Proposed Reforms to the SPCC Professional Engineer Certification Requirement: Designing a More Cost Effective Approach for Small Facilities

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The Office of Advocacy, an independent office within the U.S. Small Business Administration, has primary responsibility for government-wide oversight of the Regulatory Flexibility Act of 1980 (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA). The principal goal of the RFA is to identify and, if possible, lessen the burdens federal regulations place on small entities. The Office of Advocacy sponsored this report under contract SBAHQ-00-D-006. The statements, findings, conclusions, and recommendations found in this report are those of the authors and do not necessarily reflect official policies of the Office of Advocacy, the U.S. Small Business Administration, or the U.S. Government.

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Executive Summary

The Spill Prevention, Control and Countermeasure (SPCC) rules, administered by the U.S. Environmental Protection Agency (EPA), establishes procedures, methods, equipment, and other requirements to prevent discharges of oil from vessels and facilities and to contain such discharges. Currently, the SPCC rules require covered facilities to have professional engineers (PEs) review and certify SPCC plans and to re-certify any existing plans.

The cost of this PE certification is of particular concern to small facilities. The actual cost of PE certification and site visitation by itself imposes a significant burden, and together with the actual physical requirements of SPCC and other environmental regulations, the combined costs can be prohibitive. Even more important to small businesses, the PE-certified written plan requirement places small facilities at a cost disadvantage in comparison to medium or large facilities. Furthermore, the aggregate cost of PE certification of small facilities will cost in excess of $500 million.

A PE-certified plan, or any written plan, is not effective in minimizing oil spill risk to the environment, according to the available research conducted by EPA. Instead, the available evidence suggests that alternative physical control measures provide more effective solutions to preventing spills.

The U.S. Small Business Administration's Office of Advocacy has a congressional mandate to seek improvement of federal programs that adversely affect small business entities. The SBA Office of Advocacy has worked to ameliorate the SPCC program's impact on small businesses since the final rule amending the regulations was published in July 2002. Nevertheless, through the continued inclusion of the requirement for PE certification, EPA has adopted a "one-size-fits-all" approach for each facility regulated under the amended SPCC rules.

The EPA held a Program Dialogue in March 2003 to investigate ways of reforming the SPCC amendments to reduce the burden on small business while preserving environmental quality.[1] The Office of Advocacy suggests that these goals can be met while at the same time leveling the playing field for small businesses. The SBA alternative would replace blanket PE-certification requirements with a set of tiered requirements based on volume thresholds. These would be supplemented with collaborative outreach efforts designed to engage facilities that might otherwise elect not to comply due to high plan development and certification costs.

The proposed alternative sets up a tiered structure based on a facility's total regulated storage as follows:

- Tier I: 1,321 to 5,000 Gallon Facilities - No written plan required, but must implement compliance with all applicable substantive provisions of the rule.

[1] SPCC Program Dialogue with U.S. EPA Headquarters and Regions, March 12, 2003, sponsored by Hogan and Hartson in cooperation with EPA.

- Tier II: 5,001 to 10,000 Gallon Facilities - Written plans required, but no PE-certification requirements. Collaborative EPA/industry "best practices" model plans tailored to sectors having a significant number of similar small facilities.
- Tier III: 10,001 Gallon and Above Facilities - Written PE-certified plans.

Costs at small facilities could also be lowered without increasing impacts on the environment by allowing blanket deviations for integrity testing for small shop-built tanks or double-walled tanks built to approved engineering specifications (e.g., Underwriters Lab, ASTM). Compliance at temporary construction sites could also be streamlined by allowing SPCC plans to be combined with Storm Water Pollution Prevention Plans (SWPPP) and by allowing blanket deviations on some security requirements.

The adoption of the tiered plan can reduce the impact on small businesses, improve the cost-effectiveness of the overall regulation, place small and larger facilities and firms on more equal footing, and reduce potential shortages of PEs.

1 Introduction

1.1 Overview of the SPCC Program

Section 311(j)(1)(C) of the Clean Water Act (CWA or Act), 33 U.S.C. 1251, requires the President to issue regulations establishing procedures, methods, equipment, and other requirements to prevent discharges of oil from vessels and facilities and to contain such discharges. The President has delegated the authority to regulate non-transportation-related onshore facilities under section 311(j)(1)(C) of the Act to the U.S. Environmental Protection Agency. Executive Order 12777, section 2(b)(1), (56 FR 54757, October 22, 1991), superseding Executive Order 11735, 38 FR 21243.

Part 112 of 40 CFR outlines the requirements for both the prevention of and the response to oil spills. The prevention aspect of the rule requires preparation and implementation of Spill Prevention, Control, and Countermeasure (SPCC) Plans. The SPCC regulation 40 CFR 112.3(d), requires certification of an SPCC Plan by a professional engineer (PE) for all facilities affected by SPCC requirements. The current SPCC rule requires a PE to certify that the facility operator's plan follows good engineering practices by examining the facility and attesting familiarity with the provisions of the SPCC rule.

On July 17, 2002, the EPA revised the current rule, allowing site visitation by an agent of the PE. This revision was adopted in response to concerns regarding the scarcity of

certified PEs in relation to the number of facilities to be examined. Under the revised rule, the PE must assert:

1. Familiarity with the SPCC requirements of part 112;
2. Personal visitation and examination of the facility, or sending an agent as substitute (112.3(d)(1)(ii));
3. Preparation of the plan in accordance with good engineering practices, including applicable industry standards and requirements of Part 112;
4. Establishment of procedures for required inspections and testing; and
5. Suitability of plan for the facility.

1.2 Organization and Purpose

The purpose of this report is to present and analyze an alternative to the SPCC requirement for PE-certified written plans. This alternative is designed to provide a cost effective compliance option for small facilities that still protects the environment. In order to accomplish this purpose, this document reviews the SPCC written plan requirements, overviews the costs and benefits of the requirement for written plans, provides a detailed description of an alternative tiered plan requirement, and analyzes the benefits and costs of the tiered alternative.

This section provides an overview of the SPCC requirement for written PE-certified plans.

Section 2 reviews the costs of PE-certified written plans, while Section 3 reviews the benefits of PE-certified written plans. Several issues that affect costs and benefits are discussed, including costs and impacts by firm size; total costs for small facilities; the presence of standard configurations; facility size and the impact on navigable waters; overlaps with other requirements; and temporary construction job sites.

Section 4 examines other similar EPA regulatory programs. The key consideration is on how compliance is achieved under similar regulations that impacted large numbers of small facilities. Section 5 provides a detailed description of the tiered alternatives to the current written plan requirement. Included is a discussion of the potential impacts on costs and benefits of this alternative. Section 6 provides conclusions to the study.

2 Costs of PE-Certified Written Plans

2.1 Costs of PE Certification

In proposing the current rule, the EPA defended the requirement for PE-certified written plans by providing cost estimates of hiring a PE for all facility sizes and comparing this cost to average annual revenues for small facilities. EPA stated that,

> "In our Information Collection Request, estimated total costs for a new facility to prepare and begin implementation of a plan, including PE-certification costs, are $2,201 for a small facility, $2,164 for a medium facility, and $2,540 for a large facility. This cost is incurred only in the year that the facility first becomes subject to the rule. This one-time cost incurred by a small facility is less than 1.5 percent of the average annual revenue for small facilities in all industry categories (July 17, 2002 Federal Register, 47084 Section 112.3 (d) 47084)."

According to research performed in support of this analysis, EPA's cost estimates for small, medium and large facilities are slightly conservative. The costs for PE certification of a new plan for a small facility will be approximately $2,500 to $3,500, including site visitation. Recertifying the plan will cost approximately $1,500. These amounts do not take into account the costs for implementing the plan which may produce significant cost obligations.

2.2 Costs and Impacts by Firm Size

Though these estimates are appropriate to small facilities, costs for PE certification for medium and large facilities are nearly comparable, ranging from $2,500 to $5,000, depending on the site. The costs of PE certification, although significant, are not prohibitive. However, small facilities face a disproportionately higher cost burden in complying with the regulation when compared to medium and large facilities. Large facilities earn an annual revenue of $10 million or greater.[2] Proportionately, the costs for PE certification for large facilities are not significant in relation to revenue, around 0.05 percent. In contrast, small facilities collect average annual revenues ranging between $150,000 and $7,000,000, according to the EPA report, "Economic Analysis for the Final Revisions to the Oil Pollution Prevention Regulation."[3] When considering that a high percentage of small facilities gross under $500,000 in revenue, the costs of PE certification is proportionally higher, around 0.70 percent, when compared to the costs for PE certification and gross revenue for large facilities.[4] Thus, small facilities can pay up to fourteen times more in relation to revenues than medium or large businesses to comply with PE-certification requirements.

2.3 Total Costs for Small Facilities

PE certification and recertification for small facilities will cost more than $500 million. According to the EPA Economic Analysis Report, there will be 3,476 new small facilities in addition to the 341,619 facilities that already exist. As mentioned previously, PE

[2] See Chapter 5 of the 2002 EPA Economic Analysis for the Final Rule Revisions.
[3] In the largest sector of affected SPCC facilities, over 1.5 million farms make less than $50,000 annually. Comments of CHS Cooperatives, January 29, 2003 regarding SPCC 2002 Final Rule, page 6.
[4] See Chapter 5 of the 2002 EPA Economic Analysis for the Final Rule Revisions.

certification for small facilities cost between $1,500 and $3,500 depending on whether the plan is new or needs updating. A total of 341,619 existing facilities requiring recertification at $1,500 would collectively cost $512,428,500. For new facilities with new plans, PE certification will cost approximately $3,000 for each site. If there are 3,476 new facilities that have to pay $3,000 each, this amounts to $10,428,000. Together the cost for all small facilities, both new and existing, will amount to $522,856,500.

2.4 Costs and Standard Configurations

Facilities that have the capacity to store relatively small quantities of oil will often have standard and relatively straightforward storage configurations. One major set of such facilities might consist of a standard set-up that is typical across several industries. An example might be a simple single shop-built tank set-up. A second major set of such facilities might be associated with a single industry sector having a significant number of substantially similar small facilities. An example of this type of facility is "Jiffy-Lube." In this case, a large number of facilities performing similar operations could be expected to have similar oil storage configurations.

In these cases there is a strong argument that there is no need for a site specific plan to be developed and little or nothing to be gained by a site visit. Since there is no existing evidence that the presence of the plans themselves reduces oil spills, it is likely that the diversion of these costs to other compliance activities will increase cost-effectiveness and environmental protection.[5]

[5] The 1996 EPA study showed that a written plan had no impact on risk. U.S. Environmental Protection Agency, *Analysis of the Effectiveness of EPA's SPCC Program on Spill Risk*, 1996, (pp. 4-5).

A middle ground, which would result in written plans at greatly reduced costs, might be to allow the use of model "best practices" plans. These could be developed through collaborative efforts between EPA and the potentially impacted /regulated industries. These model plans would be designed to be easily tailored to individual small facilities. In most cases these model plans, which would likely be designed by PEs, would include a simple facility diagram and that would be reviewed and amended, as necessary.

3 Benefits of PE-Certified Written Plans

3.1 Benefits of PE Certification

PE certification of written plans has been a requirement of SPCC rules since their inception in 1973. As such, this particular requirement predates many of the analytical requirements for current rulemakings such as the application of benefit-cost analysis and small business impact analysis requirements of the Regulatory Flexibility Act. Therefore, it is not a surprise that there is no empirical evidence that that PE certification and written plans provide benefits that exceed costs.

There is a notable lack of evidence that the PE requirement provides overall benefits. The necessity of the PE-certified written plans requirement is questionable for two reasons, both of which are documented in EPA's own published research. First, small facilities have a low risk of creating a discharge that could reach navigable waters. Second, written SPCC plans have not been proven to be effective in reducing risk.[6]

However, EPA has continued to defend the PE-certification requirement for small businesses. In its response to comments, EPA stated:

[6] U.S. Environmental Protection Agency, *Analysis of the Effectiveness of EPA's SPCC Program on Spill Risk*, 1996, (pp. 4-5).

> "PE certification of all facilities, both large and small, is necessary because a discharge as described in §112.1(b) from any size facility may be harmful, and a PE review and certification of a plan may help prevent that discharge."[7]

The EPA also disagreed that small facilities need not have PE certification for SPCC plans when the tanks are certified by the Underwriters Laboratory, arguing that:

> "A plan consists of more than a certified tank. It also contains provisions for secondary containment, integrity testing, and other measures to prevent discharges. Those provisions require PE certification to ensure that they meet the requirements of the rule and that the Plan is effective to prevent discharges."[8]

These positions are not supported by EPA's own research. In its analyses of their 1995 SPCC survey, EPA noted,

> "…facilities with larger storage capacity are likely to have a greater number of oil spills, larger volumes of oil spilled, and greater cleanup costs."[9]

[7] U.S. Environmental Protection Agency, *Response to Comments*, July 2002.
[8] Id.
[9] Id.

In looking at the data EPA used to arrive at this conclusion, it can be seen that facilities with less than 10,000 gallons of storage capacity account for less than 0.2% of the total volume of oil spilled. Yet these facilities constitute a very large percentage of the total facilities regulated under SPCC. If we assume that the distribution of storage capacity across small businesses is the same as it is across all SPCC regulated facilities, we estimate that almost 170,000 small business establishments, or 65% of all small SPCC regulated facilities, fall into this category. These figures are probably low given the likelihood that facilities with low storage capacity constitute a relatively greater proportion of small businesses. EPA did not adequately take into account the low levels of risk associated with small facilities.

Furthermore, in a study of the 1995 SPCC survey results, EPA found that having a written spill prevention plan had no impact on risk.[10] Physical spill prevention measures (e.g., secondary containment), on the other hand, were found to reduce risk. Based on available research, the evidence indicates that having a PE-certified plan, or any written plan, is not effective in minimizing oil spill risk to the environment. Moreover, the available evidence suggests that alternative control measures provide more cost effective solutions.

Certified written plans, by themselves, do not ensure leak and spill prevention or contingency planning. As evidenced by small facility compliance with EPA's small

[10] U.S. Environmental Protection Agency, *Analysis of the Effectiveness of EPA's SPCC Program on Spill Risk*, 1996, (pp. 4-5).

quantity generator, used oil, and underground storage tank rules, there is no nexus between the goal of prevention and written plans, certified or not.

3.2 Likelihood of Reaching Navigable Waters

As stated above, the cost-effectiveness of written plans is lower for small facilities. This is because the costs of their plans are only slightly lower than for larger facilities, while their spill volumes and risks are significantly lower. Small facilities pose a lower risk of release that will either reach or significantly impact navigable waters. These facilities tend to have smaller tanks in relatively simple configurations (several holding tanks and drums) compared to large oil storage facilities with a network of tanks and transmission pipes. Smaller spills are also more likely to be contained by secondary storage and, if they do reach the ground, to be absorbed in place and then removed. Since the risk of reaching navigable waters is lower for small facilities, regulations aimed at reducing spills from small facilities are likely to be less cost-effective. This position is supported by EPA's own research. In its analyses of their 1995 SPCC survey, EPA noted that, "facilities with larger storage capacity are likely to have a greater number of oil spills, larger volumes of oil spilled, and greater cleanup costs."[11]

3.3 Overlap with Other Requirements

Benefits of written plans are also small because many facilities are already designed to meet engineering standards or have already complied with other federal, state or local regulations. For example, most small facilities are subject to considerable state and/or

[11] U.S. Environmental Protection Agency, *Analysis of the Relationship between Facility Characteristics and Oil Spill Risk*, 1996, p. 1.

local government oversight and comply with national and local fire codes regarding tank design, installation, and operation. Many facilities are covered by similar prevention and response requirements set out in other EPA or OSHA rules, e.g., the small quantity generator hazardous waste rule. The following section, which discusses construction sites, provides additional examples of overlapping requirements.

3.4 Construction Job Sites and Temporary Storage

Oil is stored temporarily on construction job sites. Unlike a permanent oil storage facility, a construction contractor must prepare multiple SPCC plans every year as jobs are completed and new ones start. The 1995 SPCC Survey estimated over 7,000 construction facilities were subject to the SPCC requirements in effect at that time.

Oil storage on construction sites is relatively simple (several holding tanks and drums) compared to large oil storage facilities with a network of tanks and transmission pipes. As a result, PE certification for a construction job site adds unnecessary costs and time. Professional engineers have a tendency to write lengthy, detailed and costly plans for each new job site. Contractors usually have in-house experienced personnel with expertise to prepare the relatively simple plan needed for a construction site.

Construction sites of one acre or greater must also prepare spill prevention plans as part of their storm water pollution prevention plans (SWPPP) required by the National Pollutant Discharge Elimination System (NPDES) storm water permit program. It is an added cost and paperwork burden to require two separate plans for sites with small storage capacities and small numbers of tanks. The SPCC rule does allow contractors to

combine the two plans, but still calls for the more stringent and detailed SPCC requirements to be addressed in the SWPPP, including PE certification. Sites that store oil temporarily in small quantities and have an SWPPP could be exempted from SPCC.

Blanket deviations could reduce costs without jeopardizing environmental protection. For example, the cost of conducting integrity tests, which must be performed by a professional engineer using a standardized method, is extremely high compared to the resulting environmental benefit. PE-developed deviations for small containers will probably become standard practice. Rather than have case-by-case deviations for "certain smaller shop-built containers," and incurring the cost of a PE to write each deviation, a blanket deviation could be allowed for qualifying containers. Another example is the provision of a blanket deviation for vandalism-proof double-walled above ground tanks built to an approved engineering specification (e.g., Underwriters Lab, ASTM). Such tanks would be all-in-one units with tank, dispenser, and security protection incorporated. Blanket deviation could also be allowed for fencing and lighting on construction sites because these sites are temporary in nature. It is less cost effective to install these types of security measures on temporary sites as the period of protection provided is shorter in duration.

4 Other EPA Regulatory Programs

A key consideration in evaluating the SPCC requirement for PE-certified written plans is how compliance is achieved under similar regulations that impacted large numbers of small facilities. To examine this issue, similar regulations were considered. The results of this informal survey are provided in the following sections. The key issue that was studied was the extent to which compliance was based on the use of certified plans or the use of compliance assistance outreach.

4.1 Other EPA Regulatory Programs Impacting Small Facilities

Research conducted by study staff that examined similar regulations that also impacted large numbers of small facilities found that other EPA regulatory programs do not generally require a written PE-certified plan for compliance assistance purposes. Table 1 provides a brief overview of several pollution prevention and source reduction regulations that seek to protect the environment through education, outreach, and information dissemination.

Table 1: EPA Programs and the Use of PE-certified Plans

Name of Regulatory Program	Regulatory Goal	Certified Plan Requirement	Website & Description
Underground Storage Tanks (USTs)	Law seeks to protect the environment from petroleum and hazardous releases/leaks from USTs.	No certified plan is required. This regulation focuses on providing compliance assistance and education to detect and prevent leaks.	http://www.epa.gov/swerust1/ Website provides information on compliance assistance programs and outreach documents written in plain English including requirement check lists and answers to frequently asked questions.
Used Oil Management	Law seeks to protect environment from improper used oil disposal	No certified plan is required. EPA provides "management standards [that] are common sense, good business practices designed to ensure the safe handling of used oil, to maximize recycling, and to minimize disposal."	http://www.epa.gov/epaoswer/hazwaste/usedoil/index.htm Website supplies a plain English overview of the rule and guidelines. Publications provide easy to follow directions on safe handling, recycling and proper disposal of used oil. Contact information for assistance programs are listed.
Hazardous Waste	Law seeks to protect environment from hazardous wastes generated by businesses	No certified plan is required. The regulation requires permits, treatment and disposal facilities. Other requirements include identifying levels of waste, labeling containers, and maintain records.	http://www.epa.gov/epaoswer/hazwaste/sqg/sqghand.htm Website offers publications to guide small business in understanding the issues and determining requirements This includes a "Guide for Small Businesses" that outlines the rule and practices that minimize waste production and promote proper handling of hazardous materials.
Class V Rule - Shallow Injection Wells	Rule seeks to protect environment from hazardous wastes from motor vehicle waste disposal wells.	No certified plan is required. The regulation calls for special permits and operations using "best practice guidelines' for maintaining a safe vehicle waste disposal well.	http://www.epa.gov/safewater/uic/c5imp.html#guidance Website contains a Small Entity Compliance guide that provides easy-to-follow checklists for compliance and compliance assistance information.

For example, the EPA Underground Storage Tank (UST) regulations seek to prevent leaking of hazardous materials into the soil and groundwater. This law established general operating requirements for facilities with USTs. These requirements focus on prevention and early detection. PE-certified plans are not required. The EPA implemented an outreach program that supplies small businesses with detailed information on the specific regulatory requirements and provides resources that facilitate compliance and source reduction. Publications include guides on how to identify potential problems and reduce risks.

4.2 EPA Regulated Community Outreach Efforts

Several EPA pollution reduction and prevention regulations are geared toward achieving program goals through community outreach and education. Table 2 below provides a brief summary of a number of EPA programs that focus on providing compliance assistance information. These programs do not require PE-certified plans as a prerequisite for assistance. For example, the EPA Performance Track Mentorship Program offers businesses of all sizes a way to share information on emerging technologies, business strategies, and best practices that help eliminate or reduce pollution at the source. The program also provides facilities with an opportunity for EPA compliance inspections with the possibility to avoid enforcement actions when issues are resolved promptly.

Table 2: EPA Outreach Efforts

Name of Outreach Program	Program Overview	Website & Description
Motor Vehicle Air Conditioning	EPA provides a wealth of information to technicians and the public at large on methods to properly service vehicle air conditioning units to minimize releases of hazardous gases.	http://www.epa.gov/ozone/title6/609/technicians/index.html Website offers detailed FAQ sheets, handbooks, and technical guides to educate technicians on how to comply with the rule and minimize releases.
CCAR-Greenlink	National Automotive Environmental Compliance Assistance Center assists auto repair businesses in complying with environmental program requirements through business management strategies, new technology and methodology.	http://www.ccar-greenlink.org/ Website provides business with 24 hour assistance that helps identify different management strategies, technologies, methods, and materials that help foster compliance.
Region 2 P2: Pollution Prevention in the Auto Repair/Service Sector	One of multiple regional outreach pollution prevention information outlets, EPA Region 2 Pollution Prevention in the auto repair sector program outlines the economic and environmental benefits of reducing pollution with specific	http://www.epa.gov/region02/p2/ Website contains updated information on current pollution reduction efforts occurring within the region and details on how businesses can become involved.
Performance Track Mentor Opportunities	This EPA program is a public and private sector partnership that recognizes environmental performance of all types of facilities. Participants provide leadership and share best practices in preventing pollution at the source.	http://www.epa.gov/performancetrack Website provides a resource center for members to network and identify ongoing efforts taken by similar businesses to reduce pollution and comply with SPCC regulations.

The programs listed above in Tables 1 and 2 represent a snapshot of a range of programs that offer small facilities and small businesses outreach and compliance assistance information and services. Additional services and guides are available to help with SPCC compliance without requiring a PE-certified plan. For example, Strata Guides, a private environmental consulting firm, offers businesses a comprehensive SPCC plan and compliance review for a fee. The purpose of the service is to allow businesses the

opportunity to discover and resolve potential violations of regulations. Strata Guides' website (http://www.strataguides.com) states "Don't wait for an inspection before you find out your state of compliance."

5 Proposed Reforms

5.1 Small Facility Alternative – Tiered Requirements

PE plan certification at best promotes, but does not guarantee compliance. Notably, the cost of PE-certified plans, estimated at $2,500 to 5,000 or more, are expensive for small facilities, many of whom are small businesses. These are not just one time costs because of: 1) the five year review requirement and 2) the requirement that PE-certified plan amendments be made each time a modification is made to a regulated facility. Promoting compliance can arguably be achieved more cost effectively using collaborative outreach efforts designed to engage facilities that might otherwise elect not to comply due to high plan development and certification costs.

The following small-facility alternative can promote cost-effective compliance with the SPCC rule's substantive provisions, including the establishment of required procedures and employee training. This alternative sets up a three-tiered structure based on a facility's total regulated storage and requires a different set of requirements for each size category.

Tier I: 1,321 to 5,000 Gallon Facilities

Facilities in this range need not develop written plans, but must implement compliance with all applicable substantive provisions of the rule. Outreach efforts by EPA and the regulated industry will enhance compliance.

Tier II: 5,001 to 10,000 Gallon Facilities

Facilities in this range must have written SPCC plans, but these plans need not be PE certified. Instead, it is recommended that a collaborative effort between EPA and the regulated industry be undertaken that will result in model "best practices" plans designed to be easily tailored to individual small facilities in industry sectors having a significant number of substantially similar small facilities. Model plans, which may be designed by PEs, will include a simple facility diagram and will be reviewed and amended, as necessary, every ten years. Facilities must implement compliance measures consistent with their plans.

Tier III: 10,001 Gallon and Above Facilities

Requirements for this tier will remain consistent with the rule as promulgated. Facilities in this range must have and implement PE-certified plans.

5.2 Benefits and Costs of the Proposed Alternative

In assessing the benefits and costs of the proposed alternative, it is important to keep in mind that PE-certified plans will remain an option for all covered facilities and that all covered facilities must still comply with applicable substantive requirements, including:

A. Making "reasonably expected to" determinations;
B. Proper tank/piping/drum/containment design and installation;
C. Spill, overfill, and leak prevention procedures;
D. Spill, overfill and leak control measures and countermeasures;
E. Routine tank/piping/drum/containment monitoring/inspection;
F. Adequate security and proper tank/piping closure;
G. Response coordinator designation and employee training;
H. Contingency planning and substantial harm criteria certification;

The analysis instead should focus on the cost and effectiveness of compliance with these requirements for each tier of facilities as expenditures are shifted from the costs of developing plans to outreach, technical support and physical compliance expenditures.

The following paragraphs outline the benefits of the tiered approach which include reduced costs for written plans, increased expenditures on physical compliance, reduced volumes, and increased availability of PEs for larger facilities.

Cost Savings

The most obvious benefit of the alternative proposal is the reduction in costs of compliance and the minimization of impacts on small entities. The Regulatory Flexibility Act (RFA) of 1980 as amended by the Small Business Enforcement Fairness Act (SBREFA) of 1996 seeks to encourage agencies to examine regulatory alternatives that minimize burdens of regulations on small entities and ensure a more level playing field. This alternative meets these objectives while protecting the environment.

Physical Compliance Expenditures

For Tier I and II facilities, expenditures that are currently spent on PE-certified written plans can be applied to such compliance expenses as new tanks, security measures, secondary containment (where necessary), etc. Reducing compliance costs can effectively result in increased rates of compliance, lower spill risks, and improved environmental protection. As discussed above in Section 3, EPA studies have found that

these types of expenditures are more cost-effective in reducing spill risk than written plans.

Reductions in Storage Volumes

The inclusion of a volume-based tier approach is likely to cause facilities to reduce or eliminate unnecessary oil storage. Facilities will have an incentive to reduce their storage volumes to qualify for the lower tier with its less stringent requirements. By way of analogy, the tiered approach in the hazardous waste generator rules serves as an incentive to minimize waste. In situations where facilities reduce unnecessary storage, benefits accrue to both the facility and the environment. The facility benefits in terms of reduced compliance costs, while the public benefits from reduced spills and spill risks.

PE Availability

A concern with the SPCC reforms is that there will be a shortage of qualified PEs to develop the large number of certified plans that the rule requires. The proposed alternative has the benefit of improving the supply of PE resources for larger facilities by reducing the demand for PEs at hundreds of thousands of small facilities nationwide over a short time period. This will have the side effect of improving the quality and lowering the costs of plans for larger facilities as the more qualified PEs will be available at lower cost because of reduced demand.

Reducing the number of certified plans and improving the availability of qualified PEs will ensure timely implementation and compliance with the SPCC regulations. Assuming

EPA is able to provide adequate clarification on outstanding issues, compliance with the alternative approach should be achievable by early 2005.

6 Conclusion

The SPCC rules, particularly the requirements for written plans certified by a professional engineer, place a significant and disproportionate burden on the small businesses in the covered industries.

The options for burden reduction discussed in this report offer simple yet practical means to reduce the burden of SPCC compliance while at the same time maintaining or perhaps increasing environmental protection.

An examination of spill data shows that, currently, there are a significant number of facilities that experience minimal releases. The proposed options seek not only to minimize costs and to level the playing field, they also require that all facilities continue to be subject to the regulations and receive compliance assistance.

To balance cost reductions while maintaining environmental quality, this report considers regulatory alternatives that employ specific thresholds that simultaneously reduce costs and maintain or increase environmental protection.

A simple set of tiered requirements for written plans would result in substantial cost savings to small facilities with minimal effects on environmental quality. This tiered approach would result in a scheme where:

- Facilities with small amounts of oil storage would be exempt from having a written plan but would still be subject to all other requirements.
- A second tier of facilities would be required to have plans, but would rely on standard plans that would not be PE certified.
- The remaining facilities with larger storage capacities would still be subject to the requirement for written plans.

The benefits of the tiered approach include reduced costs for written plans, increased expenditures on physical compliance, reductions in storage volumes, and increased availability of PEs for larger facilities. The adoption of the tiered plan can reduce the impact on small businesses, improve the cost-effectiveness of the overall regulation, and place small and larger facilities and firms on more equal footing.