

# OFFICE OF MANAGEMENT AND BUDGET

WASHINGTON, D.C. 20503

December 5, 2008

The Honorable Nancy Pelosi Speaker of the House of Representatives Washington, DC 20515-1314

Dear Madam Speaker:

I am pleased to submit the annual report on Federal participation in the development and use of voluntary consensus standards, in accordance with the Office of Management and Budget (OMB) Circular A-119 and as required by Section 12(d) of the National Technology Transfer and Advancement Act Amendments of 1996 (NTTAA, P.L. 104-113). This report was prepared by the National Institute of Standards and Technology (NIST) at the Department of Commerce based on input from 26 agencies. NIST and OMB staffs continue to work collaboratively with each other and with contributing agencies to improve the availability, accuracy, and relevance of this report.

The NTTAA directs Federal government agencies to achieve greater reliance on voluntary consensus standards developed by private sector and decreased reliance on standards developed by and for the government. It also directs that Federal agency personnel participate in the activities of voluntary consensus standards developing organizations to help ensure that standards produced in the private sector are more likely to be appropriate for use by Federal agencies.

This report demonstrates that agencies develop a minimal number of new standards and perform periodic review of government-unique standards for potential rescission or replacement by commercial standards.

Thank you for your ongoing interest in and support for policies related to Federal use of voluntary consensus standards.

Sincerely,

Susan E. Dudley Administrator

Office of Information and Regulatory Affairs

## Identical Letter Sent to:

The Honorable Nancy Pelosi

The Honorable Richard Cheney

The Honorable Daniel K. Inouye

The Honorable Kay Bailey Hutchinson The Honorable John F. Kerry The Honorable John Ensign

The Honorable Bart Gordon

The Honorable Ralph M. Hall

The Honorable Nick Lampson

The Honorable Bob Inglis

## Summary Report on Federal Agency Use of Private Sector Standards and Conformity Assessment Activities for FY 2007

## 1.0 – Executive Summary

The U.S. Department of Commerce presents this summary report for the Office of Management and Budget (OMB) in compliance with OMB Circular A-119 and Public Law 104-113, the National Technology Transfer and Advancement Act (NTTAA). As required by Section 9 of the Circular, this report, prepared by the National Institute of Standards and Technology (NIST), describes activities related to the use of voluntary consensus standards (VCSs) by 26 federal agencies during fiscal year (FY) 2007.

Since the inception of the NTTAA, Federal agencies have continued to make progress in relying on voluntary consensus standards in support of their regulatory and procurement activities. NIST, through its Standards Incorporated by Reference database, independently tracks governmental use of private-sector standards in regulation and procurement. As of the date of this report, NIST has identified more than 20000 citations of standards incorporated by reference in procurement and regulatory documents. This online interactive database <a href="http://standards.gov/sibr/query/index.cfm">http://standards.gov/sibr/query/index.cfm</a>> demonstrates the extensive use of voluntary standards throughout the U.S. Government.

For FY 2007, federal agencies reported 350 new uses of VCSs. In contrast, federal agencies promulgated only two new government-unique standards (GUSs) in lieu of VCSs during the fiscal year, bringing the total number of GUSs in use in lieu of VCSs to 48. The decrease from FY 2006's reporting of 73 is due to 27 GUSs in use by the U.S. Environmental Protection Agency (EPA) that have since been determined to not have a private sector equivalent and have therefore been reclassified. The continued adoption of significant numbers of VCSs and the low rate of promulgation of new government-unique standards in lieu of VCSs illustrates the success that the NTTAA continues to have in encouraging agencies to look first to VCSs to meet their regulatory, procurement and conformity assessment needs rather than to develop GUSs.

Agencies reported 3370 personnel participating in a total of 497 standards-developing organizations, representing an all time high for organizations with federal participation.

Reports for FY 2007 show that agencies and affected stakeholders continue to realize benefits from federal participation in the development and adoption of VCSs to support agency missions. These adoptions result in cost savings to federal agencies, to the Nation's businesses, and ultimately to the taxpayer through reduced injuries and deaths, increased transactional efficiencies, reduced administrative burdens, and lower costs of products and services.

During FY 2007, several agencies reported substantial benefits from their adoption and use of voluntary consensus standards. The Department of Transportation's (DOT) Federal Aviation Administration (FAA) and the DOT Pipeline and Hazardous Materials Safety Administration (PHMSA)'s worked with private standards organizations to develop guidance on micro fuel cells aboard commercial aircraft. These fuel cells are used to power consumer electronics, such as cell phones and laptops. The coordination allowed for shortening a related rule's promulgation timeframe from an average of seven years to two, and has saved industry hundreds of thousands of dollars in permitting and compliance costs. In addition,

the Nuclear Regulatory Commission achieves both cost reduction and time savings through endorsement of the ASME boiler code, thereby avoiding the independent development of regulatory requirements for construction, in-service inspection and in-service testing of nuclear power plant components. These examples illustrate a few of the various ways the government and the taxpayer derive benefits from the development, adoption and use of voluntary consensus standards.

## 2.0 – Overview and Scope

NIST formulated this report in close consultation with OMB, based on inputs submitted to NIST by federal agencies in fulfillment of the requirements of OMB Circular A-119 and the reporting requirements of Section 12 of the NTTAA. The report describes federal agency activities related to the use of private-sector standards in regulation, procurement and conformity assessment during FY 2007. A list of reporting agencies may be found in Appendix A.

## 3.0 – Federal Agency Use of Standards

The OMB Circular requires that federal agencies use voluntary consensus standards in lieu of government-unique standards in their regulatory and procurement activities. However, a federal agency is given the discretion to decide whether to use existing voluntary consensus standards if the agency determines that use of such standards would either be inconsistent with applicable laws or otherwise impractical. The Circular also directs agencies to establish a process for continuing review of their use of standards for purposes of updating such use, including substitution of private-sector standards for government-unique standards wherever possible.

## 3.1 – Government-Unique Standards Used in Lieu of Voluntary Consensus Standards

The OMB Circular requires that agencies report their use of standards on either a "categorical" or a "transactional" basis. Those agencies that report on a "categorical" basis are not required to list each instance that a government-unique standard is promulgated in lieu of a private-sector standard in procurement actions. Such agencies are required to have a system in place to ensure that government-unique standards are developed only when suitable private-sector standards are not available for use. At present, only the Department of Defense (DoD) and the National Aeronautics and Space Administration (NASA) consistently report on a "categorical" basis. For all agencies, in those cases when government-unique standards are required because private-sector standards do not exist, use of the government-unique standard is not subject to reporting.

Table 3.1 illustrates the cumulative number of government-unique standards in use (that is, the total number in use, by agency and the U.S. Government as a whole, by year) in lieu of private-sector standards since FY 1997, as well as the number of government-unique standards introduced, reclassified or discontinued in each fiscal year. During FY 2007, federal agencies reported that they incorporated two new government-unique standards and reclassified 27. The Department of Labor (DOL) reported two new government-unique standards, while the EPA reclassified and removed 27 government-unique standards from its report after an internal review which concluded that 27 of those that had been previously reported did not meet the criteria for being in use in lieu of existing private sector standards.

The private-sector standards were found not to meet the specifications needed by the EPA, therefore the promulgation of GUSs were determined to be necessary<sup>1</sup>.

Table 3.1 – Government-unique Standards in Use in Lieu of Private Sector											
Standards Statistics <sup>2</sup>											
Agency <sup>3</sup>	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
USDA									1	1	1
HHS	3	3	3	3	3	3	3	2	2	4	4
HUD				2	2	2	2	2	2	2	2
DOL					1	2	4	5	5	6	8
DOT	1	2	2	2	2	3	3	3	3	3	3
EPA		3	28	29	40	45	50	50	50	50	23
GSA				3	2	2	3	2	2	3	3
NARA				1	1	1	1	1	1	1	1
CPSC				1	1	1	2	2	2	2	2
GPO				4	4	4	4	4	0	0	0
ACCESS										1	1
New Uses	4	4	25	12	12	7	9	1	1	5	2
Discontinued					1			2	4	0	
Reclassified											27
Total In Use	4	8	33	45	56	63	72	71	68	73	48

Appendix C lists the GUSs promulgated by agencies in 2007, along with the rationale for not using the specified relevant voluntary consensus standard. For a complete listing of the GUSs used in lieu of VCSs and the justifications from FY 1997 through FY 2007, see NIST's Standards website <a href="http://standards.gov/NTTAA/agency/index.cfm">http://standards.gov/NTTAA/agency/index.cfm</a>.

## 3.2 – New Uses of VCSs By Federal Agencies

For FY 2007, federal agencies reported the adoption of 350 new VCSs. Three agencies - the Departments of Energy, Treasury and Defense -- account for nearly 90 percent of the reported new uses.

## 3.3 – Current Agency Reporting on VCSs Substituted for GUSs

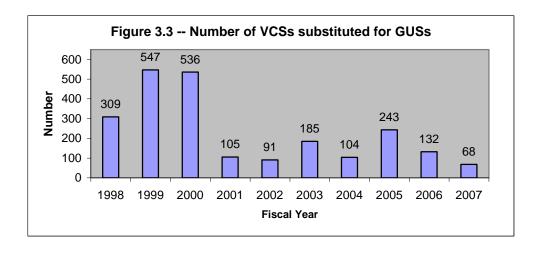
Federal agencies also report annually on the number of VCSs that they have substituted for GUSs during the year. Figure 3.3 illustrates the substitutions for each year since FY 1998. In FY 2007, federal agencies substituted 68 VCSs for GUSs.<sup>4</sup> After an intense initial effort to substitute many GUSs, there has been an average of about 133 substitutions a year since 2001.

<sup>&</sup>lt;sup>1</sup> A list of the 27 GUSs that have been reclassified is available at the following: <a href="http://standards.gov/nttaa/resources/epatable.pdf">http://standards.gov/nttaa/resources/epatable.pdf</a>

<sup>&</sup>lt;sup>2</sup> Represents only those GUSs used in lieu of VCSs which were reported by agencies as promulgated and in use or promulgated and withdrawn between 1997 and 2007 under the requirements of the NTTAA and OMB Circular A-119.

<sup>&</sup>lt;sup>3</sup> See Appendix A for list of agency acronyms.

<sup>&</sup>lt;sup>4</sup> GUSs being substituted include the universe of GUSs, i.e., those in use prior to the implementation of NTTAA reporting, those that were not 'in lieu of VCSs', and those that were in lieu of VCSs. Since NIST began collecting data, there have been 2470 reported substitutions of VCSs for GUSs across agencies. While we do not know the entire universe of GUSs, we know from published sources that DoD (the largest user of GUSs) still uses over 20000 GUSs counting military, federal and NATO specifications and as of FY 2006 was using more than 9200 private-sector standards. 7400 private-sector standards were adopted by DoD before 1997.

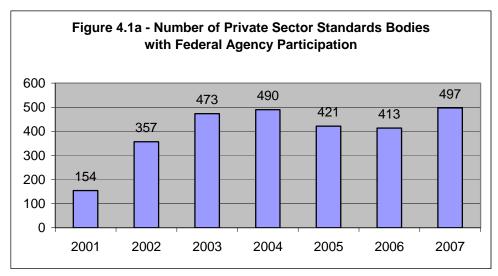


#### 4.0 – Federal Participation in Private Sector Standards Activities

OMB Circular A-119 states that federal agencies "must consult with VCSs bodies, both domestic and international, and must participate with such bodies in the development of VCSs when consultation and participation is in the public interest and is compatible with their missions, authorities, priorities, and budget resources." The Circular goes on to declare that "agency support provided to a VCSs activity must be limited to that which clearly furthers agency and departmental missions, authorities, priorities, and is consistent with budget resources."

## 4.1 – Participation Data for FY 2007

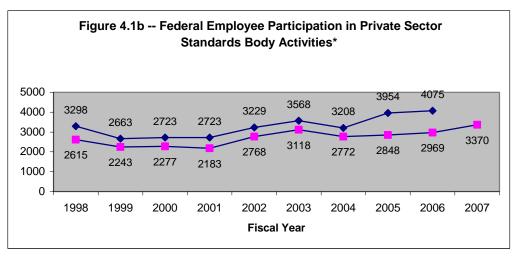
In FY 2007, agencies reported participation in 497 private sector standards bodies, compared to 413 in FY 2006, reflecting a 20 percent increase and an all-time high. (See Figure 4.1a.) The list of organizations includes American National Standards Institute (ANSI)-accredited VCSs developers, other (non-ANSI accredited) standards developers, industry and trade associations, international organizations, and consortia.



Federal agencies are also required by OMB to report the number of federal employees who participate in private sector standards bodies. This includes not only those who serve on technical standards development committees, subcommittees, or workgroups, but also those

who participate in management activities, annual meetings, or seminars. In FY 2007, agencies (excluding DoD<sup>5</sup>) reported that 3370 employees participated in private-sector standards body activities. Among agencies reporting this data, this statistic reflects an increase of 405 participants over the previous year. Figure 4.1b illustrates total federal employee participation in private sector standards body activities since FY 1998. Data detailing FY 2007 participation for each agency is provided in Appendix B.

A complete listing of the standards developing organizations in which federal agencies participated can be viewed in the extended appendices to this report located at http://standards.gov/NTTAA/agency/index.cfm.



\* The upper series includes DoD participation data prior to 2007 while the lower series excludes DoD participation.

## 5.0 – Federal Agency Conformity Assessment Activities

The NTTAA requires NIST to coordinate federal, state, and local standards activities and conformity assessment activities with private sector standards activities and conformity assessment activities, with the goal of eliminating unnecessary duplication and complexity in the development and promulgation of conformity assessment requirements and measures. Federal conformity assessment activities are a means of providing assurance that the products and services regulated or procured by federal agencies have the required characteristics and/or perform in a specified manner. Agency conformity assessment procedures may include sampling and testing, inspection, accreditation, certification; licensing; product listing; the submission to an agency of manufacturing, operational, and related data for review; manufacturer self-declaration of conformity to agency requirements; mandatory labeling and advertising requirements; establishment of national requirements, which are adopted/enforced at state and local government levels; issuance of regulatory guidelines; premarketing approval requirements; post-marketing monitoring requirements; and the conduct of environmental impact assessments. NIST publishes a number of directories and reports on conformity assessment-related issues and maintains a Web site <a href="http://ts.nist.gov">http://ts.nist.gov</a> that provides a one-stop-shopping source for information on various conformity assessment issues.

6

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<sup>&</sup>lt;sup>5</sup> The DoD employee participation data is no longer being reported. In consideration of government security restrictions, DoD is unable to collect actual personnel information related to participation in non-government standards body activities.

Throughout the fiscal year, numerous agencies worked with NIST support to design and implement appropriate and effective conformity assessment schemes for products related to homeland security, health and safety, and the environment. A measurement and standards infrastructure for three homeland security technology areas, namely radiological and nuclear detectors, biometrics readers and emergency communications equipment, was developed through these interagency efforts. Also, four other government agencies – the EPA, the Consumer Product Safety Commission (CPSC), the Food and Drug Administration (FDA), and the Department of Justice's National Institute of Justice (NIJ) as well as the NIST worked with standards developers, accreditation bodies, and industry representatives to enhance programs and initiatives in conformity assessment for electronics recycling, water conservation, toy safety, electrical medical devices, and body armor.

The full report of FY 2007 agency conformity assessment activities may be found in the *Addendum to the Eleventh Annual Report on Federal Use of Voluntary Consensus Standards and Conformity Assessment* <a href="http://standards.gov/NTTAA/agency/index.cfm">http://standards.gov/NTTAA/agency/index.cfm</a>>.

#### 6.0 – Agency Comments on the Effectiveness of OMB Circular A-119

The NTTAA requires that NIST gather and report on agency comments on the effectiveness of OMB Circular A-119. During FY 2007, the majority of reporting agencies either had no comment on the effectiveness of OMB Circular A-119 or indicated that they found the Circular effective in helping them manage their standards development programs. Several agencies provided substantive considerations regarding possible reporting alternatives and revised data collections.

- Department of Defense (DOD) recommends revising reporting requirements to include alternative information, such as examples of positive outcomes from participation in non-government standards activities and reliance on non-government standards.
- Department of Transportation (DOT) recommends agencies report only on instances
  of government-unique standards being used in lieu of voluntary consensus standards.
  DOT recommends continuing the policy that there is no requirement to report on
  government-unique standards developed where a voluntary consensus standard is
  unavailable.
- Health and Human Services (HHS) Centers for Disease Control recommends expanding reporting beyond considering just Standards Developing Organizations to also include agency activity with other outside partners.
- Department of Homeland Security (DHS) proposes that the reporting focus more on reporting standards development activities across agency programs and components.
- Department of Veterans Affairs (VA) requested recommendations to help agencies identify useful standards and compliance enforcement methods.

The full text of agency comments may be found in the *Addendum to the Eleventh Annual Report on Federal Use of Voluntary Consensus Standards and Conformity Assessment* located at <a href="http://standards.gov/NTTAA/agency/index.cfm">http://standards.gov/NTTAA/agency/index.cfm</a>. NIST has shared these comments with OMB.

## 7.0 – The Interagency Committee on Standards Policy (ICSP)

During FY 2007, 60 individuals served on the ICSP including agency Standards Executives, their alternates, NIST support staff, and representatives from OMB and the Executive Office of the President. The ICSP met four times in FY 2007, including one joint meeting with the American National Standards Institute's Government Member Forum. Information concerning the ICSP including membership, charter and meeting minutes may be found at the following link: <a href="http://standards.gov/icsp/query/index.cfm">http://standards.gov/icsp/query/index.cfm</a>.

#### 8.0 – Success Stories: Examples from Federal Agencies

Leveraging the private sector standards development process for government purposes has led to significant resource savings for agencies and stakeholders throughout the Federal Government. Some examples of successes from fiscal year 2007 are:

• Department of Transportation (DOT)

The DOT's Federal Aviation Administration (FAA) and the DOT Pipeline and Hazardous Materials Safety Administration (PHMSA) jointly worked with the International Electrotechnical Commission (IEC) and the International Civil Aviation Organization (ICAO) to prepare an IEC Publicly Available Specification (PAS) on micro fuel cells. Micro fuel cells are used in the batteries for consumer electronics such as cell phones and laptops, but present an issue for commercial aviation as they contain hazardous material. An IEC/PAS is a normative document that represents a consensus among experts and is designed to bring the work of industry consortia into the realm of the IEC.

The IEC/PAS became the basis for a rule that enables micro fuel cells to fly in the passenger cabin of commercial aircraft, maintaining aviation safety while removing a developmental barrier to this emerging technology, development and deployment of which supports the President's Hydrogen Initiative. By using the PAS structure, FAA and PHMSA reduced the time for a hazardous material in aviation final rule from an average seven (7) years, to less than two (2) years. The IEC/ICAO process allowed stakeholders from the commercial aviation and fuel cell industries to swiftly share technical information, and to produce a consensus document that enabled the new safety rule. In addition to saving time and associated costs of a lengthy rulemaking process, this new rule significantly limits the costs of compliance with the IEC/PAS to minor test costs, instead of the hundreds of thousands of dollars in costs per manufacturer to gain special permitting for each fuel cell model. The regulatory changes enabled through use of the consensus standards process lifts significant barriers to the commercialization and distribution of fuel cell cartridges for use in personal electronic equipment.

• Nuclear Regulatory Commission (NRC)

An example of a standards success for NRC involves the endorsement of Sections III (Construction of Nuclear Facility Components) and XI (In-service Inspection of Nuclear Power Plant Components) of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code and the ASME Code for Operation and Maintenance of Nuclear

Power Plants (In-service Testing of Nuclear Facility Pumps and Valves) in NRC's regulations and regulatory guidance. These ASME Codes are developed through the consensus process, and endorsement of the ASME Code by the NRC provides a method of incorporating rules into the regulatory process that are acceptable to the NRC and have received industry participation in their development. If the NRC did not take action to endorse the ASME Code, the NRC would either have had to develop independently the regulatory requirements for construction, in-service inspection (ISI), and in-service testing (IST) of Nuclear Power Plant Components, or to establish the acceptable criteria and methods for construction, ISI, and IST on a case-by-case basis.

Additional agency success stories may be found in the responses to Question 1 in the *Addendum to the Eleventh Annual Report on Federal Use of Voluntary Consensus Standards and Conformity Assessment* located at: <a href="http://standards.gov/NTTAA/agency/index.cfm">http://standards.gov/NTTAA/agency/index.cfm</a>>.

#### 9.0 – Challenges and Opportunities

As of FY 2007, eleven years since the start of the NTTAA reporting requirement, federal agencies indicate that they have 48 GUSs in use in lieu of VCSs. This small number of GUSs reflects a real and continuing reliance on VCSs. The Act has successfully encouraged agencies to look first to use VCSs to meet their needs rather than to develop unnecessary GUSs.

NIST continues to assist federal agencies and their stakeholders involved in standards management. NIST hosts the internet portal <a href="http://standards.gov">http://standards.gov</a>, providing a one-stop e-government location for information related to the use of VCSs. The website offers background, materials, useful links, and search tools for locating information about the use of standards in government including a searchable database, "Standards Incorporated by Reference" <a href="http://standards.gov/sibr/query/index.cfm">http://standards.gov/sibr/query/index.cfm</a>. The website also serves as a forum for providing ongoing, practical guidance, tools, and information needed by agencies to successfully implement the NTTAA, as well as a means to electronically report standards activities required by the NTTAA and OMB Circular.

Building on the success of the NTTAA in reducing reliance on GUSs along with the trend towards e-government, NIST is working with agencies to continue shifting towards reporting more timely and accurate information to the standards community while refining the information to better reflect the intent of the NTTAA and direction from OMB. In addition, NIST is working with agency standards executives and OMB to integrate standards participation and use more directly into the missions, decision making processes, and strategic goals of the federal agencies.

In addition to preparing and transmitting the required annual reports to OMB, NIST will continue to provide resources on standards.gov to facilitate federal agency participation in the development and use of private sector standards. NIST will also work with agencies as they establish websites that reflect required NTTAA and OMB Circular A-119 data and upto-date information on agency standards activities. The annual report fulfills the reporting requirements of both the NTTAA and OMB Circular. Expanded use of standards.gov and agency websites will consolidate information gathering and support efficient communication between agencies and stakeholders.

Appendix A FY 2007 List of Reporting Federal Agencies					
Agency	Acronym	Standards Program Website			
Department of Agriculture	USDA	*			
Department of Commerce	DOC	http://ts.nist.gov/commerce/			
Department of Defense	DoD	http://www.dsp.dla.mil			
Department of Energy	DOE	http://www.hss.energy.gov/NuclearSafety/techstds/inde x.html			
Department of Education	ED	*			
Department of Health and Human Services	HHS	*			
Department of Homeland Security	DHS	http://www.dhs.gov/xfrstresp/standards/			
Department of Housing and Urban Development	HUD	http://www.hud.gov/offices/hsg/sfh/mps/mpshome.cfm			
Department of the Interior	DOI	*			
Department of Justice	DOJ	http://www.ojp.gov/nij/topics/technology/standards-development.htm			
Department of Labor	DOL	*			
Department of State	DOS	*			
Department of Transportation	DOT	Various – see DOT's report on http://standards.gov/NTTAA/agency/index.cfm			
Department of the Treasury	TRES	http://www.treas.gov/offices/international-affairs/standards/			
Department of Veterans Affairs	VA	http://www1.va.gov/oamm/			
Environmental Protection Agency	EPA	http://www.epa.gov/oppt/p2home/pubs/programs/volunt ary.htm			
General Services Administration	GSA	http://www.gsa.gov Home>About GSA>Reference>Supply Standards			
National Archives and Records Administration	NARA	*			
National Aeronautics and Space Administration	NASA	http://standards.nasa.gov			
National Science Foundation	NSF	*			
Consumer Product Safety Commission	CPSC	http://www.cpsc.gov/volstd/standards.html			
Federal Communications Commission	FCC	*			
Federal Trade Commission	FTC	*			
Nuclear Regulatory Commission	NRC	http://www.nrc.gov/about-nrc/regulatory/standards-dev.html			
Government Printing Office	GPO	*			
Access Board	ACCESS	http://www.access-board.gov/gs.htm			
<b>*N</b>	L				

<sup>\*</sup>Not available or not reported

# Appendix B -- FY 2007 Federal Agency Information on Participation/Adoption of Voluntary Standards Activities Required by OMB Circular A-119

Agency	Government unique standards used in lieu of voluntary consensus standards	Voluntary consensus standards substituted for government unique standards	Voluntary consensus standards used this year (new uses)	Employee participation in voluntary consensus standards bodies	Voluntary consensus standards bodies with agency participation
USDA	1	0	0	98	34
DOC	0	0	0	464	108
DoD	*	67	57	NR	123
DOE	0	0	150	895	81
ED	0	0	0	4	5
HHS	4	0	0	793	170
DHS	0	0	14	125	49
HUD	2	0	0	4	5
DOI	0	0	4	300	63
DOJ	0	0	0	0	0
DOL	8	0	0	60	18
DOS	0	0	0	8	1
DOT	3	0	4	198	48
TRES	0	0	104	3	2
VA	0	0	0	4	20
EPA	23	0	3	44	25
GSA	3	0	8	23	26
NARA	1	0	0	16	13
NASA	*	1	0	105	22
NSF	0	0	0	4	3
CPSC	2	0	1	26	13
FCC	0	0	1	28	13
FTC	0	0	0	0	0
NRC	0	0	4	163	16
GPO	0	0	0	0	0
ACCESS	1	0	0	5	6
Totals	48	68	350	3370	**

<sup>\*</sup>Agencies reporting on a categorical basis per OMB Circular A-119, Section 12.

\*\* Total not provided. Total would result in multiple counting due to participation in standards bodies by two or more federal agencies.

	Appendix C FY 2007 Government-Unique Standards in use in lieu of Voluntary Consensus Standards					
1	Agency:	Department of Labor (DOL)				
	Government-Unique Standard:	29 CFR 1910 Subpart S - Electrical Standard (Incorporated: 2007) [Incorporated: 2007]				
	Voluntary Standard:	NFPA 70 - National Electric Code NFPA 70E - Electrical Safety Requirement for Employee Workplaces. ANSI/IEEE C2 - National Electrical Safety Code ANSI/ASME B30.4 - Portal, Tower, and Pedestal Cranes				
		NFPA 33 - Spray Application Using Flammable or Combustible Materials ANSI Z133.1 Arboricultural Operations for Pruning, Repairing, Maintaining, and Removing Trees, and Cutting Brush				
	Rationale:	Several voluntary consensus standards were relied upon for the various provisions in the final rule, however, no single VCS is available to cover all the workplace applications that are addressed by OSHA. The Agency believes that it would be less burdensome for the regulated community to use one OSHA standard rather than purchase and use the 6 individual consensus standards it used to write the rule.				
2	Agency:	Department of Labor (DOL)				
	Government-Unique Standard:	30 CFR Part 75 - Sealing of Abandoned Areas - Emergency Temporary Standard. [Incorporated: 2007]				
	Voluntary Standard:	ACI 318-05 - Building Code Requirements for Structural Concrete and Commentary ACI 440.2R-02 - Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures ASTM E119-07 - Standard Test Methods for Fire Tests of Building Construction and Materials ASTM E162-06 - Standard Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source				
	Rationale:	Four consensus standards were relied upon for various provisions in the emergency temporary standard, but no one consensus standard is available that covered all of the topics covered by MSHA's Emergency Temporary Standard.				