



**Program Summary
Resource Conservation and Recovery Act
Comprehensive Procurement Guidelines:
Designated Vehicular Products**

**United State Army Transportation Centers
Fort Eustis and Fort Story**

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INTRODUCTION

Section 6002 of the Resource Conservation and Recovery Act (RCRA) of 1976 and EO 13101 “Greening the Government through Waste Prevention, Recycling, and Federal Acquisition”, have outlined and mandated the responsibility of executive facilities to use recovered material products to the extent practicable. Exemptions only apply when the product can not be obtained in a timely, cost effective manner or lacks the quality compared to non-recovered content counterparts. Each item on the Comprehensive Procurement Guidelines (CPG) list has undergone stringent testing and approval procedures by the Environmental Protection Agency (EPA) for quality, availability, and cost. EPA also develops the Recovered Material Advisory Notice (RMAN), which provides guidance on buying recycled-content products.

The United States Army Transportation Center (USATC) at Fort Eustis and Fort Story recognize our responsibility as United States Army Installation to adhere to the mandates in all circumstances. This program summary focuses on the items listed under the “Vehicular Products” portion of the CPG list (www.epa.gov/epaoswer/non-hw/procure/products.htm#vehi, 2003), including re-refined oil, reclaimed engine coolant, and retread tire products.

Some basic product usage and information, provided by EPA, is as follows:

Re-refined oil products

The recycling of used oil has evolved from simply removing water, insolubles, and dirt to the more complicated removal of heavy metals, nitrogen, chlorine, and oxygenated compounds. Re-refined lubricating oils are subject to the same stringent refining, compounding, and performance standards as virgin oil for use in automotive, heavy-duty diesel, and other internal combustion engines, hydraulic fluids, and gear oils.

Currently include:

- Engine lubrication oil;
- Hydraulic fluids; and
- Gear oils.

Note: Specifically excludes marine and aviation oils.

Reclaimed engine coolant

Recycled engine coolants might actually be purer than virgin coolant because the recycling process reduces the chlorides that come from hard water. Testing shows, like new coolant, recycled coolant meets nationally recognized

performance standards established by the American Society for Testing Materials (ASTM) and the Society of Automotive Engineers (SAE).

EPA recommends:

- Procuring agencies whose vehicles are serviced by a motor pool or vehicle maintenance facility establish a program for engine coolant reclamation and reuse that consists of either reclaiming the spent engine coolants onsite for use in the agencies' vehicles or establishing a service contract for reclamation of the agencies spent engine coolant for use in the agencies vehicles;
- Procuring agencies request reclaimed engine coolant when having their vehicles serviced at commercial service centers. And agencies purchase reclaimed engine coolant when making direct purchases;
- EPA does not recommend one type of engine coolant over another. However, procuring agencies purchase engine coolant containing only one base chemical, typically ethylene glycol or propylene glycol, to prevent the commingling of incompatible types of engine coolant.

Retread tires

In most situations, retread tires can be driven under the same conditions and at the same speeds as new tires with no loss in safety or comfort. Retread tires have been used on school buses, trucks, cars, fire engines, and other emergency vehicles for years. EPA recommends that procuring agencies establish preference programs consisting of two components:

- Procurement of tire retreading services for the agencies tire casings; and
- Procurement of tires through competition between vendors of new tires and vendors of retread tires.

FORT EUSTIS AND STORY: CPG – VEHICULAR PRODUCTS

The USATC at Forts Eustis and Story, Virginia, continually excel in the area of environmental protection and management. The Environmental and Natural Resources Division of the Department of Public Works (DPW-ENRD) continually strives to meet and surpass the standards placed on all areas of environmental stewardship by adhering to all applicable regulations and standards.

DPW-ENRD staff recognized the absence of a program that tracks and analyzes the use of CPG-designated products on the installations. Staff conducted a baseline study on the procurement, use, management and disposal of the vehicular products included on the current CPG list. This program is intended to be the foundation of a more comprehensive CPG program that will encompass other product areas in the future. The following aspects of the program, as it pertains to vehicular products, are summarized in this report:

- Procurement, Management, and Disposal;
- Education and Training; and
- Inspection Guideline Conformance.

Procurement, Management, and Disposal

Several installation facilities or contract personnel provide services that either procure, manage and/or dispose of the oil, antifreeze and tires that are used on the installations. Each facility or entity provides a particular aspect as detailed below.

Fleet and Industrial Supply Center (FISC)

The FISC is located at the Norfolk Naval Base, in Norfolk, Virginia, and is responsible for supplying orders of hazardous materials to Fort Eustis and Story. The HazMart and HazMin (as described below) are the facilities that place orders through the FISC. FISC provides all data to DPW-ENRD staff on a quarterly basis for these sites.

HazMart – Fort Eustis

DPW-ENRD and the Directorate of Logistics (DOL) implemented a program in 1998 called the HazMart. It serves as a one stop shop providing centralized acquisition, storage, distribution, management, and reporting of hazardous materials used by base operations and tenants working within the fence lines. If hazardous materials are not purchased through HazMart, contractors and mission personnel must report purchases to ENRD on a quarterly basis. This centralized system of procurement allows for more efficient tracking and management of the hazardous materials that are purchased for use on the installation, including re-refined oil and reclaimed engine coolant products. HazMart is located in Building 1207 on Taylor Avenue at Fort Eustis.

HazMin – Fort Story

The Hazardous Materials Minimization Center (HazMin) serves as a one stop shop providing centralized acquisition, storage, distribution, management, and reporting of hazardous materials used by base operations and tenants working within the fence lines. If hazardous materials are not purchased through HazMin, contractors and mission personnel must report purchases to ENRD on a quarterly basis. This centralized system of procurement allows for more efficient tracking and management of the hazardous materials that are purchased for use on the installation, including re-refined oil and reclaimed engine coolant products. HazMin is located in Building 2117 on Hermitage Road, Little Creek Amphibious Base.

P2 Database

DPW-ENRD developed, maintains and continually improves a Pollution Prevention (P2) data management system. This system provides tracking of the use of hazardous materials, P2 equipment, and vehicular products on the installation. Figure 1 shows the “Vehicular Products Menu” as an example of the available functionality for the tracking of vehicular products.

Currently, the database is developed to track data from Fort Eustis, but efforts are underway to incorporate Fort Story information.



Figure 1. Vehicular Products Menu – P2 database

Contractors

Outside contractors are used primarily for the removal of disposed vehicular products from the installation, like oil and tires. Details are discussed further in the disposal sections of each product.

Solid Waste Pollution Prevention Recycling Center (SWPPRC)

At Fort Eustis, The SWPPRC, Building 1209, located on Taylor Avenue, serves the installation by providing disposal and drop-off services for used oils, used antifreeze, and used tires. As well, if the antifreeze quality is sufficient, the staff will recycle and re-distribute the reclaimed antifreeze product as needed.

Hazardous Waste Accumulation Facilities (HWAFF)

The HWAFFs at Fort Eustis (Building 1208, Taylor Avenue) and Fort Story (Building 1011) serve as collection facilities for spent antifreeze, considered hazardous waste, which needs disposal. A qualified hazardous waste disposal contractor will pick-up and dispose of the material on a periodic basis.

The following section outlines the procurement, management and disposal of each type of vehicular product used on the installation.

Re-refined lubricating oils

Procurement

Most of the lubricating oils used on the installations by mission personnel are purchased through the HazMart or HazMin. There are several grades of re-refined oils that are available and currently being tracked, as outlined in Table 1.

If the HazMart or HazMin orders the grades of oil from the Defense Supply Center (DSC), they are required by Presidential Directive to substitute with the associated re-refined grade. Therefore, although the mission personnel may not directly request re-refined oil, in this circumstance they are receiving it. If the HazMart or HazMin does not order from the DSC, the re-refined oil is not substituted. In this circumstance it is up to the mission personnel to request the re-refined product.

Table 1. Summary of re-refined oil products

NSN	Type	Viscosity	Unit of Issue	Volume	Group
9150011524118	Virgin	15W-40	Container	5	Tactical MIL SPEC
9150011524119	Virgin	15W-40	Drum	55	Tactical MIL SPEC
9150011784725	Virgin	15W-40	Quart	0.25	Tactical MIL SPEC
9150012278210	Virgin	10W-30	Box	3	Administrative Commercial
9150012309748	Virgin	10W-30	Drum	55	Administrative Commercial
9150012309749	Virgin	10W-30	Container	5	Administrative Commercial
9150013201596	Virgin	5W-30	Drum	55	Administrative Commercial
9150013203706	Virgin	5W-30	Box	3	Administrative Commercial
9150013519015	Virgin	30	Drum	55	Heavy-Duty Diesel Commercial
9150013519016	Virgin	30	Box	3	Heavy-Duty Diesel Commercial
9150013519018	Virgin	15W-40	Drum	55	Heavy-Duty Diesel Commercial
9150013519019	Virgin	15W-40	Box	3	Heavy-Duty Diesel Commercial
9150013522962	Virgin	15W-40	Container	5	Heavy-Duty Diesel Commercial
9150013528090	Virgin	30	Container	5	Heavy-Duty Diesel Commercial
9150013528091	Virgin	40	Drum	55	Heavy-Duty Diesel Commercial
9150014136892	Rerefined	10W-30	Container	5	Administrative Commercial
9150014136897	Rerefined	10W-30	Box	3	Administrative Commercial
9150014136990	Rerefined	10W-30	Drum	55	Administrative Commercial
9150014211424	Rerefined	15W-40	Container	5	Tactical MIL SPEC
9150014211427	Rerefined	15W-40	Quart	0.25	Tactical MIL SPEC
9150014211432	Rerefined	15W-40	Drum	55	Tactical MIL SPEC
9150014228746	Rerefined	15W-40	Drum	55	Heavy-Duty Diesel Commercial
9150014228750	Rerefined	15W-40	Container	5	Heavy-Duty Diesel Commercial
9150014228899	Rerefined	15W-40	Box	3	Heavy-Duty Diesel Commercial
9150014228901	Rerefined	40	Drum	55	Heavy-Duty Diesel Commercial
9150014228997	Rerefined	30	Drum	55	Heavy-Duty Diesel Commercial
9150014229247	Rerefined	30	Container	5	Heavy-Duty Diesel Commercial
9150014229250	Rerefined	30	Box	3	Heavy-Duty Diesel Commercial
9150014229253	Rerefined	5W-30	Box	3	Administrative Commercial
9150014229326	Rerefined	5W-30	Drum	55	Administrative Commercial

Management

At Fort Eustis, automated tracking of HazMart purchases began in year 1997. The data maintained by HazMart is provided to DPW-ENRD, from FISC, for use in the P2 database. From this information, the staff can determine which re-refined oil products are being purchased on the installation. See Appendix A for a sample report.

At Fort Story, the information is tracked using electronic data provided by FISC. This data is currently being integrated into the P2 database and is

searchable to retrieve re-refined oil products being purchased on the installation.

Disposal

At both installations, units place used oil in on-site above ground storage tanks which are picked up on an as needed basis from an outside contractor, C&M Industries (757-543-8775). At this time, C&M Industries provides the installations with a receipt showing the volumes and dates of pick-up, but this information is not being tracked electronically. The disposed oil is used by the contractor as a burner fuel supplement to supply energy for industrial purposes.

Reclaimed Engine Coolants

Procurement

Most of the engine coolants used on the installations by mission personnel is purchased through the HazMart or HazMin. There are several grades of reclaimed engine coolants that are available and currently being tracked, as outlined in Table 2.

Table 2. Summary of reclaimed engine coolant products

NSN	Description	Unit of Issue	Volume
6850014649096	Recycled 60/40 Ethylene glycol-based vehicle radiator coolant	Drum	55
6850014649107	Recycled Propylene glycol-based vehicle radiator coolant	Container	5
6850014649124	Recycled Propylene glycol-based vehicle radiator coolant	Drum	55
6850014649125	Recycled Ethylene glycol antifreeze	Gallon	1
6850014649131	Recycled Propylene glycol-based vehicle radiator coolant	Gallon	1
6850014649137	Recycled Ethylene glycol antifreeze	Container	5
6850014649152	Recycled Ethylene glycol antifreeze	Drum	55
6850014649263	Recycled 60/40 Ethylene glycol-based vehicle radiator coolant	Container	5
6850014649266	Recycled 60/40 Ethylene glycol-based vehicle radiator coolant	Gallon	1
6850014716521	Recycled 50/50 Ethylene glycol-based vehicle radiator coolant	Drum	55
6850014716530	Recycled 50/50 Ethylene glycol-based vehicle radiator coolant	Gallon	1
6850014716534	Recycled 50/50 Ethylene glycol-based vehicle radiator coolant	Container	5

Management

At Fort Eustis, automated tracking of HazMart purchases began in year 1997. The data maintained by HazMart is provided to DPW-ENRD, from FISC, for use in the P2 database. From this information, the staff can determine which reclaimed engine coolant products are being purchased on the installation. See Appendix B for a sample report.

At Fort Story, the data is tracked using electronic data provided by FISC. This data is currently being integrated into the P2 database and is searchable to retrieve reclaimed engine products being purchased on the installation.

Disposal

At Fort Eustis, used antifreeze on the installation is either recycled or disposed of as non-hazardous or hazardous waste. If the quality of the used product is sufficient for recycling, it is processed through one of six antifreeze recycling machines located on the installation:

- DPW-ENRD, Building 1209
- 99 RSC FE OPNS, Building 2505
- 7 Gp 6 Bn HHD, Building 2702
- 7 Gp 24 Bn HHC, Building 836
- 8 Bde, Building 2716K
- DPCA AutoCraft Shop, Building 660

At Fort Story, used antifreeze on the installation is either recycled or disposed of as non-hazardous or hazardous waste. If the quality of the used product is sufficient for recycling, it is processed through one antifreeze recycling machine located on the installation:

- 7 Gp 11 Bn HHD, Building 808

At both installations, if the antifreeze is not suitable for re-use, the units place the disposed antifreeze in a drum or container and will call for pickup or drop it off at Building 1208 (HWAF, Fort Eustis), Building 1011 (HWAF, Fort Story) or Building 1209 (SWPPRC, Fort Eustis).

Starting March 31, 2003, DPW-ENRD staff began requesting antifreeze recycling volumes from the above activities on the installations. This data will be collected quarterly and maintained in the P2 database. See Appendix C for sample reports.

Retread Tires

Procurement

On both installations, tire purchasing is non-centralized and varies by unit. The following types of purchasing mechanisms exist:

- ULLS-S4;
- CL9 Supply System (ULLS-G);
- VISA IMPAC and Purchase Orders.

Starting March 31, 2003, DPW-ENRD staff began requesting retread tire procurement information from applicable activities on the installation. This data will be collected quarterly and maintained in the P2 database. See Appendix D for sample reports.

Management

Due to various purchasing obstacles outlined in the "Retread Tire Program Implementation Documentation: Meeting Comprehensive Procurement Guidelines (CPG) Requirements, United States Army Transportation Center, Fort Eustis and Fort Story, Virginia, April 2003" report (Appendix E), a centralized, comprehensive retread tire procurement program will not be established at this time.

Disposal

For installations, units drop-off and dispose of their used tires at the SWPPRC at Fort Eustis. The tires are then picked-up by an outside contractor, VA Recycling Corporation. The contractor shreds the tires and sells them to the state transportation department for use as an asphalt additive.

Education and Training

Although a comprehensive training session specifically focused on vehicular products has not been developed, DPW-ENRD staff has used several other training and educational avenues to disseminate the information to the appropriate personnel. All educational materials are being tracked in the P2 database.

Integrated Solid Waste Management (ISWM) Training

DPW-ENRD staff began conducting a semi-annual ISWM training course February of 2003. This course focuses on installation solid waste management, affirmative procurement, CPG designated items, and green purchasing.

Impact Card Holder Training

For every civilian or mission staff that has access to a VISA IMPAC credit card, training is required before use is authorized. DPW-ENRD has included a section on Affirmative Procurement, outlining the requirements for CPG designated items as follows:

Affirmative Procurement. The Resource Conservation and Recovery Act (RCRA), Section 6002, Executive Order 13101, FAR (Section 23.404) and

Fort Eustis/Fort Story AR-200-6 draft, Environmental Management, Appendix S, require all credit card holders to comply with affirmative procurement (AP) requirements. The Fort Eustis and Fort Story policy is to buy products with recycled content when the product meets performance specifications and is available within the required period of time for a competitive price. The Executive Order required Environmental Protection Agency (EPA) to designate products that are or can be made with recovered materials, and to recommend practices for buying these products. As a result, the EPA has developed a list of products, called the Comprehensive Procurement Guidelines (CPG). Compliance with these requirements is required for credit card purchases. For more information, contact ENRD, Tel 878-4123 or go to ENRD website: <https://dpw-web.eustis.amry.mil/ENRD/ENRD/Home/Index.htm> and click Green Purchasing.

This information will continue to be reviewed and updated as necessary.

Battalion Maintenance Officer (BMO) Briefings

BMOs are the mission personnel assigned to managing the motor pool operations on the installation. They are responsible for disseminating information to their staff. The BMOs were briefed November of 2002 to educate them on the vehicular products initiative and requirements of RCRA Section 6002. The BMOs will continue to be briefed as the program progresses and/or requirements change.

Publications and Brochures

Various publications and brochures have been borrowed or developed and distributed to appropriate personnel, including (Appendix F):

- Oil, tires and antifreeze flyer
- Buying recycled flyer
- Vehicular products presentation
- EPA CPG vehicular products flyer

Future Initiatives

DPW-ENRD will continue to develop educational initiatives to further enhance the program, including:

- Continued review and update of VISA IMPAC credit card manual sections;
- Development and access to educational and training materials on the ENRD website; and, but not limited to,

- Research into development of installation policies in regards to CPG-designated items, specifically vehicular products.

Inspection Guideline Conformance

During May of 1999, EPA released guidance on “Conducting Inspections of Federal Facilities for Compliance with Section 6002 of the Resource Conservation and Recovery Act”. DPW-ENRD developed a matrix to determine the deficiencies in our program towards conformance with the inspection guidelines. Appendix G includes the matrix.

From review of the matrix, staff recognized some major areas of focus:

- Tracking and management of vehicular products;
- Education of personnel on RCRA Section 6002, EO 13101, availability of products, and personnel responsibilities; and
- Determination of the life cycle of these products on our installation.

From these main areas of focus, initiatives were developed, as discussed through-out this report, in order to develop a program that adequately meet the standards, including:

- Development of the vehicular products section of the P2 data management system – tracks re-refined oil, reclaimed engine coolant, and retread tire usage;
- Briefings and training sessions to educate appropriate installation personnel, i.e. contracting, logistics, engineering, motor pools, on RCRA Section 6002, specifically CPG-designated vehicular product usage; and
- Research and documentation of product life cycle on the installation.

CONCLUSIONS

DPW-ENRD recognizes that this program will continue to evolve in order to sufficiently meet and surpass the requirements outlined in the regulations and standards. The staff will continue to look for opportunities to further integrate the procurement and management of CPG-designated items into installation operating procedures (including vehicular products). The success of this program will require the cooperation of many activities to include the Northeast Regional Contracting Center, Directorate of Public Works, Directorate of Logistics, and the motor pools operated by the 8th Transportation Brigade, 7th Transportation Group, and the 99th Reserve Support Command.

APPENDIX A

APPENDIX B

APPENDIX C

APPENDIX D

APPENDIX E

APPENDIX F

APPENDIX G