Regulatory Impact Analysis for the Final Amendment to the Oil Pollution Prevention Regulations to Exempt Milk and Milk Product Containers, Associated Piping and Appurtenances (40 CFR PART 112)

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Chapter 1: Executive Summary

The Environmental Protection Agency (EPA or the Agency) is finalizing an amendment to the Spill Prevention, Control, and Countermeasure (SPCC) rule in order to tailor and streamline requirements for owners or operators with milk and milk product containers. Specifically, EPA is exempting all milk and milk product containers, and associated piping and appurtenances from the SPCC requirements. The Agency is also removing the compliance date requirements for the exempt containers. As a result, the capacity of exempted milk and milk product containers would not be included toward a facility's total oil storage capacity calculation. This could result in either: (1) facilities that were subject to full SPCC compliance to now be able to qualify to self certify the facility's Plan as a Tier II qualified facility, (2) Tier II qualified facilities to now be eligible for Tier I option to complete the SPCC Plan template, and (3) other facilities to now be excluded entirely from SPCC regulation when their aggregate oil storage capacity is less than the minimum capacity regulated. The argument behind this amendment is that the sanitation requirements in existing standards and ordinances for milk and milk product containers yield a similar spill prevention outcome as that intended by the SPCC requirements. EPA believes that the rule amendments continue to protect the environment and, at the same time, provide the opportunity for regulated facilities to reduce the cost of SPCC compliance.

The U.S. Department of Agriculture (USDA) surveys milk and milk product industries each year. The trend data over the past twenty years indicates that the number of dairy farms continues to decline. The latest estimates, for 2009, are used in this economic analysis. USDA data indicate that there are 65,000 dairy farms and 1,178 milk manufacturing facilities in the U.S. These data provide key input into the economic analysis.

In January 2009, EPA proposed to exempt milk containers, their associated piping and appurtenances from the SPCC rule provided they are also constructed in accordance with the current applicable 3-A Sanitary Standards, and are subject to the current applicable Grade "A" Pasteurized Milk Ordinance (PMO) sanitation requirements or a State dairy regulatory equivalent to the current applicable PMO. The Agency requested comment on an exemption for milk product containers, their associated piping and appurtenances from the SPCC rule provided they met the same criteria proposed for the milk containers. For that proposal, EPA reported cost savings for both dairy farms and milk manufacturing facilities with milk containers. The Agency is finalizing the proposed exemption to exempt milk containers, associated piping and appurtenances and is further extending the exemption to also include milk product containers, associated piping and appurtenances. The exemption for all milk product containers, piping and appurtenances is based on these containers being generally constructed to the 3-A Sanitary Standards, and subject to the PMO, the U.S. Department of Agriculture (USDA) Recommended Requirements for Milk for Manufacturing Purposes and Its Production and Processing (*Milk for Manufacturing Purposes and Its Production and Processing; Requirements Recommended for Adoption by State Regulatory Agencies*), or State dairy regulatory equivalents. Cost savings for milk manufacturing facilities with milk product containers were not

applicable for the proposal. These costs savings are applicable for the final rule, because the Agency has extended the exemption to include these containers.

EPA estimates that dairy farms incur an average annualized savings of about $133 million (2009$, 7% discount rate) and milk product manufacturing plants incur an annualized savings of about $13 million. In aggregate, the total annualized savings will be about $146 million (Exhibit 1). The estimated cost savings reflect a decrease in the number of dairy farms from about 75,000 farms to 65,000 farms between 2006 and 2009, as well as additional milk product manufacturing facilities with containers eligible for the expanded exemption.

Exhibit 1
Summary of Estimated Cost Savings for the Dairy Farms, and Milk Manufacturing Facilities
($2009 Millions)

Cost Savings Incurred	Annualized Cost Savings	
	Discounted at 3%	**Discounted at 7%**
Dairy Farms	$130	$133
New Dairy Farms	$2	$2
Existing Dairy Farms	$128	$131
Milk Manufacturing Facilities	$13	$13
New Manufacturing Facilities	$2	$2
Existing Manufacturing Facilities	$11	$11
Total	**$143**	**$146**

Chapter 2: Introduction

EPA is finalizing an amendment to the Spill Prevention, Control, and Countermeasure (SPCC) rule to exempt all milk and milk product containers associated piping and appurtenances. The capacity of exempt milk and milk product containers, associated piping and appurtenances is not to be included in a facility's oil storage capacity calculation. The Agency is also removing the compliance date requirements for the exempt containers.

The Agency believes the combination of sanitary standards and ordinances satisfactorily address the prevention of oil discharges from the exempted milk and milk product containers, associated piping and appurtenances. The 3-A Sanitary Standards for equipment construction require the use of durable materials and sanitary construction criteria that can be easily maintained and kept clean and free of defects when appropriate cleaning procedures and chemicals are used. The PMO sanitation requirements include construction and sanitation standards and frequent State and Federal inspections for these containers, piping and appurtenances. These containers, associated piping and appurtenances are also subject to the USDA Recommended Requirements which establish criteria similar to that of the PMO for milk for manufacturing purposes, including its processing, use, labeling, storage, inspection, certification and facility licensing. For the exempt containers, equivalent State dairy requirements for permits/licenses, operations and inspections are as stringent as the current applicable PMO requirements and/or USDA Recommended Requirements.

The final amendment provides relief from certain regulatory mandates to owners or operators of affected facilities, and could change the manner in which they comply with other, still applicable mandates. Under the terms of Executive Orders 12866 and 13563, this action has been judged a "significant regulatory action" because it would have an annual effect on the economy of $100 million or more. The order defines "significant regulatory action" as one that is likely to result in a rule that may do one or more of the following:

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

2. Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency.

3. Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof.

4. Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Orders.

Once an action is deemed subject to Executive Orders 12866 and 13563, agencies are required to assess all costs and benefits of regulatory activities, including quantitative and qualitative

measures. The Executive Orders also require assessment of benefits and costs, including but not limited to those related to the environment, public health and safety, distributive impacts, and issues of equity. This action was submitted to OMB for review, and the Agency prepared this regulatory impact analysis (RIA) in support of the regulatory requirements.

This RIA provides an estimate of reduced compliance costs for owners or operators of certain types of facilities and equipment as a result of the amendment to the rule. EPA believes that the amendments to SPCC in this final rule satisfactorily address the prevention of oil discharges without reducing the level of environmental protection. Thus, this analysis focuses on estimating the incremental change in compliance costs resulting from the final rule amendments.

There are many uncertainties underlying this analysis, including the estimates of unit cost savings and the number of affected facilities. While EPA did not have large samples of data for various components of the analysis, the Agency has tried to make the best use of the available data to make informed decisions regarding the assumptions and estimates used in the analysis.

The remainder of this chapter provides background information on the Oil Pollution Prevention regulation, identifies the statutory authority for the regulation, summarizes the regulatory changes, and describes the organization of this report.

2.1 Statutory Authority

Section 311(j)(1)(C) of the Clean Water Act (CWA or the Act), 33 U.S.C. 1321(j)(1)(C), requires the President to issue regulations establishing procedures, methods, equipment, and other requirements to prevent discharges of oil to navigable waters or adjoining shorelines from vessels and facilities and to contain such discharges. The President delegated the authority to regulate non-transportation-related onshore facilities to EPA in Executive Order 11548 (35 FR 11677, July 22, 1970), which was replaced by Executive Order 12777 (56 FR 54757, October 22, 1991). A Memorandum of Understanding (MOU) between the U.S. Department of Transportation (DOT) and EPA (36 FR 24080, November 24, 1971) established the definitions of transportation-related and non-transportation-related facilities. An MOU between EPA, the U.S. Department of the Interior (DOI), and DOT (59 FR 34102, July 1, 1994) re-delegated the responsibility to regulate certain offshore facilities from DOI to EPA.

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

2.2 Regulatory Background

EPA has promulgated a series of amendments to the SPCC rule.[1] Farms and manufacturing facilities handling animal fats and vegetable oils (AFVOs), including milk containers, may benefit from several of those amendments. In December 2006, EPA amended the SPCC rule to provide an option for "qualified facilities" to prepare a self-certified SPCC Plan instead of one that is reviewed and certified by a Professional Engineer (PE). In December 2008, EPA revised the SPCC rule to further streamline the SPCC requirements for a subset of qualified facilities, designated "Tier I qualified facilities," which meet the qualified facilities eligibility criteria and have no individual aboveground oil storage containers with a storage capacity greater than 5,000 gallons. The revised rule allows Tier I qualified facility owners or operators to complete a self-certified SPCC Plan template in lieu of a full SPCC Plan. All other qualified facilities are designated "Tier II qualified facilities."

Milk and milk products typically contain a percentage of animal fat, which is non-petroleum oil. Thus, milk and milk product containers are subject to the SPCC rule when they meet the applicability criteria set forth in §112.1. In the SPCC rule, the term "bulk storage container" is defined at §112.2 as "any container used to store oil." Therefore, bulk storage containers storing milk and milk products are subject to applicable provisions under §112.12. Additionally, vessels for milk pasteurization and for milk and milk product processing, while not bulk containers, are considered oil filled-manufacturing equipment and are subject to the general provisions of the SPCC rule under §112.7.

In response to EPA's October 2007 proposal for amendments to the SPCC rule (72 FR 58378, October 15, 2007), several comments requested an exemption for milk storage and processing containers. These comments suggested milk containers be exempted from SPCC based on sanitation requirements and identified the PMO, which specifically addresses milk intended for human consumption. On January 15, 2009 the Agency published a proposal to amend the SPCC rule to tailor and streamline the requirements for the dairy industry, specifically for those facilities that have milk containers, associated piping and appurtenances constructed and subject to specific standards and ordinances [74 FR 2461]. The Agency proposed an exemption for milk product containers and their associated piping and appurtenances from the SPCC rule provided they are also constructed in accordance with the current applicable 3-A Sanitary Standards, and are subject to the current applicable Grade "A" PMO sanitation requirements or a State dairy regulatory equivalent to the current applicable PMO. The Agency also requested comment on an exemption for milk product containers and their associated piping and appurtenances from the SPCC rule provided they met the same criteria as the one proposed for the milk containers.

Basis for the Final Rule

PMO is a model ordinance maintained through a cooperative agreement between the States, the FDA, and the regulated community. States typically adopt it either by reference, or by

[1] 40 CFR Part 112 Oil Pollution Prevention; Spill Prevention, Control, and Countermeasure Rule Requirements—Amendments; Final Rules. 73 FR 74236, December 5, 2008 and 74 FR 58784, November 13, 2009.

directly incorporating similar requirements into their statutes or regulations. All milk handling operations subject to the PMO are required to have an operating permit, and are subject to inspection by state dairy regulatory agencies. The PMO model code establishes criteria for the permitting, inspection and enforcement of milk handling equipment and operations that govern all processes for milk intended for human consumption.

Milk and milk product containers and their associated piping and appurtenances are generally constructed according to an industry standard established by the 3-A Sanitary Standards organization (3-A Sanitary Standards, Inc., McLean, VA, http://www.3-a.org) which satisfy the PMO model code construction requirements for milk and milk product containers and associated piping and appurtenances.

These containers, associated piping and appurtenances are also subject to the USDA Recommended Requirements (*Milk for Manufacturing Purposes and Its Production and Processing; Requirements Recommended for Adoption by State Regulatory Agencies*; see http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELDEV3004791). These model regulations relate to quality and sanitation requirements for the production and processing of manufacturing grade milk, which are recommended for adoption and enforcement by the various States that regulate manufacturing grade milk. The purpose of the model requirements is to promote uniformity in State dairy laws and regulations relating to manufacturing grade milk.

Milk and milk product containers, associated piping and appurtenances are generally constructed in accordance with current applicable 3-A Sanitary Standards, and are subject to the current applicable PMO sanitation requirements, USDA Recommended Requirements for Milk for Manufacturing Purposes and its Production and Processing, or equivalent State dairy regulations The 3-A Sanitary Standards for equipment construction require the use of durable materials and sanitary construction criteria that can be easily maintained and kept clean and free of defects when appropriate cleaning procedures and chemicals are used. The PMO sanitation requirements include construction and sanitation standards and frequent State and Federal inspections for these containers, piping and appurtenances, and provide definitions and a list of those milk products to which it applies. The USDA Recommended Requirements establish criteria similar to that of the PMO for milk for manufacturing purposes, including its processing, use, labeling and storage. Furthermore, these requirements include provisions for inspections, certification and licensing of facilities that handle and process milk for manufacturing purposes and its products. These requirements serve as basis for the exemption of milk and milk product containers and their associated piping and appurtenances from the SPCC rule. The Agency believes the combination of these standards and ordinances satisfactorily address the prevention of oil discharges.

After the Agency's review of comments and consideration of all relevant facts, these amendments expand the proposed exemption to include milk product containers, associated piping and appurtenances because they are constructed and subject to the same specific standards and ordinances as those proposed for milk containers. The Agency is also removing compliance date requirements for the exempt containers.

2.3 Statement of Need for Regulatory Action

EPA has identified opportunities to improve the efficiency of the SPCC regulatory program. To that end, the Agency proposed a series of revisions to the rule in 2005 (70 FR 73524), and received comments on these proposed revisions from regulated parties, professional associations, environmental interest groups, and others. Several comments requested an exemption for milk storage and processing containers. In response, EPA proposed to exempt from the SPCC rule milk containers, associated piping and appurtenances, and sought comments on exempting milk product containers, constructed and subject to specific standards and ordinances (74 FR 2461, January 15, 2009). EPA reviewed the comments from this proposal and evaluated new data relevant to the operations of milk and milk product manufacturing facilities regulated under the rule. As a result, EPA has determined that these final amendments are appropriate, provide an effective approach to meet statutory requirements, and prevent oil discharges while reducing the costs of compliance. Thus the final amendments improve efficiency of the SPCC regulatory program.

2.4 Final Amendments to the Rule

EPA is finalizing an exemption from SPCC requirements for milk and milk product containers, associated piping and appurtenances because they are constructed according to current applicable 3-A Sanitary Standards, and are subject to the currently applicable PMO, USDA Recommended Requirements, or equivalent State dairy regulatory requirements. The capacity of exempt milk and milk product containers is not to be included in a facility's total oil storage capacity calculation. The Agency is also removing compliance date requirements for the exempt containers.

2.5 Objectives of the Economic Analysis

The purpose of this RIA is to analyze and present the costs and benefits of the final milk and milk product containers exemption. The RIA also meets the requirements for economic analysis of Executive Order 12866–Regulatory Planning and Review[2]; Executive Order 13563-Improving Regulation and Regulatory Review[3]; the Regulatory Flexibility Act (RFA)[4] and Small Business Regulatory Enforcement Fairness Act (SBREFA)[5]; Executive Order 13132–Federalism[6]; Executive Order 13175–Consultation and Coordination with Indian Tribal Governments[7]; Executive Order 13045–Protection of Children from Environmental Health & Safety Risks[8]; Executive Order 13211–Actions That Significantly Affect Energy Supply, Distribution, or Use[9]; the National Technology Transfer and Advancement Act; and the Paperwork Reduction Act

2 58 FR 51735; October 4, 1993.
3 76 FR 3821; January 21, 2011.
4 5 U.S.C. Sec. 603; 5 U.S.C. Sec. 604.
5 Public Law 104-121, March 29, 1996.
6 64 FR 43255, August 10, 1999.
7 65 FR 67249, November 9, 2000.
8 62 FR 19885; April 23, 1997.
9 66 FR 28355, May 22, 2001.

(PRA);[10] Environmental Justice Executive (EJ) Order 12898 – Federal Actions to Address Environmental Justice In Minority Populations and Low-income Populations.

2.6 Organization of this Report

The remainder of this report is organized as follows:

- Chapter 3: describes the methodology for the analysis.
- Chapter 4: describes the affected universe of facilities, the unit compliance costs savings, and the total economic impact of the final rule on affected facilities.
- Chapter 5: presents a qualitative discussion on the human health and welfare impacts.
- Chapter 6: presents a summary of small business impacts and responds to Executive Orders.
- Chapter 7: provides key limitations and assumptions of the analysis.
- Chapter 8: presents conclusions of the analysis.

[10] 44 U.S.C. Sec. 3501.

Chapter 3: Methodology

This chapter presents the overall methodology used to estimate the economic impacts of the final amendment to the SPCC regulations. Section 3.1 describes the regulatory and economic baseline for the analysis; Section 3.2 outlines the basic framework for estimating cost savings from the final amendment to the SPCC rule.

3.1 Regulatory Baseline for the Analysis

The impacts of the rule amendment depend on the assumed baseline of industry behavior in the absence of the new rule. For the economic impact analysis of the 2008 final amendments to the SPCC rule, EPA used as its baseline the SPCC rule requirements under 40 CFR part 112, as amended in 2002 (71 FR 77266-77293). As recommended by EPA's "Guidelines for Preparing Economic Analyses", (2000), the Agency assumed that facilities were in full compliance with the 2002 amended SPCC rule. For this analysis, EPA is changing the baseline of 2002 for the milk and milk products container proposal to 2008 for the final rule. SPCC rule amendments in 2006 and 2008 contained provisions that provided additional flexibility for regulated facilities including milk and milk production facilities. Assuming full compliance with the new 2008 baseline, all eligible milk and milk product manufacturing facilities have taken advantage of the additional flexibility under the regulations.

Since certain SPCC requirements are similar in nature to those imposed by state regulations and facility owner/operators of many industries follow specific industry standards, compliance activities and their associated costs cannot be fully attributed to the SPCC rule. Because of the lack of data on the extent to which facilities adopt industry standards, in this RIA the Agency estimated the cost savings associated with the SPCC requirements without accounting for possible overlap with industry standards. As a result, the estimated compliance cost savings are likely to present an overestimate of the savings attributed to the SPCC rule. However, EPA did take into account requirements imposed by state regulations that are similar to the SPCC requirements. For details of the state overlap analysis, refer to Section 5.4 of the Regulatory Impact Analysis for the 2008 SPCC Rule.[11] In sum, when reporting the compliance cost savings, EPA accounted for potential overlap with state regulations but not with industry standards.

3.2 Cost Savings from the Final Amendment

This section outlines a general approach for estimating economic impacts on the regulated community as a result of the final amendment to the SPCC rule. The approach involves the following key steps: estimating the number of facilities affected by the final amendment; identifying the specific behavioral changes that may occur; estimating the unit costs of affected compliance measures under the baseline and amended regulatory scenarios; and applying the change in unit costs to the projected number of affected facilities. The analysis estimates the

[11] U.S. Environmental Protection Agency (EPA). November 2008. Regulatory Impact Analysis for the Final Amendments to the Oil Pollution Prevention Regulations (40 CFR PART 112).

present value (PV) of cost savings over the 10-year period and the PV of the cost savings are annualized with a payment (PMT) function.[12]

The key steps in the analysis are summarized below:

1. *Estimate the universe of facilities affected by the final rule*. EPA estimated a baseline universe of SPCC-regulated milk and milk product manufacturing facilities and range of oil storage capacities (e.g., facilities with oil storage capacity between 1,321 and 10,000 gallons of oil). EPA then estimated the number of facilities that might be affected by the amendment. EPA then projected the anticipated annual change in the number of affected facilities over the 10-year analysis period, using industry-specific growth rates.

2. *Estimate changes in compliance cost elements resulting from the final rule.* EPA used the unit cost estimates developed for specific baseline requirements and compliance measures expected to be affected by the final amendment to the SPCC rule. Baseline requirements are based on the 2008 SPCC rule.

3. *Estimate total reduction in compliance costs to potentially affected facilities*. EPA derived the cost savings for owners or operators of affected facilities, and multiplied these estimates by the total number of affected facilities. Finally, EPA estimated the net present value (NPV) of the net change in compliance costs and the NPV is annualized with a payment (PMT) function over a 10-year period using 3 percent and 7 percent discount rates.

   Note: The NPV formula and annualization formula are described in EPA's "Guidelines for Preparing Economic Analyses, September 2000.

[12] "For regulatory analysis, you should provide estimates of net benefits using both 3 percent and 7 percent." OMB, September 17, 2003, OMB Circular A-4, p. 33-34. Available at http://www.whitehouse.gov/omb/circulars/a004/a-4.pdf.

Chapter 4: Cost Impact Analysis

4.1 Background

EPA is finalizing an amendment to the Spill Prevention, Control, and Countermeasure (SPCC) rule that exempts milk and milk product containers, associated piping and appurtenances EPA is exempting these containers because they are constructed in accordance with currently applicable 3-A Sanitary Standards, USDA Recommended Requirements, or equivalent State dairy regulatory requirements.

The 3-A Sanitary Standards for equipment construction require the use of durable materials and sanitary construction criteria that can be easily maintained and kept clean and free of defects. Both the PMO sanitation requirements and the USDA Recommended Requirements include construction and sanitation standards and frequent State and/or Federal inspections for these containers, piping and appurtenances, and provide definitions and/or list those milk and milk products to which they apply. Equivalent State dairy requirements for permits/licenses, operations and inspections are those that are at least as stringent as the current applicable PMO requirements and/or USDA Recommended Requirements. The Agency believes the 3-A Sanitary Standards along with the PMO requirements, USDA Recommended Requirements, or State dairy regulatory equivalent satisfactorily address the prevention of oil discharges for milk and milk product containers, associated piping and appurtenances.

4.2 Universe of Affected Facilities

Dairy farms, milk, and milk product manufacturing facilities are affected by this exemption (Exhibit 2). Both new and existing facilities are affected, although the cost savings would be different across the two types of facilities. Exhibit 2 shows the industry codes for the affected facilities based on the North American Industry Classification System (NAICS).[13] While the preamble for this final rule uses the 3-digit level NAICS codes, the exhibit also presents 6-digit codes for the purpose of the economic analysis. NAICS 112120, *Dairy Cattle and Milk Production*, includes dairy cattle farms and milk production facilities. NAICS 31151, *Dairy Product Manufacturing*, includes manufacturing dairy products (except frozen) from raw milk and/or processed milk products and manufacturing dry, condensed, concentrated, and evaporated dairy. NAICS 311511, *Fluid Milk Manufacturing*, includes facilities that manufacture processed milk products, such as pasteurized milk or cream and sour cream. NAICS 311512,*Creamery Butter Manufacturing*, includes manufacturing creamery butter from milk and/or processed milk products. NAICS 311513, *Cheese Manufacturing*, includes facilities that manufacture cheese products from raw milk and/or processed milk products. NAICS 311514 *Dry, Condensed, and Evaporated Dairy Product Manufacturing*, includes facilities that manufacture dry, condensed, and evaporated milk products. Finally, NAICS 311520 *Ice Cream and Frozen Dessert Manufacturing*, includes manufacturing ice cream, frozen yogurts, and other frozen desserts.

[13] NAICS was developed as the standard for use by Federal statistical agencies in classifying business establishments for the collection, analysis, and publication of statistical data related to the business economy of the U.S.

Exhibit 2
Number of Facilities in Industries Affected by the Amendment (2009) [1]

Industry	NAICS Code (3-digit)	NAICS Code (6-digit)	SIC Code	Number of Facilities
Dairy Cattle and Milk Production,	112	112120	0241	65,000
Fluid Milk Manufacturing; Cheese Manufacturing; Dry, Condensed, and Evaporated Dairy Product Manufacture	311	311511 311512 311513 311514 311520	2023 2024 2026	1,178
Total				**66,178**

[1] U.S. Department of Agriculture, 2009.

[2] 3-digit NAICS codes are presented in the preamble for the Final rule; 6-digit NAICS codes provide additional level of detail necessary for the economic analysis.

Exhibit 3 presents the *total number of facilities* in the affected industries, projected over a ten-year analysis period (2010 – 2019). A certain number of dairy farms are not SPCC-regulated in the baseline (those facilities do not store enough oil to be regulated given the distribution of the universe of SPCC facilities), so they are not affected by the final amendment. The analysis assumes that all eligible milk and milk product manufacturing facilities that are SPCC regulated have taken advantage of the additional flexibility provided by the Tier I / II options via the 2006 and 2008 SPCC amendments.

Exhibit 4 presents the number of *facilities affected by the exemption* for the 2010 - 2019 analysis period using the industry sector specific growth rates. The number of milk and milk product manufacturing facilities regulated by SPCC is expected to be less than the number of facilities in the universe; some facilities have less than 1,320 gallons of milk and milk products and petroleum products. The National Milk Producers Federation advised, for the proposed rule, that there are milk producers with less than 1,320 gallons of milk and petroleum oil in total.[14] While the trend of decreasing numbers of dairy farms over the past twenty years is expected to continue, the number of milk manufacturing facilities has been and is expected to continue to be relatively stable.

[14] Some dairy farms have as few as 32 head of dairy cattle. Based on an average milk production of 6.31 gallons per head per day, total milk production for such small dairy farms is estimated at 202 gallons per day.

Exhibit 3
Estimates of Total Number of New and Existing Facilities in All Affected Industries

Facilities with Milk Containers	2010 Year 1	2011 Year 2	2012 Year 3	2013 Year 4	2014 Year 5	2015 Year 6	2016 Year 7	2017 Year 8	2018 Year 9	2019 Year 10	Ten-Year Average
Dairy Farms[1]											
New Facilities	109	116	124	133	143	153	164	176	188	202	**151**
Existing Facilities	51,400	48,500	45,800	43,300	40,900	38,700	36,700	34,800	33,100	31,500	**40,500**
Milk Manufacturing Facilities with Milk and Milk Product Containers[2]											
New Facilities	27	27	27	27	27	27	27	27	27	27	**27**
Existing Facilities	1,178	1,178	1,180	1,180	1,180	1,182	1,182	1,182	1,185	1,187	**1,181**
Total[3]	**52,714**	**49,819**	**47,131**	**44.640**	**42,350**	**40,164**	**38,109**	**36,185**	**34,500**	**32,911**	**41,858**

1 Dairy farms (NAICS 112120).
2 Milk manufacturing (NAICS 311511, 311512, 311513, 311514, and 311520).
3 Individual figures may not add up due to rounding.

Exhibit 4
Estimates of New and Existing Facilities Affected by the Final Amendment
(Excludes facilities estimated to have total oil storage less than 1,320 gallons)

Facilities with Milk Containers	Number of Facilities Affected by the Final Amendment										Ten-Year Average
	2010 Year 1	2011 Year 2	2012 Year 3	2013 Year 4	2014 Year 5	2015 Year 6	2016 Year 7	2017 Year 8	2018 Year 9	2019 Year 10	
Dairy Farms[1]											
New Facilities	109	116	124	133	143	153	164	176	188	202	**151**
Existing Facilities	36,100	34,200	32,300	30,700	29,100	27,600	26,300	25,000	23,900	22,900	**28,800**
Milk Manufacturing with Milk and Milk Product Containers[2]											
New Facilities	27	27	27	27	27	27	27	27	27	27	**27**
Existing Facilities	1,178	1,178	1,180	1,180	1,180	1,182	1,182	1,182	1,185	1,187	**1,181**
Total[3]	**37,414**	**35,521**	**33,631**	**32,040**	**30,450**	**28,960**	**27,673**	**26,385**	**25,300**	**24,316**	**30,158**

1 Dairy farms (NAICS 112120).
2 Milk manufacturing (NAICS 311511, 311512, 311513, 311514, and 311520).
3 Individual figures may not add up due to rounding.

Facility Size Distribution

EPA classified facilities into oil storage capacity categories to (1) account for differences in the potential compliance costs incurred by facilities of different sizes; and (2) determine the number of affected facilities. EPA considers "qualified" facilities as those with oil storage capacity equal to or less than 10,000 gallons and that meet the spill history criterion[15]. The four oil storage capacity categories are:

- *Category I:* total oil storage capacity greater than 1,320 gallons but less than or equal to 10,000 gallons: Tier I – no storage containers greater than 5,000 gallons, Tier II – has at least one container greater than 5,000 gallons.
- *Category II:* total oil storage capacity greater than 10,000 gallons but less than or equal to 42,000 gallons;
- *Category III:* total oil storage capacity greater than 42,000 gallons but less than or equal to 1,000,000 gallons; and
- *Category IV:* total oil storage capacity greater than 1,000,000 gallons.

Since cost impact of the final amendment is expected to be different depending on the storage capacity of these facilities, EPA estimated the distribution of the facilities by storage size capacity. To determine the storage capacity at dairy farms, EPA used information on annual milk production by size of dairy cattle herds from the U.S. Department of Agriculture National Agricultural Statistics Service (USDA NASS)[16] and calculated the total volume of milk produced in a year assuming that these farms are seven-day-a-week operations.[17] To estimate milk storage capacity from the total volume of production, EPA assumed that farms fill milk storage containers to 80 percent capacity[18] and that large facilities with greater than 1,000 heads of dairy cattle store milk for one day and smaller facilities (with less than 1,000 heads of cattle) store milk for two days.[19]

To determine total oil storage at dairy farms, including milk and other types of oil, EPA used USDA data and assumed that all facilities with more than 1,400 heads of cattle would store more than 10,000 gallons of non-milk oil. Dairy farms with more than 700 heads of cattle but less than 1,400 would store more than 1,320 gallons and no more than 10,000 gallons of non-

[15] The facility must not have had (1) a single discharge of oil to navigable waters exceeding 1,000 U.S. gallons or (2) two discharges of oil to navigable waters each exceeding 42 U.S. gallons within any twelve-month period, in the three years prior to the SPCC Plan certification date, or since becoming subject to the SPCC rule if facility has been in operation for less than three years.

[16] http://www.nass.usda.gov. Accessed July 1, 2008. Milk Cows and Production, All States. 2006.

[17] Clay Detlefsen, International Dairy Foods Association, Phone conversation, July 14, 2008 indicated that diary farms are a seven-day-a week-operation.

[18] Mike Kelley (Dairy Farm Equipment Product Manager, Paul Mueller Company) and Kelley Burgess (Dairy Farm Equipment Service Manager, Paul Mueller Company), phone conversation, July 2, 2008.

[19] Estimates on other oil storage provided by Jamie Jonker via personal conversation, Regulatory Affairs Director, National Milk Producers Federation, July 15, 2008.

milk oil.[20] Further, EPA assumed that dairy farms with less than 700 head of dairy cattle would not have enough oil storage to be SPCC-regulated. Based on data from EPA site visits to dairy farms in New York in 2006, the Agency assumed that 75 percent of farms with less than 700 heads of cattle would store no more than 1,320 gallons of fuel oil and the remaining 25 percent would store more than 1,320 gallons of fuel oil.[21] Exhibit 5 shows an estimate of the number of facilities distributed by size of cattle herd, and the effect of the rule amendment on those facilities. The National Milk Producers Federation advised that small dairies exist that would not meet the minimum oil storage capacity under the SPCC regulations. The Agency estimates 11,700 milk producers with less than 32 head of dairy cattle; these dairies likely have less than 1,320 gallons of combined milk and oil storage capacity and would not be covered by the SPCC regulations.

[20] Jamie Jonker, Regulatory Affairs Director, National Milk Producers Federation, noted that almost all facilities with greater than 700 head of cattle are likely to have oil storage greater than 1,320 gallons, larger farms with 1,400 heads of cattle would have more than 10,000 gallons of oil, and a large majority of dairy farms with less than 700 heads of cattle would also have oil storage greater than 1,320 gallons of oil. Phone conversation, July 14, 2008.

[21] Site visits conducted by Troy Swackhammer, U.S. EPA, OEM/RPDD, June 27-28, 2006.

Exhibit 5
Impact of Final Amendment to Exempt Milk and Milk Product Containers by Size Category for Dairy Farms and Milk Processing Facilities *(Excludes facilities with total oil storage less than 1,320 gallons)*

	Milk Capacity[1]	Non-Milk Oil Capacity[2]	Number of New Facilities - 10 Year Average (2010-2019)	Number of Existing Facilities - 10 Year Average (2010-2019)	SPCC Status Excluding Milk Capacity
Dairy Farms					
32 - 549 Cattle	<8,670 gallons	75% have <1,320 gallons; 25% have 1,320 – 10,000 gallons	0	25,300	Depending on non-milk oil capacity, some: 1) become exempt, and 2) become Tier I or Tier II qualified facilities
550 – 699 Cattle	8,670 – 11,000 gallons	75% have <1,320 gallons; 25% have 1,320 – 10,000 gallons	0	400	Depending on non-milk oil capacity, some: 1) become exempt, and 2) become Tier I or Tier II qualified facilities
700 - 999 Cattle	8,670 – 15,800 gallons	1,320-10,000 gallons	0	900	All farms continue to be SPCC regulated but become Tier I or Tier II qualified facilities
1,000 - 1,399 Cattle	7,880-11,000 gallons (stored in at least 5,000 gallon mobile containers)	1,320-10,000 gallons	16	400	All farms continue to be SPCC regulated but become Tier I or Tier II qualified facilities
> 1,400 Cattle	> 11,000 gallons (stored in at least 5,000 gallon mobile containers)	> 10,000 gallons	135	1,800	All remain SPCC regulated as before
Milk Manufacturing Facilities					
All Facilities	30,000-40,000 gallons (size of largest milk container)	50 % with < 1,320 gallons; 50% with >1,320-gallons	27	1,181	50% exempt; the rest remain SPCC regulated and may become Tier I or Tier II qualified facilities

[1] Milk capacity estimated using USDA estimate (2006) that a cow produces approximately 6.31 gallons of milk per day, and based on inputs from National Milk Producers Association that farms with less than 1,000 cattle store milk for 2 days, farms with more than 1,000 cattle store milk for 1 day, and typically there is 20% excess capacity.

[2] Non-milk oil capacity estimated based on site visits to dairy farms in New York conducted by Troy Swackhammer, EPA, 2007, and information received from Clay Detlefson, International Dairy Foods Association, July 15, 2008 (non-farms). Detlefson later suggested that the ratio could be 60% of facilities with less than 1,320 gallons and 40% of facilities with more than 1,320 gallons. However, the cost savings difference between these estimates is minimal because the difference between the facility level cost estimate across being exempt and not being exempt and being qualified is only the cost of recordkeeping.

[3] Average annual growth rate based on USDA report: "Profits, Costs, and the Changing Structure of Dairy Farming", 2007. http://www.ers.usda.gov/publications/err47/err47.pdf

Exhibit 6 presents the average growth rate for new and existing milk production facilities. EPA assumed that no new farms would come into existence for size categories where overall growth is negative. The number of milk manufacturing facilities is relatively stable over time and the analysis assumes that there are about 1,180 of existing facilities, based upon USDA NASS 2009 data.

Exhibit 6
Annual Growth Rate, New and Existing Dairy Farms and Milk Manufacturing Facilities

Type of Facility	Growth Rate New Facilities	Growth Rate Existing Facilities
Dairy Farms		
32 – 549 Cattle	0%	-6.2%
550 –999 Cattle	0%	0%
1,000 – 1,400 Cattle	3.7%	3.7%
> 1,400 Cattle	7.5%	7.5%
Milk Manufacturing Facilities	2.3%	2.3%

Average annual growth rate derived from the number of facilities reported in USDA report: "Profits, Costs, and the Changing Structure of Dairy Farming", 2007. http://www.ers.usda.gov/publications/err47/err47.pdf

4.3 Cost Savings Estimates

Cost savings are estimated by comparing unit costs in the 2008 baseline with the cost impacted by the rule exemption. Exhibit 7 provides a list of requirements and the unit costs impacted by the exemption. The cost savings from exempting milk and milk product containers, associated piping and appurtenances[22] would vary depending on whether a facility is new or existing. Further, the cost savings would vary for the following cases: 1) the facility becomes exempt from SPCC after excluding milk and milk product containers (such facilities no longer face any costs due to SPCC requirements); 2) the facility continues to be SPCC regulated but its status changes (qualifies as Tier I and no longer faces costs from a full SPCC Plan or as Tier II and no longer must pay for PE certification but can self certify their SPCC Plan); or 3) the facility continues to be SPCC regulated but does not have to comply with SPCC requirements for any milk or milk product containers. Specifically, owners or operators of SPCC-regulated facilities, the cost savings would be from not having to provide sized or general secondary containment for milk and milk product containers; from avoiding PE certification (for those that become either Tier I or II qualified facilities); and from Tier I qualified facilities not having to prepare a full SPCC Plan but rather complete the Plan template in Appendix G of the rule.[23] EPA used a unit costs inventory prepared by a PE firm to estimate cost savings for the proposed rule. A unit costs inventory was also used to conduct cost savings analysis from the milk and milk product exemption for the final rule.

The assumption of full compliance with the 2008 SPCC regulations suggest that only new facilities would incur cost savings from avoiding construction of secondary containment since existing facilities would have already built the containment. Facilities may also avoid

[22] For simplicity, EPA further refers to milk and milk product containers, associated piping and appurtenances as "milk and milk product containers".

[23] It is important to note that dairy farms typically have drainage systems under PMO that lead to lagoons that can retain the entire capacity of the largest milk and milk product container. However, typically neither the structure within which these containers are stored nor the drainage systems themselves are equipped to handle the capacity of the largest container. Therefore these drainage systems are not equivalent to sized secondary containment. In addition, EPA assumed that these facilities would become Tier I qualified facilities.

construction of sized secondary containment for new containers. However, if a facility meets the criteria for a Tier I or Tier II qualified facility, both new and existing facilities would incur cost savings. The new facilities that become *Tier I qualified facilities* would incur cost savings from preparation of a Plan template in lieu of a full SPCC Plan, and initial self-certification of the Plan (rather than the cost of a PE certification), while the existing facilities would incur cost savings from not incurring the costs of PE certification of their amendments. The new facilities that become *Tier II qualified facilities* would only incur cost savings from initial self-certification of the Plan (rather than the cost of a PE certification) like Tier I qualified facilities, would incur cost savings from not requiring PE certification of their amendments. Exhibit 7 presents the per-facility cost savings for new and existing facilities depending on their status after excluding the milk and milk product containers under this option.

The cost savings estimate depends on the capacity of the largest milk bulk storage container since the sized secondary containment is 'sized' to the largest milk bulk storage container. Using the average daily production per cow of 6.31 gallons,[24] EPA estimated that medium-sized farms, with 550-1,000 head of cattle, would have daily milk production of approximately 3,470-6,310 gallons. Assuming that farms fill milk bulk storage containers to 80 percent capacity[25] and that the milk is stored for two days at large facilities,[26] the capacity of milk bulk storage container would approximately be 8,670 -15,800 gallons. Thus, on average, it implies a total milk storage capacity of 12,200 gallons for farms with 550-1,000 head of cattle. At larger facilities, with greater than 1,000 head of cattle, milk is typically only stored for up to one day, and filled directly into milk transport trucks that are typically 5,000-6,500 gallons in size.[27] Thus, these milk transport trucks will be eligible for the relief provided to tank trucks in the 2008 final amendments to the SPCC rule that requires only general secondary containment instead of sized secondary containment. Therefore, the cost savings to these existing facilities would be from not having to provide general secondary containment.

Further, since EPA estimated that all dairy farms with 1,400 or fewer cattle would store less than 10,000 gallons of fuel oil on-site, these farms would become eligible as Tier I or Tier II qualified facilities, with Plan preparation, certification, and maintenance savings in addition to secondary containment savings. EPA estimated that 77 percent of all farms with 1,400 or fewer cattle would be Tier I facilities.[28] The facilities with more than 1,400 cattle are likely to store oil in quantities greater than 10,000 gallons and would only save the cost of secondary containment for these containers. Since small dairy farms storing less than 500 gallons of milk, are unlikely

[24] USDA National Agricultural Statistics Service. Milk Cows and Production, All States, 2006.

[25] Mike Kelley (Dairy Farm Equipment Product Manager, Paul Mueller Company) and Kelley Burgess (Dairy Farm Equipment Service Manager, Paul Mueller Company), phone conversation, July 2, 2008.

[26] Phone conversations with Jamie Jonker, Regulatory Affairs Director, National Milk Producers Federation, July 14, 2008 and Senior Vice President of Scientific and Regulatory Affairs, Rob Byrne.

[27] Phone conversations with Jamie Jonker, Regulatory Affairs Director, National Milk Producers Federation, July 14, 2008 and Senior Vice President of Scientific and Regulatory Affairs, Rob Byrne.

[28] Estimated based on two state databases; farms data were not available for these, so EPA used the general estimate applied to facilities of all industries in the analysis for the 2008 SPCC Rule. Of all facilities with less than 10,000 gallons (Tier II facilities), 77 percent would have no containers greater than 5,000 gallons, making them Tier I facilities.

to store more than 1,320 gallons of fuel and other oils (including milk), these farms would be exempt from SPCC regulation.

There was less information available on the milk and milk product storage at milk product manufacturing facilities. EPA estimated that these facilities are likely to store milk in large quantities and could have containers with capacity as large as 50,000 to 100,000 gallons, with the most common storage range of 30,000 to 40,000.[29] Therefore, EPA assumed that on average, these manufacturing facilities can have milk storage containers with capacity between 30,000 to 40,000 gallons. EPA assumed that 50 percent of those facilities have other fuel oil storage less than 1,320 gallons and they would incur cost savings from being exempt from the SPCC rule and 50 percent of the facilities have more than 1,320 gallons of storage so that they would incur cost savings either from becoming qualified facilities or from secondary containment no longer required for these 30,000 to 40,000 gallon tanks.[30]

Milk product manufacturing facilities that produce milk products (e.g., evaporated milk, ice cream, cheese) also have milk product containers at the facility. By extending the exemption in the final rule to milk product containers, the facility owner or operator would not be required to comply with any SPCC requirement (e.g., secondary containment, integrity testing) for the exempt milk product containers. The facilities would save all of the unit costs associated with the SPCC requirements for these containers. However, the Agency does not have data on the number of milk product containers at milk product manufacturing facilities to determine the overall cost savings for the exemption. Therefore, EPA expects that the total cost savings for the final rule is underestimated.

Exhibit 7 lists the facility-level average (1) cost of sized and general secondary containment for milk storage containers, (2) cost of Plan preparation, initial certification of the SPCC Plan, (3) the cost of Plan preparation for Tier I qualified facilities using the Plan template in Appendix G of the rule, and (4) the additional costs saved by a facility when changing size category or becoming exempt from SPCC regulation. Existing facilities incur only the savings associated with PE certification of Plan amendments. It is estimated that no dairy farms would be Category IV. Based on the expectation that the most common range of storage at these facilities is 30,000 to 40,000 gallons, and given the likely overlap between PMO planning requirements and SPCC planning requirements, EPA assumed that all affected food manufacturing facilities would have Plan costs of a Category II facility, regardless of total storage capacity.

Exhibit 7 presents cost saving components for milk and milk products manufacturing facilities. Exhibit 8 through Exhibit 11 show additional details for the cost savings components, by facility type.

[29] Personal communication with Clay Detlefson, International Dairy Foods Association, telephone conversation, July 14, 2008.

[30] Based on inputs from Clay Detlefsen, International Dairy Foods Association, Email July 15, 2008.

Exhibit 7
Estimated Facility-Level Cost Savings for the Final Amendment to Exempt Milk and Milk Product Containers (2009$)

Cost Savings Incurred	Facilities that become Exempt	Facilities that become Tier I Qualified	Facilities that become Tier II Qualified	Facilities that Continue to be SPCC Regulated
New Dairy Farms				
Average number of new farms affected	***0***	***12***	***4***	***135***
Sized Secondary Containment[1]	$12,000	$12,000	$12,000	-
General Secondary Containment[1]	-	$9,600[2]	$9,600[2]	$9,600[2]
Plan Preparation	$4,000- $8,100	$4,000 - $8,100	-	-
PE Certification	$1,600 - $3,100	$1,600 - $3,100	$1,600 - $3,100	-
Additional Cost of Preparing Plan Template	$0	($160 - $320)	$0	-
Other Savings (see Exhibit 8).	$33,600 -$34,200	Up to $600	Up to $600	-
Total Facility-Level Savings: New Farms	**$51,200 - $57,400**	**$15,100 - 23,500[3]**	**$11,200-$15,700**	**$9,600**
Existing Dairy Farms				
Average number of existing farms affected	***19,300***	***6,000***	***1,700***	***1,800***
PE certification of amendments	$300 - $600	$300 - $600	$300 - $600	-
Other Savings (see Exhibit 9).	$5,800 - $9,500	Up to $3,700	Up to $3,700	-
Total Facility-Level Savings: Existing Farms	**$6,100 - $10,100**	**$300 - $4,300**	**$300 - $4,300**	**$0**
New Manufacturing Facilities				
Average number of new manufacturing facilities affected	***14***	***9***	***4***	***0***
Sized Secondary Containment [4]	$41,300	$41,300	$41,300	$41,300
Plan Preparation [5]	$8,100	$8,100	-	-
PE Certification [5]	$3,100	$3,100	$3,100	-
Additional Cost of Preparing Plan Template	-	($300)	-	-
Other Savings (see Exhibit 10).	$60,100	$18,300	$18,300	-
Total Facility-Level Savings: New Manufacturing Facilities	**$112,600**	**$70,400**	**$62,700**	**$41,300**
Existing Manufacturing Facilities				
Average number of manufacturing facilities affected	***591***	***455***	***135***	***0***
PE certification of amendments	$600	$600	$600	-
Other Savings (see Exhibit 11).	$12,200	$6,100	$6,100	-
Total Facility-Level Savings: Existing Manufacturing Facilities	**$12,800**	**$6,700**	**$6,700**	**$0**

[1] Dairy farms with more than 1,000 heads of cattle are expected to have mobile bulk storage only, and are required to install general secondary containment instead of sized secondary containment (SPCC Final Rule RIA, 2008).

[2] General secondary containment cost savings for farms that have greater than 1,000 cattle as they store milk in mobile bulk storage containers for a day.

[3] Range of cost savings for facilities becoming Tier I qualified accounts for the cost savings difference between farms initially classified as Category I or Category II facilities and for the cost savings difference between general and sized secondary containment (large farms with more than 1,000 cattle, and small farms, respectively).

[4] Average of costs of secondary containment using earthen berm and concrete berm.

[5] All milk-using manufacturing facilities are expected to be Category II, for the purposes of Plan Preparation and Maintenance, and size of secondary containment.

Data sources for cost estimates: Unit Cost Inventory from SCS Engineers; site visits.

Exhibit 8
Other Savings for New Dairy Farms
(include all SPCC compliance elements except those listed in Exhibit 7, 2009$)

Cost Savings Incurred	Category I facilities that become Exempt	Category II facilities that become Exempt	Category II facilities that become Category I
New Dairy Farms			
Install liquid-level sensing devices	$2,500	$2,500	-
Secondary containment at a transfer area	$7,000	$7,000	-
Restrain drainage from diked storage areas using valves of manual, open-closed design	$5,470	$5,500	-
Fully fence the facility	$4,480	$5,100	$640
Warn all vehicles entering the facility to be sure that no vehicle will damage aboveground piping or other oil transfer operations	$2,700	$2,700	-
Provide facility lighting to help discover discharges and prevent vandalism	$2,340	$2,300	-
Training personnel and holding discharge prevention briefings	$2,010	$3,800	$1,790
Inspections and Testing	$1,670	$3,000	$1,350
Secondary containment for mobile/portable oil storage containers[1]	$1,690	-	($1,690)
Secondary containment for oil-filled operating equipment[1]	$1,570	-	($1,500)
Install drain covers and spill kits	$890	$890	-
Security measures for valves	$430	$430	-
Recordkeeping and discharge reporting	$430	$430	-
Security requirements for piping	$160	$160	-
Anti-Corrosive Measures	$140	$200	$60
Secondary containment for piping	$110	$110	-
Total [2]	**$33,600**	**$34,200**	**$650**

[1] In the baseline cost of compliance estimates for SPCC-regulated farms, EPA assumed that Category II farms have neither mobile/portable oil storage containers nor oil-filled operating equipment.

[2] Individual figures may not add up due to rounding.

Data sources for cost estimates: Unit Cost Inventory from SCS Engineers; site visits.

Exhibit 9
Other Savings for Existing Dairy Farms
(include all SPCC compliance elements except those listed in Exhibit 7, 2009$)

Cost Savings Incurred	Category I facilities that become Exempt	Category II facilities that become Exempt	Category II facilities that become Category I
Existing Dairy Farms			
Training personnel and holding discharge prevention briefings	$2,100	$3,810	$1,790
Inspections and Testing	$1,670	$3,030	$1,350
Equip the final discharge of ditches with a diversion system	$1,290	$1,290	-
Perform a 5-year review of the SPCC Plan	$330	$600	$270
Amend the SPCC Plan due to changes made at the facility or 5-year review of Plan	$220	$450	$220
Recordkeeping and discharge reporting	$140	$170	$30
Security requirements for piping	$160	$160	-
Total [2]	**$5,800**	**$9,500**	**$3,700**

[1] In the baseline cost of compliance estimates for SPCC-regulated farms, EPA assumed that Category II farms have neither mobile/portable oil storage containers nor oil-filled operating equipment.

[2] Individual figures may not add up due to rounding.

Data sources for cost estimates: Unit Cost Inventory from SCS Engineers; site visits.

Exhibit 10
Other Savings for New Milk Manufacturing and Processing Facilities
(include all SPCC compliance elements except those listed in Exhibit 7, 2009$)

Cost Savings Incurred	Category II facilities that become Exempt	Category II facilities that become Category I
New Milk Manufacturing and Processing Facilities		
Install liquid-level sensing devices	$2,500	-
Inspections and Testing	$7,000	$3,700
Secondary containment at a transfer area	$7,000	-
Secondary containment for a loading/unloading rack	$6,400	$6,400
Restrain drainage from diked storage areas using valves of manual, open-closed design	$5,500	-
Fully fence the facility	$5,100	$650
Secondary containment for oil-filled operating equipment	$4,700	-
Drainage measures for tanker trucks	$4,300	$4,300
Training personnel and holding discharge prevention briefings	$3,800	$1,800
Warn all vehicles entering the facility to be sure that no vehicle will damage aboveground piping or other oil transfer operations	$2,700	-
Provide facility lighting to help discover discharges and prevent vandalism	$2,300	-
Secondary containment for mobile/portable oil storage containers	$2,100	-
Anti-Corrosive Measures	$2,000	$1,300
Equip the final discharge of ditches with a diversion system	$1,300	-
Secondary containment for piping	$1,100	-
Install drain covers and spill kits	$890	-
Security measures for valves	$430	-
Recordkeeping and discharge reporting	$430	-
Provide two pumps	$200	-
Security requirements for piping	$160	-
Total [1]	**$60,100**	**$18,300**

[1] Individual figures may not add up due to rounding.

Data sources for cost estimates: Unit Cost Inventory from SCS Engineers; site visits.

Exhibit 11
Other Savings for Existing Milk Manufacturing and Processing Facilities
(include all SPCC compliance elements except those listed in Exhibit 7, 2009$)

Cost Savings Incurred	Category II facilities that become Exempt	Category II facilities that become Category I
Existing Milk Manufacturing and Processing Facilities		
Inspections and Testing	$7,100	$3,700
Training personnel and holding discharge prevention briefings	$3,800	$1,800
Perform a 5-year review of the SPCC Plan	$610	$270
Amend the SPCC Plan due to changes made at the facility or 5-year review of Plan	$450	$220
Recordkeeping and discharge reporting	$170	$30
Cap and blank-flange terminal connections at the transfer point	$160	-
Total [1]	**$12,200**	**$6.100**

[1] Individual figures may not add up due to rounding.

Data sources for cost estimates: Unit Cost Inventory from SCS Engineers; site visits.

EPA calculated the total compliance cost savings for milk and milk product manufacturing facilities that store milk using the projected number of facilities affected by the final amendment and their corresponding per-facility compliance cost savings estimated, as summarized in the equation below:

Calculation of Total Cost Savings

$$\text{Total Cost Savings} = \sum_i \sum_j NFacNew_{ij} * NCostSavingNew_{ij} + \sum_i \sum_j NFacExist_{ij} * NCostSavingExist_{ij}$$

Where i = I, II are the facility size categories, j = dairy farms (1-4, depending on total size of herd) or food manufacturing facilities (5)

$NFacNew_{ij}$ = the projected number of affected new facilities by size category i and type j (see Exhibit 4)

$NFacExist_{ij}$ = the projected number of affected existing facilities by size category i and type j (see Exhibit 4)

$NCostSavingNew_{ij}$ = the per-facility net cost savings for new facilities based on compliance options available to facilities with milk containers by size category and type (see Exhibit 7).

$NCostSavingExist_{ij}$ = the per-facility net cost savings for existing facilities based on compliance options available to facilities with milk containers by size category and type (see Exhibit 7).

Using a 7% discount rate, EPA estimated that milk production facilities would incur average annualized savings of about $133 million and milk product manufacturing plants would incur average annualized savings of about $13 million (2009$). In aggregate, the total savings will be

about $146 million (2009$). The analysis was conducted by calculating the NPV of annual cost savings and then annualizing that value using a payment (PMT) function.

Exhibit 12
Total Projected Compliance Cost Savings from the Final Amendment to Exempt Milk and Milk Product Containers (2009$ Millions) [1]

	Estimates of Compliance Cost Savings										10- Year Present Value	Annualized
	2010 Year 1	2011 Year 2	2012 Year 3	2013 Year 4	2014 Year 5	2015 Year 6	2016 Year 7	2017 Year 8	2018 Year 9	2019 Year 10		
Dairy Farms												
Not Discounted	$164.17	$154.25	$146.33	$137.42	$129.52	$122.62	$115.73	$109.85	$103.98	$98.11	**$1,242**	**$129**
3% Discounted	$159.14	$146.18	$146.33	$122.26	$112.31	$102.36	$94.41	$86.36	$79.32	$72.87	**$1,108**	**$130**
7% Discounted	$153.09	$135.09	$119.09	$105.08	$92.08	$81.68	$72.08	$63.68	$56.28	$49.77	**$929**	**$133**
New Dairy Farms												
Not Discounted	$1.17	$1.25	$1.33	$1.42	$1.52	$1.62	$1.73	$1.85	$1.98	$2.11	**$16**	**$2**
3% Discounted	$1.14	$1.18	$1.22	$1.26	$1.31	$1.36	$1.41	$1.46	$1.52	$1.57	**$13**	**$2**
7% Discounted	$1.09	$1.09	$1.09	$1.08	$1.08	$1.08	$1.08	$1.08	$1.08	$1.07	**$11**	**$2**
Existing Dairy Farms												
Not Discounted	$163	$153	$145	$136	$128	$121	$114	$108	$102	$96	**$1,226**	**$127**
3% Discounted	$158	$145	$132	$121	$111	$101	$93	$84.9	$77.8	$71.3	**$1,095**	**$128**
7% Discounted	$152	$134	$118	$104	$91	$80.6	$71.0	$62.6	$55.2	$48.7	**$918**	**$131**
Milk Manufacturing Facilities												
Not Discounted	$13.40	$13.40	$13.40	$13.40	$13.40	$13.40	$13.40	$13.40	$13.40	$13.40	**$134**	**$13**
3% Discounted	$13.01	$12.63	$12.45	$11.90	$11.56	$11.22	$10.90	$10.58	$10.27	$9.97	**$114**	**$13**
7% Discounted	$12.51	$11.69	$10.92	$10.21	$9.54	$8.92	$8.33	$7.79	$7.28	$6.80	**$94**	**$13**
New Manufacturing Facilities												
Not Discounted	$2.44	$2.44	$2.44	$2.44	$2.44	$2.44	$2.44	$2.44	$2.44	$2.44	**$24**	**$2**
3% Discounted	$2.37	$2.30	$2.24	$2.17	$2.11	$2.05	$1.99	$1.93	$1.87	$1.82	**$21**	**$2**
7% Discounted	$2.28	$2.13	$1.99	$1.86	$1.74	$1.63	$1.52	$1.42	$1.33	$1.24	**$17**	**$2**
Existing Manufacturing Facilities												
Not Discounted	$10.96	$10.96	$10,96	$10.96	$10.96	$10.96	$10.96	$10.96	$10.96	$10.96	**$110**	**$11**
3% Discounted	$10.64	$10.33	$10.03	$9.73	$9.45	$9.17	$8.91	$8.65	$8.40	$8.15	**$94**	**$11**

7% Discounted	$10.23	$9.56	$8.93	$8.35	$7.80	$7.29	$6.81	$6.37	$5.95	$5.56	**$77**	**$11**
Total Savings												
Not Discounted	$178	$168	$159	$151	$143	$136	$129	$123	$117	$111	**$1,416**	**$142**
3% Discounted	$172	$158	$146	$134	$124	$114	$105	$97	$90	$83	**$1,223**	**$143**
7% Discounted	$166	$147	$130	$115	$102	$91	$81	$72	$64	$57	**$1,023**	**$146**

[1] See Appendix K in Volume II of the 2008 SPCC Rule RIA for more details on the calculation of cost savings. When estimating the universe of SPCC-regulated facilities for dairy farms and milk manufacturing facilities, containers storing petroleum-based oil were accounted for and not milk or related substances. Therefore, the baseline universe of facilities does not include facilities that would be regulated due to milk storage containers.

4.4 Alternative Option: No Action

The Agency considered the alternative option of no action, which would have no cost impact on the facilities.

Chapter 5: Impacts on Human Health, Welfare, and the Environment

There would be environmental and human health impacts of the final rule amendments if they result in a change in threat of discharge. In the absence of detailed data on oil discharges the Agency relied on available sources of information, including available data on historical oil discharges, to inform a qualitative evaluation of changes in oil discharge threat. EPA believes that changes at facilities that handle milk and milk products in response to the final rule amendment would not increase the risk of oil discharges which pose a risk to human health, welfare and the environment. At the same time, the final amendments will provide the opportunity for regulated facilities to reduce the cost of SPCC compliance.

Milk and milk product containers, associated piping and appurtenances are generally constructed according to an industry standard established by 3-A Sanitary Standards (McLean, VA), which satisfy PMO and USDA Recommended Requirements for construction of milk and milk product containers and associated piping and appurtenances. These standards include American Iron and Steel Institute 300 Series stainless steel (i.e., austenitic stainless steel) or a metal that is at least as corrosion resistant. Milk and milk product containers, associated piping and appurtenances must have smooth and impervious surfaces that are free of breaks and corrosion, including at joints and seams. These standards further specify the requirements for easy access to inspect the container's internal surfaces. The USDA also recognizes 3-A Sanitary Standards-compliant containers under 7 CFR part 58 for purposes of USDA milk and milk product grading and inspection programs.

All milk and milk product handling operations subject to PMO and USDA Recommended Requirements must have an operating permit or license, and are subject to inspections by the state dairy regulatory agencies prior to its issuance. Both PMO and USDA Recommended Requirements establish criteria for the permitting/licensing, inspection and enforcement of milk and milk product handling equipment and operations that govern all processes for milk intended for human consumption and for milk produced for processing and manufacturing products for human consumption. These include, but are not limited to, specifications for the design and construction of milk and milk product handling equipment, equipment sanitation and maintenance procedures, temperature controls, and pasteurization standards. PMO and USDA Recommended Requirements also require inspections of the dairy farms or milk processing plants by the state-designated regulatory agency prior to issuing a permit or license, and routine inspections thereafter (for example, at dairy farms covered by PMO at least once every six months) by a state designated regulatory agency. Inspections at these facilities encompass those elements associated with the milk and milk product operation, including the milk and milk product containers, and associated piping and appurtenances. Violations of the permitting or licensing requirements may result in the suspension or revocation of the facility's operating permit or license.

Many kinds of harmful bacteria can grow rapidly in milk and milk products, therefore they are generally stored and handled differently than other oils to prevent spoilage. The sanitation measures required by PMO and USDA Recommended Requirements to suppress harmful

bacteria, such as ensuring that milk and milk products are not exposed to container corrosion or that the container does not have leaks, may also serve to reduce the likelihood of an unintended discharge. Milk is quickly refrigerated (i.e., within hours) after milking. PMO and USDA Recommended Requirements also require that milk and milk product containers are frequently emptied, cleaned, and sanitized and that records of such events be maintained. Such frequent cleaning of the containers suggests that any leaks or deterioration of container integrity would be quickly noticed. EPA believes these unique handling parameters although not primarily intended for oil spill prevention, control and countermeasure purposes, would nonetheless adequately address the prevention of oil discharges into the environment.

Chapter 6: Small Entity Impacts, Executive Orders, and Other Required Analyses

The purpose of this report is to present the final amendment and to analyze the respective costs and benefits. In addition to these analyses, several other types of impacts are important to consider in evaluating the effects of a regulation. This chapter presents analyses of whether this final amendment to the SPCC rule portion of the Oil Pollution Prevention regulations impact the financial condition of small entities, as required by the Regulatory Flexibility Act (RFA)[31] and Small Business Regulatory Enforcement Fairness Act (SBREFA).[32] It also responds to Executive Order 13132–Federalism[33]; Executive Order 13175–Consultation and Coordination With Indian Tribal Governments[34]; Executive Order 13045–Protection of Children From Environmental Health & Safety Risks[35]; Executive Order 13211–Actions That Significantly Affect Energy Supply, Distribution, or Use[36]; National Technology Transfer and Advancement Act; and the Paperwork Reduction Act (PRA).[37]

6.1 Regulatory Flexibility Act and Small Business Regulatory Enforcement Fairness Act

The Regulatory Flexibility Act generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule would not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of this final rule on small entities, a small entity is defined as: (1) a small business as defined in the U.S. Small Business Administration (SBA)'s regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field.

After considering the economic impacts of this final rule on small entities, the Agency certifies that this action would not have a significant economic impact on a substantial number of small entities. In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant, adverse economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives "which minimize any significant economic impact of the proposed rule on small entities" (5 U.S.C. 603 and 604). Thus, an agency may certify that a rule would not have a significant economic impact on a substantial number of small entities if the

[31] 5 U.S.C. Sec. 603; 5 U.S.C. Sec. 604.
[32] 13 CFR part 121.
[33] 64 FR 43255, August 10, 1999.
[34] 65 FR 67249, November 9, 2000.
[35] 62 FR 19885; April 23, 1997.
[36] 66 FR 28355, May 22, 2001.
[37] 44 U.S.C. Sec. 3501.

rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule.

Under this final rule, EPA is exempting from SPCC rule requirements milk and milk product containers, associated piping and appurtenances because they are constructed according to the current applicable 3-A Sanitary Standards, and are subject to the current applicable Grade "A" PMO, USDA Recommended Requirements for Milk for Manufacturing Purposes and its Production and Processing, or an equivalent state dairy requirement. Overall, EPA estimates that this final action will reduce annual compliance costs by approximately $146 million for owners and operators of affected facilities. Total costs were annualized over a 10-year period using a 7 percent discount rate. To derive this savings estimate, EPA first estimated the number of dairy farms and milk and milk product processing facilities that would be affected each year (2010-2019) by the final rule. EPA next analyzed the expected milk and fuel oil storage capacity of dairy farms with varying numbers of cattle based on daily production rate per cow, the storage requirements for milk, and milk products and conversations with industry representatives. EPA also estimated the milk/milk product and fuel oil storage capacity of milk and milk product processing facilities, and estimated the cost savings associated with the exemption for milk/milk product storage containers at both dairy farms and milk processing facilities. These savings include secondary containment costs, cost savings from preparing and maintaining an SPCC Plan for a smaller facility, and, for qualified facilities, preparing only a Plan template and saving PE certification costs. A certain number of dairy farms are expected to become exempt from the SPCC regulations as a result of the amendments.

EPA concludes that this final rule will relieve regulatory burden for small entities and certifies that this action will not have a significant economic impact on a substantial number of small entities. EPA requested comment on potential impacts on small entities, but received no comments specific to small entities.

6.2 Executive Order 13132–Federalism

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

This final rule does not have federalism implications. It would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Under the Clean Water Act (CWA) section 311(o), States may impose additional requirements, including more stringent requirements, relating to the prevention of oil discharges to navigable waters or adjoining shorelines. EPA recognizes that some States have more stringent requirements (56 FR 54612, October 22, 1991). This final rule

would not preempt State law or regulations. Thus, Executive Order 13132 does not apply to this final rule.

6.3 Executive Order 13175–Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). This final rule will not significantly or uniquely affect communities of Indian tribal governments. Thus, Executive Order 13175 does not apply to this final rule. EPA specifically solicited additional comment on this final action from tribal officials, but none was received.

6.4 Executive Order 13045–Protection of Children from Environmental Health & Safety Risks

EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Order has the potential to influence the regulation. This final rule is not subject to Executive Order 13045 because it does not establish an environmental standard intended to mitigate health or safety risks.

6.5 Executive Order 13211–Actions that Significantly Affect Energy Supply, Distribution, or Use

This action is not a "significant energy action" as defined in Executive Order 13211 (66 FR 18355 (May 22, 2001)), because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The overall effect of the final rule is to decrease the regulatory burden on certain facility owners or operators subject to its provisions.

6.6 National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law No. 104-113 (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

The owner or operator of a facility subject to the SPCC rule has the flexibility to consider applicable industry standards in the development of an SPCC Plan, in accordance with good engineering practice. EPA solicited comments on this aspect of the rulemaking and, specifically, invited the public to identify potentially- applicable voluntary consensus standards and to explain why such standards should be used in this regulation. The single comment submitted agreed with the use of the 3-A Sanitary Standards and the PMO model code as a basis for exempting milk and milk product containers, associated piping and appurtenances

from the SPCC requirements. However, this rulemaking does not involve technical standards, as it does not set or incorporate by reference any one specific technical standard. Therefore, the NTTAA does not apply.

6.7 Paperwork Reduction Act

This final action does not impose any new information collection burden. The final rule amendment exempts from the SPCC rule milk and milk product containers, associated piping and appurtenances. The Office of Management and Budget (OMB) has previously approved the information collection requirements contained in the existing regulations, 40 CFR part 112, under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. Burden is defined at 5 CFR 1320.3(b).

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

6.8 Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order (EO) 12898 (59 FR 7629 (February 16, 1994)) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this final rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection provided to human health or the environment.

Chapter 7: Key Assumptions and Limitations

According to Executive Orders 12866 and 13563, agencies are required to assess all costs and benefits of regulatory activities, including quantitative and qualitative measures. The EO also requires assessment of all benefits and costs including, but not limited to, those related to the environment, public health and safety, distributive impacts, and issues of equity.

This regulatory impact analysis estimated the reductions in compliance costs resulting from the final amendment to the SPCC rule. The Agency also considered whether the streamlined requirements in the final rule might increase the threat of discharges, with adverse consequences for the environment, human health, and welfare. EPA believes that the rule amendment protects the environment and, at the same time, provides the opportunity for regulated facilities to reduce the cost of SPCC compliance.

Many of the assumptions as well as the estimates of unit cost savings and the number of affected facilities presented in this RIA are inherently uncertain. EPA made the best use of the available data to make informed decisions regarding the analysis. Major limitations of the analysis are described in this chapter.

7.1 General Limitations and Assumptions

Estimated Number of Facilities

One of the main limitations of the regulatory analysis is EPA's lack of data on the milk and milk product manufacturing facilities regulated under the SPCC program. SPCC provisions do not include a notification requirement, and, with certain exceptions, regulated entities do not need to submit any information to EPA. Without conducting a statistically valid survey, EPA is limited to data already collected by state or federal agencies or by proprietary sources. Such data are collected for diverse purposes and are not ideal for identifying SPCC-regulated facilities, as the data do not normally provide information on smaller storage tanks or non-petroleum oil. Therefore, evaluating regulatory changes involves some uncertainties because the collected data often omit portions of the regulated universe or lack sufficient detail to ascertain the impacts of changes in certain requirements. Additional uncertainty is introduced in the estimate for the number of SPCC-regulated facilities because of lack of information on how owners or operators would use the flexibility to define the facility boundaries for contiguous and non-contiguous parcels, i.e., consider buildings, properties, parcels, leases, structures, installations, pipes, or pipelines as separate facilities.

Estimated Cost of Compliance

Compliance costs incurred by owners or operators of facilities in the baseline depend not only on the volume of oil stored and handled, but also on the types of oil at a site, the number of tanks (and their volume), and the locations of the tanks across the site. Given the wide range of facility sizes affected by the SPCC rule—as well as geographical and climatic conditions that affect a facility's configuration and operation patterns—a realistic baseline against which regulatory changes are measured cannot be reliably determined. Therefore, uncertainty is

involved in estimating the changes in compliance costs that could occur under the final regulatory actions.

The cost estimates used in this regulatory analysis are based on a detailed analysis by one professional engineering firm. The data provided by the firm represent information based on the experience of the Professional Engineers (PEs) employed by the firm, and may not be fully representative of costs faced by facilities with different characteristics, so there is uncertainty when they are extrapolated to the universe of affected entities. In addition, the PEs were hesitant to provide "typical" costs when the costs of compliance depend significantly on site-specific factors, and emphasized that the cost estimates are illustrative. Ideally, a regulatory analysis would explicitly account for such variability in costs. However, in this analysis, EPA was unable to differentiate compliance costs due to the lack of information on site characteristics of the entities affected by the final amendment to the SPCC rule. The PE firm provided average compliance costs within discrete categories for oil storage capacity at SPCC regulated facilities. Under ideal conditions, costs curves would be developed to precisely conduct engineering costs analysis. The data limitations do not provide this opportunity to develop precise engineering cost curves and the Agency is considering how to develop improved data and compliance cost analysis.

It is important to note that since certain SPCC requirements may be similar in nature to those imposed by state regulations and facility owner/operators of many industries may follow specific industry standards, compliance activities and their associated costs cannot be fully attributed to the SPCC rule. Since regulations vary widely across states and industries, there is no single adjustment factor that could be developed to address this issue for the universe of regulated facilities. However, due to the lack of data on the extent to which facilities adopt industry standards, in this analysis the Agency estimated the cost savings associated with the SPCC requirements without accounting for possible overlap with industry standards. EPA did take into account requirements imposed by state regulations that are similar to the SPCC requirements. As a result, the estimated compliance cost savings are likely to present an overestimate of the costs attributed to the SPCC rule. For details of the state overlap analysis, refer to Section 5.4 of the Regulatory Impact Analysis for 2008 SPCC Rule.[38]

7.2 Key Assumptions

EPA made four key assumptions in the analysis. First, the Agency assumed that cost minimization behavior applied to all owners or operators of facilities that qualify for reduced regulatory requirements, whereby all those affected would seek burden relief. Second, EPA assumed that owners or operators of existing SPCC-regulated facilities would forego compliance activities offered as alternatives to activities that required one-time initial investments because they would have already incurred the one-time cost. Third, EPA assumed that compliance is nationally consistent despite variability in state regulations, political climate, and the distribution of affected facilities. Fourth, in accordance with EPA's guidelines to prepare

[38] U.S. Environmental Protection Agency (EPA). November 2008. Regulatory Impact Analysis for the Final Amendments to the Oil Pollution Prevention Regulations (40 CFR PART 112).

economic analysis EPA assumed that all existing owners or operators of facilities are in complete compliance with the 2008 SPCC rule.[39] It is important to note that insofar as certain owners or operators of facilities are not in compliance with the 2008 rule because of the compliance date extension, this assumption may imply that cost savings are an underestimate. If facilities are not in compliance with the 2008 rule because of the compliance date extension, these facilities would in fact incur cost savings implying that the cost savings are an underestimate. EPA did not account for compliance date extension when assuming full compliance with the 2008 SPCC rule. Furthermore, since the compliance dates were extended on several occasions it is unclear how many facilities may have come into compliance before new extension dates were announced.

[39] U.S. Environmental Protection Agency (EPA). September 2000. "Guidelines for Preparing Economic Analyses."

Chapter 8: Conclusions

EPA is finalizing an exemption for milk and milk product containers, associated piping and appurtenances because they are typically subject to a combination of 3-A Sanitary Standards with either PMO or USDA requirements or state equivalent dairy regulations EPA estimated that dairy farms and milk product manufacturing facilities would incur average annualized savings of about $146 million. The Agency also considered an option of no action that would result in no cost savings. EPA believes that this final rule amendment protects the environment and, at the same time, provides the opportunity for regulated facilities to reduce the cost of SPCC compliance.

Bibliography

5 C.F.R. 1320. Controlling Paperwork Burdens on the Public.

5 U.S.C. 801 et seq., Congressional Review Act.

5 U.S.C. Sec. 603. Initial Regulatory Flexibility Analysis.

5 U.S.C. Sec. 604. Final Regulatory Flexibility Analysis.

33 U.S.C. 1321 Sec 311(j)(1)(C). National Response System.

33 U.S.C. 2720, Edible Oil Regulatory Reform Act.

3-A Sanitary Standards, Inc. 2001. "Storage Tanks for Milk and Milk Products", 3A 01-08. November. Available at: www.techstreet.com/3Agate.html.

40 C.F.R. part 112. Oil Pollution Prevention and Response.

44 U.S.C. Sec. 3501 et seq. Paperwork Reduction Act.

59 FR 34102, Memorandum of Understanding among the Secretary of the Interior, Secretary of Transportation, and Administrator of the Environmental Protection Agency, July 1, 1994.

70 FR 73524, Oil Pollution Prevention; Spill Prevention, Control, and Countermeasure Plan Requirements—Amendments; December 12, 2005.

71 FR 77266, Oil Pollution Prevention; Spill Prevention, Control, and Countermeasure Plan Requirements--Amendments; Final Rule, December 26, 2006

72 FR 58378, Oil Pollution Prevention; Spill Prevention, Control, and Countermeasure Rule Requirements—Amendments; Proposed Rule, October 15, 2007.

Detlefson, Clay, 2008. Personal communication. International Dairy Foods Association. July.

Executive Order 11548, Delegating Functions of the President under the Federal Water Pollution Control Act, as Amended, 35 FR 11677; July 22, 1970.

Executive Order 12777, Implementation of Section 311 of the Federal Water Pollution Control Act, as Amended, and Oil Pollution Act of 1990, 56 FR 54757, October 22, 1991.

Executive Order 12866, Regulatory Planning and Review, 58 FR 51735, October 4, 1993.

Executive Order 13045, Protection of Children From Environmental Health & Safety Risks, 62 FR 19885; April 23, 1997.

Executive Order 13132, Federalism, 64 FR 43255, August 10, 1999.

Executive Order 13175, Consultation and Coordination With Indian Tribal Governments, 65 FR 67249, November 9, 2000.

Executive Order 13211, Actions That Significantly Affect Energy Supply, Distribution, or Use, 66 FR 28355, May 22, 2001.

Executive Order 13563, Improving Regulation and Regulatory Review, 76 FR 3821, January 21, 2011.

Environmental Justice Executive (EJ) Order 12898 – Federal Actions to Address Environmental Justice In Minority Populations and Low-income Populations (59 FR 7629, (February 16, 1994)).

Jack Faucett Associates, for SBA Office of Advocacy. 2004. "Proposed Reforms to the SPCC Professional Engineer Certification Requirement: Designing a More Cost Effective Approach for Small Facilities." June.

Jonker, Jamie, and Rob Byrne, 2008. Personal communication. National Milk Producers Federation. July.

Kelley, Mike, and Kelley Burgess, 2008. Personal communication. Paul Mueller Company. Phone conversation, July 2.

Rob Byrne, 2008. Personal communication. National Milk Producers Federation. December.

SCS Engineers. 2007. Personal communication. January.

Small Business Regulatory Enforcement Fairness Act, Pub Law No. 104-121 (1996).

The National Technology Transfer and Advancement Act (PL 14-113), March 7, 1996.

U.S. Census Bureau. 2002. 2002 Economic Census: Summary Statistics by 2002 NAICS: United States. Available at: http://www.census.gov/econ/census02/

U.S. Department of Agriculture, National Agricultural Statistics Service. 2006. "Milk Cows and Production". All States. Accessed from http://www.nass.usda.gov/ on July 1, 2008.

U.S. Department of Agriculture, Economic Research Service. 2007. "Profits, Costs, and the Changing Structure of Dairy Farming". Accessed from http://www.ers.usda.gov/publications/err47/err47.pdf on October 8, 2008.

U.S. Department of Agriculture, National Agricultural Statistics Service. 2008. "Dairy Cattle and Milk Production". Accessed from http://www.nass.usda.gov/ on July 10, 2008.

U.S. Department of Agriculture, National Agricultural Statistics Service. "Farms, Land in Farms, and Livestock Operations 2009 Summary," February 2010.

U.S. Department of Agriculture, National Agricultural Statistics Service. "Farms, Land in Farms, and Livestock Operations 2008 Summary," February 2009.

U.S. Department of Agriculture, National Agricultural Statistics Service. "Farms, Land in Farms, and Livestock Operations 2007 Summary," February 2008.

U.S. Department of Agriculture, National Agricultural Statistics Service. "Farms, Land in Farms, and Livestock Operations 2006 Summary," February 2007.

U.S. Department of Agriculture, National Agricultural Statistics Service. "Farms, Land in Farms, and Livestock Operations 2005 Summary," January 2006.

U.S. Department of Agriculture, National Agricultural Statistics Service. “Milk Production,” February 19, 2010..

U.S. Department of Agriculture, National Agricultural Statistics Service. “Dairy Products 2009 Summary,” April 2010.

U.S. Department of Energy. 2008. Annual Energy Outlook 2008. Available at: http://www.eia.doe.gov/oiaf/aeo/pdf/0383(2008).pdf, accessed July 2, 2008.

U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration. 2004. Grade “A” Pasteurized Milk Ordinance, 2003 Revision. Available at: http://www.cfsan.fda.gov/~acrobat/pmo03.pdf.

U.S. Environmental Protection Agency (EPA) and U.S. Department of Transportation (DOT). 1971. Memorandum of Understanding between the Environmental Protection Agency and the Department of Transportation, dated November 24, 1971, 36 FR 24080, December 18, 1971. (Note: portions of this MOU appear as Appendix A to 40 CFR part 112)

U.S. Environmental Protection Agency (EPA). 2000. “Guidelines for Preparing Economic Analyses”. September.

U.S. Environmental Protection Agency (EPA). 2002b. "Economic Analysis for the Final Revisions to the Oil Pollution Prevention Regulation (40 CFR Part 112)." May.

U.S. Environmental Protection Agency (EPA). 2006. “Trip Report: New York State Agriculture Trip, June 27-28, 2006. Troy Swackhammer, US EPA, OEM/RPDD.

U.S. Environmental Protection Agency (EPA). 2008a. “Assessment of SPCC Impacts of Oil Exploration and Production”, Office of Policy Economics and Innovation, 2008.

U.S. Environmental Protection Agency (EPA). 2008b. “Regulatory Impact Analysis for the Final Amendments to the Oil Pollution Prevention Regulations (40 CFR PART 112).” November.

U.S. Environmental Protection Agency (EPA). 2008c. "Revision of Information Collection Request (ICR) for the Oil Pollution Prevention Regulation for Certain Facilities to Prepare and Maintain an Oil Spill Prevention, Control, and Countermeasure (SPCC) Plan."

U.S. Office of Management and Budget, September 17, 2003, OMB Circular A-4, p. 33-34. Available at http://www.whitehouse.gov/omb/circulars/a004/a-4.pdf.

U.S. Small Business Administration, “Table of Small Business Size Standards Matched to North American Industry Classification System Codes,” March 11, 2008. Available at: http://www.sba.gov/idc/groups/public/documents/sba_homepage/serv_sstd_tablepdf.pdf