



February 10, 2006

The Honorable Susan Parker Bodine  
Assistant Administrator for the Office  
of Solid Waste and Emergency Response  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460

*Re: Spill Prevention, Control and Countermeasure (SPCC) Rule; 70 Fed. Reg..75324 (December 12, 2005); Proposed Amendments; Qualified Facility, Oil-Filled Equipment and Other Revisions; Docket ID No. EPA-HQ-OPA-2005-0001*

Dear Ms. Bodine:

We are submitting these comments on the proposed amendments to the Spill Prevention, Control and Countermeasure (SPCC) rule (70 Fed. Reg. 73524, December 12, 2005). The Office of Advocacy supports this proposal to help alleviate substantial small business burdens, while providing improved environmental protection, and offers some specific suggestions for improvement. As you know, we have worked with EPA and the affected industries over the last several years, and look forward to providing relief for hundreds of thousands of small entities by fall 2006.

### **I. Advocacy Background**

Congress established the Office of Advocacy (Advocacy) under Pub. L. 94-305 to represent the views of small business before federal agencies and Congress. Advocacy is an independent office within the Small Business Administration (SBA), so the views expressed by Advocacy do not necessarily reflect the views of the SBA or the Administration. Section 612 of the Regulatory Flexibility Act (RFA) requires Advocacy to monitor agency compliance with the RFA, as amended by the Small Business Regulatory Enforcement Fairness Act.<sup>1</sup> The RFA requires federal agencies to consider the impacts of their regulatory proposals on small entities, and determine whether there are effective alternatives that would reduce the regulatory burden on small entities.

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<sup>1</sup> Pub. L. No. 96-354, 94 Stat. 1164 (1980) (codified at 5 U.S.C. §§ 601-612) amended by Subtitle II of the Contract with America Advancement Act, Pub. L No. 104-121, 110 Stat. 857 (1996). 5 U.S.C. § 612(a).

On August 13, 2002, President George W. Bush signed Executive Order 13272 that requires federal agencies to implement policies protecting small entities when writing new rules and regulations.<sup>2</sup> This Executive Order highlights the President's goal of giving "small business owners a voice in the complex and confusing federal regulatory process"<sup>3</sup> by directing agencies to work closely with the Office of Advocacy and properly consider the impact of their regulations on small entities. In addition, Executive Order 13272 authorizes Advocacy to provide comment on draft rules to the agency that has proposed the rule, as well as to the Office of Information and Regulatory Affairs (OIRA) of the Office of Management and Budget.<sup>4</sup> Executive Order 13272 also requires agencies to give every appropriate consideration to any comments provided by Advocacy. Under the Executive Order, the agency must include, in any explanation or discussion accompanying the final rule's publication in the *Federal Register*, the agency's response to any written comments submitted by Advocacy on the proposed rule, unless the agency certifies that the public interest is not served by doing so.<sup>5</sup>

## II. SPCC Background

The SPCC rule is designed to prevent discharge of oil into navigable waters of the United States, and to contain those spills after they occur. Facilities subject to this rule must prepare and implement plans that prevent such discharges and respond to spills. The rule applies to all non-transportation related facilities with aboveground storage capacity greater than 1,320 gallons. This includes hundreds of thousands of small businesses, farmers, manufacturers and electrical facilities.<sup>6</sup> We have worked with EPA and the regulated community to identify small business concerns and appropriate regulatory approaches. During this period, EPA has extended the compliance date for the July 2002 amendments in order to allow facilities to come into compliance and to permit EPA to develop and improve the regulations. Advocacy issued its recommendations in June 2004 for a streamlined approach for small facilities with storage of up to 10,000 gallons and oil-filled equipment. This was followed by the two Notices of Data Availability (NODA) on these topics in September 2004.<sup>7</sup> Commenters responded almost unanimously and positively to the small facility and oil-filled equipment approaches, which were intended to address these small business problems, without diminution of the environmental benefits. EPA followed this with the December 2005 proposals that are the subject of these comments.

As related in the June 2004 letter, our concerns center on the professional engineering certification requirements, plan requirements, integrity testing of the bulk containers, oil-filled equipment, and asphalt. This comment letter also addresses three new issues: farms, airports, and oil and gas production facilities.

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<sup>2</sup> Exec. Order. No. 13272 § 1, 67 Fed. Reg. 53,461 (2002).

<sup>3</sup> White House Home Page, *President Bush's Small Business Agenda*, (announced March 19, 2002) (last viewed February 8, 2006) <<http://www.whitehouse.gov/infocus/smallbusiness/regulatory.html>>.

<sup>4</sup> E.O. 13272, at § 2(c).

<sup>5</sup> *Id.* at § 3(c).

<sup>6</sup> *Spill Prevention Control and Countermeasure (SPCC) Issues, Alternatives and Recommendations (Draft Version 4)*, (September 2003) by Jack Faucett Associates for the Office of Advocacy under contract SBAHQ-00-D-006 at 8.

<sup>7</sup> 69 Fed. Reg. 56182, 56184, September 20, 2004.

### **III. EPA Should Adopt the Three-Tier Small Facility Approach from the September 2004 Notice of Data Availability**

Under the proposed SPCC rule, EPA is allowing small facilities that meet the new “qualified facility” criteria to opt out of the requirement that their SPCC plans be certified by a professional engineer (PE). EPA defines a “qualified facility” as a facility that has a total oil storage capacity of 10,000 gallons or less and a facility that has not had a spill in the last ten years according to the definition found in 40 CFR §112.1(b).<sup>8</sup> The EPA proposal is a commendable step forward in balancing environmental protections with regulatory burdens on industry. However, the Office of Advocacy recommends that EPA amend the proposed SPCC requirements for small facilities to provide additional regulatory relief, as initially advanced by a coalition of small business trade associations and the Office of Advocacy in 2004.<sup>9</sup> As described in our recommendations below, substantial additional relief can be achieved while, at the same time, decreasing oil spill risks through increased regulatory compliance.

Under the Advocacy approach, currently regulated SPCC facilities would be required to meet all substantive SPCC requirements (e.g., secondary containment), but the formal written SPCC plan requirement would be eliminated or revised for facilities with smaller oil storage capacities. The Advocacy approach divides the regulatory community into three categories or tiers based on each facility’s oil storage capacity. For facilities with capacities between 1,321 and 5,000 gallons (Tier I), EPA would no longer require an SPCC plan. All other facilities (Tier II representing facilities with 5,001 to 10,000 gallons capacity, and Tier III representing facilities with greater than 10,000 gallons capacity) would be required to prepare an SPCC plan. However, Tier II facilities would no longer be required to have their plans certified by a professional engineer (PE). Advocacy’s three-tier proposal was the subject of EPA’s September 2004 Notice of Data Availability.<sup>10</sup> Although some commenters wanted to revise the Tier thresholds to encompass additional facilities, the three-tier approach received almost universal approval from commenters on the Notice of Data Availability (NODA). In the December 2005 proposed rule streamlining SPCC requirements, however, EPA proposed the two-tier approach that is discussed below.

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<sup>8</sup> Or, has never had a spill when a facility has been in operation for less than ten years.

<sup>9</sup> Letter from Douglas Greenhaus, National Automobile Dealers Association *et al.*, to David Evans, U.S. Environmental Protection Agency, “Re: Small Facility Alternative to Professional Engineer Certification,” January 20, 2004; and Letter from Thomas M. Sullivan, and Kevin Bromberg, U.S. Small Business Administration, to Thomas P. Dunne, U.S. Environmental Protection Agency, “RE: Spill Prevention, Control and Countermeasure (SPCC) Rule; 67 Fed. Reg. 47042 (July 17, 2002); Recommendation for Adoption of Interim Final Rule,” June 10, 2004.

<sup>10</sup> 69 Fed. Reg. 56182, September 20, 2004.

## 1. EPA Should Replace the Two-Tier Approach with the Three-Tier Approach and Improve Environmental Protection

EPA’s proposal, like Advocacy’s proposal, would also require that all currently regulated SPCC facilities continue to be subject to all substantive SPCC requirements. However, this proposal sets up two tiers for purposes of determining SPCC plan requirements. Unlike Advocacy’s proposal, EPA’s proposal would not exempt any facilities from the SPCC plan requirement. Instead, facilities with storage capacities of 10,000 gallons or less would no longer be required to have their plans certified by a PE. Under both EPA’s and Advocacy’s proposals, the requirement for PE-certification of SPCC plans would continue for all facilities with storage capacities greater than 10,000 gallons.

In its final rule, EPA should replace the proposed two-tiered regulatory approach with a three-tiered approach. This recommendation more effectively addresses the relative risks associated with smaller storage capacity facilities. Our recommendation is to adopt Advocacy’s June 2004 approach, which sets-up a tiered structure based on a facility’s total regulated storage capacity as follows:

- Tier I: 1,321 to 5,000 gallon facilities - No written spill prevention plan required, but must implement compliance with all applicable substantive provisions of the rule.
- Tier II: 5,001 to 10,000 gallon facilities - Written plans required, but no PE-certification requirement. 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.

Advocacy urges the Agency to exempt one tier of small facilities from the SPCC plan requirement, and to allow larger small facilities the option of using a standardized SPCC plan, designed for their industry. The three-tier scheme produces substantial cost savings, and could improve environmental effectiveness. Furthermore, there are several additional reasons favoring the three-tier approach addressed below.<sup>11</sup>

**Table 1. Comparison of Advocacy and EPA SPCC Plan Requirement Proposals**

<b>Storage Capacity (gallons)</b>	<b>Advocacy</b>	<b>EPA</b>
1,321 to 5,000	No SPCC plan	SPCC plan without PE certification
5,001 to 10,000	SPCC plan without PE certification	
Greater than 10,000	SPCC plan with PE certification	

<sup>11</sup> In addition, we should note that Advocacy recently received an unusually high number of telephone calls from the small business community about their strong support for Advocacy’s scheme over the EPA proposal. This highlights the importance to the small business community of making this modification.

As identified in Table 1 above, the difference between the two approaches is that no plan is required for small facilities under 5,001 gallons in the Advocacy plan. Although the Advocacy proposal received almost universal approval from NODA commenters,<sup>12</sup> EPA rejected this approach in the preamble with a very brief statement that commenters did not explain how compliance could be ensured without a plan: “the Agency believes that without the owner/operator developing a Plan or documentation on how the facility will comply with the SPCC requirements, it will be challenging for the facility to both meet the substantive requirements..., as well as provide documentation to the regulators that the facility is in compliance” (70 Fed. Reg. 73524, 73533, December 12, 2005). However, EPA’s rationale for rejecting Advocacy’s proposal is unconvincing. Facilities that comply with EPA’s underground storage tank and hazardous waste rules do so without formal plans. Further, the addition of a compliance checklist suggested recently by some small business groups, could adequately address EPA’s concerns.

Based on an analysis of the Advocacy approach performed by E. H. Pechan & Associates (Pechan), estimated total cost savings from Tier I facilities is \$390 million and estimated total cost savings from Tier II facilities is \$83 million (Pechan, 2006). This approach would save \$473 million over the current requirements (Pechan, 2006). Further, the Advocacy approach saves an additional \$130 million over the EPA proposal, not an insignificant expenditure. These estimates reflect assumptions that 60 percent of Tier I and II farm facilities do not comply with current SPCC plan requirement and that 30 percent of such nonfarm facilities are noncompliant.<sup>13</sup> The farm noncompliance rate reflects the fact that 61 percent of 858 farmers surveyed by the U.S. Department of Agriculture were not aware of SPCC requirements (USDA, 2005). As such, this is a conservative estimate as there is surely an additional percentage that is aware of SPCC requirements, but does not have an SPCC plan. In lieu of information on the noncompliance percentage for nonfarm facilities, Pechan assumed noncompliance at half the rate estimated for the farm sector. At the same time, Advocacy agrees with EPA that “to the extent that the rule increases the compliance rate by lowering compliance costs, the proposal will have a positive impact on environmental quality” (EPA, 2005 at 6).

#### *a. Analysis of the Oil Spill Data Supports the Adoption of the Three-Tier Scheme*

In its own analysis of a 1995 survey of oil storage facilities, 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” (EPA, 1996). Facilities with smaller storage capacity tend to have smaller tanks or pieces of equipment in relatively simple configurations compared to large oil storage facilities with a network of tanks, equipment, and transmission pipes.<sup>14</sup> Smaller spills are also more likely to be absorbed in place and removed than larger spills. Because the risk of reaching navigable waters is lower for small facilities, and because SPCC plans alone have not

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<sup>12</sup> In Pechan’s review of the NODA comments, it found widespread support from the regulated community, and no opposition from environmental or public interest groups. The only opposition Pechan found was from trade groups representing professional engineers and individual professional engineers.

<sup>13</sup> EPA agrees that noncompliance exists, but does not estimate the noncompliance rate: “EPA does recognize, however, that there is non-compliance with the SPCC requirements by some portion of the regulated community” (EPA, 2005 at 8).

<sup>14</sup> An example of this type of facility is a quick oil change service facility.

been demonstrated to reduce the oil spill risk to the environment, a cost-effective approach to reducing risk should address ways to reduce the cost of SPCC plan development for facilities with smaller storage capacities.

Based on an analysis of EPA survey data (Pechan, 2006), facilities with between 1,321 and 5,000 gallons of storage capacity represent 0.3 percent of the total volume of oil spilled (see Table 2). As indicated by the EPA data, the average per facility spill volume for these facilities is approximately 1.6 gallons. EPA's SPCC regulatory analysis estimates that there are more than 235,000 Tier I facilities (EPA, 2005). Given the average facility spill volume and the fact that EPA has been unable to conclude that spill prevention plans lead to spill reductions,<sup>15</sup> it is difficult to assert that the theoretical spill reduction benefits of SPCC plan development will outweigh the substantial cost of plan development for such a large number of very small facilities. Assuming an average small facility plan cost of \$3,000,<sup>16</sup> the total cost of the SPCC plan requirement is estimated at \$705 million. Spreading this cost over a ten year period, and comparing projected total spill volumes over this period, the cost-effectiveness of total potential spill reductions for Tier I facilities is estimated at \$184 per gallon.

Facilities with storage capacities of between 5,001 and 10,000 gallons account for approximately 2 percent of all oil spilled (Pechan, 2006).<sup>17</sup> An analysis of the available EPA data indicates that the average facility with between 5,001 and 10,000 gallons of storage capacity spills 27.3 gallons of oil (EPA, 1996).<sup>18</sup> EPA's SPCC regulatory analysis indicates that there are 86,018 Tier II facilities (EPA, 2005). Because Tier II facilities represent a significantly higher per facility spill volume and a significantly lower facility count, the theoretical cost-effectiveness of an SPCC plan would be considerably higher for these facilities than Tier I facilities. Using analogous assumptions to those used above, the cost-effectiveness of total potential Tier II facility spill reductions is estimated at \$10.98 per gallon. Erring on the side of environmental protection, Advocacy recommends that EPA require that Tier II facilities prepare SPCC plans. However, the theoretical cost-effectiveness for these facilities will be considerably lower than for facilities with storage capacities above 10,000 gallons, which have average per facility spill volumes of

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<sup>15</sup> Based on an analysis of survey data collected from facilities subject to SPCC regulation, EPA was unable to conclude that a written spill prevention (or spill response) plan is effective in minimizing oil spill risk to the environment (EPA, 1996). However, EPA was able to conclude that other specific spill prevention/control measures (e.g. secondary containment) are effective in minimizing this risk.

<sup>16</sup> JFA reports that small facility plan costs range between \$2,500 to \$3,500; although the source for these estimates is not documented. Additional support for the \$3,000 estimate is provided by the fact that \$3,100 was the median of the total plan cost estimates provided by commenters to EPA's Notices of Data Availability (69 Fed. Reg. 56182, September 20, 2004 and 69 Fed. Reg. 56184, September 20, 2004). See (Pechan, 2006) at 3.

<sup>17</sup> Note that the JFA, 2004 report estimated the percentage of total spill volume for facilities between 1,321 and 10,000 gallons as less than 0.2 percent. The values reported herein reflect estimates derived from actual per facility spill volume by storage capacity reported in EPA, 1996 and facility counts by storage capacity category from EPA, 2005.

<sup>18</sup> Because the EPA-reported data could not be used to calculate weighted average per facility spill volumes, Pechan calculated the average of the per facility spill volumes for each storage capacity range: 1,500-2,000 gal (0.59 gal); 2,000-2,500 gal (0.85 gal); 2,500-3,000 gal (0.09); 3,000-4,000 gal (6.03 gal); and 4,000-5,000 gal (0.63 gal). The EPA survey results are not well documented, but appear to include both facilities with spills and facilities without spills.

2,372 gallons, and fewer facilities than Tier II.<sup>19</sup> Therefore, Advocacy recommends that SPCC plans for facilities with between 5,001 and 10,000 gallons of capacity not require PE certification. The removal of the SPCC plan PE certification requirement for these facilities is estimated by EPA to result in average savings of \$2,000 for new plans and \$750 for plan amendments (EPA, 2005).

**Table 2. Comparison of Facility and Spill Volume Estimates by Storage Capacity**

	<b>1,321 to 5,000 gallons</b>	<b>5,001 to 10,000 gallons</b>	<b>Greater than 10,000 gallons</b>
% of Facilities	38.1	13.9	48.0
% of Spill Volume	0.3	2.0	97.6

*b. Tier II Facilities Do Not Need A Professional Engineer to Design and Implement a Plan*

Tier II facilities are unlikely to need the services of a PE to prepare an effective SPCC plan because they typically have simple storage tank layouts with tanks that are not interconnected, which both reduces the likelihood of a significant spill and simplifies spill prevention planning. A model “best practices” plan can be developed through collaborative efforts between EPA and the potentially impacted/regulated industries, including industry trade associations that employ PEs.<sup>20</sup> This approach has proved successful under EPA’s small quantity generator hazardous waste, underground storage tank, and Clean Air Act section 112(r) accidental release regulatory programs. For example, new car dealers currently implement small quantity generator requirements, which include similar tank maintenance and inspection requirements, without a PE. While we do not expect new car dealers to be able to draw up their own SPCC plans, dealerships will not need a PE to implement model plans that have been drawn up by PEs for their use. In other words, merely because a car dealership cannot design secondary containment around its outside diesel tank, doesn’t mean that it is unable to follow directions as to how to build and maintain concrete barriers around its tanks.

*c. The Three-Tier Plan Provides an Incentive to Reduce Unnecessary Storage and Expands the Availability of Professional Engineers for Larger Facilities*

The inclusion of storage capacity-based exemptions from all or certain SPCC plan requirements is likely to cause facilities to reduce or eliminate unnecessary oil storage. In these cases, the facility benefits in terms of reduced compliance costs, while the public benefits from reduced environmental risks from oil spills. Eliminating or reducing the SPCC plan requirements for small storage capacity facilities will also result in the beneficial side effect of improving the

<sup>19</sup> Note that EPA reported data could not be used to calculate weighted average per facility spill volumes. Therefore, the average represents the simple average of the per facility spill volumes for each of 20 individual storage capacity ranges.

<sup>20</sup> Tim Laughlin, a professional engineer and Technical Director for the North Carolina Petroleum Marketers Association, has prepared a SPCC model plan. Also, members of the Environmental Committee of the American Bakers Association have designed a model plan for bakers.

quality and lowering the costs of plans for larger facilities as reduced demand for PEs will result in greater availability of qualified PEs.

*d. The Checklist Approach Will Assure Compliance with Applicable Regulations*

The heart of EPA's rejection of the three-tier approach is the Agency's fear that firms would not know how to comply with the regulations without a plan. Besides the fact that this is performed by millions of small firms already for a variety of other EPA rules, EPA could choose to require that facilities maintain a single page checklist developed by the Agency to ensure compliance with the relevant requirements. We recommend that Tier I facilities be required to provide a one-time self-certification via a checklist that the facility: (1) has conducted required periodic visual inspections of their storage tanks; (2) has complied with EPA's secondary containment requirements; and (3) has prepared an appropriate contingency plan to address the facility's planned response to a spill event. This checklist will provide EPA with documentation that the facility is in compliance with SPCC requirements and fully addresses EPA's expressed concern with the three-tier scheme.<sup>21</sup>

*e. Alternatively, EPA Could Adopt the Proposed Two-Tier Scheme*

As a less preferred alternative, Advocacy recommends that EPA adopt its proposed two-tier scheme. This does have most of the advantages discussed above for the three-tier scheme, and adds the requirement of a plan for Tier I facilities. Therefore, it adds some cost and complexity for the Tier I facilities compared to the three-tier alternative, but it unquestionably is a substantial improvement over the current scheme, and would be welcomed by many small business facilities. EPA needs to seriously consider whether a checklist scheme would adequately substitute for its plan requirement. Further, if EPA retains its two-tier proposal, the agency should consider eliminating the site visit and facility diagram requirement from the very smallest (i.e., Tier I—under 5,001 gallons) facilities, as a means of reducing the cost and complexity of the two-tier EPA scheme.

2. EPA Should Eliminate the Spill History Requirement or Limit Requirement to Three Years

EPA adopted the ten-year spill history requirement from the Utility Solid Waste Activities Group (USWAG)'s proposal for addressing oil-filled equipment. As USWAG explains in its comments to be filed on this proposal, this approach is truly not applicable to small facilities. Advocacy has received substantial adverse feedback from the small business associations on this requirement, which was not part of Advocacy's original small facility scheme. At a minimum, EPA should reduce the current ten-year spill history requirement for small facilities to 3 years. EPA should consider a shorter time-frame because unlike oil-filled equipment, which is often owned/operated by large firms (e.g. utilities), compiling and documenting a small facility's spill history for such a lengthy time-frame can represent a substantial burden. Furthermore, recordkeeping for SPCC purposes is required only for a three-year period. Under the Office of

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<sup>21</sup> In addition, the self-certification would also be applicable to the current requirement to certify compliance with the 2002 amendments and any plan amendments for qualified facilities with a plan. We also believe that the five year review should not be applicable to qualified facilities because such facilities do not often make changes, and the required amendments would keep such plans up-to-date in any event.



Management and Budget (OMB)'s paperwork policy, recordkeeping requirements in excess of three years may be mandated only in exceptional circumstances. This provision does not warrant this level of burden.

Therefore, Advocacy recommends that EPA revise the no-spill criterion to cover only the preceding three-year period. This shorter time-frame is appropriate because: (1) OMB policy generally only requires recordkeeping for this period; (2) the lengthier period would penalize small facilities that have successfully implemented recent spill prevention measures in response to earlier spill incidents; and (3) evidence indicates that small facility spills are of much lesser volumes. EPA should set less stringent standards that recognize the lower environmental risk of smaller facilities. Further, as the current SPCC rule provides, Regional Administrators have the flexibility to impose additional requirements on any facility, as needed.

In addition, because the purpose of the SPCC is to reduce the environmental harm from oil discharges that reach navigable waters, EPA should clarify that the spill history requirement pertains only to spills that actually reached navigable waters.

### 3. Revise Integrity Testing Requirement

EPA is proposing to allow owners and operators of qualified facilities to rely on industry standards to determine the type and frequency of integrity testing required for a particular size storage container and configuration. The Agency proposes to allow qualified facilities to make this determination in accordance with industry standards without the need to develop a PE-approved environmentally equivalent deviation, as is currently required under §112.7(a)(2). In the proposed SPCC regulation, EPA cites the Steel Tank Institute's SP001 as an example of a relevant industry standard.

The current SP001 standard allows periodic visual inspections for shop-fabricated aboveground storage tanks with a total capacity of 5,000 gallons, and for which there is spill control and a continuous release detection method (i.e., Category 1 tanks). Advocacy recommends that EPA permit qualified facilities to conduct periodic visual inspections for shop-fabricated aboveground storage tanks that have an oil storage capacity up to 10,000 gallons. This recommendation is appropriate because of the small risk of an oil spill reaching navigable waters due to the SP001 standard requiring that the relevant tanks have a continuous release detection method and secondary containment. Advocacy also believes that this revision will enhance the understanding of SPCC regulatory requirements, and, therefore, increase regulatory compliance by making the visual inspection applicability determination based on the same storage capacity threshold as used in defining a "qualified facility."

With these proposed revisions, EPA will effectively address the reality of the low compliance rate among small facilities by creating a practical approach that enhances environmental protection by increasing small facility SPCC regulation compliance.

#### **IV. Advocacy Supports Proposal to Allow Facilities to Employ Contingency Planning In Lieu of Secondary Containment for Oil-Filled Equipment**

EPA proposes to amend the SPCC regulations to provide a definition of oil-filled operational equipment and an optional alternative to the general secondary containment requirements for oil-filled operational equipment that meets certain qualifying criteria (hereafter referred to as “qualified oil-filled operational equipment”). In lieu of providing secondary containment, the proposal would allow facilities with qualified oil-filled operational equipment to have the alternative of preparing an oil spill contingency plan and a written commitment of manpower, equipment and materials to expeditiously control and remove any oil discharged that may be harmful, without having to make an individual impracticability determination as required in section 112.7(d). The facility would also be required to establish and document an inspection or monitoring program for the qualified oil-filled operational equipment to detect equipment failure and/or a discharge.

EPA’s proposed rule offers the following definition for oil-filled operational equipment as:

“...equipment which includes an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device. Oil-filled operational equipment is not considered a bulk storage container, and does not include oil-filled manufacturing equipment (flow-through process)” (70 Fed. Reg. 73524, 73550, December 12, 2005).

Under EPA’s proposal, to be considered as qualified oil-filled operational equipment, a facility must consider the equipment’s reportable discharge history. The qualified oil-filled operational equipment criteria specifically requires that the facility had no discharges as described in section 112.1(b) from any oil-filled operational equipment in the ten years prior to the SPCC Plan certification date, or, if the facility has been in operation for less than ten years, since becoming subject to 40 CFR part 112 (70 Fed. Reg. 73524, 73533, December 12, 2005).

The EPA economic analysis finds that using the alternative to the current regulation’s secondary containment requirements results in annual per-facility cost savings of \$9,000 to \$61,000 for new facilities, depending on a facility’s size and other characteristics (EPA, 2005). EPA estimates that this provision would reduce compliance costs by as much as \$56.7 million and \$45.9 million per year, discounted at 3 percent and 7 percent, respectively. These estimates reflect the difference between the cost of secondary containment and the cost of preparing a contingency plan and a written commitment of manpower, equipment and materials for the projected annual number of new electric utility sector facilities with qualifying equipment.<sup>22</sup>

EPA’s proposal is based in large part on the USWAG scheme that was the subject of EPA’s oil-filled equipment NODA,<sup>23</sup> which included the requirement that the oil-filled equipment not be subject to any spills within the last ten years or within the time period the facility has been

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<sup>22</sup> EPA acknowledges that this number understates the true count because it excludes the number of new facilities outside the electric utility sector.

<sup>23</sup> 69 Fed. Reg. 56184, September 20, 2004.

subject to the SPCC rule. EPA's proposed approach is justified because of the lower risk posed by qualifying oil-filled equipment.

There are a number of characteristics that make oil discharges from oil-filled electrical equipment a lower risk for environmental harm than discharges from bulk storage tanks. These features include:

- Equipment is constructed using heavier and more corrosion resistant steel and is built to resist greater pressure differentials than tanks;
- Thorough equipment pre-installation testing and frequent inspection during use (e.g., utilities typically conduct monthly inspections and periodic testing of equipment);
- Dielectric fluid is generally mineral oil, which is far less toxic than more conventional petroleum products;
- Oil is much less frequently added/removed than with tank storage;<sup>24</sup>
- Equipment is self-monitoring – a loss of dielectric fluid leads to equipment failure and an interruption in transmission of electrical power. The equipment at electrical substations is also typically equipped with remotely monitored low level and high temperature alarms; and
- Substation electrical equipment is typically surrounded by a gravel bed. In addition to fire safety benefits of this design, the gravel beds provide a significant restriction to movement of any oil that may be released, further reducing the probability of a Section 112(b) discharge (USWAG, 2003).

The strongest evidence that electrical equipment poses a low risk to navigable waters is the historical evidence indicating extremely infrequent discharges to water. The 1991 estimate of the number of discharges to navigable waters from the two million pieces of electrical equipment at nearly 50,000 substations was 10 to 15 per year, and most of these discharges involved very small quantities of oil.<sup>25</sup> By contrast, when EPA's 1988 SPCC Task Force reported on oil discharges into navigable waters from fixed tank facilities, it reported that there were 3,000 reported discharges in 1987, some of which involved tens or hundreds of thousands of gallons.<sup>26</sup>

EPA's new proposal takes these properties of oil-filled operating equipment into account and allows "qualified oil-filled operational equipment" to implement alternatives to the SPCC's secondary containment requirements. EPA defines qualified oil-filled operational equipment as equipment that has "no §112.1(b) discharges from any oil-filled operational equipment in the 10 years prior to the SPCC Plan certification date, or since becoming subject to 40 CFR part 112 if

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<sup>24</sup> EPA's 1995 survey indicates that transfers are a major source of oil discharges (EPA, 1996).

<sup>25</sup> See USWAG 1991 SPCC comments at pages 32, 42-43 (translating these statistics into fewer than 0.003% of equipment larger than 2 to 3 gallons at substations).

<sup>26</sup> See EPA, Oil Spill Prevention, Control, and Countermeasure Task Force Report, Docket No. SPCC-1P-7-1, May 13, 1988, at pages 4-6 to 4-8

the facility has been in operation for less than ten years.” 70 Fed. Reg. 73524, 73533, December 12, 2005. Facilities that meet these criteria will be able to avoid secondary containment requirements if they: (1) prepare an oil spill contingency plan consistent with Part 109 and a written commitment to expeditiously control and remove any quantity of oil discharged that may be harmful; and (2) develop and document an appropriate inspection and monitoring program. Advocacy fully supports EPA’s proposed revisions because of the relatively insignificant risks associated with oil-filled operating equipment.

## **V. EPA Should Exempt Motive Power Containers from SPCC**

EPA has proposed to exempt motive power containers from regulation. For the purposes of identifying SPCC applicability, EPA’s proposed SPCC rule amendments define motive power containers as “onboard bulk storage containers used solely to power the movement of a motor vehicle, or ancillary onboard oil-filled operational equipment used solely to facilitate its operation” (70 Fed. Reg. 73524, 73538, December 12, 2005). Motive power, therefore, generally refers to oil stored in tractors, forklifts, mobile cranes, and other mobile equipment for use by that equipment.<sup>27</sup> We support this proposed revision.<sup>28</sup>

In the preamble to the proposed SPCC rule, EPA notes that motive power storage (if 55 gallons or more storage capacity) could previously have been considered subject to SPCC jurisdiction (70 Fed. Reg. 73524, 73538, December 12, 2005). The agency further notes that it “never intended to cover motive power containers on buses, sport utility vehicles, small construction vehicles, aircraft and farm equipment, or facilities or locations such as heavy equipment dealers, commercial truck dealers, or certain parking lots ... solely because of the presence of motive power containers. Nor does EPA intend to require facilities otherwise subject to the SPCC rule to include motive power containers in their Plans.” *Id.* However, EPA is now proposing to exempt all motive power containers from SPCC requirements, and to exclude the storage capacity of motive power equipment from a facility’s total storage calculation for purposes of determining SPCC applicability.<sup>29</sup> The Agency has properly determined that it is not practicable to require containment around vehicles that regularly move about a site. In addition, we would expect that the great majority of such containers are regulated by other agencies, such as the Department of Transportation (for vehicles), and local fire code requirements. Duplicative regulation is unnecessary. Advocacy welcomes the Agency’s move to exempt motive power containers from SPCC requirements. With respect to long term changes, we believe EPA should also examine exemptions for an expanded version of motive power, specifically, fixed equipment that has moving arms, such as cranes at construction sites. It may not be very practicable to establish secondary containment for large fixed cranes, for example.

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<sup>27</sup> However, EPA has stated that it does not include oil drilling or workover equipment, including rigs because of the large amounts of oil and high flow rates of oil associated with this equipment (70 Fed. Reg. 73524, 73539, December 12, 2005).

<sup>28</sup> We support General Electric’s discussion to clarify the scope of the motive power definition to better capture EPA’s intent. GE Comments on December 2005 Proposal at 6-7, submitted February 7, 2006.

<sup>29</sup> The proposal clarifies that “oil transfer activities occurring within an SPCC covered facility would continue to be regulated...Regulating a transfer between unregulated motive powers containers and a regulated tank is required by section 112.1(b), which requires that the SPCC rule apply to owners or operators of facilities that transfer oil or oil products” (70 Fed. Reg. 73524, 73538, December 12, 2005).

## VI. EPA Should Expand the Proposed Relief for Airport Mobile Refuelers

For the purposes of SPCC applicability, EPA defines an airport mobile refueler as “a vehicle with an onboard bulk storage container designed for, or used to, store and transport fuel for transfer into or from an aircraft or ground service equipment” (70 Fed. Reg. 73524, 73540, December 12, 2005). Under the proposed SPCC rule, EPA would replace the existing *sized* secondary containment requirements for such refuelers with *general* secondary containment requirements.<sup>30</sup> These requirements apply to refuelers at all times.

The airport community has raised security, safety, and logistical concerns with applying SPCC secondary containment requirements to airport mobile refuelers. It is likely that parked refuelers will be clustered together in secondary containment areas when not in use, raising security concerns. There also would be an increased mobile refueler traffic as refuelers travel to secondary containment areas, raising logistical concerns. Further, the additional movement would lead to a rise in accidents, and thereby more, rather than less, oil spills.

It is important to note that there are current Federal Aviation Administration (FAA) regulations that effectively reduce the risk of oil spills from airport mobile refuelers.<sup>31</sup> In addition, EPA’s own Storm Water Pollution Prevention Plan program is designed to ensure that pollutants, such as oil and grease, are not transported off-site by storm water. Furthermore, a recent study indicates that larger airports tend to rely on aircraft refueling using hydrants, rather than mobile refuelers (Abt, 2004). Given this latter fact, and because other regulations effectively reduce oil spill risk, it is difficult to imagine that SPCC secondary containment requirements are also needed to reduce oil spill risks when aircraft are not actively being refueled by airport mobile refuelers.

Although the EPA proposal for unsized containment may be helpful, considerable concern still remains about the security, safety and logistical concerns. The Abt report prepared for the agency noted that sized containment was not a common practice, and it is unclear how an unsized requirement would ease compliance. EPA’s suggestion that active measures could be used instead of permanent curbing, we suspect, would be ineffective when the personnel are not present near the mobile refueler, as when the tanker is inactive.<sup>32</sup> Advocacy recommends that EPA revise the SPCC’s secondary containment requirements so that they apply only when an airport mobile refueler is actively transferring fuel. Even the Agency admits that the fuel transfer is the primary time when oil releases have occurred, and the Agency has provided no data to confirm that spills need to be addressed outside this activity. This revision will address the valid safety, security, and logistical concerns of the airport community and be more commensurate with the level of risk of airport mobile refueler oil spills reaching navigable waters.

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<sup>30</sup> Whereas *sized* secondary containment requires containment for the entire capacity of the largest single container plus sufficient freeboard to contain precipitation, *general* secondary containment must only be designed so that any discharge from a primary containment system will not escape the containment system before cleanup occurs.

<sup>31</sup> For example, the FAA requires that certain airports certify compliance with a standard that requires fueling ramp drainage systems that prohibit surface oil pooling on adjacent ground surfaces when such pooling would create a fire hazard (70 Fed. Reg. 73524, 73540, December 12, 2005).

<sup>32</sup> An active measure requires an action by the facility to prevent a spill from reaching navigable waters, and a passive measure involves a permanent structure designed to prevent spills from reaching such waters

## **VII. EPA Should Extend the Compliance Date for Farms and Complete Farm Study**

We support an extension of time for compliance for all farms. The March 2005 USDA study shows that there is a substantial lack of knowledge about the SPCC requirements at farms and a substantial cost burden imposed by the rule. It is not clear that hundreds of thousands of farms with small unconnected tanks that are miles apart should be treated the same as all other SPCC facilities. Thus, EPA's plan to specifically identify the frequency and causes of oil spills at farms, and the environmental impact of such dischargers is warranted. We look forward to fashioning regulations that fit the oil spill problems identified in actual data from farms, rather than addressing farms just as any other SPCC facility.

## **VIII. EPA Should Adopt Special Relief for Oil and Gas Production Facilities in Future Rulemaking**

EPA's proposed SPCC rule does not adequately address the unique characteristics of the oil and gas (O&G) production industry. In particular, EPA's proposal does not provide sufficient relief to thousands of low risk small O&G facilities, applies overly burdensome secondary containment requirements to O&G flowlines and gathering lines, and improperly excludes produced water from the rule's wastewater exemption. The following discusses SPCC revisions for the O&G industry that EPA should consider in a future rule.<sup>33</sup>

### 1. Develop Industry-Specific Qualified Facility Thresholds for O&G Producers

While EPA's proposed qualified facility SPCC amendments provide SPCC plan relief to hundreds of thousands of small facilities, they do not provide relief for a significant number of O&G producers. In particular, the qualified facility 10,000 gallon threshold criterion excludes hundreds of thousands of small O&G producing facilities that collectively represent a minimal risk for discharge.<sup>34</sup> Furthermore, most such facilities are in remote locations that are not near navigable waters.

Independent O&G production facilities are generally operated by small entities, which are similar to family farms. Many O&G producing facilities include surplus storage capacity because tanks were sized for early peak oil or condensate production. As production fields mature over time, production rates decrease and produced water volumes increase. The surplus capacity is left in place because tank removal is costly, and the salvage value is low. As a rule of thumb, independent wells are provided with three or four 300-barrel (12,600 gallon) or 400-barrel (16,600 gallon) tanks that can store oil and produced water on an interchangeable basis if production is less than anticipated.

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<sup>33</sup> We understand that EPA is already planning to further address SPCC requirements for this industry after obtaining the results of a forthcoming energy impact study of the 2002 SPCC rule.

<sup>34</sup> According to 2003 National Response Center spill release data, 96.7 percent of crude oil spilled came from sources that generated spills exceeding 1,000 barrels—the average marginal well would require over 450 days to produce this amount of oil.

The O&G industry views the 2002 amendments as a substantial change from previous SPCC requirements. Small production facilities, and particularly the marginal well operations, operate at very small profit margins, like other small facilities subject to the 10,000 gallon threshold. The industry asserts that additional costs imposed by the 2002 rule will result in early plugging of wells. Given that domestic oil and natural gas production is currently being challenged to meet critical domestic demand, EPA should more fully consider devising qualifying facility criteria specific to this sector. The Independent Petroleum Association of America (IPAA) suggests that all O&G facilities associated with marginal wells, as well as facilities with non-marginal wells of up to 50,000 gallons storage capacity be provided qualifying facility status.<sup>35</sup> EPA should seek to reduce the SPCC plan requirement burden on these facilities given their low risk to navigable waters and precarious financial condition. The IPAA specifies a three-tier approach to applying SPCC plan requirements in its comments on EPA's 2004 NODA.<sup>36</sup>

## 2. Address Impracticality of Secondary Containment Around Flow/Gathering Lines

In addition to better defining the qualifying facility approach with respect to small O&G facilities, EPA should also address the potential high cost and impracticality of secondary containment around flowlines and gathering lines. Although there are no apparent data that support the need for secondary containment, it is clear that this requirement will create a significant disturbance to surrounding lands. According to information provided by IPAA, flow/gathering lines are often located on agricultural lands. Requiring secondary containment for all flow/gathering lines will certainly disrupt agricultural productivity and compromise agricultural equipment safety. One recommendation that EPA should consider is allowing similar alternatives to secondary containment as those that EPA has proposed for oil-filled operational equipment (i.e., establish an inspection or monitoring program to detect equipment failure and/or a discharge; and prepare an oil spill contingency plan, and a written commitment of manpower, equipment and materials to expeditiously control and remove any that may be harmful).

## 3. Allow Wastewater Exemption for Produced Water Tanks

Another concern that is unique to the O&G sector is that the current rule does not allow the use of the SPCC rule's wastewater exemption for produced water.<sup>37</sup> Because produced water storage tanks contain *de minimis* quantities of oil that do not represent a significant risk for environmental harm to navigable waters, the IPAA recommends that EPA specify that O&G equipment used to treat produced water is subject to the rule's current wastewater exemption. The SPCC rule currently singles out O&G water separation facilities for an increased level of regulation relative to other sectors using similar or nearly identical technologies and treatment goals. The rule subjects hundreds of thousands of produced water vessels to burdensome secondary containment requirements that are unnecessary given the incidental amounts of oil

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<sup>35</sup> The O&G industry suggests defining marginal wells as "wells that produce 15 barrels per day or less of crude oil or condensate and/or that produce 90,000 cubic feet per day or less of natural gas and/or that produce 25 barrels per day or less of crude, condensate, or equivalent natural gas and are 95 percent water."

<sup>36</sup> Russell, Barry, Independent Petroleum Association of America, letter to EPA Docket Center, "Re: Docket ID No. OPA-2004-007, Comments Regarding Facility Size Thresholds," November 18, 2004.

<sup>37</sup> Produced water describes water obtained as part of the oil and gas extraction process, and can include formation water, injection water, and any chemicals added downstream or during the oil/water separation process.

they contain and the very small environmental risks they represent. EPA should revise the current rule so that produced water receives the same SPCC exemptions that are afforded to wastewater in other industry sectors.

### **IX. EPA Should Address Asphalt in Future Guidance or Future Rulemaking**

An additional major issue that warrants relief is the exclusion of asphalt cement and hot-mix asphalt from all SPCC-related requirements.<sup>38</sup> This was addressed earlier in some detail in our June 2004 letter. It has long been recognized that the storage of liquid asphalt cement and hot-mix asphalt is not a significant threat to U.S. waters. Advocacy had recommended that asphalt cement and hot-mix asphalt not be subject to any SPCC requirements in that letter. More specifically, we recommended that EPA (1) eliminate asphalt cement and hot-mix asphalt from the calculation of the 1,320 gallon site-based threshold, and (2) eliminate all requirements relating to the asphalt cement and hot-mix asphalt containers and silos.

Another approach would be for EPA to draft guidance that would advise facilities to rely on active measures to stop any spill from reaching navigable waters, instead of the more expensive measures such as secondary containment. Revising the guidance would help alleviate the problem for facilities handling asphalt.

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<sup>38</sup> This has been discussed extensively in correspondence with the agency. See Comments on EPA's Notice of Data Availability, Associated General Contractors of America, November 19, 2004; Letter from National Asphalt Paving Association and Associated General Contractors of America to Peter Truitt, EPA, April 14, 2004; Abt Associates Memorandum to Peter Truitt, EPA, February 26, 2004; Gary Fore, National Asphalt Paving Association, Memorandum to Peter Truitt, February 26, 2004; Letter from Norbert Dee, National Petrochemical and Refiners Association to Dave Evans, EPA, June 3, 2004.



## VIII. Conclusion

We are very pleased to have been able to work closely with EPA in developing these recommendations, and congratulate the agency on its excellent proposal. We have heard directly from the small business community that improving the SPCC program is a very high priority. EPA has the opportunity to reduce the costs of the SPCC rule by hundreds of millions of dollars, increase compliance with the SPCC rule requirements and focus efforts on measures that will prevent more oil spills reaching navigable waters. We look forward to working with the agency on promulgating this rule in late 2006 and completing other future regulatory improvements. Thank you for your consideration and please do not hesitate to contact me or Kevin Bromberg of my staff at 202-205-6964 or kevin.bromberg@sba.gov.

Sincerely,

Thomas M. Sullivan  
Chief Counsel for Advocacy

Kevin Bromberg  
Assistant Chief Counsel

Enclosures: “Proposed Reforms to the SPCC Professional Engineer Certification Requirement: Designing a More Cost Effective Approach for Small Facilities” (June 2004) by Jack Faucett Associates for the Office of Advocacy under contract SBAHQ-00-D-006, available at <http://www.sba.gov/advo/>

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cc w/o enclosure:

Donald Arbuckle, Acting Administrator, Office of Information and Regulatory Affairs, OMB

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**PROPOSED REFORMS TO SPILL PREVENTION  
CONTROL AND COUNTERMEASURES (SPCC)  
REGULATIONS**

**TECHNICAL MEMORANDUM**

Prepared for:

U.S. Small Business Administration  
Office of Advocacy  
409 Third Street, SW  
Washington DC 20416

Prepared by:

E.H. Pechan & Associates, Inc.  
3622 Lyckan Parkway, Suite 2002  
Durham, NC 27707

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Work Assignment No. 04-5A



## A. BACKGROUND

Under a December 12, 2005 proposed SPCC rule (70 Fed. Reg. 73524, December 12, 2005), EPA is allowing small facilities that meet the new “qualified facility” criteria to opt out of the requirement that their SPCC plans are certified by a professional engineer (PE). The EPA defines a “qualified facility” as a facility that has a total oil storage capacity of 10,000 gallons or less and a facility that has not had a spill in the last ten years according to the definition found in 112.1(b).<sup>1</sup> The EPA proposal is in contrast to a proposal initially advanced by a coalition of small business trade associations and the U.S. Small Business Administration (SBA)’s Office of Advocacy in 2004.<sup>2</sup>

Under the Office of Advocacy (Advocacy) approach, currently regulated SPCC facilities would be required to meet all substantive SPCC requirements (e.g., secondary containment), but the formal written SPCC plan requirement would be eliminated or revised for facilities with smaller oil storage capacities. The Advocacy approach divides the regulatory community into three categories (tiers) based on each facility’s oil storage capacity. For facilities with capacities between 1,321 and 5,000 gallons (Tier I), EPA would no longer require an SPCC plan. All other facilities (Tier II representing facilities with 5,001 to 10,000 gallons capacity, and Tier III representing facilities with greater than 10,000 gallons capacity) would be required to prepare an SPCC plan. However, Tier II facilities would no longer be required to have their plans certified by a PE. Table 1 presents a comparison of EPA’s proposal with the proposal advanced by Advocacy.

**Table 1. Comparison of Advocacy and EPA SPCC Plan Requirement Proposals**

Storage Capacity (gallons)	Advocacy	EPA
1,321 to 5,000	No SPCC plan	SPCC plan without PE certification
5,001 to 10,000	SPCC plan without PE certification	
Greater than 10,000	SPCC plan with PE certification	

## B. ESTIMATION OF ANNUAL SPILL VOLUMES BY TIER CATEGORY

In April 1995, EPA conducted a national survey of oil storage facilities potentially subject to the SPCC regulations. The purpose of the survey was to answer five specific questions: (1) How many facilities are regulated by EPA's SPCC program; (2) What types of facilities does the SPCC program regulate; (3) What do these facilities look like;

<sup>1</sup> Or has never had a spill when a facility has been in operation for less than ten years.

<sup>2</sup> Letter from Douglas Greenhaus, National Automobile Dealers Association *et al.*, to David Evans, U.S. Environmental Protection Agency, “Re: Small Facility Alternative to Professional Engineer Certification,” January 20, 2004; and Letter from Thomas M. Sullivan, and Kevin Bromberg, U.S. Small Business Administration, to Thomas P. Dunne, U.S. Environmental Protection Agency, “RE: Spill Prevention, Control and Countermeasure (SPCC) Rule; 67 Fed. Reg. 47042 (July 17, 2002); Recommendation for Adoption of Interim Final Rule,” June 10, 2004.

(4) Which facilities pose the greatest oil spill risk; and (5) How effective is the SPCC program in reducing oil spill risk?

The EPA calculated average facility oil spill volumes by storage capacity range from the survey responses that were received (EPA, 1996). For example, the survey results indicated that the average facility with a storage capacity between 1,500 and 2,000 gallons discharged approximately 0.59 gallons of oil for the year surveyed.<sup>3</sup> However, documentation of the survey results does not provide the number of facilities surveyed in each storage capacity range. This omission precluded Pechan from calculating weighted average per facility spill volumes for the more aggregate storage capacity ranges that pertain to Tier I, Tier II, and Tier III facilities. Therefore, Pechan calculated the simple average of the per facility spill volumes for the storage capacity ranges of interest for each Tier. For example, Pechan computed the Tier I facility average spill volume (1.6 gallons) by averaging the following per facility spill volumes reported by EPA:

- 1,500 to 2,000 gal (0.59 gallons);
- 2,000 to 2,500 gal (0.85 gallons);
- 2,500 to 3,000 gal (0.09 gallons);
- 3,000 to 4,000 gal (6.03 gallons); and
- 4,000 to 5,000 gal (0.63 gallons).<sup>4</sup>

Table 2 reports the Tier level estimates of average per facility spill volumes calculated from actual spill data compiled from the EPA survey. Next, Pechan obtained estimates of the total number of SPCC regulated facilities by Tier from EPA's regulatory analysis for the proposed SPCC rule amendments (EPA, 2005). These facility counts are also displayed in Table 2. Finally, Pechan estimated the total volume of spills associated with each Tier by multiplying the average per facility spill volumes by the facility counts. The estimated total spill volume by Tier is also reported in Table 2.

**Table 2. Number of Facilities and Total Spill Volume Estimates by Tier Category**

	<b>Tier I (1,321 to 5,000 gallons)</b>	<b>Tier II (5,001 to 10,000 gallons)</b>	<b>Tier III (Greater than 10,000 gallons)</b>
Per Facility Spill Volume (gallons)	1.6	27.3	2,372
Number of Facilities <sup>5</sup>	235,656	86,018	296,559
Total Spill Volume (gallons)	383,334	2,350,298	112,485,560

<sup>3</sup> The EPA survey results are not well documented, but appear to include both facilities with spills and facilities without spills.

<sup>4</sup> Because available data indicate that there are considerably more facilities with smaller storage capacities than facilities with larger capacities, it is anticipated that the simple average calculation will overstate the Tier level spill volume estimates because greater spill volumes are generally associated with higher storage capacity facilities. In its own analysis of the 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" (EPA, 1996).

<sup>5</sup> Computed from estimates reported in exhibit 3-1 of EPA, 2005.

Table 3 reports the percentage of facilities and percentage of total volume of oil spilled for facilities in each of the three Tiers identified in Advocacy's proposal. This table indicates the fact that although Tier I facilities are numerous, they account for only a very small percentage (0.3) of the total volume of oil spilled by SPCC regulated facilities. While accounting for nearly 14 percent of all SPCC regulated facilities, Tier II facilities account for only 2 percent of total oil spilled.<sup>6</sup>

**Table 3. Comparison of Facility and Spill Volume Estimates by Storage Capacity**

	<b>Tier I (1,321 to 5,000 gallons)</b>	<b>Tier II (5,001 to 10,000 gallons)</b>	<b>Tier III (Greater than 10,000 gallons)</b>
% of Facilities	38.1	13.9	48.0
% of Spill Volume	0.3	2.0	97.6

### **C. ESTIMATION OF SPCC PLAN COST SAVINGS FOR ADVOCACY AND EPA PROPOSALS**

In order to evaluate the potential cost savings of the Advocacy qualified facility proposal relative to EPA's proposal, Pechan first compiled estimates representing the total cost for both a new SPCC plan and an amended SPCC plan, as well as estimates for only the PE certification portion of these total costs. Table 4 displays each of these costs estimates and identifies the source of each estimate.

**Table 4. Cost Estimates for New and Amended SPCC Plans**

	<b>PE Certification</b>	<b>Total</b>
New Plan	\$2,000 (from EPA, 2005)	\$3,000 (from JFA, 2004) <sup>7</sup>
Amended Plan	\$750 (from EPA, 2005)	\$1,125 (computed from EPA's PE certification cost and total plan to PE certification plan cost proportion for new plans)

<sup>6</sup> Note that the JFA, 2004 report estimated the percentage of total spill volume for facilities between 1,321 and 10,000 gallons as less than 0.2 percent. The values reported herein reflect estimates derived using recently released facility counts by storage capacity category (from EPA, 2005).

<sup>7</sup> JFA reports that small facility plan costs range between \$2,500 and \$3,500, although the source for these estimates is not documented. Additional support for the \$3,000 estimate is provided by the fact that \$3,100 was the median of the total plan cost estimates provided by commenters to EPA's Notices of Data Availability (69 Fed. Reg. 56182, 2004 and 69 Fed. Reg. 56184, 2004).

Because EPA has acknowledged the existence of noncompliance with current SPCC requirements,<sup>8</sup> and because an extensive survey conducted by the U.S. Department of Agriculture (USDA) indicated that approximately 60 percent of farmers were not aware of SPCC requirements,<sup>9</sup> Pechan developed cost savings estimates for the current noncompliant facilities. Pechan also prepared amended plan cost savings estimates for a ten year period for each proposal. These estimates were based on an assumption that 50 percent of all SPCC regulated facilities would require one plan amendment over a 10 year period.<sup>10</sup>

To estimate the number of facilities that are currently subject to SPCC requirements, but do not have an SPCC plan, Pechan divided the Tier I and Tier II facility counts into facilities in the farm sector (117,500 in Tier I and 17,204 in Tier II) and facilities not in the farm sector (117,500 in Tier I and 68,814 in Tier II) based on percentages calculated from facility counts in EPA's regulatory analysis (EPA, 2005).<sup>11</sup> Next, Pechan assumed that 60 percent of Tier I and II farm facilities do not have an SPCC plan based on the results of the USDA survey described above.<sup>12</sup> In lieu of information on the noncompliance percentage for nonfarm facilities, Pechan assumed noncompliance at half the rate estimated for the farm sector (i.e., 30 percent).

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<sup>8</sup> The EPA agrees that noncompliance exists, but does not estimate the noncompliance rate: "EPA does recognize, however, that there is non-compliance with the SPCC requirements by some portion of the regulated community" (EPA, 2005 at pg. 8).

<sup>9</sup> Specifically, 61 percent of farmers surveyed by the USDA were unaware of SPCC requirements (USDA, 2005).

<sup>10</sup> This number may be higher if facilities need to make plan changes to reflect EPA's 2002 SPCC rule amendments.

<sup>11</sup> Pechan did not estimate the cost savings for new facilities; those savings would be a small fraction of total savings (less than \$10 million); the total savings are dominated by the savings estimated for existing facilities.

<sup>12</sup> This is a conservative estimate as there is surely an additional percentage that is aware of SPCC requirements, but does not have an SPCC plan.



## 1. EPA Proposal

The EPA's qualified facility proposal removes the requirement that an SPCC plan be certified by a PE for facilities with storage capacities of 10,000 gallons or less (equivalent to Tier I and Tier II facilities under Advocacy's proposed scheme). To estimate the cost savings of EPA's proposal, Pechan multiplied the PE certification cost estimate for new plans (\$2,000) by the estimated number of current facilities that do not have an SPCC plan, and multiplied the PE certification cost estimates for amended plans (\$750) by the estimated number of existing plans that will be amended over a 10 year period.

## 2. SBA Proposal

For Tier II facilities, Advocacy's proposal is the same as EPA's proposal, however, under Advocacy's proposal, Tier I facilities would not be required to prepare a written SPCC plan. Because Tier II facilities have the same requirements under both proposals, the Tier II facility cost savings are the same under each proposal. To estimate Tier I facility cost savings under the Advocacy proposal, Pechan multiplied the total cost estimate for a new plan (\$3,000) by the estimated number of current facilities that do not have an SPCC plan, and multiplied the total cost for an amended plan (\$1,125) by the estimated number of existing plans that will be amended over a 10 year period.

## 3. Comparison of Advocacy and SBA Proposals

Table 5 compares the estimated cost savings for new plans and amended plans by Tier category under the EPA and Advocacy proposals. As indicated by the table, the Advocacy proposal represents a substantial cost savings of nearly \$130 million relative to EPA's proposal.

**Table 5. Comparison of Advocacy and EPA SPCC Plan Requirement Proposal  
Total Cost Savings**

		<b>New Plan Savings</b>	<b>Amended Plan Savings</b>	<b>Total Savings</b>
EPA	Tier I	\$211,500,000	\$48,468,750	\$259,968,750
	Tier II	\$61,932,960	\$20,644,320	\$82,577,280
SBA	Tier I	\$317,250,000	\$72,703,125	\$389,953,125
	Tier II	same as EPA	same as EPA	same as EPA
<b>Additional SBA Cost Savings</b>				<b>\$129,984,375</b>

Because the risk of reaching navigable waters is lower for small facilities, and because SPCC plans have not by themselves been demonstrated to reduce the oil spill risk to the environment, a cost-effective approach to reducing risk should address ways to reduce the cost of SPCC plan development for facilities with smaller storage capacities. Given

average facility spill volumes and the fact that EPA has been unable to conclude that spill prevention plans lead to spill reductions,<sup>13</sup> it is difficult to assert that the theoretical spill reduction benefits of SPCC plan development will outweigh the substantial cost of plan development for Tier I facilities.

To further demonstrate the value of the Advocacy proposal relative to EPA's proposal, Pechan calculated the maximum potential cost-effectiveness of the SPCC plan requirement for Tier I and Tier II facilities. The maximum potential cost-effectiveness reflects the total volume of spills that could be reduced if each SPCC plan was one hundred percent effective at eliminating oil discharges. Utilizing the average small facility plan cost of \$3,000, and the total number of Tier I facilities subject to current SPCC plan requirements, Pechan estimates the total cost of new SPCC plans for all Tier I facilities at \$705 million. When this cost is spread over a ten year period, and compared to projected total spill volumes over this period, the maximum potential cost-effectiveness for Tier I facilities is estimated at \$184 per gallon. Using analogous assumptions to those used above, the cost-effectiveness of total potential Tier II facility spill reductions is estimated at \$10.98 per gallon. This comparison demonstrates why Tier I facilities are a much less desired target for a SPCC plan requirement than Tier II and Tier III facilities.

**Table 6. Comparison of Potential Cost-Effectiveness for New SPCC Plans**

	<b>Estimated Spill Volume Over 10 Year Period (gallons)</b>	<b>Total New Plan Cost</b>	<b>Potential New Plan Per Gallon Cost Effectiveness</b>
Tier I	3,833,338	\$705,000,000	\$183.91
Tier II	23,502,985	\$258,054,000	\$10.98

Because the risk of reaching navigable waters is lower for small facilities, and by themselves, SPCC plans have not been demonstrated to reduce the oil spill risk to the environment, a cost-effective approach to reducing risk should address ways to reduce the cost of SPCC plan development for facilities with smaller storage capacities. Therefore, Advocacy's qualified facility proposal appears preferable to EPA's proposal.

<sup>13</sup> Based on an analysis of survey data collected from facilities subject to SPCC regulation, EPA was unable to conclude that a written spill prevention (or spill response) plan is effective in minimizing oil spill risk to the environment (EPA, 1996). However, EPA was able to conclude that other specific spill prevention/control measures (e.g. secondary containment) are effective in minimizing this risk.

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