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|  | ES&H Manual | FESHM 1100 June 2016 |
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FESHM 1100: SUSTAINABLE ACQUISITION

Revision History

| Author | Description of Change | Revision Date |
|---------------|--|----------------------|
| Teri Dykhuis | Updated the chapter to reflect EO 13696 as SA driver. EO13693 revokes previous orders with sustainable acquisition requirements. Also updated all URLs and removed obsolete information. | June 2016 |
| Amber Larson | Initial release of Chapter 1100 | January 2011 |

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1.0 INTRODUCTION

Fermilab's Sustainable Acquisition (SA) program has been developed to support the Department of Energy and Fermilab's commitment to Executive Order 13693 - Planning for Federal Sustainability in the Next Decade. The purpose of the order is to maintain Federal leadership in sustainability and reduce greenhouse gas emissions.

This chapter provides information and resources for employees to specify SA products and services in their purchases as well as in contracts.

2.0 DEFINITIONS

Alternative Fuels - Denatured ethanol, and other alcohols; mixtures containing 85% or more by volume of denatured ethanol, and other alcohols with gasoline or other fuels; natural gas; liquefied petroleum gas; hydrogen; coal-derived liquid fuels; non-alcohol fuels (such as biodiesel) derived from biological material; 'P-Series' fuels; and electricity:
(<http://www.afdc.energy.gov/afdc/glossary.html>).

Alternative Vehicles - As defined by the Energy Policy Act, any dedicated, flexible-fuel, or dual-fuel vehicle designed to operate on at least one alternative fuel:
(<http://www.afdc.energy.gov/afdc/glossary.html>).

- Flexible-fuel vehicle – A vehicle with a common fuel tank designed to run on varying blends of unleaded gasoline with either ethanol or methanol.
- Dual-fuel vehicle - Vehicle designed to operate on a combination of an alternative fuel and a conventional fuel. This includes vehicles using a mixture of gasoline or diesel and an alternative fuel in one fuel tank, commonly called flexible-fueled vehicles; and vehicles capable of operating either on an alternative fuel (usually compressed natural gas or propane), a conventional fuel, or both, simultaneously using two fuel systems. These are commonly called bi-fuel vehicles.

Biobased - A product determined by the Secretary of Agriculture to be a commercial or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products or renewable domestic agricultural materials (including plant, animal, and marine materials) or forestry materials.

Energy Efficient – Electricity - Refers to equipment or programs that are aimed at reducing the energy used by specific end-use devices and systems, typically without affecting the services provided. Examples include high-efficiency appliances, efficient lighting programs, high-efficiency heating, ventilating and air conditioning (HVAC) systems or control modifications, efficient building design, advanced electric motor drives, and heat recovery systems.
(http://www.eia.doe.gov/glossary/glossary_e.htm)

Electronic Product Environmental Assessment Tool (EPEAT) - a tool designed to help purchasers in the public and private sectors evaluate, compare and select electronic products (currently desktop and notebook/laptop computers and monitors) based on their environmental attributes.

level certification - Business and Industrial Furniture Manufacturer's Association's (BIFMA's) multi-attribute sustainability standard, and third-party certification program for the furniture industry (<http://levelcertified.org/>).

- Products can be awarded a level 1, level 2 or level 3 compliance mark based on the combined score achieved in their sustainability evaluation. Level 3 is the highest award a product can achieve.

Non-Ozone Depleting Substances - a compound that does not contribute to stratospheric ozone depletion (<http://www.epa.gov/ozone/defns.html#ozdepl>).

- Ozone Depleting Substances (ODS) – a compound that contributes to stratospheric ozone depletion:
 - ODS include chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), halons, methyl bromide, carbon tetrachloride, hydrobromofluorocarbons, chlorobromomethane, and methyl chloroform. ODS are generally very stable in the troposphere and only degrade under intense [ultraviolet light](#) in the stratosphere. When they break down, they release chlorine or bromine atoms, which then deplete ozone. A detailed list of Class I and Class II substances with their Ozone Depleting Potential (ODP), Global Warming Potential (GWP), and CAS numbers are available at the [US EPA website](#).

Recycled Content or Recovered Materials - Waste materials and byproducts that have been recovered or diverted from solid waste, but do not include materials and byproducts generated from, and commonly reused within, an original manufacturing process.

Sustainable Acquisition or Environmentally Preferable Purchasing - products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. Within the DOE, that means biobased, energy and water efficient, recycled content, alternative fuels and vehicles, and non-ozone depleting products.

Water Efficient - saving water resources through the employment of water-saving technologies and activities.

3.0 RESPONSIBILITIES

3.1 Finance Section, Procurement

Procurement will continue and forge new relationships with vendors that can provide SA products/services to Fermilab, and include SA clauses in contracts as detailed in the [Fermilab Procurement Policies and Procedures Manual](#) and required by the Fermilab Prime Contract. They will also report to the Chief Safety Officer on SA contract actions as requested.

3.2 Construction Coordinator/Task Manager/Service Coordinator

Construction Coordinator/Task Manager/Service Coordinator oversees or directs the work of a subcontract for conformance with the subcontract documents. In this case, ensure that specified SA items are used to carry out the subcontract.

3.3 Division/Section Heads and Project Managers (D/S/P)

D/S/P's will ensure the requirements of this chapter are fulfilled, including requiring >95% of all new contracts to include energy efficient, water efficient, biobased, environmentally preferable, non-ozone depleting, contain recycled content, or are non- or less-toxic alternatives, where such products and services meet D/S/P performance requirements. They will report SA information to the Chief Safety Officer as requested.

3.4 Chief Safety Officer

The Chief Safety Officer will develop and provide SA training, and ensure that SA resources are available via ESH&Q Section web pages. Submit purchasing data to the DOE annually through the Consolidated Energy Data Report (CEDR).

3.5 Employees

Employees will specify SA in service and product contracts, complete the Sustainable Acquisition training as required and purchase SA products any time a SA product is available unless one of the exceptions listed below applies.

3.6 Division Safety Officer (DSO)

DSO's will provide support to D/S/P's and employees in implementing the requirements of this chapter and will ensure the preference of SA products via their review of Purchase Requisitions.

4.0 PROGRAM DESCRIPTION

The SA program is one aspect of Fermilab's Pollution Prevention and Waste Minimization program which helps Fermilab reduce its impact on the environment. It helps employees purchase products and services that have the least adverse impact to the environment. SA primarily focuses on products or services that are efficient in water or energy use, contain sustainable components (either biobased products or use alternative fuels) or contain recycled content. Sustainable Acquisition should be considered for every purchase Fermilab makes including purchase requisitions/orders, ProCard purchases, and subcontracts for goods and services. Scope of work for goods/services subcontracts should call out the SA products to be used during the course of the contract.

Section 5, below, provides web links to a variety of SA information. The General Services Administration's [Sustainable Facilities Tool](#) is a useful website to explore. Before making a purchase, employees should research products with SA characteristics to determine if it meets the performance requirements.

4.1 Exceptions to purchasing SA items

1. The item will not meet reasonable performance standards,
2. The item is unavailable in time to meet a critical need,

- The item is not life cycle cost effective or exceeds 110% of the price of the non-sustainable item. However, SA items that are more costly should still be carefully considered before being disregarded.

5.0 REFERENCES

5.1 RESOURCES

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| ESH&Q Section Sustainable Acquisition | http://esh.fnal.gov/xms/Resources/EPP |
| Procurement Office | https://fermipoint.fnal.gov/organization/fin/fin-prc/SitePages/Home.aspx |
| GSA Green Procurement Compilation | https://sftool.gov/GreenProcurement |

5.2 ENERGY EFFICIENCY

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| Energy Star | http://www.energystar.gov/ |
| Federal Energy Management Program (FEMP) | http://energy.gov/eere/femp/federal-energy-management-program |
| EPEAT | http://www.epeat.net/ |

5.3 SUSTAINABILITY

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| level Certification | http://levelcertified.org/products/ |
| US Department of Agriculture Biopreferred | http://www.biopreferred.gov/BioPreferred/faces/catalog/Catalog.xhtml |

5.4 WATER USE

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| Water Sense | http://epa.gov/watersense/ |
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5.5 OZONE DEPLETION

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| Significant New Alternatives Policy | http://www.epa.gov/ozone/snap/lists/index.html |
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5.6 EDUCATION

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| National Renewable Energy Lab (NREL) | http://www.nrel.gov/learning/ |
| US Department of Energy (DOE) | http://energy.gov/ehss/services/environment |
| Environmental Protection Agency (EPA) | http://www3.epa.gov/ |
| EPA Sustainable Marketplace: Greener Products and Services | https://www.epa.gov/greenerproducts |

5.7 SHOPPING

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| Ability One Go Green | http://www.abilityone.com/OA_HTML/ibeCCTpSctDspRte.jsp?section=10044&sitex=10020:22372:US |
| General Services Administration (GSA) – GSA Advantage | https://www.gsaadvantage.gov/advgsa/advantage/main/start_page.do |
| Green Depot | http://www.greendepot.com/greendepot/default.asp?&s_id=0 |
| Green Seal | http://www.greenseal.org/FindGreenSealProductsAndServices.aspx |
| Stock Room Catalog | https://fermi.service-now.com/fsc/ |