



# NASA JOHNSON SPACE CENTER WHITE SANDS TEST FACILITY

Tools of Engagement –  
Raising Awareness for  
Sustainability at NASA WSTF



# Shuttle Flyover





- The WSTF Sustainability Initiative Team (WSIT) was established in 2005 by the Energy Manager.
- WSIT identified the need for a site awareness program

## **Mission Statement:**

*“...to lead WSTF toward a culture of environmental sustainability by gathering and disseminating information, raising awareness and encouraging employee involvement...and, exploring opportunities for continuous improvement to reduce WSTF’s environmental impacts...”*

# Background



- WSTF is certified to the International Standards Organization (ISO) 14001 standard.
  - ISO provides a framework for organizations to systematize and improve their environmental management efforts.
- WSIT developed and provided oversight for Sustainability Environmental Management Plan (EMP) from 2006 – 2011
  - Awareness Program – laid the foundation for WSTF Sustainability Program
  - Recycling
  - Sustainable Acquisition



## Employee Involvement is Key!

- Newsletters
- LED Sign
- Annual Events
  - America Recycles Day
  - Earth Day
  - NASA “Health & Safety Day”
- Green Star Awards
- Training Presentations and Videos
- Sustainability Program Application

# WSTF WGO Monthly Newsletter



## What's Going on at WSTF?

Volume 14, Issue 2

### WSIT NEWS

**Get Caught Recycling Update:** Thumbs up for Joel Ybarvo, Laurel Gardenhire, Arleen Tinsely, Michael Brooks, Denise Barrett, John Wang, Pete Rios, Diana Garcia, Victor Meza, Wade Bannister, Lupe Arellano, Chuck Heird, Clint Derk, and Lynne Reynolds. These folks were caught recycling and each was given a \$5 gift certificate to a local business. We are still on the lookout and have more prizes to hand out, so keep recycling WSTF!

**WSIT Green Star Award.** Congratulations to Vanessa Carrillo, recipient of the Green Star Award for the first quarter of FY2013! Vanessa is working to green the Jacob's P-card process. She received a certificate and a \$20 gift certificate to Color Your World Nursery. If you would like to nominate a coworker who is helping to "green" WSTF, the nomination form here: [WAWSTF-AllEnvrPub\WSIT Docs\Green Star Nomination Form.docx](#)



Vanessa Carrillo (second from left) receives Green Star Award.

**Recycle Right** Our recycling program continues to evolve! Did you know that we get recycling credit if we haul our broken concrete to the old landfill site or composting credit if we take our yard waste to the same location? Did you know that we recycle Styrofoam through a local nursery? This handy reference: [WAWSTF-AllEnvrPub\WSIT Docs\WSTF Recycling Program February 2013.docx](#) tells you how to handle just about any material we can recycle here at WSTF. Save it as a shortcut on your desktop or print it (double sided) and post it! Questions? Call 5353. *Submitted by Mary Canavan*

**Funding of WSTF Green Projects.** In February, the NASA Sustainability Project Review Board (NSPRB) approved the funding of the following seven projects for WSTF. Project funding ranged from \$1.7k to > \$120k. Congratulations and thank you for working to "green" WSTF!



- A ~20kW photovoltaic system to be installed at the forward guard gate.
- Defense Logistics Agency "Buy Green" training for up to 60 WSTF employees.
- Purchase of two tank trailers and pumps for the Environmental Department.
- Purchase of parts to repair an Electric Gem Car.
- Purchase of a Big Belly Solar compactor for the forward guard gate.
- Phase I to develop a DI water reclamation system for Component Services.

**We need more proposals!!!** GSA Recovery Sales Funds are available for green projects that meet the public law criteria listed in the submittal instructions:

[WAWSTF-AllEnvrPub\Green Projects Forms\Call for projects Q2012013.pdf](#) There is no deadline, WSIT will accept green proposals for consideration as long as funds are available. Click on [WAWSTF-AllEnvrPub\Green Projects Forms\Green Project Response Form.docx](#) for the proposal form and contact any WSIT member with questions: Mary Canavan (5353), Pam Egan (5351), Alanna Mejia (5444), Antonette Sanchez (5497), Amanda Skarsgard (5460), Stephanie Portillo (5267), Matthew Englert (5117)

## Environmental...



### The Greening of WSTF: Sustaining Continuous Improvement by Using Less Stuff!

**Did you know that 84% of municipal solid waste in NM is landfilled?** That means that only 16% of all materials are diverted by recycling or other means. Nationally, total material recovery, or diversion is 34%. By contrast, WSTF has been highly successful at materials' diversion. You should pat yourself on the back because the WSTF diversion rate (predominately through recycling) has increased steadily from 12% in FY2000 to 94% in FY 2015!

**Federal requirements for purchasing "green" alternatives (e.g. with biobased or recycled content) to conventional products are constantly increasing.** In FY2014, 70% of materials that had green purchasing requirements and were purchased on site, met the green requirements. We are working on a daily basis to increase the number of green alternatives purchased by the site. WSTF has been recognized for our ongoing successful recycling and sustainable acquisition programs; by the EPA, NASA HQ, and by the New Mexico Recycling Coalition.

**So, where do we go from here?** How do we continue to improve our sustainability program? One answer is to start thinking differently about our resources and the waste we create. WSTF generated a total of over 400 tons of waste in FY 2014. Granted, we recycled 85% of that, but what if we had reduced our overall waste generation by using less stuff and repurposing materials? The EPA has created a Waste Management Hierarchy showing that the most sustainable option is creating less waste at the outset. *Continued on next page.*



Source: <http://www.epa.gov/waste/nonhaz/municipal/hierarchy.htm>

# Porcelain Press



**Celebrate Earth Day WSTF!**  
Recycle your old Personal Electronics through  
the United States Postal Service (USPS) BlueEarth™  
Federal Recycling Program

USPS BlueEarth™  
**Recycle Home Electronics**

The U.S. Postal Service BlueEarth Federal Recycling Program, offered by USPS and NASA, is a simple, convenient, and free way to recycle your **personally owned** consumer electronics.

**Types of recyclable home electronics:**

- inkjet and toner cartridges
- small electronics
- cell phones and smartphones
- tablets/e-readers
- MP3 players
- GPS devices
- digital cameras
- media games and game systems
- DVD and Blu-ray players
- laptops and tablets
- PCs and storage devices weighing up to 20 pounds

**Recycle home electronics in five easy steps.**

The USPS BlueEarth Federal Recycling Program makes disposing of personal devices and electronics easy and safe for the environment.

All you have to do is:

- 1 Box up your item(s).
- 2 Go to <http://BlueEarth.usps.gov>.
- 3 Fill out a quick form (identifying your agency as NASA and your items as personal assets).
- 4 Print a prepaid USPS label and tape it to your shipping box.
- 5 Mail it: call for a free package pickup, drop it in a collection box, or take it to a Post Office.

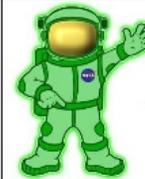
It's that easy.

\* Employees should not turn in Government agency assets.

**5111 Emergency Telephone Number Removed From Service**  
As of April 17, 2015, ext. 5111 was removed from service.  
**Ext. 5911 is now the only WSTF phone number to use for reporting an emergency.**  
Please note when using a cell phone or an off-site telephone, the 524 prefix must be added, i.e., 524-5911.

**Keystone Committee Members:**

Art Pardo, Chair; Eva Cuevas, Vice Chair; Don Hall, Bob Tufts, Carlos Martínez, Tim Brooks, Jack Cervoni, Sandy Montoya, Nina Cardenas, Chris Valdivia, Auggie Valladares, Izzy Gomez, Stephanie Portillo



**Sustainability at NASA - Sustainability at WSTF**

In December 2013, Administrator Bolden formally adopted sustainability principles stated in *NASA Policy Directive 8500, NASA Environmental Management*, that "NASA will execute the mission without compromising our planet's resources so that future generations can meet their needs." The policy directs every NASA employee and organizational element to comply with all federal, state, local, and territorial laws, and incorporate environmental risk reduction and sustainability practices into all phases of work – planning, development, implementation, and operational phases.

NASA's Strategic Sustainability and Performance Plan outlines "Green" Executive Order (EO) requirements and goals along with strategies and targets developed to support sustainability within NASA.

The ten sustainability goals outlined in the EOs are:

- Goal 1: Greenhouse Gas (GHG) Reduction
- Goal 2: Sustainable Buildings
- Goal 3: Clean & Renewable Energy
- Goal 4: Water Use Efficiency & Management
- Goal 5: Fleet Management
- Goal 6: Sustainable Acquisition
- Goal 7: Pollution Prevention and Waste Reduction
- Goal 8: Energy Performance Contracts
- Goal 9: Electronic Stewardship
- Goal 10: Climate Change Resilience

Each of these goals involves conservation of resources, including equipment and materials, energy, water, and other natural resources. As a NASA center, WSTF is supporting the agency by working to reach the targets for each goal. The newly established Site-wide Sustainability Working Group (S2WG) is currently working in tandem with WSIT to identify and measure existing "WSTF Sustainable Actions." S2WG is also a forum for brainstorming new possibilities that would reduce resource use and save the site money. WSTF has made progress in many of the goal areas, but we are tasked with continual improvement! The WSIT "Use Less Stuff" initiative is aimed at reducing our resource use in all goal areas.

If you have "Sustainability at WSTF" input or questions, please contact a WSTF member: Mary Canavan x 5353, Pam Egan x 5351, John Corkran x 5448, Laurel Gardenhire x 5552, Eric Hays-Stram x 5444, and Steven Maestas x 5361

**Practice HEAT SAFETY Wherever You Are**

Heat related deaths are preventable. Protect yourself and others from the impacts of heat waves.

**Job Sites**  
Stay hydrated and take breaks in the shade as often as possible.

**Indoors**  
Check up on the elderly, sick and those without AC.

**Vehicles**  
Never leave kids or pets unattended - LOOK before you LOCK

**Outdoors**  
Limit strenuous outdoor activities, find shade, and stay hydrated.

**weather.gov/heat**

have a safe summer

Don't forget to **HYDRATE!**

**Keystone Committee Members:**

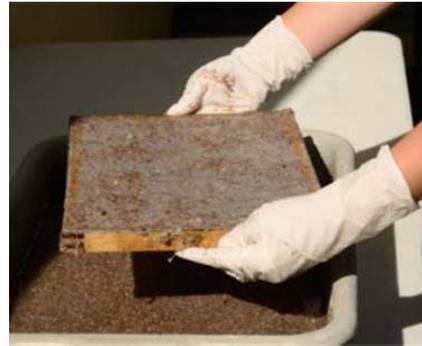
Art Pardo, Chair; Eva Cuevas, Vice Chair; Don Hall, Carlos Martínez, Tim Brooks, Jack Cervoni, Sandy Montoya, Nina Cardenas, Chris Valdivia, Izzy Gomez, Stephanie Portillo, Orlando (OJ) Crespin, Jeffrey Chavez, Joshua Sanchez, Jaime Luna, Richard Mirabal, Jaelena Knight



# LED Entry Sign



# Employee Engagement



# Annual WSTF "Health & Safety Day"



# Celebrating ARD with Recycle d'Art



# Celebrating Earth Day



**WSIT PRESENTS**  
**Fifth Annual KIDS' CLOTHING SWAP**  
April 13 - 15



Clean out your kids' closets and gather all the perfectly good items your kids no longer wear or use.

- All items should be clean and in good condition, with no holes, tears, or stains; something your kids would want to wear.
- We encourage anyone with kids to participate.
- Bring some/take some!

Reminder: This will be the last clothing swap for a while. The remaining items will be donated to Tutti Bambini, 300 El Molino at Alameda, a children's boutique offering tenderly used and new clothes and toys. Proceeds from Tutti Bambini support local kids' organizations and a couple of orphanages in Mexico.

**Gemini Conference Room**  
**Building 101, Upstairs**  
**10 am - 2 pm**



# Solar Cook Offs



# Celebrating...



# Employees





- Requirements for Federal Agencies to reduce environmental impacts and lead by example were increasing.
- January 2007 E.O. 13423 – *Strengthening Federal Environmental, Energy, and Transportation Management*
- October 2009 E.O. 13514 – *Federal Leadership in Environmental, Energy, and Economic Performance*
  - Required that all federal agencies submit an annual Strategic Sustainability Performance Plan (SSPP) to the Office of Management and Budget.



National Aeronautics and Space Administration



# 2015 Strategic Sustainability PERFORMANCE PLAN



**Submission date:** June 30, 2015

**Point of contact:** NASA Chief Sustainability Officer, 202.358.2800

[www.nasa.gov](http://www.nasa.gov)



- Management deemed the Sustainability EMP complete and closed because the program was sufficiently established.

WSIT continued to

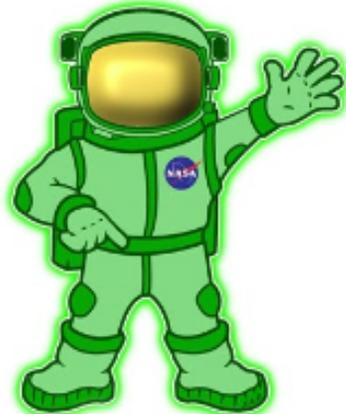
- Report annually on WSTF progress toward SSPP goals
- Work across contracts to improve Sustainable Acquisition (SA) Metrics
- Develop/improve application to house recycling and SA data

# The WSTF Sustainability Program App



WSTF Sustainability Program

- Green Products
- GPC Website
- Waiver System
- Buyers
- Recycling Metrics
- Submit Sustainable Action!**
- NETS
- Training
- Contacts
- SSPP



**Mary Canavan 575.524.5353**  
**WSTF Sustainability Team Lead**

Database Administrator: Karen Wilson 281.767.1403  
Leading through innovative business management practices  
2016 Presidential GreenGov Award Winner

# Green Product List



Available Green Products

Clear Query Refresh Table Send to Excel Discontinued Products

Center:  Item Key Word  NSN  MPN  Green Attribute

Product Category  Product Content  Subcategory  **Search**

Item Count 172

|  | Comment | Added     | Item  | Center | Star Rating | In Warehouse                        | Product Category      | Green Attribute    | Pr Co    |
|--|---------|-----------|---|--------|-------------|-------------------------------------|-----------------------|--------------------|----------|
|  | Comment | 7/18/2014 | Epson PowerLite 1262W 3LCD Projector              | WSTF   |             | <input checked="" type="checkbox"/> | Office Electronics    | RoHS complia...    | Ene      |
|  | Comment | 7/30/2014 | PAPER, BLUE PAPER. 8-1/2"X 11"                    | WSTF   |             | <input checked="" type="checkbox"/> | Paper Office Products | 30% recycled p...  | Rec recy |
|  | Comment | 7/30/2014 | BOOK,STENO WIRE COIL BOUND 6"X9                   | WSTF   |             | <input checked="" type="checkbox"/> | Paper Office Products | 50% Recycled ...   | Rec recy |
|  | Comment | 7/30/2014 | PAPER, WHITE, 8-1/2X11, 20#, 92 BRIGHTNESS,       | WSTF   | 5.00        | <input checked="" type="checkbox"/> | Paper Office Products | 500SHEETS/R...     | Rec recy |
|  | Comment | 7/30/2014 | PAPER,XEROX.GENERAL USE 8-1/2"X14". 30% Recycled  | WSTF   |             | <input checked="" type="checkbox"/> | Paper Office Products | 20LB, 92 GE/1...   | Rec recy |
|  | Comment | 7/30/2014 | PAPER,TOILET.CORMATIC,WHITE, 2-PLY. EPA Compliant | WSTF   |             | <input checked="" type="checkbox"/> | Paper Office Products | EMBOSSSED,2...     | Rec recy |
|  | Comment | 7/30/2014 | XEROGRAPHIC PAPER, 100% RECYCLED, CHLORINE FREE   | WSTF   |             | <input checked="" type="checkbox"/> | Paper Office Products | 8-1/2"X11", 20#... | Rec recy |
|  | Comment | 7/30/2014 | Memo Book, Spiral 3 X 5,                          | WSTF   | 5.00        | <input checked="" type="checkbox"/> | Paper Office Products | 40% post cons...   | Rec recy |
|  | Comment | 7/30/2014 | AD,POST-A-NOTE.3"x3"W/ADHESIV EDGE.               | WSTF   |             | <input checked="" type="checkbox"/> | Paper Office Products | 30% post cons...   | Rec recy |
|  | Comment | 7/30/2014 | PAD,POST-A-NOTE.3"x5" W/ADHESIVE EDGE.            | WSTF   |             | <input checked="" type="checkbox"/> | Paper Office Products | 100% post con...   | Rec recy |
|  | Comment | 7/31/2014 | Paper, Bond, Engineering, Copying, Xerographic,   | WSTF   |             | <input checked="" type="checkbox"/> | Paper Office Products | 30"x500'. P/N: ... | Rec recy |
|  | Comment | 8/4/2014  | BOX,SHIPPING CORRUGATED.14"X14"X14"               | WSTF   |             | <input checked="" type="checkbox"/> | Paper Office Products | 25-30% post c...   | Rec recy |

# Electronic SA Waiver



Sustainable Acquisition Request for Waiver

1. **Approver will determine the period of time for which the waiver is valid (from 3-12 months).**  
2. *Click on underlines for instructions.*

Center:

Date:

Originator:

Last Name, First Name

Waiver No:

**Submit**

**1. Product(s) containing recovered materials and meeting NASA's preference standards for the following designated item or items:**

National Stock Request No.

**2. Items were not obtained because (You can select more than one):**

A - Use of minimum content standards would result in inadequate competition.  
B - Products meeting EPA guidelines are only available at an unreasonable price.  
C - Products meeting EPA guidelines do not meet quality/performance specifications or standards.  
D - Products meeting EPA guidelines are not available within a reasonable time frame

**3. Written justification and supporting documentation for not procuring designated items containing Recovered Material:**

# Data Entry



Recycling and Waste Reduction Program Data Entry

New Record Add Category Query Send to Excel

Input Date:   Keep FY in Grid

Material:

Category (Query):
 

- Asphalt
- Cement Parking Bumpers
- Cement/Concrete/Cleanfill
- Demolition
- HDPE Bucket/Lids
- Lumber/Wood Bldg Materials
- Pallets
- Pipe
- Utility/Telephone Poles
- Wood for Reuse

Amount:

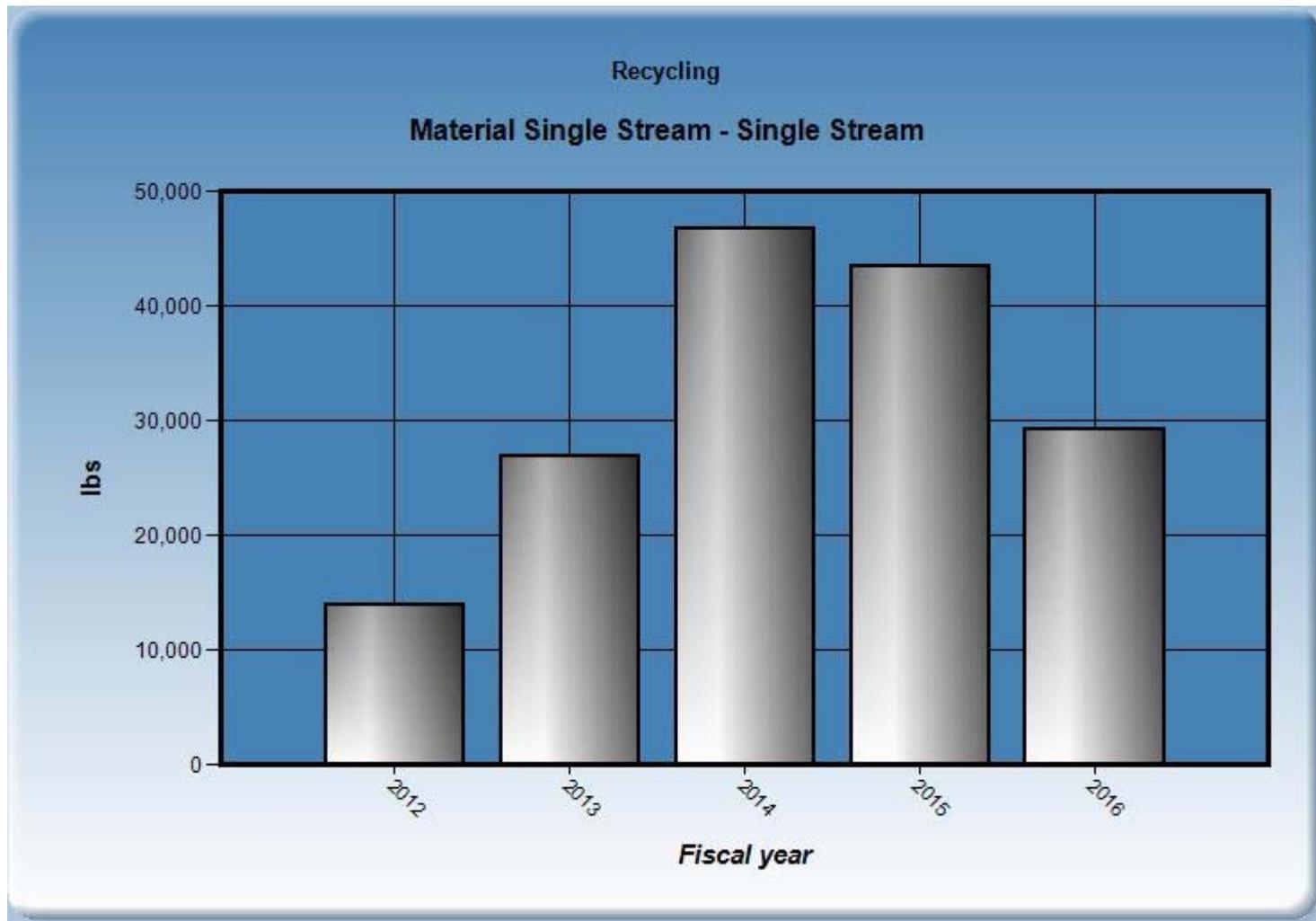
UOM:

Comment:

Save

| Edit | Delete | FY   | InputDate  | Material     | Category        | Amount    | UOM | Comment            |
|------|--------|------|------------|--------------|-----------------|-----------|-----|--------------------|
| Edit | Delete | 2016 | 12/2/2015  | Construction | Wood for Reuse  | 2,020.0   | lbs |                    |
| Edit | Delete | 2016 | 12/3/2015  | Construction | Cement/Concr... | 17,680.0  | lbs | CLC Ticket 02...   |
| Edit | Delete | 2016 | 12/16/2015 | Construction | Cement/Concr... | 21,720.0  | lbs | Cleanfill Ticket.  |
| Edit | Delete | 2016 | 12/17/2015 | Construction | Cement/Concr... | 23,200.0  | lbs | Cleanfill. Ticket. |
| Edit | Delete | 2016 | 12/17/2015 | Construction | Wood for Reuse  | 1,060.0   | lbs |                    |
| Edit | Delete | 2016 | 2/10/2016  | Construction | Cement/Concr... | 16,220.0  | lbs | CLC Weight tic.    |
| Edit | Delete | 2016 | 2/11/2016  | Construction | Wood for Reuse  | 180.0     | lbs | Mayfield shop ..   |
| Edit | Delete | 2016 | 2/17/2016  | Construction | Cement/Concr... | 19,380.0  | lbs | CLC Weight Ti..    |
| Edit | Delete | 2016 | 2/18/2016  | Construction | Cement/Concr... | 252,800.0 | lbs | CLC Weight Ti..    |
| Edit | Delete | 2016 | 3/3/2016   | Construction | Wood for Reuse  | 500.0     | lbs | Mayfield shop ..   |
| Edit | Delete | 2016 | 4/1/2016   | Construction | Wood for Reuse  | 2,440.0   | lbs | Mayfield Shop ..   |
| Edit | Delete | 2016 | 4/8/2016   | Construction | Demolition      | 7,200.0   | lbs | Weight Ticket 2.   |
| Edit | Delete | 2016 | 4/15/2016  | Construction | Wood for Reuse  | 500.0     | lbs | Mayfield Shop ..   |
| Edit | Delete | 2016 | 5/3/2016   | Construction | Demolition      | 4,940.0   | lbs | Weigh Ticket 2..   |
| Edit | Delete | 2016 | 5/11/2016  | Construction | Asphalt         | 28,920.0  | lbs | Asphalt from H.    |
| Edit | Delete | 2016 | 5/20/2016  | Construction | Demolition      | 4,820.0   | lbs | Weigh Ticket 2..   |
| Edit | Delete | 2016 | 6/13/2016  | Construction | Demolition      | 3,380.0   | lbs | Green Paso Ti..    |

# Graph Metrics

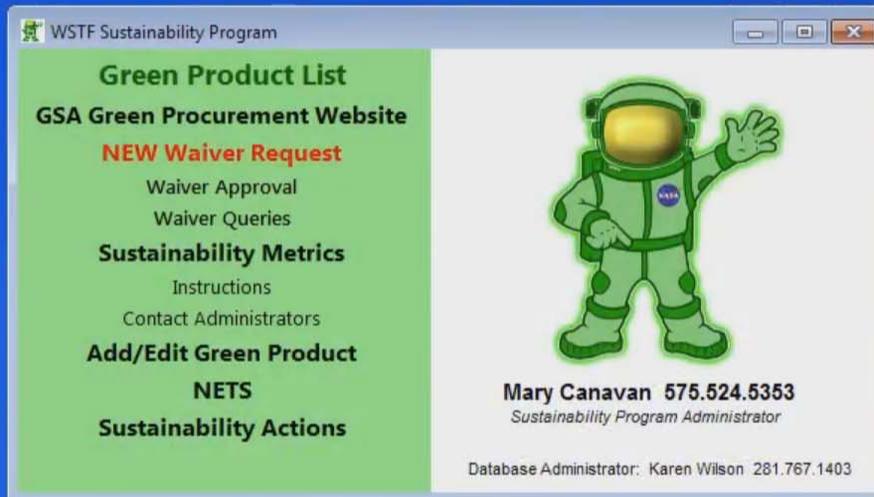


# Training Videos



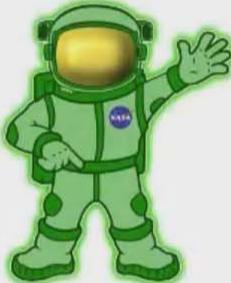
WSTF Sustainability Program

## NASA White Sands Test Facility WSTF Sustainability Program



WSTF Sustainability Program

- Green Product List**
- GSA Green Procurement Website**
- NEW Waiver Request**
  - Waiver Approval
  - Waiver Queries
- Sustainability Metrics**
  - Instructions
  - Contact Administrators
- Add/Edit Green Product**
- NETS**
- Sustainability Actions**



**Mary Canavan 575.524.5353**  
*Sustainability Program Administrator*

Database Administrator: Karen Wilson 281.767.1403



0:01 / 8:53



# By 2015



- Recycling and Sustainable Acquisition Programs are well established
- But we are challenged for Continual Improvement
- ISO 14001:2004 Standard – WSTF Environmental Policy includes commitments to pollution prevention and **continual improvement**.
- Now what!?

# Requirements



March 2015: E.O. 13693 – *Planning for Federal Sustainability in the Next Decade*

Goal 1: Greenhouse Gas (GHG) Reduction

Goal 2: Sustainable Buildings

Goal 3: Clean & Renewable Energy

Goal 4: Water Use Efficiency & Management

Goal 5: Fleet Management

Goal 6: Sustainable Acquisition

Goal 7: Pollution Prevention & Waste Reduction

Goal 8: Energy Performance Contracts

Goal 9: Electronic Stewardship

Goal 10: Climate Change Resilience

# Continual Improvement...



- ISO 14001:2015 Standard (new) requirements:
  - Implementation of proactive initiatives to protect the environment from harm and degradation, such as sustainable resource use;
  - The addition of stakeholder-focused communication strategy, and;
  - A focus on life-cycle thinking
- Determined that we need more direct employee involvement...employees are our greatest resource!
- And a broader focus on resource conservation to improve our metrics toward SSPP Goals



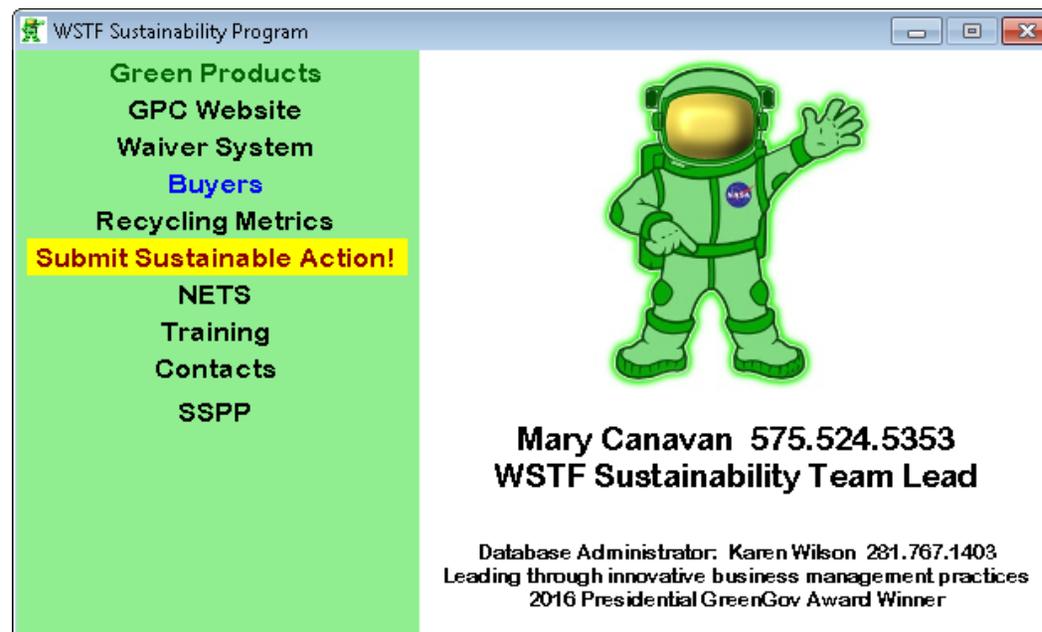
- WSIT proposed a new EMP to form the Site-Wide Sustainability Working Group (S2WG).
- Management approved and provided funding for one year.
  - Continued funding contingent upon Group performance.
- Objective of S2WG is to promote employee participation for continual improvement in:
  - Resource conservation (Use Less Stuff)
  - Incorporating sustainability thinking into our work ethic
  - Sustainability (SSPP Goal) Metrics



- Brings employees with diverse backgrounds, perspectives, and innovative resource conservation ideas to the table.
- Facilitates collaboration of SSPP Stakeholders, WSIT, and Departments.
- Shares site progress toward NASA SSPP Goals and site-wide sustainability initiatives with the WSTF Community.
- Meetings have become a successful forum for sharing information and generating ideas between departments.



- Doing more with less on a shoestring budget.
- Start with “low hanging fruit”
  - Most recently incorporated S2WG documentation into the:



# SSPP Goals and Targets



WSTF Sustainable Actions Reporting EMP 2016-0006

New Entry Send to Excel Send Email to S2WG Query Meeting Minutes Instructions

Add/Edit Submissions 4 Strategic Goals

| Goal Number | Goal  | Table              | Metric   |
|-------------|---|--------------------|--|
| 1           | 1. Greenhouse Gas (GHG) Reduction           | Table 1-1: Stra... | Reduce direct GHG emissions (onsite or offsite) by 47% and reduce indirect GHG emissions (e.g. commuting, travel) by 32% by 2025, compared to 2008.  |
| 2           | 2. Sustainable Buildings                    | Table 2-1: Stra... | Reduce energy use /Gross Square Footage by 2.5% annually through FY 2025, compared to 2015. - 1% of the agency's existing buildings above 5,000 GSF intended to be energy, waste, or water net-zero by FY 2025 - at least 23% of buildings, or 30% of GSF will meet Guiding Principles by FY 2025. |
| 3           | 3. Clean and Renewable Energy               | Table 3-1: Stra... | At least 10% of agency's total electricity consumption is from renewable energy sources, for FY 2016 and FY 2017. - At least 10% of agency's total electricity consumption and thermal energy is from clean energy sources, for FY 2016 and 2017.  |
| 4           | 4. Water Use Efficiency and Management      | Table 4: Strate... | Reduce potable intensity (gal/sq ft) by 2% annually through FY 2025, compared to 2007; reduce use for industrial, landscaping, and agricultural by 2% annually through FY 2025, compared to 2010; install appropriate green infrastructure to improve storm water and wastewater management.       |
| 5           | 5. Fleet Management                         | Table 5-1: Stra... | Reduce per-mile GHG emissions by 4% by 2017, 15% by 2021, 30% by 2025, compared to 2014.   |
| 6           | 6. Sustainable Acquisition                  | Table 6-1: Stra... | Ensure that environmental performance and sustainability factors are considered to the maximum extent practicable for all applicable procurements. - Award 1,100 contracts with Biopreferred and biobased criteria, with estimated value of \$1,000,000, to be delivered in FY 2016.               |
| 7           | 7. Pollution Prevention and Waste Reduction | Table 7-1: Stra... | Divert 50% of solid waste (excluding construction and demolition debris); divert 50% of construction and demolition debris. - Reduce acquisition, use, and disposal of toxic and hazardous materials, particularly when helpful in meeting GHG reduction goals.                                    |
| 8           | 8. Energy Performance Contracts             | Table 8-1: Stra... | Award \$73.9M investment value in Energy Savings Performance Contracts and Utility Energy Services Contracts by the end of 2016.   |
| 9           | 9. Electronic Stewardship                   | Table 9-1: Stra... | Ensure 95% of monitors, PCs, and laptops acquired meet environmentally sustainable electronics criteria (EPEAT registered). - Ensure 100% of computers, laptops, and monitors have power management features enabled; follow environmentally sound methods for disposal.                           |
| 10          | 10. Climate Change Resilience               | Table 10-1: Str... | Evaluate climate change risks to identify and manage the effects of climate change on the agency's operations and mission in both the short and long term.   |
| 11          | 11. Other                                   | N/A                |  |

# Sustainable Actions Metrics Form



WSTF Sustainable Actions Reporting EMP 2016-0006

**New Entry** Send to Excel Send Email to S2WG Query Meeting Minutes Instructions

Add/Edit Submissions 4 Strategic Goals

**Sustainable Action:** Replacement of Halogen track lighting with LED track lighting Report ID: 01-RH-2016-0001 **Save**

Person(s) Responsible for Submission

Name(s) Jamie Puentes Phone(s) \_\_\_\_\_

Resp Office RH Dept Mission (MS0) Section Publications (MS6)

Submit Date 6/1/2016

Metric Information

Is there cost savings? Yes

Is it one-time or annual savings? Annual

What is the estimated cost savings for one-time or annually? 4914

If measurable in another way, enter quantity, unit of measure and product. Example: 2000 lbs of GHG

Explain the quantity and/or cost savings

The calculator for energy savings is provided below: <http://www.waclighting.com/calculator>

Team Notes:

Administration

Team Advocate \_\_\_\_\_

**Cancel** Send to NETS Report 9/15/2016

WSTF NETS Number 1.16

Does Action/Activity

Agency Goal 1. Greenhouse Gas (GHG) Reduction

Conserve resources? Yes Which one? Energy

Replace hazardous with non-hazardous? No

Prevent pollution, divert or reduce waste? Yes

Avoid hazardous waste disposal and/or costs? Yes

Need Funding? No

Cost to Implement 0

Challenge Rate 1 Example: 2-3\*

Explain/Describe in Detail (include anything not mentioned above)

Led lights are energy efficient, do not have any toxic elements, better quality of light distribution, and offer a longer life span (up to 6 times longer).

Replaced halogen (two tracks - 18 bulbs) track lighting with LED track lighting (two track - 14 bulbs). The lighting is brighter and more cost efficient. Fewer lights mean fewer resources are needed for manufacturing processes, packaging materials and transportation.

Edit Trail:

Edited on 9/15/2016 by kawilso1  
Transferred to WSTF NETS No: 1.16  
Initiated on 9/15/2016 by kawilso1

# S2WG Working Idea List



| S2WGID          | Action  | Name(s)              | Phone(s)          | Resp Office | Date      | Savings \$ | Team Advoca |
|-----------------|---|----------------------|-------------------|-------------|-----------|------------|-------------|
| 10-RE-2016-0003 | Investigate beneficial use of PF and MP water.      | WSIT                 |                   | RE          | 9/14/2016 | \$0        |             |
| 11-RC-2016-0001 | Replaced 3 propane burning outside patio h...       | Tim Brooks           | 575.524.5695      | RC          | 7/16/2016 | \$2,000    | Tim Bro     |
| 11-RE-2016-0001 | Demurrage on gas cylinders - investigate            | B. Greene            |                   | RE          | 9/14/2016 | \$0        |             |
| 11-RE-2016-0002 | Sewage lagoons - affecting wildlife? Create a...    | D. Puentes           |                   | RE          | 9/14/2016 | \$0        |             |
| 11-RE-2016-0003 | Eliminate "personal use items" from wareho...       | P. Thomas            |                   | RE          | 9/14/2016 | \$0        |             |
| 11-RE-2016-0004 | WGO ad for site materials ; "Cort's List" for th... | WSIT                 |                   | RE          | 9/14/2016 | \$0        |             |
| 11-RE-2016-0005 | Save oil from 400 area Diesels for use in oil ...   | Tim Brooks           |                   | RE          | 9/14/2016 | \$0        |             |
| 02-RE-2016-0001 | Improved HVAC system.                               | B. Greene            |                   | RE          | 9/14/2016 | \$0        |             |
| 02-RE-2016-0002 | Expand HVAC software application                    | B. Greene            |                   | RE          | 9/14/2016 | \$0        |             |
| 02-RE-2016-0003 | Eliminate vending machines                          | B. Greene            |                   | RE          | 9/14/2016 | \$0        |             |
| 02-RE-2016-0004 | Copy Machine Study, MFD, printers as well           | B. Greene            |                   | RE          | 9/14/2016 | \$0        |             |
| 02-RE-2016-0005 | LED lighting - standardized, warehouse stoc...      | B. Luttrell/ J. M... |                   | RE          | 9/14/2016 | \$0        |             |
| 02-RE-2016-0006 | Force shutdown on electronic equipment              | K. Thompson          |                   | RE          | 9/14/2016 | \$0        |             |
| 03-RE-2016-0001 | Use natural lighting in warehouses/large buil...    | Karen Wilson         |                   | RE          | 9/14/2016 | \$250,000  |             |
| 03-RE-2016-0002 | Testing the system for a video                      | Karen Wilson         | 575.524.5555      | RE          | 9/15/2016 | \$10,000   | Juan Ti:    |
| 04-RE-2016-0001 | Reduce site water consumption                       | B. Greene            |                   | RE          | 9/14/2016 | \$0        |             |
| 04-RE-2016-0002 | Proposed project to reuse water for LASS col...     | G. Lane              |                   | RE          | 9/14/2016 | \$0        |             |
| 04-RE-2016-0003 | Lack of metering prevents us from measuring...      |                      |                   | RE          | 9/14/2016 | \$0        |             |
| 04-RE-2016-0004 | Water recycling in Machine Shop                     | J. Cervoni           |                   | RE          | 9/14/2016 | \$0        |             |
| 04-RE-2016-0005 | Recapture discharge water from cooling tow...       | J. Mujica            |                   | RE          | 9/14/2016 | \$0        |             |
| 05-RE-2016-0001 | Fleet optimization (Better understand proce...      | P. Thomas/ J. ...    |                   | RE          | 9/14/2016 | \$0        |             |
| 05-RE-2016-0002 | Eliminate E-85 fuel usage (cost-benefit analy...    | T. Brooks/ Gre...    |                   | RE          | 9/14/2016 | \$0        |             |
| 06-RC-2016-0002 | Re-Use - ADF offered some unused HVAC filt...       | Joshua Waggy...      | 527.6512 / 524... | RC          | 6/22/2016 | \$361      | Mary Ca     |
| 06-RE-2016-0001 | Standardized furniture - limit choices              | D. Puentes           |                   | RE          | 9/14/2016 | \$0        |             |
| 06-RE-2016-0002 | "Lean" the warehouse                                | P. Thomas            |                   | RE          | 9/14/2016 | \$0        |             |
| 07-RC-2016-0001 | Repurposing of used asphalt                         | Arturo Zavala        | 524.5288          | RC          | 4/1/2016  | \$1,050    |             |
| 07-RE-2016-0001 | Eliminate personal trash cans in offices.           | B. Greene            |                   | RE          | 9/14/2016 | \$0        |             |
| 07-RE-2016-0002 | Sitewide material swap                              | K. Thompson          |                   | RE          | 9/14/2016 | \$0        |             |

September 7, 2016



