

NISTIR 7857

**Fifteenth Annual Report on Federal Agency Use of Voluntary
Consensus Standards and Conformity Assessment**

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U.S. Department of Commerce
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1.0 Executive Summary

The U.S. Department of Commerce (DOC) presents this summary report to 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 (VCS) by 25 federal agencies during fiscal year (FY) 2011. These federal agencies, listed in Appendix A, fulfilled the reporting requirements of both the OMB Circular A-119 and Section 12 (d) (3) of the NTTAA by providing information on their activities related to the use of private-sector standards in regulation, procurement, and conformity assessment.

In keeping with the requirements of the NTTAA, federal agencies indicated incorporating VCS whenever possible in their regulatory and procurement activities. NIST, through its Standards Incorporated by Reference database, independently tracks government use of private-sector standards in regulations. As of the date of this report, NIST has identified over 9,486 citations of standards incorporated by reference in regulatory documents – more than 80 percent of these were developed by the private sector. Available online at <http://standards.gov/sibr/query/index.cfm>, this interactive database illustrates the extensive use of voluntary standards throughout the U.S. Government.

For FY 2011, two agencies reported issuing four government-unique standards (GUS) in lieu of VCS for a total of 52 GUS that are currently being reported as replacing VCS. The two agencies developed these GUS to provide cost savings and greater protection for constituents, and to simplify compliance. The Department of Labor (DOL) incorporated relevant aspects of five VCS into one GUS to reduce the cost burden for their regulated community to purchase and comply with the individual VCS. DOL also issued a mine safety standard that incorporated recommendations from new research findings that were not yet contained in relevant VCS. The Nuclear Regulatory Commission (NRC) revised the Regulatory Guide 8.2, “Guide for Administrative Practices in Radiation Monitoring,” removing references to outdated VCS that referred to obsolete technical practices and outdated requirements and issued two new regulatory guidance standards as part of this revision.

In FY 2011, federal agencies reported 261 new uses of VCS. Both the continued adoption of significant numbers of VCS along with the careful consideration and low rate of development of new GUS in lieu of VCS demonstrate the NTTAA’s success in encouraging agencies to look first to VCS to meet their regulatory, procurement, and conformity assessment needs.

Agencies reported 3,032 personnel participating in a total of 528 standards-developing organizations during FY 2011. This high level of federal engagement reflects a sustained commitment of the U.S. government to the activities of the private sector led VCS system.

Individual agency reports for FY 2011 reflect the benefits of this engagement, demonstrating that a strong federal investment in voluntary standards development helps to provide a sound technical basis

for standards, speeds the standards development process, and enables the adoption of VCS to support agency missions. Furthermore, federal use of VCS yields economic and social benefits to numerous stakeholders including federal agencies, the Nation’s businesses, and the public through reduced injuries and deaths, increased transactional efficiencies, reduced administrative burdens, and lower costs of products and services.

2.0 Federal Agency Use of Standards

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

2.1 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. Agencies reporting on a categorical basis are not required to list each instance that a GUS is used in lieu of a private-sector standard in procurement actions. Such agencies are required to have a system in place ensuring that GUS are developed only when suitable private-sector standards are not available for use. Only the Department of Defense (DoD) and the National Aeronautics and Space Administration (NASA) report on a categorical basis. In situations where private-sector standards do not exist, agencies are not required to report their use of GUS.

Table 2.1 illustrates the cumulative number of reported GUS (total by year and agency) used in lieu of

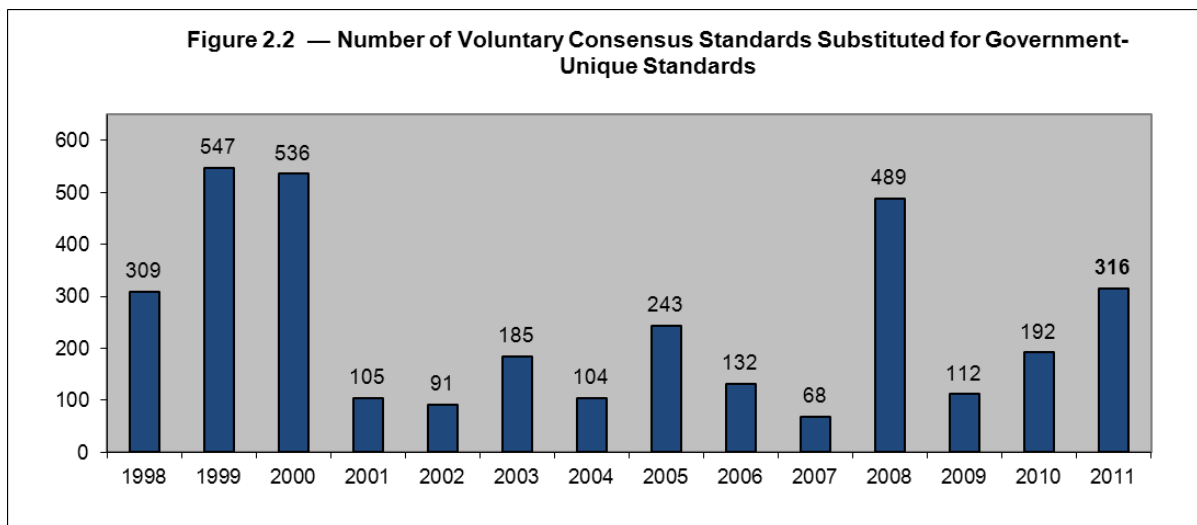
Table 2.1 Government-Unique Standards Used in Lieu of Private Sector Standards Statistics																
Agency	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
USDA									1	1	1	1	1	1	1	
HHS	3	3	3	3	3	3	3	2	2	4	4	1	1	1	1	
HUD				2	2	2	2	2	2	2	2	2	2	2	2	
DOL					1	2	4	5	5	6	8	8	9	10	12	
DOT	1	2	2	2	2	3	3	3	3	3	3	3	3	4	4	
EPA		3	28	29	40	45	50	50	50	50	23	23	23	23	23	
GSA				3	2	2	3	2	2	3	3	3	3	3	3	
NARA				1	1	1	1	1	1	1	1	1	1	1	1	
CPSC				1	1	1	2	2	2	2	2	2	2	2	2	
GPO				4	4	4	4	4								
ACCESS										1	1	1	1	1	1	
NRC																2
New Uses	4	4	25	12	12	7	9	1	1	5	2		1	3	4	
Discontinued					1			2	4		27	3		1		
Total In Use	4	8	33	45	56	63	72	71	68	73	48	45	46	48	52	

private sector standards since FY 1997, as well as the number of GUS introduced and discontinued in each fiscal year. During FY 2011, two federal agencies found it necessary to develop their own standards instead of using existing private sector standards. Appendix B lists these agencies, their new GUS and rationale for why use of the relevant VCS was impractical. For a complete listing of the GUS used in lieu of VCS and justifications from FY 1997 through FY 2011, visit <http://standards.gov/NTTAA/agency/index.cfm>.

2.2 Federal Agency Use or Substitution of Voluntary Consensus Standards in Lieu of Government-Unique Standards

In FY 2011, federal agencies frequently found opportunities to use or substitute VCS instead of creating or using GUS.

- Federal agencies report adopting 261 VCS, with DoD accounting for 43 percent of the reported new uses and NRC, EPA, and HHS accounting for 31 percent.
- Federal agencies reported substituting 316 VCS for GUS, a significant increase from the last few years.¹ Nearly all substitutions were within DoD. Figure 2.2 illustrates the substitutions for each year since FY 1998.



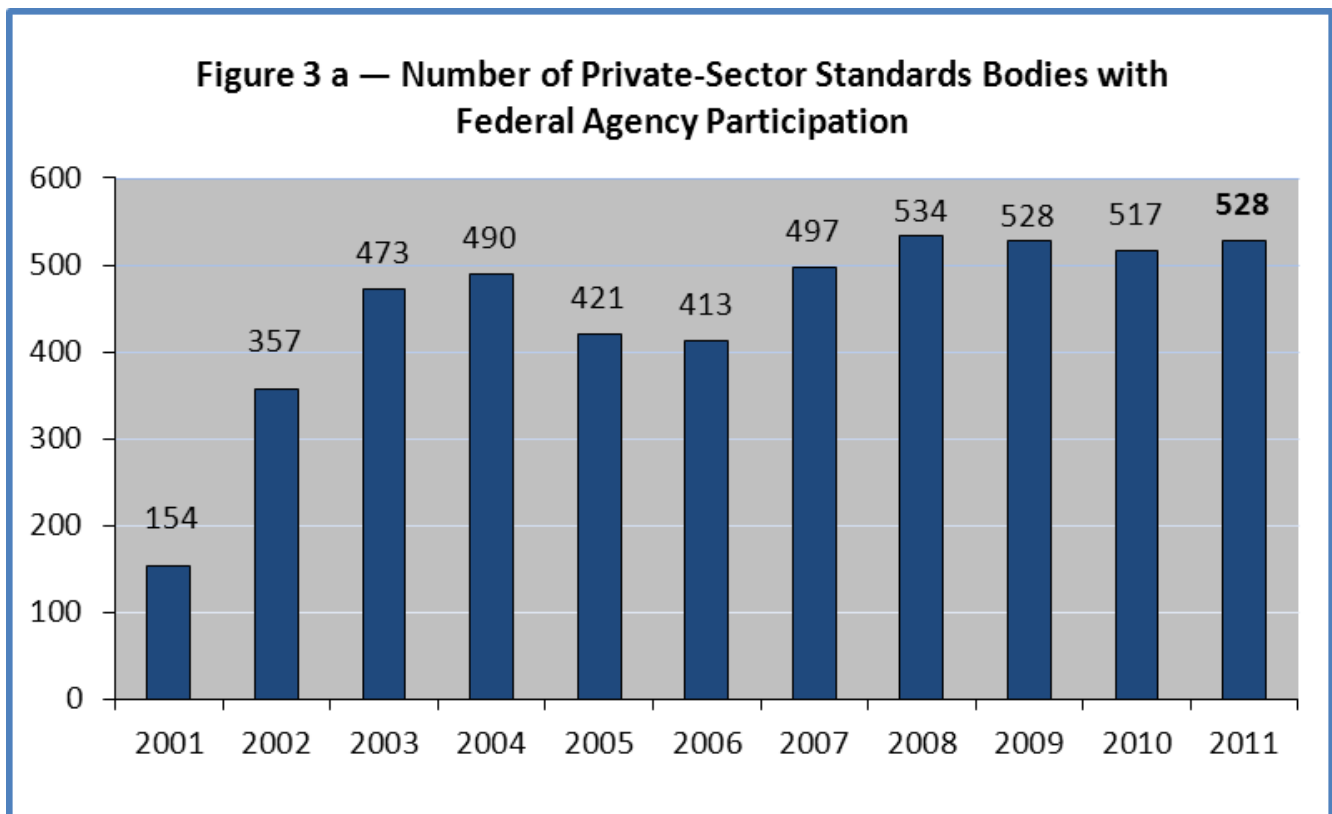
3.0 Federal Participation in Private-Sector Standards Activities

OMB Circular A-119 states that federal agencies “must consult with VCS bodies, both domestic and international, and must participate with such bodies in the development of VCS when consultation and

¹ GUS being substituted include the universe of GUS, i.e., those in use prior to the implementation of NTTAA reporting, those that are not “in lieu of VCS”, and those that are in lieu of VCS. Since NIST began collecting data, there have been 3,579 reported substitutions of VCS for GUS across agencies. While we do not know the entire universe of GUS, we know from published sources that DoD—the largest user of such standards—lists over 21,000 GUS, counting military, federal, and NATO specifications, and more than 8,600 private-sector standards. DoD adopted 7,400 private-sector standards before 1997.

participation is in the public interest and is compatible with their missions, authorities, priorities, and budget resources.” The Circular declares that “agency support provided to a VCS activity must be limited to that which clearly furthers agency and departmental missions, authorities, priorities, and is consistent with budget resources.”

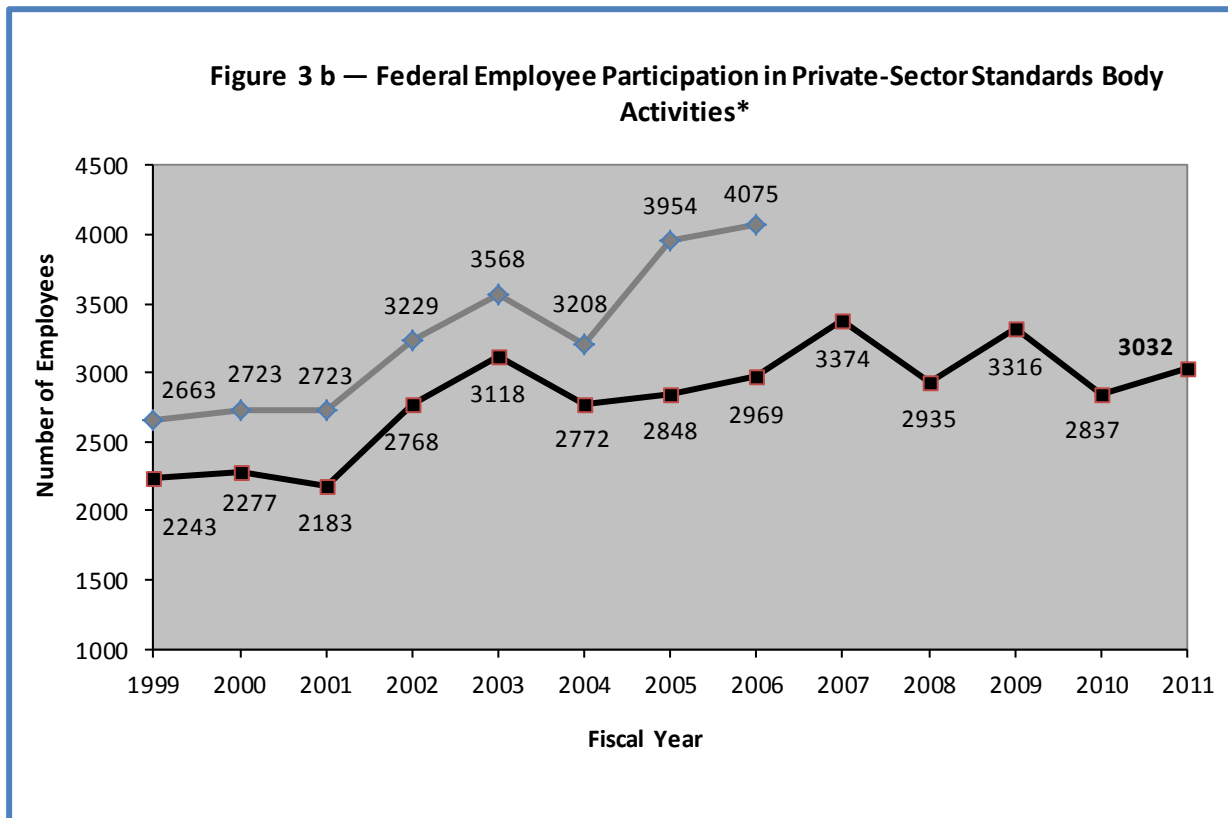
In FY 2011, agencies reported participation in 528 private-sector standards bodies compared to 517 in FY 2010 (see Figure 3a). The list of organizations includes VCS developers accredited by the American National Standards Institute (ANSI), other (non-ANSI-accredited) standards developers, industry and trade associations, international standards organizations, and consortia.



Federal agencies are also required by OMB to report the number of their employees who participate in private-sector standards body activities. This number includes not only those who serve on technical standards development committees, subcommittees, or workgroups, but also those who serve on boards and other leadership positions.

In FY 2011, federal agencies reported that 3,032 employees participated in private-sector standards body activities, an increase from the previous year. Participation continues to remain above the annual average of 2,806 for reporting agencies. Of those reporting on staff participation, Department of Health and Human Services (HHS) has the largest number of staff participating in VCS standards body activities (856) followed by the Department of Energy (498) and DOC (458). Figure 3b illustrates total

federal employee participation in private-sector standards body activities reported since FY 1998. Data detailing FY 2011 participation for each agency is provided in Appendix A. 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 data; 2006 is the last year that DoD reported staff participation in standards body activities. The lower series excludes these data.

4.0 Evaluation of the Effectiveness of OMB Circular A-119

During FY 2011, 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. Presented below are a few individual agency comments and their recommended changes to the Circular.²

Department of Homeland Security (DHS) - OMB Circular A-119, last revised in 1998, remains in need of updating to reflect the federal government initiatives in interoperability and information sharing. Recommend that revision address the inclusion of public and private sector participants more directly in the evolution of relevant government standards and conventions rather than relying on existing voluntary standards, particularly those relating to data standardization and information exchanges, for information sharing purposes.

² It is within OMB's purview to consider and respond to these comments as appropriate.

Department of Interior (DOI) –Since its issuance, Circular A-119 has worked in a straightforward manner to encourage the use of VCS. Some believe that there is an order of preference for VCS (for example, international VCS are to be preferred to domestic VCS). NIST and OMB are encouraged to adjudicate issues concerning interpretation of OMB Circular A-119.

Environmental Protection Agency (EPA) –This reporting mechanism has not proven to be a significant asset in trying to encourage strategic consideration of the voluntary standards and conformity assessment tools available here in the US and world-wide a reconsideration of the reporting might be helpful in providing the Administration, Congress, and the public with a better sense of the value of the standards system and how collaboration between the government and the system is to the benefit of all.

Treasury and the Office of Financial Research - To the extent NIST determines creation of data interoperability in other industry sectors as a government-wide goal, that such purpose may be built into A-119.

The full text of agency comments may be found in the *Addendum to the Fifteenth Annual Report on Federal Agency Use of Voluntary Consensus Standards and Conformity Assessment*, soon to be available online at <http://standards.gov/NTTAA/agency/index.cfm>.

5.0 The Interagency Committee on Standards Policy (ICSP)

During FY 2011, 54 individuals served on the ICSP, including agency Standards Executives, their alternates, NIST support staff, and a representative from OMB. The ICSP met twice jointly with the ANSI's Government Member Forum, and once alone in FY 2011. Information concerning the ICSP, including membership, charter, and meeting minutes, may be found online at <http://standards.gov/icsp/query/index.cfm>.

6.0 Summary and Conclusions

As of FY 2011, 15 years since the start of the NTTAA reporting requirement, federal agencies report that they currently are using only 52 GUS in lieu of existing VCS. This small inventory reflects a real and continuing reliance on VCS. The NTTAA has successfully encouraged agencies to look first to VCS and to engage with the private sector standards system for solutions to government needs, rather than to develop GUS unnecessarily.

Guided by the NTTAA and OMB A-119, NIST continues to assist federal agencies and their stakeholders with standards and conformity assessment information, program support, guidance, and policy concerns. NIST hosts <http://standards.gov>, offering ongoing practical guidance, tools such as the searchable Standards Incorporated by Reference database, and information needed by agencies to implement the NTTAA successfully as well as a means to report standards activities as required by the NTTAA and OMB Circular A-119. 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, operating procedures, and strategic goals of federal agencies. This report fulfills the annual reporting requirements of both the NTTAA and OMB Circular.

Appendix A: FY 2011 Federal Agency Information on Participation/Adoption of Voluntary Standards Activities Required by OMB Circular A-119

Agency	GUS in lieu of VCS	VCS substituted for GUS	New VCS used this year	Employee participation in VCS bodies	VCS bodies with agency participation
Department of Agriculture	1	0	11	91	48
Department of Commerce	0	0	0	458	123
Department of Defense	*	313	113	n/a	122
Department of Energy	0	0	10	498	92
Department of Education	0	0	0	24	4
Department of Health and Human Services	1	0	22	856	201
Department of Homeland Security	0	0	10	284	46
Department of Housing and Urban Development	2	0	0	9	5
Department of Interior	0	2	0	166	85
Department of Justice	0	0	0	1	0
Department of Labor	12	0	2	60	22
Department of State	0	0	0	9	1
Department of Transportation	4	0	8	131	50
Department of the Treasury	0	0	2	1	13
Environmental Protection Agency	23	0	26	80	14
General Services Administration	3	0	8	18	16
National Archives and Records Administration	1	0	13	14	9
National Aeronautics and Space Administration	*	0	0	71	12
Consumer Product Safety Commission	2	1	3	29	9
Federal Communications Commission	0	0	0	28	13
Federal Energy Regulatory Commission	0	0	0	0	0
Federal Trade Commission	0	0	0	0	0
Nuclear Regulatory Commission	2	0	33	189	15
Government Printing Office	0	0	0	7	4
Access Board	1	0	0	8	7
Totals	52	316	261	3032	**

* Agencies reporting on a categorical basis per OMB Circular A-119, Section 12.

** Total not calculated to avoid duplicate counting due to participation in a standards body by more than one federal agency.

Appendix B: FY 2011 New Government-Unique Standards Used in Lieu of Voluntary Consensus Standards

Agency	Department of Labor (DOL)
Government Standard	29 CFR 1915 Subpart F – General Working Conditions in Shipyard Employment (Incorporated: 2011) [Incorporated: 2011]
Voluntary Standards	<ul style="list-style-type: none"> • ANSI/IESNA RP-7-01, Recommended Practice for Lighting Industrial Facilities • ANSI/ISEA Z308.1-2009, Minimum Requirements for Workplace First Aid Kits and Supplies • ANSI Z358.1-2009, Emergency Eyewash and Shower Equipment • ANSI Z4.1-1995 and Z4.3-1995, Sanitation • ANSI/ASME B56.1-1993, Safety Standard for Low Lift and High Lift Trucks
Rationale	Several voluntary consensus standards (VCS) were relied upon for the various provisions in the final rule, however, no single VCS is available to cover all the workplace hazards that are addressed by OSHA in this final rule. The Agency believes that it is less burdensome for the regulated community to use the one OSHA standard rather than require the purchase and use of numerous individual consensus standards it used to write the rule.
Government Standard	30 CFR Part 75 – Safety Standards for Underground Coal Mines (Section 75.403 – Maintenance of Incombustible Rock Dust) – [Incorporated: 2011] [Incorporated: 2011]
Voluntary Standards	<ul style="list-style-type: none"> • ASTM C110-09 – Standard Test Methods for Physical Testing of Quicklime, Hydrated Lime, and Limestone • ASTM C737-08 – Standard Specification for Limestone Dusting of Coal Mines
Rationale	MSHA issued a final rule in June 2011 that finalized an Emergency Temporary Standard (ETS) on Maintenance of Incombustible Content of Rock Dust in Underground Bituminous Coal Mines. The basis of the ETS and final rule was a recommendation of the National Institute for Occupational Safety and Health contained in their Report of Investigations 9679 published in 2010. The ASTM consensus standards do not include the NIOSH recommendations or address the specific hazard covered in the MSHA ETS and final rule.
Agency	Nuclear Regulatory Commission (NRC)
Government Standard	NRC NUREG-1556, “Consolidated Guidance about Materials Licenses” [Incorporated: 2011]
Voluntary Standards	(ANSI) N 13.2-1969, “Guide for Administrative Practices in Radiation Monitoring”
Rationale	(ANSI) N 13.2-1969, “Guide for Administrative Practices in Radiation Monitoring,” had been endorsed in Regulatory Guide 8.2, with the same title, issued in February, 1973. The standard has not been revised since its inception, and it now refers to obsolete technical practices and outdated requirements. Therefore, Revision 1 of RG 8.2, published in May, 2011, removed endorsement of ANSI N 13.2-1969. Guidance is now provided through two referenced NRC reports, which could be considered Government-unique standards: NUREG-1556, “Consolidated Guidance about Materials Licenses,” and NUREG-1736, “Consolidated Guidance: 10 CFR Part 20—Standards for Protection against Radiation.”
Government	NRC NUREG-1736, “Consolidated Guidance: 10 CFR Part 20—Standards for

<i>Standard</i>	Protection against Radiation” [Incorporated: 2011]
<i>Voluntary Standards</i>	(ANSI) N 13.2-1969, “Guide for Administrative Practices in Radiation Monitoring”
<i>Rationale</i>	(ANSI) N 13.2-1969, “Guide for Administrative Practices in Radiation Monitoring,” had been endorsed in Regulatory Guide 8.2, with the same title, issued in February, 1973. The standard has not been revised since its inception, and it now refers to obsolete technical practices and outdated requirements. Therefore, Revision 1 of RG 8.2, published in May, 2011, removed endorsement of ANSI N 13.2-1969. Guidance is now provided through two referenced NRC reports, which could be considered Government-unique standards: NUREG-1556, “Consolidated Guidance about Materials Licenses,” and NUREG-1736, “Consolidated Guidance: 10 CFR Part 20—Standards for Protection against Radiation.”