

amended at fixed time points such as before a design is physically implemented, before startup of operations, after modifications, before new or modified equipment is in operation, or when changes are made. One commenter said that rule language should be clarified to note that the RA may specify a time period longer than six months to implement an amendment.

Response to comments. When amendment is necessary. We agree with the commenter who suggested that we maintain the current standard for amendments, i.e., when there is a change that materially affects the facility's potential to discharge oil. This position accords with our stance on when Plans should be prepared and implemented. See § 112.3. The other suggested standards too narrowly limit the changes which would trigger Plan amendment. We believe that an amendment is necessary when a facility change results in a decrease in the volume stored or a decrease in the potential for an oil spill because EPA needs this information to determine compliance with the rule. For example, the amount of secondary containment required depends on the storage capacity of a container. Decreases might also affect the way a facility plans emergency response measures and training procedures. A lesser capacity might require different response measures than a larger capacity. The training of employees might be affected because the operation and maintenance of the facility might be affected by a lesser storage capacity.

Likewise, a standard requiring amendment "when there are indicia of problems" is too vague and leaves problems unaddressed which may result in a discharge as described in § 112.1(b). A standard requiring an amendment only when the change would cause the spill potential to exceed the Plan's capabilities (because day-to-day changes do not affect the worst case spill) would have the effect of leaving no documentation of amendments which might affect discharges which do not reach the standard of "worst case spill." While we encourage facilities to incorporate new procedures into Plans which would help to prevent discharges, amendments are still necessary when material changes are made to document those new procedures, and thus facilitate the enforcement of the rule's requirements. We disagree that a small facility should be exempt from making amendments for material changes. Amendments may be necessary at large or small facilities

alike to prevent discharges after material changes.

Material changes. A material change is one that may either increase or decrease the potential for a discharge. We agree with the commenter that the rule should be worded to indicate that the examples are for illustration only, because the items in the list may not always trigger amendments, and because the list is not exclusive. Only changes which materially affect operations trigger the amendment requirement. Ordinary maintenance or non-material changes which do not affect the potential for the discharge of oil do not.

We disagree that decommissioning of a container that results in permanent closure of that container is not a material amendment. Decommissioning a container could materially decrease the potential for a discharge and require Plan amendment, unless such decommissioning brings the facility below the regulatory threshold, making the preparation and implementation of a Plan no longer a requirement. We also believe that the oversight of a Professional Engineer is necessary to ensure that the container is in fact properly closed.

We agree that replacement of tanks, containers, or equipment may not be a material change if the replacements are identical in quality, capacity, and number. However, a replacement of one tank with more than one identical tank resulting in greater storage capacity is a material change because the storage capacity of the facility, and its consequent discharge potential, have increased.

Changes of product. We have added to the list of examples, on a commenter's suggestion, "changes of product." We added "changes of product" because such change may materially affect facility operations and therefore be a material change. An example of a change of product that would be a material change would be a change from storage of asphalt to storage of gasoline. Storage of gasoline instead of asphalt presents an increased fire and explosion hazard. A switch from storage of gasoline to storage of asphalt might result in increased stress on the container leading to its failure. Changes of product involving different grades of gasoline might not be a material change and thus not require amendment of the Plan if the differing grades of gasoline do not substantially change the conditions of storage and potential for discharge.

A change in service may also be a material change if it affects the potential for a discharge. A "change in service"

is a change from previous operating conditions involving different properties of the stored product such as specific gravity or corrosivity and/or different service conditions of temperature and/or pressure. Therefore, we have amended the rule to add "or service" after the phrase "changes of product."

Documenting no change or certain activities. We agree that a log book may be used to document non-material, routine activities. However, this is not an appropriate substitute for amendment when you make material changes at the facility.

EPA approval. We agree with the commenter's suggestion that EPA approval of an amendment is not required. However, if the RA is not satisfied that your amendment satisfies the requirements of these rules, he may require further amendment of your Plan.

Time line for amendment implementation. We agree with commenters that we should not require Plan amendment before material changes are made. Therefore, we have revised the proposed rule to provide a maximum of six months for Plan amendment, and a maximum of six more months for amendment implementation. This is the current standard. We note that § 112.3(f) allows the RA to authorize an extension of time to prepare and implement an amendment under certain circumstances.

Editorial changes and clarifications. The phrase in the first sentence which read, "potential to discharge oil as described in § 112.1(b) of this part," becomes "potential for a discharge as described in § 112.1(b). "Tanks" becomes "containers." "Commission or decommission" becomes "commissioning or decommissioning."

Section 112.5(b)—Periodic Review of Plans

Background. In 1991, we repropose the current rule, which requires that the owner or operator review the Plan at least every three years, and amend it if more effective control and prevention technology would significantly reduce the likelihood of a spill, and if the technology had been field-proven at the time of the review.

In 1997, we withdrew the 1991 proposal, and instead proposed a five-year review time frame, with the same technological conditions. In 1997, we also proposed that the owner or operator certify that he had performed the review.

Comments. Five-year review. Most commenters favored the change from three-to five-year review. Some

commenters noted that a five-year review period would make it easier to coordinate reviews of related plans, such as facility response plans required by part 112. A few opposed it, preferring the current three-year review period. They believed that five-year review might lead to reduced maintenance and consequent environmental harm, especially in the absence of any requirements for a facility to ensure that personnel are familiar with planning goals and proposed response actions, including personnel who are rotated. One commenter suggested that the longevity of a tank warranty should be the determining factor in the length of review time. Another suggested that there should be no particular time period prescribed because the requirement for an amendment whenever a material change is made is sufficient.

Completion of review. Commenters split almost evenly on the proposed requirement for certification of completion of the review. Opponents of the certification proposal believed generally that it is unnecessary paperwork that will not benefit the environment. One commenter suggested that instead of documenting completion of review, a facility might instead date the Plan to show review and date each amendment. One commenter thought that the certifications should have to be forwarded to the Regional Administrator. Others asked whether the certification could be documented in a log book, instead of in the Plan. Another commenter asked at what management level certification should be required. One commenter believed that Plans amended due to five-year reviews should not require owner or operator certification because any amendments to the Plan have to be reviewed and certified by a PE. Another commenter noted that no specific language was provided for the certification. One commenter urged that the PE should be allowed to document that no change is necessary after reviewing planned changes, or that further study is required, or that an amendment is necessary.

Response to comments. Five-year review. We agree that a five-year review period will make coordination of review of related plans, such as facility response plans required by part 112, easier. We disagree that a five-year review period will lead to reduced maintenance or increased environmental harm. Amendment of a Plan will still be necessary when a material change is made affecting the facility's potential to discharge oil, perhaps after certain discharges as

required by the RA under § 112.4(a), and perhaps after on-site review of a Plan (see § 112.4(d)). Plus the Plan must be implemented at all times. These opportunities ensure that Plans will be current. We also disagree that the length of the tank warranty should be the determining factor for a technological review. Technology changes enough within a five-year period to warrant required review within such time period whether or not other changes occur. Amendments other than the five-year review amendments may not be based on the need to learn of improved technology. Those amendments might result from deficiencies in the Plan, on the need to make repairs, or to remedy the cause of a discharge.

Calculation of time between reviews. The change in the rule from three-year to five-year reviews requires some explanation as to when a review must be conducted. For example, a facility became subject to the rule on January 1, 1990. The first three-year review should have been conducted by January 1, 1993, the second by January 1, 1996, and the third by January 1, 1999. The next review must be conducted by January 1, 2004, due to the rule change. In other words, an existing facility must complete the review within 5 years of the date the last review must have been completed. A facility becoming operable on or after the effective date of the rule will begin a five-year cycle at the date it becomes subject to part 112.

Completion of review. We disagree that documentation of completion of review has no environmental benefit. Its benefit lies in the fact that it shows that someone reviewed the Plan to determine if better technology would benefit the facility and the Plan is current. Documentation of completion of review is necessary whether or not any amendments are necessary in order to clearly show that the review was done. Mere dating of the Plan or of an amendment does not show that you performed the required review. Documentation of completion of review is a function of the owner or operator, whereas certification of any resulting technical amendment is a function of the PE. We disagree that documentation of completion should be forwarded to the Regional Administrator because it would increase the information collection burden without an environmental benefit. It is sufficient that the review be done. When the Regional Administrator wishes to verify completion of review, he may do so during an on-site inspection.

How to document completion of review. You must add documentation of completion of review either at the

beginning or the end of the Plan, or maintain such documentation in a log book appended to the Plan or other appendix to the Plan. You may document completion in one of two ways. If amendment of the Plan is necessary, then you must state as much, and that review is complete. This statement is necessary because Plan amendments may result either from five-year review or from material changes at the facility affecting its potential for discharge, or from on-site review of the Plan. There is no way to know which circumstance causes the amendment without some explanation. If no amendments are necessary, you must document completion of review by merely signing a statement that you have completed the review and no amendments are necessary. You may use the words suggested in the rule to document completion, or make any similar statement to the same effect.

Who documents review. The owner or operator of the facility, or a person at a management level with sufficient authority to commit the necessary resources, must document completion of review.

Time line for amendment implementation. We agree with commenters (see comments on proposed § 112.5(a)) that the preparation and implementation of Plan amendments require more time than proposed. The same rationale applies to the preparation and implementation of amendments required due to five-year reviews. Therefore, we will require adherence to the time lines laid down in § 112.5(b) for amendments. Currently, § 112.5(b) requires that Plan amendments be prepared within six months. It is silent as to time lines for implementation. Therefore, we have revised the rule to clarify that amendments must be implemented as soon as possible, but within the next six months. This is the current standard for implementation of certain other amendments. See, for example, §§ 112.3(a) and 112.4(e). We note that § 112.3(f) allows you to request an extension of time to prepare and implement an amendment.

Editorial changes and clarifications. We have changed the word "certification" to a requirement to document completion of the review to avoid the legal effect a certification may have. The intent of the certification proposal was merely to show that an owner or operator performed a review of the Plan every five years. 62 FR 63814, December 2, 1997. A false documentation of completion of review of the Plan is a deficiency in the Plan and may be cited as a violation of these

rules. "Spill event," in the second sentence, becomes "discharge as described in § 112.1(b).

Section 112.5(c)—PE Certification of Technical Amendments

Background. In 1991, we proposed that all amendments to the Plan must be certified by a PE with the exception of changes to the contact list. The current rule requires certification of all amendments.

Comments. A few commenters suggested that the value of PE certification for amendments does not justify the cost. Another commenter questioned when recertification of the entire Plan was required, rather than just the amendment in question. Several commenters suggested that the recertification requirement be limited to those changes that materially affect the facility's potential to discharge oil.

Response to comments. It is the responsibility of the owner or operator to document completion of review, but completion of review and Plan amendment are two different processes. PE certification is not necessary unless the Plan is amended.

We believe that PE certification is necessary for any technical amendment that requires the application of good engineering practice. We believe that the value of such certification justifies the cost, in that good engineering practice is essential to help prevent discharges. Therefore, we have amended the rule to require PE certification for technical changes only. Non-technical changes not requiring the exercise of good engineering practice do not require PE certification. Such non-technical changes include but are not limited to such items as: changes to the contact list; more stringent requirements for stormwater discharges to comply with NPDES rules; phone numbers; product changes if the new product is compatible with conditions in the existing tank and secondary containment; and, any other changes which do not materially affect the facility's potential to discharge oil. If the owner or operator is not sure whether the change is technical or non-technical, he should have it certified.

Former Section 112.7(a)(1)—Certain pre-1974 Discharges

Background. In 1991, we proposed to delete § 112.7(a), which required a description of certain discharges to navigable waters or adjoining shorelines which occurred prior to the effective date of the rule in 1974, because that information was no longer relevant. 56 FR 54620. We received several comments supporting the proposed

deletion of this provision, and have deleted it.

Section 112.7 Introduction and (a)(1)—General Requirements

Background. In 1991, we repropoed the introduction to § 112.7 to clarify that the rule requires mandatory action, and that it is not just a guideline. In 1997, we repropoed a definition of SPCC Plan that included some substantive requirements. As noted above (see the "SPCC Plan" definition in § 112.2), those substantive requirements have been transferred from the definition of "SPCC Plan" in § 112.2 to this section.

Section 112.7(a)(1) requires a discussion of the facility's conformance with the listed requirements in the rule.

Comments. For a discussion of the "should to shall to must" comments and response to those comments, see the discussion above under that topic in section IV.C of this preamble.

Cross-referencing. Several commenters criticized the requirement for sequential cross-referencing set forth in the 1997 proposed definition of "SPCC Plan," alleging that it is confusing and provides no benefit. Another commenter asked how detailed the cross-referencing must be.

Written Plans. Another commenter proposed that a "written" Plan might also include texts, graphs, charts, maps, photos, and tables, on whatever media, including floppy disk, CD, hard drive, and tape storage that allows the document to be easily accessed, comprehended, distributed, viewed, updated, and printed.

Response to comments. Cross-referencing. We agree that the term "sequential" cross-referencing may be confusing, and have therefore deleted it in favor of a requirement to provide cross-referencing. We disagree that cross-referencing provides no benefit. With the wide variation now allowed in differing formats, we need cross-referencing so that an inspector can tell whether the Plan meets Federal requirements, and whether it is complete. In addition, in order for an owner or operator to do his own check to ensure that his facility meets all SPCC requirements, he must go through the exercise of comparing his Plan to each SPCC requirement. Cross-referencing in the context of the rule means indicating the relationship of a requirement in the new format to an SPCC requirement. The cross-referencing must identify the Federal section and paragraph for each section of the new format it fulfills, for example, § 112.8(c)(3). Note the cross-referencing table we have provided for your convenience in section II.A of this preamble.

Written Plans. We agree that a "written" Plan might also include texts, graphs, charts, maps, photos, and tables, on whatever media, including floppy disk, CD, hard drive, and tape storage, that allows the document to be easily accessed, comprehended, distributed, viewed, updated, and printed. Whatever medium you use, however, must be readily accessible to response personnel in an emergency. If it is produced in a medium that is not readily accessible in an emergency, it must be also available in a medium that is. For example, a Plan might be electronically produced, but computers fail and may not be operable in an emergency. For an electronic Plan or Plan produced in some other medium, therefore, a backup copy must be readily available on paper. At least one version of the Plan should be written in English so that it will be readily understood by an EPA inspector.

Editorial changes and clarifications. We have transferred all of the proposed substantive requirements in the 1997 proposed definition of "SPCC Plan" to the introduction of this section. We did this because we agree with commenters (see the comments on the definition of "SPCC Plan" in § 112.2) that definitions should not contain substantive requirements.

We have revised the introduction to § 112.7 to facilitate use of the active voice and to clearly note that the owner or operator, except as specifically noted, is responsible for implementing the rule.

We also deleted language requiring a "carefully thought-out" SPCC Plan. Such language is unnecessary because the Plan must be prepared in accordance with good engineering practices. Another editorial revision in the introduction is the change from "level with authority" in the last sentence of proposed § 112.7(a) to "level of authority." A third revision is a change from "format" to "sequence." We have transferred the part of the sentence proposed in 1991 dealing with the sequence of the Plan in § 112.7(a)(1) to the introduction of § 112.7.

For consistency with response plan language in § 112.20(h), the language in the introduction referring to alternative SPCC formats has been revised to read "equivalent Plan acceptable to the Regional Administrator." The response plan language in § 112.20(h) on "equivalent response plans" has also been revised to include the "acceptable to the Regional Administrator" language included in the introduction to § 112.7. For a discussion of possible SPCC formats, see the discussion under the definition of "SPCC Plan," above.

We deleted the term “sequentially cross-referenced” because we agree that it may be misunderstood, and instead use the term “cross-referencing” in the revised rule. As noted above, cross-referencing means identifying the requirement in the new format to the section and paragraph of the SPCC requirement. We have also substituted the word “part” for “section” where “cross-referencing” and meeting “equivalent requirements” are mentioned. We make this change because the rule requires compliance with any applicable provision in the part, not merely § 112.7. We also clarify that the discussion of your facility’s conformance with the requirements listed (see § 112.7(a)(1)) means the requirements listed in part 112, not merely the requirements listed in § 112.7.

We also note that if the Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss these items in separate paragraphs, and must explain separately the details of installation and operational start-up. The discussion must include a schedule for the installation and start-up of these items.

Section 112.7(a)(2)—Deviations from Plan Requirements

Background. In 1991, we proposed to allow deviations from the requirements listed in § 112.7(c) and in §§ 112.8, 112.9, 112.10, and 112.11, as long as the owner or operator explained the reason for nonconformance and provided equivalent environmental protection by another means. The proposal was intended to implement the requirement for “good engineering practice” which is a cornerstone of the rule, and to provide flexibility in meeting the rule’s requirements. We clearly noted in the rule that the Regional Administrator would have the authority to overrule any deviation.

In 1993, we repropoed the section, eliminating language referring to the Regional Administrator’s (RA’s) authority to overrule deviations. Instead, we proposed that whenever you proposed a deviation, you would have to submit the entire Plan to the RA with a letter explaining how your Plan contained equivalent environmental protection measures in lieu of those explicitly required in the rule. The RA would have authority under the 1993 proposal to require amendment of the Plan if he determined that the measures described in the deviation did not provide equivalent protection.

Comments. Some commenters supported the 1991 proposal. But others had concerns.

Applicability—1991. Some commenters suggested that the Agency should add language to the rule making clear that a facility may deviate from the express requirements of the rule and may substitute alternatives based on good engineering practice. The commenters added that we should make clear that the equivalency provision in § 112.7(a)(2) does not require mathematical equivalency of every requirement, but merely the achievement of substantially the same level of overall protection from the risk of discharge at the facility as the specific requirement seeks to achieve. Another commenter was concerned that proving the equivalence of measures to the satisfaction of Regional officials may be difficult. One commenter urged us to expressly state that PEs may substitute alternatives based on good engineering practice.

RA oversight—1991. One commenter opposed the provision allowing the RA to overrule waivers/equivalent measures. As noted above, we withdrew the proposal to allow the RA to explicitly overrule waivers. Instead we substituted a proposed procedure whereby the RA could require you to amend your Plan. One commenter feared that PEs would be reluctant to certify alternate technologies due to the threat of potential liability.

Deviation submission. One commenter opposed the proposed requirement to submit a Plan deviation and urged its deletion to make it consistent with the rest of the SPCC rule. The commenter argued that the deviation and Plan have already been certified by a PE, and there is no reason for EPA to be asked to second guess that certification in every case. The commenter also asserted that it is unduly burdensome to require regulated facilities to prepare a justification and submit a Plan to EPA for every waiver of the technical requirements. Another commenter questioned why the entire Plan should be submitted to the RA for review. The commenter suggested that only the portion or portions of the Plan that do not conform to the standard requirements should be submitted, adding that this step would help EPA to minimize the resources needed to review such waivers. One commenter suggested that the choice of preventive systems in the design and implementation of spill prevention measures should be left to the facility owner or operator. The commenter opposed giving the RA authority to require equivalent protection because he

questioned how the RA will determine if the deviation will cause harm to the environment, and therefore lack equivalency. If such a provision is included, the commenter asked for an appeals process similar to the one suggested in § 112.20(c).

RA oversight—1993. One commenter favored the 1993 proposal. Opposing commenters believed that submission of deviations to the RA is unnecessary because PE certification ensures the application of good engineering practice.

Secondary containment. Several commenters suggested that we explicitly say that equivalent protection should be defined to allow a compacted earthen floor and compacted earthen dike to provide secondary containment. The rationale for the comment was that other methods of secondary containment may be prohibitively expensive and unnecessary to protect against spills in primarily rural areas. One commenter suggested that we should clarify that the language of § 112.7(c) applies only to oil storage areas.

Response to comments. Applicability. We generally agree with the commenter that an owner or operator should have flexibility to substitute alternate measures providing equivalent environmental protection in place of express requirements. Therefore, we have expanded the proposal to allow deviations from the requirements in § 112.7(g), (h)(2) and (3), or (i), as well as subparts B, and C, except for the listed secondary containment provisions in § 112.7 and subparts B and C. The proposed rule already included possible deviations for any of the requirements listed in §§ 112.7(c), 112.8, 112.9, 112.10, and 112.11. We have expanded this possibility of deviation to include the new subparts we have added for various classes of oils. We take this step because we believe that the application of good engineering practice requires the flexibility to use alternative measures when such measures offer equivalent environmental protection. This provision may be especially important in differentiating between requirements for facilities storing, processing, or otherwise using various types of oil.

A deviation may be used whenever an owner or operator can explain his reasons for nonconformance, and provide equivalent environmental protection. Possible rationales for a deviation include when the owner or operator can show that the particular requirement is inappropriate for the facility because of good engineering practice considerations or other reasons, and that he can achieve equivalent

environmental protection in an alternate manner. For example, a requirement that may be essential for a facility storing gasoline may be inappropriate for a facility storing asphalt; or, the owner or operator may be able to implement equivalent environmental protection through an alternate technology. An owner or operator may consider cost as one of the factors in deciding whether to deviate from a particular requirement, but the alternate provided must achieve environmental protection equivalent to the required measure. The owner or operator must ensure that the design of any alternate device used as a deviation is adequate for the facility, and that the alternate device is adequately maintained. In all cases, the owner or operator must explain in the Plan his reason for nonconformance. We wish to be clear that we do not intend this deviation provision to be used as a means to avoid compliance with the rule or simply as an excuse for not meeting requirements the owner or operator believes are too costly. The alternate measure chosen must represent good engineering practice and must achieve environmental protection equivalent to the rule requirement. Technical deviations, like other substantive technical portions of the Plan requiring the application of engineering judgment, are subject to PE certification.

In the preamble to the 1991 proposal (at 56 FR 54614), we noted that “* * * aboveground storage tanks without secondary containment pose a particularly significant threat to the environment. The Phase One modifications would retain the current requirement for facility owners or operators who are unable to provide certain structures or equipment for oil spill prevention, including secondary containment, to prepare facility-specific oil spill contingency plans in lieu of the prevention systems.” In keeping with this position, we have deleted the proposed deviation in § 112.7(a)(2) for the secondary containment requirements in §§ 112.7(c) and (h)(1); and for proposed §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c); as well as for the new sections which are the counterparts of the proposed sections, *i.e.*, §§ 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), because a more appropriate deviation provision already exists in § 112.7(d). Section § 112.7(d) contains the measures which a facility owner or operator must undertake when the secondary containment required by § 112.7(c) or (h)(1), or the secondary containment provisions in the rule

found at §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), are not practicable. Those measures are expressly tailored to address the lack of secondary containment at a facility. They include requirements to: explain why secondary containment is not practicable; conduct periodic integrity testing of bulk storage containers; conduct periodic integrity and leak testing of valves and piping; provide in the Plan a contingency plan following the provisions of 40 CFR part 109; and, provide a written commitment of manpower, equipment, and materials to expeditiously control and remove any quantity of oil discharged that may be harmful. Therefore, when an owner or operator seeks to deviate from secondary containment requirements, § 112.7(d) will be the applicable “deviation” provision, not § 112.7(a)(2).

Deviation submission. We agree with the commenter that submission of a deviation to the Regional Administrator is not necessary and have deleted the proposed requirement. We take this step because we believe that the requirement for good engineering practice and current inspection and reporting procedures (for example, § 112.4(a)), followed by the possibility of required amendments, are adequate to review Plans and to detect the flaws in them. Upon submission of required information, or upon on-site review of a Plan, if the RA decides that any portion of a Plan is inadequate, he may require an amendment. See § 112.4(d). If you disagree with his determination regarding an amendment, you may appeal. See § 112.4(e).

RA oversight. Once an RA becomes aware of a facility’s SPCC Plan as a result of an on-site inspection or the submission of required information, he is to follow the principles of good engineering practice and not overrule a deviation unless it is clear that such deviation fails to afford equivalent environmental protection. This does not mean that the deviation must achieve “mathematical equivalency,” as one commenter pointed out. But it does mean equivalent protection of the environment. We encourage innovative techniques, but such techniques must also protect the environment. We also believe that in general PEs will seek to protect themselves from liability by only certifying measures that do provide equivalent environmental protection. But the RA must still retain the authority to require amendments for deviations, as he can with other parts of the Plan certified by a PE.

Not covered under the deviation rule. Deviations under § 112.7(a)(2) are not

allowed for the general and specific secondary containment provisions listed above because § 112.7(d) contains the necessary requirements when you find that secondary containment is not practicable. We have amended both this paragraph and § 112.7(d) to clarify this. Instead, the contingency planning and other requirements in § 112.7(d) apply. Deviations are also not available for the general recordkeeping and training provisions in § 112.7, as these requirements are meant to apply to all facilities, or for the provisions of § 112.7(f) and (j). We already provide flexibility in the manner of recordkeeping by allowing the use of ordinary and customary business records. Training and a discussion of compliance with more stringent State rules are essential for all facilities. Therefore, we do not allow deviations for these measures.

Secondary containment. Regarding the secondary containment requirements, the requirement in § 112.7(c) applies not only to oil storage areas, but also to operational areas of the facility where a discharge may occur. Section 112.7(c) may apply to any area of the facility where a discharge is possible. Other secondary containment provisions in this part have more particular applicability, *e.g.*, §§ 112.7(h)(1), 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), and their counterparts in subpart C. We decline to specify that a compacted earthen floor and compacted earthen dike will always satisfy the secondary containment requirements. Those methods may, however, be acceptable if there is no potential for oil to migrate through the compacted earthen floor or dike through groundwater to cause a discharge as described in § 112.1(b).

Editorial changes and clarifications. “Equivalent protection” becomes “equivalent environmental protection” throughout the paragraph.

Section 112.7(a)(3)—Facility Characteristics That Must be Described in the Plan

Background. In 1991, we proposed a new section that would require you to describe the essential characteristics of your facility in the Plan. Those characteristics are discussed below. In the description, you would also be required to provide a facility diagram that included the location and contents of all tanks, regardless of whether the tanks are subject to all the provisions of 40 CFR part 280 or a State program approved under 40 CFR part 281, or otherwise subject to part 112. The rationale for the diagram was that it would assist in response actions.

Responders would have a means to know where all containers are, to help ensure their safety in conducting a response action and aid in the protection of life and property.

Comments. General description of characteristics. Two commenters asked that the requirements proposed for Plan characteristics be listed on a facility basis rather than a tank basis because otherwise the proposal would be too resource intensive. The commenters did not provide cost estimates.

Facility diagram. Two commenters supported the proposal. Opposing commenters asserted that the diagram would be too costly and add little to the Plan. One commenter said that the requirement was redundant because many States require the same thing. Two commenters opposed marking the contents of the tanks because those contents may change frequently, requiring Plan amendment each time. One commenter suggested that instead the facility maintain a separate list of tank contents when changes occur frequently over a short span of time to eliminate the need to constantly amend the diagram. Other commenters requested a *de minimis* exemption for small containers for the diagram, suggesting levels of 660 gallons or less. Some of these commenters suggested that the diagram be discretionary for storage volumes of less than 10–15,000 gallons. Other commenters asked whether exempt materials would have to be marked as to content, for example, products which are not oil. Some believed that the inclusion of otherwise exempt containers in the diagram was unreasonable. One commenter suggested the diagram should include transfer stations and connecting pipes. Another commenter asked for clarification that underground tanks, whether subject to SPCC or not, need to be included in the diagram.

Unit-by-unit storage capacity. Several commenters asked for clarification of the meaning of the term “unit-by-unit storage capacity.” Many commenters asked for specification of a minimum size, and some suggested sizes, ranging from 660 gallons to 10,000 gallons.

Type and quantity of oil stored. We received one comment on this item. The commenter opposed the information requirement because “the way a tank is used changes often and the adequacy of response to an accidental discharge does not depend on the type of oil stored.”

Estimates of quantity of oils potentially discharged. The few comments we received opposed this information requirement. One commenter argued that the item requests a “prediction” of future events.

Another asserted that it would not be possible to give estimates of oil potentially discharged from flowlines or gathering systems. One commenter argued that mobile facilities should be exempt from this requirement because the exact site information changes with the movement of equipment.

Possible spill pathways. Two commenters wrote that the proposed requirement “could be an infinite number and serves no useful purpose.” One commenter asked that the requirement be replaced by a requirement to describe the most likely spill pathways to navigable water.

Spill prevention measures (including loading areas and transfers). One commenter suggested that the beginning of the paragraph be revised to read, “Secondary containment” instead of “Spill prevention measures. . . .” See also the discussion on loading areas under § 112.7(h).

Spill controls and secondary containment. One commenter thought that this paragraph should refer to “other drainage control features and the equipment they protect.”

Spill countermeasures. One commenter suggested that this paragraph be revised to read, “Prevention, control, or countermeasure features, other than secondary containment and drainage control, and the equipment which they protect.” Another commenter argued that mobile drilling and workover rigs either on or off shore should be exempt from this requirement because supplying site specific spill and clean-up information for a mobile source that will move from one site to another is not feasible. One commenter suggested that the contingency planning requirements in this paragraph, as well as in § 112.7(b) and (d)(1), seem unnecessarily complex because the same basic information seems to be required in several different places in the proposed regulation. The commenter went on to suggest that EPA consolidate these requirements. Another commenter suggested that this paragraph should be deleted and removed to a response plan section which he suggested, because the information called for requires response information.

Disposal of recovered materials. Two commenters supported the proposal in general, but one suggested that it is not feasible nor useful to discuss particular alternatives. One of the favorable commenters suggested that we should encourage recycling of spilled oil rather than mere disposal. Another commenter argued that mobile drilling and workover rigs either on or off shore should be exempt from this requirement

because supplying site specific spill and clean-up information for a mobile source that will move from one site to another is not feasible.

Some opposing commenters believed that the proposal would preclude bioremediation. Others believed that it was too costly. One commenter suggested that the “costs associated with off-site disposal of oil-saturated soil from a typical secondary containment facility after a contained spill event will cost an operator as much as \$4,700, calculated at the cost of \$90 per ton of removed soil for transportation and disposal fees and the associated leachate and waste analysis but *excluding* the internal costs associated with the actual excavation work.” Other commenters believed that we have no authority to ask the question because the subject matter is regulated either by State law or another Federal program, such as the solid waste program. One commenter asked for an exemption for mobile facilities from this requirement.

Contact list. Several commenters favored the proposal. One commenter suggested that the list name the cleanup contractor with whom the facility has a relationship, not merely the name of any cleanup contractor.

One commenter favored the inclusion of local emergency planning contacts in the required information. Another opposed it as duplicative of information in the HAZWOPER Plan. A commenter requested an exemption for mobile facilities. Another commenter believed we lack authority to request the information. One commenter suggested that the list be restricted to Federal or State agencies that must be notified in case of the accidental discharge of oil. Another commenter argued that mobile drilling and workover rigs either on or off shore should be exempt from this requirement because supplying site specific spill and clean-up information for a mobile source that will move from one site to another is not feasible. One commenter suggested that this paragraph should be deleted and removed to a response plan section which he suggested, because the information called for requires response information.

Downstream water suppliers. Several commenters suggested that the proposed requirement to include information on downstream water suppliers who must be contacted in case of a discharge to navigable waters should be limited to those “who might reasonably be affected by a discharge.” Others asked that the downstream distance be specified. They added that private wells should be excluded from the notice. Several

commenters asked how they might identify such suppliers. Yet others believed that such notification was the responsibility of local emergency response agencies.

Response to comments. General description of characteristics. The following characteristics must be described on a per container basis: the storage capacity of the container, type of oil in each container, and secondary containment for each container. The other characteristics may be described on a facility basis. We disagree that these requirements are too resource intensive. The major new requirement in § 112.7(a)(3) is the facility diagram. Based on site inspections and professional judgment, we estimate unit costs for compliance with this section to be \$33 for a small facility, \$39 for a medium facility, and \$5 for a large facility. Large facilities are assumed to already have a diagram that may be attached to the SPCC Plan. The other items mentioned in § 112.7(a)(3)—storage capacity of each container, prevention measures, discharge controls, countermeasures, disposal methods, and the contact list—are already required under the current rule or required by good engineering practice. As described in the Information Collection Request for this rule, the cost of Plan preparation includes these items, e.g., field investigations to understand the facility design and to predict flow paths and potential harm, regulatory review, and spill prevention and control practices.

Providing information on a container-specific basis helps the facility to prioritize inspections and maintenance of containers based on characteristics such as age, capacity, or location. It also helps inspectors to prioritize inspections of higher-risk containers at a facility. Container-specific information helps an inspector verify the capacity calculation to determine whether a Plan is needed; and, helps to formulate contingency planning if such planning is necessary.

Facility diagram. The facility diagram is important because it is used for effective prevention, planning, management (for example, inspections), and response considerations and we therefore believe that it must be part of the Plan. The diagram will help the facility and emergency response personnel to plan for emergencies. For example, the identification of the type of oil in each container may help such personnel determine the risks when conducting a response action. Some oils present a higher risk of fire and explosion than other less flammable oils.

Inspectors and personnel new to the facility need to know the location of all containers subject to the rule. The facility diagram may also help first responders to determine the pathway of the flow of discharged oil. If responders know possible pathways, they may be able to take measures to control the flow of oil. Such control may avert damage to sensitive environmental areas; may protect drinking water sources; and may help responders to prevent discharges to other conduits leading to a treatment facility or navigable waters. Diagrams may assist Federal, State, or facility personnel to avoid certain hazards and to respond differently to others.

The facility diagram is necessary for all facilities, large or small, because the rationale is the same for both. While some States may require a diagram, others do not. SPCC is a Federal program specifying minimum requirements, which the States may supplement with their own more stringent requirements. We note that State plans may be used as SPCC Plans if they meet all Federal requirements, thus avoiding any duplication of effort if the State facility diagram meets the requirements of the Federal one.

Facility diagram—container contents. The facility diagram must include all fixed (*i.e.*, not mobile or portable) containers which store 55 gallons or more of oil and must include information marking the contents of those containers. If you store mobile containers in a certain area, you must mark that area on the diagram. You may mark the contents of each container either on the diagram of the facility, or on a separate sheet or log if those contents change on a frequent basis. Marking containers makes for more effective prevention, planning, management, and response. For example, a responder may take one type of emergency measure for one type of oil, and another measure for another type. As noted above, oils differ in their risk of fire and explosion. Gasoline is highly flammable and volatile. It presents the risk of fire and inhalation of vapors when discharged. On the other hand, motor oil is not highly flammable, and there is no inhalation of vapors hazard associated with its discharge.

In an emergency, the responder may not have container content information unless it is clearly marked on a diagram, log, or sheet. For emergency response purposes, we also encourage, but do not require you to mark on the facility diagram containers that store CWA hazardous substances and to label the contents of those containers. When the contents of an oil container change, this

may or may not be a material change. See the discussion on § 112.5(a).

Facility diagram—De minimis containers. We have established a de minimis container size of less than 55 gallons. You do not have to include containers less than 55 gallons on the facility diagram.

Facility diagram—Transfer stations, connecting pipes, and USTs. We agree that all facility transfer stations and connecting pipes that handle oil must be included in the diagram, and have amended the rule to that effect. This inclusion will help facilitate response by informing responders of the location of this equipment. The location of all containers and connecting pipes that store oil (other than de minimis containers) must be marked, including USTs and other containers not subject to SPCC rules which are present at SPCC facilities. Again, this is necessary to facilitate response by informing responders of the location of these containers.

Unit-by-unit storage capacity. For clarity, we have changed the term in § 112.7(a)(3)(i), “unit-by-unit” storage capacity, to “type of oil in each container and its storage capacity.” As noted earlier, this requirement applies only to containers of 55 gallons or greater.

Type and quantity of oil stored. We have eliminated proposed § 112.7(a)(3)(ii) because it repeats information requested in revised § 112.7(a)(3)(i). We ask for information concerning storage capacity and type of oil stored in each container in that paragraph.

Estimates of quantity of oils potentially discharged. We have eliminated proposed § 112.7(a)(3)(iii) because it repeats information sought in § 112.7(b) regarding “a prediction of the direction, rate of flow, and total quantity of oil which could be discharged* * *.” We will address the substantive comments under the discussion of that paragraph.

Possible spill pathways. We have eliminated proposed § 112.7(a)(3)(iv) because the proposal repeats information sought in § 112.7(b) regarding “a prediction of the direction, rate of flow, and total quantity of oil which could be discharged.* * *” Again, we will address the substantive comments under the discussion of that paragraph.

Spill prevention measures. We have revised this paragraph to read “discharge prevention measures.” We disagree with the commenter that the paragraph should be labeled “secondary containment.” The term “discharge prevention measures” is better because

it encompasses both secondary containment and other discharge prevention measures.

Spill controls and secondary containment. We have revised this paragraph to refer to “discharge” controls. In response to a commenter, we have also included a reference to drainage controls in the paragraph because drainage systems or diversionary ponds might be an alternative means of secondary containment. See § 112.7(c)(1)(iii) and (v).

Spill countermeasures. We disagree that the paragraph should be revised to read, “Prevention, control, or countermeasure features, other than secondary containment and drainage control, and the equipment which they protect,” because we believe that the language we proposed, as revised, better captures the information we are seeking. Our revised language refers to discovery, response, and cleanup, which are features that are absent from the commenter’s suggestion, and for which a discussion in the Plan is necessary in order to be prepared for any discharges.

We disagree that either onshore or offshore mobile drilling and workover rigs should be exempted from this requirement because the information necessary to this requirement is not always site specific, and may be included in a general plan for a mobile facility.

We also disagree that the information required in this paragraph is redundant of information required in §§ 112.7(b) and 112.7(d)(1). Each of the sections mentioned requires discrete and different information. Section 112.7(a)(3)(iv) requires information concerning a facility’s and a contractor’s capabilities for discharge discovery, response, and cleanup. Section 112.7(b) requires information concerning the potential consequences of equipment failure. Section 112.7(d)(1) requires a contingency plan following the provisions of part 109, which includes coordination requirements with governmental oil spill response organizations.

We disagree that the information should be placed in a response section, because most SPCC facilities are not required to have response plans, and the information is necessary to prepare for discharge discovery, response, and cleanup.

Disposal of recovered materials. This provision applies to all facilities, including mobile facilities, because proper disposal of recovered materials helps prevent a discharge as described in § 112.1(b) by ensuring that the

materials are managed in an environmentally sound manner. Proper disposal also assists response efforts. If a facility lacks adequate resources to dispose of recovered oil and oil-contaminated material during a response, it limits how much and how quickly oil and oil-contaminated material is recovered, thereby increasing the risk and damage to the environment.

We disagree that this paragraph would preclude bioremediation efforts, as some commenters suggested. Bioremediation may be a method of proper disposal. The paragraph merely requires that you discuss the methods employed to dispose of recovered materials; it does not require that materials recovered be “disposed” in any particular manner nor is it an independent requirement to properly dispose of materials. Thus, there is no infringement on or duplication of any other State or Federal program or regulatory authority. Because it does nothing more than require that you explain the method of disposal of recovered materials, we also disagree that this provision is too costly. Also, we assume that good engineering practice will in many cases include a discussion of such disposal already. By describing those methods in the Plan, you help ensure that the facility has done the appropriate planning to be able to dispose of recovered materials, should a discharge occur. We support the recycling of spilled oil to the extent possible, rather than its disposal. For purposes of this rule, disposal of recovered materials includes recycling of those materials.

We disagree that either onshore or offshore mobile drilling and workover rigs should be exempted from this requirement because the information necessary to this requirement is not always site specific, and may be included in a general plan for a mobile facility.

Contact list. In response to a comment, we have amended the rule to require that the cleanup contractor listed must be the one with whom the facility has an agreement for response that ensures the availability of the necessary personnel and equipment within appropriate response times. An agreement to respond may include a contract or some less formal relationship with a cleanup contractor. No formal written agreement to respond is required by the SPCC rule, but if you do have one, you must discuss it in the Plan.

We have ample authority to ask for information concerning emergency contacts under the CWA because it is relevant to the statute’s prevention,

preparedness, and response purposes. Furthermore, it is an appropriate question for all facilities, including mobile facilities, because it is necessary to prepare for discharges and to aid in prompt cleanup when they occur. Having a Plan which contains a contact list of response organizations is a procedure and method to contain a discharge of oil as specified in CWA section 311(j)(1)(C). However, we have eliminated references to specific State and local agencies in the event of discharges in favor of a reference to “all appropriate State and local agencies.” “Appropriate” means those State and local agencies that must be contacted due to Federal or State requirements, or pursuant to good engineering practice. You may not always be required to notify fire departments, local emergency planning committees (LEPCs), and State emergency response commissions (SERCs), nor as an engineering practice do they always need to receive direct notice from the facility in the event of a discharge as described in § 112.1(b). At times they might, but they might also receive notice from other sources, such as the National Response Center. Other State and local agencies might also need notice from you.

We have added the word “Federal” to the list of all appropriate contact agencies because there are times when you must notify EPA of certain discharges. See § 112.4(a). There might also be requirements under Federal statutes other than the CWA, for notice in such emergencies.

We disagree that either onshore or offshore mobile drilling and workover rigs should be exempted from this requirement because the information necessary to this requirement is not always site specific, and may be included in a general plan for a mobile facility.

We disagree that the information should be placed in a response section, because most SPCC facilities are not required to have response plans, and the information is necessary to prepare for response to an emergency.

Downstream water suppliers. We have deleted the reference to “downstream water suppliers” (i.e., intakes for drinking and other waters) because facilities may have no way to identify such suppliers. We agree with commenters that identifying such suppliers is more a function of State and local emergency response agencies. We note, however, that facilities that must prepare response plans under § 112.20 must discuss in those plans the vulnerability of water intakes (drinking, cooling, or other).

Editorial changes and clarifications. In the introduction to paragraph (a)(3), “physical plant” becomes “physical layout.” “Tanks” becomes “containers.” In proposed paragraph (a)(3)(vi), redesignated as paragraph (a)(3)(iii), “spill controls” becomes “discharge or drainage controls.” In proposed paragraph (a)(3)(vii), redesignated as paragraph (a)(3)(iv), “spill countermeasures for spill discovery” becomes “countermeasures for discharge discovery.” In proposed paragraph (a)(3)(ix), redesignated as paragraph (a)(3)(vi), “discharge to navigable waters” becomes “discharge as described in § 112.1(b).”

Section 112.7(a)(4)—Spill Reporting Information in the Plan

Background. In 1991, we proposed that documentation in this paragraph be sufficient to enable a person reporting a spill to provide essential information to organizations on the contact list.

Comments. Several commenters had editorial comments, suggesting the rule refer to “information” rather than “documentation” on the theory that documentation refers to a past event, whereas the rule contemplates a future event. One commenter suggested that the section be qualified to indicate that a form for collecting spill report information be included in the Plan, or for “small size facilities” in the HAZWOPER reporting matrix. Another commenter suggested that a properly prepared SPCC Plan would assist the person reporting the spill to provide the requested information. One commenter asserted the proposed rule was duplicative of State requirements. Several commenters suggested that not all of the information will be available or applicable for a person reporting a discharge. One commenter suggested that this paragraph should be deleted and removed to a response plan section which he suggested, because the information called for requires response information.

Response to comments.

Documentation. We agree with commenters that the word “documentation” is inappropriate because it refers to a past event. Accordingly, as suggested by commenters, we have revised the rule to provide for “information and procedures” that would assist the reporting of discharges as described in § 112.1(b). “Information” refers to the facts which you must report, and “procedures” refers to the method of reporting those facts. Such procedures must address whom the person relating the information should call, in what order the caller should call potential

responders and others, and any other instructions necessary to facilitate notification of a discharge as described in § 112.1(b). If properly noted, the information and procedures in the Plan should enable a person reporting a discharge to accurately describe information concerning that occurrence to the proper persons in an emergency. Any information or procedure not applicable will not have to be used. Available information on a discharge must be reported. Applicable procedures must be followed. And of course, any information that is not available cannot be reported.

State requirements. While it is possible that this information may be duplicative of State requirements, the duplication is eliminated to the extent that you use your State SPCC Plan for Federal SPCC purposes. Where there is no State requirement, there is no duplication.

Response plan exemption. We disagree that this paragraph should be placed in a response section, because most SPCC facilities are not required to have response plans, and the information is necessary to prepare for response to an emergency. However, if your facility has prepared and submitted a response plan to us under § 112.20, there is no need to document this information in your SPCC Plan, because it is already contained in the response plan. See § 112.20(h)(1)(i)-(viii). Therefore, we have amended the rule to exempt those facilities with response plans from the requirements of this paragraph.

Editorial changes and clarifications. We changed “address” to “address or location” because some facilities do not have an exact address. “Spill” and “spilled” becomes “discharge as described in § 112.1(b)” or “discharged” as appropriate in the context, “discharge” being a defined term. “Spill” or “spilled” are not defined terms. “The affected medium” becomes “all affected media.”

Section 112.7(a)(5)—Emergency Procedures

Background. In 1991, we proposed this paragraph to ensure that portions of the Plan describing procedures to be used in emergency circumstances are organized in a manner to make them readily usable in an emergency.

Comments. One commenter suggested that this paragraph should be deleted and removed to a response plan section which he suggested, because the information called for requires response information.

Response to comments. We disagree this paragraph should be deleted

because most SPCC facilities are not required to have a response plan, and the procedures to be used when a discharge occurs are necessary to prepare for an emergency. Because this information would repeat information contained in a response plan submitted under § 112.20, we have excluded from the requirements of this paragraph those facilities which have submitted response plans. See § 112.20(h)(3)(i)-(ix).

Section 112.7(b)—Fault Analysis

Background. In 1991, we proposed only editorial changes to this paragraph dealing with fault analysis. The proposal would require an analysis of the major types of failures possible in a facility, including a prediction of the direction, rate of flow, and total quantity of oil that could be discharged as a result of each such failure.

Comments. Applicability. One commenter wrote that the language in the first sentence of the proposed rule is less clear than current regulations. The commenter asserted that the proposed revision, perhaps inadvertently, does not specify the sections to which the certain “situations” apply. The commenter suggested that current language is clearer and specifically focuses limited resources on situations for which there is a reasonable potential for discharge. The commenter argued that limited resources should not be consumed in developing flow rate, direction and quantity predictions in the SPCC Plan for situations without a reasonable potential for discharge to navigable waters.

Several commenters asserted that the fault analysis required by this paragraph is “too involved for small operators.” They suggested that only development of responses to obvious scenarios, such as tank rupture, should be required. Commenters from the utility industry suggested that electrical equipment facilities should be exempt from the requirements in this paragraph. One commenter believed that mobile facilities should be exempt from the requirements in the paragraph because the exact site information changes with the movement of equipment.

Failure factors. One commenter suggested that the rule should also focus on small discharges, not just “major” discharges. Another commenter asked for clarification as to what is a “major failure” and to what degree of sophistication the pathway prediction must be made. Another commenter suggested that the rule should adequately describe how detailed the analysis of potential spill pathways

should be. Another suggested that it would be impossible to give estimates of oil potentially discharged from flowlines or gathering systems.

Response to comments. Applicability. We agree with the commenter that current language is clearer and will retain it. We therefore modified the first sentence contained in the proposed rule. We agree that the Plan must only discuss potential failure situations that might result in a discharge from the facility, not any failure situation. The rule requires that when experience indicates a reasonable potential for failure of equipment, the Plan must contain certain information relevant to those failures. "Experience" includes the experience of the facility and the industry in general.

We disagree that the requirement is too difficult for owners or operators of small or mobile facilities, or of flowlines or gathering lines, or of electrical equipment facilities, or other users of oil. We believe that a Professional Engineer may evaluate the potential risk of failure for the aforementioned facilities and equipment and predict with a certain degree of accuracy the result of a failure from each. We note that since we have raised the regulatory threshold, this requirement will not be applicable to many smaller facilities.

Failure factors. To comply with this section, you need only address "major equipment" failures. A major equipment failure is one which could cause a discharge as described in § 112.1(b), not a minor failure possibility. To help clarify the type of equipment failures the rule contemplates, we have added examples of other types of failures that would trigger the requirements of this paragraph. Such other equipment failures include failures of loading/unloading equipment, or of any other equipment known to be a source of a discharge. The analysis required will depend on the experience of the facility and how sophisticated the facility equipment is. If your facility has simpler equipment, you will have less to detail. If you have more sophisticated equipment, you will have to conduct a more detailed analysis. If your facility's experience or industry experience in general indicates a higher risk of failure associated with the use of that equipment, your analysis will also have to be more detailed. This rationale and analytic detail are also applicable to electrical equipment facilities and other facilities that do not store oil, but contain it for operational use. Again, the required explanation will be tailored to the type of equipment used and the experience with that equipment.

Spill pathways. The level of analysis concerning spill pathways will depend on the geographic characteristics of the facility's site and the possibility of a discharge as described in § 112.1(b) that equipment failure might cause. However, the Professional Engineer should focus on the most obvious spill pathways.

Because this information is facility specific, the owner or operator of a mobile facility will not be able to detail spill pathways in the general Plan for the facility each time the facility moves. However, the owner or operator must provide management practices in the general Plan that provide for containment of discharges in spill pathways in a variety of geographic conditions likely to be encountered. In case of a discharge at a particular facility, the owner or operator would then take appropriate action to contain or remove the discharge. For example, the Plan may provide that a rig must be positioned to minimize or prevent discharges as described in § 112.1(b); or it may provide for the use of spill pans, drip trays, excavations, or trenching to augment discharge prevention.

Editorial changes and clarifications. We made minor editorial changes in the proposal's second sentence that reflect a plain language format. We revised the phrase in the proposed second sentence of the paragraph from "each major type of failure" to "each type of major equipment failure."

Section 112.7(c)—Secondary Containment.

Background. The SPCC Task force concluded that aboveground storage tanks without secondary containment could pose a particularly significant threat to the environment. We noted in the 1991 preamble that the proposed rule modifications would "retain the current requirement for facility owners or operators who are unable to provide certain structures or equipment for oil spill prevention, including secondary containment, to prepare facility-specific contingency plans in lieu of prevention systems." 56 FR 54614.

In 1991, we proposed to modify the current standard that dikes, berms, or retaining walls must be "sufficiently impervious." We proposed that the current "sufficiently impervious" standard for secondary containment be replaced with a standard requiring that the entire containment system, including walls and floor, must be impervious to oil for 72 hours. The rationale was that a containment system that is impervious to oil for 72 hours would allow time for discovery and

removal of an oil discharge in most cases.

We also noted that for some facilities such as electrical substations, compliance with this section might not be practicable. We said that since their purpose was not the storage of oil in bulk, they did not need to comply with the secondary containment requirements designed for bulk storage tanks in §§ 112.8(c) and 112.9(d), but only the secondary containment requirements in § 112.7(c), and that the § 112.7(c) requirement for secondary containment might be satisfied by various means including drainage systems, spill diversion ponds, etc. We added that the alternative requirements contained in proposed § 112.7(d) would fulfill the intent of the CWA when a facility could not provide secondary containment due to the impracticability of installation. 56 FR 54621.

Comments. Editorial changes and clarifications. Several commenters suggested that the reference to prevention of discharges to "surface waters" be changed to prevention of discharges to "navigable waters."

Contingency planning. One commenter suggested revising the rules to allow the use of the contingency plan contemplated in § 112.7(d) instead of secondary containment measures. Another commenter asserted that a contingency plan is not an acceptable substitute for secondary containment and advocated that all facilities be required to have secondary containment.

Applicability of requirement. Numerous electric utility commenters suggested that secondary containment was impractical for their facilities because it might cause a safety hazard. Instead, they argued for the use of contingency planning. One commenter asserted that secondary containment at sites used for the maintenance and operation of the air traffic control system was also impracticable because those sites are often very small, isolated, unmanned, and visited only on a quarterly basis. Another commenter asked that wastewater treatment tanks be exempted from the secondary containment requirement because their use is not to store oil, but to treat water. Other containers not used for storage, but other purposes might include stormwater surge tanks, activated sludge aeration tanks, equalization basins, dissolved and induced air floatation tanks, oil/water separators, sludge digesters, etc. Another commenter urged that all oil-filled equipment located in a 25-year floodplain be required to have secondary containment.

One commenter asked that we clarify that the secondary containment requirement in this section does not apply to the following equipment at onshore production facilities: flowlines because of the prohibitive cost of construction for miles of lines; fired vessels because of the danger of pooling spilled oil around an ignition source; and, pressurized vessels because a leak from such vessel might be sprayed beyond the area that a reasonable dike might enclose. One commenter suggested that all in-use hydraulic equipment such as cranes, jacks, elevators, forklifts, etc., be exempted from the secondary containment requirement because it would be impractical to provide structures for such equipment. Others suggested that mobile facilities should be exempt from the secondary containment requirement because it would be infeasible to provide it. Similarly, one commenter suggested that the requirement was infeasible for production facilities due to their sometimes remote locations or difficult terrain and soil conditions. Yet another commenter wanted us to clarify that underground piping is not subject to the rule's secondary containment provisions.

One commenter asserted that mining sites should be exempted from the secondary containment requirement because the containment requirements would be "excessive" for such sites and result in "little resultant net environmental benefit." A commenter representing various small facilities asked for exemption from the requirement on the basis that the risk is lower for those facilities.

Methods of secondary containment. As to methods of secondary containment, several commenters urged that the existence of "natural" structures and/or drainage could meet this requirement. Other commenters suggested that vaulted tanks or double-walled tanks in themselves meet the secondary containment requirement. One commenter suggested that we remove sorbent materials or booms from the list of acceptable secondary containment structures because they are not a substitute for impervious dikes and impoundment floors.

72-hour impermeability standard. We received numerous comments on the proposed 72-hour impermeability standard. Several commenters favored the standard. Many were opposed. Of the opponents, some favored the current standard that the dikes, berms or retaining walls be "sufficiently impervious" to contain spilled oil. Other commenters thought that the proposed requirement to prevent escape

of oil to surface waters should be replaced with a standard of preventing the escape of oil to "the environment" or to "navigable waters." Others asked for clarification of the term "impervious," asserting that it is a qualitative term that requires definition by engineering standards. One commenter requested that if an impervious containment system cannot be provided, that facilities be required to assure that conduits that may cause substantial migration of free products are appropriately monitored for discharges. Another commenter asked us to specify acceptable liner materials, in lieu of a total imperviousness requirement.

Costs. One commenter suggested that our industry cost estimate for the proposed 1991 regulations—of \$441 million in the first year and \$71.8 million each subsequent year—was erroneously low, but did not provide his own cost estimates. The commenter came to this conclusion by calculating compliance cost estimates for the following requirements: 72-hour impermeability for secondary containment and diked areas, and installation of containment systems at all truck loading locations. The commenter estimated the cost of the effects of two proposed items for New York oil and gas producers, not all us producers, at in excess of \$78 million; he estimated the cost of the proposed 72 hour oil impermeability requirement at \$48 million, and if earthen dikes and diked areas cannot meet the secondary containment standards at truck loading areas, at least \$30 million.

Alternate impermeability standards. Commenters suggested a number of alternate impermeability standards. One commenter suggested a standard that the containment system be impervious to oil and water for 72 hours. Another commenter suggested that the standard apply only in environmentally sensitive areas. Some suggested that the standard should be inapplicable at facilities that are staffed around the clock, seven days a week. One commenter suggested a phase-in of the requirement. Some thought that the impermeability standard should not apply to heavier oils, particularly number 5 and 6 oils.

Alternate time frames. Others suggested differing time standards in lieu of 72 hours such as 24 hours at manned facilities, 36 hours or increased inspections, "as soon as practicable," "for the duration of the response," or no time limit at all. One commenter asked when the 72 hours begins to run, whether it begins at the time of the discovery of the discharge or the time of occurrence.

Containment or impermeability. Other commenters asserted that the rule should address containment rather than impermeability because they assert that the point of a containment structure is "to keep the discharge from reaching the waters of the United States." In the same vein, two commenters asked EPA to clarify that the leaching of small amounts of oil that does not reach the water table or surface waters meets the impermeability requirement, while a third asked that we clarify that we are concerned only with horizontal rather than vertical discharges of oil.

Sufficient freeboard. See the comments to § 112.8(c)(2) under this topic.

Response to comments. Contingency planning. A contingency plan should not be used routinely as a substitute for secondary containment because we believe it is normally environmentally better to contain oil than to clean it up after it has been discharged. Secondary containment is intended to contain discharged oil so that it does not leave the facility and contaminate the environment. The proper method of secondary containment is a matter of good engineering practice, and so we do not prescribe here any particular method. Under part 112, where secondary containment is not practicable, you may deviate from the requirement, provide a contingency plan following the provisions of 40 CFR part 109, and comply with the other requirements of § 112.7(d). For bulk storage containers, those requirements include both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping. You must also provide a written commitment of manpower, equipment, and materials to expeditiously control and remove any quantity of oil discharged that may be harmful.

Applicability of requirement. Secondary containment is best for most facilities storing or using oil because it is the most effective method to stop oil from migrating beyond that containment. We believe that secondary containment is preferable to a contingency plan at manned and unmanned facilities because it prevents discharges as described in § 112.1(b). At unmanned facilities, it may be even more important because of the lag in time before a discharge may be discovered. Notwithstanding what may be difficult terrain, we believe that some form of secondary containment is practicable at most facilities, including remote production facilities. In fact, it may often be more feasible in remote or rural areas because there are fewer space limitations in such areas. For example,

at some remote mobile or production facilities, owners or operators dig trenches and line them for containment or retention of drilling fluids. Technologies used at offshore facilities to catch or contain oil may also sometimes be used onshore.

While some types of secondary containment (for example, dikes or berms) may not be appropriate at certain facilities, other types (for example, diversionary systems or remote impounding) might. However, we recognize and repeat, as we noted in the 1991 preamble, that some or perhaps all types of secondary containment for certain facilities with equipment that contain oil, such as electrical equipment, may be contrary to safety factors or other good engineering practice considerations. There might be other equipment, like fired or pressurized vessels, for which safety considerations also preclude some or all types of secondary containment.

Some facilities or equipment that use but do not store oil may or may not, as a matter of good engineering practice, employ secondary containment. Such facilities might include wastewater treatment facilities, whose purpose is not to store oil, but to treat water. Other facilities that may not find the requirement practicable are those that use oil in equipment such as hydraulic equipment. Similarly, flowlines must have a program of maintenance to prevent discharges. See § 112.9(d)(3). The maintenance program may or may not include secondary containment. Owners or operators of underground piping must have some form of corrosion protection, but do not necessarily have to use secondary containment for that purpose.

As stated above, for a facility where secondary containment is not practicable, the owner or operator is not exempt from the requirement, but may instead provide a contingency plan and take other measures required under § 112.7(d). For most facilities, however, including small facilities, mobile facilities, production facilities, mining sites, and any other facilities that store or use oil, we believe that secondary containment is generally necessary and appropriate to prevent a discharge as described in § 112.1(b). Without secondary containment, discharges from containers would often reach navigable waters or adjoining shorelines, or affect natural resources.

Methods of secondary containment. The appropriate method of secondary containment is an engineering question. Earthen or natural structures may be acceptable if they contain and prevent discharges as described in § 112.1(b),

including containment that prevents discharge of oil to groundwater that is connected to navigable water. What is practical for one facility, however, might not work for another. If secondary containment is not practicable, then the facility must provide a contingency plan following the provisions of 40 CFR part 109, and otherwise comply with § 112.7(d).

Double-walled or vaulted tanks. The term "vaulted tank" has been used to describe both double-walled tanks (especially those with a concrete outer shell) and tanks inside underground vaults, rooms, or crawl spaces. While double-walled or vaulted tanks are subject to secondary containment requirements, shop-fabricated double-walled aboveground storage tanks equipped with adequate technical spill and leak prevention options might provide sufficient equivalent secondary containment as that required under § 112.7(c). Such options include overflow alarms, flow shutoff or restrictor devices, and constant monitoring of product transfers. In the case of vaulted tanks, the Professional Engineer must determine whether the vault meets the requirements for secondary containment in § 112.7(c). This determination should include an evaluation of drainage systems and of sumps or pumps which could cause a discharge of oil outside the vault. Industry standards for vaulted tanks often require the vaults to be liquid tight, which if sized correctly, may meet the secondary containment requirement.

There might also be other examples of such alternative systems.

Completely buried tanks. Completely buried tanks, other than those exempted from this rule because they are subject to all technical Federal or State UST requirements, are subject to the secondary containment requirement. We realize that the concept of freeboard for precipitation is inapplicable to secondary containment for completely buried tanks. The requirement for secondary containment may be satisfied in any of the ways listed in the rule or their equivalent.

72-hour impermeability standard. We are withdrawing the proposal for the 72-hour impermeability standard and will retain the current standard that dikes, berms, or retaining walls must be sufficiently impervious to contain oil. We agree with commenters that the purpose of secondary containment is to contain oil from escaping the facility and reaching the environment. The rationale for the 72-hour standard was to allow time for the discovery and removal of an oil spill. An owner or operator of a facility should have

flexibility in how he prevents a discharge as described in § 112.1(b), and any method of containment that achieves that end is sufficient. Should such containment fail, the owner or operator must immediately clean up any discharged oil.

Similarly, because the purpose of the "sufficiently impervious" standard is to prevent discharges as described in § 112.1(b), dikes, berms, or retaining walls must be capable of containing oil and preventing such discharges. Discharges as described in § 112.1(b) may result from direct discharges from containers, or from discharges from containers to groundwater that travel through the groundwater to navigable waters. Effective containment means that the dike, berm, or retaining wall must be capable of containing oil and sufficiently impervious to prevent discharges from the containment system until it is cleaned up. The same holds true for container floors or bottoms; they must be able to contain oil to prevent a discharge as described in § 112.1(b). However, "effective containment" does not mean that liners are required for secondary containment areas. Liners are an option for meeting the secondary containment requirements, but are not required by the rule.

If you are the owner or operator of a facility subject to this part, you must prepare a Plan in accordance with good engineering practice. A complete description of how secondary containment is designed, implemented, and maintained to meet the standard of sufficiently impervious is necessary. In order to document that secondary containment is sufficiently impervious and sufficiently strong to contain oil until it is cleaned up, the Plan must describe how the secondary containment is designed to meet that standard. A written description of the sufficiently impervious standard is not only necessary for design and implementation, but will aid owners or operators of facilities in determining which practices will be necessary to maintain the standard of sufficiently impervious. Control and/or removal of vegetation may be necessary to maintain the impervious integrity of the secondary containment. Repairs of excavations or other penetrations through secondary containment will need to be conducted in accordance with good engineering practices in order to maintain the standard of sufficiently impervious. The owner or operator should monitor such imperviousness for effectiveness, in order to be sure that the method chosen remains impervious to contain oil.

Costs. We note that we have withdrawn the proposed 72 hour standard, and afford various secondary containment options, including earthen dikes and diked areas, if they contain and prevent discharges as described in § 112.1(b). Therefore, there are no new costs. We disagree with the commenters who asserted that we underestimated the cost to comply with the secondary containment and truck loading and unloading area requirements. The revised rule, like the current rule, does not require a specific impermeability for dikes and does not require a specific method of secondary containment at loading and unloading areas, and this flexibility is reflected in our cost estimates. We noted in our 1991 Supplemental Cost/Benefit Analysis that secondary containment for bulk storage tanks is estimated to cost \$1,000 for small facilities; \$6,400 for medium facilities; and \$63,000 for large facilities. Unit cost estimates were developed for a broad mix of facilities (e.g., farms, bulk petroleum terminals) in each size category by experienced engineers with firsthand knowledge of the Oil Pollution Prevention Regulation and the operations of onshore SPCC-regulated facilities. Because our cost estimates must be representative of the many types of facilities that are regulated, they will underestimate the costs for some facility types and overestimate the costs for others. Facilities were assumed to construct secondary containment systems of impervious soil capable of holding 110 percent of the largest tank. In that analysis, we estimated that 78 percent and 88 percent of the regulated community were already in compliance with these requirements, respectively, and would not be affected by the proposed rule change.

Since we last performed these analyses, API has issued several industry standards, including API 653 and 2610, which address many of the provisions in the SPCC rule. As a result, the final rule relies on current industry standards and practices, where feasible. In the final rule, we withdrew the proposed 72-hour impermeability standard for secondary containment and maintained the current requirement that dikes, berms, and oil retaining walls must be sufficiently impervious to contain oil. As a result, the final rule reflects current industry standards and we assume poses no additional requirements on industry.

Sufficient freeboard. See the Response to Comments in § 112.8(c)(2) for a discussion of this topic.

Industry standards. Industry standards that may assist an owner or operator with secondary containment

include: (1) NFPA 30; (2) BOCA, National Fire Prevention Code; and, (3) API Standard 2610, "Design, Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities."

Editorial changes and clarifications. In the introduction to paragraph (c), "structures or equipment to prevent discharged oil from reaching a navigable water course" becomes "structures or equipment to prevent a discharge as described in § 112.1(b)." This wording change reflects the expanded scope of the CWA as reflected in § 112.1(b) and is clearer than the proposed language. In the second sentence of the paragraph, we deleted the words "permeate, drain, infiltrate, or otherwise" from the sentence because they were unnecessary. The word "escape" in that sentence is sufficient. Also in that sentence, the reference to "escape to surface waters" becomes "escape from the containment system." This language more clearly reflects the intent of the rule that secondary containment should keep oil from escaping from the facility and reaching navigable waters or adjoining shorelines. In paragraph (c)(2)(i), "curbing, drip pans" becomes "curbing or drip pans."

In response to the commenter's question, we note that a primary containment system is the container or equipment which holds oil or in which oil is used.

Section 112.7(d)—Contingency Planning

Background. 1991 proposal. In 1991, we proposed to add several new requirements to the contingency planning requirement in § 112.7(d). First, we proposed that a facility without secondary containment be required to test a tank for integrity every five years. In contrast, our 1991 proposal for § 112.8(c)(6) provided for testing at least every 10 years for a tank with secondary containment. In addition, we proposed to require a facility without secondary containment to conduct integrity and leak testing of valves and piping at least annually. We also proposed that the contingency plan be submitted to the Regional Administrator for approval.

Instead of referring to 40 CFR part 109 for contingency plan requirements as the current rule does, the 1991 proposal added specific requirements including a description of response plans; personnel needs; methods of mechanical containment; removal of spilled oil; and, access to and availability of sorbents, booms, and other equipment. Additionally, the proposal would have required that the Plan not rely on dispersants and other chemicals for

response to oil spills without approval by the Regional Administrator. The owner or operator of a facility would also have been required to provide a written commitment of manpower, equipment, and materials required to quickly control and remove any quantity of oil that may be discharged.

1993 proposal. In 1993, we modified the 1991 proposal for a facility that lacks secondary containment to require a facility response plan as described in § 112.20, instead of the specific requirements proposed in 1991. The response plan would not be submitted to the Regional Administrator for his review, unless otherwise required, but would be maintained at the facility with the SPCC Plan.

Comments. 1991 comments. Many commenters supported the 1991 proposal. Opposing commenters suggested that such planning should be discretionary because not all facilities need such planning, or that facilities be allowed to use contingency plans prepared for other purposes. Others thought the proposal was premature as we had not at the time finalized response planning requirements in § 112.20. One commenter argued that we should delete all of the contingency planning requirements in § 112.7(d) at the point when we require an owner or operator to prepare a response plan. Some said that contingency planning was not practicable because the costs are too high, but commenters did not provide cost estimates. Several commenters criticized the proposed requirement that the contingency plan be submitted to the Regional Administrator, calling it duplicative, time-consuming, and unnecessary. Two commenters suggested that the Contingency Plan prepared under RCRA rules would suffice. Representatives of small facilities asked for a small facility exemption. Others asked for clarification of what a "written commitment" of manpower, equipment, and materials meant. Several commenters asked if PE certification of the contingency plan was necessary. One commenter opposed any requirement to provide contingency planning for buried tanks, piping, or valves for which secondary containment cannot be provided.

Integrity and leak testing. Several commenters supported the proposed integrity and leak testing requirements. Others opposed them, some on the basis that facilities already inspect their tanks regularly. Various commenters suggested exemptions for small containers or containers that are entirely within buildings. Electrical utilities argued that the requirement was

inapplicable for them because they do not store oil and that such testing would cause disruption in electrical service. Mining interests likewise asked for an exemption on the basis that they only store small amounts of oil and the requirements would be very expensive, but did not provide specific cost estimates. Various commenters asked for clarification of the term "integrity testing," and its applicability. Others asked for clarification as to methods of testing. Some argued that testing of valves and gathering lines would be expensive and result in shut-downs of operations. None of these commenters provided specific cost estimates.

1993 proposal. One commenter argued that the response plan proposal was beyond our statutory authority. Others argued that the proposal was expensive and lacking in environmental benefit. One commenter said that the installation of structures or measures achieving equivalent protection should be sufficient to avert the need for a response plan. Another suggested that the current rule, which specifies use of a strong oil spill contingency plan following 40 CFR part 109, is adequate. One commenter asked for an exemption for facilities in areas historically not subject to natural disasters. Electrical utility commenters asked for an exemption because they argued that a response plan was unnecessary for facilities that use, but do not store, oil.

Response to comments. Planning requirements. We note that we did not finalize the 1991 or 1993 contingency planning proposals. Thus there are no new costs for such planning.

Under the current rule, contingency planning is necessary whenever you determine that a secondary containment system for any part of the facility that might be the cause of a discharge as described in § 112.1(b) is not practicable. This requirement applies whether the facility is manned or unmanned, urban or rural, and for large and small facilities. In response to comment, we have revised the rule to exempt from the contingency planning requirement any facility which has submitted a response plan under § 112.20 because such a response plan is more comprehensive than a contingency plan following part 109.

We believe that it may be appropriate for an owner or operator to consider costs or economic impacts in determining whether he can meet a specific requirement that falls within the general deviation provision of § 112.7(a)(2). We believe so because under this section, the owner or operator will still have to utilize good engineering practices and come up with

an alternative that provides "equivalent environmental protection." However, we believe that the secondary containment requirement in § 112.7(d) is an important component in preventing discharges as described in § 112.1(b) and is environmentally preferable to a contingency plan prepared under 40 CFR part 109. Thus, we do not believe it is appropriate to allow an owner or operator to consider costs or economic impacts in any determination as to whether he can satisfy the secondary containment requirement. Instead, the owner or operator may only provide a contingency Plan in his SPCC Plan and otherwise comply with § 112.7(d). Therefore, the purpose of a determination of impracticability is to examine whether space or other geographic limitations of the facility would accommodate secondary containment; or, if local zoning ordinances or fire prevention standards or safety considerations would not allow secondary containment; or, if installing secondary containment would defeat the overall goal of the regulation to prevent discharges as described in § 112.1(b).

We disagree that facility response planning is beyond our statutory authority, it is a procedure or method to remove discharged oil. See section 311(j)(1)(A) of the CWA. However, while we disagree that such planning is expensive and lacking in environmental benefit, we agree that the current contingency plan arrangements which reference 40 CFR part 109 should be sufficient to protect the environment, and that a facility response plan as described in § 112.20 is therefore unnecessary for a facility that is not otherwise subject to § 112.20. We agree with the commenter that structures or equipment might achieve the same or equivalent protection as response planning for some SPCC facilities. Therefore, we are withdrawing that part of the 1993 proposal related to response planning in proposed § 112.7(d)(1), but are retaining the current contingency planning provisions, which require a contingency plan following the provisions of 40 CFR part 109. We also believe that response plans should be reserved for higher risk facilities, as provided in § 112.20.

In following the provisions of part 109, you must address the oil removal contingency planning criteria listed in 40 CFR 109.5 and ensure that all response actions are coordinated with governmental oil spill response organizations. The absence of secondary containment will place extreme importance on the early detection of an

oil discharge and rapid response by the facility to prevent that discharge. Part 109 was originally promulgated to assist State and local government oil spill response agencies to prepare oil removal contingency plans in the inland response zone, where EPA provides the On-Scene Coordinator. The basic criteria for contingency planning listed in § 109.5 apply to any SPCC regulated facility that has adequately justified the impracticability of installing secondary containment, irrespective of whether it is a government agency or the facility is located in the coastal (U.S. Coast Guard) or inland (EPA) response zone. Because the contingency plan involves good engineering practice and is technically a material part of the Plan, PE certification is required.

A contingency plan prepared under RCRA rules might suffice for purposes of the rule if the plan fulfills the requirements of part 109, and the PE certifies that such plan is adequate for the facility. If the RCRA contingency plan satisfies some but not all SPCC requirements, you must supplement it so that it does.

We note that the preamble to the 1993 proposed rule (at 58 FR 8841) suggested that response plans would not have to be submitted to the Regional Administrator unless "otherwise required by the rest of today's proposed rule." However, proposed § 112.7(a)(2) would have required that the owner or operator submit to the Regional Administrator any Plan containing a proposed deviation, including a deviation for the general secondary containment requirements in § 112.7(c). In any case, we agree with commenters that the contingency plan (or any other deviation) should not have to be submitted to the Regional Administrator for his review and approval because we believe that it is sufficient that the contingency plan (or other deviation) be available for on-site inspection. We have therefore withdrawn that part of the proposal. See also the discussion on § 112.7(a)(2).

Integrity and leak testing. In response to a commenter who asked for a clarification of integrity testing, "integrity testing" is any means to measure the strength (structural soundness) of the container shell, bottom, and/or floor to contain oil and may include leak testing to determine whether the container will discharge oil. Facility components that might cause a discharge as described in § 112.1(b) include containers, piping, valves, or other equipment or devices. Integrity testing includes, but is not limited to, testing foundations and supports of containers. Its scope includes both the

inside and outside of the container. It also includes frequent observation of the outside of the container for signs of deterioration, leaks, or accumulation of oil inside diked areas. Such testing is also applicable to valves and piping. See API Standard 653 for further information on this term.

Leak testing for purposes of the rule is testing to determine the liquid tightness of valves and piping and whether they may discharge oil. Facilities that store oil, whether they are mines or other businesses, are required to employ integrity testing for their bulk storage containers, and integrity and leak testing for their valves and piping, to help prevent discharges. Containers that do not store oil, but merely use oil, are not subject to the requirement.

We reaffirm the applicability of integrity and leak testing to both large and small facilities, because we believe such testing requirements help prevent discharges as described in § 112.1(b) at those facilities. However, we have modified our proposal in response to comments to only require such testing on a periodic basis instead of at a prescribed frequency. Integrity and leak testing requirements are also applicable for containers and valves and piping that are entirely within buildings, or within mines, because in either case, such containers, or valves and piping may become the source of a discharge as described in § 112.1(b). We have revised the rule to reflect that the requirement applies only to onshore and offshore bulk storage facilities. Therefore, a facility with only oil-filled electrical, operating, or manufacturing equipment need not conduct such testing nor incur any costs for such testing. For other types of facilities, we disagree that testing of valves and gathering lines would be prohibitively costly. In 1991, we estimated tank integrity testing and leak testing costs of buried piping. We estimated the costs as \$465 per tank, \$155 for equipment, and \$310 for installation. Small facilities were assumed to have no buried piping. Medium sized facilities were assumed to bear first year costs for tank installation and testing of \$4,704 and subsequent year costs of \$1,449. Large facilities were assumed to incur a first year cost of \$11,313, and subsequent year costs of \$3,519. We assume that this provision represents a negligible additional burden because most facilities are already testing such valves and gathering lines according to industry standards as a matter of good engineering practice. We believe that if such testing is done in accordance with industry standards, costs will be minimized.

We have eliminated the proposed frequency of the testing, both for containers and for valves and piping, in favor of testing according to industry standards. Instead, we require "periodic" integrity testing of containers, and "periodic" integrity and leak testing of valves and piping. "Periodic" testing means testing according to a regular schedule consistent with accepted industry standards. We believe that use of industry standards, which change over time, will prove more feasible than providing a specific and unchanging regulatory requirement. As required by § 112.8(c)(6), integrity testing of containers must be accomplished by a combination of visual testing and some other technique.

Written commitment. A "written commitment" of manpower, equipment, and materials means either a written contract or other written documentation showing that you have made provision for those items for response purposes. Such commitment must be shown by: the identification and inventory of applicable equipment, materials, and supplies which are available locally and regionally; an estimate of the equipment, materials, and supplies which would be required to remove the maximum oil discharge to be anticipated; and, development of agreements and arrangements in advance of an oil discharge for the acquisition of equipment, materials, and supplies to be used in responding to such a discharge. 40 CFR 109.5(c).

The commitment also involves making provisions for well defined and specific actions to be taken after discovery and notification of an oil discharge including: specification of an oil discharge response operating team consisting of trained, prepared, and available operating personnel; predesignation of a properly qualified oil discharge response coordinator who is charged with the responsibility and delegated commensurate authority for directing and coordinating response operations and who knows how to request assistance from Federal authorities operating under current national and regional contingency plans; a preplanned location for an oil discharge response operations center and a reliable communications system for directing the coordinated overall response actions; provisions for varying degrees of response effort depending on the severity of the oil discharge; and, specification of the order of priority in which the various water uses are to be protected where more than one water use may be adversely affected as a result of an oil discharge and where response

operations may not be adequate to protect all uses. 40 CFR 109.5(d).

Industry standards. Industry standards that may assist an owner or operator with the integrity testing of containers, and the integrity and leak testing of piping and valves include: (1) API Standard 653, "Tank Inspection, Repair, Alteration, and Reconstruction"; (2) API Recommended Practice 575, "Inspection of Atmospheric and Low-Pressure Tanks"; (3) API Standard 570, "Piping Inspection Code (Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems)"; (4) American Society of Mechanical Engineers (ASME) B31.3, "Process Piping"; (5) ASME 31.4, "Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols"; (6) Steel Tank Institute Standard SP001-00, "Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids"; and, (7) Underwriters Laboratory (UL) Standard 142, "Steel Aboveground Tanks for Flammable and Combustible Liquids."

Editorial changes and clarifications. In the introductory paragraph, "tanks" becomes "containers." We revised the first sentence of the introduction which now reads, "When it is determined * * *," to read, "If you determine * * *." Later in that sentence we change the words "demonstrate such impracticability" to "explain why such measures are not practicable," in referencing the impracticability of secondary containment. Also, in the first sentence of the introduction, we clarify that the requirement for contingency planning and other measures is applicable when secondary containment is not practicable under §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), as well as § 112.7(c) and (h)(1). Additionally in that sentence, the reference to "prevent discharged oil from reaching navigable waters" becomes "to prevent a discharge as described in § 112.1(b)," conforming the geographic scope of the rule to the CWA. At the end of the paragraph we clarify that when secondary containment is not practicable, the contingency plan and written commitment must be provided in the Plan, rather than to the Regional Administrator. We also clarify that if you have submitted a facility response plan under § 112.20 for a facility, you need not provide for that facility either a contingency plan following the provisions of part 109, nor a written commitment of manpower, equipment, and materials required to expeditiously

control and remove any quantity of oil discharged that may be harmful.

In paragraph (d)(1), "A strong oil spill contingency plan following the provision of 40 CFR part 109 * * *." becomes "An oil spill contingency plan following the provisions of part 109 * * *." The word "strong" is unnecessary because in any case the contingency plan must follow the provisions of part 109.

In paragraph (d)(2), we did not finalize the proposed recommendation for the operator to consider financial capability in making his written commitment of manpower, equipment, and materials because we do not wish to confuse the regulated community with discretionary requirements in a mandatory rule. Finally, we changed the reference in paragraph (d)(2) from "to expeditiously control and remove any harmful quantity of oil discharged" to read "to expeditiously control and remove any quantity of oil discharged that may be harmful." We made this change to refer to the statutory standard referring to a quantity of oil "that may be harmful."

Section 112.7(e)—Inspections, Tests, and Records

Background. In 1991, we proposed that records and inspections and test results be kept for a period of five years. Current rules require record, inspection, and test results be maintained for three years. We also proposed that such records might be maintained with the Plan, instead of being part of the Plan.

In 1997, we returned to the three-year record maintenance period in our new proposal. In 1997, we also proposed that usual and customary business records, such as records maintained under API Standards 653 and 2610, would suffice to meet the requirements of this section. Finally we proposed that such records be made a part of the Plan.

Comments. 1991 comments. Maintenance with Plan. Most commenters favored the proposal that records might be maintained with the Plan, rather than as part of it. Two commenters thought the requirements should apply generally only to large facilities.

Form of records. One commenter urged use of electronic records.

Records required. Still another asked that we list all inspections and tests required by part 112. One commenter asked for a requirement to keep records and tests of all major repairs and of employee training.

Time period. Most commenters favored retaining the current three-year time period to maintain records, believing it is adequate. Some

commenters objected to the cost of a five-year record retention requirement. One commenter favored a two-year record maintenance period. Several favored a phase-in period if five years were to be required so that three-year records could be brought into compliance with the rule. One commenter favored a requirement that records be maintained in accordance with other State and Federal agency requirements to avoid additional and unnecessary costs.

1997 comments. Maintenance with Plan. A number of commenters criticized the proposal that records must be maintained as part of the Plan, rather than maintained with the Plan, considering that proposal burdensome and providing no benefit to the environment.

Form of records. Several commenters asked that we clarify that use of records maintained under the API standards cited is not required. Another commenter noted that many smaller companies do not use API standards, and that use of such records should be allowed "when available." Several commenters urged that we state that records kept under the NPDES program might suffice for the SPCC program. Other commenters asked whether records in other formats might be acceptable, such as under a facility's QS-9000 or ISO-14000 system, or under standards promulgated by the Underwriters' Laboratories. Other commenters discussed use of NPDES stormwater bypass records. We will talk about those records under the discussion of § 112.8(c)(3)(iv).

Time period. Most commenters favored the proposal to retain the current three-year time period for maintenance of records.

Response to comments. Maintenance with Plan. We agree with commenters that it is not necessary to maintain records as part of the Plan. Therefore, today's rule allows "keeping" of the records "with" the Plan, but not as part of it. In the current rule, such records "should be made part of the SPCC Plan * * *." 40 CFR 112.7(e)(8). Because you continually update these records, this change will eliminate the need to amend your Plan each time you remove old records and add new ones. You still retain the option of making these records a part of the Plan if you choose.

Records required. The rule permits use of usual and customary business records, and covers all of the inspections and tests required by this part as well as any ancillary records. "Inspections and tests" include not only inspections and tests, but schedules, evaluations, examinations, descriptions,

and similar activities required by this part. After publication of this rule, we will list all of the inspections and tests required by part 112 on our website (www.epa.gov/oilspill). The applicability of each inspection and test will depend on the exercise of good engineering practice, because not every one will be applicable to every facility.

Form of records. Records of inspections and tests required by this rule may be maintained in electronic or any other format which is readily accessible to the facility and to EPA personnel. Usual and customary business records may be those ordinarily used in the industry, including those made under API standards, Underwriters' Laboratories standards, NPDES permits, a facility's QS-9000 or ISO-14000 system, or any other format acceptable to the Regional Administrator. If you choose to use records associated with compliance with industry standards, such as Underwriters' Laboratories standards, you must closely review the inspection, testing, and recordkeeping requirements of this rule to ensure that any records kept in accordance with industry standards meets the intent of the rule. Some standards have limited recordkeeping requirements and may only address a particular aspect of container fabrication, installation, inspection, and operation and maintenance. The intent of the rule is that you will not have to maintain duplicate sets of records when one set has already been prepared under industry or regulatory purposes that also fully suffices for SPCC purposes. The use of these alternative record formats is optional; you are not required to use them, but you may use them.

Time period. We agree with commenters that maintenance of records for three years is sufficient for SPCC purposes, since that period will allow for meaningful comparisons of inspections and tests taken. Therefore, there will be no new costs. We note, however, that certain industry standards, for example API Standards 570 and 653, may specify record maintenance for more than three years.

Editorial changes and clarifications. As proposed in 1991, we affirm that the certifying engineer, as well as the owner or operator, may be a person who develops inspection procedures. We also affirm that the provision applies to both "inspections" and "tests" undertaken. The tests are usually integral parts of the inspections.

Section 112.7(f)—Employee Training and Discharge Prevention Procedures

Background. In 1991, we proposed that you conduct training exercises and that you train new employees within their first week of work. The rationale for these provisions was that a high percentage of discharges are caused by operator error; therefore, training and briefings might help prevent many discharges and promote a safer facility. This rationale was based on program experience and studies EPA undertook. The 1995 SPCC Survey found that operator error was the most common spill cause for facilities in 9 of the 19 industry categories that reported having spills. Also, the August 1994 draft report of the EPA Aboveground Oil Storage Facilities Workgroup called "Soil and Ground Water Contamination from Aboveground Oil Storage Facilities: A Strategic Study" presented data on causes of discharges from two studies. Both studies showed that error during product transfer activities is one of the biggest known causes of discharges at AST facilities. Two other studies also support our contention: Carter, W.J., "How API Viewed the Needs for Aboveground Storage Tanks," Tank Talk, Vol. 7, July/August 1992, p.2.; and U.S. EPA, "The Technical Background Document to Support the Implementation of OPA Response Plan Requirements," Emergency Response Division, Office of Solid Waste and Emergency Response, February 1993, p.4-19.

In 1993, we proposed to qualify the applicability of the training requirements to only those facilities that transfer or receive greater than or equal to 10,000 gallons of oil in a single operation more than twice per month on average, or greater than or equal to 50,000 gallons in a single operation more than once a month on the average. We further proposed that you require that employees involved in "oil-handling activities," such as the operation or maintenance of oil storage tanks or the operation of equipment related to storage tanks, receive eight hours of facility specific training within one year of the effective date of the rule or at the date that your facility becomes subject to the requirement. In subsequent years, each employee would be required to undergo four hours of refresher training.

Our 1993 proposal would require training for new employees within one week of employment. We also proposed to specify the areas in which you would be required to train employees to include: training in correct equipment operation and maintenance, general

facility operations, discharge prevention laws and regulations, and the contents of the facility's SPCC Plan. Finally, the proposal would require that you conduct unannounced drills, at least annually, in which oil-handling personnel would participate.

Comments. 1991 comments. Applicability of training requirements. Numerous commenters suggested that the training requirements should apply only to personnel involved in the operation or maintenance of equipment. They argued that the training requirements need not apply to clerks, secretaries, and similar employees who are not involved in the physical operations of the facility. They also argued that we failed to sufficiently account for training costs in our economic analysis. Another commenter asked for a small facility exemption from training requirements.

Another commenter asked that facilities be allowed to incorporate SPCC training requirements into already existing training programs required by other Federal or State law. One commenter suggested that the rule include a requirement that owners or operators document each training session and spill response drill conducted, and to maintain those records for five years.

Timing of employee training. Some commenters favored the proposed provision for yearly training exercises and suggested that the training be coordinated with local oil spill response organizations or Local Emergency Planning Committees (LEPCs) whenever possible. One commenter cautioned that the annual training should not be considered a full scale SPCC drill.

Opposing commenters suggested no time period for such exercises, or alternative periods, such as every two or three years.

Likewise, many commenters opposed the provision relating to the training of new employees within one week of employment. Opposing commenters argued generally that such a recommendation is impractical, and called for employer discretion in scheduling training. Others suggested varying time periods in lieu of one week. Those suggestions ranged from one month to one year, with alternatives suggested such as "as soon as practical," "prior to operation but before one year," "within one week of job assignment," "a more reasonable time period," "after training," and "until the next annual training for all employees." One commenter asked that we define the term "new employee."

Discharge prevention briefings. Many commenters criticized the proposal for

annual spill prevention briefings, as opposed to the current requirement to hold such briefings "at intervals frequent enough to assure adequate understanding of the SPCC Plan." They argued that the current standard is adequate. Some commenters suggested that we require additional training in these briefings such as emergency response training, or training concerning Plan changes.

1993 comments. Applicability of training requirements. In 1993, many commenters asked for clarification of what "oil-handling" personnel meant. Some thought the requirements for training should be limited to those employees engaged in response activities. Others questioned what "on average" meant in determining the threshold applicability of the rule. Still others asked what "a single operation" meant. Some asked that the requirements be limited to facilities with potential to cause "substantial harm" to the environment. Others asked that the requirements be relaxed for facilities with equipment that reduce the potential for discharges. Some suggested differing gallon thresholds for the applicability of the training requirements. One commenter suggested that training be limited to those employees involved in emergency response or countermeasure activities. One commenter asked for an exemption from this requirement for small facilities. Another commenter asked for an exemption for extraction facilities, because, he argued, they have few spills. Another commenter suggested that the 1991 proposal was adequate.

Timing of employee training. Some commenters favored the proposed requirement for eight-hour annual training, with four-hour refresher training in subsequent years. Others opposed it, arguing that employer discretion in this matter will ensure a better result.

Likewise many commenters opposed the requirement that new employees be trained within one week of employment, arguing instead for employer discretion. Some commenters suggested alternate frequencies other than one week, ranging from "prior to assuming duties" to up to six months after hiring.

Content of training. A few commenters supported the specification of training subjects. Some commenters suggested that we require training in the proper operation and maintenance of facility equipment and knowledge of spill procedure protocols. A utility commenter objected to the proposal that its employees be trained in maintenance of oil storage tanks, because its

maintenance activities do not involve the transfer or handling of oil and therefore fall outside the scope of the rule. Alternatively, the commenter suggested, those employees should be given a lower level of "awareness" training. One commenter suggested inclusion of response training.

Unannounced drills. Some commenters favored the proposal and suggested that actual discharge experience should be given credit as a drill. One commenter suggested a frequency schedule for various types of drills.

Some commenters criticized the proposal for at least yearly unannounced drills. One commenter suggested that the frequency of the drills should be at the operator's discretion. Commenters argued that, if required at all, drills should only be applicable to operational or response personnel. Two commenters said that a requirement for unannounced drills for all employees would require them to conduct at least eight or more drills a year. Another commenter suggested training instead of drills, because of the potential for drills to cause expensive shutdowns.

Response to comments. Applicability of training requirements. We believe that training requirements should apply to all facilities, large or small, including all those that store or use oil, regardless of the amount of oil transferred in any particular time. Training may help avert human error, which is a principal cause of oil discharges. "Spills from ASTs may occur as a result of operator error, for example, during loading operations (e.g., vessel or tank truck—AST transfer operation), or as a result of structural failure (e.g., brittle fracture) because of inadequate maintenance of the AST." EPA Liner Study, at 14. The 1995 SPCC Survey found that operator error was the most common spill cause for facilities in 9 of the 19 industry categories that reported having spills. Also, the August 1994 draft report of the EPA Aboveground Oil Storage Facilities Workgroup called "Soil and Ground Water Contamination from Aboveground Oil Storage Facilities: A Strategic Study" presented data on causes of discharges from two studies. Both studies showed that error during product transfer activities is one of the biggest known causes of discharges at AST facilities. Two other studies also support our contention: Carter, W.J., "How API Viewed the Needs for Aboveground Storage Tanks," Tank Talk, Vol. 7, July/August 1992, p.2.; and U.S. EPA, "The Technical Background Document to Support the Implementation of OPA Response Plan Requirements," Emergency Response

Division, Office of Solid Waste and Emergency Response, February 1993, p.4–19. We have therefore retained the applicability of training to all facilities. The 1993 proposal would have limited training requirements to only certain facilities which received or transferred over the proposed amount of oil. Facilities which receive or transfer less than the proposed amount might also have discharges which could have been averted through required training. Also the proposed rule would have exempted many facilities that use rather than store oil from its scope. Therefore, we have provided in the rule that all facilities, whether bulk storage facilities or facilities that merely use oil, must train oil-handling employees because all facilities have the potential for a discharge as described in § 112.1(b), and training is necessary to avert such a discharge.

We agree with the commenter that training is only necessary for personnel who will use it to carry out the requirements of this rule. Therefore revised paragraph (f)(1) provides that only oil-handling personnel are subject to training requirements, as we proposed in 1993. Thus there are no new training costs because we have always required such training of oil-handling personnel. "Oil-handling personnel" is to be interpreted according to industry standards, but includes employees engaged in the operation and maintenance of oil storage containers or the operation of equipment related to storage containers and emergency response personnel. We do not interpret the term to include secretaries, clerks, and other personnel who are never involved in operation or maintenance activities related to oil storage or equipment, oil transfer operations, emergency response, countermeasure functions, or similar activities.

You may incorporate SPCC training requirements into already existing training programs required by other Federal or State law at your option or may conduct SPCC training separately.

You must document that you have conducted required training courses. Such documentation must be maintained with the Plan for three years.

Timing of employee training. We agree with commenters who thought it desirable to leave the timing and number of hours of training of oil-handling employees, including new employees, to the employer's discretion. "Proper instruction" of oil-handling employees, as required in the rule, means in accordance with industry standards or at a frequency sufficient to

prevent a discharge as described in § 112.1(b). This standard will allow facilities more flexibility to develop training programs better suited to the particular facility. While the rule requires annual discharge prevention briefings, we also agree that the annual briefings required are not drills. In any case, the SPCC rules do not require drills, as explained below.

For purposes of the rule, it is not necessary to define a "new employee" because all oil-handling personnel are subject to training requirements, whether new or not. You do, however, have discretion as to the timing of that training, so long as the timing meets the requirements of good engineering practice.

Discharge prevention briefings. Annual discharge prevention briefings are necessary, but there should be more frequent briefings where appropriate. Such briefings are necessary to refresh employees' memories on facility Plan provisions and to update employees on the latest prevention and response techniques. Training must include the contents of the facility Plan. Although it is desirable, we disagree that we should require SPCC briefings to include emergency response training. That training is already required for those facilities which must prepare response plans.

Content of training. Specifying a minimum list of training subjects is necessary to ensure that facility employees are aware of discharge prevention procedures and regulations. As suggested by a commenter, we have added knowledge of discharge procedure protocols to the list of training subjects because such training will help avert discharges. Therefore, we have specified that training must include, at a minimum: the operation and maintenance of equipment to prevent the discharge of oil; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility Plan. As noted above, we require response training for facilities that must submit response plans, but such training is not necessary for all SPCC facilities.

In response to the utility commenter who asserted that utility employees do not need to be trained in the maintenance of oil storage tanks because such maintenance does not involve the transfer and handling of oil, we note that training must address relevant maintenance activities at the facility. If there is no transfer and handling of oil, such topic need not be covered in training.

Unannounced drills. The proposed yearly frequency for unannounced drills is also unnecessary because such drills are already required at FRP facilities, which are higher risk facilities. We do not believe that the risk at all SPCC facilities approaches the same level as at FRP facilities. Therefore, we are not finalizing this proposal, and there are no new costs.

Editorial changes and clarifications. We changed the title from "Personnel, training, and spill prevention procedures," to "Personnel, training, and discharge prevention procedures." In paragraph (f)(1), "discharges of oil" becomes "discharges." In paragraph (f)(2), "line management" becomes "facility management," and "oil spill prevention" becomes "discharge prevention." In paragraph (f)(3), "spill prevention briefings" becomes "discharge prevention briefings." Also in paragraph (f)(3); "operating personnel" becomes "oil-handling personnel," to be consistent with language in paragraph (f)(1); and, "spill events" becomes "discharges as described in § 112.1(b)."

Section 112.7(g)—Security (Excluding oil Production Facilities)

Background. In 1991, we proposed to turn into a recommendation the current requirement that a facility should be fully fenced, and gates locked and/or guarded when the facility is not in production or is unattended. We proposed to require that the master flow and drain valves (or other valves that will permit direct outward flow of the tanks' contents) have adequate security to ensure that they remain in a closed position when in non-operating or non-standby status. Thus, the proposal would allow more flexibility in the method of securing the valves than the current rule, which requires that such valves be "securely locked."

The current rule requires that loading/unloading connections be securely capped or blank-flanged when not in service or standby-service "for an extended time." We proposed in 1991 to clarify that "an extended time" means six months or more, based on our Regional experience.

Comments. Editorial changes and clarifications. One commenter asked for the meaning of "plant" as used in proposed § 112.7(g)(1).

Applicability of requirement. One commenter urged an exemption from all security provisions for mobile facilities, because such facilities are manned 24 hours a day while in operation.

Fences. One commenter argued that fences should not be required for all facilities, because it is not practicable in

some places. Another argued that fences should be topped with barbed wire, or otherwise designed to deter vandalism.

Starter controls on pumps. Several commenters argued that the requirements to lock starter controls on all pumps and to locate them at a site accessible only to authorized personnel are duplicative and do not deter vandals or other unauthorized personnel.

Another commenter urged us to exclude large facilities from the locking requirement because the potential for losing keys or having the locks become inoperative due to freezing conditions is great. A third commenter suggested that the requirement should apply to facilities, and not to pumps.

Loading/unloading connections. One commenter urged that the blank-flanging requirement apply to facilities that are not in service for six months or more, rather than to connections of oil piping. The rationale was that larger facilities have seasonal or contractual variations in use of lines, pumps, racks, and connections. Therefore, it would be costly and impractical to blank off lines only to reopen them in the seventh month. Accordingly, the rule should, per the commenter, recognize normal operating procedures at such facilities and allow flexibility. Another commenter requested that "quick disconnect" fittings qualify as a method of secure capping.

Response to comments. Applicability of requirements. We asked in the 1991 preamble (at 56 FR 54616) for comments as to whether provisions proposed as discretionary measures or recommendations should be made requirements. We were concerned whether these proposed measures represented good engineering practice for all facilities. Specific comments are discussed below. In the case of proposed § 112.7(g)(1) and (5) as requirements, we have decided to retain the requirements as requirements rather than convert those paragraphs into recommendations as proposed. We have done this because we believe that fencing, facility lighting, and the other measures prescribed in the rule to prevent vandalism are elements of good engineering practice in most facilities, including mobile facilities. Where they are not a part of good engineering practice, we have amended the proposed provision allowing deviations, § 112.7(a)(2), to include the provisions in § 112.7(g).

Fences. Fencing helps to deter vandals and thus prevent the discharges that they might cause. In response to the commenter who argued that fences should be topped with barbed wire, or otherwise designed to deter vandalism,

we agree. When you use a fence to protect a facility, the design of the fence should deter vandalism. Methods of deterring vandals might include barbed wire or other devices. If any type of fence is impractical, you may, under § 112.7(a)(2), explain your reasons for nonconformance and provide equivalent environmental protection by some other means.

Valves. Revised § 112.7(g)(2) requires you to ensure that the master flow and drain valves and other valves permitting outward flow of the container's contents have adequate security measures. The current rule requires that such valves be securely locked in the closed position when in non-operating or non-standby status. Today's revised rule allows security measures other than locking drain valves or other valves permitting outflow to the surface. Manual locks may be preferable for valves that are not electronically or automatically controlled. Such locks may be the only practical way to ensure that valves stay in the closed position. For electronically controlled or automated systems, no manual lock may be necessary. The rule gives you discretion in the method of securing valves. We believe that this flexibility is necessary due to changes in technology and in the use of manual and electronic valving.

Starter controls on pumps. We disagree that the requirements to have the starter control locked in the off position and be accessible only to authorized personnel are redundant. Restricting access to such pumps prevents unauthorized personnel from accidentally opening the starter control. These measures are necessary to prevent discharges at small as well as large facilities because the threat of discharge is the same regardless of the size of the container, and a small discharge may be harmful to the environment. If the potential for losing keys, weather conditions such as frequent freezing, or other engineering factors render such a measure infeasible, you may use the deviation provisions in § 112.7(a)(2) if you can explain your reasons for nonconformance and provide equivalent environmental protection by some other means.

Loading/unloading connections. In response to comment, we have decided to retain the current time line in § 112.7(g)(4), *i.e.*, "an extended time," instead of specifying a six-month time line, due to the need for operational flexibility at facilities. We define "an extended time" in reference to industry standards or, in the absence of such standards, at a frequency sufficient to prevent any discharge. The appropriate method of securing or blank flanging of

these connections is a matter of good engineering practice, and might include "quick disconnect fittings" as a possible deviation under § 112.7(a)(2). In any case, a secure cap is one equipped with some kind of lock or secure closure device to prevent vandalism. We disagree that the requirements of this paragraph should apply to the owner or operator of a facility instead of the owner or operator of the piping because a facility might place only some piping out of service for a period of time, and let other piping remain in service. Therefore, the owners or operators of some piping might escape the requirements of the rule and be more likely to discharge oil.

Industry standards. Industry standards that may assist an owner or operator with security purposes include: (1) API Standard 2610, Design, Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities; and, (2) NFPA 30A, Automotive and Marine Service Station Code, Flammable and Combustible Liquids Code.

Editorial changes and clarifications. We agree that the term "plant" has no clear meaning. Therefore, in paragraph (g)(1), we have substituted the term "facility" in its place, which is a defined term in these rules. Also in that paragraph, the phrase "handling, processing and storing oil" becomes "handling, processing or storing oil." In paragraph (g)(2), "tank" becomes "container." In paragraph (g)(3), "pumps" becomes "pump." In paragraph (g)(5), the phrase "Consideration should be given to:" is deleted. We revise the sentence to read, "Provide facility lighting commensurate with the type and location of the facility that will assist in the: * * *"

Section 112.7(h)—Loading/Unloading (Excluding Offshore Facilities)

Background. In 1991, we repropounded the current discharge prevention requirements for loading/unloading racks.

Comments. In general. Several commenters opposed the proposal on the basis that a requirement for a strong contingency plan would be a preferable and more effective alternative. Another commenter asked that we clarify that only facilities routinely used for loading or unloading of tanker trucks from or into aboveground bulk storage tanks are subject to this provision. One commenter believed that the proposed rule regulates items which "should be covered" by DOT rules governing loading, unloading, and vehicle inspection.

Editorial changes and clarifications. One commenter asked for a clarification of the term "quick drainage system."

Another commenter recommended that instead of mandatory containment requirements, a facility be allowed to show that procedures are in place to ensure that personnel are present at all times to supervise tank truck loading and unloading. Additionally, that commenter recommended that all new or renovated loading/unloading areas provide, at a minimum, curbing, sloped concrete, trenching, tanks, or basins which could contain at least five percent by volume of the largest compartment of the tank car or truck. For existing facilities, that commenter suggested that containment might contain a lesser volume, provided that the entire area is constructed of impervious material, no reported releases have occurred, and that loading/unloading activities are supervised.

Alarm or warning systems. One commenter asked whether the requirement to provide a warning light or physical barrier system, or warning signs, applied to tank batteries or just plants. Another suggested that a vehicle brake interlock system or similar system might work just as well. Still another suggested the use of wheel chocks during tank truck transfers.

Vehicle drain closure. Two commenters opposed the proposed requirement that vehicle drains and outlets be examined for leakage and if necessary repaired to prevent liquid leaks during transit. They argued that the facility owner had little or no control over trucks that were owned by others which loaded or unloaded at a facility and could not ensure their compliance with the rules.

Response to comments. In general. This section is applicable to any non-transportation-related or terminal facility where oil is loaded or unloaded from or to a tank car or tank truck. It applies to containers which are aboveground (including partially buried tanks, bunkered tanks, or vaulted tanks) or completely buried (except those exempted by this rule), and to all facilities, large or small. All of these facilities have a risk of discharge from transfers. Our Survey of Oil Storage Facilities (published in July 1996) showed that as annual throughput increases, so does the propensity to discharge, the severity of the discharge, and, to a lesser extent, the costs of the cleanup. Throughput increases are often associated with transfers of oil.

The requirements contained in this section, including those for secondary containment, warning systems, and

inspection of trucks or cars for discharges are necessary to help prevent discharges. If you can justify a deviation for secondary containment requirement in paragraph (h)(1) on the basis that it is not practicable from an engineering standpoint, you must provide a contingency plan and take other actions to comply with § 112.7(d). If you seek to deviate from any of the requirements in paragraphs (h)(2) or (3), you must explain your reasons for nonconformance, as provided in § 112.7(a)(2), and provide measures affording equivalent environmental protection.

We disagree that a contingency plan (whether labeled "strong" or otherwise) is a preferable alternative to secondary containment. Secondary containment is preferable because it may prevent a discharge that may be harmful as described in § 112.1(b). A contingency plan is a plan for action when such discharge has already occurred. However, as noted earlier, if secondary containment is not practicable, you must provide a contingency plan and take other actions as required by § 112.7(d). EPA will continue to evaluate the issue of whether the provisions for secondary containment found in § 112.7(h)(1) should be modified or revised. We intend to publish a notice asking for additional data and comment on this issue.

We disagree that the section regulates activities already under the purview of the U.S. Department of Transportation. We regulate the environmental aspects of loading/unloading transfers at non-transportation-related facilities, which are legitimately part of a prevention plan. DOT regulates other aspects of those transfers, such as safety measures.

Other State or Federal law. We have withdrawn, as unnecessary, proposed § 112.7(h)(1), which would have required that facilities meet the minimum requirements of Federal and State law. Those requirements apply whether they are mentioned or not.

Secondary containment. As noted above, the requirement for secondary containment applies to all facilities, whether with aboveground or completely buried containers. This includes production facilities and small facilities. The method of secondary containment must be one of those listed in the rule (see § 112.7(c)), or some similar system that provides equivalent environmental protection. The choice of method is one of good engineering practice. However, in response to comments, we note that sumps and drip pans are a listed method of secondary containment for offshore facilities. A catchment basin might be an acceptable

form of retention pond for an onshore facility. Whatever method is implemented, it must be capable of containing the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded in the facility. A discharge from the maximum capacity of any single compartment of a tank car or tank truck includes a discharge from the tank car or tank truck piping and hoses. This is the largest amount likely to be discharged from the oil storage vehicle. A requirement that secondary containment be able to hold only five percent of a potential discharge when procedures are in place to prevent discharges fails to protect the environment if there is human error in one of those procedures. In case of discharge, the secondary containment system must be capable of preventing a discharge from that maximum capacity compartment to the environment. As mentioned above, if secondary containment is not practicable, you may be able to deviate from the requirement if you provide a contingency plan and otherwise comply with § 112.7(d).

Alarm or warning systems. The requirement to provide a warning light or other physical barrier system applies to the loading/unloading areas of facilities. We have amended the rule on the suggestion of a commenter to include "vehicle brake interlock system" and "wheel chocks." The examples listed in the rule of potential warning systems are merely illustrative. Any other alarm or warning system which serves the same purpose and performs effectively will also suffice to meet this requirement.

Vehicle drain closure. We believe that the requirement to check vehicles for discharge is important to help prevent discharges. If the check were not done, the entire contents of the vehicle might be discharged. We further believe that the responsibility for compliance with proposed § 112.7(h)(3), as well as with all provisions of the rule, continues to rest with the owner or operator of the facility when those vehicles are loading or unloading oil at the facility.

Industry standards. Industry standards that may assist an owner or operator with loading and unloading areas include: (1) NFPA 30, "Flammable and Combustible Liquids Code"; and, (2) API Standard 2610, "Design, Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities."

Editorial changes and clarifications. In paragraph (h)(1), for clarity, "plant" is changed to "facility." The phrase "to handle spills" becomes "to handle discharges." A "quick drainage system" is a device which drains oil away from

the loading/unloading area to some means of secondary containment or returns the oil to the facility. For § 112.7(h)(1), if secondary containment is not practicable, you must provide a contingency plan following the provisions of 40 CFR part 109, and otherwise comply with § 112.7(d). Also, in paragraph (h)(1), "tank truck" becomes "tank car or tank truck." In paragraph (h)(2), "prevent vehicular departure," becomes "prevent vehicles from departing." In paragraph (h)(3), "leakage" becomes "discharge." "Discharge" is a broader term, of which "leakage" is a subset. Also in that paragraph, "examine" becomes "inspect."

Section 112.7(i)—Brittle Fracture Evaluation

Background. In 1993, we proposed to require that you evaluate your field-constructed tanks for brittle fracture if those tanks undergo repair, alteration, or a change in service. You would have been required to evaluate those tanks by adherence to industry standards contained in American Petroleum Institute (API) Standard 653, entitled "Tank Inspection, Repair, Alteration, and Reconstruction." The rationale was to help prevent the failure of field-constructed tanks due to brittle fracture, such as the four million gallon aboveground Ashland Oil tank failure which occurred in January 1988.

Comments. Applicability. Several commenters favored the proposal. One suggested that we incorporate API Standard 653 into our rules to accommodate the possibility of tank failures other than through brittle fracture. One commenter opposed the proposal on the basis that the evaluation was unnecessary for small volume tanks and tanks with secondary containment. Other commenters argued that such testing was unnecessary for steel-bolted tanks because such tanks are too thin to be subject to brittle fracture since material properties are uniform through the thickness. One commenter asked that small facilities be exempted from the proposed requirement.

Editorial changes and clarifications. Two commenters asked what the term "change in service" means. Others asked for clarification of the term "field-erected tank." Another asked for clarification of the term "repair," so that it would exclude ordinary day-to-day maintenance activities which are conducted to maintain the functional integrity of the tank and do not weaken the tank.

Alternatives to brittle fracture evaluation. One commenter suggested

that we allow testing by acoustic emission testing.

Response to comments. Applicability. The requirement to evaluate field-constructed tanks for brittle fracture whenever a field-constructed aboveground container undergoes repair, alteration, reconstruction, or change in service is necessary because brittle fracture may cause sudden and catastrophic tank failure, resulting in potentially serious damage to the environment and loss of oil. The requirement must be applicable to large and small facilities alike, because all the field-constructed aboveground containers have a risk of failure. The presence or absence of secondary containment does not eliminate the need for brittle fracture evaluation because the intent of the rule is to prevent a discharge whether or not it will be contained. While the requirement applies to all field-constructed aboveground containers, if you can show that the evaluation is unnecessary for your steel-bolted tanks, you may deviate from the requirement under § 112.7(a)(2) if you can explain your reasons for nonconformance and provide equivalent environmental protection. We note that portions of steel-bolted tanks, such as the bottom or roof, may be welded, and therefore subject to brittle fracture.

The requirement for evaluation of a field-constructed aboveground container must be undertaken when the container undergoes a repair, alteration, reconstruction, or change in service that might affect the risk of a discharge or failure due to brittle fracture, or when a discharge or failure has already occurred due to brittle fracture or other catastrophe. Catastrophic failures are failures which may result from events such as lightning strikes, dangerous seismic activity, etc. As a result of a catastrophic failure, the entire contents of a container may be discharged to the environment in the same way as if brittle fracture had occurred.

"Repair" means any work necessary to maintain or restore a container to a condition suitable for safe operation. Typical examples include the removal and replacement of material (such as roof, shell, or bottom material, including weld metal) to maintain container integrity; the re-leveling or jacking of a container shell, bottom, or roof; the addition of reinforcing plates to existing shell penetrations; and the repair of flaws, such as tears or gouges, by grinding or gouging followed by welding. We understand that some repairs (such as repair of tank seals), alterations, or changes in service will not cause a risk of failure due to brittle

fracture; therefore, we have amended the rule to refer to those repairs, alterations, reconstruction, or changes in service that affect the risk of a discharge or failure due to brittle fracture.

“Alteration” means any work on a container involving cutting, burning, welding, or heating operations that changes the physical dimensions or configurations of the container. Typical examples include the addition of manways and nozzles greater than 12-inch nominal pipe size and an increase or decrease in tank shell height.

Alternatives to brittle fracture evaluation. We have eliminated the incorporation by reference to API Standard 653 from the rule. We have also therefore withdrawn proposed Appendix H, the API Standard 653 brittle fracture flowchart. We believe that API Standard 653 is an acceptable standard to test for brittle fracture. However, an incorporation by reference of any standard might cause the rule to be instantly obsolete should that standard change or should a newer, better method emerge. A potential standard might also apply only to a certain subset of facilities or equipment. Therefore, as with most other requirements in this part, if you explain your reasons for nonconformance, alternative methods which afford equivalent environmental protection may be acceptable under § 112.7(a)(2). If acoustic emission testing provides equivalent environmental protection it may be acceptable as an alternative. That decision, in the first instance, is one for the Professional Engineer and owner or operator.

Industry standards. Industry standards that may assist an owner or operator with brittle fracture evaluation include: (1) API Standard 653, “Tank Inspection, Repair, Alteration, and Reconstruction”; and, (2) API Recommended Practice 920, “Prevention of Brittle Fracture of Pressure Vessels.”

Editorial changes and clarifications. A “field-constructed aboveground container” is one that is assembled or reassembled outside the factory at the location of its intended use. A “change in service” is a change from previous operating conditions involving different properties of the stored product such as specific gravity or corrosivity and/or different service conditions of temperature and/or pressure. The word “reconstruction” was added in the first sentence to conform with the text in API Standard 653. The words “discharge or” were added prior to “failure” and “brittle fracture failure” to make clear that evaluation is necessary when there

has been a discharge from the container, whether or not there has been a complete failure of the container due to brittle fracture or catastrophe. When a container has failed completely and will be replaced, no brittle fracture or catastrophe evaluation is necessary. The evaluation is only applicable when the original container remains, but the physical condition of the container has changed due to repair, alteration, or change in service.

Section 112.7(j)—State Rules

Background. In the introduction to § 112.7(e) of the current rule, an owner or operator is required to discuss in the Plan his conformance with § 112.7(c), plus other applicable parts of § 112.7, other effective spill prevention and containment procedures or, if more stringent, with State rules, regulations, and guidelines. In our 1991 proposal, we limited the required discussion of “other effective spill prevention and containment procedures” to those listed in §§ 112.8, 112.9, 112.10, and 112.11, or if more stringent, with State rules, regulations, and guidelines.

Comments. Cross-referencing of requirements. One commenter argued that the proposed requirements should be more clearly limited to those sections which are applicable to the facility in question. For example, the commenter asserted, “requirements in § 112.8 ‘* * * onshore facilities (excluding production facilities)’ should not (by the requirement in § 112.7(i)) be applied to any portion of any production facility.”

Consistency in rules. Two States urged that our rules be as consistent as possible with rules in the States. Another State urged that we grant reciprocity to State-approved Plans which have been reviewed under equal or greater adequacy criteria. One commenter complained that EPA rules are in some cases more stringent than some State rules.

Federal and State regulation. Two commenters argued against any State regulation in the SPCC area to avoid duplication. Conversely, another commenter argued against any Federal regulation because the States are better qualified to regulate in the SPCC arena.

Preemption. Another State requested that EPA strive to have similar programs as the States, or at the least not to preempt the States in the regulation of SPCC matters.

Response to comments. Cross-referencing of requirements. In response to the commenter who believed that proposed § 112.7(i) (redesignated in today’s rule as § 112.7(j)) might require him to discuss inapplicable requirements, we note that you must

address all SPCC requirements in your Plan. You must include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in part 112 or any applicable more stringent State rule, regulation, or guideline. If a requirement is not applicable to a particular type of facility, we believe that it is important for an owner or operator to explain why.

Consistency in rules. As noted above, you may now use a State plan as a substitute for an SPCC Plan when the State plan meets all Federal requirements and is cross-referenced. When you use a State plan that does not meet all Federal requirements, it must be supplemented by sections that do meet all Federal requirements. At times EPA will have rules that are more stringent than States rules, and some States may have rules that are more stringent than those of EPA. If you follow more stringent State rules in your Plan, you must explain that is what you are doing.

Federal and State regulation. Both the States and EPA have authority to regulate containers storing or using oil. We believe State authority to regulate in this area and establish spill prevention programs is supported by section 311(o) of the CWA. Some States have exercised their authority to regulate while others have not. We believe that State SPCC programs are a valuable supplement to our SPCC program.

Preemption. We do not preempt State rules, and defer to State rules, regulations, and guidelines that are more stringent than part 112.

Editorial changes and clarifications. To simplify the rule language, we have amended the proposed rule to state that you must discuss all applicable requirements in the Plan instead of listing all of the sections individually. The phrase “sections of the Plan shall include* * *” becomes “include in your Plan* * * .” “Spill” becomes “discharge.”

Subpart B—Requirements for Petroleum Oils or Other Non-petroleum Oils, Except Animal Fats and Vegetable Oils

Background. As noted above, we have reformatted the rule to differentiate between various classes of oil as mandated by EORRA. Subpart B prescribes particular requirements for an owner or operator of a facility that stores or uses petroleum oils or non-petroleum oils, except for animal fats and vegetable oils.

Introduction to Section 112.8

Background. We have inserted an introduction to § 112.8 so that we could list the requirements of that section in the active voice. Those requirements, except as specifically noted, apply to the owner or operator of an onshore facility (except a production facility). The introduction does not result in any substantive change in requirements.

Section 112.8(a)—General Requirements—Onshore Facilities (Excluding Production Facilities)

Background. This is a new provision that merely references the general requirements which all facilities subject to this part must meet and the specific requirements that facilities subject to this section must meet. It does not result in any change to substantive requirements.

Editorial changes and clarifications. “Spill prevention” in the 1991 proposal becomes “discharge prevention.” We also deleted from the titles of each paragraph the words “onshore” and “excluding production facilities” because the entire section applies to onshore facilities and excludes production facilities from its scope. Finally, the proposed requirement to “address” general and specific requirements and procedures becomes “meet” those requirements and procedures.

Section 112.8(b)(1)—Diked Storage Area Drainage

Background. In 1991, we repropounded the current rule (§ 112.7(e)(1)(i)) on facility drainage from diked areas.

Comments. Applicability. One commenter asked that we limit the scope of this section to facilities having areas with the potential to receive discharges greater than 660 gallons or areas with tanks regulated under these rules. Another commenter said that for facilities with site-wide containment, or that have substantial stormwater draining onto and across the site, the requirement is not practical and may justify reliance on contingency plans instead of containment. That commenter, and another, suggested that certain devices may reduce the potential of a significant spill of floating or other products that can be separated by gravity, such as oil/water separators, underflow uncontrolled discharge devices, and other apparatus.

De minimis amounts of oil. One commenter thought it would be impossible to ensure no oil would be discharged into water from diked areas. The rationale was that oil can be present in water in an amount below the perception threshold of the human eye.

Response to comments. Applicability. We disagree that we should limit the scope of this section to facilities having areas with the potential to receive discharges greater than 660 gallons or areas with tanks regulated under these rules. Small discharges (that is, of 660 gallons or less) as described in § 112.1(b) from diked storage areas can cause great environmental harm. See section IV. F of this preamble for a discussion of the effects of small discharges. We disagree that this section should apply only to areas with tanks regulated under these rules because this rule applies to regulated facilities, not merely areas with regulated tanks or other containers. A facility may contain operating equipment within a diked storage area which could cause a discharge as described in § 112.1(b).

We disagree that the requirement is not practical for facilities with site-wide containment, or that have substantial stormwater draining onto and across the site. Where oil/water separators, underflow uncontrolled discharge devices, or other positive means provide equivalent environmental protection as the discharge restraints required by this section, you may use them, if you explain your reasons for nonconformance. See § 112.7(a)(2). However, you must still ensure that no oil will be discharged when using alternate devices.

De minimis amounts of oil. This rule is concerned with a discharge of oil that would become a discharge as described in § 112.1(b). When oil is present in water in an amount that cannot be perceived by the human eye, the discharge might not meet the description provided in 40 CFR 110.3. Therefore, such a discharge might not be a discharge in a quantity that may be harmful, and therefore not a reportable discharge under part 110. However, a discharge which is invisible to the human eye might also contain components (for example, dissolved petroleum components) which would violate applicable water quality standards, making it a reportable discharge. Therefore, we are keeping the language as proposed, other than making some editorial changes.

Industry standards. Industry standards that may assist an owner or operator with facility drainage include: (1) NFPA 30, “Flammable and Combustible Liquids Code”; and (2), API Standard 2610, “Design, Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities.”

Editorial changes and clarifications. “Spill or other excessive leakage of oil” and “leakage” become “discharge.” The

phrase “handle such leakage” becomes “control such discharge.” We deleted the phrase “or other positive means,” because it is confusing when compared with the text of § 112.7(a)(2). Under § 112.7(a)(2), you have the flexibility to use alternate measures ensuring equivalent environmental protection. The word “examine” becomes “inspect.”

Section 112.8(b)(2)—Diked Storage Areas—Valves Used; Inspection of Retained Stormwater

Background. In 1991, we repropounded the current rule on the type of valves that must be used to drain diked storage areas. The rule also addresses inspection of retained stormwater.

Comments. Innovative devices. Two commenters believed that the rule would apparently preclude the use of innovative containment devices to control discharges from containment dikes, such as imbiber beads. These beads are inside a small cylinder that filters releases from a containment area. The beads are inserted where a valve would be placed and allow water to pass, but prevent release of oil by closing on contact. Another commenter asked that the rule allow oil-water gravity separation systems instead of valves.

PE certification. One commenter suggested that a section should be added to the rule requiring that Professional Engineers be required to certify the design and construction of the stormwater drainage system and the sanitary sewer system, because the Professional Engineer is in the best position to prepare the spill containment parts of the SPCC Plan.

Response to comments. Innovative devices. This rule does not preclude innovative devices that achieve the same environmental protection as manual open-and-closed design valves. If you do not use such valves, you must explain why. The provision for deviations in § 112.7(a)(2) allows alternatives if the owner or operator states his reasons for nonconformance, and if he can provide equivalent environmental protection by some other means. However, you may not use flapper-type drain valves to drain diked areas. And if you use alternate devices to substitute for manual, open-and-closed design valves, you must inspect and may drain retained stormwater, as provided in § 112.8(c)(3)(ii), (iii), and (iv), if your facility drainage drains directly into a watercourse, lake, or pond bypassing the facility treatment system.

PE certification. PE certification is already required for the design of

stormwater drainage and sanitary sewer systems by current rules because those systems are a technical element of the Plan. Therefore, we are keeping the language as proposed.

Editorial changes and clarifications. In the first sentence, we deleted the phrase “as far as practical” because it is confusing when compared to the text of § 112.7(a)(2). Under § 112.7(a)(2), if the requirement is not practical, you have the flexibility to use measures ensuring equivalent environmental protection. In the second sentence, we clarify that the wastewater treatment plant mentioned therein is an “on-site wastewater treatment plant.” Also in that sentence, we clarify that you must inspect and “may drain” retained stormwater, as provided in § 112.8(c)(3)(ii), (iii), and (iv). Finally, in the last sentence, we clarify that drained retained stormwater must be “uncontaminated.”

Section 112.8(b)(3)—Drainage Into Secondary Containment; Areas Subject to Flooding

Background. In 1991, we proposed to clarify that only undiked areas that are located such that they have a reasonable potential to be contaminated by an oil discharge are required to drain into a pond, lagoon, or catchment basin. We explained that a good Plan should seek to separate reasonably foreseeable sources of contamination and non-contamination.

We also proposed to make a recommendation of the current requirement that catchment basins not be located in areas subject to periodic flooding.

Comments. One commenter supported the proposal.

Editorial changes and clarifications. One commenter suggested that the rule should be worded to refer to systems “with a potential for discharge,” rather than with a “potential for contamination.”

Applicability. Two commenters argued that the secondary containment provisions of this paragraph should “remain a recommendation as opposed to a regulation,” because a requirement is impracticable for drainage systems from pipelines that move product throughout the facility.

Alternatives. One commenter said that the rule should not be limited to drainage trenches, and that the owners and operators of facilities should have a free choice of design. Another commenter suggested that if areas under aboveground piping and loading/unloading areas are regulated under this section, the operation should have the option of providing spill control by committing to the regular inspection of,

and immediate clean-up of spills within such areas. Another commenter urged that we clarify that oil/water separators meet the requirement for drainage control and secondary containment because such units, when properly sized and operated, meet the requirements of good engineering practice for preventing discharges of oil. One commenter suggested that in rural areas where electrical equipment is widely spaced, it may be more practical to provide for individual secondary containment rather than site-wide diversion facilities. Other commenters suggested that the drainage requirements in urban areas would be impossible to meet for transformers located in vaults in large office and apartment buildings, and underneath urban streets because there is no space at such sites to construct the sort of drainage control structures required by the rule.

Areas subject to periodic flooding. One commenter argued that the proposed recommendation should be retained as a requirement because it is highly unlikely that catchment basins would operate effectively during a flood event, and that these facilities could cause significant harm to the environment. Another commenter suggested that drainage systems for existing facilities be engineered (even if it requires pumping of contaminated water to a higher level for storage prior to treatment) so that minimal amounts of contaminated water are retained in areas subject to periodic flooding.

Response to comments. Applicability. We disagree that the rule language should become a recommendation because we believe that it is important to control the potential discharges the rule addresses. Where a drainage system is infeasible, if you explain your reasons for nonconformance, you may provide equivalent environmental protection by an alternate means.

In response to the commenter who questioned the applicability of this paragraph to areas under aboveground piping and loading/unloading areas, we note that both areas are subject to the rule’s requirements if they are undiked.

Alternatives. The rule does not limit you to the use of drainage trenches for undiked areas. Other forms of secondary containment may be acceptable. The rule only prescribes requirements for the drainage of diked areas, but does not mandate the use of diked areas. However, if you do use diked areas, the rule prescribes minimum requirements for drainage of those areas. Also, if the requirement is not practical, you may explain your reasons for nonconformance and provide equivalent

environmental protection under § 112.7(a)(2).

Areas subject to periodic flooding. We agree with the commenter that the current requirement should remain a requirement and not be converted into a recommendation. We are convinced by the argument that catchment basins will not work during flood events and may cause significant environmental damage. We also agree with the commenter that any drainage system should be engineered so that minimal amounts of contaminated water are retained in areas subject to periodic flooding. Therefore, we have retained the current requirement. We also recommend, but do not require that ponds, lagoons, or other facility drainage systems with the potential for discharge not be located in areas subject to periodic flooding.

Editorial changes and clarifications. We agree that the wording “potential for discharge” meets the intent of the rule better than “potential for contamination” and have made that change.

Section 112.8(b)(4)—Diversion Systems

Background. In 1991, we proposed that diversion systems must retain oil in the facility, rather than return it to the facility after it has been discharged.

Comments. One commenter asked for a clarification that oil “retained” in a facility does not leave the facility boundaries. A second commenter suggested that oil be either retained within the facility or returned to the facility, whichever is applicable. The commenter further suggested that the diversion system apply only to the petroleum areas of the facility such as tanks, pipes, racks, and diked areas because drainage from the rest of the facility should not be contaminated and thus should not have to be diverted.

Response to comments. The rule accomplishes the aim of retaining within the facility minimal amounts of contaminated water in undiked areas subject to periodic flooding. It is better that a diversion system retain rather than allow oil to leave the facility, thus enhancing the prevention goals of the rule. Furthermore, it should be easier to retain discharged oil rather than retrieve oil that has been discharged from the facility. Therefore, we agree with the commenter that “retained” oil is oil that never leaves the facility. We also agree that the rule applies only to drainage from the “petroleum” (or other oil) areas of the facility such as tanks, pipes, racks, and diked areas, because the purpose of the SPCC rule is to prevent discharges of oil, not of all runoff contaminants. Amendment of the rule

language is unnecessary because all of the rule applies only to "petroleum" or "oil" areas of the facility. Therefore, we have promulgated the rule language as proposed with a minor editorial change.

Editorial changes and clarifications.

We clarify that the reference to the engineering of facility drainage is a reference to paragraph (b)(3).

Section 112.8(b)(5)—Natural Hydraulic Flow, Pumps

Background. In 1991, we repropoed substantively the current rule (see § 112.7(e)(1)(v)) concerning hydraulic flow and pump transfer for drainage waters.

Comments. We received one editorial comment regarding a grammatical error in the proposal. The commenter suggested that the second sentence of the proposal read, "If pump transfer is needed, two "lift" pumps shall be provided, and at least one of the pumps shall be permanently installed when such treatment is continuous." We received no substantive comments.

Editorial changes and clarifications.

We deleted the first sentence from the proposed rule because it is a recommendation. We are not including recommendations in this rule so as to avoid confusion in the regulated community as to what is required and what is not. We agree with the commenter's editorial suggestion regarding the second sentence, and have amended the rule accordingly. In the last sentence of the proposal, the phrase "oil will be prevented from reaching navigable waters of the United States, adjoining shorelines, or other waters that would be affected by discharging oil as described in § 112.1(b)(1) of this part" becomes "to prevent a discharge as described in § 112.1(b). * * *

Response to comments. We have corrected the grammatical error.

Proposed Section 112.8(b)(6)—Additional Requirements for Events that Occur During a Period of Flooding

Background. In 1991, we proposed a new recommendation that facilities should address the need to comply with Federal, State, and local governmental requirements in areas subject to flooding. We noted that this recommendation was consistent with Federal Emergency Management Agency (FEMA) rules found at 44 CFR part 60 for aboveground storage tanks located in flood hazard areas.

Comments. One commenter suggested that exploration and production tanks located in flood plain areas should be adequately secured through proper mechanical or engineering methods to reduce the chance of loss of product.

Another commenter argued that the proposed rule should be eliminated because it is duplicative of stormwater regulations. One commenter urged that the rule require that no facilities for oil or hazardous substances be sited in floodplains. Another commenter requested that the rule require that: (1) A facility should identify whether it is in a floodplain in the SPCC Plan; (2) if it is in a floodplain, the Plan should address minimum FEMA standards; and, (3) if a facility does not meet minimum FEMA standards, the Plan should address appropriate precautionary and mitigation measures for potential flood-related discharges. The commenter also suggested that we consider requiring facilities in areas subject to 500-year events to address minimum FEMA standards. A second commenter supported a requirement for special considerations in the Plan for facilities in areas subject to flooding. That commenter also suggested that we define "areas subject to flooding," and noted that other Federal rules (i.e., RCRA) define this as the 25-year floodplain. Another commenter thought the term "areas subject to flooding" should be explained in terms of a 100-year flood event. A final comment noted that the preamble spoke to a recommendation that facilities address precautionary measures if they are located in areas subject to flooding, while the recommendation text spoke to requirements for events that occur during a period of flooding. The commenter urged reconciliation of the differing language.

Response to comments. We deleted this recommendation because it is more appropriately addressed in FEMA rules and guidance, including the definitions the commenters referenced. We disagree that the proposed recommendation should be made a requirement because flood control plans and design capabilities for discharge systems are provided for under the stormwater regulations, and further Federal regulations would be duplicative.

Other Federal rules also apply, making further SPCC rules unnecessary. Oil storage facilities are considered structures under the National Flood Insurance Program (NFIP), and therefore such structures are subject to the Regulations for Floodplain Management at 44 CFR 60.3. Some of the specific NFIP standards that may apply for aboveground storage tanks include the following: (1) tanks must be designed so that they are elevated to or above the base flood level (100-year flood) or be designed so that the portion of the tank below the base flood level is watertight with walls substantially impermeable to

the passage of water, with structural components having the capability of resisting hydrostatic and hydrodynamic loads, and with the capability to resist effects of buoyancy (44 CFR 60.3(a)(3)); (2) tanks must be adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads and the effects of buoyancy (40 CFR 60.3(c)(3)); for structures that are intended to be made watertight below the base flood level, a Registered Professional Engineer must develop and/or review the structural design, specifications, and plans for construction, and certify that they have been prepared in accordance with accepted standards and practice (40 CFR 60.3(c)(4)); and, tanks must not encroach within the adopted regulatory floodway unless it has been demonstrated that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge (40 CFR 60.3(d)). Additionally, the NFIP has specific standards for coastal high hazard areas. See 40 CFR 60.3(e)(4).

Section 112.8(c)(1)—Construction of and Materials Used for Containers

Background. In 1991, we repropoed without substantive change current § 112.7(e)(2)(i), which requires that no tank be used for the storage of oil unless its material and construction are compatible with the material stored and the conditions of storage such as pressure and temperature. The only changes we proposed were editorial. We also proposed a new recommendation that the construction, materials, installation, and use of tanks conform with relevant industry standards such as API, NFPA, UL, or ASME standards, which are required in the application of good engineering practice for the construction and operation of the tank.

Comments. Several commenters asked that the proposal be recast as a recommendation rather than a rule, arguing that the words of the proposal, when taken in conjunction with § 112.7(a) language requiring the use of good engineering practice in the preparation of Plans, were contradictory. A commenter noted that § 112.8(c)(1) *recommends* that materials, construction, and installation of tanks adhere to industry standards "which are required in the application of good engineering practice for the construction and operation of the tank." The commenter asserted that since it is clear in the preamble that the Agency's intent is to make the use of industry standards a recommendation rather than a

requirement, the rule should be modified to reflect that. Another commenter supported the proposal as a requirement on the theory that all tanks should be required to meet industry standards. A third commenter asked for clarification as to whether we intended a recommendation or a requirement.

One commenter asked that we specifically reference steel storage tank systems standards in the rule.

Response to comments. Requirement v. recommendation. The first sentence of the proposed rule indeed contemplated a requirement, i.e., that no container may be used for the storage of oil unless its material and construction are compatible with the material stored and the conditions of storage, such as pressure or temperature. The second sentence, which was clearly a recommendation, has been deleted from the rule because we have decided to remove all recommendations from the rule language. Rules are mandates, and we do not wish to confuse the regulated community as to what actions are mandatory and what actions are discretionary. The Professional Engineer must, pursuant to § 112.3(d)(1)(iii), certify that he has considered applicable industry standards in the preparation of the Plan. While he must consider such standards, use of any particular standards is a matter of good engineering practice.

Industry standards. Industry standards that may assist an owner or operator with the material and construction of containers include: (1) API Standard 620, "Design and Construction of Large Welded Low-Pressure Storage Tanks"; (2) API Standard 650, "Welded Steel Tanks for Oil Storage"; (3) Steel Tank Institute (STI) F911, "Standard for Diked Aboveground Steel Tanks"; (4) STI Publication R931, "Double Wall Aboveground Storage Tank Installation and Testing Instruction"; (5) UL Standard 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids"; (6) UL Standard 142, "Steel Aboveground Tanks for Flammable and Combustible Liquids"; (7) UL Standard 1316, "Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products"; and, (8) Petroleum Equipment Institute (PEI) Recommended Practice 200, "Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling."

Editorial changes and clarifications. "Bulk storage tanks" becomes "bulk storage containers." We deleted the abbreviation "etc." from the end of the paragraph because it is unnecessary.

The use of the phrase "such as pressure and temperature" already indicates that these are only some examples of such conditions.

Section 112.8(c)(2)—Secondary Containment—Bulk Storage Containers

Background. In 1991, we repropose current secondary containment requirements with several significant additions. We gave notice in the preamble (at 56 FR 54622–23) that "sufficient freeboard" is freeboard sufficient to contain precipitation from a 25-year storm event. We also proposed in rule language that diked areas must be sufficiently impervious to contain spilled oil for at least 72 hours. The current standard is that such diked areas must be "sufficiently impervious" to contain spilled oil.

Comments. Secondary containment, in general. One commenter asked for clarification of what "primary containment system" means. One commenter opposed the requirement for secondary containment on the grounds that impervious containment of a volume greater than the largest single tank may not be necessary for all tanks, and that existing facilities may find it difficult to retrofit. In this vein, another commenter asked for a phase-in of the requirements, and a third asked for variance provisions so that a facility would not have to make small additions to its secondary containment for minimum environmental benefit. Another commenter argued that the requirement should be applied to large facilities only. One commenter believed that the proposal duplicates NPDES stormwater rules. Two commenters believed the requirement should apply only to unmanned facilities. See also the comments and response to comments concerning secondary containment in the discussion of § 112.7(c), above.

Sufficient freeboard. Several commenters said that the standard of a 25-year storm event might be difficult to determine without extensive meteorological studies. Other commenters asked for clarification of the terms "sufficient" and "freeboard," or of the phrase "sufficient freeboard." Likewise, several commenters asked for clarification of the Agency's position that sufficient freeboard would be that which would withstand a 25-year storm event. Two commenters suggested a standard of 110% of tank capacity. Other commenters suggested alternatives for the 25-year storm event, such as a 24-hour, 10 year rain; or a 24-hour, 25-year storm. Another commenter suggested the adequacy of freeboard should be left flexible on a facility-specific basis.

Seventy-two-hour impermeability standard. Similar to the comments directed toward the proposed requirements for secondary containment in § 112.7(c), some commenters objected to the proposed 72-hour impermeability standard. See the comments and response to comments for § 112.7(c) above.

Response to comments. Secondary containment, in general. A primary containment system is the container or equipment in which oil is stored or used. Secondary containment is a requirement for all bulk storage facilities, large or small, manned or unmanned; and for facilities that use oil-filled equipment; whenever practicable. Such containment must at least provide for the capacity of the largest single tank with sufficient freeboard for precipitation. A discharge as described in § 112.1(b) from a small facility may be as environmentally devastating as such a discharge from a large facility, depending on the surrounding environment. Likewise, a discharge from a manned facility needs to be contained just as a discharge from an unmanned one. A phase-in of these requirements is not appropriate because secondary containment is already required under current rules. When secondary containment is not practicable, the owner or operator of a facility may deviate from the requirement under § 112.7(d), explain the rationale in the Plan, provide a contingency plan following the provisions of 40 CFR part 109, and otherwise comply with § 112.7(d).

Because a pit used as a form of secondary containment may pose a threat to birds and wildlife, we encourage an owner or operator who uses a pit to take measures to mitigate the effect of the pit on birds and wildlife. Such measures may include netting, fences, or other means to keep birds or animals away. In some cases, pits may also cause a discharge as described in § 112.1(b). The discharge may occur when oil spills over the top of the pit or when oil seeps through the ground into groundwater, and thence to navigable waters or adjoining shorelines. Therefore, we recommend that an owner or operator not use pits in an area where such pit may prove a source of such discharges. Should the oil reach navigable waters or adjoining shorelines, it is a reportable discharge under 40 CFR 110.6.

We disagree that the rule is duplicative of NPDES rules. Forseeable or chronic point source discharges that are permitted under CWA section 402, and that are either due to causes associated with the manufacturing or

other commercial activities in which the discharger is engaged or due to the operation of treatment facilities required by the NPDES permit, are to be regulated under the NPDES program. "Classic spill" situations are subject to the requirements of CWA section 311. Such spills are governed by section 311 even where the discharger holds a valid and effective NPDES permit under section 402. 52 FR 10712, 10714. Therefore, the typical bulk storage facility with no permitted discharge or treatment facility would not be under the NPDES rules.

The secondary containment requirements of the rule apply to bulk storage containers and their purpose is to help prevent discharges as described in § 112.1(b) by containing discharged oil. NPDES rules, on the other hand, may at times require secondary containment, but do not always. Furthermore, NPDES rules may not always apply to bulk storage facilities. Therefore, the rule is not always duplicative of NPDES rules. Where it is duplicative, an owner or operator of a facility subject to NPDES rules may use that portion of his Best Management Practice Plan as part of his SPCC Plan.

Sufficient freeboard. An essential part of secondary containment is sufficient freeboard to contain precipitation. Whatever method you use to calculate the amount of freeboard that is "sufficient" must be documented in the Plan. We believe that the proper standard of "sufficient freeboard" to contain precipitation is that amount necessary to contain precipitation from a 25-year, 24-hour storm event. That standard allows flexibility for varying climatic conditions. It is also the standard required for certain tank systems storing or treating hazardous waste. See, for example, 40 CFR 265.1(e)(1)(ii) and (e)(2)(ii). While we believe that 25-year, 24-hour storm event standard is appropriate for most facilities and protective of the environment, we are not making it a rule standard because of the difficulty and expense for some facilities of securing recent information concerning such storm events at this time. Recent data does not exist for all areas of the United States. Furthermore, available data may be costly for small operators to secure. Should recent and inexpensive information concerning a 25-year, 24-hour storm event for any part of the United States become easily accessible, we will reconsider proposing such a standard.

Seventy-two-hour impermeability standard. As noted above, we have decided to withdraw the proposal for the 72-hour impermeability standard

and retain the current standard that diked areas must be sufficiently impervious to contain oil. We take this step because we agree with commenters that the purpose of secondary containment is to contain oil from reaching waters of the United States. The rationale for the 72-hour standard was to allow time for the discovery and removal of an oil spill. We believe that an owner or operator of a facility should have flexibility in how to prevent discharges as described in § 112.1(b), and that any method of containment that achieves that end is sufficient. Should such containment fail, an owner or operator must immediately clean up any discharged oil. Similarly, we intend that the purpose of the "sufficiently impervious" standard is to prevent discharges as described in § 112.1(b) by ensuring that diked areas can contain oil and are sufficiently impervious to prevent such discharges.

Industry standards. Industry standards that may assist an owner or operator with secondary containment for bulk storage containers include: (1) NFPA 30, "Flammable and Combustible Liquids Code"; (2) BOCA, National Fire Prevention Code; (3) API Standard 2610, "Design Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities"; and, (4) Petroleum Equipment Institute Recommended Practice 200, "Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling."

Editorial changes and clarifications. In the first sentence, "spill" becomes "discharge." Also in that sentence, "contents of the largest single tank" becomes "capacity of the largest single container." This is merely a clarification and has always been the intent of the rule. The contents of a container may vary from day to day, but the capacity remains the same. In discussing capacity, we noted in the 1991 preamble that "the oil storage capacity (emphasis added) of the equipment, however, must be included in determining the total storage capacity of the facility, which determines whether a facility is subject to the Oil Pollution Prevention regulation." 56 FR 54623. We discuss this capacity in the context of the general requirements for secondary containment. Thus, it is clear that we have always intended capacity to be the determinative factor in both subjecting a facility to the rule and in determining the need for secondary containment.

We also deleted the phrase "but they may not always be appropriate" from the third sentence of the paragraph because it is confusing when compared to the text of § 112.7(d). Under

§ 112.7(d), if secondary containment is not practicable, you may provide a contingency plan in your SPCC Plan and otherwise comply with that section. In the last sentence, "plant" becomes "facility." Also in that sentence, the phrase "so that a spill could terminate * * *" becomes "so that any discharge will terminate. * * *"

Section 112.8(c)(3)—Drainage of Rainwater

Background. In 1991, we repropoed the current rule on drainage of rainwater, incorporating the CWA standard, *i.e.*, "that may be harmful," into the proposal.

In 1997, we proposed that records required under NPDES §§ 122.41(j)(2) and 122.41(m)(3) would suffice for purposes of this section, so that you would not have to prepare duplicate records specifically for SPCC purposes. The proposed change would also apply to records maintained regarding inspection of diked areas in onshore oil production facilities prior to drainage. See 112.9(b)(1).

Comments. 1991 comments. One commenter in 1991 suggested that we allow use of NPDES records for purposes of this section. Another commenter suggested that records of discharges that do not violate water quality standards are unnecessary.

1997 comments. Many commenters favored the 1997 proposal. One commenter opposed the proposal if the records were not to be required by NPDES. Specifically, the commenter sought an exemption for discharges of rainwater containing animal fats and vegetable oils if such discharges are not regulated under NPDES rules. The commenter believed that an exception should be created for reporting and recording dike bypasses of § 112.7(e)(2)(iii)(D) relating to animal fats and vegetable oil storage, only requiring such reporting and recording if required by an NPDES stormwater permit, because in all cases discharge of contaminated stormwater is not permitted. Asking why EPA should regulate stormwater bypass events if the stormwater is not contaminated, the commenter argued that if stormwater permits do not require reporting and recording of dike bypass events, then EPA should not require an added tier of regulation under SPCC Plans. Other commenters thought that EPA was adopting by reference the NPDES rules and sought clarification on the issue.

Response to comments. We agree with the first 1991 commenter mentioned above and proposed that change in 1997. We disagree with the second 1991 commenter that records of discharges

that do not violate water quality standards are unnecessary. Such records show that the facility has complied with the rule.

We are not adopting the NPDES rules for SPCC purposes, but are only offering an alternative for recordkeeping. The intent of the rule is that you may, if you choose, use the NPDES stormwater discharge records in lieu of records specifically created for SPCC purposes. We are not incorporating the NPDES requirements into our rules by reference.

This paragraph applies to discharges of rainwater from diked areas that may contain any type of oil, including animal fats and vegetable oils. The only purpose of this paragraph is to offer a recordkeeping option so that you do not have to create a duplicate set of records for SPCC purposes, when adequate records created for NPDES purposes already exist.

Editorial changes and clarifications. In the introduction to the paragraph (c)(3), "drainage of rainwater" becomes "drainage of uncontaminated rainwater." In paragraph (c)(3)(ii), which read, "* * * run-off rainwater ensures compliance with applicable water quality standards and will not cause a discharge as described in 40 CFR part 110" becomes "* * * retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b)." Also in that paragraph, we deleted the phrase "applicable water quality standards" because such standards are encompassed within the phrase "a discharge as described in § 112.1(b)."

Section 112.8(c)(4)—Completely Buried Tanks; Corrosion Protection

Background. In 1991, we repropoed the current rule requiring that new completely buried metallic storage tank installations (*i.e.*, installed on or after January 10, 1974) must be protected from corrosion by coatings, cathodic protection, or effective methods compatible with local soil conditions. We recommended that such buried tanks be subjected to regular leak testing. The rationale for the recommendation was that testing technology was rapidly advancing and we wanted more information on such technology before making the recommendation a requirement. We also stated a desire to be consistent with many State rules.

Comments. Corrosion protection. One commenter supported the proposal for corrosion protection. Another thought a requirement for corrosion protection "if soil conditions warrant" would be unenforceable. A third commenter

complained that the proposal included no discussion of cathodic protection for tank bottoms in contact with soil or fill materials. Others thought facilities with underground tanks subject to part 112 should be required to develop a corrosion protection plan consistent with 40 CFR part 280, the rules for the Underground Storage Tanks Program.

Leak testing. Several commenters opposed the proposed recommendation for leak testing, arguing that owner/operator discretion should be retained. One commenter suggested that practices for annual integrity testing and for the installation of pipes under 40 CFR part 280 should be changed from recommended practices to required practices because recommendations with standards are not usually followed.

Response to comments. Corrosion protection. We agree in principle that all completely buried tanks should have some type of corrosion protection, but as proposed, we will only extend that requirement to new completely buried metallic storage tanks. Because corrosion protection is a feature of the current rule (see § 112.7(e)(2)(iv)), the requirement applies to completely buried metallic tanks installed on or after January 10, 1974. The requirement is enforceable because it is a procedure or method to prevent the discharge of oil. See section 311(j)(1)(C) of the CWA. Most owners or operators of completely buried storage tanks will be exempted from part 112 under this rule because such tanks are subject to all of the technical requirements of 40 CFR part 280 or a State program approved under 40 CFR part 281. Those tanks subject to 40 CFR part 280 or a State program approved under 40 CFR part 281 will follow the corrosion protection provisions of that rule, which provides comparable environmental protection. Those that remain subject to the SPCC regulation must comply with this paragraph.

The rule requires corrosion protection for completely buried metallic tanks by a method compatible with local soil conditions. Local soil conditions might include fill material. The method of such corrosion protection is a question of good engineering practice which will vary from facility to facility. You should monitor such corrosion protection for effectiveness, in order to be sure that the method of protection you choose remains protective. See § 112.8(d)(1) for a discussion of corrosion protection for buried piping.

Leak testing. The current SPCC rule contains a provision calling for the "regular pressure testing" of buried metallic storage tanks. 40 CFR 112.7(e)(2)(iv). We proposed in 1991 a

recommendation that such buried tanks be subject to regular "leak testing." Proposed § 112.8(c)(4). Leak testing for purposes of this paragraph is testing to ensure liquid tightness of a container and whether it may discharge oil. We specified leak testing in the proposal, instead of pressure testing, in order to be consistent with many State regulations and because the technology on such testing was rapidly evolving. 56 FR at 54623.

We are modifying the leak testing recommendation to make it a requirement. We agree with the commenter who argued that such testing should be mandatory because recommendations may not often be followed. Appropriate methods of testing should be selected based on good engineering practice. Whatever method and schedule for testing the PE selects must be described in the Plan. Testing under the standards set out in 40 CFR part 280 or a State program approved under 40 CFR part 281 is certainly acceptable (as we suggested in the proposed rule). "Regular testing" means testing in accordance with industry standards or at a frequency sufficient to prevent leaks.

Editorial changes and clarifications. The first sentence of the proposed rule was deleted because it was surplus, and contained no mandatory requirements. It merely noted that completely buried metallic storage tanks represent a potential for undetected spills. "Buried installation" becomes "completely buried metallic storage tank," to accord with the definition in § 112.2. We clarify that a "new" installation is one installed on or after January 10, 1974, the effective date of the SPCC rule, by deleting the word "new" and substituting the date. We deleted the phrase "or other effective methods," because it is confusing when compared to the text of § 112.7(a)(2). Under § 112.7(a)(2), if you explain your reasons for nonconformance, you may use alternate methods providing equivalent environmental protection.

Section 112.8(c)(5)—Partially Buried or Bunkered Tanks; Corrosion Protection

Background. In 1991, we proposed changing the current requirement to avoid using partially buried metallic tanks into a recommendation. We proposed that if you do use such tanks, that you must protect them from corrosion.

Comments. One commenter argued that the rule should only apply to new tanks.

Response to comments. Requirement v. recommendation. Due to the risk of discharge caused by corrosion, we

decided to keep the current requirement to not use partially buried metallic tanks, unless the buried section of such tanks are protected from corrosion. The requirement to not use such tanks, unless they are protected from corrosion, applies to all partially buried metallic tanks, installed at any time.

Editorial changes and clarifications. Bunkered tanks are a subset of partially buried tanks, and are included within the rule to clarify that it applies to all partially buried tanks. We did not finalize the proposed phrase "or other effective methods," because it is confusing when compared to the text of § 112.7(a)(2). Under § 112.7(a)(2), if you explain your reasons for nonconformance, you may use alternate methods providing equivalent environmental protection. The proposed recommendation that "partially buried or bunkered metallic tanks be avoided, since partial burial at the earth can cause rapid corrosion of metallic surfaces, especially at the earth/air interface" becomes a requirement to "not use partially buried or bunkered metallic tanks for the storage of oil unless you protect the buried section of the tank from corrosion."

Section 112.8(c)(6)—Integrity Testing

Background. In 1991, we proposed that integrity testing for bulk storage tanks be conducted at least every ten years and when material repairs are conducted. We gave several examples of "material repairs" in the preamble. The current requirement for such testing is that it be "periodic." We also proposed that visual inspection, as a method of testing, must be combined with some other method, because visual testing alone is insufficient for an integrity test. 56 FR at 54623.

In 1997, we added a proposed sentence to the rule which would allow the use of usual and customary business records for integrity testing. We suggested that records maintained under API Standards 653 and 2610 would suffice for this purpose.

Comments. 10-year integrity testing in general. One commenter asked for a clarification of the term "integrity testing." Several commenters favored the proposal for ten-year integrity testing. Other commenters opposed the requirement or favored turning it into a recommendation. Several commenters proposed testing according to accepted industry standards, such as American Petroleum Institute (API), National Fire Protection Association (NFPA), Underwriters Laboratory (UL), or American Society of Mechanical Engineers (ASME).

Applicability of integrity testing. Some asked for an exemption for tanks inside buildings. Others asked for an exemption for number 5 and 6 fuel oils, and asphalt, because such oils are heavy and would not flow very far. Some commenters believed the requirement should not apply to small facilities because it is "not standard industry practice" to conduct these tests at small facilities. Another commenter stated that while most large corporations perform testing at some frequency, most smaller businesses do not. The commenter suggested that exemptions because of size or quantity of oil stored should not be granted because the smaller facilities generally are more in need of testing.

Several commenters suggested that integrity testing should be waived for tanks which can be visually inspected on the bottom and all sides, such as tanks located off the ground on crates, and which have secondary containment. One commenter asked that the requirement apply only when the tank is used to store corrosive materials or where the tank has failed within the last five years. Other commenters asked for a phase-in of the requirement. Utilities asked that the requirement not apply to electrical equipment because no methods exist for integrity testing of such equipment, and because the primary reason for failure of such equipment is not corrosion, but mechanical failure.

Material repairs. Several commenters asked for clarification as to the meaning of "material repairs."

Method of testing. Some commenters favored visual inspection only because it might be used more frequently than any other method of testing. Another commenter asked for clarification if visual inspection meant inspection of both the interior and exterior of a tank. Another commenter suggested that we augment integrity testing procedures with procedures to test the tank bottom for settlement and corrosion, and to test roof supports.

Business records. Most commenters favored the proposal to allow use of usual and customary business records for integrity testing and other purposes. Some commenters argued that the suggested API Standards were unfamiliar to many owners and operators.

Response to comments. 10-year integrity testing in general. Integrity testing is a necessary component of any good prevention plan. A number of commenters supported a requirement for such testing. It will help to prevent discharges by testing the strength and imperviousness of the container. We

agree with commenters that testing according to industry standards is preferable, and thus will maintain the current standard of regularly scheduled testing instead of prescribing a particular period for testing. Industry standards may at times be more specific and more stringent than our proposed rule. For example, API Standard 653 provides specific criteria for internal inspection frequencies based on the calculated corrosion rate, rather than an arbitrary time period. API Standard 653 allows the aboveground storage tank (AST) owner or operator the flexibility to implement a number of options to identify and prevent problems which ultimately lead to a loss of tank integrity. It establishes a minimum and maximum interval between internal inspections. It requires an internal AST inspection when the estimated corrosion rate indicates the bottom will have corroded to 0.1 inches. Certain prevention measures taken to prevent a discharge from the tank bottom may affect this action level (thickness). Once this point has been reached, the owner or operator has to make a decision, depending on the future service and operating environment of the tank, to either replace the whole tank, line the bottom, add cathodic protection, replace the tank bottom with a new bottom, add a release prevention barrier, or some combination of the above.

Another benefit from the use of industry standards is that they specify when and where specific tests may and may not be used. For example, API Standard 653 is very specific as to when radiographic tests may be used and when a full hydrostatic test is required after shell repairs. Depending on shell material toughness and thickness a full hydrotest is required for certain shell repairs. Allowing a visual inspection in these cases risks a tank failure similar to the 1988 Floreffe, Pennsylvania event. Testing on a "regular schedule" means testing per industry standards or at a frequency sufficient to prevent discharges. Whatever schedule the PE selects must be documented in the Plan.

Applicability of integrity testing. Integrity testing is essential for all aboveground containers to help prevent discharges. Testing will show whether corrosion has reached a point where repairs or replacement of the container is needed. Prevention of discharges is preferable to cleaning them up afterwards. Therefore, it must apply to large and small containers, containers on and off the ground wherever located, and to containers storing any type of oil. From all of these containers there exists the possibility of discharge. Because electrical, operating, and manufacturing

equipment are not bulk storage containers, the requirement is inapplicable to those devices or equipment. 56 FR 54623. Also, as noted by commenters, methods may not exist for integrity testing of such devices or equipment.

Material repairs. The rationale for testing at the time material repairs are conducted is that such repairs could materially increase the potential for oil to be discharged from the tank. Examples of such repairs include removing or replacing the annular plate ring; replacement of the container bottom; jacking of a container shell; installation of a 12-inch or larger nozzle in the shell; a door sheet, tombstone replacement in the shell, or other shell repair; or, such repairs that might materially change the potential for oil to be discharged from the container.

Method of testing. The rule requires visual testing in conjunction with another method of testing, because visual testing alone is normally insufficient to measure the integrity of a container. Visual testing alone might not detect problems which could lead to container failure. For example, studies of the 1988 Ashland oil spill suggest that the tank collapse resulted from a brittle fracture in the shell of the tank. Adequate fracture toughness of the base metal of existing tanks is an important consideration in discharge prevention, especially in cold weather. Although no definitive non-destructive test exists for testing fracture toughness, had the tank been evaluated for brittle fracture, for example under API standard 653, and had the evaluation shown that the tank was at risk for brittle fracture, the owner or operator could have taken measures to repair or modify the tank's operation to prevent failure.

For certain smaller shop-built containers in which internal corrosion poses minimal risk of failure; which are inspected at least monthly; and, for which all sides are visible (*i.e.*, the container has no contact with the ground), visual inspection alone might suffice, subject to good engineering practice. In such case the owner or operator must explain in the Plan why visual integrity testing alone is sufficient, and provide equivalent environmental protection. 40 CFR 112.7(a)(2). However, containers which are in contact with the ground must be evaluated for integrity in accordance with industry standards and good engineering practice.

Business records. You may use usual and customary business records, at your option, for purposes of integrity testing recordkeeping. Specifically, you may use records maintained under API

Standards 653 and 2610 for purposes of this section, if you choose. Other usual and customary business records either existing or to be developed in the future may also suffice. Or, you may elect to keep separate records for SPCC purposes. This section requires you to keep comparison records. Section 112.7(e) requires retention of these records for three years. You should note, however, that certain industry standards (for example, API Standards 570 and 653) may specify that an owner or operator maintain records for longer than three years.

Industry standards. Industry standards that may assist an owner or operator with integrity testing include: (1) API Standard 653, "Tank Inspection, Repair, Alteration, and Reconstruction"; (2) API Recommended Practice 575, "Inspection of Atmospheric and Low-Pressure Tanks;" and, (3) Steel Tank Institute Standard SP001-00, "Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids."

Editorial changes and clarifications. In the first sentence, "Aboveground tanks shall be subject to integrity testing * * *" becomes "Test each container for integrity * * *" Also in that sentence, the phrase "or a system of non-destructive shell testing" becomes "or another system of non-destructive shell testing." The last sentence which read, "* * * the outside of the container must be frequently observed by operating personnel for signs of deterioration, leaks, * * *" becomes "* * * you must frequently inspect the outside of the container for signs of deterioration, leaks, * * *" We made that change because the requirements of this paragraph are the responsibility of the owner or operator, not of "operating personnel."

"Integrity testing" is any means to measure the strength (structural soundness) of the container shell, bottom, and/or floor to contain oil and may include leak testing to determine whether the container will discharge oil. It includes, but is not limited to, testing foundations and supports of containers. Its scope includes both the inside and outside of the container. It also includes frequent observation of the outside of the container for signs of deterioration, leaks, or accumulation of oil inside diked areas.

Section 112.8(c)(7)—Leakage; Internal Heating Coils

Background. In 1991, we proposed that the current rule on controlling leakage through defective internal heating coils should be modified to

include a recommendation that retention systems be designed to hold the contents of an entire tank. We also proposed to change the current requirement to consider the feasibility of installing external heating systems into a recommendation.

Comments. One commenter proposed that instead of requiring a retention system which would hold the entire contents of a tank, that an oil/water separator might work just as well. Another commenter opposed requiring the use of oil/water separators. As to the proposed recommendation to consider use of external heating systems, one commenter objected to the cost which might be incurred. One commenter opposed the proposed recommendation due to the belief that leaks in the aboveground piping can be mitigated through daily inspections and they are often placed within secondary containment. Another commenter asserted that with drainage routed to oil/water separators or holding ponds, leak proof galleys under aboveground piping were redundant and economically unjustified.

Response to comments. The rule does not mandate the use of any specific separation or retention system. Any system that achieves the purpose of the rule is acceptable. That purpose is to prevent discharges as described in § 112.1(b) by controlling leakage.

Editorial changes and clarifications. We deleted the proposed recommendations from the rule because we do not wish to confuse the regulated public as to what is mandatory and what is discretionary. We have included only requirements in the rule.

Section 112.8(c)(8)—Good Engineering Practice—Alarm Systems

Background. In 1991, we repropoed the current rule on "fail-safe" engineering. We added a proposal to allow alternate technologies. We recommended that sensing devices be tested in accordance with industry standards.

Comments. Editorial changes and clarifications. Several commenters objected to the term "fail-safe" engineering because they believe that nothing is ever fail-safe. They suggested using the term "in accordance with good engineering practice," or "consistent with accepted industry practices" instead.

Applicability. One commenter thought the proposed requirement should apply to large facilities only or facilities that were the cause of a reportable spill within the preceding three years. One commenter suggested a phase-in of the requirement.

Monitoring. One commenter suggested that a person must be present to monitor gauges when a fast response system is used to prevent container overfilling. Another suggested that the requirement for alarm devices not apply to containers where an operator is present.

Alternatives. One commenter suggested that certain "procedures" might suffice instead of alarm devices. Another commenter suggested that we need to be specific as to methods of testing.

Response to comments. Applicability. Alarm system devices are necessary for all facilities, large or small, to prevent discharges. Such systems alert the owner or operator to potential container overfills, which are a common cause of discharges. Because this is a requirement in the current rule, no phase-in is necessary.

Monitoring. We agree with the commenter that a person must be present to monitor a fast response system to prevent overfills and have amended the rule accordingly. We disagree that the requirement for alarm devices should not apply when a person is present, because human error, negligence, or inattention may still occur in those cases, necessitating some kind of alarm device.

Alternatives. Under the deviation rule at § 112.7(a)(2), you may substitute "procedures" or other measures that provide equivalent environmental protection as any of the alarm systems mandated in the rule if you can explain your reasons for nonconformance.

Industry standards. Industry standards that may assist an owner or operator with alarm systems, discharge prevention systems, and inventory control include: (1) NFPA 30, "Flammable and Combustible Liquids Code"; (2) API Recommended Practice 2350, "Overfill Protection for Storage Tanks in Petroleum Facilities"; and, (3) API, "Manual of Petroleum Measurement Standards."

Editorial changes and clarifications. Throughout, "tank" becomes "container." In the introductory paragraph, we deleted the words "as far as practical" from the rule text because they are confusing when compared with the text of § 112.7(a)(2). Under § 112.7(a)(2), you may deviate from a requirement if you explain your reasons for nonconformance and provide equivalent environmental protection. "Spills" becomes "discharges." We agree with the commenter that "fail-safe" engineering is inappropriate and have substituted "in accordance with good engineering practice." The change in terminology does not imply any

substantive change in the level of environmental protection required, it is merely editorial. Finally, in the introductory paragraph the phrase "one or more of the following devices" becomes "at least one of the following." Not all of the items listed under this paragraph are devices. For example, regular testing of liquid sensing devices is a procedure. Therefore, the word "devices" was incomplete. In paragraph (i), "manned operation" becomes "attended operation," and "plants" becomes "facilities." In paragraph (iv), the phrase "or their equivalent," was deleted because it is confusing when compared with the text of § 112.7(a)(2). Under § 112.7(a)(2), you may deviate from a requirement if you explain your reasons for nonconformance, and provide equivalent environmental protection. Proposed paragraph (v), relating to alternative technologies, was deleted because alternative devices are allowed under § 112.7(a)(2).

Section 112.8(c)(9)—Effluent Disposal Facilities

Background. In 1991, we repropose the current rule on observation of effluent disposal facilities.

Comments. We received only one comment which asked us to clarify that "effluents" mean oil-contaminated water collected within secondary containment areas, and that "disposal facilities" means "treatment facilities."

Editorial changes and clarifications. "Oil spill event" becomes "discharge as described in § 112.1(b)." "System upset" refers to an event involving a discharge of oil-contaminated water. "Effluent" means oil-contaminated water. "Disposal facilities" becomes "effluent treatment facilities."

Section 112.8(c)(10)—Visible Oil Leaks

Background. In 1991, we repropose the current requirement that visible oil leaks must be promptly corrected. Additionally, we proposed that accumulated oil or oil-contaminated materials must be removed within 72 hours. The 72-hour proposal in this paragraph was consistent with the proposal in § 112.7(c). The rationale was that a 72-hour time period would allow time for discovery and removal of an oil discharge in most cases. We suggested in the preamble to the 1991 proposal that most facilities are attended at some time within a 72-hour time period. 56 FR 54621.

Comments. Editorial changes and clarifications. One commenter asked for clarification of the meaning of "accumulation" of oil. Others asked for clarification of the meaning of "oil contaminated materials." Another

commenter noted that reference to a spill event within a diked area is inconsistent with its definition.

Applicability. Some commenters thought the requirement should not apply to small facilities because of the likelihood that the discharge would be smaller.

Extent and methods of cleanup. One commenter suggested that covering soil with plastic film may be an acceptable method to prevent stormwater contamination during remediation. Some commenters suggested that where a spill creates a risk of fire or explosion, the first priority should be to eliminate such threats before undertaking cleanup. Several commenters asked whether removal of accumulations of oil means complete removal. Some commenters feared that a requirement to remove oil-contaminated materials would be interpreted to mean that cleanup of portions of the dike that are oil-stained is required. The commenters were concerned that such a cleanup would undermine the stability of the dike and would be unnecessary. One commenter argued that complete removal would compound landfill disposal problems. Another commenter asked whether the rule contemplates cleanup of soil contaminated by past practices. Some commenters argued that the 72-hour requirement would preclude bioremediation.

72-hour cleanup standard. Some commenters asked how a 72-hour time limit would be calculated. Those commenters suggested that the clock begin to run from the time of the discharge itself, or of its discovery. Others suggested different time periods from "immediately," "as soon as possible," "within 72 hours," "within 96 hours," or "expeditiously." One commenter suggested no time limit. Some commenters noted that a containment system might be designed to contain oil for more than 72 hours before it begins to leak.

One commenter suggested that, depending on site conditions, a 72-hour time limit might jeopardize worker health and safety. Another sought clarification on the need to clean up small discharges as opposed to larger ones within the proposed time limit.

Numerous commenters opposed this requirement because it might preclude bioremediation. Some thought it would be impossible to meet.

Response to comments. Applicability. The requirement to clean up an accumulation of oil is applicable to all facilities, large and small. The damage to the environment may be the same, depending on the amount discharged.

Extent of and methods of cleanup. Prevention of contamination is always the preferred alternative. If you choose, you may spread plastic film over the diked area if it will prevent the occurrence of an accumulation of oil. Of course, you must then dispose of the film properly. We agree with commenters that where a discharge creates a risk of fire or explosion, the first priority should be to eliminate such threat before undertaking cleanup. But once that threat is removed, correction of the source of the discharge and cleanup must begin promptly.

No matter what method of cleanup you choose, you must completely remove the accumulation of oil. Any method that works and complies with all other applicable laws and regulations is acceptable. Bioremediation may be one acceptable method of cleanup. Acceptable methods will depend on weather and other environmental conditions. We do not mean to limit cleanup methods, which will depend on good engineering practice. If the cleanup method you choose would undermine the stability of the dike, you must repair the dike to its previous condition.

72-hour cleanup standard. We have deleted the 72-hour cleanup standard because it would preclude bioremediation. We also agree that under certain circumstances, such a limit might jeopardize worker health and safety. Therefore, we have maintained the current standard that visible discharges must be promptly removed. "Prompt" removal means beginning the cleanup of any accumulation of oil immediately after discovery of the discharge, or immediately after any actions to prevent fire or explosion or other threats to worker health and safety, but such actions may not be used to unreasonably delay such efforts. The size of the accumulation is irrelevant, as any accumulation may migrate to navigable waters or adjoining shorelines.

Editorial changes and clarifications. "Leaks" becomes "discharges." "Tank" becomes "container." "Accumulation of oil" means a discharge that causes a "film or sheen" in a diked area, or causes a sludge or emulsion there. See 40 CFR 110.3(b). The reference to violation of applicable water quality standards in 40 CFR 110.3(b) does not apply here because the rule assumes that the oil will not have reached any waters of the United States or adjoining shorelines, but stays entirely within the diked area of the facility. The term "oil-contaminated materials" is not used in the rule. We eliminate the term "oil-contaminated materials" that was used

in the proposed rule because oil must accumulate on something such as materials or soil. Therefore, the term is redundant. Instead we refer to an accumulation of oil, which includes anything on which the oil gathers or amasses within the diked area. Such accumulation may include oil-contaminated soil or any other oil-contaminated material within the diked area impairing the secondary containment system. See also the discussion of "accumulation of oil" included with the response to comments of § 112.9(b)(2). We have removed the term "spill event" from the proposed paragraph and note that we agree with the commenter who noted that reference to a "spill event," or "a discharge as described in § 112.1(b)," within a diked area is inconsistent with that concept.

Section 112.8(c)(11)—Mobile Containers

Background. In 1991, we proposed to require that mobile tanks be positioned or located to prevent oil discharges. We recommended secondary containment for the largest single compartment or tank of any mobile container. We also recommended that these containers not be located where they will be subject to periodic flooding or washout.

Comments. Scope of discharge prevention. One commenter asked that the rule be amended to refer to discharges to navigable waters, instead of discharges.

Time limits. One commenter asked that a mobile or portable container be defined as a container which is in place on a contiguous property for 10 days or less.

Secondary containment. Two commenters supported the secondary containment proposals, but favored making them requirements instead of recommendations. One commenter asked that the secondary containment recommendation for the largest single compartment or container be modified to include tanks which are manifolded together or otherwise have overflow capabilities. Another commenter suggested that secondary containment provide freeboard sufficient to contain precipitation from a 25-year storm event.

Floods. Other commenters asked for a requirement that mobile tanks not be located in areas subject to flooding.

Response to comments. Scope of discharge prevention. We agree that the purpose of the rule is to prevent discharges from becoming discharges as described in § 112.1(b). Therefore, in response to comment, we have modified the proposed rule to require positioning or locating mobile or portable containers

to prevent "a discharge as described in § 112.1(b)," rather than "oil discharges." "A discharge as described in § 112.1(b)" is a more inclusive term, tracking the expanded scope of the amended CWA.

Time limits. We decline to place a time limitation in a definition of mobile or portable containers. Mobile or portable containers may be in place for more than ten days and still be mobile. Mobile containers that are in place for less than 10 days may still experience a discharge as described in § 112.1(b).

Secondary containment. In response to comments, we have maintained the secondary containment requirement in the current rule because secondary containment is necessary for mobile containers for the same reason that it is necessary for fixed containers; to prevent discharges from becoming discharges as described in § 112.1(b). Secondary containment must also be designed so that there is ample freeboard for anticipated precipitation. We have therefore amended the rule on the suggestion of a commenter to provide for freeboard. We agree with the commenter that the amount of freeboard should be sufficient to contain a 25-year storm event, but are not adopting that standard because of the difficulty and expense for some facilities in securing recent information concerning 25-year, 24-hour storm events at this time. Should that situation change, we will reconsider proposing such a standard in rule text. Freeboard sufficient to contain precipitation is freeboard according to industry standards, or in an amount that will avert a discharge as described in § 112.1(b). Should secondary containment not be practicable, you may be able to deviate from the requirement under § 112.7(d).

We clarify that the secondary containment requirement relates to the capacity of the largest single compartment or container. Permanently manifolded tanks are tanks that are designed, installed, or operated in such a manner that the multiple containers function as a single storage unit. Containers that are permanently manifolded together may count as the "largest single compartment," as referenced in the rule.

Floods. We deleted the proposed recommendation on siting of mobile containers in this rule because we do not wish to confuse the regulated public over what is mandatory and what is discretionary. These rules contain only mandatory requirements.

Industry standards. Industry standards that may assist an owner or operator with secondary containment for mobile containers include: (1) NFPA 30, "Flammable and Combustible

Liquids Code'; and, (2) BOCA, "National Fire Prevention Code."

Editorial changes and clarifications. "Spill event" becomes "a discharge as described in § 112.1(b)." "Tank" becomes "container." We deleted the word "onshore" because the whole section applies only to onshore facilities.

Section 112.8(d)(1)—Buried Piping—Facility Transfer Operations, Pumping, and Facility Process (Onshore) (Excluding Production Facilities)

Background. In 1991, we proposed a new recommendation that all piping installations should be placed aboveground wherever possible. We added a new proposed requirement that would require protective coating and cathodic protection for new or replaced buried piping. The current rule requires such coating and cathodic protection only if soil conditions warrant. We explained in the preamble that we believe that all soil conditions warrant protection of buried piping. We did not propose to make the requirement applicable to all existing piping because of the significant possibility that replacing all unprotected buried piping might cause more discharges than it would prevent. If soil conditions warrant such protection for existing piping, it is already required by the current rule. We also proposed a new recommendation that buried piping installation comply to the extent possible with all the relevant provisions of 40 CFR part 280.

Comments. Aboveground piping recommendation. Two commenters favored the recommendation. Others requested that it be modified to have all piping be aboveground only when appropriate, on the theory that some aboveground piping may become an obstacle to motorized traffic within a facility, or may be a hazard to worker safety because of the possibility of tripping over it.

Corrosion protection. Several commenters supported the proposal to require corrosion protection for all new or replaced buried piping. One commenter believed that corrosion protection should be required, as in the current rule, only where soil conditions warrant. One commenter asked for clarification that the requirement for replaced piping only applies to the section replaced, not necessarily to the entire line of piping. Another commenter believed that corrosion protection was inadequate to protect from discharges, and urged a requirement for double-walled piping or secondary containment and product sensitive leak detection for new

facilities. One commenter believed that the recommendation for buried piping installation to comply with 40 CFR part 280 should be a requirement, not a recommendation.

Response to comments. Aboveground piping recommendation. While we have deleted the proposed recommendation from the rule text because we do not wish to confuse the regulated public over what is mandatory and what is discretionary, we still believe that piping should be placed aboveground whenever possible because such placement makes it easier to detect discharges. The decision to place piping aboveground might include consideration of safety and traffic factors.

Corrosion protection. Based on EPA experience, we believe that all soil conditions warrant protection of new and replaced buried piping. EPA's cause of release study indicates that the operational piping portion of an underground storage tank system is twice as likely as the tank portion to be the source of a discharge. Piping failures are caused equally by poor workmanship and corrosion. Metal areas made active by threading have a high propensity to corrode if not coated and cathodically protected. See 53 FR 37082, 37127, September 23, 1988; and "Causes of Release from US Systems," September 1987, EPA 510-R-92-702. If you decide to deviate from the requirement, for example, to provide an alternate means of protection other than coating or cathodic protection, you may do so, but must explain your reasons for nonconformance, and demonstrate that you are providing equivalent environmental protection. A deviation which seeks to avoid coating or cathodic protection, or some alternate means of buried piping protection, on the grounds that the soil is somehow incompatible with such measure(s), will not be acceptable to EPA.

A "new" or "replaced" buried piping installation is one that is installed 30 days or more after the date of publication of this rule in the **Federal Register**. We have deleted the words "new" and "replaced" from the proposed language and substituted this specific date so the effective date is clearer to the regulated community. Under the current rule, you have an obligation to provide buried piping installations with protective wrapping and coating only if soil conditions warrant such measures. Under the revised rule, you must provide such wrapping and coating for new or replaced buried piping installations regardless of soil conditions.

You should consult a corrosion professional before design, installation, or repair of any corrosion protection system. Any corrosion protection you provide should be installed according to relevant industry standards. When piping is replaced, you must protect from corrosion only the replaced section, although protection of the entire line whenever possible is preferable. Equipping only a small portion of piping with corrosion protection may accelerate corrosion rates on connected unprotected piping. While we agree that corrosion protection might not prevent all discharges from buried piping, it is an important measure because it will help to prevent most discharges.

Double-walled piping or secondary containment or sensitive leak detection for buried piping may be acceptable as a deviation from the requirements of this paragraph under § 112.7(a)(2) if you explain your reasons for nonconformance with the requirement and show that the means you selected provides equivalent environmental protection to the requirement. However, we will not require such measures because we did not propose them.

We have deleted the recommendation from the proposed rule that all buried piping installations comply to the extent practicable with 40 CFR part 280, because we are excluding recommendations from this rule to avoid confusion with what is mandatory and what is discretionary. Also, some buried piping now subject to part 112 will be subject only to 40 CFR part 280 or a State program approved under 40 CFR part 281 under this rule. See § 112.1(d)(4).

Industry standards. Industry standards that may assist an owner or operator with corrosion protection for buried piping installations include: (1) National Association of Corrosion Engineers (NACE) Recommended Practice-0169, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems"; and, (2) STI Recommended Practice 892, "Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems."

Editorial changes and clarifications. In the second sentence of paragraph (d)(1), we included a reference to "a State program approved under part 281 of this chapter." In the third sentence, "examine" and "examination" become "inspect" and "inspection."

Section 112.8(d)(2)—Terminal Connections

Background. In 1991, we proposed that when piping is not in service or is in standby service for 6 months or more, the terminal connection at the transfer point must be capped or blank-flanged and marked as to origin. The current rule requires such capping or blank-flanging when the piping is not in service or is in standby service “for an extended time.”

Comments. One commenter supported the six-month clarification of an “extended time.” Several commenters opposed the requirement to cap or blank-flange piping in standby service because such piping may be needed to be put into service quickly during an emergency to ensure safe operations at the facility. The commenter suggested that the rule be reworded to say “When piping is not in service or is not in standby service.”

Response to comments. We have decided to keep the current standard of requiring capping or blank-flanging terminal connections when such piping is not in service or is in standby for an extended time in order to maintain flexibility for variable facilities and engineering conditions. We define “an extended time” in reference to industry standards or at a frequency sufficient to prevent discharges. We disagree with commenters that the requirement should not apply to piping that is not in standby service because some discharges may be caused by loading or unloading oil through the wrong piping or turning the wrong valve when the piping in question was actually out-of-service. Typically, piping that is in standby service is only needed in emergency situations or when there is an operational problem. In the rare situations when such piping is needed immediately, the owner or operator may remove the cap or blank-flange to return the piping to service.

Editorial changes and clarifications. “Examine” becomes “inspect.”

Section 112.8(d)(3)—Pipe Supports

Background. In 1991, we repropoed without substantive change the current rule concerning pipe supports.

Comments. We received no comments on this proposal. Therefore, we have promulgated the provision as proposed.

Section 112.8(d)(4)—Inspection of Aboveground Valves and Piping

Background. In 1991, we proposed that you examine all aboveground valves, piping, and appurtenances on at least a monthly basis. This contrasts with the current requirement of

“regular” examinations. We also recommended that you conduct annual integrity and leak testing of buried piping, or that you monitor it on a monthly basis. Finally, we recommended that all valves, pipes, and appurtenances conform to relevant industry codes, such as ASME standards. We proposed deletion from the rule of the current requirement for periodic pressure testing for piping where facility drainage is such that a failure might lead to a spill event.

Comments. Monthly examination of aboveground valves, piping, and appurtenances. One commenter supported the visual monthly examination proposal, but suggested that we require a more sophisticated method of testing every three to four years, such as pressure testing. Most other commenters opposed monthly examinations, on grounds of impracticality. Most opposing commenters urged testing on a quarterly or semiannual basis, or per industry standards. Some thought the requirement should be a recommendation, both for large and small facilities. Electrical utility commenters asserted that the monthly testing of millions of pieces of equipment would be extremely burdensome. Several commenters urged that the examination requirement be limited to visual examination because of the cost of other methods.

Buried piping. Several commenters favored the proposed recommendation for annual integrity and leak testing of buried piping or monitoring of such piping on a monthly basis. One commenter was concerned that the recommendation made no concession for piping construction material, length of time in the ground, etc. Several commenters believed that the recommendation should be a requirement because piping often runs outside of secondary containment; buried piping cannot be inspected visually; discharges are common from this piping; and few owners or operators conduct integrity or leak testing of such piping. Some thought it should be a requirement for all facilities, others just for large facilities. One commenter thought that the requirement to inspect buried piping only when exposed is inadequate. The commenter suggested that the piping should be subject to pressure testing. The frequency of the testing would be based on aquifer use.

Opposing commenters believed annual testing or monthly monitoring was unnecessary, generally citing cost and practicability reasons. Some suggested differing time periods for testing, such as every three years, or

every ten years. One commenter believed that the recommendation should not apply to piping of less than ten feet. Others asked for clarification as to the type of testing contemplated. One commenter suggested that the recommendation be clarified to refer only to oil-handling piping and equipment, and not include buried piping unrelated to oil operations. Several commenters suggested that we add a requirement to the rule to conduct integrity and leak testing of protected piping at the time of installation, modification, construction, relocation, or replacement, and to conduct an engineering evaluation of in-service unprotected underground piping every five years. Another commenter suggested double-walled piping as an alternative. One commenter suggested that the recommendation was inappropriate for vaulted tanks because of the configuration of the tanks.

Response to comments. Monthly inspection of aboveground valves, piping, and appurtenances. Inspection of aboveground valves, piping, and appurtenances must be a requirement to help prevent discharges. Such valves, piping, and appurtenances often are located outside of secondary containment systems, and often do not have double-wall protection or some form of secondary containment themselves. Therefore, any discharge from such valves, piping, and appurtenances is more likely to become a discharge as described in § 112.1(b). Examination of discharge reports from the Emergency Response Notification System (ERNS) shows that discharges from such valves, piping, and appurtenances are much more common than catastrophic tank failure or discharges from tanks. The requirement must be applicable to large and small facilities covered by this section that store oil, because of the same threat of discharge.

The requirements of this paragraph do not apply to electrical utilities and other facilities with oil-filled equipment because they are not bulk storage facilities.

The final rule maintains the current standard of “regular” inspections, on the suggestion of commenters who noted that at some remote sites monthly inspections are impractical, especially in harsh weather conditions. Furthermore, we agree with commenters that “regular” inspections are inspections conducted “in accordance with accepted industry standards,” rather than the monthly proposed standard. You must include appurtenances in the inspection. Inspections may be either visual or by

other means, including pressure testing. However, we do not require pressure testing or any other specific method. We agree that, subject to good engineering practice, pressure testing every three or four years may be warranted in addition to regular inspection of aboveground valves, piping, and appurtenances. However, we believe that regular inspection is sufficient to help prevent discharges and will not impose any additional requirements at this time.

Buried piping. We have deleted the text of the proposed recommendation to conduct annual integrity and leak testing of buried piping or monitor buried piping on a monthly basis from the rule because we do not wish to confuse the regulated public over what is mandatory and what is discretionary. This rule contains only mandatory requirements. However, we continue to endorse the recommendation as a discretionary action, and suggest that you conduct such testing according to industry standards.

We agree with a commenter that the proposed recommendation would apply only to "oil-handling" piping and valves, not all such piping and valves, which may be unrelated to oil activities. However, no change in rule text is necessary because the entire rule applies only to procedures, methods, or equipment that are involved with the storage or use of oil. In response to the commenter who urged that the proposed recommendation not apply to buried piping of less than 10 feet in length, we believe that any buried piping, regardless of length, may cause a discharge, and therefore should be tested. Double-walled piping might be an acceptable alternative to integrity and leak testing or monthly monitoring. If you choose double-walled piping as an alternative, you must explain your nonconformance with the rule requirements, and explain how double-walled piping provides equivalent environmental protection. See 112.7(a)(2).

On the suggestion of commenters, we have modified the proposed recommendation for annual testing or monthly monitoring of buried piping into a requirement that you must only conduct integrity and leak testing of such piping at the time of installation, modification, construction, relocation, or replacement. We believe that when piping is exposed for any reason, integrity and leak testing of such exposed piping according to industry standards is appropriate because piping is visible at that point, and testing is easier because the piping is more accessible. The same commenters also recommended that unprotected

underground piping be subject to engineering evaluations every five years, but we recommend such evaluations be conducted in accordance with industry standards to preserve flexibility in case the time frame changes with changing technology.

If you have vaulted containers, the requirement for integrity and leak testing of buried piping might be the subject of a deviation under § 112.7(a)(2) if those pipes, valves, and fittings come out of the top of the container and are not buried, or are encased in a double-walled piping system and you thereby significantly reduce the potential for corrosion.

Likewise, we have deleted from rule text the recommendation that all valves, pipes, and appurtenances conform to industry standards, but we endorse its substance.

Industry standards. Industry standards that may assist an owner or operator with inspection and testing of valves, piping, and appurtenances include: (1) API Standard 570, "Piping Inspection Code (Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems"; (2) API Recommended Practice 574, "Inspection Practices for Piping System Components"; (3) American Society of Mechanical Engineers (ASME) B31.3, "Process Piping"; and, (4) ASME B31.4, "Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols."

Editorial changes and clarifications. "Examine" and "examination" become "inspect" and "inspection." We have deleted the reference to "operating personnel" in the first sentence because all of the requirements of this rule, except when specifically noted otherwise, are the responsibility of the owner or operator.

Section 112.8(d)(5)—Vehicular Traffic

Background. In 1991, we repropose the current rule concerning warnings to vehicular traffic, because of vehicle size, to avoid endangering aboveground piping. We proposed to amend the rule to include avoidance of endangering "other transfer operations" within the scope of the warning. We added a recommendation that weight restrictions should be posted, as applicable, to prevent damage to underground piping.

Comments. Vehicular warnings. Several commenters supported the current requirement to warn vehicular traffic to avoid endangering aboveground piping or other transfer operations because of vehicle size. Others believed that any size or weight restrictions would unnecessarily burden facility operations. See the comments

below on weight restrictions. Some believed the proposed requirement should be a recommendation based on good engineering practices. One thought it made no difference. One commenter proposed as an alternative, marking such piping so it could be temporarily protected or avoided. One commenter suggested that it would be more prudent to require signs where piping is lower than 14 feet and located such that vehicles can traverse, and recommended that, in addition to signs, verbal warnings be provided.

Weight restriction posting. Several commenters supported making this recommendation a requirement because good engineering practice will exclude heavy equipment from crossing buried piping which does not have adequate cover to protect the pipe.

Others opposed it on the grounds it would restrict access to vehicles which "have driven over the same piping for a dozen or more years." One commenter thought the recommendation was unnecessary because local building codes or other standards already address the issue of buried piping protection. Some thought the recommendation should be a matter of PE discretion. Several commenters thought that the recommendation should apply to large facilities only because only large facilities will have the type of tanker trucks on site which would potentially damage underground piping. One commenter thought that small facilities should be exempt from the recommendation.

Another commenter believed that the recommendation should be restricted to situations where it is not certain that the underground piping can withstand all anticipated vehicular traffic. Another commenter suggested that if buried piping is placed across a thoroughfare, it should be installed with additional structural protection. The commenter asserted that proper installation is a preventative and is a better alternative than a sign because signs are not always heeded.

One commenter suggested that posting of weight restrictions at airports in open areas would be impractical and impact operations. The commenter argued that the proposal was unreasonable where some buried piping/hydrant systems run under ramp surfaces. A railroad commenter argued that the recommendation is overly broad because railroads have a large amount of piping under track that is built to withstand maximum loads from vehicular traffic, making the posting of signs unnecessary and costly. One commenter argued that the requirement was inapplicable to vaulted tanks

because the concrete vault reduced the risk of vehicular damage.

Response to comments. Vehicular warnings. The requirement to warn vehicular traffic so that no vehicle will endanger aboveground piping or other oil transfer operations applies to all facilities, large or small, because vehicular traffic may endanger aboveground piping or other transfer operations at all facilities. Warnings may include verbal warnings, signs, or marking and temporary protection of piping or equipment. No particular height restriction is incorporated into the rule. Rather, aboveground piping at any height must be protected from vehicular traffic unless the piping is so high that all vehicular traffic passes underneath the piping. In this case, or where the requirement is infeasible, you may be able to use the deviation provision in § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection. We have deleted the clause concerning the size of vehicles that may endanger piping or oil transfer operations because the owner or operator may not be able to determine precisely when the size or weight of a vehicle would cause such endangerment.

In response to commenters who suggested that the posting of signs is impractical and might impact operations, or would be very costly, we note that you may deviate from the requirement under § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection.

Weight restriction posting. We deleted the proposed recommendation concerning weight restrictions as they relate to underground piping from rule text, but still support it when appropriate. We include only mandatory items in this rule because we do not wish to confuse the regulated public as to what is mandatory and what is discretionary. We decline to make the recommendation a requirement because we believe the appropriate posting of weight restrictions should be a matter of good engineering practice.

Editorial changes and clarifications. We deleted the references to verbal warning or appropriate signs in the rule. Instead, the rule contains an obligation to warn entering vehicular traffic. Warnings may be verbal, by signs, or by other appropriate methods.

Introduction to Section 112.9

Background. We have added an introduction to help rewrite the section in the active voice. Since the owner or

operator is the person with responsibility to implement a Plan, the mandates of the rule are properly addressed to him, except as specifically noted.

Section 112.9(a)—General Requirements—Onshore Oil Production Facilities

Background. This is a new provision that merely references the general requirements which all facilities must meet as well as the specific requirements that you must meet if you are an owner or operator of a facility in the category of onshore oil production facilities.

Editorial changes and clarifications. The obligation to “address” general SPCC requirements becomes the obligation to “meet” those requirements. “Spill prevention” becomes “discharge prevention.” We also deleted the word “onshore” from the titles of the paragraphs of this section because the entire section applies only to onshore production facilities.

Proposed Section 112.9(b)—Definition—Onshore Oil Production Facilities

Background. This proposed section was merely a reference to the old definition of onshore oil production facility (*see* current § 112.7(e)(5)(i)), which is today incorporated within the new definition of production facility. Therefore, the section is no longer necessary and we have deleted it.

Section 112.9(b)(1), Proposed as § 112.9(c)(1)—Dike Drains and Drainage

Background. In 1991, we repropoed the current rule concerning drainage of diked areas.

Comments. Editorial changes and clarifications. One commenter suggested an editorial change from discharges to “navigable waters,” to a discharge as referenced in § 112.1(b)(1).

Applicability. Another commenter urged a small facility exemption from this requirement because the recordkeeping involved was too burdensome.

Engineering methods. One commenter believed that the requirement to have all drains closed on dikes around storage containers might preclude engineering methods designed to handle flow-through conditions at water flood oil production operations, where large volumes of water may be directed to oil storage tanks if water discharge lines on oil-water separators become plugged.

Response to comments. Applicability. We believe that this requirement must be applicable to both large and small facilities to help prevent discharges as

described in § 112.1(b). The risk of such a discharge and the accompanying environmental damage may be devastating whether it comes from a large or small facility. We disagree that the recordkeeping is burdensome. If you are an NPDES permittee, you may use the stormwater drainage records required pursuant to 40 CFR 122.41(j)(2) and 122.41(m)(3) for SPCC purposes, thereby reducing the recordkeeping burden.

Engineering methods. “Equivalent” measures referenced in the rule might, depending on good engineering practice, include using structures such as stand pipes designed to handle flow-through conditions at water flood oil production operations, where large volumes of water may be directed to oil storage tanks if water discharge lines on oil-water separators become plugged. Any alternate measures must provide environmental protection equivalent to the rule requirement.

Industry standards. Industry standards that may assist an owner or operator with facility drainage include API Recommended Practice 51, “Onshore Oil and Gas Production Practices for Protection of the Environment.”

Editorial changes and clarifications. In response to the commenter’s suggestion, the reference to “navigable waters” becomes a reference to “a discharge as described in § 112.1(b).” “Central treating stations” becomes “separation and treating areas.” Such areas might be centrally located or located elsewhere at the facility and might include both separation and treatment devices and equipment. The reference to “rainwater is being drained” becomes “draining uncontaminated rainwater.” We clarify that accumulated oil on rainwater must be disposed of in accord with “legally approved methods,” not “approved methods.”

Section 112.9(b)(2)—Proposed as § 112.9(c)(2)—Drainage Ditches, Accumulations of Oil

Background. In 1991, we sought to clarify that oil as well as oil-contaminated soil must be removed from field drainage ditches, road ditches, and the like. The current rule only requires removal of an “accumulation of oil.” We also proposed that such accumulations be removed within 72 hours at the most.

Comments. Applicability. One commenter asserted that this section does not apply to crude oil transfers from production fields into tank trucks because any discharges in the transfer process would be caught in a small

sump or catchment basin. Another commenter asked if this section applied to cleanup of oil and oil-contaminated soil from diked areas.

Inspection schedule. Another commenter suggested that we require inspections of field drainage ditches, etc., at monthly intervals and within 24 hours of a 25-year storm event.

Accumulations of oil and oil-contaminated soil. Two commenters argued that EPA lacks authority to require cleanup of contaminated soil. Others asked for clarifications of the terms "accumulation" and "oil-contaminated soil." Another asked what cleanup standard EPA contemplated under this rule. The commenter elaborated, "is accumulated oil and contaminated soil to be removed from diked areas under this provision?"

72-hour cleanup standard. Several commenters argued that the 72-hour standard for cleanup would preclude bioremediation or other cleanup techniques allowed by State and local law. Several commenters suggested other time periods, including "as soon as practical," "within a timely manner." Some suggested no time standard is appropriate. Those commenters generally thought that a 72-hour period might be unrealistic in certain cases.

Response to comments. Applicability. Crude oil transfers from production fields into tank trucks or cars are covered by the general requirements contained in § 112.7(c) and (h), both of which require some form of secondary containment. Cleanup of oil, oil-contaminated soil, and oil-contaminated materials from field drainage ditches, road ditches, or other field drainage system is covered by this paragraph. In response to comment, we note that cleanup of oil from diked areas at onshore production facilities is not specifically covered by the rules. However, the presence of oil in diked areas may impair the quality of the dike or the capacity for secondary containment, and if so, the oil must be removed.

Inspection schedule. We have retained the "regularly scheduled intervals" standard for inspections. This standard means regular inspections according to industry standards or on a schedule sufficient to prevent a discharge as described in § 112.1(b). Whatever schedule for inspections is selected must be documented in the Plan. We decline to specify a specific interval because such an interval might become obsolete with changing technology.

Accumulations of oil and oil-contaminated soil. We have adequate authority to require cleanup of an

accumulation of oil, including on soil and other materials, because section 311(j)(1)(C) of the CWA provides EPA with the authority to establish procedures, methods, and equipment and other requirements for equipment to prevent discharges of oil. The broad definition of "oil" in CWA section 311(a)(1) covers "oil refuse" and "oil mixed with wastes other than dredged spoil." If field drainage systems allow the accumulation of oil on the soil or other materials at the onshore facility and that oil threatens navigable water or adjoining shorelines, then EPA has authority to establish a method or procedure, i.e., the removal of oil contaminated soil, to prevent that oil from becoming a discharge as described in § 112.1(b). The cleanup standard under this paragraph requires the complete removal of the contaminated oil, soil, or other materials, either by removal, or by bioremediation, or in any other effective, environmentally sound manner.

72-hour cleanup standard. We agree that the 72-hour cleanup standard might preclude bioremediation and have therefore deleted it. Instead we establish a standard of "prompt cleanup." "Prompt" cleanup means beginning the cleanup immediately after discovery of the discharge or immediately after any actions necessary to prevent fire or explosion or other imminent threats to worker health and safety.

Editorial changes and clarifications. "Escaped from small leaks" becomes "resulted from any small discharge." We eliminate the term "oil-contaminated soil" because oil must accumulate on something, such as materials or soil. We retain the term "accumulation of oil," but elaborate on its meaning. "Accumulation of oil" means a discharge that causes a "film or sheen" within the field drainage system, or causes a sludge or emulsion there (see 40 CFR 110.3(b)). An accumulation of oil includes anything on which the oil gathers or amasses within the field drainage system. An accumulation of oil may include oil-contaminated soil or any other oil-contaminated material within the field drainage system. See also the discussion of "accumulation of oil" included with the response to comments of § 112.8(c)(10).

*Proposed Section 112.9(c)(3)—
Additional Requirements for Flood
Events*

Background. In 1991, we proposed a new recommendation for oil production facilities in areas subject to flooding. We recommended that the Plan address additional precautionary measures related to flooding. In the discussion of

the proposal, we referenced FEMA requirements.

Comments. One commenter thought this provision should be a requirement rather than a recommendation. Another commenter suggested that exploration and production facilities located in flood plain areas should be adequately secured through proper mechanical/engineering methods to reduce the chance of loss of product. A third commenter suggested the following specific measures to be implemented: (1) Identify whether the facility is located in a floodplain in the Plan; (2) if the facility is located in a floodplain, the Plan should address to what extent it meets the minimum requirements of the National Flood Insurance Program (NFIP); and (3) if a facility does not meet the minimum requirements of the NFIP, the Plan should address appropriate precautionary and mitigation measures for potential flood-related discharges.

Response to comments. We have deleted the recommendation because we do not wish to confuse the regulated public over what is mandatory and what is discretionary. These rules contain only mandatory requirements. However, we support the substance of the recommendation, and suggest that a facility in an area prone to flooding either follow the requirements of the NFIP or employ other methods based on good engineering practice to minimize damage to the facility from a flood.

*Section 112.9(c)(1)—Proposed as
§ 112.9(d)(1)—Materials and
Construction—Bulk Storage Containers*

Background. In 1991, we repropose the section on materials and construction of bulk storage containers with an added recommendation that containers conform to relevant industry standards.

Comments. One commenter thought that the recommendation for use of industry standards should be a requirement. The commenter asked that at a date certain, all existing tanks must be upgraded to current standards, and that all new and reconstructed tanks must be subject to applicable codes. Another commenter suggested that the recommendation should not apply to crude oil storage tanks because local industry standards are more appropriate.

Response to comments.
Recommendation v. requirement. We are retaining the mandatory requirement to use no container for the storage of oil unless its material and construction are compatible with the material stored and the conditions of storage, as proposed. We have deleted the recommendation that materials, installation, and use of

new tanks conform with relevant portions of industry standards because we do not wish to confuse the regulated public over what is mandatory and what is discretionary. However, we endorse its substance. In most cases good engineering practice and liability concerns will prompt the use of industry standards. See § 112.3(d)(1)(iii). In addition, a requirement is not necessary or desirable because local governmental standards on construction, materials, and installation sometimes control industry standards on these matters.

Industry standards. Industry standards that may assist an owner or operator with materials for and construction of onshore bulk storage production facilities include: (1) API Specification 12B, "Bolted Tanks for Storage of Production Liquids"; (2) API Specification 12D, "Field Welded Tanks for Storage of Production Liquids"; (3) API Specification 12F, "Shop Welded Tanks for Storage of Production Liquids"; (4) API Specification 12J, "Oil Gas Separators"; (5) API Specification 12K, "Indirect-Type Oil Field Heaters"; and, (6) API Specification 12L, "Vertical and Horizontal Emulsion Treaters."

Editorial changes and clarifications. "Tank" becomes "container."

Section 112.9(c)(2)—Proposed as § 112.9(d)(2)—Secondary Containment, Drainage

Background. The SPCC Task force concluded that aboveground storage tanks without secondary containment pose a particularly significant threat to the environment. We noted that the proposed rule modifications would "retain the current requirement for facility owners or operators who are unable to provide certain structures or equipment for oil spill prevention, including secondary containment, to prepare facility-specific contingency plans in lieu of prevention systems." 56 FR 54614. In 1991, we therefore repropose the secondary containment requirements for onshore oil production facilities with a clarification. We clarified that secondary containment must include sufficient freeboard to allow for precipitation. The current rule requires that drainage from undiked areas must be safely confined in a catchment basin or holding pond. The proposed rule had modified this requirement to apply only to drainage from undiked areas "showing a potential for contamination."

Comments. Secondary containment. See the discussion under § 112.7(c) of secondary containment in general. One commenter suggested that the requirement was too vague and

comprehensive to be applied to oil leases, which might cover hundreds of acres. Another asked how we would determine what is sufficient freeboard.

Drainage. One commenter thought the drainage requirement was duplicative of NPDES requirements.

Response to comments. Secondary containment. The requirement applies to oil leases of any size. Secondary containment is not required for the entire leased area, merely for the contents of the largest single container in the tank battery, separation, and treating facility installation, with sufficient freeboard to contain precipitation. In response to the comment as to how an owner or operator might determine how much freeboard is sufficient, we have revised the rule to provide that freeboard sufficient to contain precipitation is the standard. Freeboard sufficient to contain precipitation is freeboard installed according to industry standards, or in an amount sufficient to avert a discharge as described in § 112.1(b). This standard is consistent with the amount of freeboard required in § 112.8(c)(2).

Drainage. We deleted the proposed reference to undiked areas "showing a potential for contamination" because drainage from any undiked area poses a threat of contamination. When drainage from such areas is covered by stormwater discharge permits, that part of the BMP might be usable for SPCC purposes. There is no redundancy in recordkeeping requirements, because you can use your NPDES records for SPCC purposes.

Industry standards. Industry standards that may assist an owner or operator with secondary containment at onshore production facilities include: (1) API Recommended Practice 51, "Onshore Oil and Gas Production Practices for Protection of the Environment"; (2) NFPA 30, "Flammable and Combustible Liquids Code"; and, (3) BOCA, "National Fire Prevention Code."

Editorial changes and clarifications. "Tank battery and central treating plant installations" becomes "tank battery, separation, and treating facility installations." "Contents of the largest single tank" becomes "capacity of the largest single container." With this change, this paragraph agrees with general secondary containment requirements found in § 112.7(c). The reference to tanks "in use" was deleted because it is redundant. Containment for tanks or containers that are not permanently closed is already required. We deleted the phrase "if feasible, or alternate systems, such as those outlined in § 112.7(c)(1)," because it is

confusing when compared to the text of § 112.7(d). Under § 112.7(d), if secondary containment is not practicable, you must provide a contingency plan following the provisions of 40 CFR part 109, and otherwise comply with the requirements of § 112.7(d). Furthermore, you are also free to provide alternate systems of secondary containment. We do not prescribe the method.

Section 112.9(c)(3)—Proposed as § 112.9(d)(3)—Container Inspection

Background. In 1991, we proposed that you must visually examine all containers of oil at onshore production facilities at least once a year. The current requirement is that you examine these containers "on a scheduled periodic basis." We also proposed that you would be required to maintain the schedule and records of those examinations for a period of five years, irrespective of changes in ownership.

Comments. Frequency of inspection. One commenter favored the proposal. One commenter suggested quarterly rather than annual inspections. Two commenters suggested triennial inspections. Other commenters suggested a frequency in accordance with API recommended standards.

Extent of inspection. Several commenters thought that the inspections should be external only, and should not necessarily include the foundations and supports (as proposed) because of the number of containers that would be taken out of service with that requirement. Another commenter asserted that inspection of foundations and supports might not be possible due to foundation settlement or lack of space to perform the inspection.

Response to comments. Frequency of inspection. We have maintained the current standard for frequency of inspection because we agree that inspections in accordance with industry standards are necessary. Those standards may change with changing technology, therefore, a frequency of "periodically and upon a regular schedule" preserves maximum flexibility and upholds statutory intent.

Extent of inspection. We disagree that the inspection of containers should be limited to external inspection. Internal inspection is also necessary to detect possible flaws that could cause a discharge. The inspection must also include foundations and supports that are on or above the surface of the ground. If for some reason it is not practicable to inspect the foundations and supports, you may deviate from the requirement under § 112.7(a)(2), if you explain your rationale for

nonconformance and provide equivalent environmental protection.

Record maintenance. We have deleted the proposed requirement to maintain records of these inspections for five years, irrespective of ownership, because it is redundant with the general requirement in § 112.7(e) to maintain Plan records. Section 112.7(e) requires record maintenance for three years. However, you should note that certain industry standards (for example, API Standard 653 or API Recommended Practice 12R1) may specify that an owner or operator maintain records for longer than three years.

Industry standards. Industry standards that may assist an owner or operator with inspection of containers at onshore production facilities include: (1) API Recommended Practice 12R1, "Recommended Practice for Setting, Maintenance, Inspection, Operation, and Repair of Tanks in Production Service"; and, (2) "API Standard 653, "Tank Inspection, Repair, Alteration, and Reconstruction."

Editorial changes and clarifications. "Visually examine" becomes "Visually inspect." "All tanks" becomes "each container." "Foundation and supports of tanks above the ground surface" becomes "Foundation and support of each container that is on or above the surface of the ground."

Section 112.9(c)(4)—Proposed as § 112.9(d)(4)—Good Engineering Practice

Background. In 1991, we proposed to convert the current requirement for "fail-safe" engineering (which includes vacuum protection and other measures) of new and old tank battery installations into a recommendation. We also proposed that you reference appropriate industry standards.

Comments. One commenter asserted that we should retain the original requirement to avoid confusion among the regulated community, help improve spill prevention, and because we proposed a similar requirement for bulk storage containers. Another commenter opposed the proposed recommendation because he believed the cost of such engineering would be prohibitive. Two commenters sought an exemption for small facilities on the same rationale. Similarly, some commenters opposed the proposed recommendation on vacuum protection because of the potential cost. None of the commenters provided their own cost estimates. Some commenters opposed the proposed recommendation relating to vacuum protection because of the potential cost, which they estimated as "in excess of \$100 per tank."

Response to comments. Good engineering practice. We agree with the commenter that we should retain this section as a requirement both to improve spill prevention and to avoid confusion among the regulated community because of the similar requirement for bulk storage containers at facilities other than production facilities. Therefore, there are no new costs. Nevertheless, you have flexibility as to which measures you use, and may choose the least expensive alternative listed in § 112.9(c)(4). For example, should vacuum protection be too costly, you are free to use another alternative. Furthermore, you may also deviate from the requirement under § 112.7(a)(2) if you can explain nonconformance and provide equivalent environmental protection by some other means. We revised the paragraph on vacuum protection to clarify that the rule addresses any type of transfer from the tank, not merely a pipeline run.

Industry standards. Industry standards that may assist an owner or operator with alarm systems include: (1) API, "Manual of Petroleum Measurement Standards"; (2) API Recommended Practice 51, "Onshore Oil and Gas Production Practices for Protection of the Environment"; (3) API Recommended Practice 2350, "Overfill Protection for Storage Tanks in Petroleum Facilities"; and, (4) NFPA 30, "Flammable and Combustible Liquids Code."

Editorial changes and clarifications. "Fail-safe" engineering becomes "good engineering practice," because fail-safe engineering is a misnomer. The change in terminology does not imply any substantive change in the level of environmental protection required, it is merely editorial. See the comments, and the discussion under "Editorial changes and clarification," § 112.8(c)(8). The same reasoning applies to this paragraph. We deleted the phrase "as far as is practical," because it is confusing when compared to the text of § 112.7(a)(2). Under § 112.7(a)(2), you may explain your reasons for nonconformance, and provide equivalent environmental protection by some other means. We deleted the recommendation to reference appropriate industry standards because it was unnecessary. You must discuss actual standards used in the Plan. Section 112.3(d)(1)(iii) also requires the Professional Engineer to certify that he has considered applicable industry standards in the preparation of the Plan. Also in the introductory paragraph, the phrase "Consideration shall be given to providing.* * *" becomes, "You must provide.* * *" This change makes the

language consistent with a companion paragraph dealing with good engineering design, *i.e.*, § 112.8(c)(8). In paragraph (c)(4)(i), "regular rounds" becomes "regularly scheduled rounds." "Spills" becomes "discharges." In paragraph (c)(4)(iv), the phrase "where facilities are" becomes "where the facility is." Elsewhere "tank" becomes "container."

Section 112.9(d)(1)—Proposed as § 112.9(e)(1)—Inspection of Aboveground Valves and Piping

Background. In 1991, we proposed that you inspect monthly all aboveground valves and pipelines, and that you maintain records of such inspections for five years. The current requirement is that you examine such valves and pipelines "periodically on a scheduled basis," and maintain the records of such inspections for three years.

Comments. Editorial changes and clarifications. One commenter asked for clarifying language that the rule only applied to valves and piping associated with transfer operations.

Applicability. Two commenters asked for an exemption from the requirements of this paragraph for small facilities.

Frequency of inspections. Several commenters suggested alternate inspection intervals, such as every six months, or every year. Another commenter suggested that monthly inspections are meaningless because some unscrupulous operators might fill out inspection reports on dates when no problems are to be found. Other commenters suggested that we require a performance standard instead of a prescribed monthly inspection. One commenter suggested the proposed inspections standards for § 112.9(e) were excessive for many small facilities. The commenter suggested that a standard defined by the licensed Professional Engineer who certifies the SPCC Plan could reflect the differing requirements that may apply under different equipment configurations as well as differing geographical and meteorological conditions. The commenter added that a generalized performance standard should be included that includes a minimum inspection interval, such as annual inspection, which could be altered to meet specific facility conditions.

Recordkeeping. One commenter thought a five-year record retention period is excessive. Another commenter asked that we clarify that PE certification of these regular inspections and records is not required.

Response to comments. Applicability. The rule must apply equally to large and

small facilities because failure to inspect piping and valves at any facility might lead to a discharge as described in § 112.1(b).

Frequency of inspections. We have retained the current inspection frequency of periodic inspections, but editorially changed it to “upon a regular schedule.” Our decision accords with the comment which sought a performance standard instead of a prescribed monthly inspection. The standard of inspections “upon a regular schedule” means in accordance with industry standards or at a frequency sufficient to prevent discharges as described in § 112.1(b). Whatever frequency of inspections is selected must be documented in the Plan.

Recordkeeping. We agree that a five-year record retention period is longer than necessary and have deleted the proposed requirement in favor of the general requirement in § 112.7(e) to maintain records for three years. However, comparison records for compliance with certain industry standards may require an owner or operator to maintain records for longer than three years. PE certification of these inspections and records is not required.

Editorial changes and clarifications. “Examine” becomes “inspect.” We agree with the commenter who asked for clarification that the rule applies only to inspections related to transfer operations and have amended the rule to reflect that. A transfer operation is one in which oil is moved from or into some form of transportation, storage, equipment, or other device, into or from some other or similar form of transportation, such as a pipeline, truck, tank car, or other storage, equipment, or device.

Section 112.9(d)(2)—Proposed as § 112.9(e)(2)—Salt Water Disposal Facilities

Background. In 1991, we repropoed without change the current requirements on the examination of salt water (oil field brine) disposal facilities. The current requirement is that you examine these facilities “often.” However, we have recommended weekly examination as an appropriate engineering standard for most facilities. 56 FR 54624. We noted that low temperature conditions, sudden temperature changes, or periods of low flow rates may require more frequent inspections.

Comments. Applicability. One commenter suggested that the requirement to examine these facilities should not apply to storage facilities with de minimis amounts of oil.

Sudden change in temperature.

Another commenter asked for clarification of what “a sudden change in temperature” means. The commenter assumed that it meant a sudden drop that could cause system upsets.

Response to comments. Applicability. The rule applies to any regulated facility with salt water disposal if the potential exists to discharge oil in amounts that may be harmful, as defined in 40 CFR 110.3. This standard is necessary to protect the environment.

Sudden change in temperature. A sudden change in temperature means any abrupt change in temperature, either up or down, which could cause system upsets.

Frequency of inspections. Inspections of these facilities must be conducted “often.” “Often” means in accordance with industry standards, or more frequently, if as noted, conditions warrant. Whatever frequency of inspections is chosen must be documented in the Plan.

Editorial changes and clarifications. “Examine” becomes “inspect.” “Oil discharge” becomes “discharge,” because the term “oil” is redundant in the definition of “discharge.”

Section 112.9(d)(3)—Proposed as § 112.9(e)(3)—Flowline Maintenance

Background. In 1991, we repropoed the current requirements for flowline maintenance. We proposed a recommendation, rather than a requirement, that the program include certain specifics, because of differences in the circumstances of locations, staffing, and design for production facilities. We suggested that monthly examinations are appropriate for most facilities.

Comments. Applicability. Two commenters asked for a small facility exemption for this recommendation.

Frequency of inspections. Several commenters suggested that the recommendation refer to periodic instead of monthly examinations. Others suggested annual or quarterly inspections. One commenter said that monthly inspection of gathering lines buried in the colder parts of the Appalachian basin is impossible.

Corrosion protection. Several commenters asserted that the provision for corrosion protection for the bare steel pipe used for gathering line systems in the Appalachians is impossible because the cost of coated lines and cathodic protection is prohibitive. None of the commenters provided their own cost estimates.

Transfer operation. One commenter asked for clarification of the term “oil production facility transfer operation.”

The commenter suggested that a definition of the term would improve compliance.

Response to comments. Applicability. A program of flowline maintenance is necessary to prevent discharges both at large and small facilities. However, we have deleted the proposed recommendation regarding the specifics of the program from the rule. We took this action because we are not including recommendations in the rule in order not to confuse the public over what is mandatory and what is discretionary. This rule contains only mandatory requirements.

Frequency of inspections. In the proposed recommendation we suggested that you conduct monthly inspections for a flowline maintenance program. We now recommend that you conduct inspections either according to industry standards or at a frequency sufficient to prevent a discharge as described in § 112.1(b). Under § 112.3(d)(1)(iii), the Professional Engineer must certify that the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards.

Corrosion protection, flowline replacement. While we have deleted the recommendation from rule text due to reasons explained above and therefore, the rule imposes no new costs, we recommend corrosion protection, we recommend corrosion protection, and flowline replacement when necessary, because those measures help to prevent discharges as described in § 112.1(b).

Transfer operation. A transfer operation is one in which oil is moved from or into some form of transportation, storage, equipment, or other device, into or from some other or similar form of transportation, such as a pipeline, truck, tank car, or other storage, equipment, or device.

Editorial changes and clarifications. “Spills” becomes “discharges.” The phrase “from this source” becomes “from each flowline.”

Section 112.10—Introduction—Onshore Oil Drilling and Workover Facilities

Background. This paragraph is a new one, not proposed in 1991, but editorially added to allow us to rewrite the section in the active voice. Since the owner or operator is the person with responsibility to implement a Plan, the mandates of the rule are properly addressed to him, except as specifically noted.

Section 112.10(a)—General and Specific Requirements

Background. This is a new paragraph that merely references the general

requirements which all facilities must meet as well as the specific requirements that facilities in this category must meet.

Comments. One commenter asked for a definition of “onshore drilling and workover facilities.”

Editorial changes and clarifications. The new definition for “production facility” in § 112.2 includes the procedures, methods, and equipment referenced in this section, making a definition of “onshore drilling and workover facilities” unnecessary. “Spill prevention” becomes “discharge prevention.” To “address” requirements becomes to “meet” requirements.

Section 112.10(b)—Mobile Facilities

Background. In 1991, we repropose the current rule on the location of mobile facilities without substantive change.

Comments. Editorial changes and clarifications. One commenter asked that the requirement be limited to discharges to navigable waters.

Site location. One commenter opposed the requirement on the location of mobile facilities because the facility contractor has absolutely no control over the location of the rig unit. The commenter added that the contractor is instructed by the site owner/operator where to place the rig unit generally, and the sites are where oil and gas are expected to be located. The physical location of the well site is constructed by and maintained by the owner/operator of the lease. The contractor has no input as to site design nor responsibility for its maintenance.

Response to comments. Site location. We agree with the commenter that the contractor is not normally responsible for site location, nor site design or maintenance. Such decisions are the responsibility of the facility owner or operator. The owner or operator of the facility has the responsibility to locate equipment so as to prevent discharges as described in § 112.1(b).

Editorial changes and clarifications. The applicable limitation on discharges in the rule tracks the statute. The commenters requested that discharges be limited to discharges to “navigable waters.” However, the correct scope of discharge prevention is not merely navigable waters, but the entire range of protected resources described in § 112.1(b). We therefore use the phrase “a discharge as described in § 112.1(b).”

Section 112.10(c)—Secondary Containment—Catchment Basins or Diversion Structures

Background. In 1991, we repropose without substantive change the current

requirements for secondary containment. We received no comments on the proposal. Therefore, we have promulgated it as proposed, with minor editorial changes.

Industry standards. Industry standards that may assist an owner or operator with secondary containment at onshore oil drilling and workover facilities include: (1) API Recommended Practice 52, “Land Drilling Practices for Protection of the Environment”; (2) NFPA 30, “Flammable and Combustible Liquids Code”; and, (3) BOCA, “National Fire Prevention Code.”

Editorial changes and clarifications. “Spills” becomes “discharges.” The words “depending on the location” were deleted because they were confusing when compared with the text of § 112.7(d). If a catchment basin or diversion structure or other form of secondary containment is not practicable from the standpoint of good engineering practice, under § 112.7(d) you must provide a contingency plan following the provisions of 40 CFR part 109, and otherwise comply with § 112.7(d).

Section 112.10(d)—Blowout Prevention (BOP)

Background. In 1991, we proposed that blowout prevention (BOP) assembly would only be required “when necessary.” The rationale was that a BOP assembly is not necessary where pressure is not great enough to cause a blowout (gauge negative) and is not required in all cases. We noted that the necessity of BOP assembly hinges on the “history of the pressures encountered when drilling on the oil reservoir.” When that history is unknown, BOP assembly is required.

Comments. Several commenters urged modification of the rule to exclude well service jobs that may not need BOP assembly, such as the installation of a rod pumping unit, or the batch treatment of a well with corrosion inhibitor.

Response to comments. Service jobs. Where BOP assembly is not necessary, as for certain routine service jobs, such as the installation of a rod pumping unit, or the batch treatment of a well with corrosion inhibitor, you may deviate from the requirement under § 112.7(a)(2), and explain its absence in the Plan. When BOP assembly is unnecessary because pressures are not great enough to cause a blowout, it is likewise unnecessary to provide equivalent environmental protection.

Industry standards. Industry standards that may assist an owner or operator with blowout prevention assembly include: (1) API

Recommended Practice 16E, “Design of Control Systems for Drilling Well Control Equipment”; (2) API Recommended Practice 53, “Blowout Prevention Equipment Systems for Drilling Operations”; (3) API Specification 16A, “Drill Through Equipment”; and, (4) API Specification 16D, “Control Systems for Drilling Well Control Equipment.”

Editorial changes and clarifications. We deleted the phrase “as necessary” from the requirement, because it is confusing when compared to the text of § 112.7(a)(2). When BOP assembly is unnecessary and therefore no alternate measure is required, you may deviate from the requirement under § 112.7(a)(2) if you explain your reasons for nonconformance. We have deleted as surplus the last sentence of the rule requiring that casing and BOP installations must be in accordance with State regulatory requirements. Adherence to State regulatory requirements is mandatory under State law in any case. The phrase “is expected to be encountered” becomes “may be encountered.”

Section 112.11—Introduction—Offshore Oil Drilling, Production, or Workover Facilities

Background. We added an introduction as an editorial device to allow us to rewrite the section in the active voice. Because the owner or operator is the person with responsibility to implement a Plan, the mandates of the rule are properly addressed to him, except as specifically noted.

Section 112.11(a)—General and Specific Requirements—Offshore Oil Drilling, Production, or Workover Facilities

Background. This is a new paragraph that merely references the general requirements which all facilities must meet as well as the specific requirements that facilities in this category must meet.

Comments. State rules. One commenter thought § 112.11 should be deleted because current State rules provide adequate spill protection in inland water areas such as lakes, rivers, and wetlands.

Response to comments. State rules. We disagree with the commenter that these rules are unnecessary because not every State has rules to protect offshore drilling, production, and workover facilities. While some States may have rules, some State rules may not be as stringent as the Federal rules. In any case, Congress has intended us to establish a nationwide Federal program to protect the environment from the

dangers of discharges as described in § 112.1(b) posed by this class of facilities. Therefore, we have retained the section, as modified. We note, however, that if you have a State SPCC plan or other regulatory document acceptable to the Regional Administrator that meets all Federal SPCC requirements, you may use it as an SPCC Plan if you cross reference the State or other requirements to the Federal requirement. If it meets only some, but not all Federal SPCC requirements, you must supplement it so that it meets all of the SPCC requirements.

Editorial changes and clarifications. “Spill prevention” becomes “discharge prevention.” The obligation to “address” requirements and procedures becomes the obligation to “meet” them.

Proposed Section 112.11(b)—Definition Reference; MMS Jurisdiction

Background. The proposed 1991 section referenced the definition of “offshore oil drilling, production, and workover facility,” which is now encompassed within the definition of “production facility” in § 112.2. A new sentence would have referenced the exemption of facilities subject to Minerals Management Service (MMS) Operating Orders, notices, and regulations from the SPCC rule. MMS jurisdiction is outlined in Appendix B to part 112.

Comments. One commenter suggested that we delete the reference to the proposed definition and to the applicability section.

Response to comments. We agree. Since none of the proposed language is mandatory, we have deleted it because we have included only mandates in this rule so as not to confuse the regulated public over what is required and what is discretionary.

Section 112.11(b)—Proposed as § 112.11(c)—Facility Drainage

Background. In 1991, we repropoed the current section on facility drainage with the modification to require removal of collected material at least once a year. The rationale was to prevent a buildup of accumulated oils. We noted that a protracted removal period could lead to an accidental excess buildup and resultant overflow.

Comments. Two commenters recommended deletion of the proposed requirement to remove collected oil as often as necessary, but at least once a year, because the current requirement is sufficient.

Response to comments. Removal of collected oil. EPA agrees with the commenter’s suggestion that the current

rule is sufficient to prevent discharges as described in § 112.1(b), and therefore we have deleted the “at least once a year” standard. You must remove collected oil as often as is necessary to prevent such discharges.

Editorial changes and clarifications. “Discharging oil as described in § 112.1(b)(1)” becomes “having a discharge as described in § 112.1(b).” In the second sentence, we deleted the phrase “or equivalent collection system sufficient,” because it is confusing when compared to the text of § 112.7(a)(2). You may deviate from a requirement under § 112.7(a)(2) if you explain your reasons for nonconformance, and provide equivalent environmental protection.

Section 112.11(c)—Proposed as § 112.11(d)—Sump Systems

Background. In 1991, we proposed to clarify language in current rule that a regularly scheduled maintenance program is a monthly preventive maintenance program.

Comments. Frequency of inspections. One commenter recommended that a semi-annual inspection and testing program of the liquid removal system, instead of monthly inspection and testing would be preferable.

Response to comments. Frequency of inspections. We have retained the current rule language requiring a “regularly scheduled” preventive maintenance program because we believe that the frequency of maintenance should be in accordance with industry standards or frequently enough to prevent a discharge as described in § 112.1(b). Whatever schedule is chosen must be documented in the Plan.

Editorial changes and clarifications. We deleted the phrase “or equivalent method” from the first sentence because it is confusing when compared to the text of § 112.7(a)(2). You may deviate from a requirement under § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection.

Section 112.11(d)—Proposed as § 112.11(e)—Discharge Prevention Systems for Separators and Treaters

Background. In 1991, we repropoed without substantive change the current rule on discharge prevention systems for separators and treaters. We received no comments.

Editorial changes and clarifications. “Escape” of oil becomes “discharge” of oil. “Oil discharges” becomes “discharge of oil.” We deleted the phrase from the last sentence which allows “using other feasible alternatives

to prevent oil discharges,” because it is confusing when compared to the text of § 112.7(a)(2). You may deviate from a requirement under § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection.

Section 112.11(e)—Proposed as § 112.11(f)—Atmospheric Storage or Surge Containers; Alarms

Background. In 1991, we repropoed without substantive change the current paragraph on alarm systems for atmospheric storage or surge containers. We received no comments. Therefore, we have promulgated the rule as proposed, with only minor editorial changes.

Editorial changes and clarifications. “Oil discharges” becomes “discharges.” We added the words “that activate an alarm or control the flow” to clarify that these activities, along with “otherwise” controlling discharges, are the purpose of the sensing devices we reference in the paragraph. The phrase “to activate” becomes “that activate,” and we add the word “otherwise” before “prevent discharges.” We deleted the phrase “or other acceptable alternatives,” because it is confusing when compared to the text of § 112.7(a)(2). You may deviate from a requirement under § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection.

Section 112.11(f)—Proposed as § 112.11(g)—Pressure Containers; Alarm Systems

Background. In 1991, we repropoed the current rule concerning pressure tanks without substantive change. We received no comments. Therefore, we have promulgated the rule as proposed, with minor editorial changes.

Editorial changes and clarifications. “Tanks” becomes “containers.” “Oil discharges” becomes “discharges.” We deleted the phrase “or with other acceptable alternatives to prevent discharges,” because it is confusing when compared to the text of § 112.7(a)(2). You may deviate from a requirement under § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection.

Section 112.11(g)—Proposed as § 112.11(h)—Corrosion Protection

Background. In 1991, we repropoed the current paragraph requiring corrosion protection for containers at facilities subject to this section. We added a recommendation that you follow National Association of

Corrosion Engineers standards for corrosion protection.

Comments. Industry standards. One commenter suggested that we remove the last sentence, which is advisory, and addresses industry standards of the National Association of Corrosion Engineers, or make it a requirement (at least for new construction). Another commenter suggested that the rule be modified to incorporate other industry recommended practices relative to corrosion control, such as those of STI and API. The commenter specifically recommended STI Recommended Practice R892–89, “Recommended Practice for Corrosion Protection of Underground Steel Piping Associated with Underground Storage and Dispensing Systems,” and STI Recommended Practice 893–89, “Recommended Practice for External Corrosion of Shop Fabricated Aboveground Steel Storage Tank Floors.”

Response to comments. Industry standards. In response to the comment, we have deleted the recommendation because we do not wish to confuse the regulated community over what is mandatory and what is discretionary. These rules contain only mandatory requirements. We expect that facilities will follow industry standards for corrosion protection as well as other matters (see § 112.3(d)(iii)), but decline to prescribe particular standards in the rule text because those standards are subject to change, and we will not incorporate a potentially obsolescent standard into the rules.

Industry standards. Industry standards suggested by a commenter that may assist an owner or operator with corrosion include: (1) National Association of Corrosion Engineer standards; (2) STI Recommended Practice R892, “Recommended Practice for Corrosion Protection of Underground Steel Piping Associated with Underground Storage and Dispensing Systems,” and, (3) STI Recommended Practice 893, “Recommended Practice for External Corrosion of Shop Fabricated Aboveground Steel Storage Tank Floors.”

Editorial changes and clarifications. “Tanks” becomes “containers.”

Section 112.11(h)—Proposed as § 112.11(i)—Pollution Prevention System Procedures

Background. In 1991, we repropoed without substantive change the current requirements concerning written procedures for inspecting and testing pollution prevention equipment and systems. We received no substantive comments. Therefore, we have

promulgated the rule as proposed with minor editorial changes.

Editorial changes and clarifications. “As part of the SPCC Plan” becomes “within the Plan.”

Section 112.11(i)—Proposed as § 112.11(j)—Pollution Prevention Systems; Testing and Inspection

Background. In 1991, we repropoed the current rule on testing and inspection of pollution prevention systems. Additionally, we proposed that simulated spill testing must be the preferred method to test and inspect oil spill prevention equipment and systems. We also proposed that pollution prevention systems must be tested at least monthly. The current standard calls for testing and inspection “on a scheduled periodic basis.”

Comments. Some commenters suggested that simulation testing on a monthly basis is excessive. Commenters suggested instead testing on a semi-annual or annual basis.

Response to comments. Frequency of testing. We have retained the current requirement for testing on a “scheduled periodic basis” commensurate with conditions at the facility because we believe that testing should follow industry standards or be conducted at a frequency sufficient enough to prevent a discharge as described in § 112.1(b) rather than any prescribed time frame. Whatever frequency is chosen must be documented in the Plan.

Editorial changes and clarifications. In the first sentence, “or other appropriate regulations” becomes “and any other appropriate regulations.” In the second sentence, “spill testing” becomes “simulated discharges for testing.” We have deleted from the last sentence the phrase “unless the owner or operator demonstrates that another method provides equivalent alternative protection” because it is confusing when compared to the text of § 112.7(a)(2). You may deviate from a requirement under § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection.

Section 112.11(j)—Proposed as § 112.11(k)—Surface and Subsurface Well Shut-in Valves and Devices

Background. In 1991, we repropoed the current section concerning surface and subsurface well shut-in valves and devices. We proposed an additional requirement that records for each well must be kept for five years. We received no substantive comments. Therefore, we have promulgated the rule as proposed, with minor editorial changes.

Editorial changes and clarifications.

In today’s rule, we kept the recordkeeping requirement, but deleted language requiring maintenance of those records for five years. The effect of the deletion is that records become subject to the general three-year recordkeeping requirement. See § 112.7(e). You may keep the records as part of the Plan or may keep them with the Plan.

Section 112.11(k)—Proposed as § 112.11(l)—Blowout Prevention

Background. In 1991, we repropoed the current rule concerning blowout prevention without substantive change.

Comments. One commenter suggested that there are occasions when blowout prevention is not warranted or impractical to implement and that there should be an exception for drilling below conductor casing.

Response to comments. Alternatives. The question of whether blowout prevention is warranted or impractical or not for drilling below conductor casing is one of good engineering practice. Acceptable alternatives may be permissible under the rule permitting deviations (§ 112.7(a)(2)) when the owner or operator states the reasons for nonconformance and provides equivalent environmental protection.

Industry standards. Industry standards that may assist an owner or operator with offshore blowout prevention assembly and well control systems include: (1) API Recommended Practice 16E, “Design of Control Systems for Drilling Well Control Equipment”; (2) API Recommended Practice 53, “Blowout Prevention Equipment Systems for Drilling Operations”; (3) API Specification 16A, “Drill Through Equipment”; (4) API Specification 16C, “Choke and Kill Systems”; and, (5) API Specification 16D, “Control Systems for Drilling Well Control Equipment.”

Editorial changes and clarifications. “BOP preventor assembly” becomes “BOP assembly.” We deleted the last sentence of the paragraph referring to adherence to State rules because we are not incorporating State rules into the SPCC rule and adherence to State rules is required under State law whether we state it or not. The phrase “expected to be encountered” becomes “may be encountered.”

Proposed § 112.11(m)—Extraordinary Well Control Measures

Background. In 1991, we proposed to change the current requirements on extraordinary well control measures for emergency conditions to recommendations. The rationale was

that we would review these measures in the context of response planning.

Comments. One commenter suggested that the paragraph should be deleted because it is advisory, or made a requirement.

Response to comments. In response to comment, we have deleted the text of the recommendations from the rules because we do not wish to confuse the regulated community over what is mandatory and what is discretionary. However, we endorse its substance. This rule contains only mandatory requirements.

Section 112.11(l)—Proposed as § 112.11(n)—Manifolds

Background. In 1991, we repropoed the current requirements concerning manifolds without substantive change. We received no comments on the proposal. Therefore, we have promulgated the rule as proposed.

Section 112.11(m)—Proposed as § 112.11(o)—Flowlines, Pressure Sensing Devices

Background. In 1991, we repropoed the current requirements concerning pressure sensing devices and shut-in valves for flowlines without substantive change. We received no comments on the proposal. Therefore, we have promulgated the rule as proposed.

Section 112.11(n)—Proposed as § 112.11(p)—Piping; Corrosion Protection

Background. In 1991, we repropoed the current requirements concerning corrosion protection for piping appurtenant to the facility without substantive change. We also proposed to change into a recommendation the current requirement that the method used, such as protective coatings or cathodic protection, be discussed.

Comments. One commenter suggested that we remove the second sentence, which is advisory.

Response to comments. In response to comment, we have deleted the recommendation to discuss the method of corrosion protection, because it is surplus. In your SPCC Plan, you must discuss the method of corrosion protection you use. See 112.7(a)(1).

Section 112.11(o)—Proposed as § 112.11(q)—Sub-Marine Piping; Environmental Stresses

Background. In 1991, we repropoed the current requirements concerning environmental stress against sub-marine piping appurtenant to facilities without substantive change. We received no comments. Therefore, we have

promulgated the rule as proposed, with minor editorial changes.

Editorial changes and clarifications. We have rewritten the rule in the active voice. We also deleted the proposed recommendation because this rule contains only mandatory items, and because the recommendation is redundant. Whatever manner of protection is chosen to protect sub-marine piping must be discussed in the Plan.

Section 112.11(p)—Proposed as § 112.11(r)—Inspections of Sub-Marine Piping

Background. In 1991, we repropoed the current requirements concerning the inspection of sub-marine piping appurtenant to facilities without substantive change. We received no comments. Therefore, we have promulgated the rule as proposed, with minor editorial changes.

Editorial changes and clarifications. The proposal to require maintenance of records for five years was deleted because under § 112.7(e) of today's rule, all records must be kept for three years. We clarify that you must inspect or test the piping. Because visual inspection of sub-marine piping may not always be possible, we allow testing as an alternative. We encourage inspection or testing pursuant to industry standards or at a frequency sufficient to prevent a discharge as described in § 112.1(b). Whatever inspection schedule you select must be documented in the Plan.

Proposed § 112.11(s)—Written Instructions for Contractors

Background. In 1991, we proposed to change into a recommendation the current requirement that you prepare written instructions for contractors and subcontractors whenever contract activities involve servicing a well, or systems appurtenant to a well or pressure vessel. The current rule requires that you keep the instructions at the facility. We note in the proposed rule that under certain circumstances, you may require the presence of your representative at the facility to intervene when necessary to prevent a discharge as described in § 112.1(b).

Comments. One commenter wrote that the proposal creates two serious problems. First, that since the contractor is hired to perform special services, he is able to do his work more safely if he is allowed to direct his own activities. Second, operators might expose themselves to various types of liability by virtue of the degree of control exercised over contractors. A second commenter suggested editorial revisions

to the recommendation, and subsequent sentences.

Response to comments. We have decided to delete the proposed recommendation because we do not wish to confuse the regulated community over what is mandatory and what is discretionary. This rule contains only mandatory requirements.

Subparts C and D

Background. In 1995, Congress enacted the Edible Oil Regulatory Reform Act (EORRA), 33 U.S.C. 2720. That statute mandates that most Federal agencies differentiate between and establish separate classes for various types of oils, specifically: animal fats and oils and greases, fish and marine mammal oils; oils of vegetable origin; and, other oils and greases, including petroleum and other non-petroleum oils. In differentiating between these classes of oils, Federal agencies are directed to consider differences in the physical, chemical, biological, and other properties, and in the environmental effects, of the classes.

In 1991, EPA proposed to reorganize the SPCC rule based on facility type. The rationale for that reorganization is to clarify SPCC Plan requirements for different types of facilities. While we have reorganized the rule to provide requirements for different types of facilities, we also provide requirements for different types of oil in this rulemaking. To make this change, we have divided the rule into subparts. Subpart A consists of an applicability section, definitions, and general requirements for all facilities. Subparts B and C outline the requirements for different types of oils. Subpart B is for petroleum oils and non-petroleum oils, except for animal fats and vegetable oils. Subpart C is for animal fats and oils and greases, and fish and marine mammal oils; and for vegetable oils, including oils from seeds, nuts, fruits, and kernels. Subpart D is for response. Subparts B and C are divided into sections to reflect the differing types of facilities for each type of oil. Subpart D is for response requirements.

Therefore, as noted above, we have divided the requirements of the rule by subparts for the various classes of oils listed in EORRA. Because at the present time EPA has not proposed differentiated requirements for public notice and comment, the requirements for facilities storing or using all classes of oil will remain the same. However, we have published an advance notice of proposed rulemaking seeking comments on how we might differentiate requirements for facilities storing or using the various classes of oil. 64 FR

17227, April 8, 1999. After considering these comments, if there is adequate justification for differentiation, we will propose a rule.

Proposed § 112.20(f)(4)—Capacity of Facilities Storing Process Water/Wastewater for Response Plan Purposes

Background. In 1997, we proposed to add a new paragraph to § 112.20(f) to provide a method for facility response plan purposes to calculate the oil storage capacity of storage containers storing a mixture of process water/wastewater with 10% or less of oil. This proposal for certain systems that treat process water/wastewater would be applicable at certain facilities required to prepare a facility response plan. It would have no effect on facilities required to prepare response plans because they transfer oil over water and have a total oil storage capacity greater than or equal to 42,000 gallons. Likewise, the proposal would have no effect on the method of calculating capacity for purposes of SPCC Plans. Under the proposal, we would not count the entire capacity of process water/wastewater containers with 10% or less of oil in the capacity calculation to determine whether a facility must prepare a facility response plan. We only would count the oil portion of that process water/wastewater contained in § 112.20(f)(2), and therefore response planning is not necessary.

Today, we are withdrawing the proposal because it is no longer necessary. It is unnecessary because we have exempted from part 112 any facility or part thereof (except at oil production, oil recovery, and oil recycling facilities) used exclusively for wastewater treatment and not to satisfy any requirement of part 112. See the discussion under § 112.1(d)(6). The exemption in § 112.1(d)(6) applies to the types of facilities treating wastewater that would have been allowed to calculate a reduced storage capacity if the percentage of oil in the mixture were 10 percent or less.

Section 112.20(h)—Facility Response Plan Format

Background. In 1997, we proposed to amend the requirements for formatting of a facility response plan to clarify that an Integrated Contingency Plan (ICP) or other plan format acceptable to the Regional Administrator is allowable to serve as a facility response plan if it meets all facility response plan requirements. Our intent was to track language in the SPCC rule allowing the Regional Administrator similar authority to accept differing formats for SPCC Plans. However, the Regional

Administrator already has the authority to accept differing formats for response plans, and the existing facility response plan requirements already provide for cross-referencing. See § 112.20(h). Therefore, new rule language was unnecessary, and the proposal tracked current language. Today, we have made only a minor editorial change in rule language.

Comments. Acceptable formats. Most commenters favored the proposal. One commenter suggested that the rule should specifically mention the ICP. Another requested that State FRP equivalents be accepted. Several commenters criticized the proposal; one calling the ICP concept “over-rated.” One commenter thought that the rule makes the ICP mandatory. Another commenter noted that the proposed rule is identical to the current rule.

Partially acceptable formats. One commenter asked if an operator would have to integrate all parts of an ICP with a response plan or if he would have the option to integrate parts of the ICP with the SPCC Plan.

PE certification. One commenter asked how an ICP would work, i.e., whether the PE would be certifying the SPCC portion, the FRP portion, or both.

Response to comments. Acceptable formats. It is not necessary for the rule to mention the ICP or any other format specifically because the rule already allows the Regional Administrator flexibility to accept any format that meets all Federal requirements. See § 112.20(h). You may use the ICP, a State response plan, or other format acceptable to the Regional Administrator, at your option. We do not require use of any alternative format, but merely give you the option to do so.

The commenter is correct that the proposed rule is identical to the current rule. The current rule allows the submission of an “equivalent response plan that has been prepared to meet State or other Federal requirements.”

Partially acceptable formats. You have the option to integrate any or all parts of an ICP with your response plan. This gives you flexibility in formatting. Similar to SPCC Plans, the Regional Administrator may accept partial use of alternative formats.

PE certification. PE certification is only required for the SPCC portion of any ICP.

Editorial changes and clarifications. We added the words “acceptable to the Regional Administrator” in the first sentence after the words “response plan.”

Appendix C—Substantial Harm Criteria

Background. In 1997, we proposed changes to Appendix C which would track proposed amendments to § 112.20(f)(4) regarding calculating the oil storage capacity of aboveground storage containers storing a mixture of process water/wastewater within 10% or less of oil. Because we have withdrawn the proposed changes to § 112.20(f)(4), the proposed changes to Appendix C are also unnecessary. Therefore, we have withdrawn the proposed changes to Appendix C, and it remains unchanged.

Appendix C—Section 2.1—Non-Transportation-Related Facilities With a Total Oil Storage Capacity Greater Than or Equal to 42,000 Gallons Where Operations Include Over-Water Transfer of Oil

Background. We have corrected the text of the first sentence in the section to correspond with the title, so that it reads “A non-transportation-related facility with a total oil storage capacity greater than or equal to 42,000 gallons that transfers oil over water to or from vessels must submit a response plan to EPA. We added the words “or equal to” to track rule language found at § 112.20(f)(1)(i).

Appendix C—Section 2.4—Proximity to Public Drinking Water Intakes at Facilities With a Total Oil Storage Capacity Greater Than or Equal to 1 Million Gallons

Background. We have revised the title of this section by reversing the order of the words “Storage” and “Oil” in the heading. We have also added the word “oil” to the first sentence so that it reads, “A facility with a total oil storage capacity greater than * * *.”

Appendix D—Part A—Section A.2 (Footnote 2)

Background. We have revised footnote 2 to section A.2 of Part A, Appendix D, to reflect the new citation to the SPCC rule’s secondary containment requirements.

Appendix F—Section 1.2.7—NAICS Codes

Background. We have revised section 1.2.7 to delete the reference to Standard Industry Classification (SIC) codes, and replace it with a reference to North American Industry Classification System (NAICS) codes. The NAICS was adopted by the United States, Canada, and Mexico on January 1, 1997 to replace the SIC codes.

Appendix F—Section 1.4.3 Analysis of the Potential for an Oil Discharge

Background. We have revised the second and last sentences of this section by replacing the word “spill” with “discharge.”

Appendix F—Section 1.7.3 (7)—Containment and Drainage Planning

Background. We have revised paragraph (7) of section 1.7.3 of Appendix F to use the new citation to the SPCC rule’s inspection and monitoring requirements for drainage.

Appendix F—Section 1.8.1 Facility Self-Inspection

Background. We have revised section 1.8.1 of Appendix F to use the new citation to the SPCC rule’s recordkeeping requirements. The revision also reflects the three-year record maintenance periods for SPCC records and keeps the current five-year period for FRP records.

Editorial changes and clarifications. “Tanks” becomes “each container.”

Appendix F—Section 1.8.1.1—Tank Inspection

Background. We have revised section 1.8.1.1 of Appendix F to use the new citation to the SPCC rule’s tank inspection requirements.

Appendix F—Section 1.8.1.3 Secondary Containment Inspection

Background. We have revised section 1.8.1.1.4 of Appendix F to use the new citation to the SPCC rule’s secondary containment inspection requirements.

Appendix F—Section 1.10 Security

Background. We have revised section 1.10 of Appendix F to use the new citation to the SPCC rule’s security requirements.

Appendix F—Section 2.1(6) General Information

Background. We have revised paragraph 2.1(6) to refer to NAICS codes in place of SIC codes.

Appendix F—Section 3.0 Acronyms

Background. We have deleted the acronym for SIC and substituted the acronym for NAICS.

Appendix F—Attachment F-1 Response Plan Cover Sheet

Background. We have deleted the reference to SIC and substituted a reference to NAICS.

VI. Summary of Supporting Analyses

A. Executive Order 12866—OMB Review

Under Executive Order 12866, (58 FR 51735, October 4, 1993), the Agency

must determine whether a regulatory action is “significant” and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The order defines “significant regulatory action” as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in the Executive Order.

Under the terms of Executive Order 12866, it has been determined that this rule is a “significant regulatory action” because it raises novel legal or policy issues. Such issues include proposed measures which would relieve facilities of regulatory mandates and could change the manner in which facilities comply with remaining mandates. Therefore, this action was submitted to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

The reduction in size of the regulated community due to final rule revisions will lead to a capital cost savings of approximately \$29.47 million per year. During the first year, regulated facilities will experience an increase in total paperwork cost burden of \$21.93 million due primarily to the need to read the rule. In addition, certain facilities will recalculate their storage capacity to exclude applicable wastewater treatment systems and, therefore, must amend and certify their plans if the storage capacity threshold is still met. In certain cases, however, the wastewater treatment system provision in section 112.1(b)(6) will result in a facility no longer being subject to the any Part 112 requirements. However, during the second year, total paperwork cost burden will decrease by about \$60.21 million and beginning in the third year following the rulemaking, the total paperwork cost burden to all regulated facilities will decrease by about \$45.03 million. The result is an aggregate cost savings of about \$7.56 million during the first year, \$89.69

million during the second year, and \$74.51 million during subsequent years.

B. Executive Order 12898—Environmental Justice

Executive Order 12898 requires that each Federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minorities and low-income populations. EPA has determined that the regulatory changes in this rule will not have a disproportionate impact on minorities and low-income populations.

C. Executive Order 13045—Children’s Health

Executive Order 13045, “Protection of Children from Environmental Health Risks and Safety Risks” (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be “economically significant” as defined under Executive Order 12866; and, (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency. EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under Section 5-501 of the Order has the potential to influence the regulation. This final rule is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the Agency does not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The Agency has no data that indicate that the types of risks resulting from oil discharges have a disproportionate effect on children, and does not have reason to believe that they do so.

D. Executive Order 13175—Consultation and Coordination with Indian Tribal Governments

On November 6, 2000, the President issued Executive Order 13175 (65 FR 67249) entitled, “Consultation and Coordination with Indian Tribal Governments.” Executive Order 13175 took effect on January 6, 2001, and revokes Executive Order 13084 (Tribal

Consultation) as of that date. EPA developed this final rule, however, under the period when EO 13084 was in effect; thus, EPA addressed tribal considerations under EO 13084.

Today's rule does not significantly or uniquely affect communities of Indian tribal governments. Overall, the rule significantly reduces the regulatory burden, and the few burden increases in the rule do not uniquely affect Indian tribal governments.

Nevertheless, we consulted with a representative organization of tribal groups, the Tribal Association on Solid Waste and Emergency Response. That organization did not provide us with any comments.

E. Executive Order 13132—Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Under CWA section 311(o), EPA believes that States are free to impose additional requirements, including more stringent requirements, relating to the prevention of oil discharges to navigable waters. In proposing modifications to the SPCC rule, EPA encouraged States to supplement the federal SPCC program and recognized that some States have more stringent requirements. 56 FR 54612 (Oct. 22, 1991). This rule does not preempt state law or regulations. Thus, Executive Order 13132 does not apply to this rule.

F. Executive Order 13211—Energy Effects

This rule is not a "significant energy action" as defined in Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the

supply, distribution, or use of energy. The overall effect of the rule is to decrease the regulatory burden on facility owners or operators subject to its provisions.

G. Regulatory Flexibility Act (R.F.A.) as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

The R.F.A. generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business as defined in the Small Business Administration's (SBA) regulations at 13 CFR 121.201—the SBA defines small businesses by category of business using North American Industry Classification System (NAICS) codes, and in the case of farms and production facilities, which constitute a large percentage of the facilities affected by this rule, generally defines small businesses as having less than \$500,000 in revenues or 500 employees, respectively; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant *adverse* economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives "which minimize any significant economic impact of the proposed rule on small entities." 5 U.S.C. 603 and 604. Thus, an agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule. This rule will significantly reduce regulatory burden on all facilities, particularly small facilities. For example, the rule exempts approximately 55,000 facilities from its scope. Approximately 41,300 of those

facilities are small facilities, and of those, nearly 27,700 are small farms. This rulemaking will increase information collection burden for most facilities in the first year by approximately 0.75 million hours due principally to the estimated burden each facility will incur to read and understand the changes that we are making to the rule. However, the rule will also reduce the overall annual information collection burden by nearly 1.59 million hours a year in the second year and over 1.18 million hours a year in the third year of the information collection request, much of that for the small facilities that make up the large majority of our regulated universe. Further, the rule will reduce costs for both existing and new facilities.

Information collection and other provisions in the final rule that affect capital costs are expected to yield cost savings of about \$7.56 million during the first year, \$89.69 million during the second year and \$74.51 million during subsequent years. The rule also gives all facilities greater flexibility in recordkeeping and other paperwork requirements. Finally, § 112.7(a)(2) of the rule gives small businesses and all other facilities the flexibility to use alternative methods to comply with the requirements of the rule if the facility explains its rationale for nonconformance and provides equivalent environmental protection. We have therefore concluded that today's final rule will relieve regulatory burden for all small entities.

After considering the economic impacts of today's final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities.

H. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative

that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted.

Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. Overall, the rule reduces burden and costs on all facilities. After the first and second year, the rule is expected to reduce the information collection burden by over 1.3 million hours annually.

Approximately 55,000 facilities will no longer be subject to the SPCC rule. Of these facilities, EPA estimates that approximately 3,500 existing facilities will no longer be required to maintain SPCC plans, due to the exemption for certain wastewater treatment systems. Other revisions are expected to exempt approximately 51,400 additional facilities 39,623 small facilities (including 27,700 small farms). The exemption for completely buried containers will result in approximately 14,000 facilities no longer subject to the rule, and 37,000 more facilities with some partial information collection reduction. Further, EPA estimates Information collection and capital costs are expected to decrease by over \$74.25 million a year in the third year of the SPCC information collection request. In addition to these SPCC-related impacts, this rulemaking is estimated to result in cost savings for as many as 35 facilities that are expected to no longer require facility response plans due to the wastewater treatment system exemption. The result of the changes to the scope of the FRP information collection requirements is a cost savings of approximately \$0.23 million per year.

The rule also gives all facilities greater flexibility in recordkeeping and other paperwork requirements. Finally, § 112.7(a)(2) of the rule gives small businesses and all other facilities the flexibility to use alternate methods to comply with the requirements of the rule if the facility explains its rationale for nonconformance and describes its method of equivalent environmental protection. Thus, today's rule is not subject to the requirements of sections 202 and 205 of the UMRA.

In developing this rule, EPA nevertheless consulted with representative organizations of State, local, and tribal governments. The representative organizations were the Environmental Council of the States, the National Association of Counties, and the Tribal Association on Solid Waste and Emergency Response. None of those organizations provided us with any comments. However, numerous States and local governments did comment on the rule proposals in all three proposed rulemakings. Those commenters submitted a wide variety of comments. EPA responses to those comments may be found in this document and in the Comment Response Documents.

EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments. As explained above, the overall effect of the rule will be to reduce burden and costs for regulated facilities, including small governments that are subject to the rule.

I. Paperwork Reduction Act

The Office of Management and Budget (OMB) has approved the information collection requirements contained in this rule under the provisions of the *Paperwork Reduction Act*, 44 U.S.C. 3501 *et seq.* and has assigned OMB control number 2050-0021.

EPA does not collect the information required by SPCC regulation on a routine basis. SPCC Plans ordinarily need not be submitted to EPA, but must generally be maintained at the facility. Preparation, implementation, and maintenance of an SPCC Plan by the facility helps prevent oil discharges, and mitigates the environmental damage caused by such discharges. Therefore, the primary user of the data is the facility. While EPA may, from time to time, request information under these regulations, such requests are not routine.

Although the facility is the primary data user, EPA also uses the data in certain situations. EPA primarily uses SPCC Plan data to ensure that facilities comply with the regulation. This includes design and operation

specifications, and inspection requirements. EPA reviews SPCC Plans: (1) when it requests a facility to submit a Plan after certain oil discharges or to evaluate an extension request; and, (2) as part of EPA's inspection program. Note that the final rule eliminates the previous requirement to submit the entire Plan after certain discharges, and merely retains the requirement that it be maintained at the facility unless EPA requests a copy. State and local governments also use the data, which are not necessarily available elsewhere and can greatly assist local emergency preparedness efforts. Preparation of the information for affected facilities is required under section 311(j)(1) of the Act as implemented by 40 CFR part 112.

In the absence of this final rulemaking, EPA estimates that 469,274 facilities would have been subject to the rule in the first year and would have already prepared SPCC Plans. In addition, EPA estimates that approximately 4,700 new facilities would have become subject to the requirements of the rule annually. EPA also estimates that, in the absence of this rulemaking, the average annual public reporting and recordkeeping burden for this collection of information for existing and newly regulated facilities would have ranged between 4.9 to 13.8 hours and 39.4 to 100.4 hours, respectively, depending on facility characteristics (*e.g.*, storage capacity).

Through this rulemaking, we expect to reduce both the number of regulated facilities, as well as the average annual burden for facilities that remain regulated. The number of regulated facilities will be reduced by approximately 55,000. The average annual public reporting for facilities already regulated by the Oil Pollution Prevention regulation is estimated to range between 8.6 and 12.2 hours, while the burden for newly regulated facilities is estimated to range between 35.1 and 65.2 hours as a result of this rulemaking. These average annual burden estimates take into account the varied frequencies of response for individual facilities according to characteristics specific to those facilities, including the frequency of oil discharges and facility modification, but exclude the anticipated burden facilities may incur in the first year to read and understand the changes we are making to the rule.

Under the final rule, an estimated 419,033 existing and newly regulated facilities will be subject to the SPCC information collection requirements of this rule during the first year of the information collection period. The net annualized capital and start-up costs for

the SPCC information collection portion of the rule average \$740,000 and net annualized labor and operation and maintenance costs are estimated to be \$93.00 million for all of these facilities combined.

The information collection burden of the SPCC rule prior to this rulemaking averaged 2,828,150 hours per year. Under this final rule, the annual average burden over the next three-year ICR period is estimated to be 2,208,701 hours, resulting in a 22 percent average reduction. This rulemaking will increase burden for most facilities in the first year (totaling approximately 3.6 million hours) due principally to the estimated burden each facility will incur to read and understand the changes that we are making to the rule. The first-year burden also includes the additional need for certain facilities to amend and certify their SPCC plans to exclude wastewater treatment volumes from their oil storage capacity. Second year burden is expected to total approximately 1.3 million hours. In subsequent years, we estimate that the overall burden will be approximately 1.7 million hours annually, representing a nearly 40 percent reduction versus the average annual burden from the previous information collection period. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

In addition to reducing the information collection burden of SPCC facilities, this final rule also affects the number of facilities that require an FRP. The FRP rule (40 CFR 112.20–21) requires that owners or operators of facilities that could cause “substantial harm” to the environment by discharging oil into navigable waters or adjoining shorelines prepare plans for responding, to the maximum extent practicable, to a worst case discharge of oil, to a substantial threat of such a discharge, and, as appropriate, to discharges smaller than worst case discharges. All facilities subject to this

requirement must submit their plans to EPA. In turn, we review and approve plans submitted by facilities identified as “significant and substantial harm” to the environment from oil discharges. Other facilities are not required to prepare FRPs but are required to document their determination that they do not meet the “substantial harm” criteria.

Prior to this rulemaking, EPA estimated that it requires between 99 and 132 hours for facility personnel in a large facility (*i.e.*, total storage capacity greater than 1 million gallons) and between 26 and 46 hours for personnel in a medium facility (*i.e.*, total storage capacity greater than 42,000 gallons and less than or equal to 1 million gallons) to comply with the annual, subsequent-year reporting and recordkeeping requirements of the FRP rule. We have also estimated that prior to this rulemaking newly regulated large and medium facilities will require between 253 and 293 hours and 109 and 142 hours, respectively, to prepare a plan in the first year. In the absence of this rulemaking, EPA estimates that the total number FRP facilities affected in the first year would have been 6,000 existing and 70 new facilities. Through this rulemaking the estimated number of facilities required to maintain FRPs is reduced to 5,965 and the number of new facilities that will be required to prepare and submit FRP plans is reduced to 64 facilities. This reduction in the number of facilities required to prepare, submit, and/or maintain an FRP would result in an average annual information collection burden reduction of 8,513 hours a year (624,252 to 615,739 hours).

An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA’s regulations are listed in 40 CFR part 9 and 48 CFR Chapter 15. EPA is amending the table in 40 CFR part 9 of currently approved ICR control numbers issued by OMB for various regulations to list the information requirements contained in this final rule.

J. National Technology Transfer and Advancement Act

As noted in the December 7, 1997, proposed rule, section 12(d) of the National Technology Transfer and Advancement Act of 1995 (“NTTAA”). Pub. L. 104–113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary

consensus standards are technical standards such as materials specifications, test methods, sampling procedures, and business practices that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This rulemaking involves technical standards. Throughout today’s preamble, EPA has emphasized that owners or operators of facilities should use applicable industry standards in performing tests, inspections, and in monitoring. Section 112.3(d) provides that a Professional Engineer must certify that the SPCC Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards. We are providing examples of specific standards in today’s preamble. However, due to the wide variety of facilities the rule involves, few standards would be applicable to all regulated facilities. Also, those standards change over time. Therefore, we are not incorporating those standards into rule text.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of Congress and to the Comptroller General of the United States. EPA has submitted a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This action is not a “major rule” as defined by 5 U.S.C. 804(2). This rule will be effective August 16, 2002.

List of Subjects in 40 CFR Part 112

Environmental protection, Fire prevention, Flammable materials, Materials handling and storage, Oil pollution, Oil spill prevention, Oil spill response, Penalties, Petroleum, Reporting and recordkeeping requirements, Tanks, Water pollution control, Water resources.

Dated: June 28, 2002.

Christine Todd Whitman,
Administrator.

For the reasons set out in the preamble, title 40 CFR, chapter I, part

112 of the Code of Federal Regulations, is amended as follows:

PART 112—OIL POLLUTION PREVENTION

1. The authority for part 112 continues to read as follows:

Authority: 33 U.S.C. 1251 *et seq.*; 33 U.S.C. 2720; E.O. 12777 (October 18, 1991), 3 CFR, 1991 Comp., p. 351.

2. Part 112 is amended by designating §§ 112.1 through 112.7 as subpart A, adding a subpart heading and revising newly designated subpart A to read as follows:

Subpart A—Applicability, Definitions, and General Requirements For All Facilities and All Types of Oils

Sec.

- 112.1 General applicability.
- 112.2 Definitions.
- 112.3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan.
- 112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator.
- 112.5 Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators.
- 112.6 [Reserved].
- 112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.

Subpart A—Applicability, Definitions, and General Requirements for All Facilities and All Types of Oils

§ 112.1 General applicability.

(a)(1) This part establishes procedures, methods, equipment, and other requirements to prevent the discharge of oil from non-transportation-related onshore and offshore facilities into or upon the navigable waters of the United States or adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act).

(2) As used in this part, words in the singular also include the plural and words in the masculine gender also include the feminine and vice versa, as the case may require.

(b) Except as provided in paragraph (d) of this section, this part applies to any owner or operator of a non-transportation-related onshore or offshore facility engaged in drilling, producing, gathering, storing,

processing, refining, transferring, distributing, using, or consuming oil and oil products, which due to its location, could reasonably be expected to discharge oil in quantities that may be harmful, as described in part 110 of this chapter, into or upon the navigable waters of the United States or adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act) that has oil in:

- (1) Any aboveground container;
- (2) Any completely buried tank as defined in § 112.2;
- (3) Any container that is used for standby storage, for seasonal storage, or for temporary storage, or not otherwise “permanently closed” as defined in § 112.2;
- (4) Any “bunkered tank” or “partially buried tank” as defined in § 112.2, or any container in a vault, each of which is considered an aboveground storage container for purposes of this part.

(c) As provided in section 313 of the Clean Water Act (CWA), departments, agencies, and instrumentalities of the Federal government are subject to this part to the same extent as any person.

(d) Except as provided in paragraph (f) of this section, this part does not apply to:

(1) The owner or operator of any facility, equipment, or operation that is not subject to the jurisdiction of the Environmental Protection Agency (EPA) under section 311(j)(1)(C) of the CWA, as follows:

(i) Any onshore or offshore facility, that due to its location, could not reasonably be expected to have a discharge as described in paragraph (b) of this section. This determination must be based solely upon consideration of the geographical and location aspects of the facility (such as proximity to navigable waters or adjoining shorelines, land contour, drainage, etc.) and must exclude consideration of manmade features such as dikes, equipment or other structures, which may serve to restrain, hinder, contain, or otherwise prevent a discharge as described in paragraph (b) of this section.

(ii) Any equipment, or operation of a vessel or transportation-related onshore or offshore facility which is subject to the authority and control of the U.S. Department of Transportation, as defined in the Memorandum of

Understanding between the Secretary of Transportation and the Administrator of EPA, dated November 24, 1971 (Appendix A of this part).

(iii) Any equipment, or operation of a vessel or onshore or offshore facility which is subject to the authority and control of the U.S. Department of Transportation or the U.S. Department of the Interior, as defined in the Memorandum of Understanding between the Secretary of Transportation, the Secretary of the Interior, and the Administrator of EPA, dated November 8, 1993 (Appendix B of this part).

(2) Any facility which, although otherwise subject to the jurisdiction of EPA, meets both of the following requirements:

(i) The completely buried storage capacity of the facility is 42,000 gallons or less of oil. For purposes of this exemption, the completely buried storage capacity of a facility excludes the capacity of a completely buried tank, as defined in § 112.2, and connected underground piping, underground ancillary equipment, and containment systems, that is currently subject to all of the technical requirements of part 280 of this chapter or all of the technical requirements of a State program approved under part 281 of this chapter. The completely buried storage capacity of a facility also excludes the capacity of a container that is “permanently closed,” as defined in § 112.2.

(ii) The aggregate aboveground storage capacity of the facility is 1,320 gallons or less of oil. For purposes of this exemption, only containers of oil with a capacity of 55 gallons or greater are counted. The aggregate aboveground storage capacity of a facility excludes the capacity of a container that is “permanently closed,” as defined in § 112.2.

(3) Any offshore oil drilling, production, or workover facility that is subject to the notices and regulations of the Minerals Management Service, as specified in the Memorandum of Understanding between the Secretary of Transportation, the Secretary of the Interior, and the Administrator of EPA, dated November 8, 1993 (Appendix B of this part).

(4) Any completely buried storage tank, as defined in § 112.2, and connected underground piping, underground ancillary equipment, and containment systems, at any facility, that is subject to all of the technical requirements of part 280 of this chapter or a State program approved under part 281 of this chapter, except that such a tank must be marked on the facility diagram as provided in § 112.7(a)(3), if