

U.S. Department of Commerce

High Performance and Sustainable Buildings Handbook

Pursuant to Executive Order 13423

Strengthening Federal Environmental, Energy, and Transportation Management,

Executive Order 13514

Federal Leadership in Environmental, Energy, and Economic Performance

and

The Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding

Revised February 15, 2011



Executive Summary

Sustainable buildings have become a national priority due to concerns about limited energy resources, increasing energy costs, energy security, and climate change.

This Sustainable Buildings Handbook (SBH) addresses how the U.S. Department of Commerce (DOC) shall implement the sustainable buildings requirements of Executive Orders (EOs) 13423 and 13514. Specifically, this SBH outlines how DOC shall meet the following objectives:

- 1) Ensure all applicable new facilities and major renovation projects implement design, construction, and operations and maintenance practices in support of the sustainable buildings goals of EO 13423 and EO 13514, as well as statutory requirements; and
- 2) Ensure at least 15 percent of DOC's applicable existing buildings incorporate the Guiding Principles by the end of FY 2015; and
- 3) Ensure that DOC makes annual progress toward 100-percent conformance with the Guiding Principles; and
- 4) Ensure all applicable new construction and major renovations achieve a minimum LEED (Leadership in Energy and Environmental Design) silver rating.

DOC will include this plan as an appendix in the DOC's Real Property Asset Management Plan and shall update the plan annually.

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1. Introduction

The vision of the Department of Commerce is to meet its mission concurrent with exercising responsible stewardship for the environment by operating in sustainable facilities.

This Sustainable Buildings Handbook (SBH) provides advice to Department of Commerce (DOC) operating units (OUs) on courses of action that will facilitate compliance with High Performance and Sustainable Buildings (HPSB) requirements.

This plan incorporates the requirements of the following documents:

- *Federal Leadership in High Performance and Sustainable Buildings Memorandum of understanding (MOU)*, signed in February 2006 by DOC
- EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, signed January 24, 2007
- *Instructions for Implementing Executive Order 13423 – Strengthening Federal Environmental, Energy, and Transportation Management* prepared by the Council for Environmental Quality (CEQ) and the Office of the Federal Environmental Executive (OFEE), March 29, 2007
- *Sustainable Buildings Implementation Plan Guidance* prepared by OMB, June 29, 2007
- *High Performance and Sustainable Buildings Guidance* prepared by the Interagency Sustainable Buildings Working Group (ISWG), December 1, 2008
- EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, signed October 5, 2009

DOC shall internally review and update the SBH every year.

2. Scope

i. Purpose and Authority

The purpose of this SBH is to outline approaches OUs can take to improve the sustainability of their building portfolios to meet the requirements of EO 13423 and EO 13514.

ii. Applicability

The SBH applies to all DOC OUs.

iii. References

Departmental Administrative Order (DAO) - Energy & Environment

DOC shall publish an Energy & Environment DAO that shall serve as the primary source for all DOC energy & environmental requirements, including sustainable buildings.

DOC Energy & Environmental Management Manual

OSEEP shall publish an Energy & Environmental Management Manual (EEMM). The EEMM shall detail the requirements of all DOC energy and environmental programs, including sustainable buildings. Guidance on enabling legislation, DOC policy, roles and responsibilities, and reporting requirements shall be provided.

3. Requirements

iv. Sustainability Requirements

Criteria	Requirement
New Construction	
<ul style="list-style-type: none"> • Larger than 5,000 GSF¹ • DOC owned facility, OR • Built-to-suit lease 	<ul style="list-style-type: none"> • Meet the 5 Guiding Principles² • Achieve a minimum LEED silver rating³
Major Renovations	
<ul style="list-style-type: none"> • Exceeds 25% of facility replacement value⁴ 	<ul style="list-style-type: none"> • Meet the 5 Guiding Principles • Achieve a minimum LEED silver rating
New Leases & Renegotiation of Existing Leases	
<ul style="list-style-type: none"> • All buildings 	<ul style="list-style-type: none"> • To the greatest extent practicable, include a preference for buildings that: <ul style="list-style-type: none"> ○ (1) meet the 5 Guiding Principles, AND ○ (2) are Energy Star certified⁵
Existing Buildings	
<ul style="list-style-type: none"> • Larger than 5,000 GSF^{6, 7} • DOC owned facility⁸, OR • DOC leased facility, independent of GSA 	<ul style="list-style-type: none"> • Included in OU's Capital Asset Building Inventory (CABI). By 2015, 15% of OU's CABI shall: <ul style="list-style-type: none"> ○ Meet the 5 Guiding Principles, OR ○ If design contract awarded prior to Oct 1, 2008, achieve third-party building certification • OU shall make annual progress towards 100% CABI sustainability.

For properties that do not meet the thresholds identified above, OUs are ***strongly encouraged but not required*** to meet the GPs.

Note on existing buildings:

¹ Per *Instructions for Implementing Executive Order 13423 – Strengthening Federal Environmental, Energy, and Transportation Management* prepared by the Council for Environmental Quality (CEQ) and the Office of the Federal Environmental Executive (OFEE), March 29, 2007

² Per *High Performance and Sustainable Buildings Guidance* prepared by the Interagency Sustainable Buildings Working Group (ISWG), December 1, 2008

³ Per *DOC's Biennial Report on Energy & Environmental Management for 2000 – 2001*

⁴ Per *Integration of Renewable Energy Into New Construction and Major Renovations*, briefing, A Crawley, FEMP,

⁵ Per the Energy Independence and Security Act 2007 (EISA 2007). See EISA 2007 for exemptions.

⁶ Per E.O. 13514

⁷ Note: for leased space, 5,000 GSF criteria is for ***size of DOC leased space only***, not entire facility size.

⁸ Per *2009 Guidance for Real Property Inventory Reporting*, prepared by the Federal Real Property Council, July, 2009

Each OU is responsible for ensuring that a minimum of 15 percent of their existing capital asset building inventory (CABI) as of the end of FY 2015 incorporates the GPs, measured in terms of **number of buildings**. The CABI only includes facilities that are:

- Larger than 5,000 GSF
- Owned by DOC, OR
- Leased by DOC, independent of GSA

Leases from GSA are not included in the CABI.

i. Sustainability Metrics

Existing Buildings

OUs shall use the HPSB Checklist for Existing Buildings (Appendix B) to measure progress towards incorporation of the GPs in existing buildings. For a facility to meet the 5 GPs, it must comply with all checklist questions. The HPSB checklist is included in the EPA's Portfolio Manager web-based tool⁹. OUs shall use Portfolio Manager to enter checklist results.

New Construction & Major Renovations

OUs shall use the HPSB Checklist for New Construction (Appendix C) to measure progress towards incorporation of the GPs in new construction & major renovations. Metrics for new construction and major renovations are different than those for existing buildings.

OUs shall use the appropriate LEED rating system to track their progress towards achieving LEED Silver for all new construction and major renovations.

The Department of Energy has developed a crosswalk between both the Existing Buildings and the New Construction HPSB Checklists and the LEED rating system. Several of the HPSB checklist items align closely with categories on the LEED rating system. These crosswalks can be found at http://www1.eere.energy.gov/team/hpsb_technical_guidance.html.

ii. Reporting Requirements

Existing Buildings

OUs shall annually report their sustainable buildings inventory through the FRPM system. Additionally, OUs shall use EPA Portfolio Manager to track the energy use, water use, and sustainability of all of their applicable facilities.

New Construction

OUs shall track the sustainability of all new construction stages, and report this information to ORPP.

iii. Reporting Schedule

Refer to the DOC EEMM for specifics on the annual reporting schedule.

⁹ The EPA Portfolio Manager web-based tool is at: <https://energystar.gov/istar/pmpam/>

4. Process

This section outlines the systematic approach that OUs should take to improve the sustainability of their building inventory.

iv. Identify facilities

OUs should first identify what facilities make up their Capital Asset Building Inventory. Appendix A lists DOC's CABI as of December 2010. If there are any errors, contact ORPP.

Next, OUs should verify that all applicable facilities are uploaded to the EPA Portfolio Manager system. Portfolio Manager is a tool that helps facility managers track the energy use, water use, and sustainability of their buildings. Training for Portfolio Manager can be found at <http://www.osec.doc.gov/oas/orepmp-news.html>. OUs should direct any questions regarding EPA Portfolio Manager to OSEEP.

v. Assess

Once OUs have identified all of their buildings, the next step is to assess their sustainability. OUs should use the HPSB Checklist for Existing Buildings (Appendix B), included in EPA Portfolio Manager, to do this. Training on Portfolio Manager can be found at: <http://www.osec.doc.gov/oas/orepmp-news.html>

vi. Identify projects

After assessing facilities, OUs should identify sustainability projects. Many projects can be undertaken at little or no cost; however, some will require investments in the form of appropriations or alternative financing.

vii. Program / budget

OUs should program for any sustainability projects that will require appropriated funding.

viii. Execute

OUs should execute identified projects. Note that projects that do not require appropriated funds can be executed immediately; those that do are subject to the budget cycle.

ix. Reassess

After projects have been executed, OUs should reassess the appropriate facilities and update their HPSB Checklist in Portfolio Manager as necessary.

x. Report

OUs shall annually report their sustainable buildings inventory through the FRPM system. This system serves as DOC's official record of building inventory sustainability. Data element #25 tracks whether a building is Sustainable, Not Sustainable, Not yet assessed, or Not Applicable. OUs should direct any questions about the FRPM system to ORPP.

If OUs are proactive about using Portfolio Manager, they can quickly review it to identify which buildings are sustainable, and update FRPM as necessary.

5. Strategies

OUs are encouraged to pursue a wide-ranging and diverse strategy to improving the sustainability of their building inventory. Reviewing all options will ensure DOC improves the sustainability of our buildings in the most cost effective and timely manner possible.

Most of the requirements identified by the HPSB Checklist can be implemented through improved policy and management of existing assets. OUs are encouraged to carefully assess their facilities and implement these low-cost measures. Appendices B & C identify which of the Guiding Principles can be satisfied by existing DOC, OU, or facility-level policy, and which require facility upgrades.

A facility only qualifies as sustainable if it satisfies every HPSB checklist item. Before investing in facility upgrades, OUs should carefully evaluate if the facility has the potential to meet **all** HPSB checklist items.

OUs must ensure that sustainability upgrades to historic buildings comply with the National Historic Preservation Act. The Advisory Council on Historic Preservation (ACHP) provides further technical guidance on this topic¹⁰.

The following sections recommend strategies bureaus can take to improve building sustainability. OUs are encouraged to pursue the following strategies, and be creative with their own approaches.

xi. Assessments

OUs are required to assess all of their owned facilities and private leases (independent of GSA) for conformance with the HPSB checklist. Both the condition of facilities and their management policies must be assessed. OUs need to be strategic in their approach to facility assessments in order to keep costs low. Some strategies to decrease assessment costs include:

- Include sustainability assessments in other mandatory facility assessments
- Use management systems
- Identify which checklist items can be assessed by on-site personnel and which will require engineering or architecture assessments
- Assess the most modern facilities first, as these facilities that are most likely to qualify as sustainable. OUs should also focus on facilities with a high Facility Condition Index.

xii. Existing Buildings

OUs are required to have 15 percent of their facilities meet the 5 Guiding Principles by 2015. Meeting this requirement will be very challenging, as DOC's building inventory is aged and contains many unique and mission critical facilities, such as laboratories. It will require OUs to develop aggressive, comprehensive facility management strategies that both increase the number of sustainable buildings and decrease the number of non-sustainable buildings.

a. Strategies to decrease population of non-sustainable buildings

¹⁰ <http://www.achp.gov/>

Facility consolidation

OUs should reduce number of unsustainable facilities by consolidating staff in sustainable facilities. OUs should review the space allocation within all facilities and compare them to the Federal average of 230 square feet per person¹¹. If locations exceed the Federal average, there may be facility consolidation opportunities.

Facility consolidation has the added benefit of decreasing OU real estate costs.

Facility demolition & new construction

OUs should reduce their inventory of antiquated, unsustainable facilities, and replace them with modern facilities. The costs of demolition and new construction can be high. However, these costs can be offset by the decreased operating and maintenance costs and improved worker productivity of modern facilities.

Move from private leases to GSA leases

DOC is responsible for the sustainability of facilities it leases from the private sector, independently of GSA; GSA is responsible for improving the sustainability of its building fleet. OUs should work with GSA and ORPP to identify opportunities to move from privately leased space to GSA facilities.

[b. Strategies to increase population of sustainable buildings](#)

Sustainable new construction & major renovations

All new construction and major renovations must meet the 5 Guiding Principles. As OUs construct new facilities, the overall sustainability of their building fleet will increase.

Assess building inventory for sustainability

OUs are required to assess all owned and leased facilities (independent of GSA) over 5,000 gsf against the HPSB Existing Building checklist. Assessing facilities will give OUs insight into which facilities could achieve sustainable status with relatively minor upgrades, and which facilities will be unable to qualify as sustainable.

Install sustainable management policies

The majority of HPSB checklist items can be achieved by initiating and documenting sustainable policies. OUs should review the HPSB Existing Buildings checklist (Appendix C) for which policies can be achieved through implementing low-cost policy and management strategies.

Initiate sustainability projects

Some HPSB checklist items, such as energy and water efficiency, may require capital investment in the form of sustainability projects. OUs should only undertake sustainability projects once they have (1) assessed all facilities to identify those that are most likely to meet all HPSB checklist items; and (2) installed all sustainable management policies required by the HPSB checklist. This will ensure that only the most cost effective investments are made.

¹¹ Source: ORPP

OUs are encouraged to use alternative financing for sustainability projects if appropriated funding is not available.

i. New Construction

All new construction greater than 5,000 gsf is required to satisfy all items on the HPSB New Construction Checklist (Appendix C) and achieve a minimum LEED silver rating. OUs should begin planning to meet these requirements as early as possible in the planning process. Incorporating sustainable design practices early on will lower the cost of complying with sustainability mandates.

OUs should note that new construction must satisfy all HPSB checklist items to qualify as meeting the 5 Guiding Principles. This may be especially challenging for many of DOC's mission-critical facilities, such as laboratories, which have high energy and water consumption. Resources on laboratory energy efficiency can be found at: <http://www.labs21century.gov/>.

The Whole Building Design Guide (WBDG) website has many resources and technical documents that will help OUs understand and comply with the new construction sustainability requirements. These resources can be found at: http://www.wbdg.org/references/fhpsb_new.php.

xiii. Major Renovations

All major renovations whose cost exceeds 25 percent of the facility's replacement value are required to satisfy all items on the HPSB New Construction Checklist (Appendix C) and achieve a minimum LEED silver rating. OUs should note that the major renovations requirements are slightly different than the new construction requirements.

As with new construction, the cost of complying with sustainability mandates is lowered if sustainable design practices are incorporated as early as possible in the planning of major renovations.

Improving the sustainability of existing buildings through major renovation is costly. The majority of HPSB checklist items are satisfied by policy and building management techniques and do not require major renovations. OUs should not undergo a major renovation on a facility only to comply with sustainability requirements; OUs are encouraged to piggy-back sustainability upgrades onto renovations that are already planned or underway.

If the cost of a major renovation is to exceed 50 percent of the facility's replacement value, OUs are encouraged to consider demolition and new construction in lieu of renovation.

OUs are required to report the sustainability of all building stages to ORPP. ***NEED ORPP INPUT**

As with new construction, OUs should note that major renovations must satisfy all HPSB checklist items to qualify as meeting the 5 Guiding Principles.

OUs are encouraged to consider alternative financing to reduce the capital costs of meeting the 5 Guiding Principles. Alternative financing, either through Energy Savings Performance Contracts (ESPCs) or Utility Energy Service Contracts (UESCs) allow OUs to pay for the high

capital costs of renewable energy and energy efficient products through the savings they generate. However, alternative financing is generally a more expensive option than direct appropriations due to financing costs. The DOE's Federal Energy Management Program (FEMP) provides alternative financing support and training for federal agencies. FEMP resources can be found at: <http://www1.eere.energy.gov/femp/financing/mechanisms.html>.

The Whole Building Design Guide (WBDG) website has many resources and technical documents that will help OUs to understand and comply with the major renovation sustainability requirements. These resources can be found at: http://www.wbdg.org/references/fhpsb_new.php

xiv. New Leases

All new leases are required to include a preference for sustainability unless:

- No such buildings exist that would allow the OU to meet mission requirements, or
- Leasing a sustainable facility would be prohibitively expensive

OUs have flexibility to determine when it is appropriate for a new lease not to require sustainability. DOC suggests that OUs include a preference for sustainability in the following circumstances:

- Mission requirements do not require a unique facility (e.g. laboratories or radar stations)
- The increased cost of leasing sustainable space does not exceed 10 percent of total lease price
- The location of the lease is not mission critical
- The leased space is in an urban area, with many potential sustainable facility options.

Appendix A:
DOC 2010 Sustainable Buildings Inventory

High Performance and Sustainable Buildings Handbook

The following data was pulled from the FY10 FRPP submission to the FRPC. The data was used to compile the Jan 30, 2011 sustainability scorecard to OMB.

Sustainable

UNIQUE IDENTIFIER	LEGAL INTEREST	REPORTING BUREAU	GROSS SQUARE FOOTAGE	ADDRESS	CITY	STATE	ZIP CODE	SUSTAINABILITY
14000673	Leased	NOAA	20,100	500 West Fletcher	ALPENA	MI	49707	Yes
14000749	Owned	NOAA	15,000	33 East Quay Road	KEY WEST	FL	33040	Yes
FLC09601	Owned	NOAA	15,000	35 East Quay Road, Bldg C	KEY WEST	FL	33040	Yes
14000378	Owned	NOAA	8,428	810 Main Street	CARIBOU	ME	04736	Yes
14000408	Owned	NOAA	6,690	910 South Felton St	PALMER	AK	99645	Yes
14000665	Owned	NOAA	6,548	1315 White Street	KEY WEST	FL	33040	Yes
VAE07901	Owned	NOAA	5,543	44087 Weather Service Road	ALBANY	VA	12203	Yes

Not Sustainable

UNIQUE IDENTIFIER	LEGAL INTEREST	REPORTING BUREAU	GROSS SQUARE FOOTAGE	ADDRESS	CITY	STATE	ZIP CODE	SUSTAINABILITY
WAW05309	Owned	NOAA	114,200	7600 Sand Point Way NE	SEATTLE (SAND POINT)	WA	98115	No
14000741	Leased	NOAA	114,113	120 David L. Boren Blvd.	NORMAN	OK	73072	No
WAW05310	Owned	NOAA	92,650	7600 Sand Point Way Ne	SEATTLE (SAND POINT)	WA	98115	No
14001027	Leased	NOAA	90,335	55 Great Republic Drive	GLOUCESTER	MA	01930	No
14000626	Leased	NOAA	54,000	263 13th Ave South	ST PETERSBURG	FL	33701	No
14001047	Leased	NOAA	53,000	4840 South State Road	ANN ARBOR	MI	48108	No
NJE01401	Leased	NOAA	50,000	Forrestal Campus, Main Building 18 and 18A	PRINCETON	NJ	08542	No
SCC00501	Leased	NOAA	41,308	219 Ft. Johnson Road	CHARLESTON	SC	29412	No
14001010	Leased	NOAA	38,070	672 Independence Parkway	CHESAPEAKE	VA	23320	No
MAE01002	Owned	NOAA	36,992	166 Water Street	WOODS HOLE	MA	02543	No
NJE02702	Leased	NOAA	33,391	74 Magruder Road	HIGHLANDS	NJ	07732	No

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UNIQUE IDENTIFIER	LEGAL INTEREST	REPORTING BUREAU	GROSS SQUARE FOOTAGE	ADDRESS	CITY	STATE	ZIP CODE	SUSTAINABILITY
14000963	Leased	NOAA	29,545	1313 Halley Avenue	NORMAN	OK	73069	No
WAW07401	Leased	NOAA	28,643	3305 E Commerce St.	PASCO	WA	99301	No
14000077	Leased	NOAA	28,022	1424 Halley Avenue Bldg. 366	NORMAN	OK	73069	No
OKM08201	Leased	NOAA	21,518	1200 Westheimer Drive	NORMAN	OK	73069	No
MNC04201	Leased	NOAA	20,252	1733 Lake Drive West	CHANHASSEN	MN	55317	No
NJE01403	Leased	NOAA	18,000	Princeton University, Forrestal Campus	PRINCETON	NJ	08542	No
NJE02701	Leased	NOAA	17,197	74A Madgruder Road	HIGHLANDS	NJ	07732	No
MDC01101	Owned	NOAA	15,990	904 S. Morris Street	OXFORD	MD	21654	No
WAW05202	Owned	NOAA	15,716	2725 Montlake Blvd East	SEATTLE	WA	98112	No
VAE02118	Owned	NOAA	15,306	439 W. York Street	NORFOLK	VA	23510	No
WAW05407	Leased	NOAA	15,044	1801 Fairview Ave E	SEATTLE	WA	98102	No
00000006	Leased	NOAA	14,196	1897 Ranger Loop	PEARL HARBOR	HI	96860	No
UTW02801	Leased	NOAA	14,019	Salt Lake City Airport 2242 West North Temple	SALT LAKE CITY	UT	84122	No
TXC00205	Owned	NOAA	13,772	4700 Avenue U	GALVESTON	TX	77551	No
TXM15001	Leased	NOAA	13,440	3401 Northern Cross Rd	FORT WORTH	TX	76137	No
WAW05410	Leased	NOAA	12,866	1801 Fairview Ave E	SEATTLE	WA	98102	No
MAE03501	Leased	NOAA	12,813	455 Myles Standish Blvd	TAUNTON	MA	02780	No
FLM07404	Owned	NOAA	12,800	4301 rickenbackercswy	KEY BISCAYNE	FL	33149	No
ORW09001	Leased	NOAA	12,103	5241 Northeast 122nd Ave	PORTLAND	OR	97230	No
MSM00111	Owned	NOAA	11,840	3209 Frederic St	PASCAGOULA	MS	39567	No
14000558	Leased	NOAA	11,738	328 Innovation Blvd, Ste. 330	STATE COLLEGE	PA	16803	No
OKM10801	Leased	NOAA	11,637	10159 East 11th Street Suite 300 Guaranty Bank Bld	TULSA	OK	74128	No
AKW15409	Owned	NOAA	11,532	1300 Eisele Road	FAIRBANKS (GILMORE CREE	AK	99712	No

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UNIQUE IDENTIFIER	LEGAL INTEREST	REPORTING BUREAU	GROSS SQUARE FOOTAGE	ADDRESS	CITY	STATE	ZIP CODE	SUSTAINABILITY
CAW19701	Leased	NOAA	11,341	3310 El Camino Ave. Room 228	SACRAMENTO	CA	95821	No
AKW15420	Owned	NOAA	10,924	1300 Eisele Road	FAIRBANKS (GILMORE CREEK)	AK	99712	No
AKW13001	Owned	NOAA	10,900	250 Egan Drive (Juneau Subport)	JUNEAU	AK	99801	No
TXC00207	Owned	NOAA	10,780	4700 Avenue U	GALVESTON	TX	77551	No
COM05302	Owned	NOAA	10,758	No Street	ROLLINSVILLE	CO	80474	No
IDM02901	Leased	NOAA	10,624	1750 Foote Drive	IDAHO FALLS	ID	83402	No
TXC00217	Owned	NOAA	10,550	4700 Avenue U	GALVESTON	TX	77551	No
FLC09401	Leased	NOAA	10,314	95230 Overseas Highway	KEY LARGO	FL	33037	No
WAW04516	Owned	NOAA	10,227	7305 Beach Drive East	PORT ORCHARD	WA	98366	No
AZW05001	Leased	NOAA	9,982	520 N Park Ave Suite 30	TUCSON	AZ	85721	No
HIW03701	Leased	NOAA	9,466	2525 Correa Rd., Ste. 250	HONOLULU	HI	96822	No
NCC00101	Owned	NOAA	9,232	101 Pivers Island Road	BEAUFORT	NC	28516	No
WAW04502	Owned	NOAA	9,228	7305 Beach Drive East	PORT ORCHARD	WA	98366	No
14000988	Leased	NOAA	9,200	410 Dividend Drive	PEACHTREE CITY	GA	30269	No
MAE04701	Leased	NOAA	8,250	32 Jonathan Bourne Driv	POCASSET	MA	02559	No
TNM01001	Leased	NOAA	8,188	7777 Walnut Grove Road, OM1	MEMPHIS	TN	38120	No
CAW19801	Leased	NOAA	7,722	11440 West Bernardo Court Ste 230	SAN DIEGO	CA	92127	No
WAW05204	Owned	NOAA	7,706	2725 Montlake Blvd East	SEATTLE	WA	98112	No
14000370	Leased	NOAA	7,532	FSU Love Building 116, Palmetto Drive	TALLAHASSEE	FL	32306	No
CTE00502	Owned	NOAA	7,450	212 Rogers Avenue	MILFORD	CT	06460	No
NEC03402	Leased	NOAA	7,320	6707 North 288th Street	VALLEY	NE	68064	No
14000163	Leased	NOAA	7,250	320 Sparkman Drive, S.W.	HUNTSVILLE	AL	35805	No
CAW18801	Leased	NOAA	7,168	299 Foam Street	MONTEREY	CA	93940	No

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UNIQUE IDENTIFIER	LEGAL INTEREST	REPORTING BUREAU	GROSS SQUARE FOOTAGE	ADDRESS	CITY	STATE	ZIP CODE	SUSTAINABILITY
IAC01702	Leased	NOAA	7,165	9050 Harrison Street Davenport	DAVENPORT	IA	52806	No
MTW05601	Leased	NOAA	7,125	5324 TriHill Frontage Road	GREAT FALLS	MT	59405	No
14000588	Leased	NOAA	7,000	House No. 483	KOTZEBUE	AK	99752	No
AKW22301	Leased	NOAA	6,999	930 Koykuk Drive Rm 355	FAIRBANKS	AK	99775	No
MTW05901	Leased	NOAA	6,906	2170 Overland Ave	BILLINGS	MT	59105	No
NYE06701	Leased	NOAA	6,800	251 Fuller Road	ALBANY	NY	12222	No
HIW02403	Owned	NOAA	6,800	2570 Dole Street	HONOLULU	HI	96822	No
TXM15401	Leased	NOAA	6,694	2579 South Loop289 Suite 100	LUBBOCK	TX	79423	No
NCE08101	Leased	NOAA	6,680	1005 Capability Dr. Suite 300	RALEIGH	NC	27606	No
WVE02101	Leased	NOAA	6,642	400 Parkway Rd (southridge)	CHARLESTON	WV	25309	No
AKW18003	Owned	NOAA	6,605	6930 Sand Lake Road	ANCHORAGE	AK	99519	No
AKW00904	Owned	NOAA	6,469	Building B1	ST PAUL	AK	99660	No
AKW01302	Owned	NOAA	6,428	King Salmon Airport	KING SALMON	AK	99613	No
MNC04401	Leased	NOAA	6,333	5027 Miller Trunk Highway	DULUTH	MN	55811	No
VAE01409	Owned	NOAA	6,115	35663 Chincoteague Road	WALLOPS ISLAND	VA	23337	No
SCE00601	Leased	NOAA	6,078	2909 Aviation Way	WEST COLUMBIA	SC	29170	No
ARM00401	Leased	NOAA	6,060	8400 Remount Road	NORTH LITTLE ROCK	AR	72118	No
AKW13006	Owned	NOAA	6,042	250 Egan Drive (Juneau Subport)	JUNEAU	AK	99801	No
CTE00504	Owned	NOAA	6,000	212 Rogers Avenue	MILFORD	CT	06460	No
ORW05502	Owned	NOAA	5,955	520 Heceta Place	HAMMOND (POINT ADAMS)	OR	97121	No
FLM01503	Owned	NOAA	5,951	2525 14th Avenue SE	RUSKIN	FL	33570	No
14000685	Leased	NOAA	5,838	1437 Kilauea Avenue	HILO	HI	96720	No
TXM10202	Leased	NOAA	5,800	7654 Knickerbocker Road	SAN ANGELO	TX	76904	No
COM01801	Owned	NOAA	5,786	Section 36, Township 3N, Range	PLATTEVILLE	CO	80651	No

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UNIQUE IDENTIFIER	LEGAL INTEREST	REPORTING BUREAU	GROSS SQUARE FOOTAGE	ADDRESS	CITY	STATE	ZIP CODE	SUSTAINABILITY
				66W				
WAW05206	Owned	NOAA	5,753	2725 Montlake Blvd East	SEATTLE	WA	98112	No
AKW12906	Owned	NOAA	5,564	11305 Glacier Highway	JUNEAU (AUKE BAY/AUKE C	AK	99801	No
VAE07701	Leased	NOAA	5,560	1750 Forecast Drive	BLACKSBURG	VA	24060	No
OHE00601	Leased	NOAA	5,521	Federal Facilities Bldg. Cleveland Hopkins Airport	CLEVELAND	OH	44135	No
NMM02101	Leased	NOAA	5,484	2341 Clark Carr Loop SE	ALBUQUERQUE	NM	87106	No
AZW02901	Leased	NOAA	5,473	1521 North Project Drive	TEMPE	AZ	85281	No
14000680	Leased	NOAA	5,400	100 Museum Drive	NEWPORT NEWS	VA	23606	No
AKW13404	Owned	NOAA	5,375	Baranof Island	JUNEAU(LITTLE PORT WALT	AK	99801	No
KSC01701	Leased	NOAA	5,353	1116 NE Strait Avenue	TOPEKA	KS	66616	No
MIC05802	Owned	NOAA	5,200	1431 Beach St.	MUSKEGON	MI	49441	No
14000608	Leased	NOAA	5,159	1353 FM 646	DICKINSON	TX	77539	No
RIE00211	Owned	NOAA	5,000	28 Tarzwell Drive	NARRAGANSETT	RI	02882	No
14001137	Owned	NOAA	53,000	3209 Frederic Street	PASCAGOULA	MS	39567	Not yet evaluated
14001126	Leased	NOAA	29,690	40.625278 124.047222	NEWPORT	OR	97365	Not yet evaluated
14001125	Leased	NOAA	21,375	40.625278 124.047222	NEWPORT	OR	97365	Not yet evaluated
14001207	Owned	NOAA	19,680	1300 Eisele Road	FAIRBANKS	AK	99712	Not yet evaluated
14001108	Owned	NOAA	15,000	331 Ft. Johnson Road	CHARLESTON	SC	29412	Not yet evaluated
14001071	Owned	NOAA	8,450	15351 Office Drive	WOODFORD	VA	22580	Not yet evaluated
14001198	Leased	NOAA	8,421	2578 Davisville Road	NORTH KINGSTOWN	RI	02852	Not yet evaluated
14001057	Leased	NOAA	7,500	#10 Pick A Nail Street	Tamuning	GU	99999	Not yet evaluated
14001078	Owned	NOAA	6,000	726 S. Kihei Road	KIHEI	HI	96753	Not yet evaluated
14001094	Owned	NOAA	5,946	101 Pivers Island Road	BEAUFORT	NC	28516	Not yet evaluated
14001208	Owned	NOAA	5,000	4700 Avenue U	GALVESTON	TX	77551	Not yet evaluated
WAW05305	Owned	NOAA	126,856	7600 Sand Point Way Ne	SEATTLE (SAND POINT)	WA	98115	No

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UNIQUE IDENTIFIER	LEGAL INTEREST	REPORTING BUREAU	GROSS SQUARE FOOTAGE	ADDRESS	CITY	STATE	ZIP CODE	SUSTAINABILITY
WAW05304	Owned	NOAA	92,265	7600 Sand Point Way Ne	SEATTLE (SAND POINT)	WA	98115	No
WAW05302	Owned	NOAA	86,459	7600 Sand Point Way NE	SEATTLE (SAND POINT)	WA	98115	No
14000213	Owned	NOAA	74,575	331 Ft. Johnson Road	CHARLESTON	SC	29412	No
FLM07402	Owned	NOAA	74,000	4301 Rickenbacker Causeway	KEY BISCAYNE	FL	33149	No
CAW07202	Owned	NOAA	67,100	8604 La Jolla Shores Dr	SAN DIEGO (LA JOLLA)	CA	92038	No
WAW05203	Owned	NOAA	63,630	2725 Montlake Blvd East	SEATTLE	WA	98112	No
LAC04602	Owned	NOAA	56,183	646 Cajundome Boulevard	LAFAYETTE	LA	70506	No
14000161	Owned	NOAA	53,400	110 Shaffer Road	SANTA CRUZ	CA	95060	No
FLM00202	Owned	NOAA	46,300	75 Virginia Beach Drive	KEY BISCAYNE	FL	33149	No
SCE02001	Owned	NOAA	45,321	2234 S. Hobson Avenue	NORTH CHARLESTON	SC	29405	No
ORW05403	Owned	NOAA	32,172	Marine Science Dr.	NEWPORT	OR	97365	No
14000970	Owned	NOAA	32,084	17109 Pt. Lena Loop Rd	JUNEAU	AK	99801	No
14000969	Owned	NOAA	31,480	17109 Pt. Lena Loop Rd	JUNEAU	AK	99801	No
ORW05402	Owned	NOAA	30,388	Marine Science Dr.	NEWPORT	OR	97365	No
VAE02102	Owned	NOAA	30,012	439 W. York Street	NORFOLK	VA	23510	No
CTE00501	Owned	NOAA	29,000	212 Rogers Avenue	MILFORD	CT	06460	No
MAE01001	Owned	NOAA	28,524	166 Water Street	WOODS HOLE	MA	02543	No
FLC08702	Owned	NOAA	25,236	11691 SW 17th Street	MIAMI	FL	33165	No
NCC00102	Owned	NOAA	23,462	101 Pivers Island Road	BEAUFORT	NC	28516	No
14000139	Owned	NOAA	20,026	43741 Weather Service Road	STERLING	VA	20166	No
14000178	Owned	NOAA	19,159	2032 SE OSU Dr	NEWPORT	OR	97365	No
AKW15408	Owned	NOAA	18,103	1300 Eisele Road	FAIRBANKS (GILMORE CREE	AK	99712	No
RIE00201	Owned	NOAA	17,576	28 Tarzwell Drive	NARRAGANSETT	RI	02882	No
AKW18002	Owned	NOAA	16,426	6930 Sand Lake Road	ANCHORAGE	AK	99519	No
14000957	Owned	NOAA	15,844	101 Pivers Island Road	BEAUFORT	NC	28516	No
VAE01401	Owned	NOAA	14,760	35663 Chincoteague Road	WALLOPS ISLAND	VA	23337	No
FLM00301	Owned	NOAA	14,100	3500 Delwood Beach Road	PANAMA CITY	FL	32408	No
AKW12902	Owned	NOAA	14,084	11305 Glacier Highway	JUNEAU (AUKE BAY/AUKE C	AK	99801	No

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UNIQUE IDENTIFIER	LEGAL INTEREST	REPORTING BUREAU	GROSS SQUARE FOOTAGE	ADDRESS	CITY	STATE	ZIP CODE	SUSTAINABILITY
MOC03602	Owned	NOAA	13,580	1803 North 7 Highway	PLEASANT HILL	MO	64080	No
HIW02402	Owned	NOAA	13,000	2570 Dole Street	HONOLULU	HI	96822	No
WAW05303	Owned	NOAA	12,955	7600 Sand Point Way Ne	SEATTLE (SAND POINT)	WA	98115	No
14000954	Owned	NOAA	12,556	2725 Montlake Blvd East	SEATTLE	WA	98112	No
TXC00206	Owned	NOAA	12,364	4700 Avenue U	GALVESTON	TX	77551	No
GAM08303	Owned	NOAA	11,579	4 Falcon Drive	PEACHTREE CITY	GA	30269	No
LAM06302	Owned	NOAA	11,275	62300 Airport Road	SLIDELL	LA	70460	No
CAW20101	Owned	NOAA	11,220	1352 Lighthouse Avenue	PACIFIC GROVE	CA	93950	No
SCE02002	Owned	NOAA	11,180	2234 S. Hobson Avenue	NORTH CHARLESTON	SC	29405	No
OHE03502	Owned	NOAA	11,058	1901 South State Route 134	WILMINGTON	OH	45177	No
AKW15426	Owned	NOAA	10,680	1300 Eisele Road	FAIRBANKS (GILMORE CREE	AK	99712	No
TXC00216	Owned	NOAA	9,182	4700 Avenue U	GALVESTON	TX	77551	No
CAW14602	Owned	NOAA	8,940	21 Grace Hopper Ave. Stop 5	MONTEREY	CA	93943	No
WAW05308	Owned	NOAA	8,800	7600 Sand Point Way NE	SEATTLE (SAND POINT)	WA	98115	No
VAE02110	Owned	NOAA	8,610	538 Front Street	NORFOLK	VA	23510	No
14000511	Owned	NOAA	8,226	151 Watts Avenue	PASCAGOULA	MS	39567	No
GQW00202	Owned	NOAA	7,866	3232 Hueneme Rd	Barrigada	GU	99999	No
ORW06504	Owned	NOAA	7,435	MedfordJackson Co. Airport 4003 Cirrus Drive	MEDFORD	OR	97504	No
AKW12908	Owned	NOAA	7,238	11305 Glacier Highway	JUNEAU (AUKE BAY/AUKE C	AK	99801	No
14000569	Owned	NOAA	7,090	11421 Bethell Burley Rd SE	PORT ORCHARD	WA	98367	No
VAE07802	Owned	NOAA	7,085	10009 General Mahone Hwy	WAKEFIELD	VA	23888	No
NJE01002	Owned	NOAA	7,011	732 Woodlane Road	MT HOLLY	NJ	08060	No
IAC02504	Owned	NOAA	6,860	9607 NW Beaver Drive	JOHNSTON	IA	50131	No
MIC06902	Owned	NOAA	6,860	9200 White Lake Road	WHITE LAKE	MI	48386	No
WYC01602	Owned	NOAA	6,860	1301 Airport Parkway	CHEYENNE	WY	82001	No
CAW20302	Owned	NOAA	6,785	520 North Elevar Street	OXNARD	CA	93030	No
14000201	Owned	NOAA	6,700	175 EDWARD FOSTER RD SUNSET	SCITUATE	MA	02066	No

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UNIQUE IDENTIFIER	LEGAL INTEREST	REPORTING BUREAU	GROSS SQUARE FOOTAGE	ADDRESS	CITY	STATE	ZIP CODE	SUSTAINABILITY
AKW02710	Owned	NOAA	6,655	Yakutat Airport	YAKUTAT	AK	99689	No
PAE01303	Owned	NOAA	6,568	192 Shafer Road	CORAOPOLIS	PA	15108	No
NCE07202	Owned	NOAA	6,451	533 Roberts Road	NEWPORT	NC	28570	No
WAW05307	Owned	NOAA	6,451	7600 Sand Point Way Ne	SEATTLE (SAND POINT)	WA	98115	No
FLM11402	Owned	NOAA	6,166	421 Croton Road	MELBOURNE	FL	32935	No
AKW13402	Owned	NOAA	6,144	Baranof Island	JUNEAU(LITTLE PORT WALT	AK	99801	No
SDC03102	Owned	NOAA	6,016	300 East Signal Drive	RAPID CITY	SD	57701	No
NDC01302	Owned	NOAA	6,015	4797 Technology Circle	GRAND FORKS	ND	58203	No
CAW20202	Owned	NOAA	5,971	300 Startare Drive	EUREKA	CA	95501	No
FLM01504	Owned	NOAA	5,939	2525 14th Avenue SE	RUSKIN	FL	33570	No
INC04302	Owned	NOAA	5,939	6900 West Hanna Avenue	INDIANAPOLIS	IN	46241	No
SDC02202	Owned	NOAA	5,829	26 Weather Lane	SIOUX FALLS	SD	57104	No
MTW06101	Owned	NOAA	5,797	Missoula Aerial Depot 6633 Aviation Way	MISSOULA	MT	59801	No
INC04702	Owned	NOAA	5,732	7506 East 850 North	SYRACUSE	IN	46567	No
COC00606	Owned	NOAA	5,711	792 Eagle Drive	GRAND JUNCTION	CO	81506	No
FLM11802	Owned	NOAA	5,711	13701 Fang Drive	JACKSONVILLE	FL	32218	No
IDW04302	Owned	NOAA	5,711	Pocatello Mun. Airport 1945 Beechcraft Ave.	POCATELLO	ID	83204	No
MIC09502	Owned	NOAA	5,711	112 Airpark Drive South	NEGAUNEE	MI	49866	No
NEC03104	Owned	NOAA	5,711	5250 East Lee Bird Drive	NORTH PLATTE	NE	69101	No
NVW01702	Owned	NOAA	5,711	7851 South Dean Martin Drive	LAS VEGAS	NV	89139	No
NYE06801	Owned	NOAA	5,711	587 Aero Drive	BUFFALO	NY	14225	No
ORW01106	Owned	NOAA	5,711	Pendleton Mun. Airport 2001 NW 56th Drive	PENDLETON	OR	97801	No
WYC01502	Owned	NOAA	5,711	12744 West U.S. Highway 26	RIVERTON	WY	82501	No
AZW03704	Owned	NOAA	5,710	Camp Navajo Army Depot PO Box 16057	BELLEMONT	AZ	86015	No
LAM06702	Owned	NOAA	5,710	500 Airport Blvd, #115	LAKE CHARLES	LA	70607	No
MIC09302	Owned	NOAA	5,710	8800 Passenheim Hill Road	GAYLORD	MI	49735	No

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UNIQUE IDENTIFIER	LEGAL INTEREST	REPORTING BUREAU	GROSS SQUARE FOOTAGE	ADDRESS	CITY	STATE	ZIP CODE	SUSTAINABILITY
NMM01802	Owned	NOAA	5,710	7955 Airport Road	SANTA TERESA	NM	88008	No
WAW07705	Owned	NOAA	5,710	2601 North Rambo Rd.	SPOKANE	WA	99204	No
MIC08102	Owned	NOAA	5,709	4899 South Complex Drive SE	GRAND RAPIDS	MI	49512	No
NCE07302	Owned	NOAA	5,706	2015 Gardner Drive	WILMINGTON	NC	28405	No
ILC04102	Owned	NOAA	5,704	1362 State Route 10	LINCOLN	IL	62656	No
MOC04002	Owned	NOAA	5,704	5805 West Highway EE	SPRINGFIELD	MO	65802	No
LAM06602	Owned	NOAA	5,683	5655 Hollywood Avenue	SHREVEPORT	LA	71109	No
NVW02102	Owned	NOAA	5,662	2350 Raggio Parkway	RENO	NV	89512	No
ALM05403	Owned	NOAA	5,631	465 Weathervane Road	CALERA	AL	35040	No
NDC00101	Owned	NOAA	5,631	2301 University Drive Building #27	BISMARCK	ND	58504	No
SDC00101	Owned	NOAA	5,631	824 Brown County 14 South	ABERDEEN	SD	57401	No
TNM00605	Owned	NOAA	5,631	500 Weather Station Road	OLD HICKORY	TN	37138	No
TXM12802	Owned	NOAA	5,631	2090 Airport Road	NEW BRAUNFELS	TX	78130	No
TXM15602	Owned	NOAA	5,631	300 Pinson Drive (Int'l Arpt)	CORPUS CHRISTI	TX	78406	No
RQM01103	Owned	NOAA	5,622	4000 Carretera 190	CAROLINA	RQ	99999	No
MEE02702	Owned	NOAA	5,600	One Weather Lane Route 231	GRAY	ME	04039	No
AKW15407	Owned	NOAA	5,550	1300 Eisele Road	FAIRBANKS (GILMORE CREE	AK	99712	No
CAW18702	Owned	NOAA	5,391	900 Foggy Bottom Road	HANFORD	CA	93232	No
14000592	Owned	NOAA	5,340	P.O Box 10 Yap Airport	YAP ISL	FM	99999	No
MSM01103	Owned	NOAA	5,230	234 Weather Service Drive	FLOWOOD	MS	39232	No
KYC01202	Owned	NOAA	5,210	8250 Kentucky Highway 3520	WEST PADUCAH	KY	42086	No
AKW21902	Owned	NOAA	5,082	8500 Mendenhall Loop Rd	JUNEAU	AK	99803	No
14000528	Owned	NOAA	5,000	Mile 9 Jakolof Road	SELDOVIA	AK	99663	No
NYE06302	Owned	NOAA	5,000	175 Brookhaven Avenue	UPTON	NY	11973	No
MDB00605	Owned	NIST	78,578	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00623	Owned	NIST	75,588	100 Bureau Drive	GAITHERSBURG	MD	20899	No
COM02001	Leased	NIST	36,443	University Of Colorado	BOULDER	CO	80309	No
MDB00609	Owned	NIST	11,702	100 Bureau Drive	GAITHERSBURG	MD	20899	No

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UNIQUE IDENTIFIER	LEGAL INTEREST	REPORTING BUREAU	GROSS SQUARE FOOTAGE	ADDRESS	CITY	STATE	ZIP CODE	SUSTAINABILITY
COM08003	Owned	NIST	8,806	2000 E. County Rd 58	FT COLLINS	CO	80524	No
MDB00604	Owned	NIST	8,166	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00626	Owned	NIST	6,083	100 Bureau Drive	GAITHERSBURG	MD	20899	No
COM08002	Owned	NIST	5,965	2000 E. County Rd 58	FT COLLINS	CO	80524	No
HIM01801	Owned	NIST	5,952	Barking Sands	KEKAHA	HI	96752	No
06000004	Owned	NIST	17,358	100 Bureau Drive	GAITHERSBURG	MD	20899	Not yet evaluated
06000014	Owned	NIST	5,428	100 Bureau Drive	GAITHERSBURG	MD	20899	Not yet evaluated
06000001	Owned	NIST	536,538	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00601	Owned	NIST	358,313	100 Bureau Drive	GAITHERSBURG	MD	20899	No
COM04502	Owned	NIST	304,385	325 Broadway	BOULDER	CO	80303	No
MDB00642	Owned	NIST	231,835	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00619	Owned	NIST	229,849	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00616	Owned	NIST	219,654	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00614	Owned	NIST	216,069	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00618	Owned	NIST	207,907	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00625	Owned	NIST	204,332	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00603	Owned	NIST	166,101	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00613	Owned	NIST	164,659	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00617	Owned	NIST	164,028	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00602	Owned	NIST	142,804	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00620	Owned	NIST	135,519	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00612	Owned	NIST	75,120	100 Bureau Drive	GAITHERSBURG	MD	20899	No
COM04503	Owned	NIST	58,822	325 Broadway	BOULDER	CO	80303	No
MDB00624	Owned	NIST	42,889	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00606	Owned	NIST	38,367	100 Bureau Drive	GAITHERSBURG	MD	20899	No
COM04514	Owned	NIST	30,010	325 Broadway	BOULDER	CO	80303	No
COM04504	Owned	NIST	20,024	325 Broadway	BOULDER	CO	80303	No
MDB00607	Owned	NIST	18,234	100 Bureau Drive	GAITHERSBURG	MD	20899	No

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UNIQUE IDENTIFIER	LEGAL INTEREST	REPORTING BUREAU	GROSS SQUARE FOOTAGE	ADDRESS	CITY	STATE	ZIP CODE	SUSTAINABILITY
COM04513	Owned	NIST	17,280	325 Broadway	BOULDER	CO	80303	No
COM04505	Owned	NIST	15,403	325 Broadway	BOULDER	CO	80303	No
MDB00622	Owned	NIST	14,573	100 Bureau Drive	GAITHERSBURG	MD	20899	No
MDB00610	Owned	NIST	13,217	100 Bureau Drive	GAITHERSBURG	MD	20899	No
COM04515	Owned	NIST	8,200	325 Broadway	BOULDER	CO	80303	No
MDB00615	Owned	NIST	7,060	100 Bureau Drive	GAITHERSBURG	MD	20899	No
14000537	Leased	EDA	7,744	504 Lavaca, Suite 1100	AUSTIN	TX	78701	No

Appendix B:
*High Performance and Sustainable Buildings
Checklist for Existing Buildings*

Source: DOE HPSB tool for Existing
Buildings http://www1.eere.energy.gov/team/hpsb_technical_guidance.html

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Guiding Principle	Action Required	Complete Yes/No	Suggested Compliance Verification Documents	Notes <i>(DOC Compliance Verification Docs)</i>
1. Employ Integrated Assessment, Operation, and Management Principles				
<u>Integrated Assessment, Operation, and Management</u>	Use an integrated team to develop and implement policy regarding sustainable operations and maintenance.		Building Information Tab or equivalent document, e.g., a team roster	Facility Policy
	Incorporate sustainable operations and maintenance practices within the appropriate Environmental Management System (EMS).		EMS Manual	OU/DOC EMS
	Assess existing condition and operational procedures of the building and major building systems and identify areas for improvement.		Complete HPSB assessment to meet guiding principles and/or Energy and Water Building Evaluation.	
	Establish operational performance goals for energy, water, material use and recycling, and indoor environmental quality, and ensure incorporation of these goals throughout the remaining lifecycle of the building.		The establishment of 430.2B and 450.1A meet the goal setting requirement. Use this checklist or equivalent to demonstrate incorporation.	
	Incorporate a building management plan to ensure that operating decisions and tenant education are carried out with regard to integrated, sustainable building operations and maintenance.		Develop a strategy to ensure building management and occupants are informed (such as training, seminars, or newsletters).	Facility Policy
	Augment building operations and maintenance as needed using occupant feedback on work space satisfaction.		Conduct survey with at least 30% of building occupants to assess work space satisfaction.	
<u>Commissioning</u>	Employ recommissioning (see Commissioning Compliance Tab for detailed information)		Commissioning/Recommissioning/ Retro-commissioning report	

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Guiding Principle	Action Required	Complete Yes/No	Suggested Compliance Verification Documents	Notes <i>(DOC Compliance Verification Docs)</i>
	Meet the requirements of EISA 2007, Section 432 and associated FEMP guidance.		Commissioning/Recommissioning/ Retro-commissioning report, Energy and Water Building Evaluation, and Portfolio Manager Statement of Energy Performance or equivalent	
2. Optimize Energy Performance				
<u>Energy Efficiency</u>	Use one of the following three options to measure energy efficiency performance:			
	<i>Option 1:</i> Receive an ENERGY STAR® rating of 75 or higher or an equivalent Labs21 Benchmarking Tool score for laboratory buildings.		Portfolio Manager Statement of Energy Performance or ENERGY STAR® Label or Labs21 equivalent	Prepopulated by Portfolio Manager
	<i>Option 2:</i> Reduce energy use by 20% compared to building energy use in 2003 or a year thereafter with quality energy use data.		Energy consumption meter comparison data	Prepopulated by Portfolio Manager
	<i>Option 3.</i> Reduce energy use by 20% compared to the ASHRAE 90.1 2007 baseline building design if design information is available.		Design calculations, energy modeling, or statement from architect or engineer	
	Use ENERGY STAR® and FEMP-designated Energy Efficient Products, where available.		Standard purchasing policy/policies, construction specifications, or retain proof of purchase.	Commerce Acquisition Manual (CAM) 1323.70, 2.2
<u>Onsite Renewable Energy</u>	Per Executive Order 13423, implement renewable energy generation projects on agency property for agency use, when lifecycle cost effective.		Any of the following or equivalent: design specs, statement of work, photos, etc. If not lifecycle cost effective provide justification.	

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Guiding Principle	Action Required	Complete Yes/No	Suggested Compliance Verification Documents	Notes <i>(DOC Compliance Verification Docs)</i>
<u>Measurement and Verification</u>	Per the Energy Policy Act of 2005 (EPAct2005) Section 103, install building level electricity meters to track and continuously optimize performance. Per the Energy Independence and Security Act (EISA) 2007, the utility meters must also include natural gas and steam, where natural gas and steam are used.		Any of the following or equivalent: statement of work, billing records, photos, ENERGY STAR® label certification if applicable.	
<u>Benchmarking</u>	Compare annual performance data with previous years' performance data, preferably by entering annual performance data into the ENERGY STAR® Portfolio Manager. For building and space types not available in ENERGY STAR®, use an equivalent benchmarking tool such as the Labs21 for laboratory buildings.		ENERGY STAR® Portfolio Manager Statement of Energy Performance or Labs21 benchmarking analysis or equivalent.	Prepopulated by Portfolio Manager
3. Protect and Conserve Water				
<u>Indoor Water</u>	Use one of the following two options to measure indoor potable water use performance:			
	<i>Option 1:</i> Reduce potable water use by 20% compared to a water baseline calculated for the building.		Documentation from tools such as Watergy, the LEED water calculator or similar, to establish baseline usage and calculated savings and/or provide documentation based on metering/bills.	Prepopulated by Portfolio Manager
	<i>Option 2:</i> Reduce building measured potable water use by 20% compared to building water use in 2003 or a year thereafter with quality water data.		Establish baseline usage and calculate savings based on metering/bills and/or use the ENERGY STAR® Portfolio Manager for water savings.	Prepopulated by Portfolio Manager
<u>Outdoor Water</u>	Use one of the following three options to measure outdoor potable water use performance:			
	<i>Option 1:</i> Reduce potable irrigation water use by 50% compared to conventional methods, or		Documentation from tools such as Watergy, the LEED water calculator, or similar to establish baseline usage and calculated savings and/or provide documentation based on metering/bills, or certification from a licensed irrigator.	Prepopulated by Portfolio Manager

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Guiding Principle	Action Required	Complete Yes/No	Suggested Compliance Verification Documents	Notes <i>(DOC Compliance Verification Docs)</i>
	<i>Option 2:</i> Reduce building related potable irrigation water use by 50% compared to measured irrigation water use in 2003 or a year thereafter with quality water data, or		Establish baseline usage and calculate savings based on metering/bills and/or use ENERGY STAR® Portfolio Manager for water savings or equivalent,	Prepopulated by Portfolio Manager
	<i>Option 3:</i> Use no potable irrigation water.		Document no potable irrigation water due to nominal or native landscape or the usage of recycled water.	Prepopulated by Portfolio Manager
<u>Measurement of Water Use</u>	Install a water meter for the building or if only one meter is installed for the site, reduce the potable water use (indoor and outdoor combined) by at least 20% compared to building water use in 2003 or a year thereafter.		Install building water meters. Retain statement of work, or billing records. Guiding Principles for Indoor and Outdoor water meet the reduction requirement. Provide water usage reduction documentation based on metering/bills.	
	Employ strategies that reduce storm water runoff and discharges of polluted water offsite. Per EISA Section 438, where redevelopment affects site hydrology, use site planning, design, construction, and maintenance strategies to maintain hydrologic conditions during development, or to restore hydrologic conditions following development, to the maximum extent that is technically feasible.			Storm Water Pollution Prevention Plan as required by the Clean Water Act. May include technologies such as rain gardens, pervious pavement, rainwater recycling, settling ponds, etc. A site plan for managing storm-water runoff is acceptable (campus setting) or document local code compliance if applicable.
<u>Process Water</u>	Per EPA Act 2005 Section 109, when potable water is used to improve a building's energy efficiency, deploy lifecycle cost effective water conservation measures.		Document water conservation strategy or that conservation measure is not life cycle cost effective. Document(s) should be verified by on-site engineer or through an energy service provider. Guiding principle is met if no potable water is used.	
<u>Water Efficient Products</u>	Where available, use EPA's WaterSense-labeled products or other water conserving products.		Any of the following or equivalent: purchasing and design specs, statement of work, receipts, etc.	Commerce Acquisition Manual (CAM) 1323.70, 2.4
	Choose irrigation contractors who are certified through a WaterSense-labeled program.		Same as above.	Commerce Acquisition Manual (CAM) 1323.70, 2.4
4. Enhance Indoor Environmental Quality				

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Guiding Principle	Action Required	Complete Yes/No	Suggested Compliance Verification Documents	Notes <i>(DOC Compliance Verification Docs)</i>
<u>Ventilation and Thermal Comfort</u>	Meet ASHRAE Standard 55-2004 Thermal Environmental Conditions for Human Occupancy and ASHRAE Standard 62.1-2007: Ventilation for Acceptable Indoor Air Quality.		Document compliance with ASHRAE Standards by licensed architect or engineer or retain ENERGY STAR® label certification.	
<u>Moisture Control</u>	Provide policy and illustrate the use of an appropriate moisture control strategy to prevent building damage, minimize mold contamination, and reduce health risks related to moisture. For façade renovations, Dew Point analysis and a plan for cleanup or infiltration of moisture into building materials are required.		Document appropriate inspection (audit) driven moisture prevention strategy that includes maintenance of the roof and the foundation system, or document that your building does not have a moisture problem, or document strategy through a recommissioning report.	
<u>Daylighting and Lighting Controls</u>	Provide automated lighting controls (occupancy/vacancy sensors with manual-off capability) for appropriate spaces including restrooms, conference and meeting rooms, employee lunch and break rooms, training classrooms, and offices.		Not all offices will be considered appropriate. Document schematic of floor layout showing automated lighting controls, statement based upon visual audit that automated controls are being used.	
	Two options can be used to meet additional daylighting and lighting controls performance expectations:			
	<i>Option 1:</i> Achieve a minimum daylight factor of 2 percent (excluding all direct sunlight penetration) in 50 percent of all space occupied for critical visual tasks, or		Document a site audit by energy manager, site manager or designee or energy service provider or third party contractor.	
	<i>Option 2:</i> Provide occupant controlled lighting, allowing adjustments to suit individual task needs, for 50% of regularly occupied spaces.		Document that individual lighting control is available for the occupants by using schematic of floor layout, showing locations of manual lighting controls (such as task lighting) or statement based upon visual audit.	
<u>Low-Emitting Materials</u>	Use low emitting materials for building modifications, maintenance, and cleaning.		Establish contract(s), design specifications, purchasing specifications or solicitations with specific language for the purchase of low emitting materials, durable goods, consumables and for green cleaning.	Commerce Acquisition Manual (CAM) 1323.70, 2.7
<u>Integrated Pest Management</u>	Use integrated pest management techniques as appropriate to minimize pesticide usage. Use EPA-registered pesticides only when needed.		Establish contract with specification language for the purchase of EPA Registered pesticides or statement of work that contractor uses only EPA Registered pesticides. Ensure that language is explicit. Retain, purchase specifications, receipts, or statement of work as applicable.	

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Guiding Principle	Action Required	Complete Yes/No	Suggested Compliance Verification Documents	Notes <i>(DOC Compliance Verification Docs)</i>
<u>Tobacco Smoke Control</u>	Prohibit smoking within the building and within 25 feet of all building entrances, operable windows, and building ventilation intakes.		Establish environmental tobacco smoke control policy. Policy may be for entire site, PSO or for Agency. Bulletin leased or owned space under the jurisdiction, custody or control of GSA.	
5. Reduce Environmental Impact of Materials				
<u>Recycled Content</u>	Per section 6002 of RCRA, for EPA-designated products, meet or exceed EPA's recycled content recommendations for building modifications, maintenance, and cleaning. If EPA-designated products meet performance requirements and are available at a reasonable cost, include a preference for purchasing them in all solicitations relevant to construction, operation, maintenance of or use in the building.		Incorporate the FAR requirements for the purchase of EPA-designated products into contracts, bid solicitations and purchasing specifications and use products meeting or exceeding EPA's recycled content recommendations. Provide construction, purchasing or bid specifications, and/or affirmative procurement report.	Commerce Acquisition Manual (CAM) 1323.70, 2.1.1, 2.8
<u>Biobased Content</u>	Per section 9002 of FSRIA, for USDA-designated products, use products with the highest content level per USDA's biobased content recommendations. Use biobased products made from rapidly renewable resources and certified sustainable wood products. Include a preference for purchasing them in all solicitations relevant to construction, operation, maintenance of or use in the building.		Incorporate the FAR requirements for the purchase of USDA-designated products into contracts and use products meeting or exceeding USDA's biobased content recommendations. In addition, use biobased products made from rapidly renewable resources and certified sustainable wood products. Provide construction, purchasing or bid specifications, and/or affirmative procurement report.	Commerce Acquisition Manual (CAM) 1323.70, 2.1.2
<u>Environmentally Preferable Products</u>	Use products that have a lesser or reduced effect on human health and the environment over their lifecycle when compared with competing products or services that serve the same purpose.		Establish purchasing contracts, bids construction documents with specification language for the purchase of environmentally preferable materials, durable goods, cleaning supplies, and consumables. Ensure that language is explicit and clear regarding such considerations as VOC limits and Green Seal requirements.	Commerce Acquisition Manual (CAM) 1323.70, 2.7

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Guiding Principle	Action Required	Complete Yes/No	Suggested Compliance Verification Documents	Notes (DOC Compliance Verification Docs)
<u>Waste and Materials Management</u>	Provide reuse and recycling services for building occupants, where markets or on-site recycling exist.		Documentation may be in the form of receipts, agreements or contracts with local recycling and product reclaiming services. Documentation may include contract specifications with vendors, for example, outlining carpet recycling programs through the manufacturer/distributor or may include photos, or policies that illustrate recycling initiatives for batteries, computers, and beverage containers. Building or site recycling program documentation except able.	
<u>Ozone Depleting Compounds</u>	Eliminate the use of ozone depleting compounds where alternative environmentally preferable products are available, consistent with either the Montreal Protocol and Title VI of the Clean Air Act Amendments of 1990, or equivalent overall air quality benefits that take into account lifecycle impacts.		Document zero use of CFC-refrigerants (policy, equipment specification, procurement specification or contract) unless a third party audit shows that a replacement or conversion is not economically feasible - in which case show that a phase out plan is in place. Do not use halons in fire suppression. Use all alternatives consistent with EPA's Significant New Alternatives Policy (SNAP) regulatory requirements.	Commerce Acquisition Manual (CAM) 1323.70, 2.6

Appendix C:
*High Performance and Sustainable Buildings
Checklist for New Construction*

Source: DOE HPSB tool for New Construction

http://www1.eere.energy.gov/team/hpsb_technical_guidance.html

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Guiding Principle	Action Required	Yes/No	Suggested Compliance Verification Documents	Notes
1. Employ Integrated Design Principles				
	Use a collaborative, integrated planning and design process that:			
<u>Integrated design</u>	Initiates and maintains an integrated project team as described on the Whole Building Design Guide in all stages of a project's planning and delivery, http://www.wbdg.org/design/engage_process.php		Complete the Building Information Tab or equivalent document, e.g., a team roster. Follow the DOE. O. 430.2B and 450.1A.	Facility Policy
	Integrates the use of OMB's A-11, Section 7, Exhibit 300: Capital Asset Plan and Business Case Summary		Provide documentation and use this checklist or equivalent (USGBC LEED) to demonstrate incorporation. The establishment of 413.3A, 430.2B and 450.1A meet the goal setting requirement.	Facility Policy
	Establishes performance goals for siting, energy, water, materials and indoor environmental quality along with other comprehensive design goals and ensures incorporation of these goals throughout the design and lifecycle of the building		The establishment of 430.2B and 450.1A meet the goal setting requirement. Use this checklist or equivalent (USGBC LEED) to demonstrate incorporation.	Facility Policy
	Considers all stages of the building's lifecycle, including deconstruction.		The establishment of 430.2B and 450.1A meet the goal setting requirement. Use this checklist or equivalent (USGBC LEED) to demonstrate incorporation.	Facility Policy
<u>Commissioning</u>	Employ commissioning practices tailored to the size and complexity of the building and its system components in order to verify performance of building components and systems and help ensure that design requirements are met. This should include an experienced commissioning provider, inclusion of commissioning requirements in construction documents, a commissioning plan, verification of the installation and performance of systems to be commissioned, and a commissioning report.		Provide a commissioning plan. In-house experienced personnel or team acceptable. (may provide compliance for GP IV. Enhance Indoor Environmental Quality: Moisture Control.)	
2. Optimize Energy Performance				

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<u>Energy Efficiency</u>	Establish a whole building performance target that takes into account the intended use, occupancy, operations, plug loads, other energy demands, and design to earn the ENERGY STAR® targets for new construction and major renovation where applicable. For new construction, reduce the energy use by 30 percent compared to the baseline building performance rating per the American National Standards Institute (ANSI)/American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., (ASHRAE)/Illuminating Engineering Society of North America (IESNA) Standard 90.1-2007, Energy Standard for Buildings Except Low-Rise Residential. For major renovations, reduce the energy use by 20 percent below pre-renovations 2003 baseline. Laboratory spaces may use the Labs21 Laboratory Modeling Guidelines.		Have a licensed engineer or architect provide documents that identify that the energy use targets were achieved or provide USGBC LEED submittal documentation also stating that the goals were achieved.	
	Use ENERGY STAR® and FEMP-designated Energy Efficient Products, where available?		Provide standard purchasing policy/policies, constructions specifications, or retain proof of purchase.	Commerce Acquisition Manual (CAM) 1323.70, 2.2
<u>On-Site Renewable Energy</u>	Per the Energy Independence and Security Act (EISA) Section 523, meet at least 30% of the hot water demand through the installation of solar hot water heaters, when lifecycle cost effective.		Implement on-site solar hot water heating and retain design specs, statement of work, or photos, etc. If not lifecycle cost effective provide justification.	
	Per Executive Order 13423, implement renewable energy generation projects on agency property for agency use, when lifecycle cost effective.		Any of the following or equivalent: design specs, statement of work, photos, etc. If not lifecycle cost effective provide justification.	
<u>Measurement and Verification</u>	Per the Energy Policy Act of 2005 (EPAct) Section 103, install building level electricity meters in new major construction and renovation projects to track and continuously optimize performance.		Retain statement of work, billing records, photos, etc and/or provide ENERGY STAR® label certification if applicable.	
	Per EISA Section 434, include equivalent meters for natural gas and steam, where natural gas and steam are used.		Retain statement of work, billing records, photos, etc and/or provide ENERGY STAR® label certification if applicable.	
<u>Benchmarking</u>	Compare actual performance data from the first year of operation with the energy design target, preferably by using ENERGY STAR® Portfolio Manager for building and space types covered by ENERGY STAR®. Verify that the building performance meets or exceeds the design target, or that actual energy use is within 10% of the design energy budget for all other building types. For other building and space types, use an equivalent benchmarking tool such as the Labs21 benchmarking tool for laboratory buildings.		Use ENERGY STAR's Portfolio Manager or Labs 21 database to enter annual performance data and print out the Statement of Energy Performance on an annual basis to track performance over time.	

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3. Protect and Conserve Water				
<u>Indoor Water</u>	Employ strategies that in aggregate use a minimum of 20 percent less potable water than the indoor water use baseline calculated for the building, after meeting the EPAAct 1992, Uniform Plumbing Codes 2006, and the International Plumbing Codes 2006 fixture performance requirements.		Use Watergy, the LEED® water calculator, or equivalent modeling to establish baseline usage and calculated savings or provide documentation based on metering/bills.	
	The installation of water meters is encouraged to allow for the management of water use during occupancy.		Install water meter(s) and provide documentation.	
	The use of harvested rainwater, treated wastewater, and air conditioner condensate should also be considered and used where feasible for nonpotable use and potable use where allowed.		Document use of harvested rainwater, treated wastewater, and air conditioner condensate as applicable.	
<u>Outdoor Water</u>	Use water efficient landscape and irrigation strategies, such as water reuse, recycling, and the use of harvested rainwater, to reduce outdoor potable water consumption by a minimum of 50 percent over that consumed by conventional means (plant species and plant densities).		Retain documentation from design tools, such as the LEED® water calculator or other water tools to provide a statement on how water usage was reduced and calculated, or document minimal use of irrigation water due to nominal or no landscape. Choose irrigation contractors who are certified through a WaterSense labeled program and document outdoor potable water consumption reduction. (May provide compliance for GP III. Protect and Conserve Water: Water-Efficient Products)	
	The installation of water meters for locations with significant outdoor water use is encouraged.		Document Installation and use of outdoor water meters.	
	Employ design and construction strategies that reduce storm water runoff and discharges of polluted water offsite. Per EISA Section 438, to the maximum extent technically feasible, maintain or restore the predevelopment hydrology of the site with regard to temperature, rate, volume, and duration of flow using site planning, design, construction, and maintenance strategies.		Provide documents that demonstrate strategy implemented to reduce storm water runoff and maintain or restore predevelopment hydrology of the site.	
<u>Process Water</u>	Per the Energy Policy Act of 2005 Section 109, when potable water is used to improve a building's energy efficiency, deploy lifecycle cost effective water conservation measures.		Document water conservation strategy in process systems. Documentation may be provided by licensed engineer, water utility or through an energy service provider. Guiding principle is met if no potable water is used.	
<u>Water Efficient Products</u>	Specify EPA's WaterSense-labeled products or other water conserving products, where available.		Any of the following or equivalent: purchasing or design specifications, statement of work, receipts, etc.	Commerce Acquisition Manual (CAM) 1323.70, 2.4

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	Choose irrigation contractors who are certified through a WaterSense labeled program.			Commerce Acquisition Manual (CAM) 1323.70, 2.4
4. Enhance Indoor Environmental Quality				
<u>Ventilation and Thermal Comfort</u>	Meet ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy, including continuous humidity control within established ranges per climate zone AND		Document compliance with ASHRAE Standards by licensed architect or engineer or achieve an ENERGY STAR Label Certification	
	ASHRAE Standard 62.1-2007, Ventilation for Acceptable Indoor Air Quality.			
<u>Moisture Control</u>	Establish and implement a moisture control strategy for controlling moisture flows and condensation to prevent building damage, minimize mold contamination, and reduce health risks related to moisture.		Document inspection-driven moisture prevention strategy that is part of building commissioning plan that specifies maintenance of the roof drainage and the foundation system, or document that your building does not have a moisture problem.	
<u>Daylighting</u>	Achieve a minimum daylight factor of 2 percent (excluding all direct sunlight penetration) in 75 percent of all space occupied for critical visual tasks.		Document through computer simulation or by light measurement.	
	Provide automatic dimming controls or accessible manual lighting controls, and appropriate glare control.		Document that individual lighting control is available for the occupants by schematic of floor layout, showing locations of manual lighting controls (such as task lighting) or statement based upon visual audit.	
<u>Low-Emitting Materials</u>	Specify materials and products with low pollutant emissions, including composite wood products, adhesives, sealants, interior paints and finishes, carpet systems, and furnishings.		Establish contract(s), design specifications, purchasing specifications or solicitations with specific language for the purchase of low emitting materials, durable goods, consumables and for green cleaning.	Commerce Acquisition Manual (CAM) 1323.70, 2.7
<u>Protect Indoor Air Quality during Construction</u>	Follow the recommended approach of the Sheet Metal and Air Conditioning Contractor's National Association Indoor Air Quality Guidelines for Occupied Buildings under Construction, 2007. After occupancy, continue flush-out as necessary to minimize exposure to contaminants from new building materials. After construction and prior to occupancy, conduct a minimum 72-hour flush-out with maximum outdoor air consistent with achieving relative humidity no greater than 60 percent. After occupancy, continue flush-out as necessary to minimize exposure to contaminants from new building materials.		Before major renovations, develop and implement an indoor air quality management plan, specification or guidelines. May use USGBC LEED reference documentation.	

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<p><u>Tobacco Smoke Control</u></p>	<p>Implement a policy indicating that smoking is prohibited within the building and within 25 feet of all building entrances, operable windows, and building ventilation intakes during building occupancy. Post signage indicating that smoking is prohibited within the building and within 25 feet of all building entrances, operable windows, and building ventilation intakes during building occupancy.</p>		<p>Establish environmental tobacco smoke control policy or equivalent. Policy may be for entire site, PSO or for Agency.</p>	
<p>5. Reduce Environmental Impact of Materials</p>				
<p><u>Recycled Content</u></p>	<p>Per Section 6002 of the Resource Conservation and Recovery Act (RCRA), for EPA-designated products, specify products meeting or exceeding EPA's recycled content recommendations. For other products, specify materials with recycled content when practicable. If EPA-designated products meet performance requirements and are available at a reasonable cost, a preference for purchasing them shall be included in all solicitations relevant to construction, operation, maintenance of or use in the building. EPA's recycled content product designations and recycled content recommendations are available on EPA's Comprehensive Procurement Guideline web site at <www.epa.gov/cpg>.</p>		<p>Incorporate the FAR requirements for the purchase of EPA-designated products into contracts, bid solicitations and purchasing specifications and use products meeting or exceeding EPA's recycled content recommendations. Provide construction, purchasing or bid specifications, and/or affirmative procurement report.</p>	<p>Commerce Acquisition Manual (CAM) 1323.70, 2.1.1, 2.8</p>
<p><u>Biobased Content</u></p>	<p>Per Section 6002 of the Resource Conservation and Recovery Act (RCRA), for EPA-designated products, specify products meeting or exceeding EPA's recycled content recommendations. For other products, specify materials with recycled content when practicable. If EPA-designated products meet performance requirements and are available at a reasonable cost, a preference for purchasing them shall be included in all solicitations relevant to construction, operation, maintenance of or use in the building. EPA's recycled content product designations and recycled content recommendations are available on EPA's Comprehensive Procurement Guideline web site at <www.epa.gov/cpg>.</p>		<p>Incorporate the FAR requirements for the purchase of USDA-designated products into contracts and use products meeting or exceeding USDA's biobased content recommendations. In addition, use biobased products made from rapidly renewable resources and certified sustainable wood products. Provide construction, purchasing or bid specifications, and/or affirmative procurement report.</p>	<p>Commerce Acquisition Manual (CAM) 1323.70, 2.1.2</p>

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<p><u>Environmentally Preferable Products</u></p>	<p>Use products that have a lesser or reduced effect on human health and the environment over their lifecycle when compared with competing products or services that serve the same purpose. A number of standards and ecolabels are available in the marketplace to assist specifiers in making environmentally preferable decisions. For recommendations, consult the Federal Green Construction Guide for Specifiers at <www.wbdg.org/design/greenspec.php>.</p>		<p>Establish purchasing contracts, bids construction documents with specification language for the purchase of environmentally preferable materials, durable goods, cleaning supplies, and consumables. Ensure that language is explicit and clear regarding such considerations as VOC limits and Green Seal requirements.</p>	<p>Commerce Acquisition Manual (CAM) 1323.70, 2.7</p>
<p><u>Waste and Materials Management</u></p>	<p>Incorporate adequate space, equipment, and transport accommodations for recycling in the building design. During a project's planning stage, identify local recycling and salvage operations that could process site-related construction and demolition materials. During construction, recycle or salvage at least 50 percent of the non-hazardous construction, demolition and land clearing materials, excluding soil, where markets or onsite recycling opportunities exist. Provide salvage, reuse and recycling services for waste generated from major renovations, where markets or onsite recycling opportunities exist.</p>		<p>Documentation may be in the form of receipts, agreements or contracts with local recycling and product reclaiming services. Documentation may include contract specifications with vendors, for example, outlining carpet recycling programs through the manufacturer/distributor or may include photos, or polices that illustrate recycling initiatives for batteries, computers, and beverage containers. Building or site recycling program documentation except able.</p>	
<p><u>Ozone Depleting Compounds</u></p>	<p>Eliminate the use of ozone depleting compounds during and after construction where alternative environmentally preferable products are available, consistent with either the Montreal Protocol and Title VI of the Clean Air Act Amendments of 1990, or equivalent overall air quality benefits that take into account lifecycle impacts.</p>		<p>Document zero use of CFC-refrigerants (policy, equipment specification, procurement specification or contract) unless a third party audit shows that a replacement or conversion is not economically feasible - in which case show that a phase out plan is in place. Do not use halons in fire suppression. Use all alternatives consistent with EPA's Significant New Alternatives Policy (SNAP) regulatory requirements.</p>	<p>Commerce Acquisition Manual (CAM) 1323.70, 2.6</p>