
Final

**Pollution Prevention Management Plan
Naval Construction Battalion
Center Gulfport
Gulfport, Mississippi**

Contract Delivery Order JM23

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Naval Facilities Engineering Command Southeast**

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Prepared by



Atlanta, Georgia

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ACRONYMS AND ABBREVIATIONS

AEI	Air Emissions Inventory
AIMM	Assess, Implement, Manage, and Measure
AST	Aboveground Storage Tank
AUL	Authorized User List
BEM	Building Energy Monitor
BEQ	Bachelor’s Enlisted Quarters
BMF	Battalion Maintenance Facility
BMP	Best Management Practice
C&D	Construction and Demolition
CDC	Child Development Center
CED	Construction Equipment Department
CFR	Code of Federal Regulations
CHRIMP	Consolidated Hazardous Material Reutilization and Inventory Management Program
CNRSE	Commander, Naval Region Southeast
CO	Commanding Officer
DLA	Defense Logistics Agency
DoD	Department of Defense
DoDI	Department of Defense Instruction
DoN	Department of the Navy
EMS	Environmental Management System
EO	Executive Order
EPCRA	Emergency Planning and Community Right-to-Know Act
EPR	Environmental Project Requirement
ERP	Enterprise Resource Planning
FY	Fiscal Year
FEAD	Facilities Engineering Acquisition Division
HAZMAT	Hazardous Materials
HAZMATCEN	Hazardous Materials Center
HVAC	Heating, Ventilation, and Air Conditioning
HVLP	High Volume/Low Pressure
HW	Hazardous Waste
KSF	Thousand Square Feet
KW	Kilowatt
LED	Light-Emitting Diode
LEED	Leadership in Energy and Environmental Design
LID	Low Impact Design
MDEQ	Mississippi Department of Environmental Quality
MEK	Methyl Ethyl Ketone
MS4	Municipal Separate Storm Sewer System
MWR	Morale, Welfare, and Recreation
N/A	Not Applicable

NAVFAC	Naval Facilities Engineering Command
NCBC	Naval Construction Battalion Center
NCG	Naval Construction Group
NCTC	Naval Construction Training Center
NCTCCESE	Naval Construction Training Center Civil Engineering Support Equipment
NEX	Naval Exchange
NO _x	Oxides of Nitrogen
OPNAVINST	Chief of Naval Operations Instruction
P2	pollution prevention
P2ADS	Pollution Prevention Annual Data Summary
P2MP	Pollution Prevention Management Plan
P2MS	Pollution Prevention Management System
P2OA	Pollution Prevention Opportunity Assessment
PAO	Public Affairs Officer
PM	Preventive Maintenance
POA&M	Plan of Action and Milestones
POL	Petroleum, Oil, and Lubricant
PVC	Polyvinyl Chloride
PWRMS	Prepositioned War Reserve Materiel Stock
QRP	Qualified Recycling Program
SCORE	Sustained Compliance and Operational Readiness for Environmental Excellence
SDS	Safety Data Sheet
SPCC	Spill Prevention Control and Countermeasure
SSC	Stennis Space Center
SWMP	Solid Waste Management Plan
TAIO	Heavy Equipment Training Field
TAZ	Bulldozer Training Field
TPY	Ton Per Year
UST	Underground Storage Tank
VOC	Volatile Organic Compound
XO	Executive Officer

NAVAL CONSTRUCTION BATTALION CENTER GULFPORT ENVIRONMENTAL POLICY STATEMENT



DEPARTMENT OF THE NAVY
NAVAL CONSTRUCTION BATTALION CENTER
4902 MARVIN SHIELDS BLVD
GULFPORT MS 39501-5001

IN REPLY REFER TO:
29 Jul 13

MEMORANDUM

Subj: COMMAND POLICY ON ENVIRONMENTAL

1. Naval Construction Battalion Center (NCBC), Gulfport, is committed to environmental compliance with local, state, and Federal environmental laws, regulations, and policies and to being a good steward of our environment. Environmental stewardship is essential to the safe, healthful, and compliant execution of our mission and the preservation and protection of our land, air, water, and other natural resources.

2. All personnel working onboard or on behalf of NCBC, Gulfport, to include tenant commands and contractors, must integrate sound environmental practices into their operations. All are expected to be aware of environmental and natural resources laws and regulations that apply to their work, to utilize pollution prevention measures, and to minimize adverse effects to the environment. To achieve and maintain the expected levels of environmental stewardship, we will:

a. Incorporate environmental policies into all planning, decision-making, and business practices.

b. Continually evaluate and improve our practices and procedures and strive to mitigate environmental impacts.

c. Assess the effectiveness of our environmental management system to ensure our established objectives and targets are met.

d. Communicate our Environmental Policy to all personnel and educate them in their roles and responsibilities to minimize the impact of their work activities to the environment.

A handwritten signature in black ink, appearing to read "P. J. Odenthal".

P. J. ODENTHAL

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EXECUTIVE SUMMARY

The Mission Statement of Naval Construction Battalion Center (NCBC) Gulfport (also referred to as “the installation”) is to maintain and operate facilities and provide services and material in support of Naval Construction Force Units. This includes Amphibious Construction Fleet Units, the Maritime Prepositioning Force (Enhanced), Battalions, and other fleet and assigned organizational units deployed from or homeported at NCBC Gulfport, and to perform such other functions and tasks as may be assigned by higher authority. NCBC Gulfport personnel consider protection of the environment to be an intrinsic aspect of this mission. Pollution prevention (P2) is crucial to implementing environmental programs at NCBC Gulfport. In general, P2 refers to the implementation of practices that reduce or eliminate the creation of pollutants through process improvements, technology upgrades, use of less toxic materials, and waste recycling/reuse.

This Pollution Prevention Management Plan (P2MP) was developed to comply with Chief of Naval Operations Instruction (OPNAVINST) 5090.1D, Chapter 4, and the Mississippi Multimedia Pollution Prevention Program Act. The Department of the Navy (DoN) refers to this plan as the P2MP. The Mississippi Department of Environmental Quality (MDEQ) refers to it as the Waste Minimization Plan. This P2MP fulfills the requirement for both DoN and MDEQ regulations. Under Section 49-31-21 of the Mississippi Multimedia Pollution Prevention Act, facilities that are generators of hazardous waste (HW) or facilities that are required to file Toxic Release Inventory Report Forms (Form Rs) must prepare and file an annual Waste Minimization Certified Report, which is due by July 31 of each year. Summary Reports for Annual P2MP reviews can be used to help prepare the annual Waste Minimization Certified Report.

This plan will help NCBC Gulfport maintain its P2 program efficiently, especially in the area of hazardous materials (HAZMAT) management and waste reduction. With a well implemented P2 program, NCBC Gulfport will be able to achieve reduction goals and foster environmental awareness among its personnel. As a result, the volume and toxicity of the hazardous and solid wastes generated, treated, or disposed by NCBC Gulfport will be reduced. Other benefits include a safer workplace, reduced management and liability costs for hazardous and solid waste disposal, and improved compliance with environmental regulations. This P2MP is consistent with Executive Order (EO) 13423, “Strengthening Federal Environmental, Energy, and Transportation Management,” and incorporates information from EO 13514, “Federal Leadership in Environmental, Energy, and Economic Performance.”

Numerous P2 initiatives have already been implemented at NCBC Gulfport, as summarized in Table ES-1.

Table ES-1: NCBC Gulfport - Highlights of Implemented P2 Initiatives (2009 – 2013)
<p><u>Implement system to track water, electricity, and gas usage.</u> Water, electricity, and gas usage are currently tracked by the NCBC Gulfport Commodities Manager. Many initiatives have been implemented to increase energy and water efficiency, reduce energy and water consumption, and evaluate/implement renewable energy sources. This initiative enables NCBC Gulfport to track its progress against federal sustainability goals established in EO 13423, EO 13414, and DoN guidance.</p>
<p><u>New Wash Racks and Oil/Water Separators at Vehicle Maintenance Shops.</u> Industrial wash racks and oil/water separators were installed at vehicle maintenance shops (e.g., Construction Equipment Department [CED], Marine Forces Reserve Motor Pool, and Naval Construction Group [NCG]-2 Battalion Maintenance Facility [BMF]) to reduce pollutant loading in the storm water conveyance system.</p>
<p><u>Improved Battery Management.</u> Use of high-end Optima batteries are used to extend service life. Also pulse charging and trickle charging are used to increase efficiency of battery charging and reduce energy draw when batteries reach optimal charge.</p>
<p><u>Metered Petroleum, Oil, and Lubricant (POL) Dispenser.</u> At the CED shops, a metered POL dispenser is used with close-tight nozzles that prevent any drippage or spills from dispenser tubes hung from the ceiling. Staff can input the specific amount of POL necessary and the system will dispense the amount and shut down.</p>
<p><u>Brake Cleaner Recharging System.</u> Instead of purchasing individual cans of brake cleaner, staff at CED have procured a system in which spray cans are continuously recharged with brake cleaner. This has reduced the number of spray cans disposed by CED shops.</p>
<p><u>Purchase of a FlowJet System.</u> The FlowJet cuts down on the amount of material waste produced by CED D shop. It also eliminates the need for metal working (e.g., sanding, grinding, polishing, etc.) after parts have been cut.</p>
<p><u>Advertisement of HAZMAT for Reuse.</u> The Hazardous Materials Minimization Center (HAZMATCEN) advertises materials that have been turned in and are available for reuse to shop points of contact.</p>
<p><u>Freon Recovery and Recycling.</u> At shops in which Freon is used/managed, a recycling program has been established that covers the actual material and canisters it is transported in.</p>
<p><u>Light-emitting Diode (LED) Lighting.</u> Notably implemented in the Naval Construction Training Center (NCTC) Soils Lab, this general facility lighting is energy efficient and provides high luminous efficacy. High-efficiency lighting is installed as standard build-out for new construction and renovation initiatives.</p>
<p><u>Switch from Safety Kleen 105 to Safety Kleen 150 Solvent.</u> Implemented at final unit in CED shop area to complete initiative started prior to 2009.</p>

Other P2 initiatives have been partially implemented at NCBC Gulfport, as summarized in Table ES-2. These initiatives will be retained and monitored until completion.

Table ES-2: NCBC Gulfport - Highlights of Partially Implemented P2 Initiatives (2009 – 2013)
<p><u>Electric Carts (Energy Conservation, Air Emission Reduction).</u> This initiative has been partially implemented by the Public Works Facilities Engineering and Acquisition Division. Personnel utilize electric carts for transportation. Electric carts and dual-fuels carts replace gasoline carts and automobiles. The installation also has some solar driven vehicles. Not all fleet vehicles are replaced with hybrid vehicles. General Services Administration controls the replacement of vehicles.</p>
<p><u>Use steel deflector plates on Woolmarket Range.</u> This initiative has been partially implemented. Steel deflector plates, angled down at 45 degrees to deflect bullets into the retention berms, have been installed. The plates will allow for capture and recycle of projectiles without impact to environmental media.</p>
<p><u>Install LED Street and Parking Lot Lights.</u> A fiscal year (FY) 2012 contract has been completed to install LED street and parking lot lights. A second contract, awarded in FY 2013, is in the process of being implemented. LED street and parking lot lights will be completed at the conclusion of the second contract.</p>

Continual and ongoing P2 initiatives at NCBC Gulfport are summarized in Table ES-3. These initiatives will be retained and monitored indefinitely.

Table ES-3: NCBC Gulfport - Highlights of Ongoing P2 Initiatives
<p><u>Continue implementation of P2 and recycling at Stennis Space Center (SSC).</u> Qualified Recycling Program (QRP) efforts at SSC are managed through NCBC Gulfport. Every year, recycling of materials (primarily of spent brass) brings in approximately \$50,000 to NCBC Gulfport's QRP.</p>

Table ES-3 (continued): NCBC Gulfport - Highlights of Ongoing P2 Initiatives	
<u>Promote P2, Consolidated Hazardous Material Reutilization and Inventory Management Program (CHRIMP), and recycling awareness.</u>	Recycling efforts include typical household items (e.g., paper, plastic, glass, and aluminum) and industrial supply items (e.g., sheet metal, used oil filters, used oil, used antifreeze, tires, etc.). Continued recycling awareness is facilitated by the Environmental Management System (EMS) and distribution of recycling flyers throughout the installation. The installation has a CHRIMP and is currently using Enterprise Resource Planning (ERP) for HAZMAT management. Each year NCBC Gulfport coordinates an Earth Day celebration with outreach and educational materials about P2, recycling, and local watershed pollution. The Earth Day celebration also includes opportunities for coastal cleanups and marine mammal conservation programs.
<u>Encourage recycling of construction and demolition (C&D) waste.</u>	For construction and renovation initiatives managed by the Facilities Engineering Acquisition Division (FEAD), nearly 100% of C&D materials are currently recycled or reutilized. Most of the C&D waste generated is asphalt and concrete. Used asphalt is being diverted for reuse by local contractors. Concrete rubble is being reused for site fill and road base and by the Mississippi Department of Marine Resources for artificial reefs. Specific requirements and procedures are described in NCBC Gulfport's Solid Waste Management Plan (SWMP).
<u>CHRIMP FEAD Contractors.</u>	This initiative is retained from the previous P2MP update. Tracking and properly managing HAZMAT used in construction and renovation initiatives by FEAD contractors will help reduce environmental and safety liabilities.
<u>Placement of Spill Kits in Shops.</u>	NCBC Gulfport has an initiative to place spill kits in shops in which there is a high probability of spills from HAZMAT. Spill kits were observed in most shops during the August 2013 site visit.

Table ES-4 lists priority P2 initiatives identified for implementation at NCBC Gulfport during the next three years. Priority P2 initiatives were selected based on information gathered during the site survey for the 2013 triennial review, subsequent Draft Report review teleconferences, and previous P2 initiatives. New initiatives are detailed in Sections 3.1 to 8.1.

Table ES-4:	
NCBC Gulfport - Priority P2 Initiatives – New and Retained	
<u>Increase Number of Recycling Container Locations.</u>	Add more recycling containers to the installation (including at tenants).
<u>Hire Staff for CHRIMP.</u>	Hire one to two more staff to support implementation of CHRIMP. This includes shop inspections, inventory management, ERP labeling on all products, and incorporation of all NCBC Tenants.
<u>Identify vendor for recycling/reuse of spent blast media.</u>	Reduce amount of blast media disposed as solid waste; increase in NCBC Gulfport’s recycling rate.
<u>New oil distribution nozzles.</u>	Implement oil nozzles observed at CED shops to other vehicle maintenance areas throughout NCBC Gulfport.

Implementing the P2MP will ensure NCBC Gulfport continues to make progress toward the following goals:

Incorporate P2 awareness at all levels of the organization and provide a channel for NCBC Gulfport personnel to provide P2 suggestions.

- Improve solid waste diversion rates
- Reduce Resource Conservation and Recovery Act HW generation
- Improving resource conservation through improvements to energy and water efficiency

Table ES-5 lists P2 initiatives identified for implementation at NCBC Gulfport during previous site surveys and discusses the status of these initiatives.

Table ES-5:	
NCBC Gulfport - Highlights of Previously Suggested P2 Initiatives	
<u>Develop a “P2 Suggestion” button on the NCBC Gulfport Environmental web site.</u>	Due to staffing, manpower, and funding issues, this initiative has not been implemented. It would have increased awareness of P2 and provided a mechanism for all personnel to provide input and suggestions.
<u>Filter and purify waste diesel fuel for use in generators at NCBC Gulfport.</u>	This initiative has not and will not be implemented due to manpower issues. It would have resulted in reuse of a material with significant fuel value for beneficial reuse and eliminate disposal as waste. It should be noted that waste fuel is recycled by a Defense Logistics Agency (DLA) Disposition Services contractor.

Table ES-5 (continued): NCBC Gulfport - Highlights of Previously Suggested P2 Initiatives	
<p><u>Use arc-welding emission reduction equipment for welding, grinding, cutting and gouging operations.</u></p>	<p>This initiative has not been implemented. Shops are not using welding fume hoods and other air emissions control devices. Most welding is performed outside or bay doors are opened during welding operations to allow fumes to escape. The major benefit of these controls will be for occupational health and safety rather than P2. However, about 80% of the arc welding has been replaced with wire welding to reduce emissions.</p>
<p><u>Use hydraulic fluid purifier to extend the use of hydraulic fluid by 60%.</u></p>	<p>This initiative has not and will not be implemented due to manpower issues. It was retained from previous P2MP updates.</p>
<p><u>Use biodegradable fluids for hydraulic equipment.</u></p>	<p>This initiative has not and will not be implemented due to manpower issues. Readily biodegradable, low-toxicity natural vegetable-based and synthetic ester-based lubricants have been developed for environmentally sensitive markets. These lubricants may offer improved thermal and oxidative stability properties over mineral-oil-based lubricants.</p>
<p><u>Use Waterborne Paint Systems.</u></p>	<p>This initiative was not implemented because all painting operations at NCBC Gulfport switched to low-volatile-organic-compound (VOC) paints. Waterborne paints, such as PPG Industries' Envirobase High Performance coatings, may be safer for employees and better for the environment, and may produce a superior finish at a lower cost. Waterborne paints can reportedly reduce base-coat-sourced VOC emissions by up to 80 percent when compared to conventional solvent-based base coatings.</p>
<p><u>Use abrasive blast media lease and recycling services.</u></p>	<p>This initiative was not implemented because no vendor could be located that could provide blast media in the amount needed by NCBC Gulfport. Certain vendors offer federal and state approved programs to recycle blasting media. This can reduce transportation, tracking, and disposal costs. Spent blast media is recycled into beneficial manufactured consumer products, such as bathroom sinks, plastic yard pots, benches, and concrete masonry units. NCBC Gulfport's blast media is currently being landfilled as a non-hazardous solid waste. The installation tests all equipment prior to blasting for lead, cadmium, or chromium. Those pieces of equipment which test positive for these chemicals are not blasted.</p>
<p><u>Procure Automatic Battery Watering System.</u></p>	<p>Due to staff turnover, this initiative was not implemented. Additionally, NCBC Gulfport has procured alternative battery charging systems that achieve the same benefits as automatic battery watering systems. This initiative was identified for implementation by the previous P2 Program Manager to reduce spills, improve worker safety, reduce maintenance costs, and extend battery life. Most of the batteries that are generated by the Battalions are 24-volt from heavy equipment. This equipment sits in the warehouse for extended periods which result in dead batteries.</p>

Table ES-5 (continued):

NCBC Gulfport - Highlights of Previously Suggested P2 Initiatives

Minimize the disposal of deployed materials and Prepositioned War Reserve Material Stock (PWRMS) as HW.

This initiative was partially implemented because most of the PWRMS has been turned over and restocked. NCBC Gulfport's CHRIMP also stores materials (e.g., paints, acetylene, welding rods, greases, adhesives, fuel additives, etc.) which are ready to ship when needed. Most of the material (about 90%) from the PWRMS is waste (e.g., expired material). A new supply system has been implemented and procedures have been put in place to use local DLA Disposition Services rather than returning unused materials and wastes to NCBC Gulfport. This initiative will monitor the effectiveness of these systems and procedures at reducing the amount of HW generated from returning PWRMS.

1.0 INTRODUCTION

Naval Construction Battalion Center (NCBC) Gulfport has developed a Pollution Prevention Management Plan (P2MP) that focuses on eliminating the use of unnecessary or environmentally unsound materials or processes. The intent of the P2MP is to provide a management system for the Pollution Prevention (P2) Program and to provide an implementation plan for P2 initiatives that will facilitate achievement of NCBC Gulfport's P2 objectives.

This P2MP was developed to comply with Department of the Navy (DoN) requirements of Chief of Naval Operations Instruction (OPNAVINST) 5090.1D, which states that the Commanding Officer (CO) will “develop and implement an Activity Pollution Prevention Plan” and “Update the Pollution Prevention Plan on a regular basis.” This P2MP partially fulfills the requirements of Section 49-31-21 of the Mississippi Multimedia Pollution Prevention Act. The DoN refers to this plan as the P2MP, and Mississippi Department of Environmental Quality (MDEQ) refers to it as the Waste Minimization Plan. They are compatible documents. Under Section 49-31-21 of the Mississippi Code, facilities that are generators of hazardous waste (HW) or facilities that are required to file Toxic Release Inventory Report Forms (Form Rs) must prepare a Waste Minimization Plan and file a certified Waste Minimization Report, which is required by July 31 each year. This P2MP is consistent with Executive Order (EO) 13514, “Federal Leadership in Environmental, Energy, and Economic Performance” and EO 13423, “Strengthening Federal Environmental, Energy, and Transportation Management.”

This P2MP describes the ongoing P2 efforts at NCBC Gulfport and is a proactive approach to managing the installation's P2 Program. The key personnel, resources, roles, and responsibilities for implementing the Pollution Prevention Management System (P2MS) and maintaining the P2MP are described in Section 2. The procedures required to review and update the P2MP are critical elements of the P2MS are also described in Section 2. P2 initiatives may be integrated into NCBC Gulfport's Environmental Management System (EMS). The EMS addresses management actions that, if carried out, will achieve the performance requirements established by the organization. Those performance requirements are developed by the organization with consideration given to applicable laws, regulations, policies, or interests. This P2MP was developed using these EMS principles. This EMS approach to P2 is consistent with the DoN strategy of Assess, Implement, Manage, and Measure to Achieve Sustained Compliance and Operational Readiness for Environmental Excellence (also known as AIMM to SCORE).

The primary goal of this P2MP is to eliminate, reduce, or minimize pollution at points of compliance in all media areas while maintaining mission readiness and providing support to the fleet. It provides a process for NCBC Gulfport to identify and track program objectives and technical initiatives, evaluate completed P2 initiatives, and assign roles and responsibilities. It is the “plan, do, check, act” cycle that ensures the installation's P2 Program is working effectively. This process ensures that the plan is sustainable by continuously evaluating progress made in executing the P2 Implementation Plan (Section 9 and Appendix B) and progress toward NCBC Gulfport's P2 objectives. It also ensures that corrective action is taken when initiatives prove ineffective.

The Implementation Plan describes each initiative recommended for NCBC Gulfport at a high level and each Pollution Prevention Opportunity Assessment (P2OA) evaluates each initiative's objectives and the work centers affected. Each P2OA also provides a blank Plan of Action and Milestones (POA&M) for NCBC Gulfport to implement the initiative and metrics to track progress of each initiative. Each POA&M should include:

- Steps necessary to implement the initiative.
- Personnel responsible for implementing each step.
- Personnel responsible for ensuring that the action has been completed.
- An estimated start and actual completion date for each step.

This plan update addresses multimedia P2 initiatives and emphasizes tracking of initiatives to ensure they are accomplished.

2.0 POLLUTION PREVENTION MANAGEMENT SYSTEM

The P2MS is the process by which the P2 Program will be managed. P2 initiatives identified in the P2MP are tracked and evaluated.

A review of P2 initiatives should be undertaken annually. This review is typically completed by NCBC Gulfport environmental personnel or the P2 Program Manager. Changes to the schedule of P2 initiatives or actions are noted during the annual review. Significant changes in the mission, personnel, or operations of the installation are also noted during the annual review, as well as any changes in priorities of the installation or changes in regulatory compliance requirements. Changes to the P2MP during the annual review may be made as pen and ink markups to the plan, marginal notes, or a short, dated summary report at the end of each affected section of the P2MP.

In accordance with the Mississippi Multimedia Pollution Prevention Act, the waste minimization plan will be reviewed and updated annually, to include at a minimum, an “analysis and quantification of progress made, if any, in waste minimization relative to each performance goal, and any amendments to the plan, and an explanation of the need for the amendments.” DoN guidance requires the P2MP shall be updated on a regular basis. A complete revision of the P2MP should be undertaken every three years (triennially). The triennial review and update would encompass programmatic evaluation of P2 Initiatives and reviews of all work centers at NCBC Gulfport. Comprehensive, triennial P2MP updates will be completed the P2 Program Manager; however, they frequently involve varying levels of assistance from outside contractor personnel.

Actions to be accomplished by specified personnel are identified in Section 2-1. Roles and responsibilities by position are summarized in Section 2.2.

The primary goal of the P2MP is to eliminate or minimize pollution at points of compliance in all media areas while maintaining mission readiness and providing support to the fleet. The 2013 update of the NCBC Gulfport P2MP followed the P2MS. As a result, the following qualitative programmatic goals were developed:

- Hazardous Materials (HAZMAT) – Minimize the volume of HAZMAT being used.
- Wastewater (including storm water) – Reduce wastewater generation and minimize impacts to/from storm water.
- Air – Reduce air emissions.
- Solid Waste – Reduce volume of solid waste and recycle as much as economically possible.
- HW – Continue to reduce the total amount of HW generated.
- Conservation of Resources – Decrease consumption of finite resources (e.g., fuel, water, etc.) while increasing consumptive efficiency. Evaluate renewable energy sources.

The P2MS is further discussed by media in Sections 3 through 8, and these qualitative goals are further defined and quantified in Section 9 and Appendix B, some in the form of Technical Initiatives, others in the form of Programmatic Initiatives. Technical

initiatives typically establish: use of a new technology or use of technically improved equipment. Programmatic Initiatives establish process changes or new processes that positively impact P2. Implementation of technical and programmatic initiatives is monitored by tracking metrics while executing the Implementation Plan.

The P2MS is a dynamic, sustainable process, and the P2 Program Manager as well as other users may enter the process at any step. Steps in this process may be executed by NCBC Gulfport personnel identified in the flow chart or via contract. The P2MS encompasses all media, but stresses waste reduction and elimination. Individual P2 media processes and strategies are discussed in Sections 3 through 8 and Appendix B.

2.1 Identify And Track Program Objectives And Technical Initiatives

This section details actions to be taken by NCBC Gulfport personnel or contractors during each step of the P2MS process.

Prior to the P2MP triennial update, the P2 Program Manager will review the following federal, state, and DoN regulations and technical guidance pertaining to the P2 Program. The P2 Program Manager should carefully note any changes or revisions. Additionally, the P2 Program Manager should be aware of any new Federal, state, or DoN requirements that have been promulgated since the last P2MP review.

- OPNAVINST 5090.1D (or most recent version)
- Mississippi Multimedia Pollution Prevention Act
- EO 13514, “Federal Leadership in Environmental, Energy, and Economic Performance”
- EO 13423, “Strengthening Federal Environmental, Energy, and Transportation Management”
- The Pollution Prevention Act of 1990
- Department of Defense Instruction (DoDI) 4210.15, Hazardous Material Pollution Prevention
- DoN Shore Pollution Prevention Plan Updates (Naval Facilities Engineering Service Center UG-2046-ENV)
- Hazardous and Solid Waste Amendments of 1984, Section 224

The P2 Program Manager will review site-specific documents prior to the triennial update of the P2MP. This review will help the P2 Program Manager set quantitative goals. These documents include, but are not limited to the following multimedia guidance and data plans:

- Emergency Planning and Community Right-to-Know Act (EPCRA) Data and Reports
- Annual Environmental Project Requirement (EPR) Portal Waste Reports
- Annual Certified MDEQ Waste Generated/Waste Minimized Reports
- Pollution Prevention Annual Data Summary (P2ADS) Reports
- Waste Stream Determinations
- Safety Data Sheets (SDSs)
- Material Purchase Orders
- Authorized User Lists (AULs)

- HW Manifests
- Enterprise Resource Planning (ERP) Database
- Shore Installation Energy and Water Management Annual Reports
- Spill Prevention Control and Countermeasure (SPCC) Plan
- Municipal Separate Storm Sewer System (MS4) Permit
- Storm Water Management Plan
- Air Emissions Inventory (AEI)
- P2MP
- Hazardous Waste Management Plan
- Solid Waste Management Plan (SWMP)
- Oil and Hazardous Substance Contingency Plan
- Installation Restoration/Underground Storage Tank (UST)/HW Cleanup Program Documents
- Pesticides Management Plan
- Environmental Compliance Evaluations/Environmental Quality Audit Reports

The P2 Program Manager will use the above information every three years to develop media maps. Media maps will outline the following information for each media area (as presented in Sections 3 through 8):

- Areas of Interest to the Media Being Evaluated – Record the physical location, building number, and or shop/work center to be evaluated.
- Actual P2 Successes – Previous media initiatives accomplished that would qualify as P2 successes.
- Previous P2 Recommendations – Previous media recommendations made in media plans that would qualify as P2 recommendations.
- Opportunities for further P2 Initiatives – Any possible opportunities that “stand out” during the review of multimedia information and merit consideration as future P2 initiatives.
- Effective Metrics – Metrics that are or could be used to identify successes and failures within the media being reviewed.
- Points of Compliance – Specific units, processes, or items that are controlled by the media being evaluated (e.g., vents, outfalls, tanks).
- Source documents used during review.

Review and Evaluate Existing Operations

Triennially, the **P2 Program Manager** will conduct field visits of all work centers and evaluate existing operations. The purpose of the field survey is to: ensure that work center processes are documented and management procedures are accurate, document P2 progress to date, and identify the potential for additional P2 initiatives. The work center survey should consist of the following:

- Determine the work centers to be evaluated. This determination is made by considering the following:
 - New operations or processes

- Significant changes in operation or process
- Mission impact potential
- Significant areas for potential release
- Significant areas for worker exposure
- Areas not reviewed during the last update of the P2MP
- Any customer requested areas

During the field visit, the following tasks must be completed:

- Update Work Center Report (Appendix C).
- Look at all media points of compliance, noting any additional points of compliance not previously identified (e.g., tanks, vents, outfalls, monitoring wells).
- Seek P2 ideas from shop workers.
- Document the management review, including identification of programmatic initiatives.
- Determine whether previous recommendations have been implemented. If so capture as a success. If not, determine whether recommendations are still valid or a barrier exists. If recommendations are still valid, re-recommend.
- Determine whether quantitative goals have been met from the previous plan. If objectives were met, record them as a success; if not, determine what can be done to ensure that the new objectives are met.

Develop Initiatives

Based on the triennial review of NCBC Gulfport operations, the **P2 Program Manager** will develop P2 initiatives and determine the effectiveness of the previous initiatives.

- Create a master list of P2 initiatives by work center and Installation-wide.
- Rank potential initiatives on a scale of 1-5 (1 being negative impact, 3 being no effect, and 5 being positive impact), based on criteria (see Appendix B). The criteria should, at a minimum, include primary qualitative goals.
- Perform a “sanity check” on the outcome of the ranking.
- Determine the cutoff score for initiatives that will be implemented first (mark priority initiatives in yellow in Appendix B).
- Develop a POA&M for initiatives. Assign start and completion dates for priority initiatives that are feasible (refer to the individual POA&Ms in Appendix B).
- Perform economic analysis for selected technical initiatives.

Revise P2MP

The Mississippi Multimedia Pollution Prevention Act requires annual updates of waste minimization plans. The annual review will capture, at a minimum, “analysis and quantification of progress made, if any, in waste minimization relative to each performance goal, and any amendments to the plan, and an explanation of the need for the amendments” DoN guidance requires that installations shall update their P2MP on a

regular basis. A complete revision of the P2MP should be undertaken every three years (triennially). The triennial review and update would encompass programmatic evaluation of P2 Initiatives and reviews of all work centers at NCBC Gulfport. The updated plan will contain the following information:

- Executive Summary
- P2MS (revised as necessary).
- Implementation Plan for current programmatic and technical initiatives.
- Reference document containing the data used to create the plan including, but not limited to, the following:
 - Work Center reports (see Appendix C)
 - Qualitative objectives
 - Quantitative objectives
 - Initiatives evaluated, with rankings
 - Media maps
 - Quantitative objectives that have been met since the P2MP's previous update. These objectives will be captured as successes in the updated plan.
 - All quantitative objectives that were not met and a discussion of why they were not met.

Update Initiative POA&M

Although POA&M are executed on a day-to-day basis, the **P2 Program Manager** will formally update the POA&M biannually by:

- Documenting all actions that have been accomplished to date.
- Noting slippages of the estimated completion dates by pen and ink changes to the individual Implementation Plans found in the respective P2OAs found in Appendix B.

Implement and Evaluate Initiatives

On a schedule to be determined by the **P2 Program Manager**, work center employees will report on the effectiveness of the implemented initiative. Based on work center feedback, and if the P2 equipment is not appropriate for the work center, the **P2 Program Manager** will relocate equipment and/or procure new, appropriate equipment.

- Training. The P2 Program Manager will assist in coordinating training of work center employees by subject matter experts from the contractor supplying equipment to a work center. The training may consist of a training video of the initial start-up and installation demonstration, fact sheets, and/or owner's manual.
- Equipment Inappropriate for work center or Process. The P2 Program Manager will either relocate the piece of equipment or procure the appropriate equipment for the work center.

After initiatives are determined to be effective, the P2 Program Manager will document the metrics; record the initiative as a success and report to the environmental director during the next quarterly meeting.

Present Objective and Initiative Progress to the Environmental Director

The P2 Program Manager will present the POA&M for each P2 initiative, along with baseline information and any schedule barriers to the environmental director on a quarterly basis. One quarterly update per year will include the data received from the media managers on progress made toward the qualitative goals.

Assess Progress and Identify Corrective Action with the CO

The environmental director and the P2 Program Manager will meet annually with the CO or Executive Officer (XO) to assess progress toward meeting P2 objectives and identify any necessary corrective action measures. As a result of this discussion the following will occur:

- The P2 Program Manager will develop a POA&M of the corrective measures that result from this meeting.
- The POA&M will be distributed to all affected work centers, tenant commands, etc. with a cover letter from the CO/XO stressing the importance of meeting the dates and actions outlined in the POA&M.

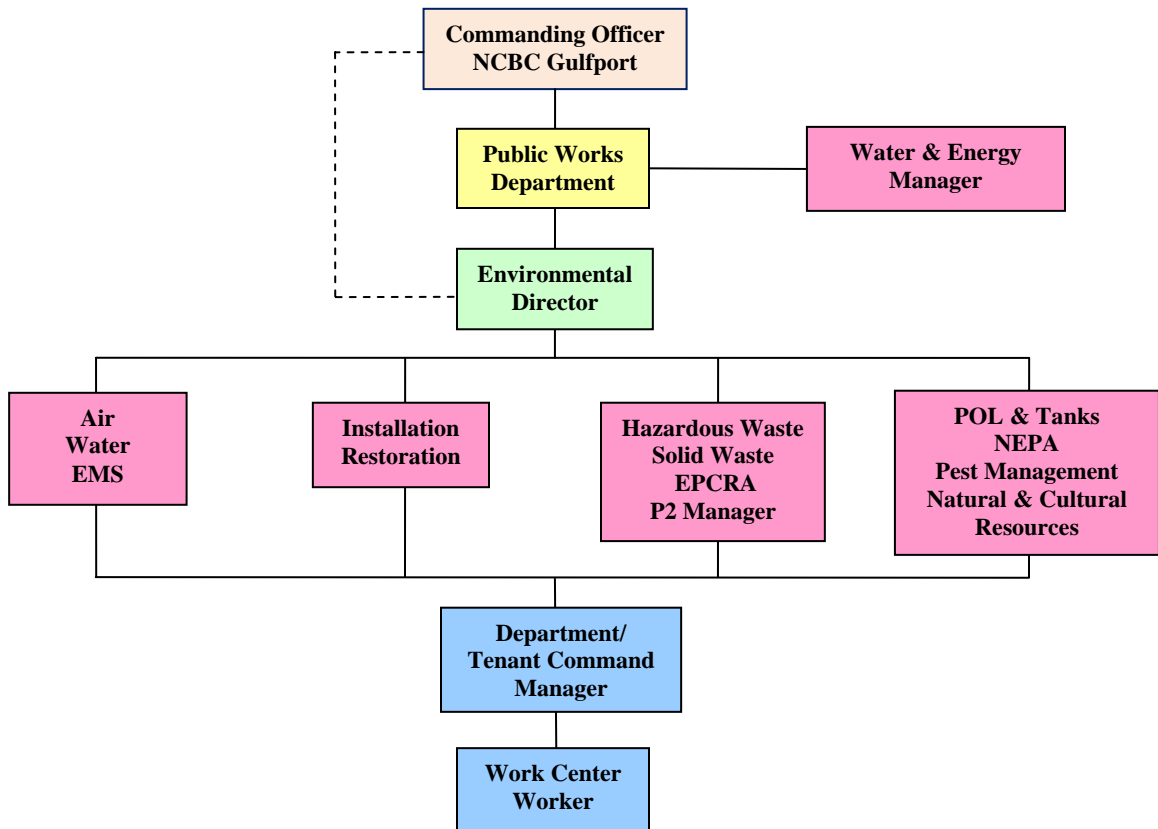
Update P2MP

The **P2 Program Manager** will review the P2MP annually and make pen and ink changes to ensure the plan is up to date and progress on initiatives has been documented. These changes are generally minor revisions and consist of points of contact, phone numbers, and work center locations.

2.2 P2 Management Roles and Responsibilities of NCBC Gulfport Personnel

The Environmental Division is the organization primarily responsible for environmental compliance and protection at NCBC Gulfport. The P2 Program Manager is primarily responsible for the NCBC Gulfport P2 Program. However, as outlined below, there are numerous stakeholders at NCBC Gulfport who ensure the effective and continuous implementation of P2 on a daily basis. Figure 2-1 provides a P2 organization chart for NCBC Gulfport.

Figure 2-1 NCBC Gulfport P2 Organizational Chart



CO/XO

- Ensure that NCBC Gulfport has an assigned Environmental Director and P2 Program Manager and that they have sufficient resources to implement this plan.
- Ensure station-wide consolidation of P2 training and awareness resources.
- Ensure that construction and maintenance contracts awarded for work at NCBC Gulfport incorporates P2 training and awareness for all workers.
- Maintain a signed P2 Command policy statement. A new P2 policy statement will be issued by each new CO of NCBC Gulfport within 30 days of assuming command. Review, revise, and issue NCBC Gulfport Policy Statement and ensure that all tenant commands have developed their own P2 policies that they dovetail with the station's policy.
- Sign and fully endorse finalized P2MP.
- Stress the importance of P2 in helping accomplish the mission.

Environmental Director

- Support the CO in meeting P2 responsibilities.
- Ensure that NCBC Gulfport has an assigned P2 Program Manager.

- Request resources as needed to implement the P2MP.
- Provide support to the P2 Program Manager.
- Ensure that the Command meets all the requirements for the P2 Program outlined in state, federal, and Department of Defense (DoD) regulations by ensuring that Environmental Division personnel meet their P2 responsibilities.
- Provide periodic briefs to the CO on P2 initiatives, objectives, successes, and needs and identify any necessary corrective action.
- Serve as strong environmental advocate to other departments.
- Regularly meet with the P2 Program Manager to receive a status update on media-specific objectives.
- Implement an ongoing program to apply P2 solutions to environmental compliance issues.

HW/Solid Waste/Recycling/P2 Program Manager

- Develop and implement a P2 Program for NCBC Gulfport to support DoN P2 Policy as specified in OPNAVINST 5090.1D (or most recent version).
- Plan and request funding for all P2 initiatives identified in the P2MP.
- Review the P2MP on an annual basis to identify significant changes in installation mission, function and personnel; progress on actions identified in the P2MP; changes to compliance requirements; and changes in installation priorities.
- Review P2MP on annual basis, revise if necessary. Perform comprehensive triennial updates.
- Investigate and implement priority P2 initiatives.
- Monitor NCBC Gulfport progress toward meeting P2 goals.
- Stay current with new P2 technologies applicable to DoN stations.
- Perform long-range planning to meet P2 objectives (e.g., EPR exhibits).
- Provide P2 management support to all departments, commands, and tenants.
- Periodically meet with the Environmental Director that they can assist the CO in assessing the progress toward the P2 goals and identifying any necessary corrective actions.
- Coordinate all station-wide P2 special events such as Arbor Day, Beach Cleanup, etc.
- Work with the tenant and department Points of Contact and/or work centers to identify and implement P2 initiatives.
- Promote P2 awareness and ongoing and new initiatives at the station.
- Periodically visit the work centers to ensure that the P2 initiatives and equipment are effective and working properly.
- Search for off-site vendors who will recycle or reuse NCBC Gulfport wastes rather than dispose of them.
- Identify wastes turned in by work centers that can be recycled on-site and off-site.
- Assist the P2 Program Manager in completing waste or recycling reports such as the P2ADS by providing data.
- Advertise and promote recycling programs at NCBC Gulfport.

- Periodically evaluate the addition of new recyclable materials to the program.

Occupational Safety and Health Manager

- Review and approve all AULs in ERP.
- Ensure that all contractors register materials through the Consolidated Hazardous Material Reutilization and Inventory Management Program (CHRIMP).
- Ensure that safety personnel and work center HAZMAT coordinators receive required P2 training.
- Screen new HAZMAT requests to determine hazard potential.
- Manage the central repository of SDSs.

Department/Tenant Command Managers or Environmental Coordinators

- Identify and implement P2 initiatives in work centers in coordination with the P2 Program Manager.
- Encourage waste segregation and recycling within shops.
- Identify potential HAZMAT substitutes.
- Be familiar with established station disposal protocols for all types of waste and unused HAZMAT.
- Ensure that HAZMAT are obtained through CHRIMP.

HAZMAT Coordinators and Authorized Credit Card User for Each Shop

- Work with P2 Program Manager to investigate and implement P2 initiatives.
- Ensure P2 equipment is functioning properly.
- Stay abreast of the latest developments in material substitutions and process changes being recommended and implemented within their organizations.
- Ensure material is purchased through CHRIMP.
- Ensure credit-card-purchased material arrives at the work center through CHRIMP.

SERVMART/HAZMATCEN Coordinator

- Purchase all HAZMAT in coordination with CHRIMP.
- Check work center AULs.
- Coordinate with CHRIMP to determine if HAZMAT are on the shelf or need to be ordered.
- When HAZMAT arrive, ensure they are sent to CHRIMP for barcoding and tracking and notify customer.

CHRIMP Manager

- Input materials through CHRIMP.
- Track HAZMAT and chemical quantities issued to specific work centers using ERP.
- Track costs avoided by the return and reissue of partially used HAZMAT containers.
- Coordinate approval of new HAZMAT for use by a work center.

- Minimize expired-shelf-life HAZMAT disposal by: 1) tracking material shelf-life; 2) extending material shelf-life as appropriate; and 3) finding off-site users of expired shelf-life materials.
- Coordinate with the HW Program Manager to recover and reissue (when possible) unopened HAZMAT turned in for disposal by work centers.
- Store HAZMAT for work centers.
- Provide SERVMART with work center AULs.

Naval Facilities Engineering Command (NAVFAC) Southeast Public Affairs Officer (PAO)

- Promote P2 and recycling awareness in conjunction with the environmental director, P2 Program Manager and the Solid Waste/Recycling Program Manager.

Fleet and Industrial Supply Center Jacksonville Contracting Officer

- Facilitate coordination between contractors and applicable offices for P2 concerns.
- Ensure that construction and maintenance contracts awarded for work at NCBC Gulfport incorporate P2 training and awareness for all workers.
- Coordinate with Occupational Safety and Health manager and P2 Program Manager to ensure that construction contractors recycle construction debris and meet other P2 objectives.

2.3 Roles and Responsibilities for P2 Survey Members

Normally when funding is available, NAVFAC Southeast will contract with an outside engineering firm to conduct the tri-annual survey of NCBC Gulfport and review the P2MP. However, during tight fiscal periods, NAVFAC and/or NCBC Gulfport personnel may serve as P2 survey members. The P2 survey member will conduct the site visit, gather necessary data from the work centers to revise the P2MP, and provide NCBC Gulfport with the revised plan. The roles of individuals during this process are as follows:

Role of Group Leader

- Act as liaison with NCBC Gulfport.
- Be lead spokesperson at meetings between the team and the authorities at NCBC Gulfport.
- Select the survey team members. This is done based on the candidate's knowledge of the installation and the area of expertise of the team members.
- Be responsible for the provision of information about unique requirements, regulations, and laws affecting NCBC Gulfport.
- Be responsible for avoiding conflicts.

Role of Team Leader

- Act as lead spokesperson for the survey team in each shop visited.
- Serve as representative for the team at meetings with the group leader when it is unnecessary to have the entire group present.

- Be responsible for taking notes about the processes under study. These notes will be transferred to electronic format at the end of each day.
- Be a problem solver for the team at the shop sites, and be the one to bring problems to the attention of the group leader, when necessary.
- Let the team know what is expected from them.

Role of Team Member

- Be an active participant of the survey team in each shop visited.
- Serve as assistant to the team leader.
- Be supplemental note taker to the team leader. This ensures that important items are not left out of the report.
- Serve as representative at collective meetings of the P2 team as required.
- Contribute to the P2 team for your particular area of expertise and in putting the report together.
- Work the schedule required by the team.
- Fulfill the role required.

NCBC Gulfport P2 Program Manager

- Provide the team members and team leader with a copy of all requested plans and permits.
- Be available for questions related to each of the respective media areas.
- Provide the team leader with a list of points of contact for each media area of each shop.
- Guide and escort to facilitate access to shop survey sites.
- Function as lead speaker to introduce the team to the shop foremen.
- Notify the shop areas in advance of planned visits.

3.0 POLLUTION PREVENTION BY MEDIA - HAZARDOUS MATERIALS

Reducing and eliminating use of HAZMAT is a major consideration in P2. Through substitution of environmentally friendly products and less dangerous materials, the amount of HW produced will decrease.

Point of Contact

CHRIMP Manager (228) 871-3423

Areas of Interest

- Building 225, Supply, Work Center R41A
- Building 320 /Section C /South End, Packing & Preservation, Work Center 564
- Building 400 Construction Equipment Department (CED) Shop Store
- Building 228 HAZMATCEN

Individual work center processes that use HAZMAT are provided in Appendix C (only major HAZMAT users are identified in Appendix C).

Processes

The work centers that use HAZMAT obtain them from the HAZMATCEN. The HAZMATCEN staff are responsible for receiving, storing, distributing, and tracking HAZMAT and for implementing the DoN's CHRIMP at NCBC Gulfport. One of the primary objectives of the HAZMATCEN is to reduce the amount of "shelf-life expired" HAZMAT that must be disposed of as a waste. This objective is achieved, in part, through:

- Minimizing inventories of HAZMAT;
- Limiting work centers to a thirty-day supply of HAZMAT;
- Providing for "turn-in" and free re-issue of partially used containers of HAZMAT;
- Labeling HAZMAT containers prior to issue;
- Facilitating tracking and proper disposal of HAZMAT by requiring the empty HAZMAT containers to be returned to the HAZMATCEN;
- Monitoring HAZMAT expiration dates;
- Maintaining and enforcing AULs to control proper HAZMAT access/use;
- Establishing thirty-day inventory limits;
- Conducting quarterly work center inventories (locker checks) to ensure compliance with AULs and the seven-day inventory limits; and
- Repackaging HAZMAT into smaller containers to minimize waste and disposal by utilizing a container size that corresponds with the given work center task.

All HAZMAT used at NCBC Gulfport should be issued through the HAZMATCEN. The HAZMATCEN can issue HAZMAT to all work centers at NCBC Gulfport on a container basis and track these transactions in DoN ERP.

Responsibilities and Roles

The CHRIMP manager will assemble supporting P2 data for the HAZMAT program on an annual basis, noting progress toward the recommended P2 Program initiatives listed below, and provide this data to the P2 Program Manager. Data will be:

- Assembled and loaded into Excel spreadsheets and graphed to track progress toward completing selected initiatives.
- If Excel spreadsheets are not provided, note progress separately.

Information used to track initiative progress will be drawn from the ERP Reports or individual work center reports where appropriate.

HAZMAT Coordinators and Authorized Credit Card User for each work center will:

- Work with P2 Program Manager to investigate and implement P2 initiatives.
- Ensure P2 equipment is functioning properly.
- Stay abreast of the latest developments in material substitutions and process changes being recommended and implemented within their organizations.
- Implement training programs to insure that procurement and acquisition officials limit the procurement of toxic or HAZMAT “Green Book” purchases.
- Ensure material is purchased through CHRIMP.
- Ensure credit-card-purchased material arrives at the work center through CHRIMP.

CHRIMP Manager will:

- Input materials through CHRIMP.
- Track HAZMAT and chemical quantities issued to specific work centers using the ERP.
- Track costs avoided by the return and reissue of partially used HAZMAT containers.
- Coordinate approval of new HAZMAT for use by a work center.
- Minimize expired-shelf-life HAZMAT disposal by:

- 1) tracking material shelf-life;
 - 2) extending material shelf-life as appropriate; and
 - 3) finding off-site users of expired shelf-life materials.
- Store HAZMAT for work centers.
 - Provide SERVMART with work center AULs.

Previous P2 Initiatives

Previously recommended P2 initiatives include:

- Switch to water-based enamel coatings
- Collect and recycle cardboard
- Collect recycle or auction excess wood products
- Enforce work center HAZMAT locker storage time.
- Advertisement of HAZMAT for reuse
- Freon recovery and recycling
- Promoting CHRIMP awareness
- Integrate contractors and tenants into CHRIMP

P2 Successes

- Implementing an agreement with Naval Supply Systems Command to minimize storage of Prepositioned War Reserve Materiel Stock (PWRMS) HAZMAT and reduction of expired shelf-life materials.
- Wide-spread involvement in NCBC Gulfport's CHRIMP, and as such, most work centers contain barcoded HAZMAT and are not procuring their HAZMAT outside of CHRIMP.
- Low-volatile-organic-compound (VOC) paints have been implemented in the CED D work center.

Recommended P2 Initiatives

Several initiatives are addressed below, some of which are continuous efforts and some of which are efforts already initiated by NCBC Gulfport staff. Initiatives identified during the 2013 P2MP update site visit are also presented below:

- Hire staff for the HAZMATCEN/CHRIMP. Refer to Pollution Prevention Opportunity Assessment (P2OA)-02.
- Continue advertising HAZMAT for reuse.
- Continue with Freon recovery and recycling.
- Continue with CHRIMP outreach and awareness.
- Continue with general CHRIMP operation and continue to integrate contractors and tenants into CHRIMP.

Effective Metrics

- HAZMAT expiring (pounds per year)
- HAZMAT recycled (tons per year [TPY])
- Refer to P2OA-02 for additional metrics

Source Documents:

- EPCRA data and reports
- EPR Portal Waste Reports
- P2ADS Reports
- Waste Stream Determinations
- SDSs
- AULs
- ERP Database

4.0 POLLUTION PREVENTION BY MEDIA – STORM WATER/ WASTEWATER

The main goal for this media is to decrease contaminants in wastewater. This includes reduction in pollution to/from storm water and reduction in pollution to wastewater in NCBC Gulfport's sanitary sewer system.

Point of Contact

Storm Water Manager (228) 871-2373

Areas of Interest

Note that not all areas below store HAZMAT or HW, and thus, will not have associated work center reports in Appendix C.

- Bldg. 241 & 465 Naval Construction Naval Construction Group (NCG)-2 Maintenance Facility
- Bldg 241, Naval Construction Training Center Civil Engineering Support Equipment (NCTCCESE)
- Bldg. 435, Armory
- Bldg. 399, 400, 401, 409, CED Shops
- Bldg. 397 & 142, Morale, Welfare, and Recreation (MWR) Auto Hobby Shop & Self-Service Vehicle Wash
- Bldg. 299 & 470, Golf Course Maintenance
- Bldg. 340, Naval Exchange (NEX) Service Station
- Bldg. 345-346, 378-381, Naval Construction Training Center (NCTC)
- Bldg. 266, Public Works, Paint & Riggers Shop
- Bldg. 421, Public Works, Pesticide Shop
- Bldg. 219, 222, Supply, Controlled Humidity Container Warehouse
- Bldg. 228, CHRIMP/Child Development Center (CDC) Warehouse
- Bldg. 398, Supply, Military Service Station
- Bldg. 428-431, Mine Inshore Underwater Battalion
- Bulldozer Training Field (TAZ) & Heavy Equipment Training Field (TAIO)
- Bldg. 321, Fire Department
- Bldg. 243, Marine Forces Reserve Motor Pool
- Bldg. 274, Public Works, Utilities Shop
- Woolmarket Range

Processes

Storm water is generated when precipitation from rain events flows over land or impervious surfaces and does not seep into the ground. As the storm water runoff flows over the land or impermeable surfaces, such as paved streets, parking lots, and building rooftops, it accumulates debris, chemicals, sediment, or other pollutants that may adversely impact water quality.

Wastewater is generated from shop activities such as cleaning or maintenance inside a work center. During the August 2013 site visit, it was observed that some shops had

floor drains. From interviews with NCBC Gulfport staff, as well as direct observation, it was determined that these drains were either blanked off or filled with concrete. There is little hazard of wastewater contamination or a slug contaminants impacting downstream wastewater treatment plants.

Individual work center process descriptions are provided in Appendix C.

Responsibilities and Roles

The media manager will assemble supporting P2 data for the storm water/wastewater program on an annual basis, noting deficiencies, progress toward the P2 Program objectives listed below, and provide this data to the P2 Program Manager.

Previous P2 Initiatives

Previously recommended P2 initiatives include:

- Use 45-degree bullet deflectors at Woolmarket Range. This initiative has been implemented. Bullet deflectors are installed so to direct bullets downward into soil berms. Bullets are then recovered for recycling by reconditioning the berms every three to five years.
- Implement storm water runoff prevention structures at the TAZ/TAIO. This initiative was programmed at the suggestion of the media manager and included the construction of berms to reduce offsite flow of storm water and petroleum spills. This initiative was not funded.

P2 Successes

- NCBC Gulfport has instituted Best Management Practices (BMPs) from their MS4 Permit. This includes training to contractors and installation staff who are new to the facility.
- Low Impact Design (LID) principles are incorporated into construction and/or renovation initiatives.
- Wash racks with oil/water separators have been installed at major vehicle maintenance facilities. These systems are equipped with process tanks to slow the discharge rate of water to ensure oil and contaminants are properly separated before effluent is discharge to the storm water drainage system.

Recommended P2 Initiatives

Several initiatives are discussed below, some of which are continuous efforts and some of which are efforts already initiated by NCBC Gulfport staff. Initiatives identified during the 2013 P2MP update site visit are also presented below:

Continue to implement BMPs from NCBC Gulfport's MS4 Permit and Storm Water Management Plan. Continue to conduct work center interviews and inspections to ensure storm water P2 BMPs are being implemented.

- Continue to provide storm water training and enforce planning/permitting requirements for initiatives greater than one acre in size.
- Continue to implement LID principles into new construction and renovation initiatives at NCBC Gulfport.

Effective Metrics - Success of this initiative will be demonstrated by documentation of annual Storm Water Compliance Inspections and completion of any required follow-up actions identified therein and lack of Notices of Non-compliance or Violation of the conditions of the Storm Water General Permit. During the August 2013 site visit, it was observed that all inspections are conducted in accordance with permit requirements and no Notices of Non-compliance or Violation had been received.

Permits

- Baseline Permit (40 Code of Federal Regulations [CFR] 122.26)
- Construction Storm Water General Permit
- MS4 Permit

Plans

- NCBC Gulfport Storm Water Management Plan, Revised December 2007
- NCBC Gulfport Storm Water Pollution Prevention Inspection Checklists, November, 2007
- Site-specific Storm Water Management Plans for construction sites

5.0 POLLUTION PREVENTION BY MEDIA – AIR

Air emissions are generated through various NCBC Gulfport processes. Under the Clean Air Act, the United States Environmental Protection Agency establishes air quality standards to protect public health and the environment from air pollutants. The primary goal of air P2 is to minimize use of hazardous chemicals and equipment that may emit harmful pollutants. Equipment and processes at NCBC Gulfport that release pollutants into the air are listed below.

Point of Contact

Air Program Manager (228) 871-2373

Areas of Interest

Note that not all areas below store HAZMAT or HW, and thus, will not have associated work center reports in Appendix C.

- Bldg. 399, 400, 401, 409, CED Shops
- Bldg. 321, Fire Department
- Bldg. 243, Marine Forces Reserve Motor Pool
- Bldg. 397, MWR Hobby Shop
- Bldg. 241 & 465, NCG-2, Maintenance Facility
- Woolmarket Range
- Bldg. 432, NCG-2 Communications Systems
- Bldg. 122, NCG-2, Munitions Division
- Bldg. 435, NCG-2, Armory
- Bldg. 39, NCG-2, Central Tool Room
- Bldg. 385, NCTC, Air Conditioning Repair Shop; Plumbing Shop
- Bldg. 241, NCTCESE
- Bldg. 67, NCTC, Sheet Metal Shop; Welding Shop
- Bldg. 400, Public Works, Carpentry Shop
- Bldg. 266, Public Works, Paint Shop
- Bldg. 421, Public Works, Pest Control Shop
- Bldg. 274, Public Works, Sheet Metal Shop; Utilities Shop
- Bldg. 437, Supply, Packing and Preservation Center
- Bldg 283 Landscape Contractor
- Bldg 340 NEX Service Station
- Bldg 398 Government-owned Vehicle Fueling Station

Processes

The individual work center activities that involve these equipment and processes are provided in Appendix C.

Responsibilities and Roles

The media manager will assemble supporting P2 data for the air emissions program on an annual basis, noting deficiencies, progress toward the P2 Program objectives listed below, and provide this data to the P2 Program Manager.

Information used to track initiative progress will be drawn from the ERP reports, AEIs, annual waste summaries, and work center reports where appropriate.

All Department/Tenant Command Managers will:

- Provide input to the environmental media manager regarding specific training needs to aid with P2 efforts.

HAZMAT Coordinators and Authorized Credit Card Users for each work center will:

- Work with the P2 Program Manager to investigate and implement P2 initiatives.
- Ensure P2 equipment is functioning properly.
- Stay abreast of the latest developments in material substitutions and process changes being recommended and implemented within their organizations.
- Ensure material is purchased through CHRIMP.

Previous P2 Initiatives

- Restrict the consumption of natural gas in external combustion units to 300 million cubic meters per year to maintain oxides of nitrogen (NO_x) emissions below 100 TPY. The NCBC Gulfport AEI calculated that the installation's annual NO_x emissions were 3.9 TPY. NCBC Gulfport's annual NO_x potential emissions were calculated to be 79 TPY. An update to the AEI is scheduled to be completed in 2014 and will determine changes to annual and potential NO_x emissions.
- Use arc-welding emission reduction equipment for welding, grinding, cutting, and gouging operations. This initiative was not implemented. Most shops have changed from arc-welding to wire welding to reduce emissions. Shops typically open bay doors or perform welding outside to mitigate the need for emission hoods.
- Use waterborne paint systems. This initiative was not implemented due to the fact that NCBC already uses low-VOC paints and HLVP paint systems inside a well-designed paint booth facility.

P2 Successes

NCBC Gulfport has had success implementing past P2 initiatives, which included the following:

- Replaced solvent-based parts washers with aqueous-based parts washers or steam parts washers.
- Replaced Black Beauty blast media with glass or garnet blast media.
- Implementation of high volume/low pressure (HVLP) spray guns and low-VOC paint for paint booth operations.

Recommended P2 Initiatives

Several initiatives are discussed below, some of which are continuous efforts and some of which are efforts already initiated by NCBC Gulfport staff. Initiatives identified during the 2013 P2MP update site visit are also presented below:

- Continue to procure glass or garnet blast media instead of Black Beauty.
- Continue to evaluate adequacy of aqueous-based parts washers or steam parts washers for shops at NCBC Gulfport.
- Continue with aboveground storage tank (AST) refurbishment initiative to (1) inspect ASTs to Steel Tank Institute standard; (2) identify structural deficiencies (e.g., inadequate vents, sealed emergency vents, etc.); and (3) repair tanks.
- Continue to procure of New Source Performance Standard compliant emergency generators.
- Continue to evaluate emergency generators to determine if lower kilowatt (KW) rating is acceptable. For example, based on interviews with the Air Emissions Program Manager, it was determined that most emergency generators at sewage lift stations are approximately 100 KW. It is suggested that these emergency generators only need to be rated to 20 KW.
- Continue to determine sell-back capacity of electrical power from emergency generators to local utilities.

Effective Metrics

- VOCs emissions (TPY)
- Hazardous Air Pollutants (TPY)

Permits

Mississippi Air Pollution Control Permit No. 1020-00080. This is a modified Synthetic Minor Operating Permit with a restricted potential to generate 100 TPY of NOx.

Plans

“Emissions Inventory and Compliance Assessment Report, Naval Construction Battalion Center, Gulfport, Mississippi, February 2009”.

6.0 POLLUTION PREVENTION BY MEDIA – SOLID WASTE

The primary goal for the solid waste media is to reduce the amount accumulated and increase the amount diverted for recycling and reutilization.

Point of Contact

SW Program Manager (228) 871-3228

Areas of Interest

The primary solid waste areas of interest at NCBC Gulfport are:

- Recycle Center, Building 275
- Facilities Engineering Acquisition Division (FEAD) Contracting Office and construction sites
- Family Housing and Bachelor’s Enlisted Quarters (BEQ)
- Community Facilities (NEX, Commissary)

Processes

These work center process descriptions are provided in Appendix C.

The largest contributions to P2 at NCBC Gulfport are derived from the Recycling Center. The Recycling Center is a collection point for excess materials that are destined for solid waste disposal. Materials are sorted depending on type and processed for reuse, sale, or disposal. Equipment, tools, and material suitable for reuse are diverted to users at NCBC Gulfport in order of preference: (1) sent to Defense Logistics Agency (DLA) Disposition Services for disposal through sales, (2) offered for public sale, or (3) disposed of as solid waste.

Responsibilities and Roles

The media manager will assemble supporting P2 data for the solid waste program on an annual basis, noting deficiencies, progress toward the P2 Program objectives listed below, and provide this data to the P2 Program Manager.

Information used to track initiative progress will be drawn from the P2ADS Reports, MDEQ Annual Waste Summaries, and work center reports where appropriate.

In addition, the Solid Waste Program Manager will periodically evaluate the addition of new recyclable materials to the program.

All Department/Tenant Command Managers will provide input to the environmental media manager regarding specific training needs to aid with P2 efforts.

Previous P2 Initiatives

The following is a list of previously recommended P2 initiatives:

- Provide source reduction and reuse training
- Collect and recycle scrap metal parts
- Develop a “P2 Suggestion” button on the NCBC website.

- Use a blast media “lease and recycle” service. This initiative was not implemented because a cost-effective solution could not be determined for (1) recycling blast media from NCBC Gulfport and (2) providing enough virgin blast media for standard operations at the installation.

P2 Successes

NCBC Gulfport was successful in implementing past P2 initiatives, which included:

- Direct Sale Authority for excess and recyclable materials, reuse and recycle of building materials removed by contractors in demilitarized buildings, and construction of a larger recycling center providing additional floor space to sort and segregate recyclable materials.
- Review construction contracts before award for recycling initiatives and ensure NAVFAC Guide Specification 01572B is included in the issuance for bid.

Recommended P2 Initiatives

Several initiatives are addressed below, some of which are continuous efforts and some of which are efforts already initiated by NCBC Gulfport staff. Initiatives identified during the 2013 P2MP update site visit are also presented below:

- Continue to exercise direct sale of recyclable materials and recycling of construction and demolition (C&D) waste.
- Continue to review construction and renovation contracts prior to design and award to ensure NAVFAC Guide Specification 01572B is adequately addressed.
- Increase recycling by expanding the number of recycling containers throughout the installation; refer to P2OA-01.
- Identify a vendor that can provide virgin blast media and remove/recycle spent blast media. Refer to P2OA-03.

Effective Metrics

- Weight of materials recycled (tons of each material).
- Weight of materials sold through Direct Sales (TPY)
- Refer to P2OA-01 and P2OA-03 for additional metrics

Source Documents

NCBC Gulfport, Solid Waste Management Plan, August 2013

7.0 POLLUTION PREVENTION BY MEDIA – HAZARDOUS WASTE

HW is indirectly related to the amount of HAZMAT used. Through substitution of environmentally friendly products and use of less hazardous materials, the amount of HW generated will decrease.

Point of Contact

HW Program Manager (228) 871-3228

Areas of Interest

The HW media areas of most significant interest are:

- Work processes at work centers that generate an HW are listed in Appendix C.
- 42 HW satellite accumulation areas (Bldg 70, 122, 215, 217, 225, 241, 243, 272, 276, 291, 295, 298, 340, 345, 346, 372, 397, 400, 403, 418, 429, 445, 448, 465)
- 1 Less-Than 90 Day Accumulation Area (Bldg 276)

Processes

The process descriptions for the work centers listed above are provided in Appendix C.

Responsibilities and Roles

The media manager will be interviewed to obtain supporting P2 data for the HW program on an annual basis, noting progress toward the P2 Program objectives listed below. Topics to be discussed include information used to track initiative progress which will be drawn from the P2ADS Reports, Annual Waste Summaries, and Work Center reports, where appropriate.

In addition, the HW Program Manager will:

- Use off-site vendors who will recycle or reuse NCBC Gulfport wastes rather than dispose of them.
- Track HW generation and work with the SW Program Manager to identify and implement P2 initiative to reduce or eliminate waste streams.
- Work with the CHRIMP manager to identify unopened containers of HAZMAT that can be reused.
- Identify wastes turned in by work centers that can be recycled on-site and off-site.

Previous P2 Initiatives

The following is a list of previously recommended P2 initiatives:

- Filter and purify waste diesel fuel for use in emergency generators. This initiative was eliminated due to the manpower and funding issues. Additionally, used oils are recycled by a DLA Disposition Services contractor.
- Use hydraulic fluid purifier to extend the use of hydraulic fluid. This initiative was eliminated due to manpower and funding issues.

- Use biodegradable hydraulic fluids for hydraulic equipment. This initiative was eliminated due to manpower and funding issues.
- Implement an automatic battery watering system. This initiative was eliminated due to the procurement of high-end batteries and more efficient charging systems.
- Minimize the disposal of deployed materials from PWRMS as HW. This initiative was not implemented due to a change in the procurement, stocking, and shipment of material for PWRMS. Also refer to Section 3 – Pollution Prevention by Media – Hazardous Materials.

P2 Successes

NCBC Gulfport was successful in implementing past P2 initiatives, which included the following:

- Material Substitutions
- Recycling
- Work Process Changes
- Switch from Safety Kleen 105 to Safety Kleen 150 solvent
- Convert Photo Lab to an entirely digital process
- Switch to non-hazardous Break-Free products
- Updated HW profiles
- Re-evaluate and document exemptions for waste streams

Recommended P2 Initiatives

Several initiatives are addressed below, some of which are continuous efforts and some of which are efforts already initiated by NCBC Gulfport staff. Initiatives identified during the 2013 P2MP update site visit are also presented below:

- Hire staff for the HAZMATCEN/CHRIMP. Refer to P2OA-02.
- Install metered Petroleum, Oil, and Lubricant (POL) dispensers in vehicle maintenance shops. Refer to P2OA-04.
- Continue with material substitutions, recycling, and work process changes.
- Continue to re-evaluate and document exemptions for waste streams.
- Continue to switch to non-hazardous parts cleaners, if compatible with military specifications.

Effective Metrics

- HW Generated (pounds per year)
- HW Recycled (pounds per year)
- HW Disposed off-site (pounds per year)
- Refer to P2OA-2 and P2OA-04 for additional metrics.

Points of Compliance

- 1 Less-than-90-day storage area
- 42 Satellite accumulation areas
- Work processes generating HW

Permits – None

Source Documents

- NCBC Gulfport Hazardous Waste Management Plan, June 2011
- NCBC Gulfport Instruction 5090.1, Disposal of Hazardous Materials/Hazardous Waste Management Plan, 2 December 2011 (which incorporates 40 CFR 262, Mississippi HW Management Regulation HW-1 of April 2011, OPNAVINST 5090.1C, and OPNAVINST 5100.19)

8.0 POLLUTION PREVENTION BY MEDIA – RESOURCE CONSERVATION (ENERGY, PETROLEUM, AND POTABLE WATER)

Resource conservation encompasses implementation of requirements outlined by EOs 13423 and 13514 as well as Energy Policy Act of 2005 and the Energy Independence Security Act of 2007. The intent for resource conservation is to increase the efficiency of electrical and water consumption at NCBC Gulfport in order to reduce the consumptive impact on non-renewable resources. Conservation of energy and potable water is a cost-effective P2 strategy for NCBC Gulfport, as demonstrable improvements be accomplished through effective training and a shift of habits.

Point of Contact

Public Works Commodities Manager (228) 871-2191

Areas of Interest

The NCBC Public Works Department is the primary area of interest as it comprises the individuals responsible for ensuring energy, water, and fuel conservation practices are implemented at the installation. Public Works collaborates with the FEAD on new construction and renovation initiatives to ensure efficient and low-impact materials are used (i.e., energy efficient lights, low flow toilets, solar panels) and constructed to DoN Leadership in Energy and Environmental Design (LEED) standards.

Processes

Resource Conservation applies to all facilities at NCBC Gulfport, regardless of whether they have a work center report or not.

Responsibilities and Roles

The NCBC Gulfport Commodities Manager (and staff) work with several departments within the Public Works Department to identify initiatives and opportunities that will assist with resource conservation. Opportunities exist in the form of new construction or renovation initiatives. The Commodities Manager may also identify pilot initiatives to determine if renewable energy resources are viable at NCBC Gulfport. Requirements necessary to achieve DoN LEED standards and efficiency requirements are submitted during the design/build phase of initiatives.

NCBC Gulfport has Building Energy Monitors (BEMs) designated at each building that follow the guidance established in the *Navy/Marine Corps Building Energy Monitor's Guide*. BEMs meet on a regular basis and are responsible for completing checklists that ensure office equipment, heating and cooling equipment, lighting, appliances, water equipment, and building envelope improvements are maintained in order to ensure resource conservation. BEMs are tasked with reporting deficiencies observed in their area of responsibility and can also filter resource conservation ideas to the Commodities Manager.

Previous P2 Initiatives

Previous P2 Initiatives for Resource Conservation include, but are not limited to:

- Evaluation of biomass power production.
- Evaluation of wind-based power production.
- Evaluation of landfill gas-based power production.
- Installation of solar powered water heaters, heat pumps, and photovoltaic cells.
- Installation of micro turbines.
- Installation of high-efficiency heating, ventilation, and air conditioning (HVAC) systems; evaluation of ability to recycle inside air; evaluation of ability to recapture exhaust heat from HVAC units.
- Installation of turborcor chillers.
- Installation of an energy/water smart-grid for real time consumption monitoring.
- Performed energy/water surveys.

P2 Successes

As of 2013, NCBC Gulfport has reduced its energy use by 37% (compared to fiscal year [FY] 2003 baseline) and water use by 63% (compared to FY 2007 baseline). The installation has also significantly decreased its natural gas use by replacing oil boilers with high-efficiency heat pumps and focusing strategies that fine-tune heating/cooling strategies based on ambient air temperature. Additional P2 successes are wide-ranging and include some of the following:

- Implementation of energy-efficiency management measures such as high-efficiency lighting; lighting motion sensors; set-back temperatures during unoccupied times; electronics in sleep mode; etc.
- Implementation of water-efficiency management measures such as leak detection initiatives for distribution system; water efficient landscaping; efficient showers, toilets, and urinals; cooling tower management; water reuse/recycling; etc.
- Over 8.3 million square feet of work space has undergone energy and water audits.
- A collaborative effort with Public Affairs Office to implement energy and water conservation awareness and outreach program that includes written articles, posters, emails, and presentations.
- Compliance with LEED Silver and Gold Standards for all new construction.

Recommended P2 Initiatives

Based on the 2013 P2MP update site visit, there are no recommended P2 initiatives for resource conservation. The Public Works Department energy/water conservation team has a great understanding of the requirements of their program and is proactive to research, evaluate, program, seek funding, and implement resource conservation initiatives.

Effective Metrics

- Million British Thermal Unit/Thousand Square Feet (KSF) – Energy Intensity
- Thousand Gallons/KSF – Water Intensity
- Megawatt Hour – Electricity Use
- Thousand Cubic Feet – Natural Gas Use

Permits

- N/A

Source Documents

- FY 2010 Shore Installation Energy and Water Management Annual Report
- FY 2011 Shore Installation Energy and Water Management Annual Report
- FY 2012 Shore Installation Energy and Water Management Annual Report

9.0 POLLUTION PREVENTION IMPLEMENTATION PLAN

The information contained in this section will ensure that P2 initiatives described in the NCBC Gulfport P2MP are easily reviewed and tracked. Survey data collected during the August 2013 P2MP site visit show that several of the P2 initiatives suggested in 2009 were not implemented – many due to funding or manpower issues. The tables below describe whether an initiative was implemented, partially implemented, ongoing, or if the initiative was not implemented at all. In addition, a summary table of Priority P2 Initiatives for 2013 is included. This table represents initiatives suggested to NCBC Gulfport for further evaluation and funding requests.

Table 9-1, below, presents P2 initiatives completed during 2009 to 2013. A brief description of the initiative as well as the initiative type and effected media is included. Note that some of these initiatives were undertaken by NCBC Gulfport staff and were not included in previous iterations of the P2MP.

Table 9-1		
Implemented P2 Initiatives (2009-2013)		
Implemented Initiative	Type of Initiative	Effected Media¹
<p><u>Implement system to track water, electricity, and gas usage.</u> Water, electricity, and gas usage are currently tracked by the NCBC Gulfport Commodities Manager. Many initiatives have been implemented to increase energy and water efficiency, reduce energy and water consumption, and evaluate/implement renewable energy sources. This initiative enables NCBC Gulfport to track its progress against federal sustainability goals established in EO 13423, EO 13414, and DoN guidance.</p>	Technical and Programmatic	RC
<p><u>New Wash Racks and Oil/Water Separators at Vehicle Maintenance Shops.</u> Industrial wash racks and oil/water separators were installed at vehicle maintenance shops (e.g., CED, Marine Forces Reserve Motor Pool, and NCG-2 Battalion Maintenance Facility [BMF]) to reduce pollutant loading in the storm water conveyance system.</p>	Technical	HW WW
<p><u>Improved Battery Management.</u> Use of high-end Optima batteries are used to extend service life. Also pulse charging and trickle charging are used to increase efficiency of battery charging and reduce energy draw when batteries reach optimal charge.</p>	Technical	HW

Table 9-1 (continued)		
Implemented P2 Initiatives (2009-2013)		
Implemented Initiative	Type of Initiative	Effected Media¹
<p><u>Metered POL Dispenser.</u> At the CED shops, a metered POL dispenser is used with close-tight nozzles that prevent any drippage or spills from dispenser tubes hung from the ceiling. Staff can input the specific amount of POL necessary and the system will dispense the amount and shut down.</p>	Technical	HM HW
<p><u>Brake Cleaner Recharging System.</u> Instead of purchasing individual cans of brake cleaner, staff at CED have procured a system in which spray cans are continuously recharged with brake cleaner. This has reduced the number of spray cans disposed by CED shops.</p>	Technical	AE HM HW SW
<p><u>Purchase of a FlowJet System.</u> The FlowJet cuts down on the amount of material waste produced by CED D shop. It also eliminates the need for metal working (e.g., sanding, grinding, polishing, etc.) after parts have been cut.</p>	Technical	AE SW HW
<p><u>Advertisement of HAZMAT for Reuse.</u> The HAZMATCEN advertises materials that have been turned in and are available for reuse to shop points of contact.</p>	Programmatic	SW HM HW
<p><u>Freon Recovery and Recycling.</u> At shops in which Freon is used/managed, a recycling program has been established that covers the actual material and canisters it is transported in.</p>	Technical	AE HM HW
<p><u>Light-emitting Diode (LED) Lighting.</u> Notably implemented in the NCTC Soils Lab, this general facility lighting is energy efficient and provides high luminous efficacy. High efficiency lighting is installed as standard build-out for new construction and renovation initiatives.</p>	Technical	RC
<p><u>Switch from Safety Kleen 105 to Safety Kleen 150 Solvent.</u> Implemented at final unit in CED shop area to complete initiative started prior to 2009.</p>	Technical	HW

¹ AE = Air Emissions; HM = Hazardous Materials; HW = Hazardous Waste; RC = Resource Conservation; SW = Surface Water; WW = Waste Water

Table 9-2, below, presents partially completed P2 initiatives completed during 2009 to 2013. A brief description of the initiative as well as the initiative type and effected media is included.

Table 9-2		
Partially Implemented P2 Initiatives (2009-2013)		
Partially Implemented Initiative	Type of Initiative	Effected Media¹
<p><u>Electric Carts (Energy Conservation, Air Emission Reduction).</u> This initiative has been partially implemented by the Public Works Facilities Engineering and Acquisition Division. Personnel utilize electric carts for transportation. Electric carts and dual-fuels carts replace gasoline carts and automobiles. The installation also has some solar driven vehicles. Not all fleet vehicles are replaced with hybrid vehicles. General Services Administration controls the replacement of vehicles.</p>	Technical and Programmatic	RC
<p><u>Use steel deflector plates on Woolmarket Range.</u> This initiative has been partially implemented. Steel deflector plates, angled down at 45 degrees to deflect bullets into the retention berms, have been installed. The plates will allow for capture and recycle of projectiles without impact to environmental media.</p>	Technical	AE HM HW SW WW
<p><u>Install LED Street and Parking Lot Lights.</u> A fiscal year (FY) 2012 contract has been completed to install LED street and parking lot lights. A second contract, awarded in FY 2013, is in the process of being implemented. LED street and parking lot lights will be completed at the conclusion of the second contract.</p>	Technical	RC

¹ AE = Air Emissions; HM = Hazardous Materials; HW = Hazardous Waste; RC = Resource Conservation; SW = Surface Water; WW = Waste Water

Table 9-3 presents ongoing P2 initiatives. A brief description of the initiative as well as the initiative type and effected media is included. Note that some of these initiatives were undertaken by NCBC Gulfport staff and were not included in previous iterations of the P2MP.

Table 9-3		
Ongoing P2 Initiatives		
Ongoing Initiative	Type of Initiative	Effected Media¹
<p><u>Continue implementation of P2 and recycling at Stennis Space Center (SSC).</u> Qualified Recycling Program (QRP) efforts at SSC are managed through NCBC Gulfport. Every year, recycling of materials (primarily of spent brass) brings in approximately \$50,000 to NCBC Gulfport's QRP.</p>	Programmatic	SW
<p><u>Promote P2, CHRIMP, and recycling awareness.</u> Recycling efforts include typical household items (e.g., paper, plastic, glass, and aluminum) and industrial supply items (e.g., sheet metal, used oil filters, used oil, used antifreeze, tires, etc.). Continued recycling awareness is facilitated by the EMS and distribution of recycling flyers throughout the installation. The installation has a CHRIMP and is currently using ERP for HAZMAT management. Each year NCBC Gulfport coordinates an Earth Day celebration with outreach and educational materials about P2, recycling, and local watershed pollution. The Earth Day celebration also includes opportunities for coastal cleanups and marine mammal conservation programs.</p>	Programmatic	AE HM HW RC SW WW
<p><u>Encourage recycling of C&D waste.</u> For construction and renovation initiatives managed by the ROICC, nearly 100% of C&D materials are currently recycled or reutilized. Most of the C&D waste generated is asphalt and concrete. Used asphalt is being diverted for reuse by local contractors. Concrete rubble is being reused for site fill and road base and by the Mississippi Department of Marine Resources for artificial reefs. Specific requirements and procedures are described in NCBC Gulfport's SWMP.</p>	Programmatic	SW
<p><u>CHRIMP FEAD Contractors.</u> This initiative is retained from the previous P2MP update. Tracking and properly managing HAZMAT used in construction and renovation initiatives by FEAD contractors will help reduce environmental and safety liabilities.</p>	Programmatic	AE HM HW SW
<p><u>Placement of Spill Kits in Shops.</u> NCBC Gulfport has an initiative to place spill kits in shops in which there is a high probability of spills from HAZMAT. Spill kits were observed in most shops during the August 2013 site visit.</p>	Technical	HW WW

¹ AE = Air Emissions; HM = Hazardous Materials; HW = Hazardous Waste; RC = Resource Conservation; SW = Surface Water; WW = Waste Water

Table 9-4, below, presents previously suggested P2 initiatives as well as their implementation status. A brief description of the initiative as well as the initiative type and effected media is included.

Table 9-4		
Previously Suggested Initiatives		
Previously Suggested Initiatives	Type of Initiative	Effected Media¹
<p><u>Develop a “P2 Suggestion” button on the NCBC Gulfport Environmental web site.</u> Due to staffing, manpower, and funding issues, this initiative has not been implemented. It would have increased awareness of P2 and provided a mechanism for all personnel to provide input and suggestions.</p>	Programmatic	AE HM HW SW WW
<p><u>Filter and purify waste diesel fuel for use in generators at NCBC Gulfport.</u> This initiative has not and will not be implemented due to manpower issues. It would have resulted in reuse of a material with significant fuel value for beneficial reuse and used fuels are being recycled. It should be noted that waste fuel is recycled by a DLA Disposition Services contractor.</p>	Technical	HM SW
<p><u>Use arc-welding emission reduction equipment for welding, grinding, cutting and gouging operations.</u> This initiative has not been implemented. Shops are not using welding fume hoods and other air emissions control devices. Most welding is performed outside or bay doors are opened during welding operations to allow fumes to escape. The major benefit of these controls will be for occupational health and safety rather than P2. However, about 80% of the arc welding has been replaced with wire welding to reduce emissions.</p>	Technical	AE
<p><u>Use hydraulic fluid purifier to extend the use of hydraulic fluid by 60%.</u> This initiative has not and will not be implemented due to funding and manpower issues. It was retained from previous P2MP updates.</p>	Technical	HM SW
<p><u>Use biodegradable fluids for hydraulic equipment.</u> This initiative has not and will not be implemented due to funding and manpower issues. Readily biodegradable, low-toxicity natural vegetable-based and synthetic ester-based lubricants have been developed for environmentally sensitive markets. These lubricants may offer improved thermal and oxidative stability properties over mineral-oil-based lubricants.</p>	Technical	HM HW

Table 9-4 (continued)		
Previously Suggested Initiatives		
Previously Suggested Initiatives	Type of Initiative	Effected Media¹
<p><u>Use Waterborne Paint Systems.</u> This initiative was not implemented because all painting operations at NCBC Gulfport switched to low-VOC paints. Waterborne paints, such as PPG Industries' Envirobase High Performance coatings, may be safer for employees and better for the environment, and may produce a superior finish at a lower cost. Waterborne paints can reportedly reduce base-coat-sourced VOC emissions by up to 80 percent when compared to conventional solvent-based base coatings.</p>	Technical	AE HM HW
<p><u>Use abrasive blast media lease and recycling services.</u> This initiative was not implemented because no vendor could be located that could provide blast media in the amount needed by NCBC Gulfport. Certain vendors offer federal and state approved programs to recycle blasting media. This can reduce transportation, tracking, and disposal costs. Spent blast media is recycled into beneficial manufactured consumer products, such as bathroom sinks, plastic yard pots, benches, and concrete masonry units. NCBC Gulfport's blast media is currently being landfilled as a non-hazardous solid waste. The installation tests all equipment prior to blasting for lead, cadmium, or chromium. Those pieces of equipment which test positive for these chemicals are not blasted.</p>	Technical	AE HW SW
<p><u>Procure Automatic Battery Watering System.</u> Due to staff turnover, this initiative was not implemented. Additionally, NCBC Gulfport has procured alternative battery charging systems that achieve the same benefits as automatic battery watering systems. This initiative was identified for implementation by the previous P2 Program Manager to reduce spills, improve worker safety, reduce maintenance costs, and extend battery life. Most of the batteries that are generated by the Battalions are 12 and 24-volt from heavy equipment. This equipment sits in the warehouse for extended periods which result in dead batteries.</p>	Technical	HM HW WW

Table 9-4 (continued)		
Previously Suggested Initiatives		
Previously Suggested Initiatives	Type of Initiative	Effected Media¹
<p><u>Minimize the disposal of deployed materials and PWRMS as HW.</u> This initiative was partially implemented because most of the PWRMS has been turned over and restocked. NCBC Gulfport’s CHRIMP also stores materials (e.g., paints, acetylene, welding rods, greases, adhesives, fuel additives, etc.) which are ready to ship when needed. Most of the material (about 90%) from the PWRMS is waste (e.g., expired material). A new supply system has been implemented and procedures have been put in place to use local DLA Disposition Services rather than returning unused materials and wastes to NCBC Gulfport. This initiative will monitor the effectiveness of these systems and procedures at reducing the amount of HW generated from returning PWRMS.</p>	Programmatic	HW SW

¹ AE = Air Emissions; HM = Hazardous Materials; HW = Hazardous Waste; RC = Resource Conservation; SW = Surface Water; WW = Waste Water

The final table of this section, Table 9-5 presents priority P2 initiatives based on the August 2013 P2MP site visit, strategy review teleconference, and review of previous P2 initiatives. These initiatives are further described in Appendix B, complete with a POA&M to evaluate the progress of the initiative.

Table 9-5		
Priority Initiatives		
Priority Initiatives	Type of Initiative	Effected Media¹
<p><u>Increase Number of Recycling Container Locations.</u> Add more recycling containers to the installation (including at tenants).</p>	Programmatic	SW
<p><u>Hire Staff for CHRIMP.</u> Hire one to two more staff to support implementation of CHRIMP. This includes shop inspections, inventory management, ERP labeling on all products, and incorporation of all NCBC Tenants.</p>	Programmatic	HM
<p><u>Identify vendor for recycling/reuse of spent blast media.</u> Reduce amount of blast media disposed as solid waste; increase in NCBC Gulfport’s recycling rate.</p>	Programmatic	SW

Table 9-5 (continued)		
Priority Initiatives		
Priority Initiatives	Type of Initiative	Effected Media¹
<u>New oil distribution nozzles.</u> Implement oil nozzles observed at CED shops to other vehicle maintenance areas throughout NCBC Gulfport.	Technical	HW

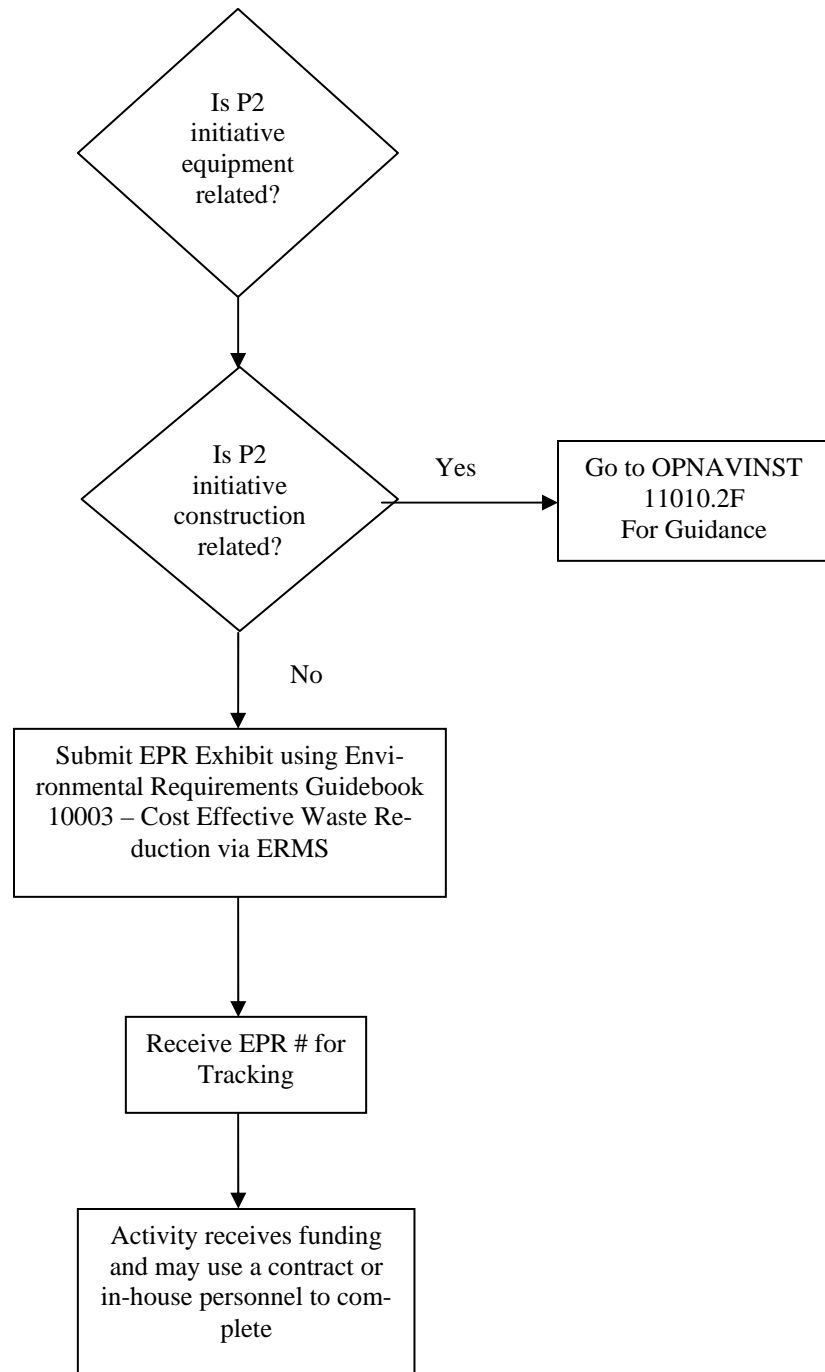
¹ HM = Hazardous Materials; HW = Hazardous Waste; SW = Surface Water

10.0 INITIATIVE FUNDING

P2 initiative funding requests for the next two to four years are tracked through the EPR system. The EPR system is at <https://eprportal.cnrnw.navy.mil> and can only be accessed through a secure Navy Marine Corps Internet connection. After the NCBC Gulfport P2 Program Manager has identified, evaluated, and approved a P2 initiative, it is entered into the EPR system and given an EPR number. The funding request is then reviewed by the Environmental Director and routed up the regional chain for approval using the EPR system. An “EPR Guidebook” is available to assist with data entry and protocol for using the system. Status of initiative funding can be monitored through the EPR system. The user must update the EPR system to indicate that the initiative has been completed once funding is approved and implemented.

Typically, EPRs for new requirements must be submitted at least three years (current FY plus two) prior to the anticipated need for the resources. Resource requirements that are more urgent generally require identification over less critical initiatives (with programmed funding) to serve as offsets. If no such sacrificial initiatives are available within NCBC Gulfport, the Commander, Naval Region Southeast (CNRSE) will determine whether resources can be made available from resources originally programmed for another installation within the CNRSE area of responsibility. If a requirement is critical and cannot be met by funds available within the region, the major claimant will examine funding priorities across its entire area of responsibility; persistent critical requirements can be elevated to the Chief of Naval Operations for worldwide funding priority consideration. The level of scrutiny and demand for detailed supporting information typically increases with each escalation in command level at which resources must be sought.

Figure 10-1 P2 Funding Flowchart



APPENDIX A

Table of Work Centers with Points of Contact Media Matrix

NCBC Work Centers and Points of Contact					
Command	Work Center Name	Shop Name	Building Number	Work Center #	Phone (228)
NCBC Gulfport	CEDA	A-Shop	400	932	871-2267
NCBC Gulfport	CEDB	B-Shop	400	933	871-2267
NCBC Gulfport	CEDC	Automotive C-Shop	400	935	871-2267
NCBC Gulfport	CEDD	D-Shop	400	943D	871-2267
NCBC Gulfport	DENTAL	Dental Clinic	295	Code 100	871-2605
NCBC Gulfport	FIREDEPT	Fire Department	321	N/A	871-2414
Fleet Logistics Center – Jacksonville	HAZMATCEN	HAZMATCEN	228	N/A	822-5073
Marine Corps	MARINES	Motor Pool	243	Marine Corps Reserve Center	871-2750
NCBC Gulfport	MEDICAL	Medical Clinic	295	Code 100	871-2810, x214
NCBC Gulfport	MWRHOBBY	Auto Hobby Shop	397	N/A	871-2804
NCG-2	NCG2-BMF1	Battalion Maintenance Facility – Bay 1	465	Battalion Maintenance	871-2964
NCG-2	NCG2-BMF2	Battalion Maintenance Facility – Bay 2	465	Battalion Maintenance	871-2964
NCG-2	NCRARMS	Woolmarket Range	N/A	R-75C.2	392-4998
NCG-2	NCRCOMMU	Communications Systems	432	TC01	871-3231
NCG-2	NCRCONT	Equipment Department	K6	Contingency Training	871-2145
NCG-2	NCRMUN	Munitions Division	122	R-75B.1	871-2463
NCG-2	NCRORDNA	Armory	435	Ordnance	871-2564
NCG-2	NCRSUPL	Supply	225A & B	R-41A	871-3423
NCG-2	NCRTOOL	Central Tool Room	39	SS04	871-2058
NCG-2	NCRVEHIC	Equipment Department	241	R-436	871-2783

NCBC Work Centers and Points of Contact					
Command	Work Center Name	Shop Name	Building Number	Work Center #	Phone (228)
NCTC	NCTCACR	Air Conditioning Repair Shop	385	N/A	871-3223
NCTC	NCTCESE	Civil Engineer Support Equipment	241	CESE Maintenance Division	871-3223
NCTC	NCTCDFS	Diesel Fuel Systems Shop (includes Electrical Shop)	70	N/A	871-3223
NCTC	NCTCENGR	Engineering Aids Soils Lab	385	Alpha Company	871-3223
NCTC	NCTC-F	Electric Fuel Injection Trainer Simulator	70	A Bay	871-3223
NCTC	NCTCHCS	Heavy Chassis Shop (includes Hydraulic Shop)	70	N/A	871-3223
NCTC	NCTCHEAD	Automotive Head Reconditioning Shop	346	C Bay	871-3223
NCTC	NCTCLCS	Light Chassis Shop	70	C Bay	871-3223
NCTC	NCTCPLUM	Plumbing Shop	385	N/A	871-3223
NCTC	NCTCPRAC	Cable Splicing Training Course & Interior Wiring Training Course	305	Practical Room	871-3223
NCTC	NCTCSHET	Sheet Metal Shop	67	N/A	871-3223
NCTC	NCTCTRAN	Transmission Shop	345	N/A	871-3223
NCTC	NCTCWELD	Welding Shop	67	N/A	871-3223
NCTC	NCTCWTTT	Water Treatment/Boiler Training Course	385	N/A	871-3223
NAVFAC	PWCARP	Carpenter Shop	274	400	871-2861
NAVFAC	PWPAINT	Paint Shop	266	400	871-2861
NAVFAC	PWPEST	Pest Control	421	400	871-2861
NAVFAC	PWSHTMTL	Sheet Metal	274	400	871-2861
NAVFAC	PWUTIL	Utilities	274	400	871-2861
NCBC Gulfport	RECYCLE	Recycle	275	N/A	871-4738
Fleet Logistics Center	SUPPACK	Packing & Preservation Center	437	564	871-2450

Media Matrix

The Media Matrix is a tabulation of work centers at NCBC Gulfport that have multiple processes and/or a high potential to generate pollution in one of the listed media areas. It is a tool to (1) quickly determine which media a certain work center may impact and (2) assist in reaching a consensus on P2 initiatives that address multiple media areas. Data gathered during site surveys are used to populate the matrix. The matrix is intended to be a dynamic document. As such, future updates to this P2MP and periodic work center surveys should expand or reduce the matrix as necessary.

It should be noted that sustainability initiatives (i.e., reduction in energy and water consumption) and energy/fuel efficiency initiatives apply to all work centers and are not presented below.

Work Center	Air	Hazardous Materials	Hazardous Waste	Wastewater	Solid Waste
CEDA	X	X	X	X	X
CEDB	X	X	X	X	X
CEDC	X	X	X	X	X
CEDD	X	X	X	X	X
DENTAL		X	X	X	X
FIREDEPT	X	X	X	X	X
HAZMATCEN	X	X	X	X	X
MARINES	X	X	X	X	X
MEDICAL		X	X		X
MWRHOBBY	X	X	X	X	X
NCG2-BMF1	X	X	X	X	X
NCG2-BMF2	X	X	X	X	X
NCRARMS	X	X	X	X	X
NCRCOMMU	X	X	X		X
NCRCONT		X	X		X
NCRMUN	X	X	X		X
NCRORDNA	X	X	X		X
NCRSUPL		X	X		X
NCRTOOL	X	X	X		X
NCRVEHIC	X	X	X	X	X
NCTCACR	X	X	X		X
NCTCCESE	X	X	X	X	X
NCTCDFS	X	X	X		X
NCTCENGR		X	X		X
NCTC-F	X	X	X	X	X
NCTCHCS		X	X		X
NCTCHEAD		X	X	X	X

Work Center	Air	Hazardous Materials	Hazardous Waste	Wastewater	Solid Waste
NCTCLCS		X	X		X
NCTCPLUM	X	X	X	X	X
NCTCPRAC		X	X		X
NCTCSHET	X	X	X		X
NCTCTRAN		X	X	X	X
NCTCWELD	X	X	X		X
NCTCWTTT		X	X		X
PWCARP	X	X	X		X
PWPAIN	X	X	X	X	X
PWPEST	X	X	X	X	X
PWSHTMTL	X	X	X		X
PWUTIL	X	X	X	X	X
RECYCLE		X			X
SUPPACK	X	X	X		X

APPENDIX B

CURRENT P2 INITIATIVES AND LIFE CYCLE COSTS

P2 INITIATIVES AND RANKINGS

Several P2 Initiatives were identified as a result of the August 2013 site visit. The table, below, describes the initiatives that were selected by the NCBC Gulfport P2 Program Manager and the NAVFAC Southeast Regional Program Manager. Also included is NCBC Gulfport’s preferred strategy priority.

P2 Initiatives for Evaluation		
Initiative	Description	Priority
Increase Number of Recycling Container Locations	Add more recycling containers to the installation (including at tenants).	1
Hire Staff for CHRIMP	Hire one to two more staff to support implementation of CHRIMP. This includes shop inspections, inventory management, ERP labeling on all products, and incorporation of all NCBC Tenants.	2
Identify vendor for recycling/reuse of spent blast media	Reduce amount of blast media disposed as solid waste; increase in NCBC Gulfport’s recycling rate.	3
New oil distribution nozzles	Implement oil nozzles observed at CED shops to other vehicle maintenance areas throughout NCBC Gulfport.	4

Several additional initiatives were suggested to NCBC Gulfport and NAVFAC Southeast, but not selected for further evaluation. These initiatives are identified in the table below. These initiatives may not be appropriate to NCBC Gulfport due to many reasons (e.g., lack of manpower, funding, not cost effective, etc.) but are included in the P2MP so they may be reconsidered during recurring evaluation of the P2 Program.

Initiatives Suggested but not Selected	
Initiative	Description
Recycle used polyvinyl chloride (PVC) pipes	Identified at NCTC Plumbing Shop (and others as applicable) to separate and recycle PVC used during training courses.
Storm water, Solid Waste, and Natural/Cultural Resources Training at Camp Keller	Increased awareness for Sailors, Marines, and other personnel to reduce number of environmental concerns.
Evaluate recent solvent-contaminated wipe Resource Conservation and Recovery Act exemption	Solvent-contaminated wipes, if managed correctly, may be exempted from HW stream. Increase training for shop staff so they know they can use rags until fully soaked. Don’t use rag once and then throw it away.
Brake cleaner recharge stations	Implement brake cleaner recharging stations at non-CED shops throughout NCBC Gulfport.
Oil vacuum	Purchase an oil vacuum for NCTCESE – Maintenance Division to reduce the need for oil contaminated pads/rags when draining engines and maintenance.

Initiatives Suggested but not Selected	
Initiative	Description
Remove AST at Building 385	Remove tank and replace with jerry cans that are filled prior to class commencement. AST is old and corroded and prone to leaks.
Used cooking oil recycling	Evaluate scenario where NCBC is paid for used cooking oil which is then converted to biodiesel.
Blue Pad Program	Evaluate viability of an oil spill pad reuse program.
Investigate Maintenance Requirement Cards (MRCs)	MRCs dictate using solvent-based parts washers. Look into how easy it is to change MRCs to aqueous-based parts washers.

The selected initiatives are further evaluated and elaborated in this section. Each initiative is evaluated in a P2OA, which is created to evaluate opportunities to reduce waste or otherwise minimize environmental impacts with consideration given to cost-effectiveness, impacts to mission requirements, ease of implementation, and whether similar measures have been successfully implemented at similar facilities.

P2OA-01: INCREASE NUMBER OF RECYCLING CONTAINER LOCATIONS

Objectives

- Increase availability of recycling containers to staff at NCBC Gulfport and Camp Keller.
- Increase NCBC Gulfport’s solid waste diversion rate.
- Increase profitability of NCBC Gulfport’s QRP.

Work Centers or Tenants Affected

This P2OA will affect many work centers at NCBC Gulfport and Camp Keller. A full listing on affected work centers is listed below.

Initiative Description

This P2OA intends to increase the number of recycling containers available to staff at NCBC Gulfport and Camp Keller. Increasing the number of recycling containers will theoretically increase the recycling rate (and solid waste diversion rate), will reduce the amount of non-HW that is disposed in the landfill, and will increase the profitability of the QRP. A POA&M template is provided for NCBC Gulfport to track implementation of this P2OA. An economic summary of P2OA-01 is included in the table, below.

Estimated Capital Cost	Estimated Annual Savings (after initiative)	Estimated Solid Waste Diversion	Payback Period (years)
\$27,161	\$194,738	286 tons	0.24

Regulatory Driver

- EOs 13423 and 13514
- 40 CFR 246
- Section 49-31-21, Mississippi Multimedia Pollution Prevention Act
- DoD FY 2012 Strategic Sustainability Performance Plan
- DoDI 4715.4
- OPNAVINST 5090.1D (or most recent version)

Discussion

NCBC Gulfport’s solid waste management and QRP have achieved great success at diverting non-hazardous solid waste from waste streams disposed in landfills. From FY 2010 to FY 2012, the solid waste diversion rate increased from 17.9% to 32.89%. The amount of materials recycled at NCBC Gulfport also increased from 517 tons in FY 2010 to 978 tons in FY 2012. Since 2009, NCBC Gulfport annually diverts close to 100 percent of its C&D debris.

With this success, there is still room for increased recycling at NCBC Gulfport. During the August 2013 site visit, interviews and walkthroughs of work centers led to the observation NCBC Gulfport would benefit from increased access to recycling containers. The 2013 NCBC Gulfport SWMP supports this observation, as it estimated there is an

addition 571 tons of recyclable material that is regularly disposed in solid waste dumpsters on an annual basis. The majority of recyclable material observed in solid waste dumpsters included mixed paper, aluminum cans, plastic materials, and cardboard. A list of the affected work centers and the materials that could be recycled is provided in the table, below.

Bldg #	Facility	Plastic	Cardboard	Mixed Paper	Aluminum
448	Subway	X	X	-	-
410	Seabee Lake	X	X	-	X
29/30	Thrift Store	X	-	-	X
400	CED	X	X	X	X
397	MWR Hobby Shop	X	-	X	X
452	Welcome Center	X	-	X	X
367	Galley	X	X	-	X
40	Cold Storage	X	X	-	-
335	CDC	X	X	X	-
273/274	Supply Warehouse	X	X	X	X
Multiple	NCTC	X	X	X	X
N/A	Camp Keller Bay 1	X	X	-	X
N/A	Camp Keller Bay 2	X	X	-	-
N/A	Camp Keller Bay 3	X	X	-	X
Multiple	BEQ	X	X	-	X
225	Warehouse	X	X	X	X
203	Warehouse	X	X	X	-

Note: Taken from the 2013 SWMP

It is assumed that at least 100 small (28-quart) and 50 medium (20-gallon) single-stream recycling containers need to be purchased. Smaller containers can be used for individual offices while larger containers can be used in general areas such as CED shops, NCTC shops, the Galley, the Welcome Center, and BEQs. An additional five cardboard recycling containers need to be purchased and staged in areas such as the Galley, Seabee Lake, Camp Keller, the CED shops and NCTC shops. Depending on the recycling priorities and material throughput, NCBC Gulfport could opt to purchase less small containers and more medium and cardboard recycling containers.

Currently, the QRP operates with two full-time staff and two part-time staff. QRP staff perform collections four days a week at SSC and one day a week at NCBC Gulfport. It is anticipated that the increase in recycling containers will lead to an increase in the need for recycling collection. It is suggested that two more part time staff are hired to perform collections at NCBC Gulfport while the original QRP staff continue with their regular schedules at SSC and NCBC Gulfport.

A conservative estimate for increase in recyclable materials is approximately 50% of the 571 tons identified in the 2013 SWMP. This would equate to 286 tons. If one adds this

to the 928 tons that NCBC Gulfport already recycles, it would result in 1,2145 tons of recycled material. With the increase of recycling containers and subsequent increase of solid waste diversion, NCBC Gulfport's solid waste diversion rate could potentially increase to 42.5%. Additional information and assumptions are detailed in the Cost-Benefit Analysis section.

Metrics and Tracking

- Locations where recycling containers are deployed; number/type of recycling containers deployed per location.
- Amount of recyclable materials in recycling container; amount of recycling material collected by location.
- Change in amount of recyclable material collected; change in solid waste diversion rate.
- Cost of solid waste disposal in landfill; cost of operating QRP; profit of QRP.

Cost-Benefit Analysis

Installation Name: NCBC Gulfport	Project Number P2OA-01	Prepared By: J. Johnson Checked By:
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Increase availability of recyclable materials containers

Cost Element	Status Quo Operational Estimate (before P2 solution)			Pollution Prevention Opportunity Cost Estimate (after P2 Solution Identified)							
	Unit Cost	No. of Units	Cost	Investment Costs				Operating Costs			
				Unit Cost	No. of Units	Cost	Diff. Savings	Unit Cost	No. of Units	Cost	Diff. Savings
INDIRECT CAPITAL COSTS											
P2 Manager Time			\$0.00	\$100.00	40.00	\$4,000.00	(4,000)			\$0.00	\$0.00
DIRECT CAPITAL COSTS											
Small Recycling Bins (28 qt)			\$0.00	\$8.86	100	\$886.00	(886)			\$0.00	\$0.00
Medium Recycling Bins (20 gal)			\$0.00	\$31.66	50	\$1,583.00	(1,583)			\$0.00	\$0.00
Cardboard Recycling Bin (50 gal)			\$0.00	\$138.38	5	\$691.90	(692)			\$0.00	\$0.00
OPERATING COSTS											
Disposal Cost	\$349.74	1,930	\$674,998.20			\$0.00	0	\$349.74	1,645	\$575,147.43	\$99,850.77
Recycling Cost	\$40.65	928	\$37,722.36			\$0.00	0	\$40.65	1,214	\$49,327.68	(\$11,605.32)
Recycling Revenue	(\$375.17)	928	(\$348,156.83)			\$0.00	0	(\$375.17)	1,214	(\$455,267.58)	\$107,110.75
Additional Manpower			\$0.00	\$50.00	800	\$40,000.00	(40,000)			\$0.00	\$0.00
O&M			\$0.00			\$0.00	0			\$0.00	\$0.00
SUPPLIES (new small bins)			\$0.00			\$0.00	0	\$31.66	13	\$395.75	(\$395.75)
SUPPLIES (new medium bins)			\$0.00			\$0.00	0	\$8.86	25	\$221.50	(\$221.50)
SUPPLIES (new cardboard bins)			\$0.00			\$0.00	0	\$138.38	1	\$138.38	(\$138.38)
TOTAL COSTS/SAVINGS			\$364,563.73			\$47,180.90	(47,181)			\$189,824.78	\$194,738.95
PAYBACK PERIOD (YEARS):						0.24		NOTE: () INDICATE NEGATIVE VALUE			

Notes & Assumptions:

Disposal cost and amount of solid waste (tons) calculated from FY12 P2ADS

Recycling cost and amount of recycled materials (tons) calculated from FY12 P2ADS

Recycling revenue and amount of recycled materials calculated from FY12 P2ADS

Assume 100 hours of upfront cost for SW/Recycling PM to organize P2OA-01

Cost of 28 quart recycling container from GSA Global Supply website (https://www.gsaglobalsupply.gsa.gov/advantage/catalog/product_detail.do?contractNumber=BPA-EDD-FL001-TL1&itemNumber=TL1-G3994291)

Cost of 20 gallon recycling container from GSA Global Supply website (https://www.gsaglobalsupply.gsa.gov/advantage/catalog/product_detail.do?contractNumber=BPA-EDD-FL001-TL1&itemNumber=TL1-G3994280)

Cost of 50 gallon recycling container from GSA Global Supply website (https://www.gsaglobalsupply.gsa.gov/advantage/catalog/product_detail.do?contractNumber=BPA-EDD-FL001-TL1&itemNumber=TL1-G3994336)

Manpower assumes two part-time staff working one day per week, eight hours a day, 50 days a year

Assume amount of solid waste disposed in landfill would decrease by 50% of additional recyclable material identified in ISWMP (285.5 tons)

Assume operating cost of QRP would increase by 285.5 tons

Assume amount of materials recycled would be increased by 285.5 tons

Assume program would have to replace 25% of recycling containers per year

POA&M

Action	Responsibility	Start Date	Completion Date	Notes

P2OA-02: HIRE STAFF FOR CHRIMP/HAZMATCEN

Objectives

- Integrate all contractors, tenants, and organizations at NCBC Gulfport into the CHRIMP.
- Increase the ability of HAZMATCEN staff to perform accurate HAZMAT inventories, work center inspections, and HAZMAT tracking at NCBC Gulfport.
- Save tenants and organizations money through inventory control, shelf-life extension, and reuse programs. Save NCBC Gulfport money by reduction in disposal costs.
- Reduce potential for spills due to improper storage of HAZMAT.
- Reduce amounts of solid waste and HW that must be disposed.

Work Centers or Tenants Affected

Initially, this P2OA would affect the HAZMATCEN and CHRIMP; however, if more staff are appropriated to work in the HAZMATCEN, all work centers and contractors at NCBC Gulfport would be affected.

Initiative Description

This P2OA intends to increase the number of staff that work in NCBC Gulfport's HAZMATCEN. An increase in staff will allow real-time AUL revisions, work center inspections, and a more accurate extension/re-use program. A POA&M template is provided for NCBC Gulfport to track implementation of this P2OA. An economic summary of P2OA-02 is not available. It is assumed that the benefits of additional HAZMATCEN staff would be experienced through full implementation of CHRIMP. Cost savings would be experienced following increase in staff through reduced HAZMAT purchasing and HW disposal.

Regulatory Driver

- EOs 13423 and 13514
- Section 49-31-21, Mississippi Multimedia Pollution Prevention Act
- DoDI 4210.15
- OPNAVINST 5090.1D (or most recent version)

Discussion

NCBC Gulfport currently maintains a HAZMATCEN that operates its CHRIMP. HAZMAT are procured for work centers that have integrated their procurement process with CHRIMP. There are two full-time CHRIMP staff who are responsible for:

- Receipt and barcoding of HAZMAT ordered by work centers operating in accordance with the CHRIMP
- Creation and maintenance of work center AULs
- Conducting work center HAZMAT locker inspections
- Running the re-use, shelf-life extension, and HAZMAT turn-in processes

- Setting up new contractors and tenants in the CHRIMP

During the August 2013 site visit, interviews were conducted with the HAZMATCEN personnel. It was revealed that the HAZMATCEN staff are unable to complete all of their responsibilities and only receive and barcode HAZMAT ordered by NCBC Gulfport's work centers. They do not have time to address any of the remaining bullets listed above. Therefore, this P2OA addresses hiring additional staff that can be trained to perform HAZMATCEN functions. The paragraphs below describe the actions that additional HAZMATCEN staff will be able to accomplish.

Review and revise work center AULs. During the August 2013 site visit, an assessment of work center AULs was conducted. It was observed that many AULs were either (1) not present or (2) not current. Materials were observed on AULs that either had more sustainable or less hazardous replacements. Maintaining revised AULs will eliminate obsolete materials being ordered by work centers and will reduce the amount of HW that will need to be disposed.

Integrate all NCBC tenants and contractors into the CHRIMP. Currently, many of the tenants and contractors at NCBC Gulfport participate in the CHRIMP. For example, the CED work centers all had barcoded HAZMAT and accurate AULs. There is, however, room for improvement. The NCG2-BMF work centers did not have AULs or barcoded HAZMAT and are not involved in the CHRIMP. The addition of more staff will allow the CHRIMP to identify tenants and contractors who are working at NCBC Gulfport and involve them in the CHRIMP. This will increase program participation and will reduce procurement of unallowable or excess materials. The end result will be a reduction in the amount of HW and associated disposal costs.

Increase work center/HAZMAT locker inspections. The increase in HAZMATCEN staff will allow for the increase of work center locker inspections. One of the pillars of a good CHRIMP is control of onsite HAZMAT. This begins with AULs and is enforced through a locker inspection program. Inspections will look for unbarcoded HAZMAT, illicit or unallowable stock, and overstocked HAZMAT. HAZMATCEN personnel will also reinforce the importance of proper HAZMAT storage, update HAZMAT coordinator points of contact, and notify users of re-use, shelf-life extension, and turn-in processes. The overall result will be increased environmental compliance from old, leaking containers and better overall HAZMAT cabinet management. Standing stock will also reduce as work centers are notified of re-use stock available through the HAZMATCEN.

Increase in re-use, shelf-life extension, and turn-in processes. An increase in HAZMATCEN staff will allow for an expansion of NCBC Gulfport's re-use, shelf-life extension, and turn-in processes. Currently, a re-use list is circulated to HAZMAT coordinators on a monthly basis. The process relies on work centers bringing unnecessary materials to the HAZMATCEN. Additional staff could pick up overstocked HAZMAT lockers during inspection and place additional stock into the re-use process. The increased availability of material for re-use will decrease operating costs for the work centers and decrease disposal amounts/costs for NCBC Gulfport. Similarly, with the shelf-life extension, increased HAZMATCEN personnel will be able to lookup and process materials that can receive shelf-life extensions. Currently, due to lack of staffing,

expired materials are disposed as HW. Increasing the shelf-life extension process will decrease operating costs for the work centers and decrease disposal amounts/costs for NCBC Gulfport. Lastly, increased HAZMATCEN personnel could establish a turn-in process in which work centers are not allowed to pick up material unless they return the old containers. This is also known as a “one in, one out” process. The benefits from this process would be an increase in the amount of recyclable materials that are coming into the HAZMATCEN and subsequently transferred to the QRP. It also helps to maintain inventory control at the work centers, ensures no overstocking of HAZMAT lockers occurs, and ensures that no obsolete/illicit materials are purchased by work centers.

Hiring additional staff at the HAZMATCEN begins with a conversation between NCBC Gulfport’s Environmental Office and CHRIMP. This P2OA will be a collaborative effort between the two organizations because improvements made under the CHRIMP will result in enhanced environmental performance. For example, a reduction in expired HAZMAT will result in reduced HW and associated disposal costs. Additionally, success of a HAZMAT turn-in process should increase profitability of the QRP.

Metrics and Tracking

- Amount of HAZMAT turned in for re-use
- Amount of HAZMAT that has undergone shelf-life extension; amount of HAZMAT disposed due to shelf-life extension
- Amount of money (by work center/activity/installation) saved due to re-use and shelf-life extension
- Amount of scrap metal collected from HAZMATCEN (from HAZMAT turn-in)
- Amount of unauthorized HAZMAT confiscated during inspections (i.e., HAZMAT not listed on work center AUL)
- Number of HAZMAT cabinet inspections; results of inspections

POA&M

Action	Responsibility	Start Date	Completion Date	Notes

P2OA-03: IDENTIFY VENDOR FOR RECYCLING/REUSE OF SPENT BLAST MEDIA

Objectives

Identify and perform cost-analysis for a vendor that can provide recycling services for waste blast media. The vendor must also be able to provide an equal amount of virgin blast media to NCBC Gulfport.

Work Centers or Tenants Affected

Initially, this initiative would apply to the large blast booth that is utilized by CED D. Once the recycling/reuse program is fully operational, additional work centers listed below could be incorporated:

- CED A
- CED C
- NCRVEHIC
- NCTCLCS
- NCTCHCS

Initiative Description

This initiative addresses identification of a vendor that is capable of delivering and recycling garnet blast media in quantities sufficient for NCBC Gulfport’s use. An economic summary of P2OA-03 is included in the table, below.

Estimated Capital Cost	Estimated Annual Savings (after project)	Estimated Solid Waste Diversion	Payback Period (years)
\$4,000	-\$17,657	30,000 lbs	-0.23

Regulatory Driver

- EOs 13423 and 13514
- Section 49-31-21, Mississippi Multimedia Pollution Prevention Act
- OPNAVINST 5090.1D (or most recent version)

Discussion

Currently, NCBC Gulfport annually disposes of approximately 30,000 pounds of spent blast media into a solid waste landfill. This encompasses several different types of blast media including garnet beads, sand beads, glass beads and aluminum oxide beads. As part of this P2OA, several companies in the Mississippi, Alabama, Louisiana area were contacted to determine if they could provide the amount of blast media discussed above and recycle that amount. The following companies were identified as possible vendors that could provide blast media recycling/reuse services to NCBC Gulfport.

- Nederman (www.nederman.com)
- Kleen Blast (www.kleenblast.com)

- UST Media (www.ustmedia.com)

After an additional evaluation, it was determined that UST Media has sufficient capability to support NCBC with a “lease and recycle” system for garnet blast media. UST Media will lease blast media to NCBC Gulfport. The lease cost will include freight costs to/from NCBC Gulfport as well as all blast media containers (e.g., drums, bins, bags). Blast media disposed by NCBC Gulfport is categorized as a non-hazardous solid waste. UST Media also offers disposal of HW in the event that HW blast media is generated. This additional service would not be included in the initial contract, but could be negotiated as an additional item. Refer to UST Media’s Lease & Recycle [Brochure](#) for more information.

A prior issue with identifying blast media reuse/recycling for NCBC Gulfport has been the location and amount of material throughput. Per discussions with UST Media, neither of these historical issues would pose a problem. The spent blast media is incorporated into mix for pouring and producing concrete-type blocks. The blocks are then used in several types of residential and commercial buildings and applications.

This initiative is not economically feasible for NCBC Gulfport. Currently, purchasing and disposing of blast media costs NCBC Gulfport \$22,842 annually. Recycling the blast media through UST media would an additional \$17,657 annually.

Metrics and Tracking

- Amount of garnet blast media recycled per year
- Annual cost of lease/recycle program
- Annual cost of disposing blast media in solid waste landfill

Cost-Benefit Analysis

Installation Name: NCBC Gulfport	Project Number P2OA-03	Prepared By: J. Johnson Checked By:
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Identify vendor for recycling/reuse of spent blast media

Cost Element	Status Quo Operational Estimate (before P2 solution)			Pollution Prevention Opportunity Cost Estimate (after P2 Solution Identified)							
	Unit Cost	No. of Units	Cost	Investment Costs				Operating Costs			
				Unit Cost	No. of Units	Cost	Diff. Savings	Unit Cost	No. of Units	Cost	Diff. Savings
INDIRECT CAPITAL COSTS											
P2 Manager Time			\$0.00	\$100.00	40.00	\$4,000.00	(4,000)			\$0.00	\$0.00
DIRECT CAPITAL COSTS											
Blast Media (garnet)	\$1,173.09	15	\$17,596.36			\$0.00	0			\$0.00	\$17,596.36
OPERATING COSTS											
Disposal Cost	\$349.74	15	\$5,246.10			\$0.00	0			\$0.00	\$5,246.10
Blast Media, Delivery & Recycling Cost			\$0.00			\$0.00	0	\$2,700.00	15	\$40,500.00	(\$40,500.00)
O&M			\$0.00			\$0.00	0			\$0.00	\$0.00
TOTAL COSTS/SAVINGS			\$22,842.46			\$4,000.00	(4,000)			\$40,500.00	(\$17,657.54)
PAYBACK PERIOD (YEARS):						-0.23		NOTE: () INDICATE NEGATIVE VALUE			

Notes & Assumptions:

Assume that NCBC Gulfport is currently purchasing (32.26 per 55 lbs) garnet blast media from GSA. [https://www.gsaglobalsupply.gsa.gov/advantage/catalog/product_detail.do?oid=496158959&itemIndex=-1]

Disposal cost calculated from FY12 P2ADS

Amount of spent blast media, and necessary new blast media, (30,000 lbs / 15 tons) from Mr Stanley Smith, NCBC Gulfport

Assume 100 hours of upfront cost for HW PM to organize P2OA-03

Unit cost recycling spent blast media is \$1.35 per pound per UST Media

POA&M

Action	Responsibility	Start Date	Completion Date	Notes

P2OA-04: INSTALLATION OF METERED POL DISPENSERS IN MOTOR VEHICLE MAINTENANCE SHOPS

Objectives

Identify and perform cost-analysis for installation of metered POL dispensers in motor vehicle maintenance shops. This initiative seeks to reduce the number of minor leaks and drips from transfer of minor quantities of POLs and reduce the amount of clean-up material disposed as HW.

Work Centers or Tenants Affected

This initiative would apply to the following work centers:

- Marines
- MWR Hobby
- NCG2-BMF1
- NCG2-BMF2
- NCRVEHIC
- NCTCCESE

This initiative could also apply to new vehicle maintenance shops as they are established or older vehicle maintenance shops if they are renovated or retrofitted.

Initiative Description

This initiative addresses identification of a metered POL distribution system that can be installed in vehicle maintenance shops at NCBC Gulfport. An economic summary of P2OA-03 is included in the table, below.

Estimated Capital Cost	Estimated Annual Savings (after initiative)	Estimated Solid Waste Diversion	Payback Period (years)
\$14,007	\$1,295	4 tons	10.8

Regulatory Driver

- EOs 13423 and 13514
- Section 49-31-21, Mississippi Multimedia Pollution Prevention Act
- DoDI 4210.15
- OPNAVINST 5090.1 (or most recent version)

Discussion

NCBC Gulfport has several motor vehicle maintenance shops throughout the installation. These motor vehicle maintenance shops currently use POLs including engine oil, transmission fluid, and hydraulic fluid. These POLs are typically maintained in 55-gallon drums. POLs are either hand-pumped from vertically oriented drums or are gravity-fed through hoses and nozzles on horizontally oriented drums. During the August 2013 site visit, interviews with work center personnel indicated that oil absorbent material and

absorbent pads are typically used to clean up minor spills and leaks during the transfer of POLs into oil cans and containers that are used during maintenance activities. Many work center personnel mentioned that they were familiar with the metered distribution system that was installed in CED C and that their work centers would also benefit from a similar system.

The metered distribution system at CED C is composed of several ASTs outside of the facility. Each AST is double-walled and is located inside of a covered shed. The ASTs are piped, under pressure, to a central distribution system that is equipped with metered nozzles that hang from the ceiling. Each different type of POL is equipped with its own metered nozzle. Staff use each metered nozzle by entering the amount of POL they require. The system opens the nozzle, dispenses the exact quantity of POL, and then closes the nozzle. Each nozzle is equipped with a leak-tight fixture that prevents leaks and drips after the POL has been dispensed. This equipment has reduced the amount of spill absorbent material and absorbent pads produced by the CED work centers.

As CED C is a major vehicle maintenance facility at NCBC Gulfport, their distribution system (AST-based) is designed for high amounts of throughput. The work centers listed above all currently use drum-based distribution systems for their POL. It is suggested that their distribution systems remain drum-based. New Pig currently produces a *Complete Metered Dispensing System* for oil-based liquids that have viscosities less than 140 weight oil. The New Pig system is designed to fit inside of a 55-gallon drum. It provides product via an air-operated pump system and through a metered nozzle that measures product in eight ounce increments. The metered nozzle is equipped with a non-drip nozzle. The system also includes a 32-foot hose and reel that retracts once staff have finished using the hose. Upon emptying of a drum, the entire metered dispensing system is removed and inserted into a new drum of product. NCBC Gulfport has the capability to rinse, recover, and recycle these drums once they are free of product.

Compressed air, at 40 to 145 PSI is required to operate this metered dispensing system. It is assumed that most vehicle maintenance shops will have access to compressed air systems since they are responsible for conducting tire changes, rotations, and similar activities. Additionally, since these are drum-based metered distribution systems, sufficient secondary containment would need to be provided. Since most of the vehicle maintenance shops already contain POL drums, this is assumed to be easily accomplished. Some additional notes include:

The New Pig system would not be compatible with horizontally-oriented drums. According to the manufacturer, if oriented horizontally, product would not dispense properly. Also, the metering system does not come with a meter equipped with an automatic shut-off. If requested, a custom meter/nozzle assembly can be ordered at an additional cost. This custom meter/nozzle would allow users to input a certain amount of product to dispense. Once dispensed, the meter/nozzle would stop dispensing. Lastly, the manufacturer mentioned that while the system is designed for up to 55-gallon drums, it could be retrofitted for drums over 55 gallons in capacity. The tube that dispenses product to the hose-reel assembly is a 3/4-inch PVC tube that can be easily customized and replaced.

This initiative is not very economically beneficial to NCBC Gulfport. Based on initial implementation at 1/3 of motor vehicle maintenance shops, the reduction in solid waste would be only 4 tons. Diversion could rise up to 12 tons if implemented at all motor vehicle maintenance work centers; however, the payback period would still be several years.

Metrics and Tracking

- Number (amount or weight) of used drums from motor vehicle maintenance shops that are recycled.
- Number of spills in work centers with metered distribution system; number of spills in work centers without metered distribution system.
- Amount of spill clean-up material disposed per calendar year.

Cost-Benefit Analysis

Installation Name: NCBC Gulfport	Project Number P2OA-04	Prepared By: J. Johnson Checked By:
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Installation of Metered POL Dispensers in Motor Vehicle Maintenance Shops

Cost Element	Status Quo Operational Estimate (before P2 solution)			Pollution Prevention Opportunity Cost Estimate (after P2 Solution Identified)							
	Unit Cost	No. of Units	Cost	Investment Costs				Operating Costs			
				Unit Cost	No. of Units	Cost	Diff. Savings	Unit Cost	No. of Units	Cost	Diff. Savings
INDIRECT CAPITAL COSTS											
P2 Manager Time			\$0.00	\$100.00	20.00	\$2,000.00	(2,000)			\$0.00	\$0.00
Staff Training			\$0.00	\$50.00	4.00	\$200.00	(200)				
DIRECT CAPITAL COSTS											
Metered POL System (stock)			\$0.00	\$1,448.75	8	\$11,590.00	(11,590)			\$0.00	\$0.00
Stock Shipping Cost			\$0.00	\$217.48	1	\$217.48	(217)			\$0.00	\$0.00
Metered POL System (custom)			\$0.00			\$0.00	0			\$0.00	\$0.00
Custom Shipping Cost			\$0.00			\$0.00	0			\$0.00	\$0.00
OPERATING COSTS											
Disposal Cost	\$349.74	13	\$4,487.16			\$0.00	0	\$349.74	9	\$2,991.44	\$1,495.72
O&M			\$0.00			\$0.00	0			\$0.00	\$0.00
Annual PMI			\$0.00			\$0.00	0	\$100.00	2	\$200.00	(\$200.00)
TOTAL COSTS/SAVINGS			\$4,487.16			\$14,007.48	(14,007)			\$3,191.44	\$1,295.72
PAYBACK PERIOD (YEARS):					10.81	NOTE: () INDICATE NEGATIVE VALUE					

Notes & Assumptions:

Disposal cost calculated from FY12 P2ADS

Assume 20 hours of upfront cost for HW PM to organize P2OA-04

Assume two hours of training for four staff to test feasibility of system (two different Work Centers)

GSA Pricing for New Pig Metered POL Distribution System (http://www.newpig.com/pig/FD/complete-metered-dispensing-system-drm699?cm_cat=shop_by_product)

Assume four units per system, two systems 1/3 of NCBC Gulfport's Work Centers as test case

Stock shipping cost based on 8 stock units

Assume 33% reduction of oil contaminated absorbent materials; reduction based on implementation at 1/3 of motor vehicle work centers

Assume annual preventive maintenance/inspection cost per individual system (labor & parts, if necessary)

POA&M

Action	Responsibility	Start Date	Completion Date	Notes

APPENDIX C

WORK CENTER REPORTS AND PROCESS FLOW DIAGRAMS

CED A Shop

COMMAND: NCBC Gulfport
WORK CENTER #: 932
SHOP NAME: A Shop
BUILDING #: 400
SHOP POC AND PHONE #: Jerry Horan (Shop Foreman) (228) 871-2267; Roy Smith (HAZMAT Coordinator) (228) 871-3818
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop is responsible for the overhaul of Lighter, Amphibious Resupply, Cargo, 5-ton (LARC-V) and Sea Lift Warton Tub (SLWT) modules, and repair of construction equipment. Bulk materials, such as antifreeze, and bulk petroleum, oils, and lubricants (POL) products such as engine oils, hydraulic fluid, and preservation materials are issued from CHRIMP.

The primary process performed in this shop is:

Overhauling LARC-Vs and SLWT modules; including sandblasting of small LARC-V parts, fabrication of hydraulic hoses and addition of battery electrolyte. Preservation of equipment to support long-term storage.

The biggest waste producer in this shop is:

Waste POLs

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, floor drains and connections are:

Filled in and plugged with concrete.

All HAZMAT in this shop have the proper ERP barcode:

Yes – A spot check of flam lockers showed HAZMAT were properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- Use of a recycled-water washrack. Not implemented because the Marines purchased a recycled-water washrack that was poorly designed and ineffective for heavy equipment. The design was never implemented at any shop.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in the shop.
- A wash rack with oil/water separator is shared by all the Construction Equipment Division (CED) shops.
- Optima and other high-end batteries are being used to extend service life. Use of pulse charging to extend service life of batteries. Use of trickle charging to reduce electricity consumption.
- Aqueous parts cleaners are in use to minimize waste solvent disposal.

- Used oil filter crusher and drum crusher to maximize metal recycling.
- Sorbent pads and granular sorbents are used on floor under equipment.
- Brake cleaner can refilling system is in place which eliminates the number of aerosol cans that need to be purchased and disposed.
- A metered, bulk POL fluid dispensing system is employed to minimize waste, container disposal, and material purchase.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal drums and oil filters are drained, rinsed, crushed, and recycled.
- Recycling Center – aluminum, scrap metal, cardboard, plastic, and glass are segregated for recycling.
- Used oil, antifreeze, and batteries are picked up for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.
- Tire recycling is coordinated through DLA Disposition Services.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Overhaul LARC-V and SLWT Modules

DESCRIPTION

Maintain and overhaul vehicles. Maintain vehicle fluid changes, mechanical repairs, cleaning, wheel, engine, and transmission repair. Batteries are also replaced as necessary.

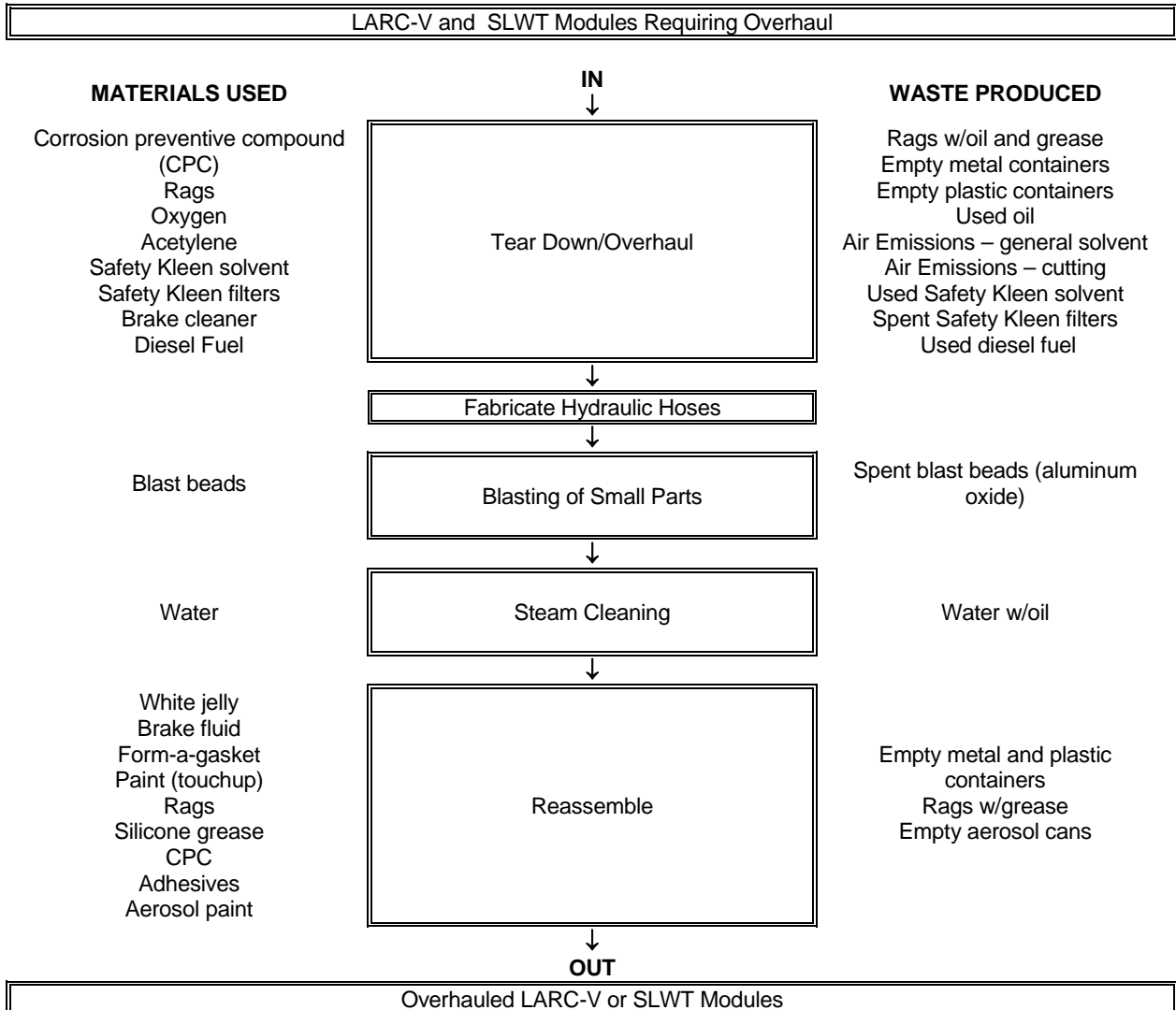
Base Process ID #: CEDA-01
Substrate: Metal
Production Units:
 Description LARC-V
 Quantity 3

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Blast boxes (1 with aluminum oxide beads and 1 with glass beads which is being replaced with aluminum oxide beads), parts washers (two 120-gal (solvent) and one 75-gal (aqueous)), brake cleaner can refilling system.

PROCESS FLOW DIAGRAM CEDA-01 Overhaul LARC-V and SLWT Modules



PROCESS SUMMARY

Equipment Preservation

DESCRIPTION

Equipment Preservation.

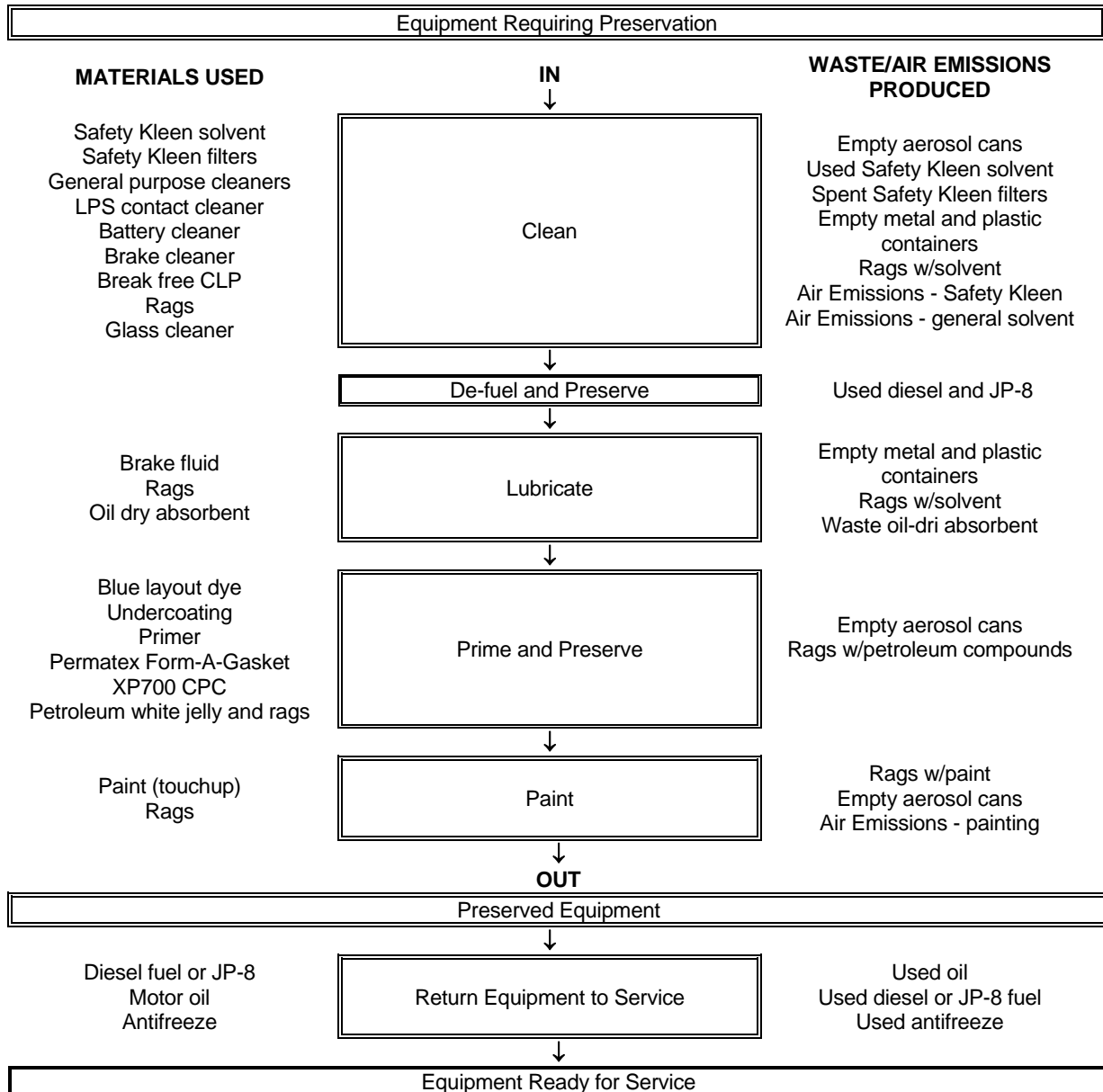
Base Process ID #: CEDA-02
Substrate: Metal
Production Units:
 Description: Equipment units
 Quantity: 200

MRC/Technical Publication: Several

Equipment Used in Process:

Parts washers (two 120-gal (solvent) and one 75-gal (aqueous)), brake cleaner can refilling system, metered bulk POL fluid dispensing system.

PROCESS FLOW DIAGRAM CEDA-02 Equipment Preservation



CED B Shop

COMMAND: NCBC Gulfport
WORK CENTER #: 933
SHOP NAME: B Shop
BUILDING #: 400
SHOP POC AND PHONE #: Jerry Horan (Shop Foreman) (228) 871-2267; Roy Smith (HAZMAT Coordinator) (228) 871-3818
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop maintains and overhauls 5-ton and larger equipment for NCBC Gulfport, rebuilds engines for Construction Equipment Division (CED), provides mobile lube & minor repair service for NCTC, and preserves new trucks for storage. Bulk materials such as antifreeze and POL products (i.e., engine oil, hydraulic fluid and preservation materials) are issued from the CHRIMP.

The primary process performed in this shop is:

Vehicle maintenance (including engine rebuilds and preservation).

The biggest waste producer in this shop is:

Used POLs

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, floor drains and connections are:

Filled in with concrete

All HAZMAT in this shop have the proper ERP barcode:

Yes – A spot check of flam lockers showed HAZMAT were properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- Diesel and JP-8 are collected and recycled installation-wide.
- Use of a recycled-water washrack. Not implemented because the Marines purchased a recycled-water washrack that was poorly designed and ineffective for heavy equipment. The design was never implemented at any shop.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in the shop.
- A wash rack with oil/water separator is shared by all the CED shops.
- Optima and other high-end batteries are being used to extend service life. Use of pulse charging to extend service life of batteries. Use of trickle charging to reduce electricity consumption.
- Aqueous parts cleaners are in use to minimize waste solvent disposal.
- Hot water parts washer (140 gal) is in use which uses steam.
- Used oil filter crusher and drum crusher to maximize metal recycling.

- A metered, bulk POL fluid dispensing system is employed to minimize waste, container disposal, and material purchase.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal drums and oil filters are drained, rinsed, crushed, and recycled.
- Recycling Center – aluminum, scrap metal, cardboard, plastic, and glass are segregated for recycling.
- Used oil and antifreeze are picked up for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.
- Tire recycling is coordinated through DLA Disposition Services.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.
- Repair brake cleaner can refilling system.

PROCESS SUMMARY

Vehicle Maintenance

DESCRIPTION

This shop maintains and overhauls 5-ton and larger equipment for NCBC Gulfport, rebuilds engines for CED, provides mobile lube & minor repair service for NCTC, and preserves new trucks for storage.

Base Process ID #: CEDB-01

Substrate: Metal

Production Units:

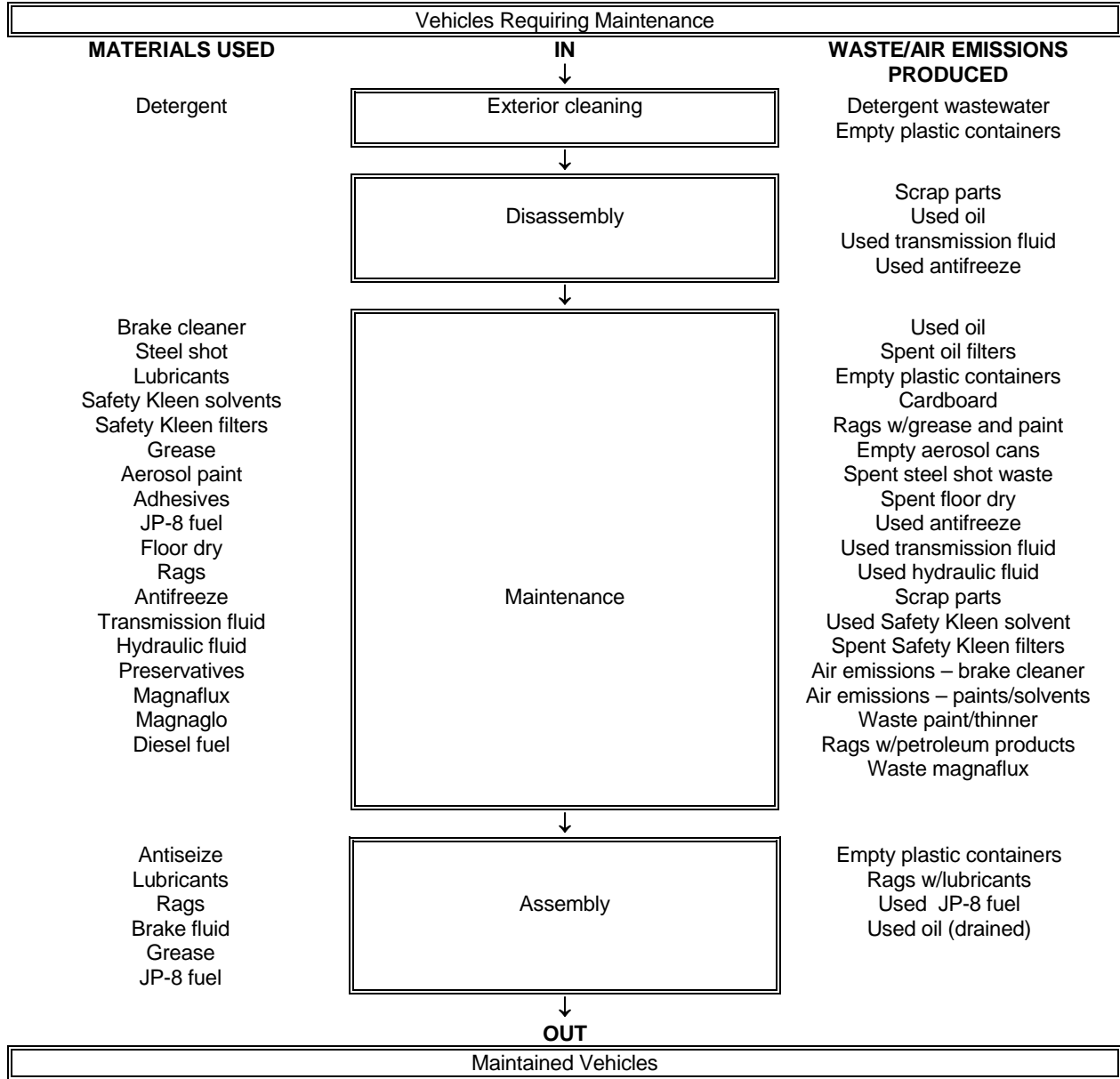
Description	Vehicles
Quantity	600-650

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Parts washers (5 units; two 120-gal [solvent], one 140-gal [aqueous – steam], one 75-gal [aqueous], and one 25-gal [aqueous]), steel shot bead glove box, Magnaflux machine, portable Safety Kleen brake cleaning units (2 units), metered bulk POL fluid dispensing system, brake cleaner can refilling system.

PROCESS FLOW DIAGRAM CEDB-01 Vehicle Maintenance



CED C Shop

COMMAND: NCBC Gulfport
WORK CENTER #: 935
SHOP NAME: Automotive C Shop
BUILDING #: 400
SHOP POC AND PHONE #: Jerry Horan (Shop Foreman) (228) 871-2267; Roy Smith (HAZMAT Coordinator) (228) 871-3818
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop maintains and repairs light duty vehicles (below 5 tons), preserves equipment (below 15 tons), repairs defective hydraulic hoses, manufactures new hoses, maintains batteries, and maintains material handling equipment (dock mules, forklifts) from 1,000 - 36,000 lb lift caps. Some heavy equipment repair is also performed. Material such as antifreeze and POL (i.e., engine oil, hydraulic fluid, and preservation materials) are issued from the CHRIMP.

The primary process performed in this shop is:

Vehicle maintenance/repair, equipment preservation, hydraulic hose manufacture/repair, and battery maintenance/new battery start up.

The biggest waste producer in this shop is:

Used batteries and tires

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, floor drains and connections are:

Filled in with concrete

All HAZMAT in this shop have the proper ERP barcode:

Yes – A spot check of flam lockers showed HAZMAT were properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- Shop is implementing an oil analysis program whereby the oil is tested to verify whether it needs to be changed rather than adhering to a set schedule. The shop is currently collecting trend data.

P2 INITIATIVES NOT IMPLEMENTED

- Use of a recycled-water washrack. Not implemented because the Marines purchased a recycled-water washrack that was poorly designed and ineffective for heavy equipment. The design was never implemented at any shop.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in the shop.
- A wash rack with oil/water separator is shared by all the Construction Equipment Division (CED) shops.

- Optima and other high-end batteries are being used to extend service life. Use of pulse charging to extend service life of batteries. Use of trickle charging to reduce electricity consumption.
- Aqueous parts cleaners are in use to minimize waste solvent disposal.
- Used oil filter crusher and drum crusher to maximize metal recycling.
- Sorbent pads and granular sorbents are used on floor under equipment.
- A metered, bulk POL fluid dispensing system is employed to minimize waste, container disposal, and material purchase.
- Brake cleaner can refilling system is in place which eliminates the number of aerosol cans that need to be purchased and disposed. A metered, bulk POL fluid dispensing system is employed to minimize waste, container disposal, and material purchase.
- Most hose manufacture (~90%) is outsourced. New equipment is being put in place for the shop to do the hose manufacture themselves. Most outsourcing will be eliminated by 2014.
- Implementation of refrigerant recycling program for refrigerants removed from vehicles.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal drums and oil filters are drained, rinsed, crushed, and recycled.
- Recycling Center – aluminum, scrap metal, cardboard, plastic, and glass are segregated for recycling.
- Used oil, antifreeze, and batteries are picked up for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.
- Tire recycling is coordinated through DLA Disposition Services.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Vehicle Maintenance and Repair

DESCRIPTION

This shop performs maintenance and repairs on light duty vehicles (below 5 tons) and material handling equipment (dock mules, forklifts) from 1,000 - 36,000 lb lift capacity.

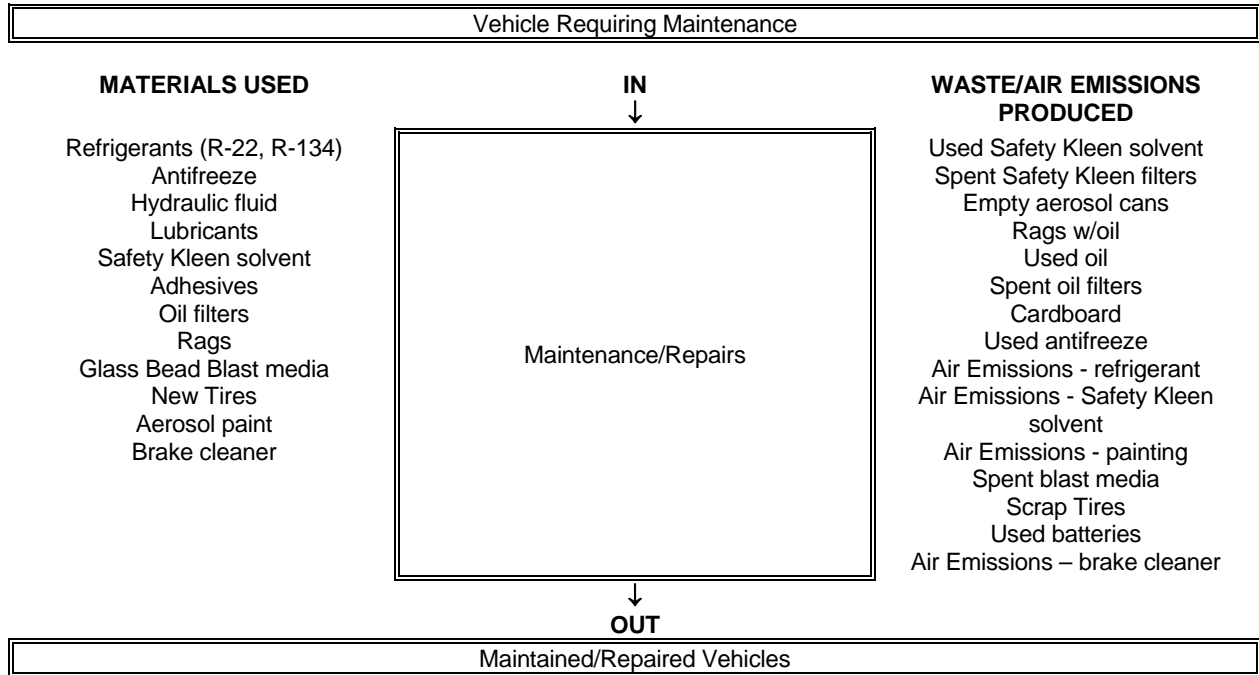
Base Process ID #: CEDC-01
Substrate: Metal
Production Units:
 Description: Vehicles
 Quantity: 780

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Safety Kleen vats (3-120 gal solvent based, 1-120 gal aqueous based, and 1-25 gal aqueous based), refrigerant recycling units (5), glove box blast booth (1), brake cleaner can refilling system.

PROCESS FLOW DIAGRAM CEDC-01 Vehicle Maintenance and Repair



PROCESS SUMMARY

Equipment Preservation

DESCRIPTION

This shop preserves equipment (below 15 tons) for long term storage.

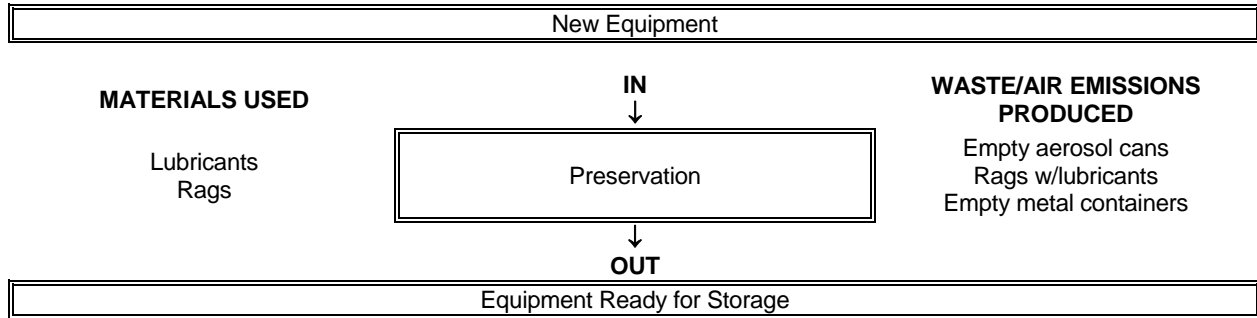
Base Process ID #: CEDC-02
Substrate: Metal
Production Units:
Description: Equipment
Quantity: 200

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
Grease gun and hand tools

PROCESS FLOW DIAGRAM

CEDC-02 Equipment Preservation



PROCESS SUMMARY

Hydraulic Hose Manufacture/Repair

DESCRIPTION

This shop manufactures and repairs hydraulic hoses.

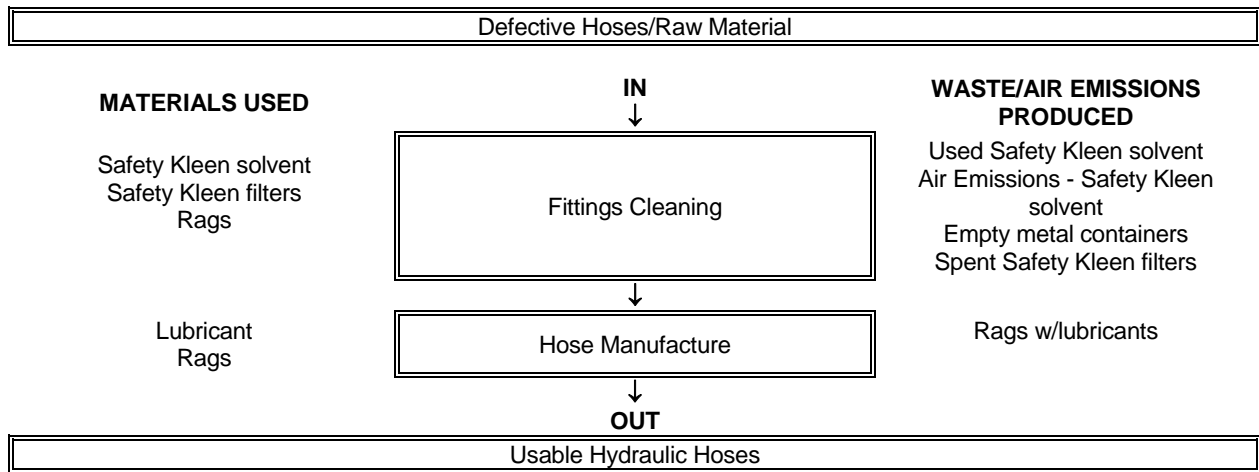
Base Process ID #: CEDC-03
Substrate: Metal
Production Units:
 Description: Hoses
 Quantity: 520

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Recirculating pump parts washer (Safety Kleen), identified earlier for CEDC-01.

PROCESS FLOW DIAGRAM CEDC-03 Hydraulic Hose Manufacture/Repair



PROCESS SUMMARY

Battery Maintenance

DESCRIPTION

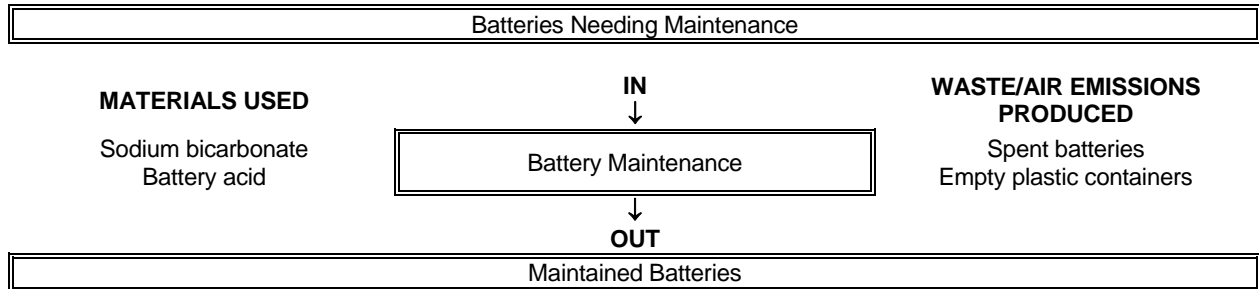
This shop maintains batteries for vehicles and equipment.

Base Process ID #: CEDC-04
Substrate: N/A
Production Units:
Description: Batteries
Quantity: 1,300-1,400 lbs per week

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
None

PROCESS FLOW DIAGRAM CEDC-04 Battery Maintenance



CED D Shop

COMMAND: NCBC Gulfport
WORK CENTER #: 943D
SHOP NAME: D Shop
BUILDING #: 400
SHOP POC AND PHONE #: Jerry Horan (Shop Foreman) (228) 871-2267; Roy Smith (HAZMAT Coordinator) (228) 871-3818
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop is responsible for performing bodywork on NCBC vehicles, LARCs (5 ton amphibious vehicles), fiberglass boats and heavy equipment.

The primary process performed in this shop is:

Bodywork, including undercoating, spray-on bedliners, painting, welding, sheet metal work, metal fabrication, glasswork, some spot priming, and stenciling.

The biggest waste producer in this shop is:

Used blast media and paint waste

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, floor drains and connections are:

Filled in with concrete

All HAZMAT in this shop have the proper ERP barcode:

Yes – A spot check of flam lockers showed HAZMAT were properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- Reuse of floor dry. Floor dry in use does not need to be reused. It is passed through a sieve and unused floor dry is separated from used floor dry.
- Use of a recycled-water washrack. Not implemented because the Marines purchased a recycled-water washrack that was poorly designed and ineffective for heavy equipment. The design was never implemented at any shop.

CURRENT P2 PRACTICES & EQUIPMENT

- Spill kits were observed in the shop.
- A wash rack with oil/water separator is shared by all the Construction Equipment Division (CED) shops.
- Use HVLP paint guns to increase transfer efficiency.
- Use non-aerosol low VOC paints (2.5-5.0%) and water-based primer to reduce VOC air emissions and disposal of waste paint.
- Use of a FlowJet system to precision cut metal pieces.
- Use of a dual action (DA) sander to vacuum dust from sanding.

- Maintenance of a paint log where by personnel log in the amount of paint disposed.
- Use of a bed lining rig to decrease the amount of material used.
- Use of a new vinyl cutting machine which reduces the amount of leftover scrap produced.
- Use of a paper dispensing machine which reduces the amount of paper waste.
- Use of a fine tooth stationary band saw which confines waste in the bed area of the equipment and makes clean up easier.
- Use of a blast booth which uses recyclable garnet media.
- Use of a paint gun cleaner.
- Use of a dry filter paint spray booth.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, rinsed, crushed, and picked up for recycling.
- Recycling Center – aluminum, scrap metal, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Bodywork

DESCRIPTION

This shop is responsible for performing bodywork on NCBC vehicles, LARCs (5 ton amphibious vehicles), fiberglass boats, and heavy equipment.

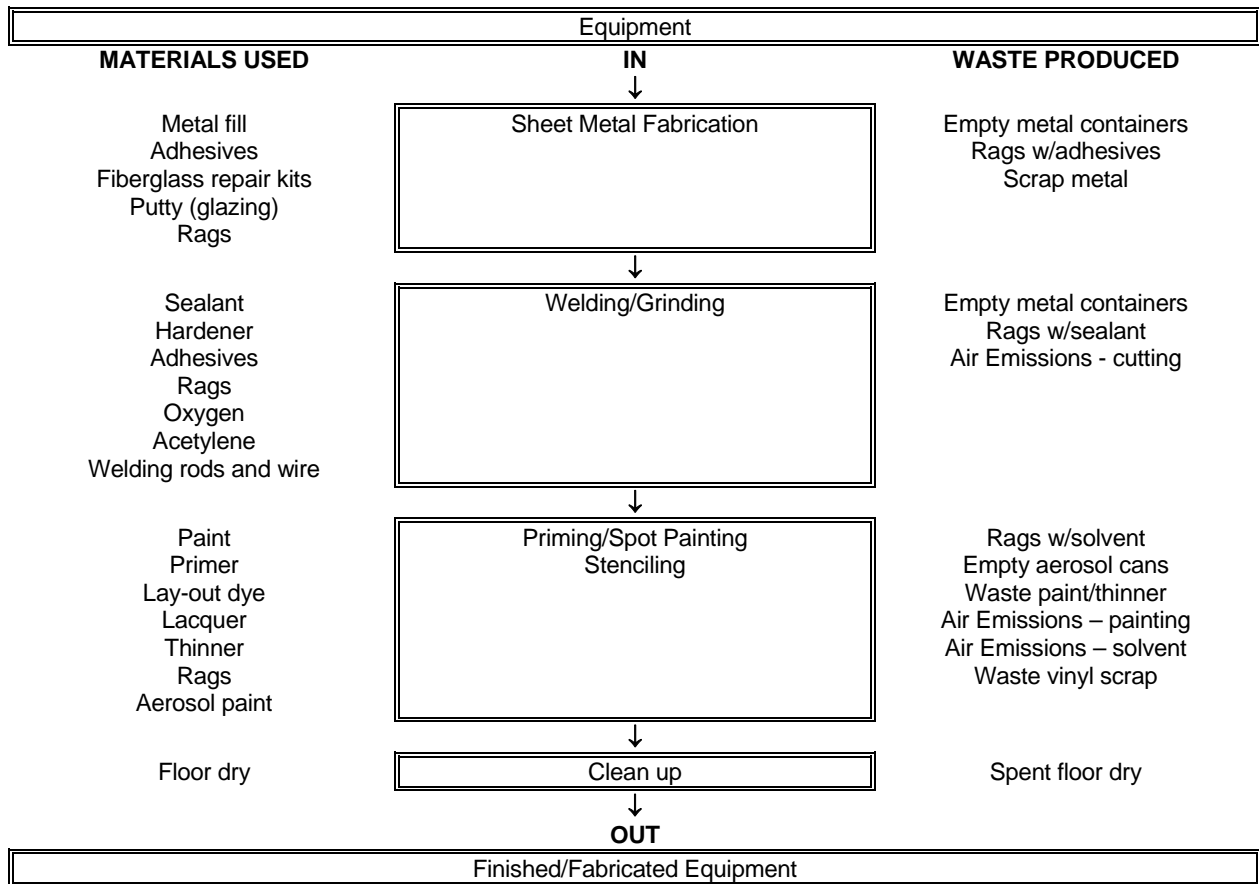
Base Process ID #: CEDD-01
Substrate: Metal
Production Units:
 Description: Vehicles
 Quantity: 30

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

HVLP paint gun, DA sander, FlowJet System, vinyl cutting machine, fine tooth stationary band saw

PROCESS FLOW DIAGRAM CEDD 01 Bodywork



PROCESS SUMMARY

CEDD-02 Corrosion Maintenance

DESCRIPTION

This shop is responsible for performing bodywork on NCBC vehicles, LARCs (5 ton amphibious vehicles), fiberglass boats, and heavy equipment.

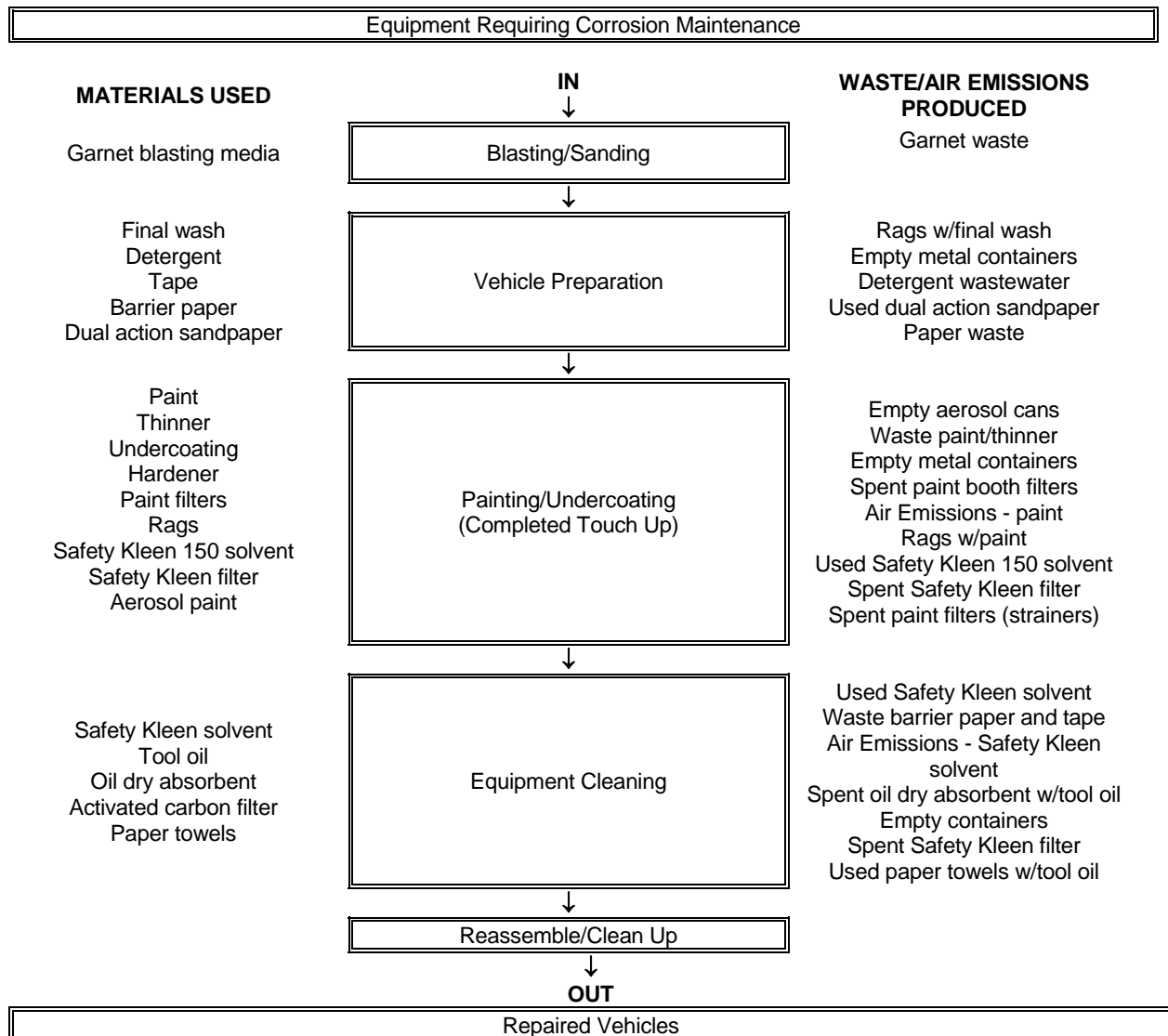
Base Process ID #: CEDD-02
Substrate: Metal/Fiberglass
Production Units:
 Description: LARCs and heavy equipment
 Quantity: 80

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Dry filter paint spray booths (4), hand-held spray guns (high volume/low pressure) (about 15), Safety Kleen paint gun cleaners (2-5 gal solvent based), blast booth (garnet)

PROCESS FLOW DIAGRAM CEDD-02 Corrosion Maintenance



PROCESS SUMMARY

CEDD-03 LARC and Heavy Equipment Repair

DESCRIPTION

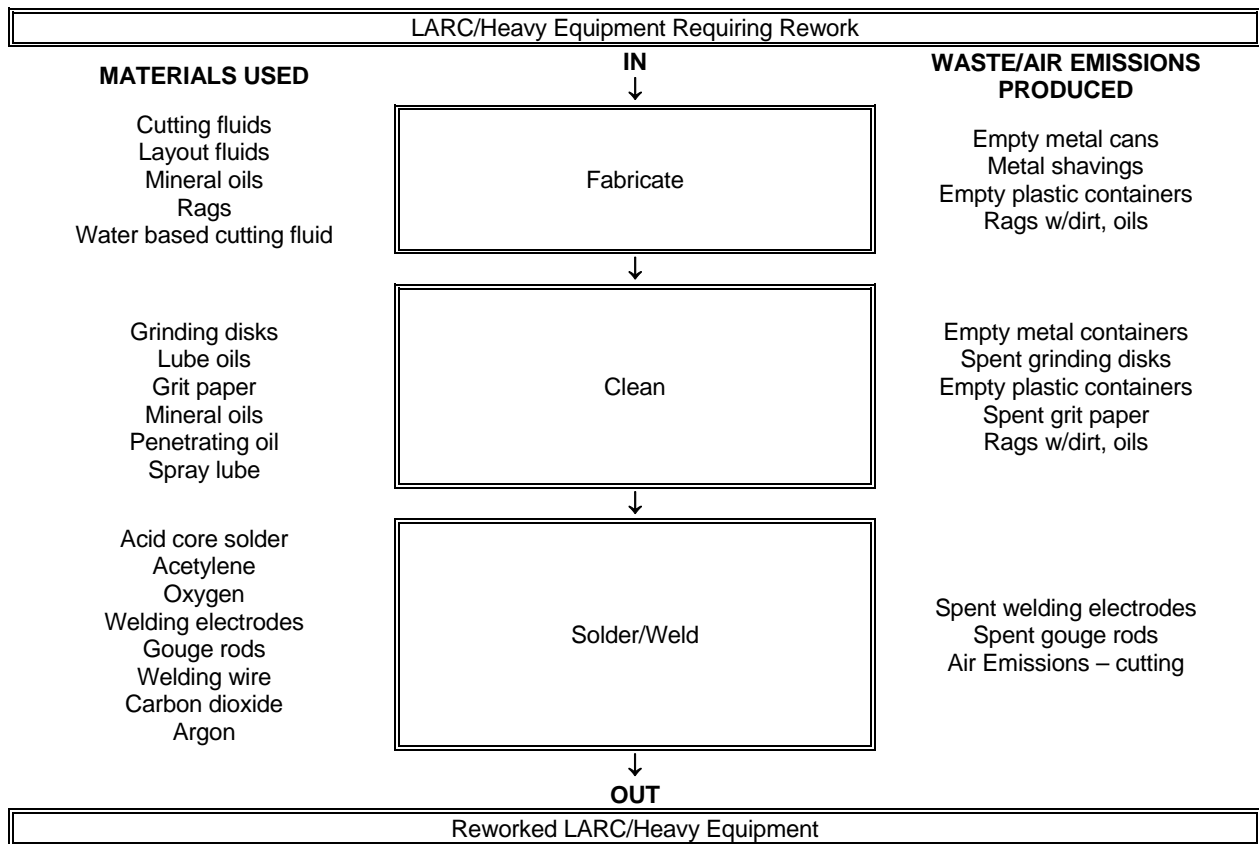
This shop provides equipment fabrication and metal repair support of LARCs and heavy equipment (including fabrication and welding) for CED and other NAVFAC activities.

Base Process ID #: CEDD-03
Substrate: Metal
Production Units:
 Description: LARCs and heavy equipment
 Quantity: 20

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
 DA sander, recycling water-based cutting fluid unit

PROCESS FLOW DIAGRAM CEDD-03 LARC and Heavy Equipment Repair



Dental

COMMAND: NCBC Gulfport
WORK CENTER #: Code 100
SHOP NAME: Dental Clinic
BUILDING #: 295
SHOP POC AND PHONE #: Supervisor (228) 871-2605
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The Dental Clinic is responsible for routine and emergency dental care.

The primary process performed in the Dental Clinic is:

Dental examinations and procedures, including but not limited to: tooth extractions, digital imagery, and ultrasonic clean up.

The biggest waste producer in this shop is:

Medical waste and dental amalgam.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, floor drains and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- Silver recovery of spent x-ray chemicals. Not implemented due to switch to digital processing.
- Recycle sharps using the Steris Ecocycle 10. Not implemented because sharps are picked up and recycled by a contractor.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits present in the shop.
- Digital x-ray imaging process.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Recycling Center – aluminum, cardboard, paper, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Dental Examinations/Procedures

DESCRIPTION

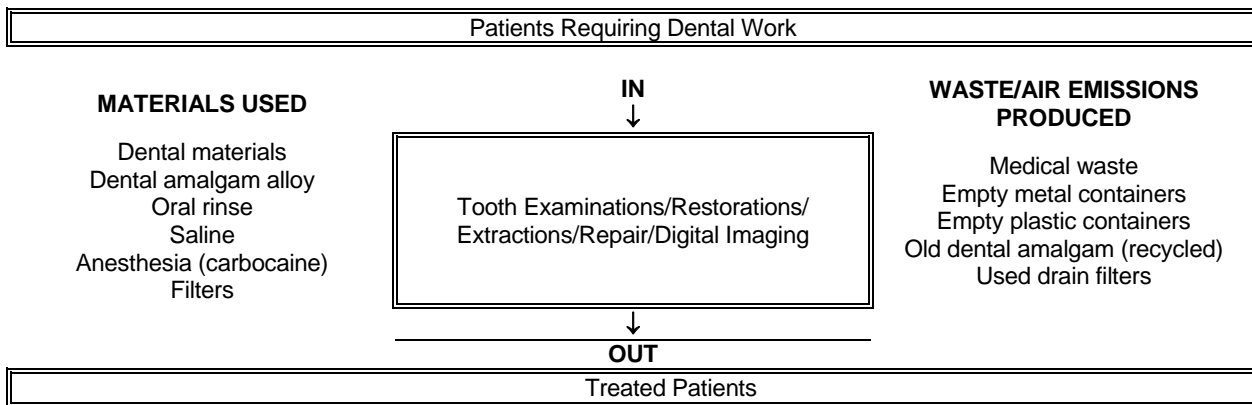
The Dental Clinic performs examinations and procedures, including but not limited to tooth extractions, digital imagery, and ultrasonic clean up.

Base Process ID #: DENTAL-01
Substrate: N/A
Production Units:
 Description Patients
 Quantity 10,000

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
 Digital imaging machine.

PROCESS FLOW DIAGRAM DENTAL-01 Dental Examinations/Procedures



FIRE DEPT

COMMAND: NCBC Gulfport
WORK CENTER #: N/A
SHOP NAME: Fire Department
BUILDING #: 321
SHOP POC AND PHONE #: Supervisor (228) 871-2414
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The Fire Department trains for and responds to all fire alarms, fires, or other emergencies where their presence is requested or needed. Other activities performed by the Fire Department include inspection of base buildings; housing fire alarm and CO₂ detector inspection and replacement; hazardous material containment, remediation, and disposal; fire prevention; training for base personnel and family housing personnel; station tours; truck demonstrations; activities for various schools and day care centers; and medical responses.

The primary process performed by the Fire Department is:

Responding to emergency situations and cleaning/maintaining equipment and facilities.

The biggest waste producer in this shop is:

Chemical/POL-contaminated rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, floor drains and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- Use of water and vinegar for cleaning purposes. Not implemented because other “green” cleaners are purchased through SERVMART and used for vehicle cleaning.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits present in the shop.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, rinsed, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, paper, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA’s Shelf-life Extension Program.

P2 EQUIPMENT NOT IN USE

- Note noted.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Emergency Response

DESCRIPTION

The Fire Department responds to all fire alarms, fires, medical responses, or other emergencies where their presence is requested or needed.

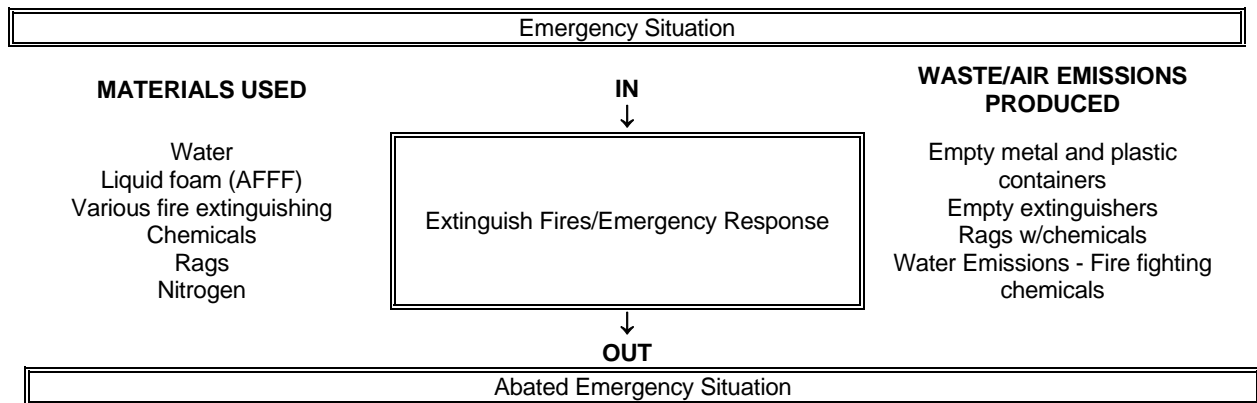
Base Process ID #: FIREDEPT-01
Substrate: N/A
Production Units:
 Description: Emergency Response Situations
 Quantity: 250

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
 None noted.

PROCESS FLOW DIAGRAM

FIRE DEPT-01 Emergency Response



PROCESS SUMMARY

Cleaning/Maintenance

DESCRIPTION

The Fire Department maintains fire fighting equipment.

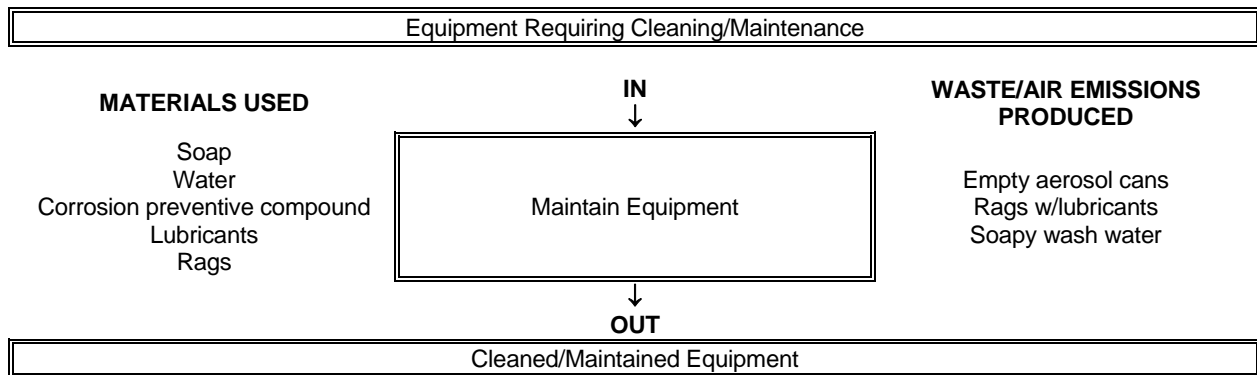
Base Process ID #: FIREDEPT-02
Substrate: N/A
Production Units:
Description: Emergency Response Equipment
Quantity: 250

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

None noted.

PROCESS FLOW DIAGRAM FIRE DEPT-02 Cleaning/Maintenance



PROCESS SUMMARY

Fire Training

DESCRIPTION

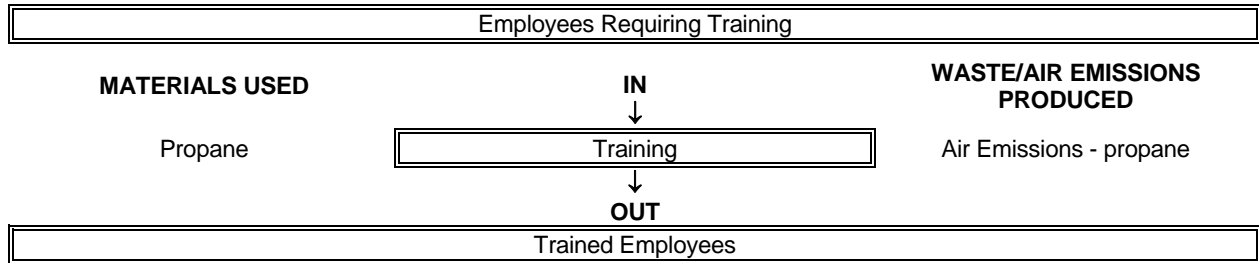
The Fire Department periodically conducts fire fighter training exercises.

Base Process ID #: FIREDEPT-03
Substrate: N/A
Production Units:
 Description Training Events
 Quantity 500

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
 None noted.

PROCESS FLOW DIAGRAM FIRE DEPT-03 Fire Training



HAZMATCEN

COMMAND: Fleet Logistics Center - Jacksonville
WORK CENTER #: N/A
SHOP NAME: HAZMATCEN
BUILDING #: 228
SHOP POC AND PHONE #: Shop Supervisor (228) 822-5073
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The primary process performed in this shop is distribution of hazardous materials. If shop personnel come across a biodegradable or more environmentally friendly alternative, they will recommend it. Expired HAZMAT is sent to HW for disposal.

The primary process performed in this shop is:

Hazardous material distribution.

The biggest waste producer in this shop is:

Waste pallets and packaging.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, floor drains and connections are:

Filled in and plugged with concrete.

All HAZMAT in this shop have the proper ERP barcode:

Yes - A spot check of HAZMAT on shelves showed HAZMAT were properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- N/A – this is a new shop identified during the August 2013 site visit.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were present in the shop.
- Reuse of pallets.
- Auto lighting in the warehouse areas.
- Advertise reusable material (through monthly emails to shop POCs).

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Recycling Center – aluminum, scrap metal, cardboard, plastic, and glass are segregated for recycling.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness
- Perform more flam locker inspections (more manpower is needed).

PROCESS SUMMARY

Hazardous Material Distribution

DESCRIPTION

Hazardous material distribution.

Base Process ID #: HAZMATCEN-01

Substrate: Various

Production Units:

Description N/A

Quantity N/A

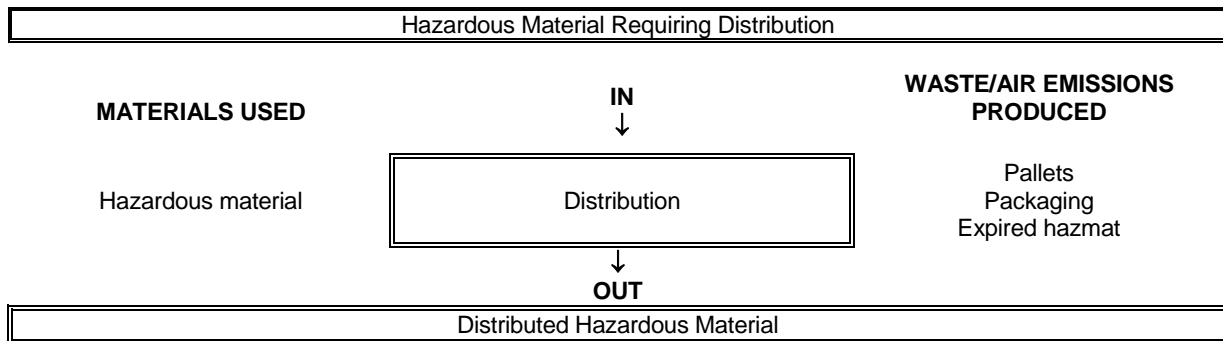
MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:

Auto lighting.

PROCESS FLOW DIAGRAM

HAZMATCEN-01 Hazardous Material Distribution



MARINES

COMMAND: Marine Corps
WORK CENTER #: Marine Corps Reserve Center
SHOP NAME: Motor Pool
BUILDING #: 243
SHOP POC AND PHONE #: Supervisor (228) 871-2750
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop maintains vehicles used by the Marine Corps Reserve Center.

The primary process performed in this Shop is:

Vehicle maintenance.

The biggest waste producer in this shop is:

Used oil, used oil filters, used anti-freeze and oily rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, floor drains and connections are:

No floor drains in buildings.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- Use of recycled-water wash rack. Not implemented because purchased recycled-water washrack that was poorly designed and ineffective for heavy equipment. The design was never implemented at any shop.
- “Red Rag” Program. Not implemented because rag return rate was less than 50% and was discontinued due to cost factors.

CURRENT P2 PRACTICES AND EQUIPMENT

- Use of rechargeable batteries.
- Aqueous parts cleaners are in use to minimize waste solvent disposal.
- Oil/water separator and spill kits.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Spill kits should be present in the shop.
- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA’s Shelf-life Extension Program.

P2 EQUIPMENT NOT IN USE

- Note noted.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Vehicle Maintenance

DESCRIPTION

Provides routine scheduled maintenance.

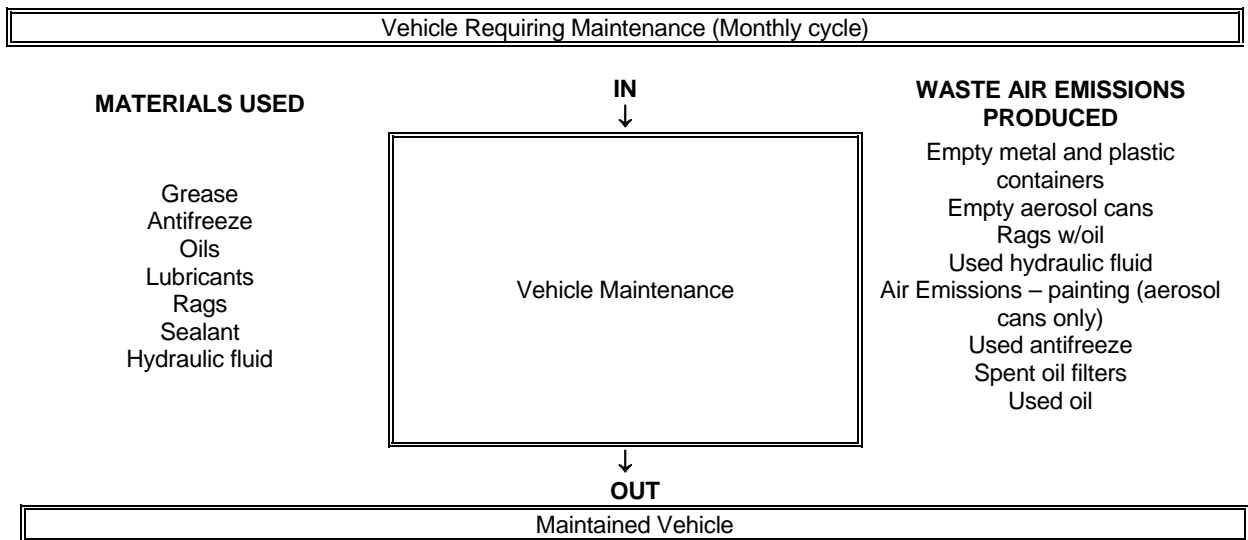
Base Process ID #: MARINES -01
Substrate: N/A
Production Units:
 Description: Wheeled Vehicles
 Quantity: 10

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Oil/water separator, spill kits.

PROCESS FLOW DIAGRAM: MARINES-01 Vehicle Maintenance



Medical

COMMAND: NCBC Gulfport
WORK CENTER #: Code 100
SHOP NAME: Medical Clinic
BUILDING #: 295
SHOP POC AND PHONE #: Supervisor/PO Marshall (228) 871-2810 x214
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The Medical Clinic is responsible for performing routine physical examinations and treating patients.

The primary process performed in the Medical Clinic is:

The medical clinic performs digital imagery and general medical treatment.

The biggest waste producer in this shop is:

Medical waste.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

The floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- Silver recovery of spent x-ray chemicals. Not implemented due to switch to digital processing.
- Recycle sharps using the Steris® Ecocycle 10™. Not implemented because sharps are picked up and recycled by a contractor.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.
- Replaced film x-ray with digital imaging process.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Medical Examinations/Procedures

DESCRIPTION

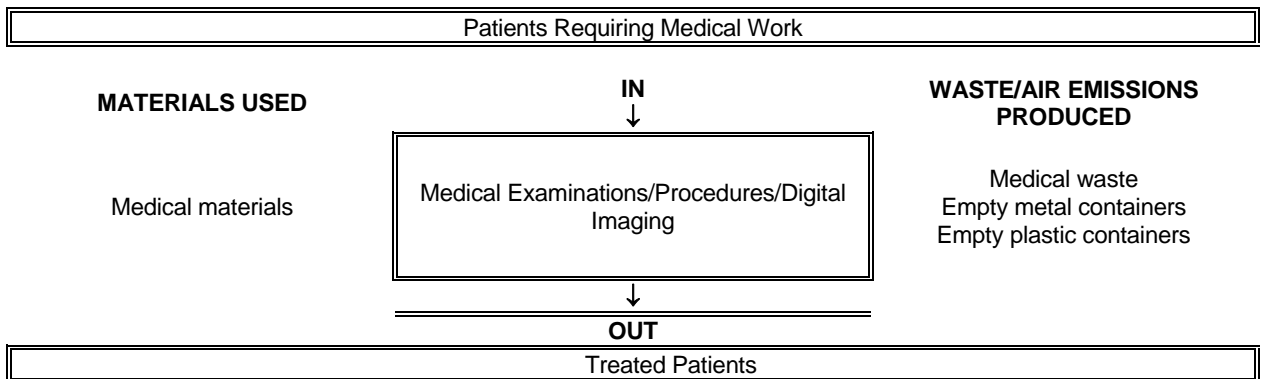
The Medical Clinic performs examinations and procedures, including but not limited to tooth extractions, digital imagery, and ultrasonic clean

Base Process ID #: MEDICAL-01
Substrate: N/A
Production Units:
 Description Patients
 Quantity 10,000

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
 Digital imaging machine.

PROCESS FLOW DIAGRAM MEDICAL-01 Medical Examinations/Procedures



MWR HOBBY

COMMAND: NCBC Gulfport
WORK CENTER #: N/A
SHOP NAME: Auto Hobby Shop
BUILDING #: 397
SHOP POC AND PHONE #: Shop Supervisor (228) 871-2804
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop provides space and equipment for personally owned vehicle maintenance.

The primary process performed in this shop is:

Maintenance on personally-owned vehicles.

The biggest waste producer in this shop is:

Used POLs and oily rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

POL stains were observed throughout the shop, as is indicative of motor vehicle maintenance areas. No active leaks were observed, however. Shop personnel use absorbent pads during operations in which there is a high probability of leaks or drips.

If present, floor drains and connections are:

Filled in with concrete

All HAZMAT in this shop have the proper ERP barcode:

No – HAZMAT are sitting on shelving units without ERP barcodes. All HAZMAT are brought in (and sometimes left) by patrons. The shop does not use CHRIMP because they do not purchase materials. The flam lockers currently at the shop belong to the boat maintenance personnel who have moved to the Outdoor Recreation Shop.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Use oil filter crusher to maximize metal recycling.
- Aboveground used oil (500 gal) tank.
- Used antifreeze 55-gallon drum.
- Dedicated 30-gallon drum to collect empty aerosol cans.
- A spill kit is located in the shop.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Metal containers and oil filters are drained, crushed, and picked up for recycling.
- Used oil and antifreeze are picked up for recycling.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.
- Purchase of aqueous based parts washers.
- Purchase of brake cleaner can refilling system is in place which eliminates the number of aerosol cans that need to be purchased and disposed.

PROCESS SUMMARY

Vehicle Maintenance

DESCRIPTION

Maintain and overhaul vehicles. Maintain vehicle fluid changes, mechanical repairs, cleaning, wheel, engine, and transmission repair. Batteries are also replaced as necessary.

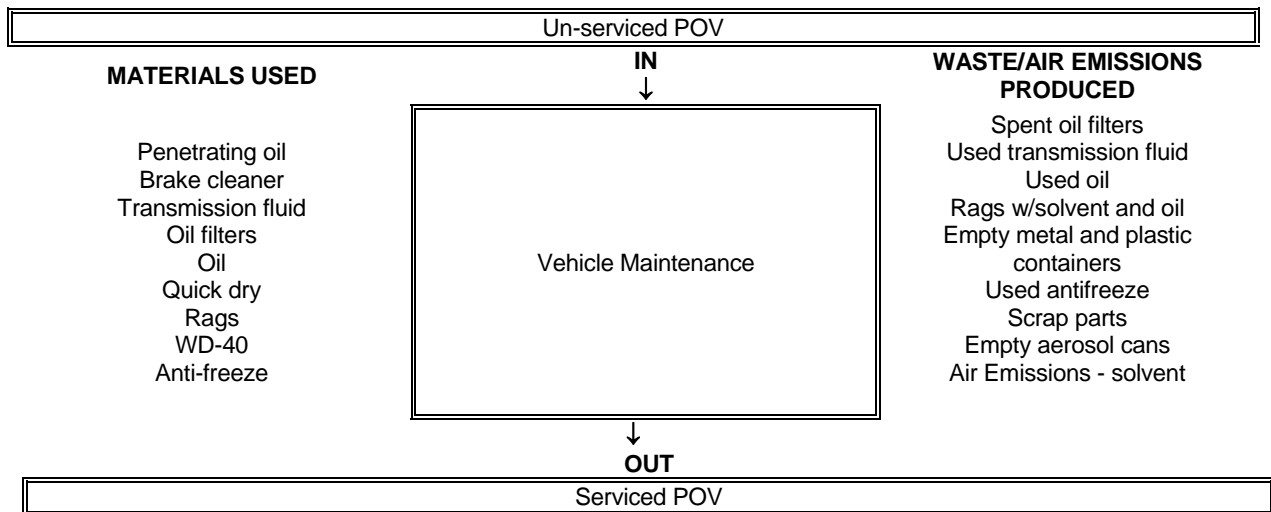
Base Process ID #: MWRHOBBY-01
Substrate: Metal
Production Units:
 Description: Vehicles
 Quantity: 6-20 vehicles/day; 4 days per week

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Oil filter crusher, parts washers (2-120 gal (solvent)) – scheduled to be removed by end of FY13, brake parts washer (aqueous)

PROCESS FLOW DIAGRAM MWRHOBBY-01 Vehicle Maintenance



NCG2-BMF1

COMMAND: Naval Construction Group - 2 (NCG-2)
WORK CENTER #: Battalion Maintenance
SHOP NAME: Battalion Maintenance Facility – Bay 1
BUILDING #: 465
SHOP POC AND PHONE #: Petty Officer Cook (228) 871-2964
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The primary process performed in this shop is preventive maintenance on heavy, rolling equipment.

The primary process performed in this shop is:

This shop is responsible for maintenance of vehicles owned by Naval Mobile Construction Battalions station at NCBC Gulfport. Processes include light engine maintenance, tire repair, vehicle inspections, and filter replacements prior to battalion deployments. Bulk materials, such as antifreeze, and bulk petroleum, oils, and lubricants (POL) products such as engine oils, hydraulic fluid, and preservation materials are issued from CHRIMP.

The biggest waste producer in this shop is:

Waste POLs and associated containers; used fuel filters

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Generally good. This is a new shop and general housekeeping has been implemented. No leaking equipment was observed and absorbent pads were under equipment/processes that may incur small drips.

If present, floor drains and connections are:

N/A – do not exist.

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- N/A – this is a new shop identified during the August 2013 site visit.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in the shop.
- Vehicle wash rack, lube cubes, oil/water separator, hot water washer, and used oil recycling tank.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Metal drums and oil filters are drained, rinsed, crushed, and recycled.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.
- Used oil, antifreeze, and scrap tires and rims are picked up for recycling.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness
- Brake cleaner can refilling system is in place which eliminates the number of aerosol cans that need to be purchased and disposed.

PROCESS SUMMARY

Preventive Maintenance

DESCRIPTION

Preventive Maintenance

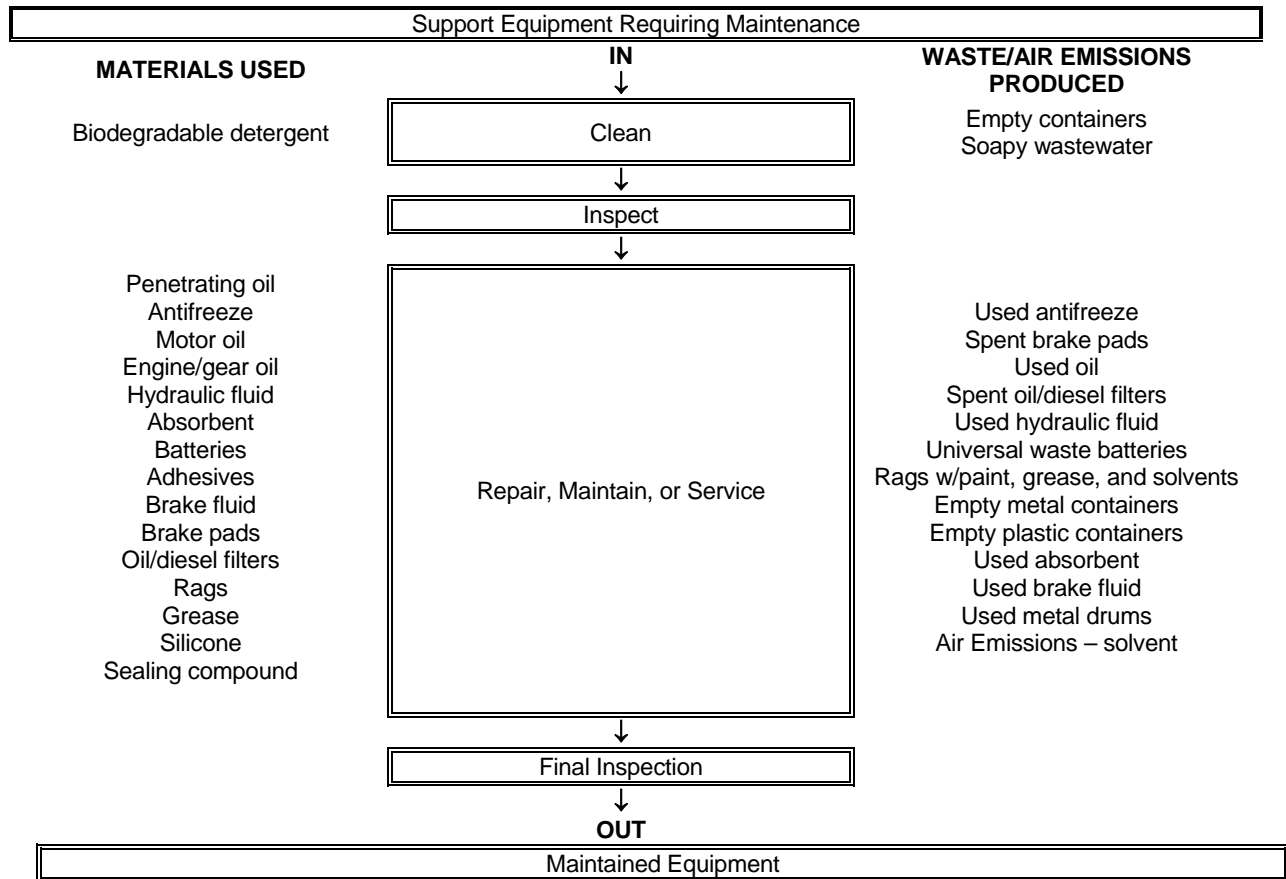
Base Process ID #: NCG2BMF1-01
Substrate: Various
Production Units:
 Description: Rolling equipment
 Quantity: 600 pieces of equipment/vehicles

MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:

Vehicle wash rack, lube cubes, oil/water separator, hot water washer, and used oil recycling tank.

PROCESS FLOW DIAGRAM NCG2BMF1-01 Preventive Maintenance



PROCESS SUMMARY

Tire Replacement

DESCRIPTION

Tire replacement.

Base Process ID #: NCG2BMF1-02

Substrate: Various

Production Units:

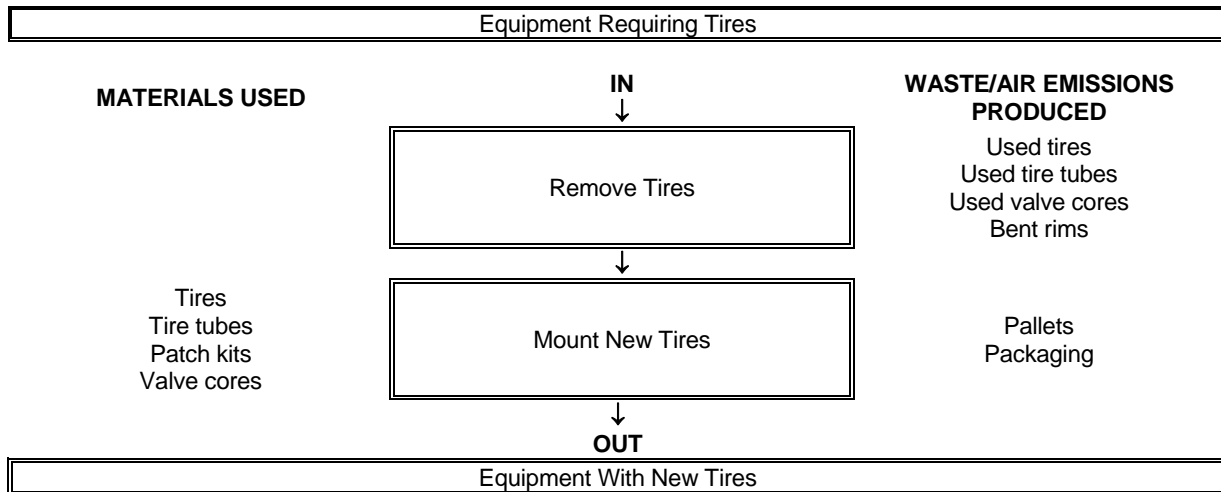
Description	Tires
Quantity	200/year

MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:

None noted.

PROCESS FLOW DIAGRAM
NCG2BMF1-02 Tire Replacement



NCG2-BMF2

COMMAND: Naval Construction Group - 2 (NCG-2)
WORK CENTER #: Battalion Maintenance
SHOP NAME: Battalion Maintenance Facility – Bay 2
BUILDING #: 465
SHOP POC AND PHONE #: Petty Officer Cook (228) 871-2964
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The primary process performed in this shop is preventive maintenance on heavy, rolling equipment.

The primary process performed in this shop is:

This shop is responsible for maintenance of vehicles owned by Naval Mobile Construction Battalions station at NCBC Gulfport. Processes include light engine maintenance, tire repair, vehicle inspections, and filter replacements prior to battalion deployments. Bulk materials, such as antifreeze, and bulk petroleum, oils, and lubricants (POL) products such as engine oils, hydraulic fluid, and preservation materials are issued from CHRIMP.

The biggest waste producer in this shop is:

Waste POLs and associated containers; used fuel filters

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Generally good. This is a new shop and general housekeeping has been implemented. No leaking equipment was observed and absorbent pads were under equipment/processes that may incur small drips.

If present, floor drains and connections are:

N/A – do not exist.

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- N/A – this is a new shop identified during the August 2013 site visit.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in the shop.
- Vehicle wash rack, lube cubes, oil/water separator, hot water washer, and used oil recycling tank.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Metal drums and oil filters are drained, rinsed, crushed, and recycled.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.
- Used oil, antifreeze, and scrap tires and rims are picked up for recycling.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness
- Brake cleaner can refilling system is in place which eliminates the number of aerosol cans that need to be purchased and disposed.

PROCESS SUMMARY

Preventive Maintenance

DESCRIPTION

Preventive Maintenance

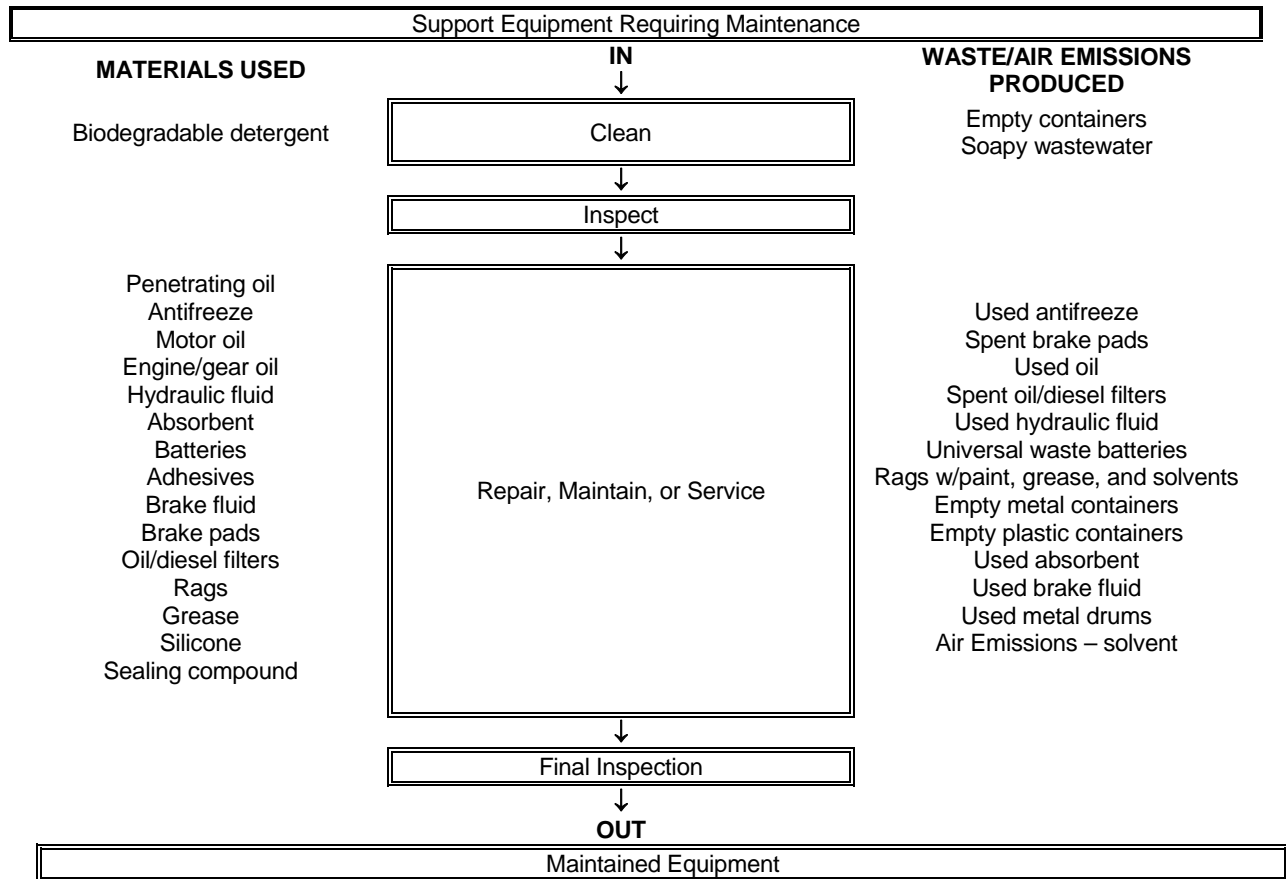
Base Process ID #: NCG2BMF2-01
Substrate: Various
Production Units:
 Description: Rolling equipment
 Quantity: 600 pieces of equipment/vehicles

MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:

Vehicle wash rack, lube cubes, oil/water separator, hot water washer, and used oil recycling tank.

PROCESS FLOW DIAGRAM NCG2BMF2-01 Preventive Maintenance



PROCESS SUMMARY

Tire Replacement

DESCRIPTION

Tire replacement.

Base Process ID #: NCG2BMF2-02

Substrate: Various

Production Units:

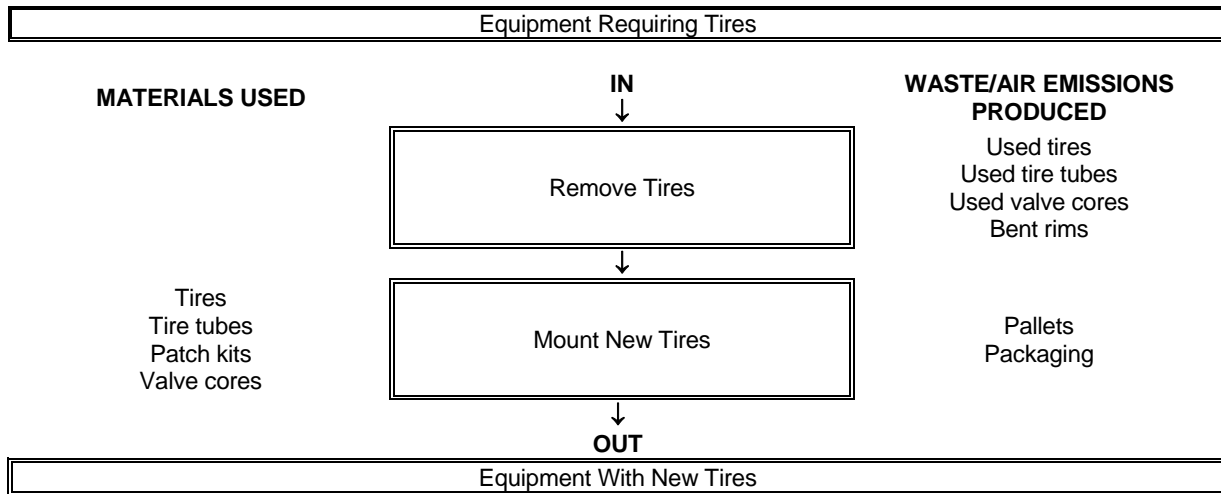
Description	Tires
Quantity	200/year

MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:

None noted.

PROCESS FLOW DIAGRAM
NCG2BMF2-02 Tire Replacement



NCRARMS

COMMAND: Naval Construction Group - 2 (NCG-2)
WORK CENTER #: R-75C.2
SHOP NAME: Woolmarket Range
BUILDING #: N/A
SHOP POC AND PHONE #: Shop Supervisor (228) 392-4998
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The range staff maintains the Woolmarket small arms firing range (Camp Keller) located 10 miles from NCBC Gulfport, off I-10. Range and grounds maintenance are performed.

The primary process performed in this shop is:

Conducting training exercises for Navy, FBI, and local law enforcement personnel.

The biggest waste producer in this shop is:

Spent brass cartridges

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – there is no “shop” as the location is the Woolmarket Range.

If present, floor drains and connections are:

N/A – there is no “shop” as the location is the Woolmarket Range.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None planned.

P2 INITIATIVES NOT IMPLEMENTED

- Switch from spray adhesive to wheat paste. Not implemented because wheat paste did not work due to humidity.

CURRENT P2 PRACTICES AND EQUIPMENT

- Metal ammunition cases are recovered and submitted for recycling.
- 45° steel deflector.
- Berm.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Recycling Center – cardboard is segregated for recycling.
- Metal containers picked up for recycling.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.
- Conduct Storm water training and awareness.
- Conduct Cultural and Natural Resources training and awareness.

PROCESS SUMMARY

Range Maintenance

DESCRIPTION

Range Maintenance

Base Process ID #: NCRARMS-01

Substrate: Miscellaneous

Production Units:

Description Targets, clipboards, pit cans, and carriages

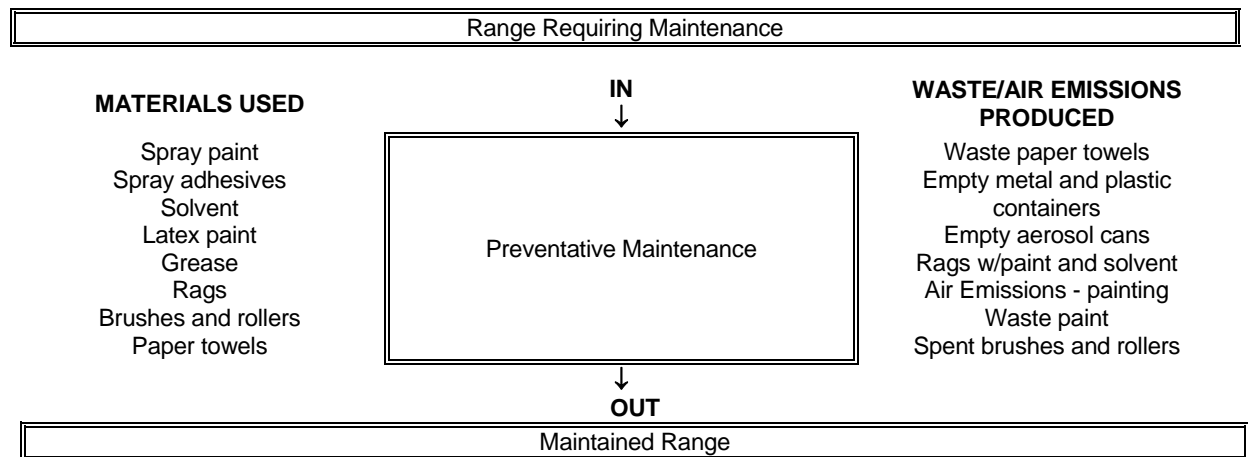
Quantity 71 carriages

MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:

None

PROCESS FLOW DIAGRAM NCRARMS-01 Range Maintenance



PROCESS SUMMARY

Grounds Maintenance

DESCRIPTION

Grounds Maintenance

Base Process ID #: NCRARMS-02

Substrate: Grass

Production Units:

Description Grounds

Quantity 40 acres

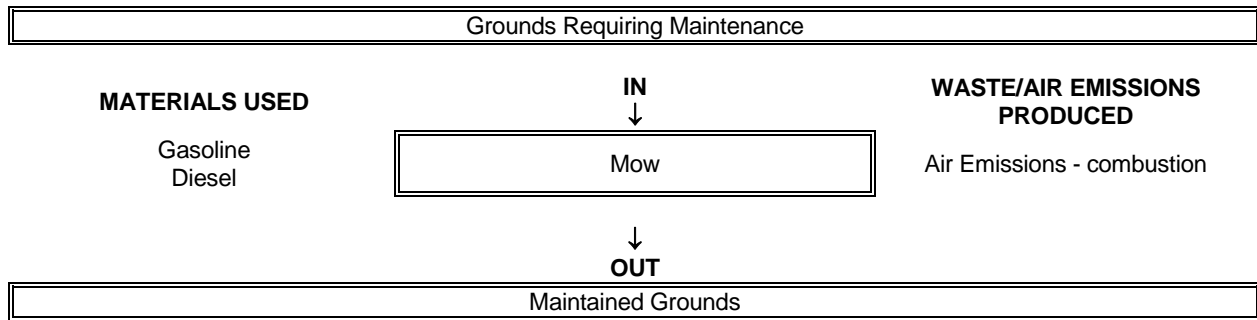
MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:

None.

PROCESS FLOW DIAGRAM

NCRARMS-02 Grounds Maintenance



PROCESS SUMMARY

Training Exercises

DESCRIPTION

Training Exercises

Base Process ID #: NCRARMS-03

Substrate: Bullets

Production Units:

Description Bullets

Quantity 3,251,261

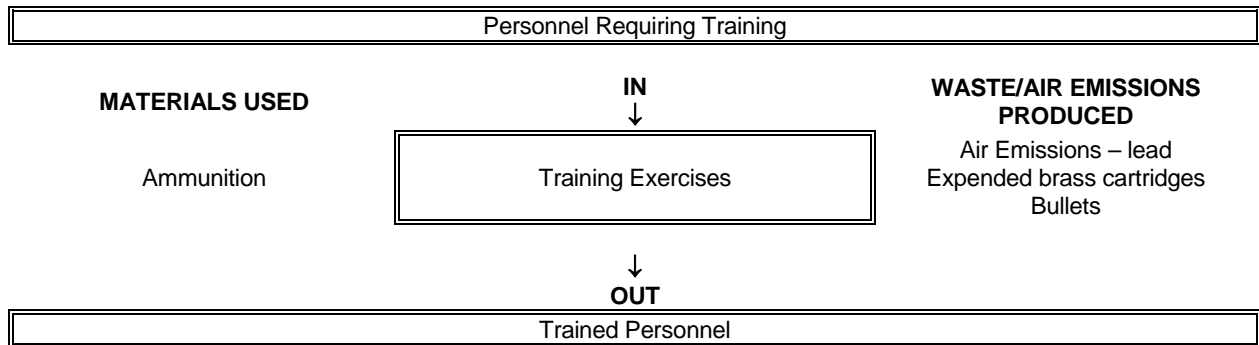
MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:

Berm. 45°steel deflector.

PROCESS FLOW DIAGRAM

NCRARMS-03 Training Exercises



NCRCOMMU

COMMAND: Naval Construction Group - 2 (NCG-2)
WORK CENTER #: TC01
SHOP NAME: Communication Systems
BUILDING #: 432
SHOP POC AND PHONE #: Shop Supervisor (228) 871-3231
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The primary process performed in this shop is repair of communication equipment,

The primary process performed in this shop is:

Repair of communication equipment.

The biggest waste producer in this shop is:

Oily rags and batteries.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, floor drains and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- Additional paper recycling receptacles are required. Bins for cardboard would divert a significant amount of materials from disposal. Additional smaller bins for each of 4 classrooms would also result in more recyclables.

P2 INITIATIVES NOT IMPLEMENTED

- Replace 1,1,1-trichloroethane with isopropyl alcohol. 1,1,1-trichloroethane is no longer used and products are being evaluated to replace isopropyl alcohol.

CURRENT P2 PRACTICES AND EQUIPMENT

- Rechargeable nickel-metal-hydride, lithium, nickel cadmium and alkaline batteries are used in place of lead-acid batteries.

P2 EQUIPMENT NOT IN USE

- Spill kits should be present in the shop.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Cleaning/Repair of Communication Equipment

DESCRIPTION

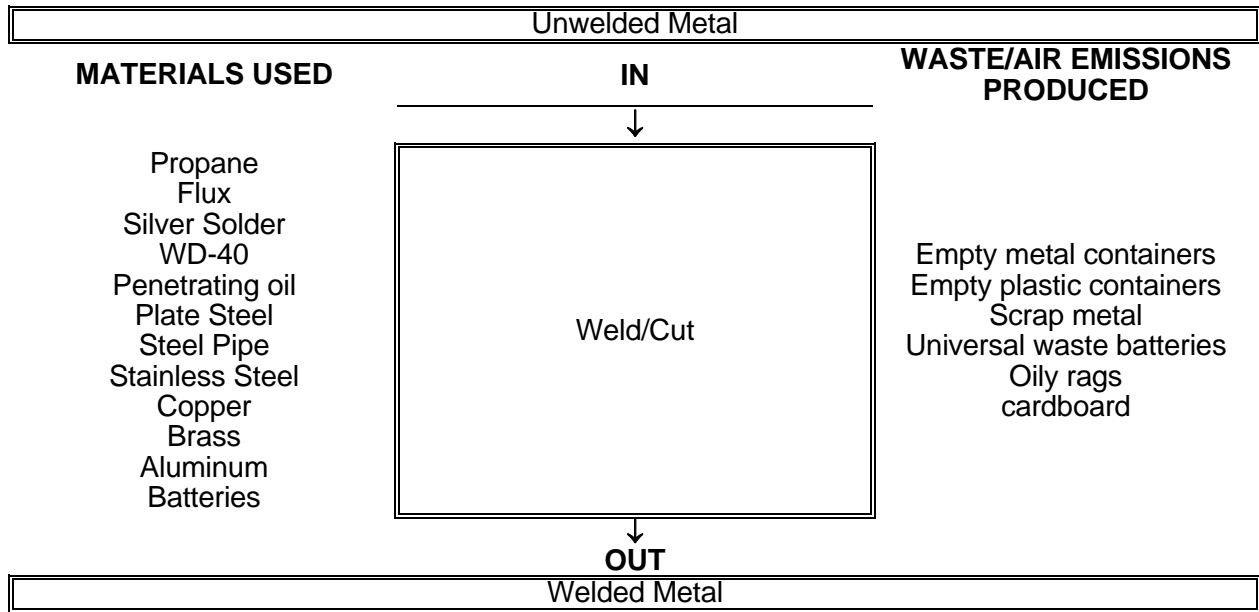
Repair of Communication Equipment.

Base Process ID #: NCRCOMMU-01
Substrate: Various
Production Units:
 Description: Communication Gear
 Quantity: N/A

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
 Recycling Bins

PROCESS FLOW DIAGRAM
NCRCOMMU-01 Cleaning/Repair of Communication Equipment



NCRCONT

COMMAND: Naval Construction Group - 2 (NCG-2)
WORK CENTER #: Contingency Training
SHOP NAME: Equipment Department
BUILDING #: K6
SHOP POC AND PHONE #: Shop Supervisor (228) 871-2145
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop provides various types of training to the SEABEES, including sea hut construction, shower construction, electric field power systems installation, pre-formed metal building installation, mobile concrete plant construction, rapid runway repair, and water well drilling.

The primary process performed in this shop is:

This shop is responsible for training of SEABEES for contingency operations described above. In addition, minor preventive maintenance of equipment is performed before and after operational use.

The biggest waste producer in this shop is:

Waste adhesive

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Training Exercises

DESCRIPTION

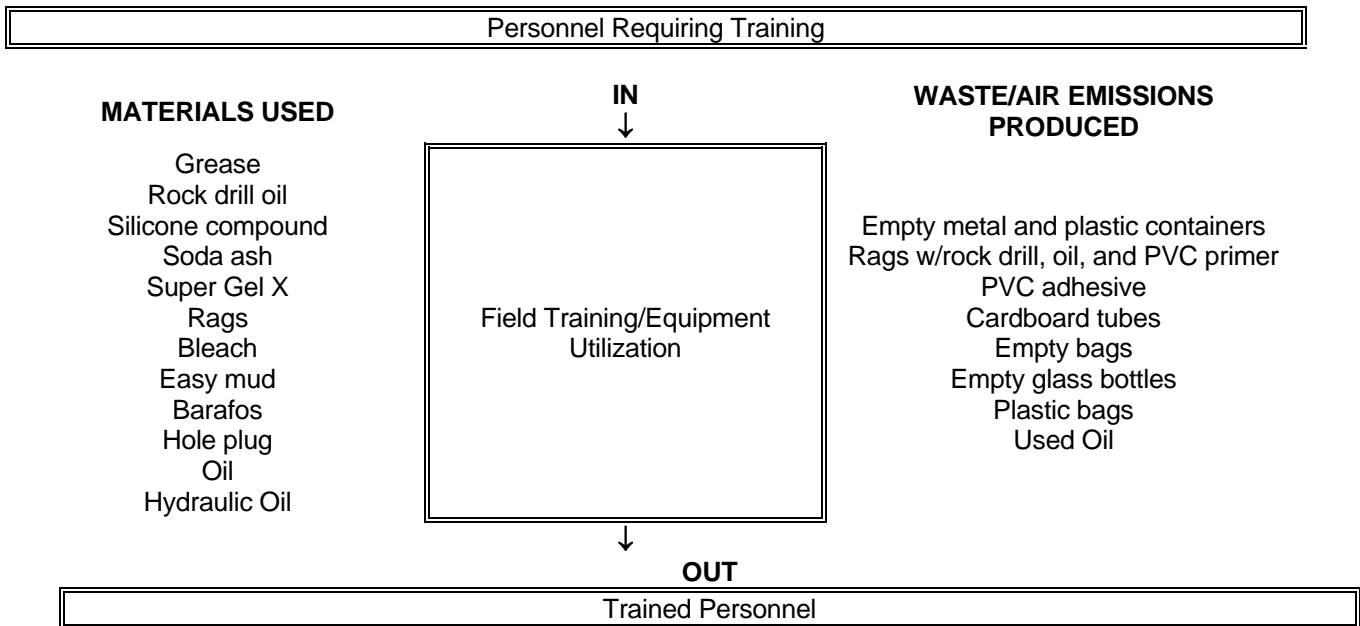
Training exercises. Perform equipment checks and train new personnel on conducting field applications of drilling, mobile construction, and equipment installation.

Base Process ID #: NCRCONT-01
Substrate: N/A
Production Units:
 Description Training Exercises
 Quantity 6

MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:
 None noted.

PROCESS FLOW DIAGRAM NCRCONT-01 Training Exercises



NCRMUN

COMMAND: Naval Construction Group - 2 (NCG-2)
WORK CENTER #: R-75 B.1
SHOP NAME: Munitions Division
BUILDING #: 122
SHOP POC AND PHONE #: Shop Supervisor (228) 871-2463
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop is used to supply ammunitions for training of (4) four active NCR Battalions. This shop handles spent ammunition cartridges and stenciled containers. MWR takes the cartridges and gives them directly to a scrap metal dealer.

The primary process performed in this shop is:

This shop supplies ammunition to the Sailors and Marines stationed at NCBC Gulfport. It also trains staff on the handling and disposition of munitions handling.

The biggest waste producer in this shop is:

Paint waste and contaminated rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, floor drains and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.
- Brass casings are recovered for recycling.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.
- Use of a demil machine.

PROCESS SUMMARY

Recycle Spent Cartridges and Containers

DESCRIPTION

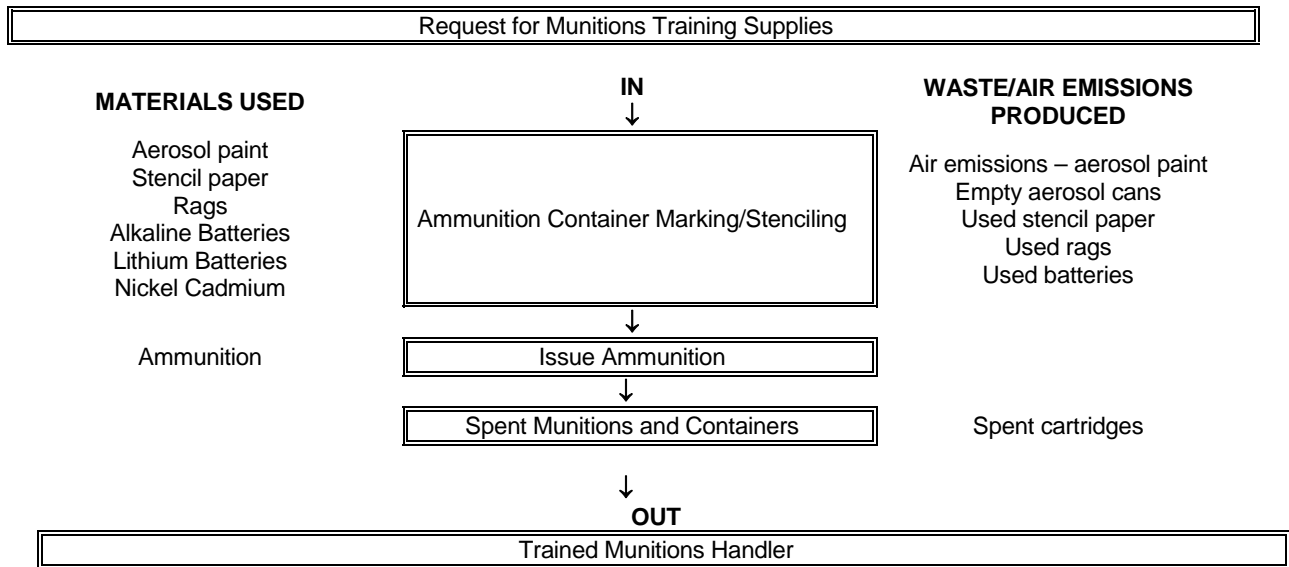
Ammunition supply and training.

Base Process ID #: NCRMUN-01
Substrate: N/A
Production Units:
 Description Training Request
 Quantity Varies

MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:
None noted.

PROCESS FLOW DIAGRAM NCRMUN-01 Recycle Spent Cartridges and Containers



NCRORDNA

COMMAND: Naval Construction Group - 2 (NCG-2)
WORK CENTER #: Ordnance
SHOP NAME: Armory
BUILDING #: 435
SHOP POC AND PHONE #: Shop Supervisor (228) 871-2564
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The armory is used for cleaning, repairing, storing, and maintaining firearms.

The primary process performed in this shop is:

Storage and maintenance of firearms used by Sailors and Marines at NCBC Gulfport.

The biggest waste producer in this shop is:

Oily rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Use of non-hazardous Breakfree products.
- Use of squeeze bottles instead of aerosol lubrication cans.
- Spill kits should be present in the shop.
- Two aqueous steam parts washers (140-gal).

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Firearms Maintenance

DESCRIPTION

Firearms maintenance.

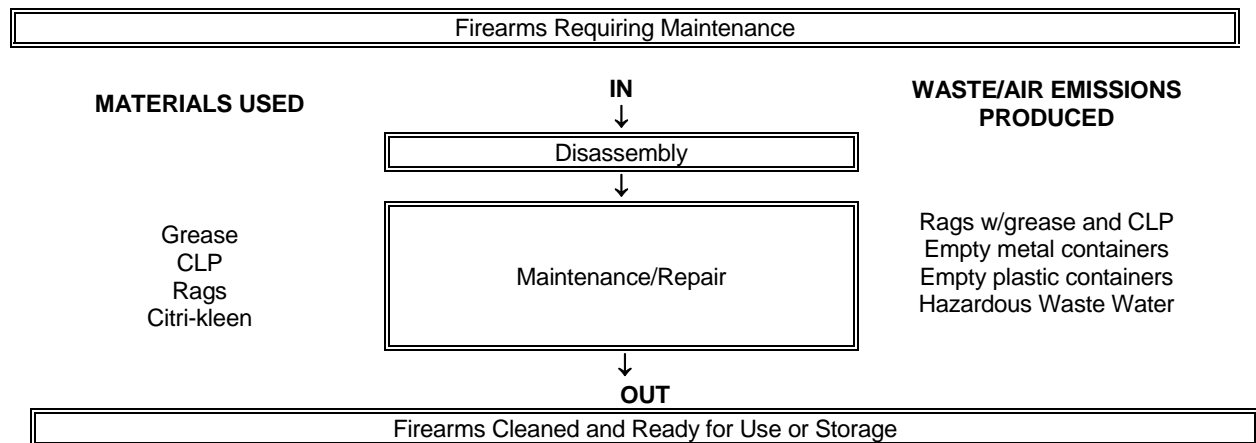
Base Process ID #: NCRORDNA-01
Substrate: Metal and rubber
Production Units:
 Description Firearms
 Quantity 300,000

MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:

Two aqueous steam parts washers (140-gal).

PROCESS FLOW DIAGRAM NCRORDNA-01 Firearms Maintenance



NCRSUPL

COMMAND: Naval Construction Group - 2 (NCG-2)
WORK CENTER #: R-41A
SHOP NAME: Supply
BUILDING #: 225A and 225B
SHOP POC AND PHONE #: Shop Supervisor (228) 871-3423
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The shop checks out and receives back various items which are used in training exercises. Items that have exceeded the marked shelf life or expiration date are disposed of as waste. This is the source of approximately 5% of the hazardous waste generated at NCBC Gulfport.

The primary process performed in this shop is:

Redistribution/disposal of items used during training exercises.

The biggest waste producer in this shop is:

Items having expired shelf life (e.g., paints, POLs, miscellaneous chemicals, and various medical compounds).

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, scrap metal, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Redistribution/Disposal of Returned Materials

DESCRIPTION

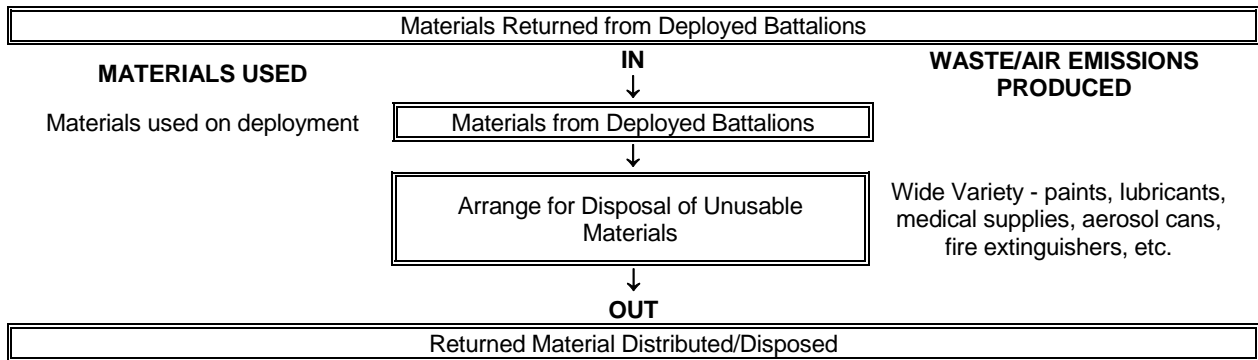
Redistribution/disposal of returned materials.

Base Process ID #: NCRSUPL-01
Substrate: Numerous
Production Units:
 Description: Expired/unusable materials
 Quantity: Fluctuates greatly

MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:
None noted.

PROCESS FLOW DIAGRAM NCRSUPL-01 Redistribution/Disposal of Returned Materials



NCRTOOL

COMMAND: Naval Construction Group - 2 (NCG-2)
WORK CENTER #: SS04
SHOP NAME: Central Tool Room
BUILDING #: 39
SHOP POC AND PHONE #: Shop Supervisor (228) 871-2058
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The primary process performed in this shop is minor maintenance and distribution of field kits and hand tools.

The primary process performed in this shop is:

This shop conducts preventive maintenance and minor repair of field kits and tools.

The biggest waste producer in this shop is:

Rags contaminated with paints and solvents.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- Reuse of floor dry. Floor dry in use does not need to be reused. It is passed through a sieve and unused floor dry is separated from used floor dry.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Tool Maintenance and Repair

DESCRIPTION

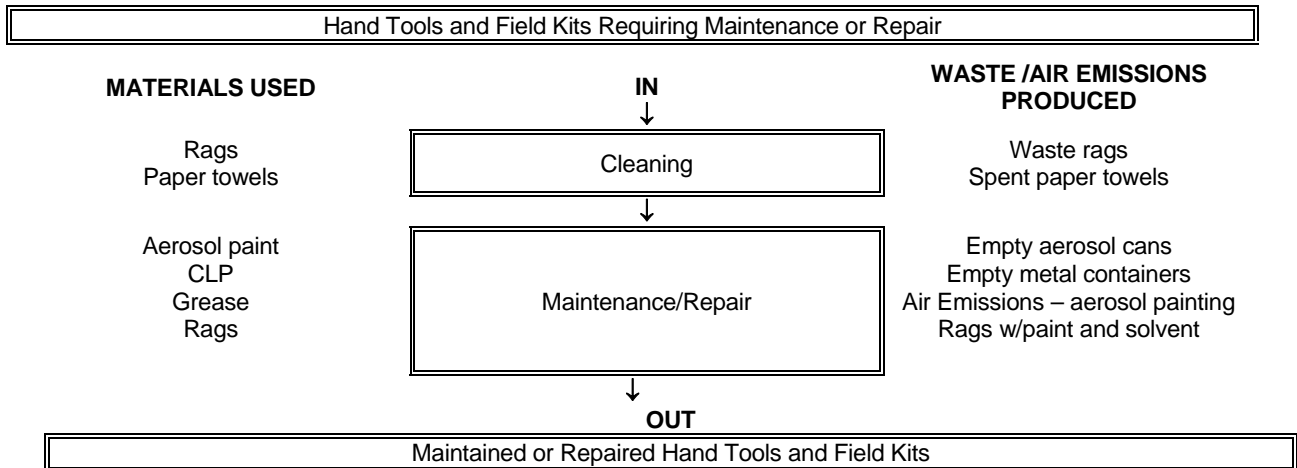
Maintenance/distribution of field kits and hand tools.

Base Process ID #: NCRTOOL-01
Substrate: Various
Production Units:
 Description: Field kits and hand tools
 Quantity: Less than 100

MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:
 None noted.

PROCESS FLOW DIAGRAM NCRTOOL-01 Tool Maintenance and Repair



NCRVEHIC

COMMAND: Naval Construction Group - 2 (NCG-2)
WORK CENTER #: R-436
SHOP NAME: Equipment Department
BUILDING #: 241
SHOP POC AND PHONE #: Shop Supervisor (228) 871-2783
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The primary process performed in this shop is preventive maintenance on heavy, rolling equipment.

The primary process performed in this shop is:

Heavy equipment inspections, maintenance, lubrication, and tire changes.

The biggest waste producer in this shop is:

Used POLs, oily rags, used oil and fuel filters.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, the floor drain and connections are:

Filled in and plugged with concrete.

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- Installation of paint gun washer. Not implemented because no painting operations occur in this shop.

CURRENT P2 PRACTICES AND EQUIPMENT

- Vehicle wash rack, drum crusher, lube cubes, oil filter crusher, brake cleaner can refiller, and two oil/water separators.
- Used oil and used antifreeze are automatically sent to drums outside of the building.
- Brake cleaner can refilling system is in place which eliminates the number of aerosol cans that need to be purchased and disposed.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Metal containers and oil filters are drained, rinsed, crushed and picked up for recycling.

- Recycling Center – aluminum, scrap metal, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.
- Used oil, antifreeze, scrap tires, metals, and batteries are picked up for recycling.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness
- Use of a fume hood for soldering.
- Switch from Black Beauty blast media to glass or garnet.
- Placement of spill kits near potential spill areas.

PROCESS SUMMARY

Preventive Maintenance

DESCRIPTION

Preventive Maintenance

Base Process ID #: NCRVEHIC-01
Substrate: Various
Production Units:
 Description Rolling equipment
 Quantity 600 pieces of equipment/vehicles

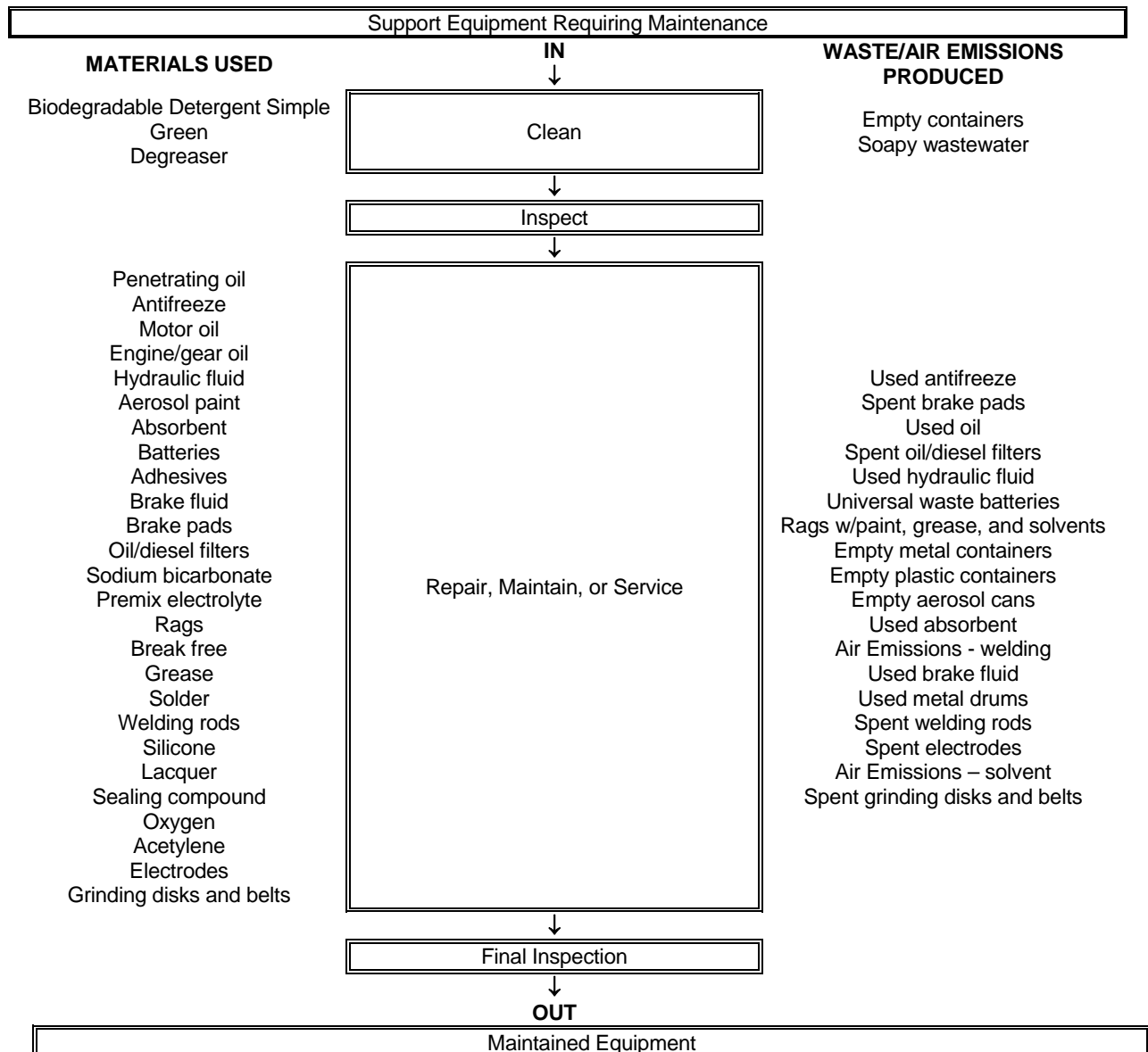
MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:

Vehicle wash rack, drum crusher, lube cubes, oil filter crusher, brake cleaner can refiller, two oil/water separators, two aqueous parts washers (120-gal), and glove box with Black Beauty blast media.

PROCESS FLOW DIAGRAM

NCRVEHIC-01 Preventive Maintenance



PROCESS SUMMARY

Tire Replacement

DESCRIPTION

Tire replacement.

Base Process ID #: NCRVEHIC-02

Substrate: Various

Production Units:

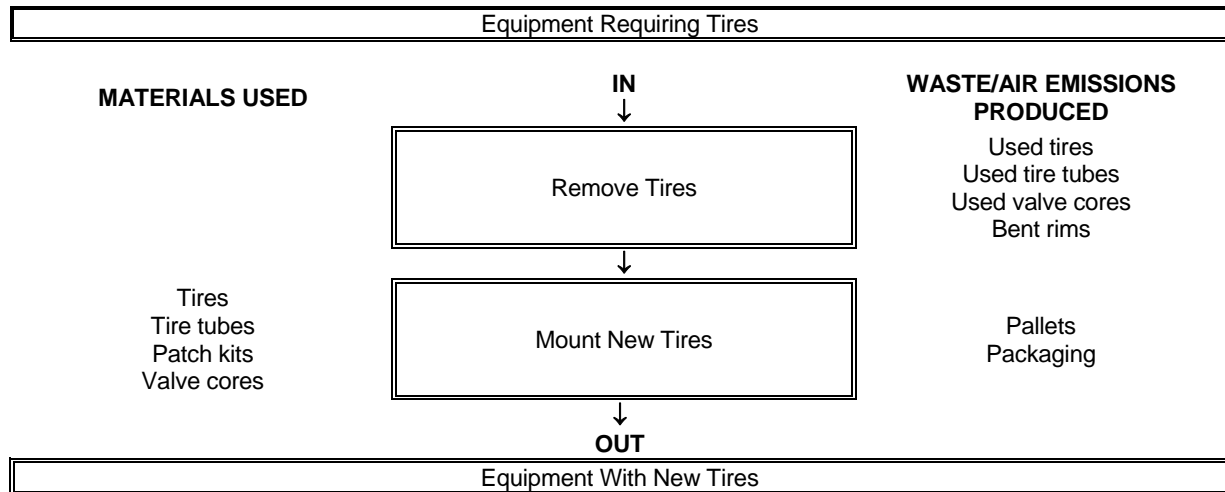
Description	Tires
Quantity	600/year

MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:

None noted.

PROCESS FLOW DIAGRAM
NCRVEHIC-02 Tire Replacement



NCTCACR Shop

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: N/A
SHOP NAME: Air Conditioning Repair Shop
BUILDING #: 385
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The air conditioning repair shop trains Navy personnel to maintain and repair air conditioning equipment.

The primary process performed in this shop is:

Repairing and maintaining air conditioning equipment.

The biggest waste producer in this shop is:

Used oil and contaminated rags; recovered ODS.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed. ODS removal equipment and unused refrigerants are stored in secured lockers.

If present, floor drains and connections are:

Filled in and plugged with concrete.

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in this shop.
- Refrigerant R-134a and R-410a are used and replaces older ozone-depleting substances (ODS).
- Freon reclamation units (6).

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.

- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.
- Use of fume hood for brazing instead of performing brazing operations outside.

PROCESS SUMMARY

Air Conditioning Repair

DESCRIPTION

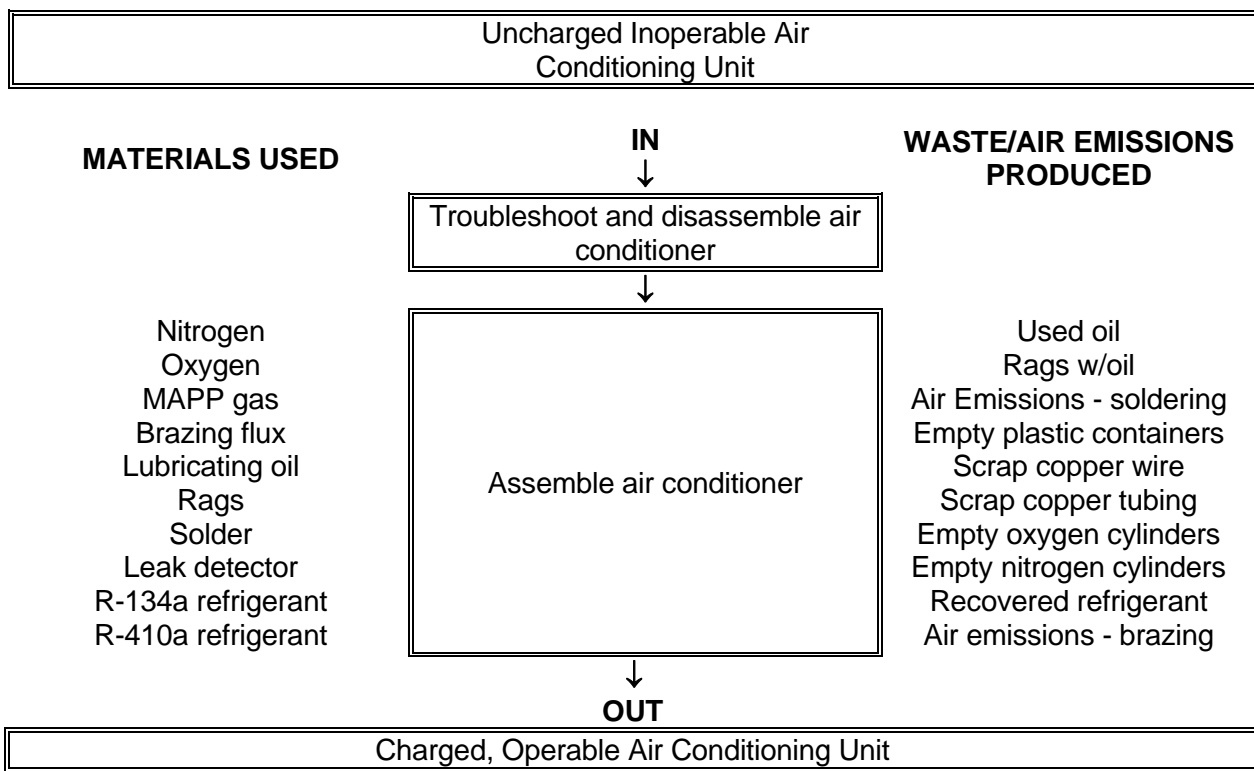
Train personnel in air conditioning system repair.

Base Process ID #: NCTCACR-01
Substrate: Metal
Production Units:
 Description: Air conditioners
 Quantity: 4 classes/year

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
 Freon reclamation units (6).

PROCESS FLOW DIAGRAM NCTCACR-01 Air Conditioning Repair



NCTCCESE Shop

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: Civil Engineering Support Equipment (CESE) Maintenance Div.
SHOP NAME: Civil Engineering Support Equipment
BUILDING #: 241
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop performs maintenance on vehicles used by NCTC to conduct training and building support. Depot level work is sent to CED to be performed.

The primary process performed in this shop is:

Second-level maintenance including oil changes, brake and transmission fluids additions, parts, lubrication, antifreeze change-out, tire replacement, battery change-out, and welding.

The biggest waste producer in this shop is:

Used POLs and associated containers.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

General housekeeping in the shop is good; however, there are areas where past staining and spilled POLs were observed. No actively leaking equipment was observed. Absorbent pads were included under equipment prone to minor drips.

If present, floor drains and connections are:

Filled in and plugged with concrete

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were present in this shop.
- Antifreeze recovery unit, battery charger, 75-gal aqueous parts washer, lube cubes, citrus-based brake cleaner unit.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.

- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.
- Used oil, antifreeze, and batteries are picked up for recycling.
- Tire recycling is coordinated through DLA Disposition Services.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.
- Metered bulk POL system in order to avoid manual fluid transfers.
- Vacuum system for removing engine oil out of heavy equipment.
- Oil filter crusher and oil drum crusher that can be shared between all Building 241 occupants.

PROCESS SUMMARY

Vehicle Maintenance

DESCRIPTION

Vehicle maintenance.

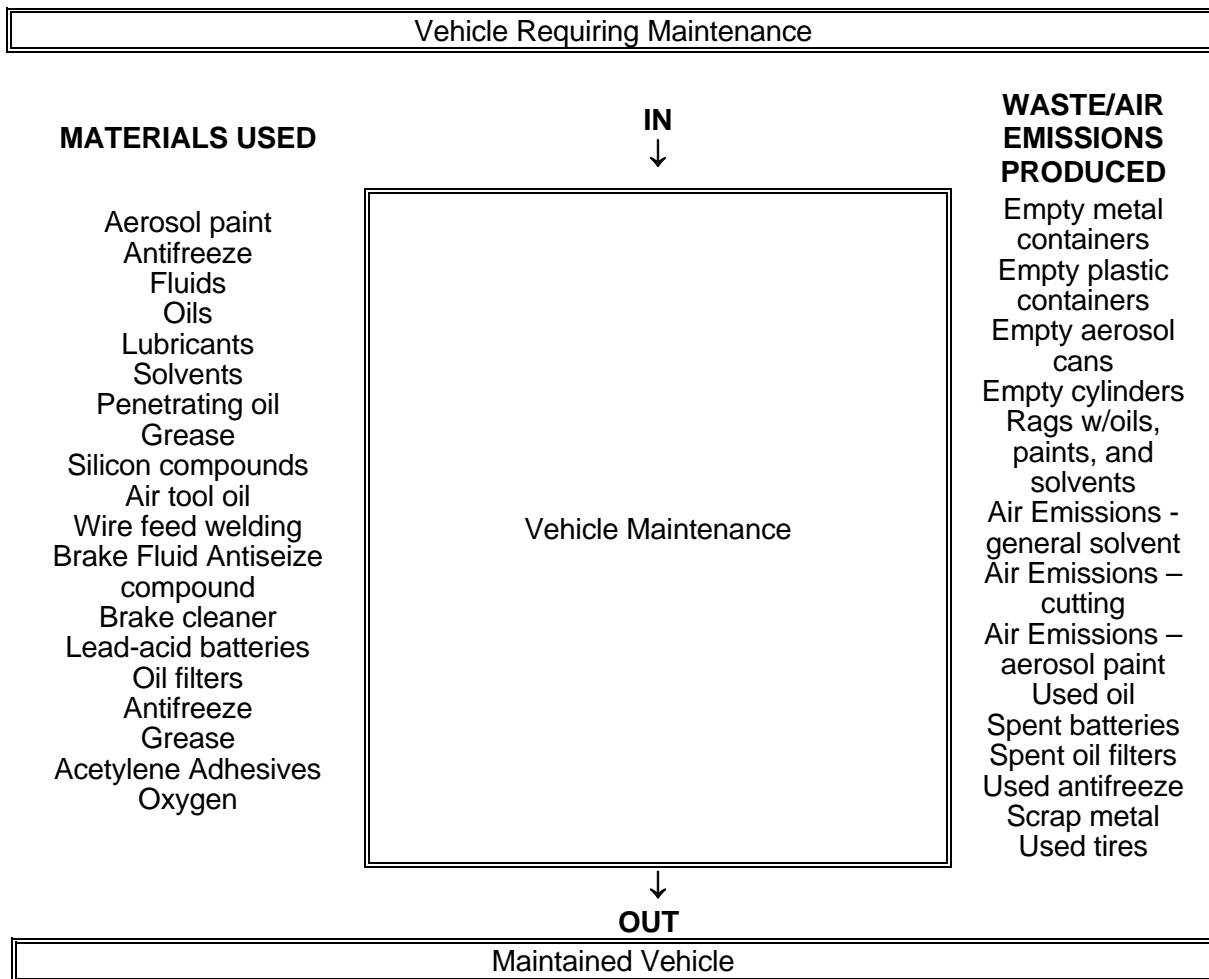
Base Process ID #: NCTCCESE-01
Substrate: Metal
Production Units:
 Description: Wheeled Vehicles
 Quantity: 1,000 vehicles/year

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Citrus-based brake cleaner unit, antifreeze recovery unit, battery charger, 75-gal aqueous parts washer, lube cubes.

PROCESS FLOW DIAGRAM NCTCCESE-01 Vehicle Maintenance



NCTCDFS Shop

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: N/A
SHOP NAME: Diesel Fuel Systems Shop
BUILDING #: 70
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop trains Navy personnel in general service tune up procedures for diesel engines and how to repair small automotive electrical items such as starters and alternators. Currently there are approximately twelve students in each class and a class works in each shop six times per year. In between classes the battalions come in and use the facilities. They also bring in about twelve students and use the shops three times per year

The primary process performed in this shop is:

Routine maintenance (including testing and diagnostics) on diesel engines and simple automotive electrical repairs.

The biggest waste producer in this shop is:

Used POLs, oily rags, and used oil filters.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, floor drains and connections are:

Filled in and plugged with concrete.

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in this shop.

P2 EQUIPMENT NOT IN USE

- An aqueous-based parts washer (120 gal).

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Metal containers and oil filters are drained, crushed, and picked up for recycling.
- Used oil, antifreeze, and batteries are picked up for recycling.

- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Routine Engine Maintenance

DESCRIPTION

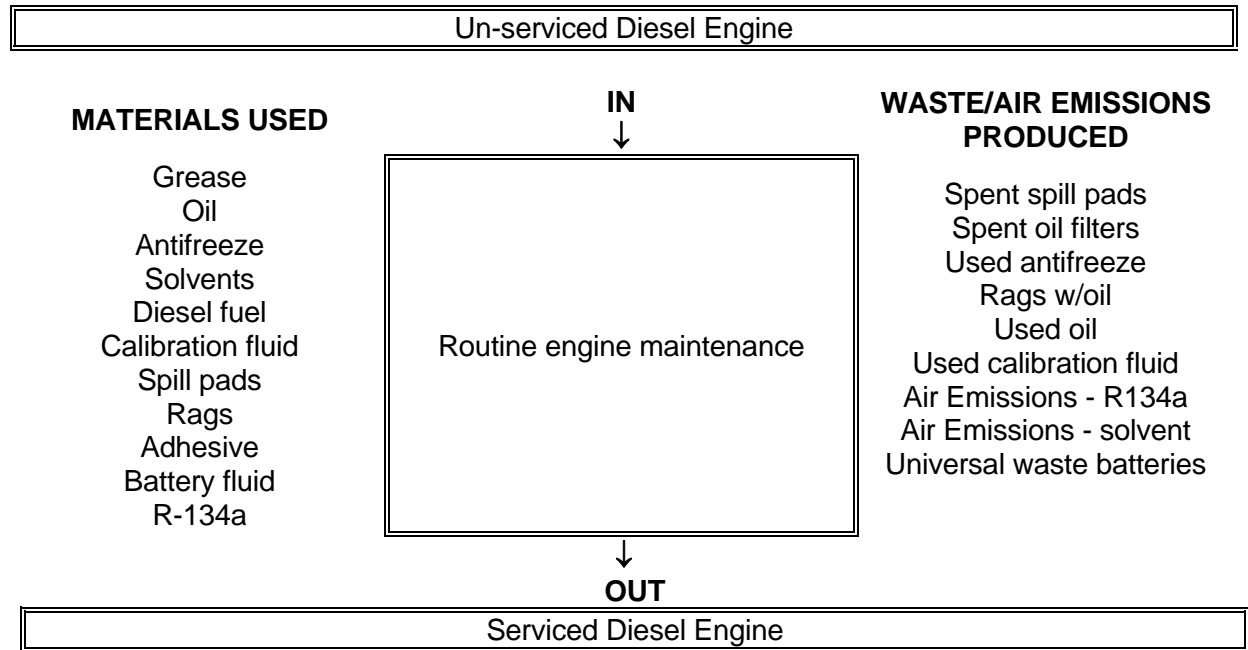
Maintain and repair diesel engines.

Base Process ID #: NCTCDFS-01
Substrate: Metal
Production Units:
 Description Diesel Engines
 Quantity 84 engines/ year

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
 Aqueous parts washer.

PROCESS FLOW DIAGRAM NCTCDFS-01 Maintain and Repair Diesel Engines



PROCESS SUMMARY

Electrical Repairs and Testing

DESCRIPTION

Train personnel in repair of automotive electrical components.

Base Process ID #: NCTCDFS-02

Substrate: Metal

Production Units:

Description Transmissions

Quantity 24 uses/year

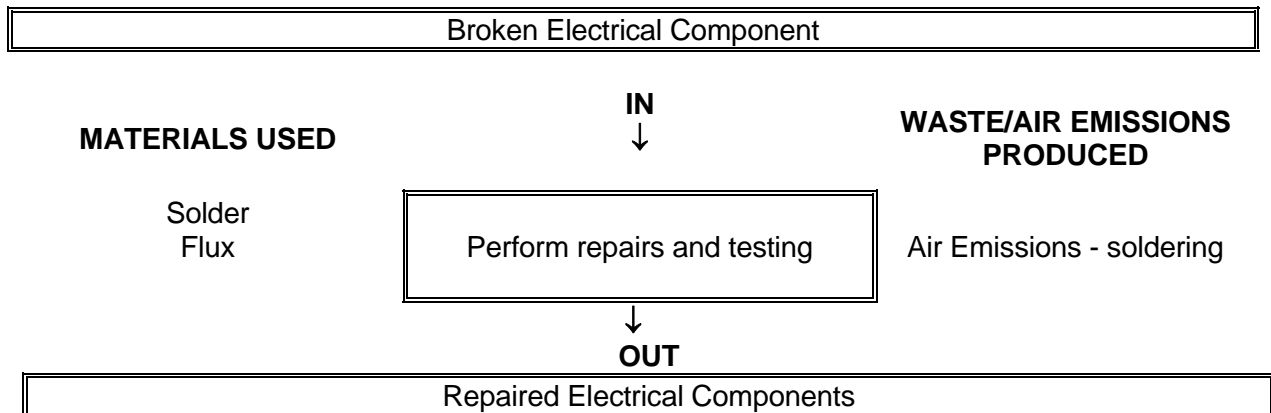
MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Electrical testing equipment.

PROCESS FLOW DIAGRAM

NCTCDFS-02 Electrical Repairs and Testing



NCTCENGR Shop

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: Alpha Company
SHOP NAME: Engineering Aids Soils Lab
BUILDING #: 385
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop trains Navy personnel in construction testing procedures.

The primary process performed in this shop is:

Construction lab testing (i.e., asphalt extraction tests, soil compaction tests, concrete compression tests, asphalt freeze/thaw tests, soil moisture content tests, and other miscellaneous construction tests).

The biggest waste producer in this shop is:

Waste kerosene and unused asphalt constituent.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, floor drains and connections are:

Filled in and plugged with concrete.

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in this shop.
- Citrus (aqueous) parts washer (75-gal), LED lighting

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Construction Lab Testing

DESCRIPTION

Construction Lab Testing.

Base Process ID #: NCTCENGR-01

Substrate: N/A

Production Units:

Description Untested material

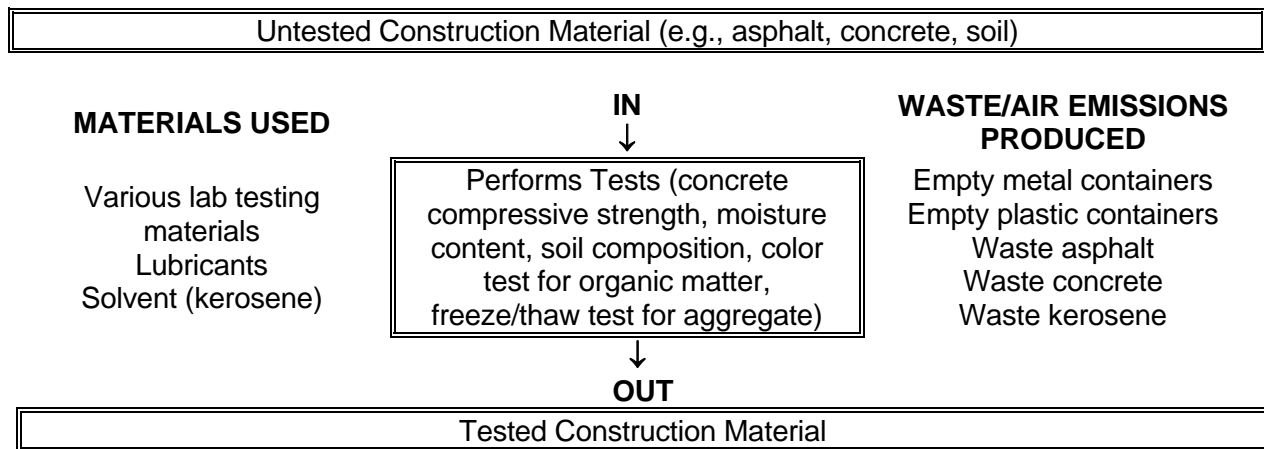
Quantity 4 classes/year

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Aqueous (citrus) parts washer (75-gal), LED lighting.

PROCESS FLOW DIAGRAM NCTCENGR-01 Construction Lab Testing



NCTC-F Shop

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: A-Bay
SHOP NAME: Electric Fuel Injection Trainer Simulators
BUILDING #: 70
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop trains Navy personnel to calibrate and clean automotive fuel injection systems. Currently there are approximately twelve students in each class and a class works in each shop three-times per year. In between classes the battalions come in and use the facilities. They also bring in about twelve students and use the shops three-times per year.

The primary process performed in this shop is:

Calibration and cleaning of automotive fuel injection systems.

The biggest waste producer in this shop is:

Oily rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, floor drains and connections are:

Filled in and plugged with concrete.

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in this shop.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Calibrate and Clean Fuel Injectors

DESCRIPTION

Train personnel in calibration and cleaning of automotive fuel injection systems.

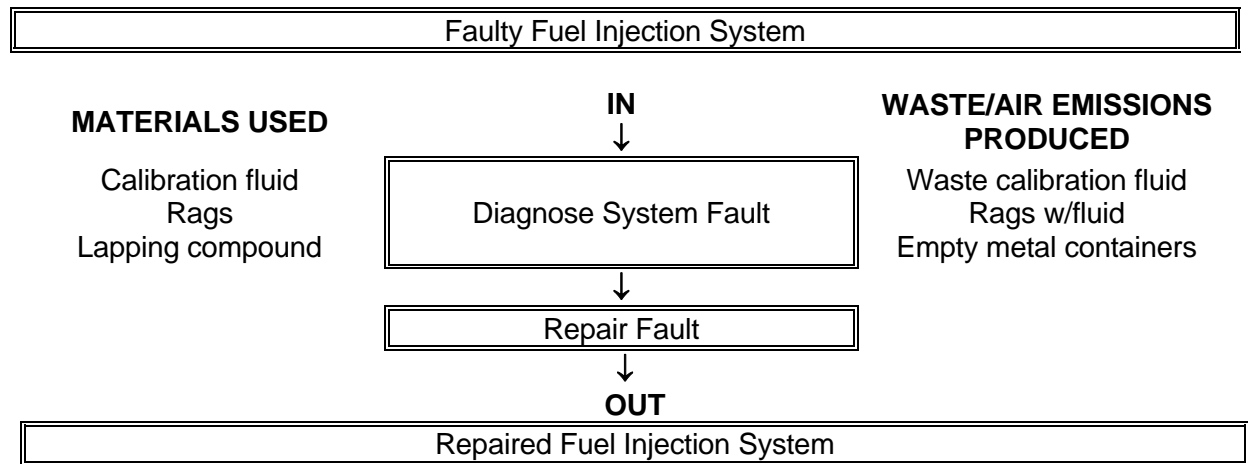
Base Process ID #: NCTC-F-01
Substrate: Metal
Production Units:
 Description: Fuel injectors
 Quantity: 24 uses/ year

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Bacharach brand fuel injector calibrator.

PROCESS FLOW DIAGRAM NCTC-F-01 Calibrate and Clean Fuel Injectors



NCTCHCS Shop

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: N/A
SHOP NAME: Heavy Chassis Shop
BUILDING #: 70
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop trains active duty and reserve personnel in performing maintenance and repair operations on track suspension systems, vehicle air conditioning, and hydraulic pumps. Currently, there are approximately twelve students in each class and approximately twelve students in each class and approximately six classes per year.

The primary process performed in this shop is:

Heavy chassis equipment repair (including hydraulic component testing), vehicle air conditioning repair, and hydraulic pump repair (including building and testing hydraulic hoses and cleaning, degreasing, and repairing hydraulic pumps).

The biggest waste producer in this shop is:

Oily rags and associated waste.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, floor drains and connections are:

Filled in and plugged with concrete.

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in this shop.
- Glove box with sand blast media; 10-gal solvent immersion cleaner; 75-gal aqueous parts washer; hydraulic hose tester which uses water as test fluid instead of hydraulic oil to minimize use of petroleum-based hydraulic fluids; and Freon recovery, recycling, and recharging units (6).

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, rinsed, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Maintenance and Repair of Heavy Chassis and A/C

DESCRIPTION

Maintenance and repairs of heavy chassis.

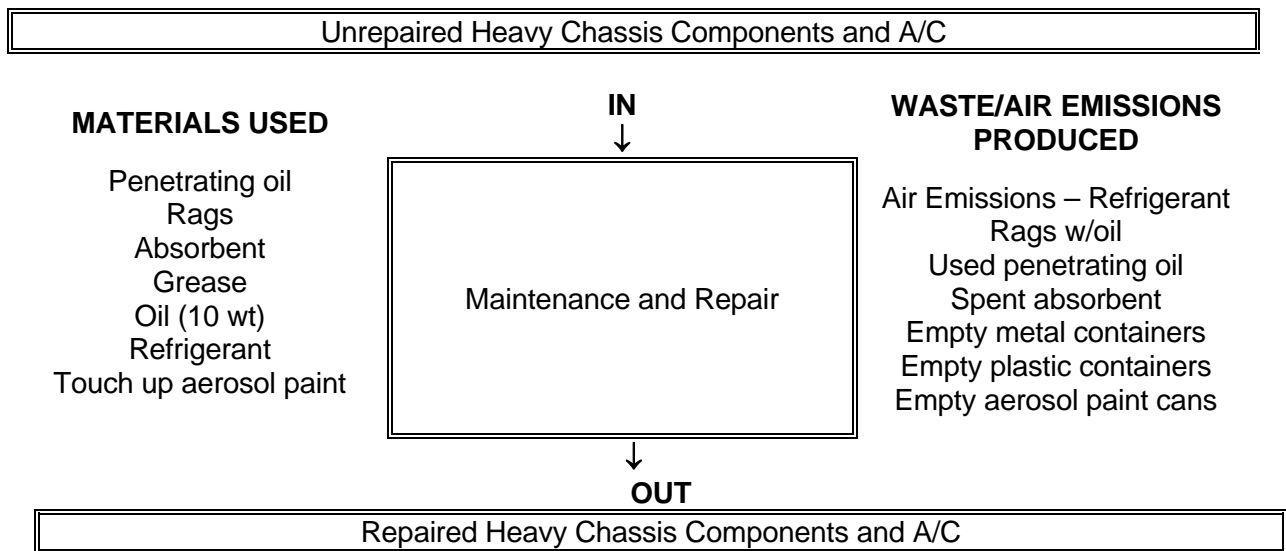
Base Process ID #: NCTCHCS-01
Substrate: N/A
Production Units:
 Description Heavy chassis components
 Quantity 3 classes/year

MRC/Technical Publication: CAT Service manual, Custom Track Service manual, John Deere Service manual

P2/Environmental Equipment Used in Process:

Glove box with sand blast media; 10-gal solvent immersion cleaner; 75-gal aqueous parts washer; and recovery, recycling, and recharging units (6).

PROCESS FLOW DIAGRAM
NCTCHCS-01 Maintenance and Repair of Heavy Chassis and A/C



PROCESS SUMMARY

Maintain and Repair Hydraulic Pumps

DESCRIPTION

Train personnel in maintenance and repair of hydraulic pumps and manufacture of hoses.

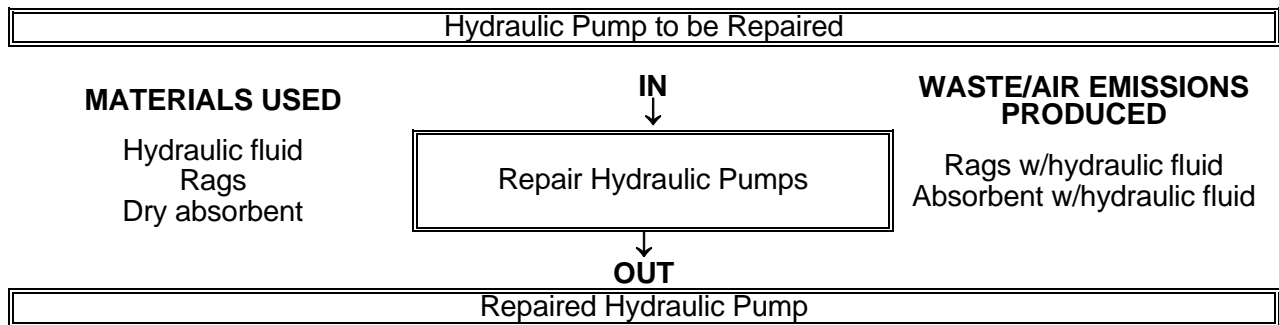
Base Process ID #: NCTCHCS-02
Substrate: Metal
Production Units:
 Description Hydraulic pumps
 Quantity 24 uses/year

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Hydraulic hose tester, aqueous parts washer.

PROCESS FLOW DIAGRAM NCTCHCS-02 Maintain and Repair Hydraulic Pumps



PROCESS SUMMARY

Manufacture Hoses

DESCRIPTION

Manufacture hoses.

Base Process ID #:

NCTCHCS-03

Substrate:

Rubber hose material

Production Units:

Description

Hoses

Quantity

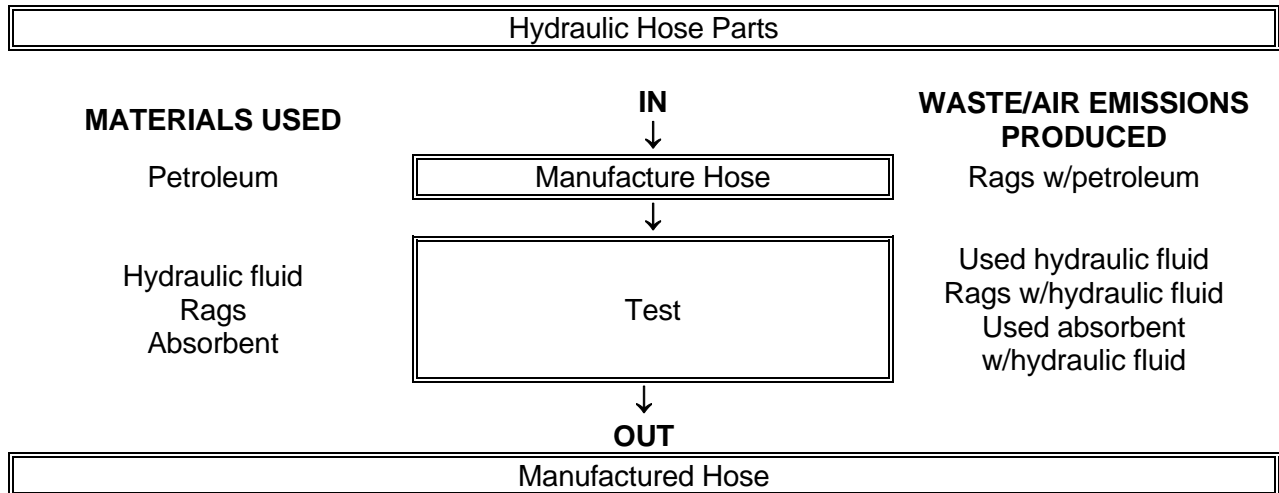
Various, depending on operational tempo.

MRC/Technical Publication: Several

Equipment Used in Process:

Hose fabrication machine.

PROCESS FLOW DIAGRAM NCTCHCS-02 Manufacture Hoses



NCTCHEAD Shop

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: C Bay
SHOP NAME: Automotive Head Reconditioning Shop
BUILDING #: 346
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop trains Naval personnel in automotive head reconditioning. Currently there are approximately twelve students in each class and a class works in each shop three times per year. In between classes the battalions come in and use the facilities. They also bring in about twelve students and use the shops three times per year.

The primary process performed in this shop is:

Automotive head reconditioning.

The biggest waste producer in this shop is:

Oily rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.
-

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness

PROCESS SUMMARY

Automotive Head Reconditioning

DESCRIPTION

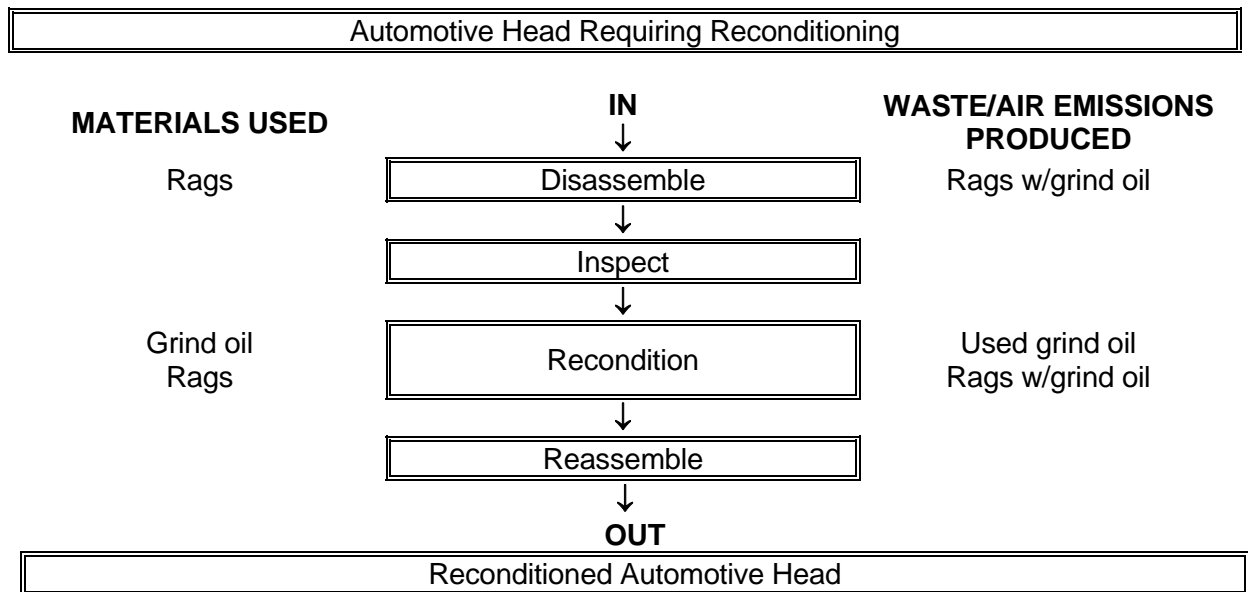
Automotive head reconditioning.

Base Process ID #: NCTCHEAD-01
Substrate: N/A
Production Units:
 Description: Automotive heads
 Quantity: 18

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
 None noted.

PROCESS FLOW DIAGRAM NCTCHEAD-01 Automotive Head Reconditioning



NCTCLCS Shop

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: C Bay
SHOP NAME: Light Chassis Shop
BUILDING #: 70
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop trains Navy personnel to maintain and repair light chassis automotive components. Currently there are approximately twelve students in each class and a class works in each shop three times per year. In between classes the battalions come in and use the facilities. They also bring in about twelve students and use the shops three times per year.

The primary process performed in this shop is:

Light chassis equipment repairs including welding.

The biggest waste producer in this shop is:

Used oil and oily rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, floor drains and connections are:

Filled in and plugged with concrete.

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- An aqueous parts washer (75 gal) is in use.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, rinsed, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.
- Place spill kits into shop.

PROCESS SUMMARY

Light Chassis Systems Repair

DESCRIPTION

Light chassis systems repair.

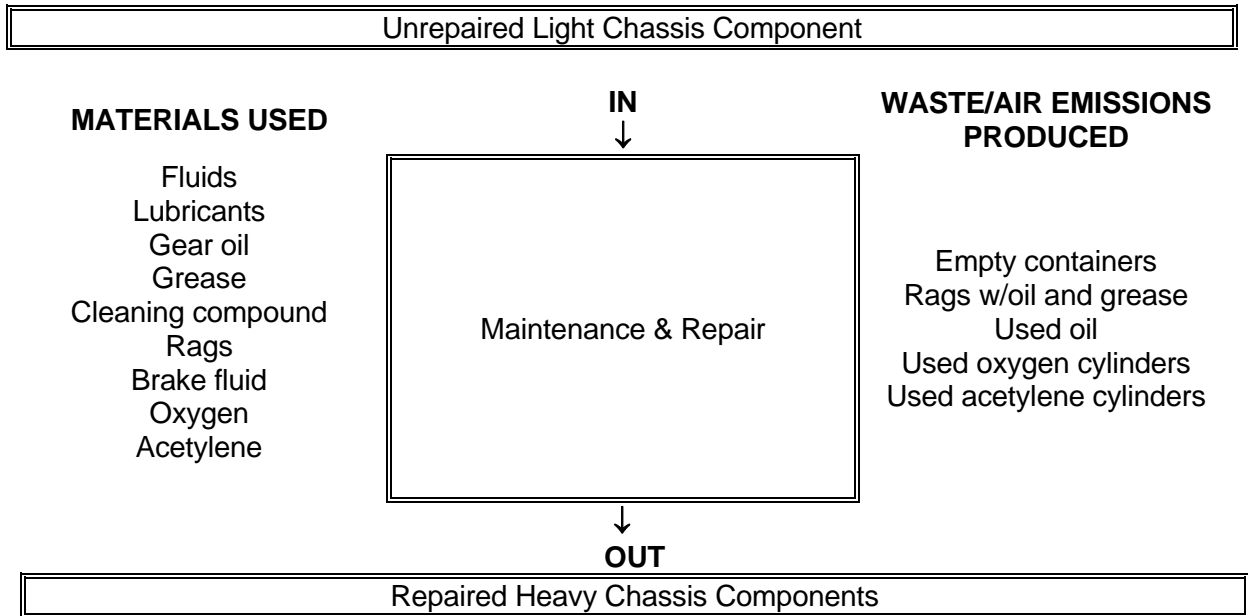
Base Process ID #: NCTCLCS-01
Substrate: N/A
Production Units:
 Description Light chassis components
 Quantity 6 classes/year

MRC/Technical Publication: Chevrolet Manufacturer's Service Manual

P2/Environmental Equipment Used in Process:

Blast box (with glass beads), parts washer (75 gal aqueous), aqueous brake cleaner unit (5 gal).

PROCESS FLOW DIAGRAM NCTCLCS-01 Light Chassis Systems Repair



NCTCPLUM

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: N/A
SHOP NAME: Plumbing Shop
BUILDING #: 385
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop trains Navy personnel in general plumbing repair for PVC and copper applications. The plumbing course is taught approximately seven times per year with ten students per class. "A" level training (recruit) has been moved to Sheppard AFB. Only "C1" level (senior NCO) classes are now taught at NCTC.

The primary process performed in this shop is:

Plumbing and tubing repair.

The biggest waste producer in this shop is:

Oily rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

General housekeeping in the shop is good; however, there are areas where past staining and spilled POLs were observed. No actively leaking equipment was observed. Absorbent pads were included under equipment prone to minor drips.

If present, floor drains and connections are:

Filled in and plugged with concrete

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in this shop.

P2 EQUIPMENT NOT IN USE

- Fume hoods for soldering emissions.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.
- Use of a fume hood for soldering.
- Recycling of PVC generated during training classes.

PROCESS SUMMARY

Plumbing and Tubing Repair

DESCRIPTION

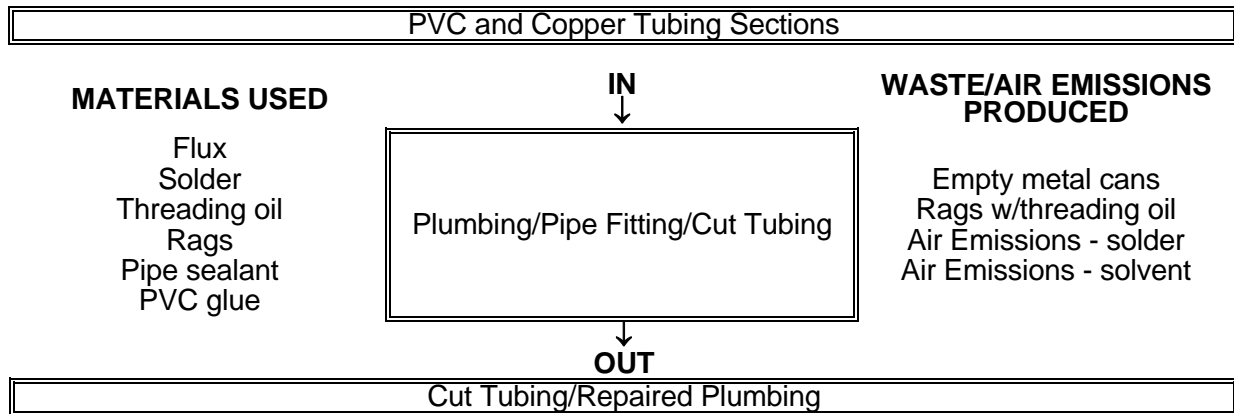
Train personnel in plumbing and tubing repair.

Base Process ID #: NCTCPLUM-01
Substrate: Copper and PVC plastic
Production Units:
 Description: Piping and tubing
 Quantity: 7 classes/year, 200 feet per year

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process: None noted.

PROCESS FLOW DIAGRAM NCTCPLUM-01 Plumbing and Tubing Repair



NCTCPRAC

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: Practical Room
SHOP NAME: Cable Splicing Training Course/Interior Wiring Training Course
BUILDING #: 305
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop trains Navy personnel to perform cable splicing operations and routine interior wiring.

The primary process performed in this shop is:

Cable/fiber optics repair.

The biggest waste producer in this shop is:

Splice kits, oily rags, insulating resin.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Cable/Fiber Optics Repair

DESCRIPTION

Train personnel in cable and fiber optics repair.

Base Process ID #: NCTCPRAC-01

Substrate: N/A

Production Units:

Description Cables

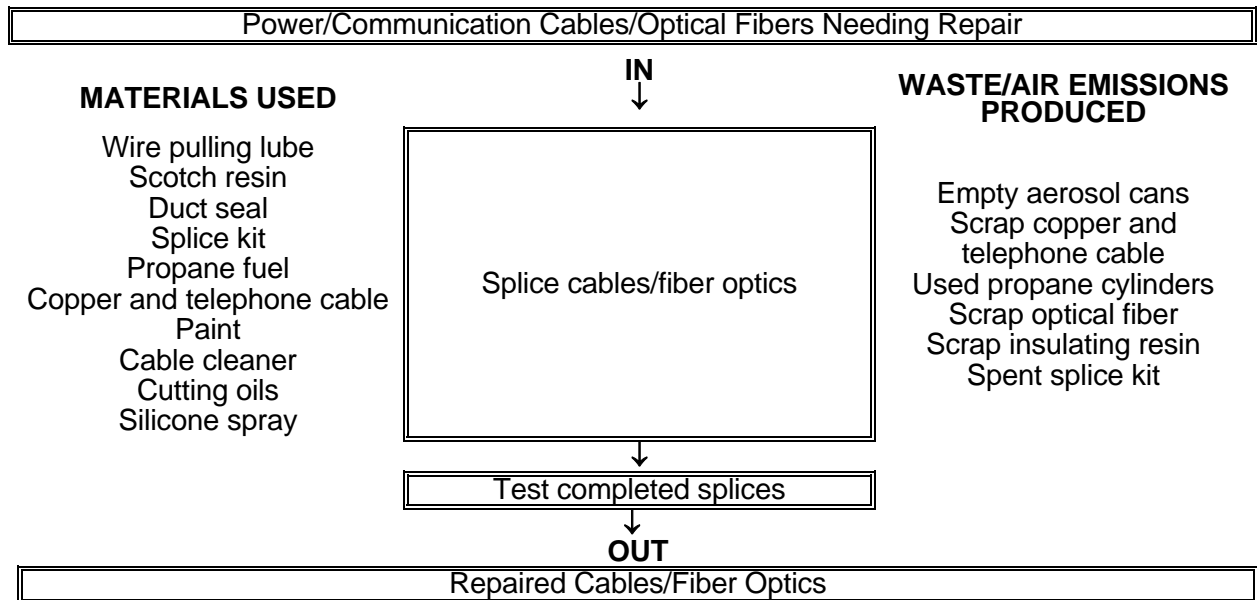
Quantity N/A

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

None noted.

PROCESS FLOW DIAGRAM NCTCPRAC-01 Cable/Fiber Optics Repair



NCTCSHET

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: N/A
SHOP NAME: Sheet Metal Shop
BUILDING #: 67
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop trains Navy personnel to fabricate sheet metal.

The primary process performed in this shop is:

Fabrication of sheet metal, including cutting, cleaning, soldering, and grinding.

The biggest waste producer in this shop is:

Scrap metal and empty containers.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, scrap metal, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Sheet Metal Fabrication

DESCRIPTION

Train personnel in sheet metal fabrication.

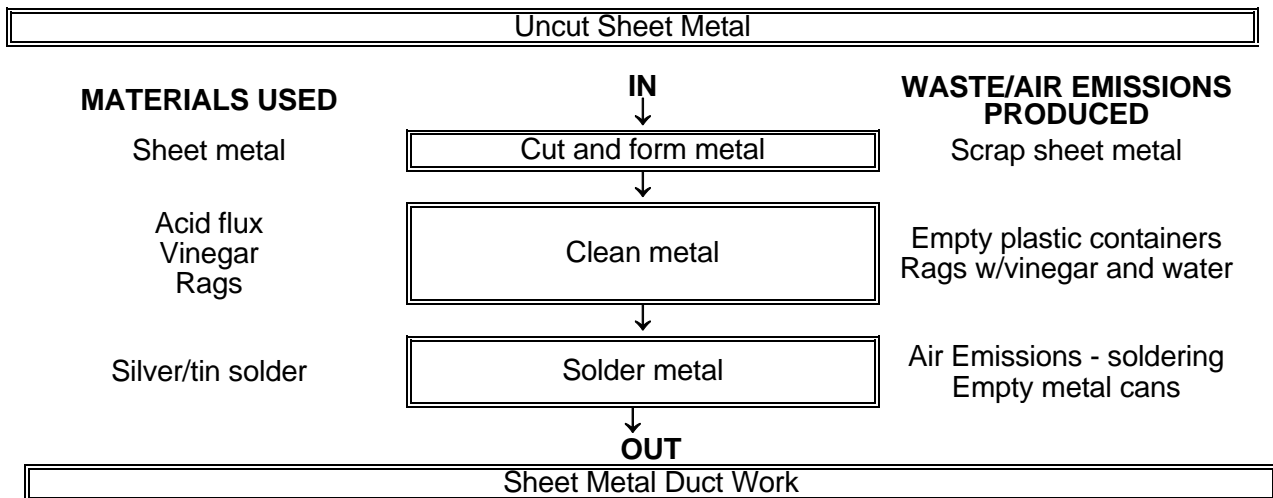
Base Process ID #: NCTCSHET-01
Substrate: N/A
Production Units:
 Description Sheet metal
 Quantity 1,200 hours of use per year

MRC/Technical Publication: Various

P2/Environmental Equipment Used in Process:

None noted.

PROCESS FLOW DIAGRAM NCTCSHET-01 Sheet Metal Fabrication



NCTCTRAN

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: N/A
SHOP NAME: Transmission Shop
BUILDING #: 345
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop provides training to Navy personnel in the repair and the tear-down/rebuilding of automotive and truck transmissions. Currently there are approximately twelve students in each class and a class works in each shop three-times per year. In between classes the battalions come in and use the facilities. They also bring in about twelve students and use the shops three times per year.

The primary process performed in this shop is:

Disassembly, repair, tear-down, and rebuilding of automobile and truck transmissions.

The biggest waste producer in this shop is:

Oily rags and rags contaminated with solvent.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, the floor drain and connections are:

Filled in and plugged with concrete.

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in this shop.
- Hydraulic fluid is captured and reused multiple times in training exercises.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is obtained from SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.

- Recycling Center – aluminum, scrap metal, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Transmission Repair/Rebuilding

DESCRIPTION

Train personnel in transmission repair/tear down/rebuilding.

Base Process ID #: NCTCTRAN-01

Substrate: N/A

Production Units:

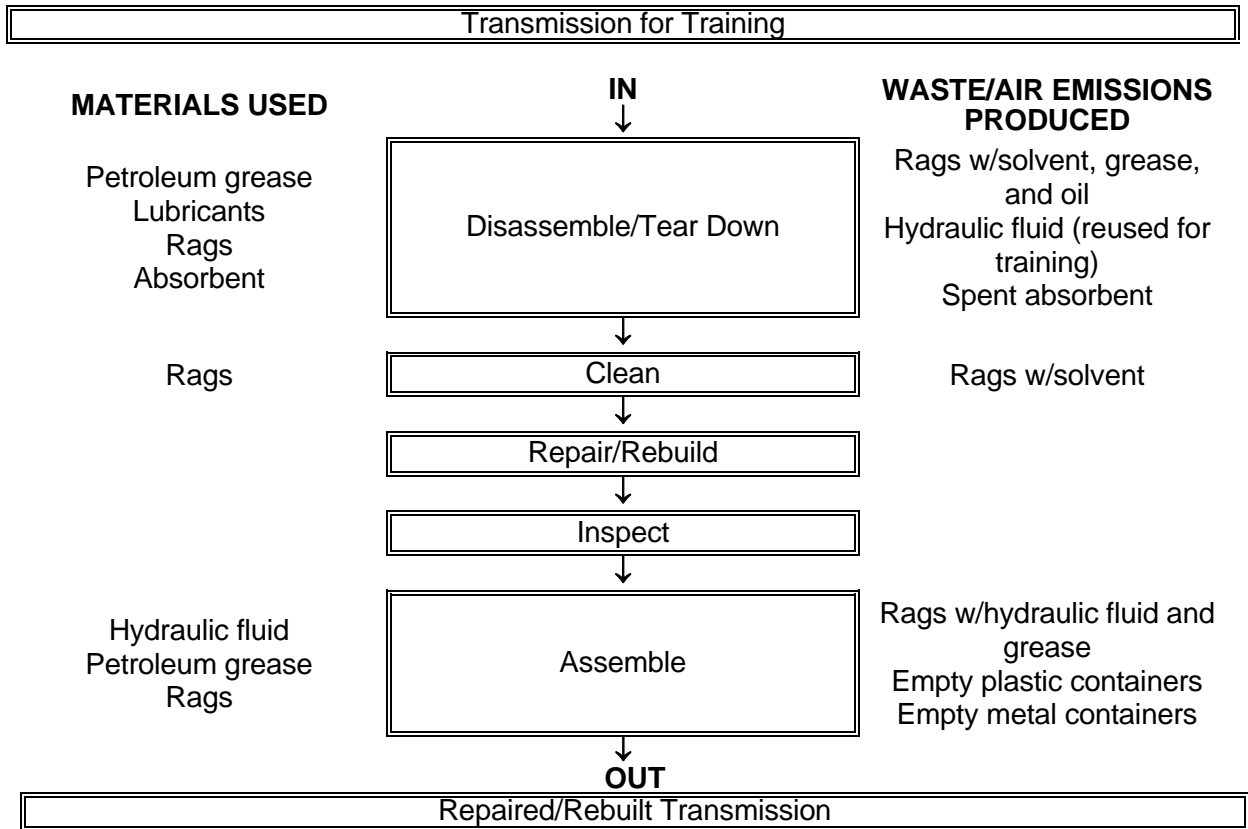
Description	Transmissions
Quantity	Various

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Two 120 gal solvent parts washers

PROCESS FLOW DIAGRAM NCTCTRAN-01 Transmission Repair/Rebuilding



NCTCWELD

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: N/A
SHOP NAME: Welding Shop
BUILDING #: 67
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop trains Navy personnel to weld. This shop trains students how to form and shape metal in order to repair vehicles and structures that have been damaged. Several different forms of welding are used. NCTC has added Air Force and Army students to the roster, which increased operations by 300%. Welding activities will be conducted 6.5 hours/day, 5 days/week/year in Building 67.

The primary process performed in this shop is:

Welding.

The biggest waste producer in this shop is:

Spent welding rods.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- Ensure spent glass blasting media are not RCRA –regulated waste through testing. Not implemented because blasting is not conducted in this shop.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.

- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Welding

DESCRIPTION

Train personnel in welding.

Base Process ID #: NCTCWELD-01

Substrate: Metal

Production Units:

Description Metal

Quantity 310 sheets/year

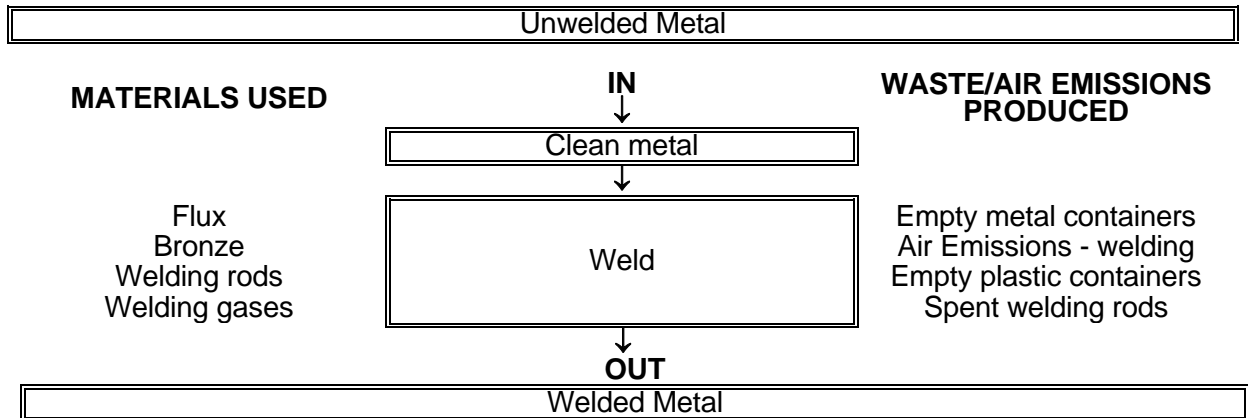
MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

None noted.

PROCESS FLOW DIAGRAM

NCTCWELD-01 Welding



NCTCWTTTC

COMMAND: Naval Construction Training Center (NCTC)
WORK CENTER #: N/A
SHOP NAME: Water Treatment/Boiler Training Course
BUILDING #: 385
SHOP POC AND PHONE #: William Bailey (Facilities Manager) (228) 871-3223
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop trains Navy personnel how to operate boilers, including how to perform necessary water analysis, chemically treat water, and prepare potable water in the field.

The primary process performed in this shop is:

Water Treatment.

The biggest waste producer in this shop is:

Waste chemicals and used oil/contaminated rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

Housekeeping conditions are generally good. Personnel place absorbent pads under equipment that may experience minor drips. No actively leaking equipment was observed.

If present, floor drains and connections are:

Filled in and plugged with concrete.

All HAZMAT in this shop have the proper ERP barcode:

No – A spot check of flam lockers showed HAZMAT were not properly barcoded.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits were observed in this shop.
- Reverse osmosis units (2).

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.
- Remove AST from outside of Building 385 and replace with jerry cans that are filled prior to class commencement.

PROCESS SUMMARY

Water Treatment

DESCRIPTION

Train personnel in the chemistry of water treatment.

Base Process ID #: NCTCWTTTC-01

Substrate: Water

Production Units:

Description Water Treatment

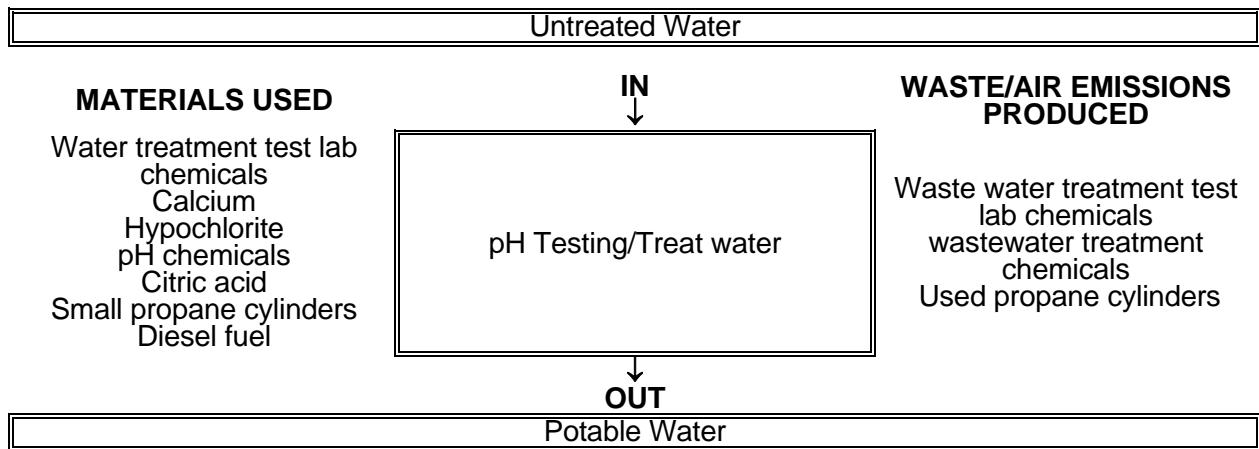
Quantity 7 uses/year

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Settling tanks, reverse osmosis unit, water purification unit 6000D

PROCESS FLOW DIAGRAM NCTCWTTTC-01 Water Treatment



PROCESS SUMMARY

Boiler Repair

DESCRIPTION

Train personnel in the boiler repair.

Base Process ID #: NCTCWTTTC-02

Substrate: Water

Production Units:

Description Boiler Repair

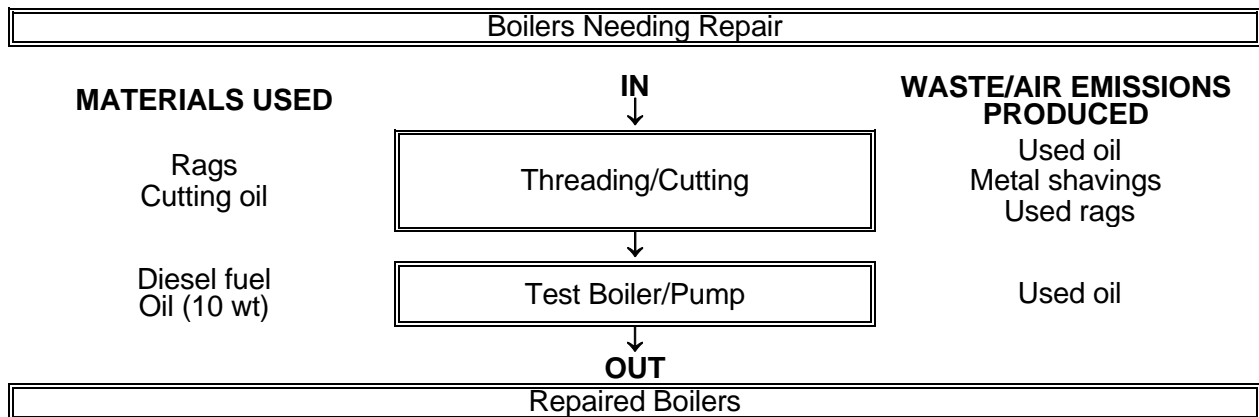
Quantity 4 times/year

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

Settling tanks, reverse osmosis unit, water purification unit 6000D

PROCESS FLOW DIAGRAM
NCTCWTTTC-01 Water Treatment



PWCARP

COMMAND: NAVFAC
WORK CENTER #: 400
SHOP NAME: Carpenter Shop
BUILDING #: 274
SHOP POC AND PHONE #: Shop Supervisor (228) 871-2861
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop performs woodworking functions including structural repairs.

The primary process performed in this shop is:

Preparation and finishing of wood products, including structural repairs on buildings.

The biggest waste producer in this shop is:

Paint waste, solvents/thinner waste, oily rags and rags contaminated with solvent/thinner.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Woodworking

DESCRIPTION

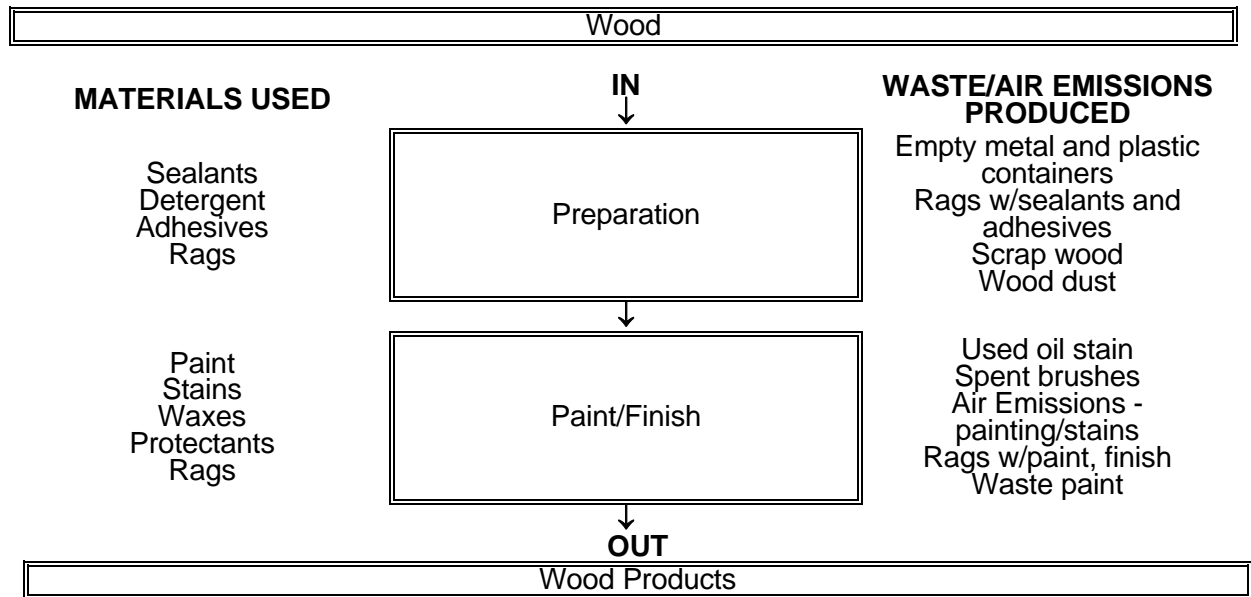
Woodworking (minor repairs and patchwork).

Base Process ID #: PWCARP-01
Substrate: N/A
Production Units:
 Description Woodworking order requests
 Quantity One use/month

MRC/Technical Publication: Several.

P2/Environmental Equipment Used in Process:
 None noted.

PROCESS FLOW DIAGRAM PWCARP-01 Woodworking (Minor Repairs and Patch Work)



PWPAINT

COMMAND: NAVFAC
WORK CENTER #: 400
SHOP NAME: Paint Shop
BUILDING #: 266
SHOP POC AND PHONE #: Shop Supervisor (228) 871-2861
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop is responsible for small painting jobs (Limited priming) buildings, structures (wood and metal), roads and equipment. Since 1994, the work this shop performs has been steadily decreasing as most shop duties are contracted to local service providers.

The primary process performed in this shop is:

Painting of buildings, metal structures, and pavement surfaces.

The biggest waste producer in this shop is:

Paint waste, solvents/thinner waste, rags contaminated with solvent/thinner.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers and oil filters are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Painting Buildings

DESCRIPTION

Painting buildings.

Base Process ID #: PWPAINT-01

Substrate: N/A

Production Units:

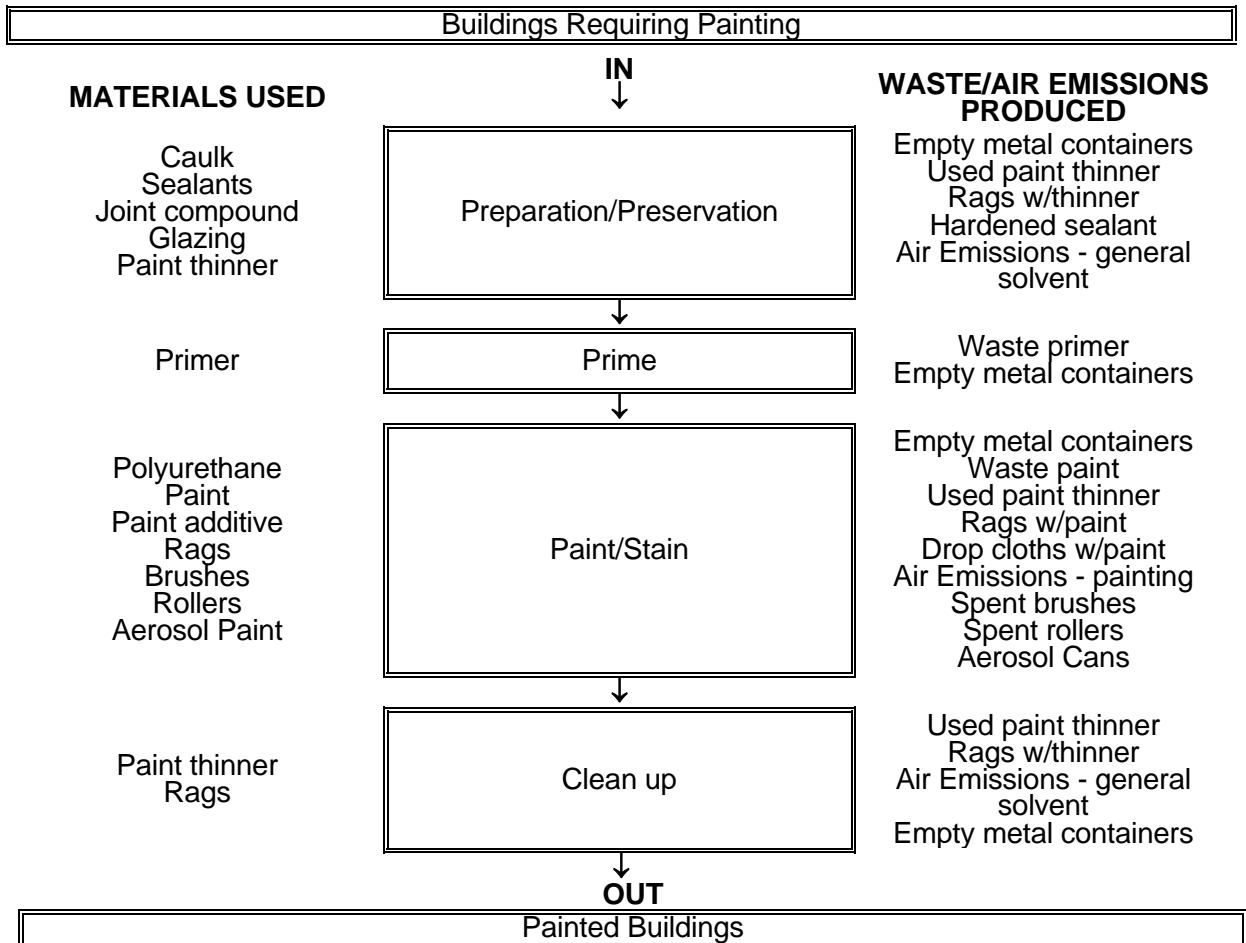
Description	Buildings
Quantity	150

MRC/Technical Publication: N/A

P2/Environmental Equipment Used in Process:

None noted.

PROCESS FLOW DIAGRAM PWPAINT-01 Painting Buildings



PROCESS SUMMARY

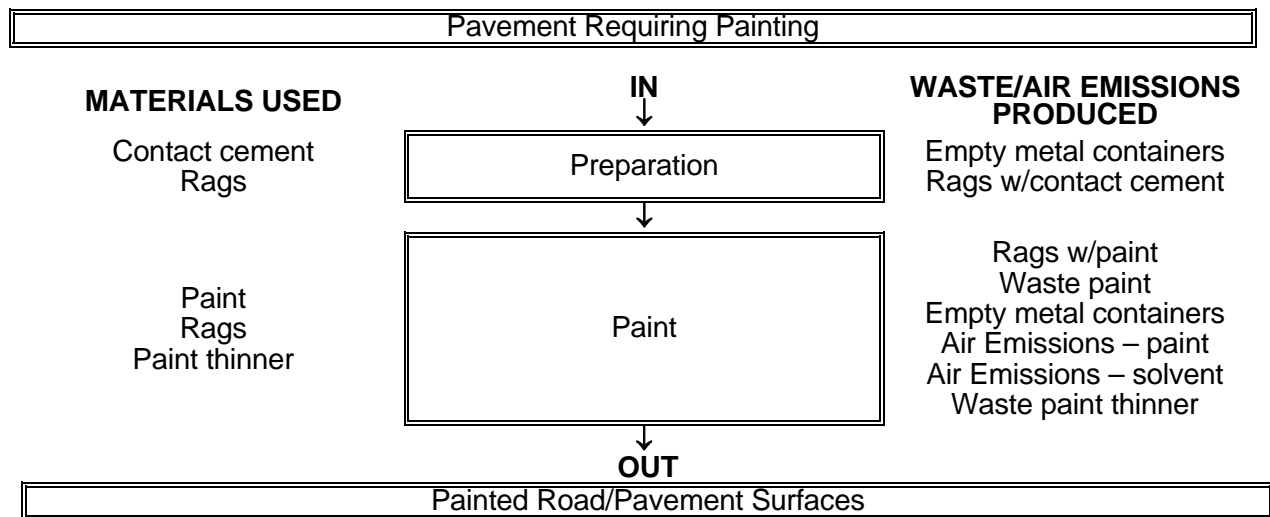
Painting Road/Pavement Surfaces

Base Process ID #: PWPAINT-02
Substrate: N/A
Production Units:
 Description Roads and pavement
 Quantity 2-4 days/month (average)

MRC/Technical Publication: N/A

P2/Environmental Equipment Used in Process:
 None noted.

PROCESS FLOW DIAGRAM PWPAINT-02 Painting Road/Pavement Surfaces



PWPEST

COMMAND: NAVFAC
WORK CENTER #: 400
SHOP NAME: Pest Control
BUILDING #: 421
SHOP POC AND PHONE #: Shop Supervisor (228) 871-2861
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop is responsible for pest control and ant bait distribution.

The primary process performed in this shop is:

Pest control, herbicide application, and equipment cleaning.

The biggest waste producer in this shop is:

Bait bags and used pest traps.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

NA – Shop was not visited.

If present, the floor drain and connections are:

NA – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

NA – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.
- Use of integrated pest management (IPM) principles to minimize use of pesticides.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Ant Abatement

DESCRIPTION

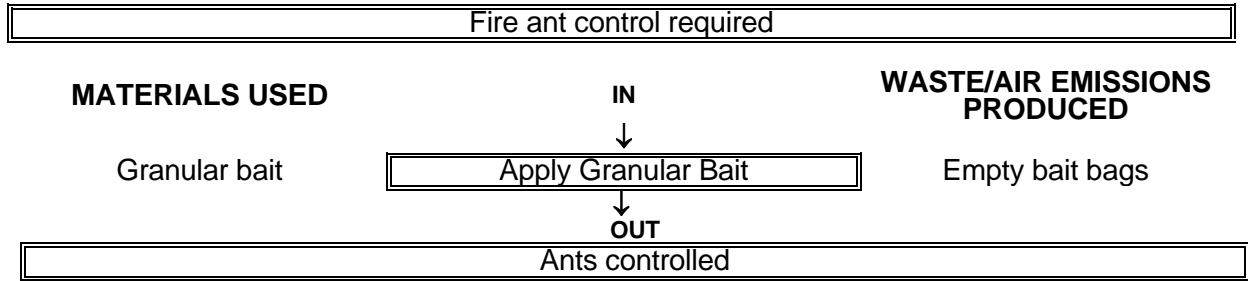
Pest control.

Base Process ID #: PWPEST-01
Substrate: Applications
Production Units:
 Description: Ant Abatement
 Quantity: 300

MRC/Technical Publication: Manufacturer bulletins

P2/Environmental Equipment Used in Process:
 None.

PROCESS FLOW DIAGRAM PWPEST-01 Ant Abatement



PROCESS SUMMARY

Pest Control and Herbicide Application

DESCRIPTION

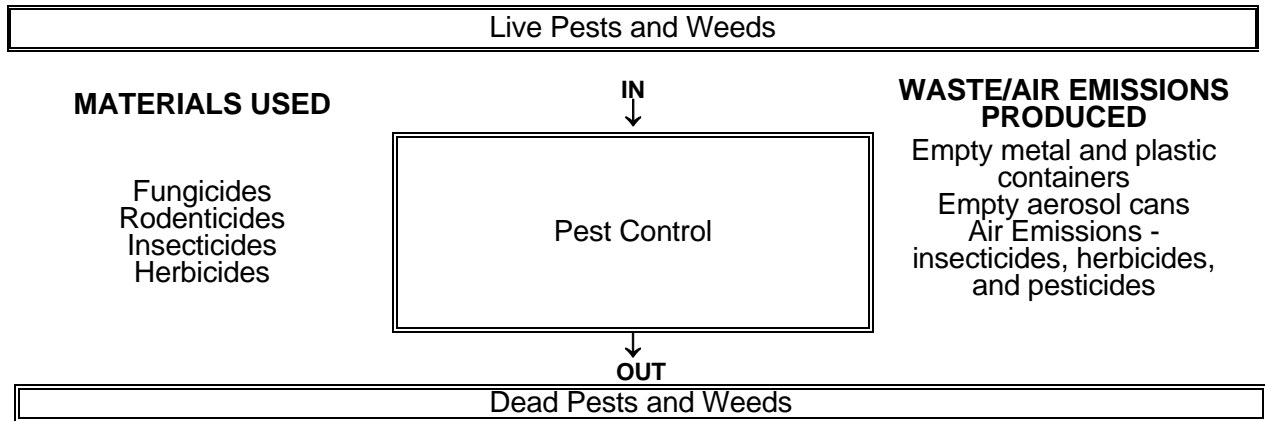
Pest control and herbicide application.

Base Process ID #: PWPEST-02
Substrate: Applications
Production Units:
 Description Land
 Quantity 300

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
 None noted.

PROCESS FLOW DIAGRAM PWPEST-02 Pest Control and Herbicide Application



PROCESS SUMMARY

Equipment Cleaning

DESCRIPTION

Equipment Cleaning.

Base Process ID #: PWPEST-03

Substrate: Applications

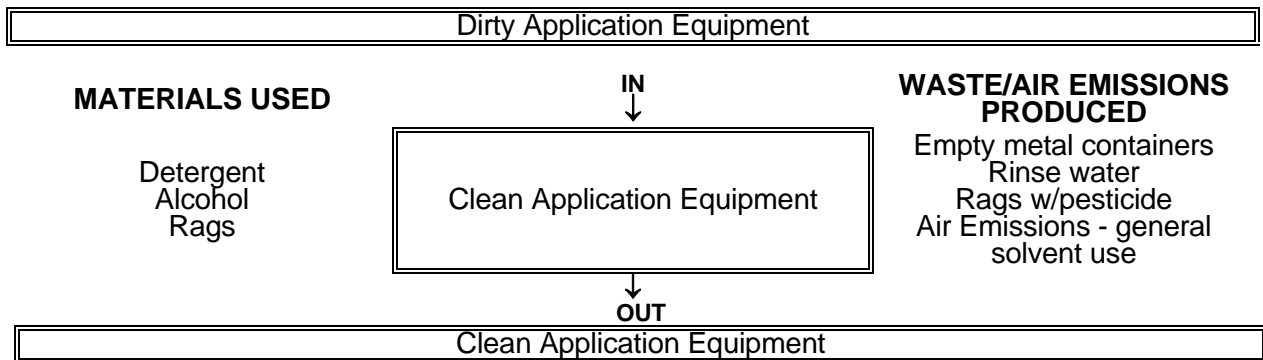
Production Units:
Description: Equipment
Quantity: 300

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:

None noted.

PROCESS FLOW DIAGRAM PWPEST-03 Equipment Cleaning



PWSHTMTL

COMMAND: NAVFAC
WORK CENTER #: 400
SHOP NAME: Sheet Metal
BUILDING #: 274
SHOP POC AND PHONE #: Shop Supervisor (228) 871-2861
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop performs metalworking functions and minor structural repairs.

The primary process performed in this shop is:

Metalworking/structural repair (including surface preparation, metal corrosion protection, metal sealing, and welding).

The biggest waste producer in this shop is:

Contaminated rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.

P2 EQUIPMENT NOT IN USE

- None noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, scrap metal, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Metalworking/Structural Repair

DESCRIPTION

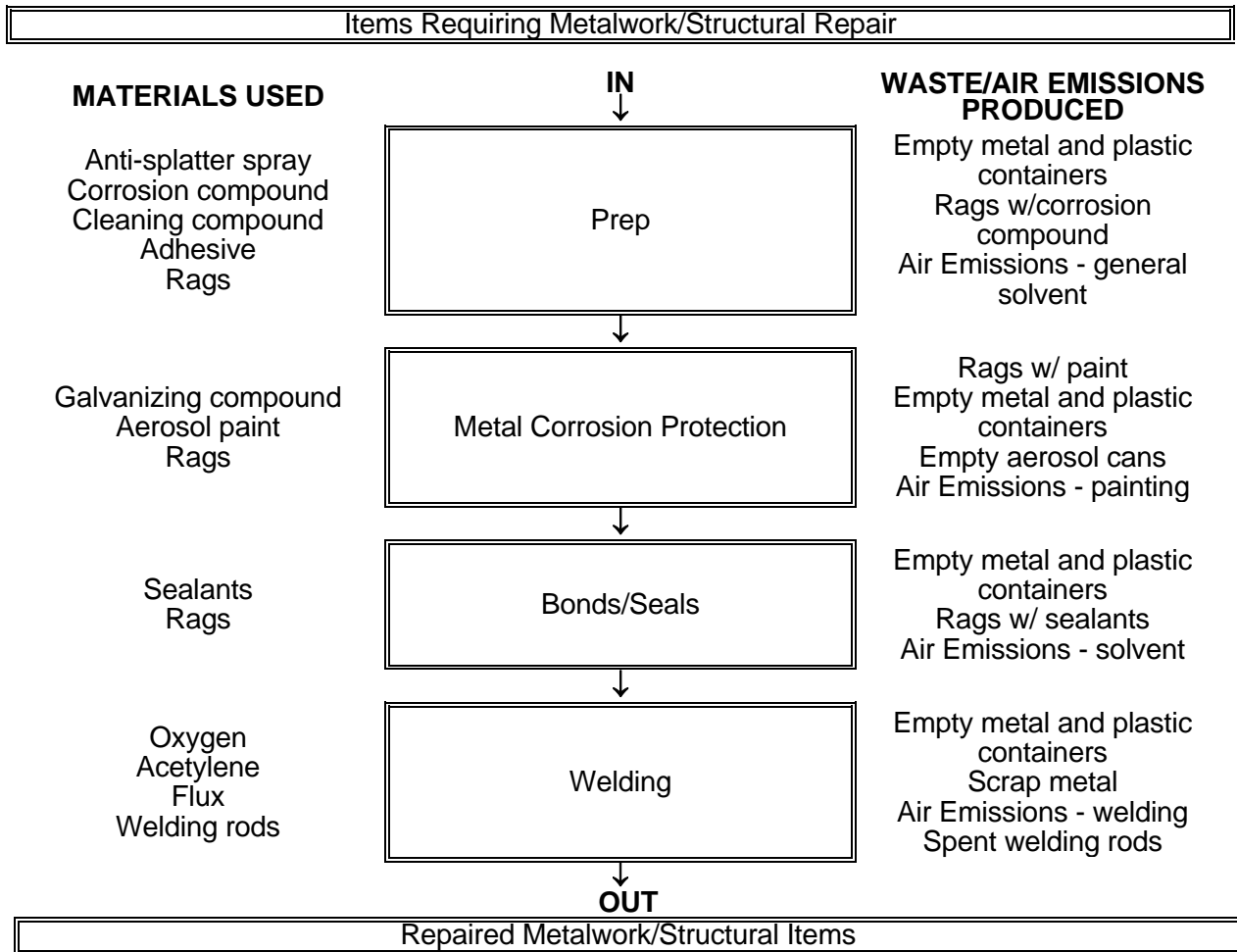
Metalworking/structural repair.

Base Process ID #: PWSHTMTL-01
Substrate: Sheet metal
Production Units:
 Description: Work order requests
 Quantity: 600/year

MRC/Technical Publication: Several.

P2/Environmental Equipment Used in Process:
 None noted.

PROCESS FLOW DIAGRAM PWSHTMTL-01 Metalworking/Structural Repair



PWUTIL

COMMAND: NAVFAC
WORK CENTER #: 400
SHOP NAME: Utilities
BUILDING #: 274
SHOP POC AND PHONE #: Shop Supervisor (228) 871-2861
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

The shop repairs pipes, fixtures, and performs general generator lubrication; and treats water systems.

The primary process performed in this shop is:

General equipment lubrication and water treatment.

The biggest waste producer in this shop is:

Used oil and oily rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A- Shop was not visited.

If present, the floor drain and connections are:

N/A- Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A- Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Used Freon (and associated containers) that is generated from non-contracted activities is recycled.
- Spill kits should be present in the shop.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Used oil is picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Generator Lubrication

DESCRIPTION

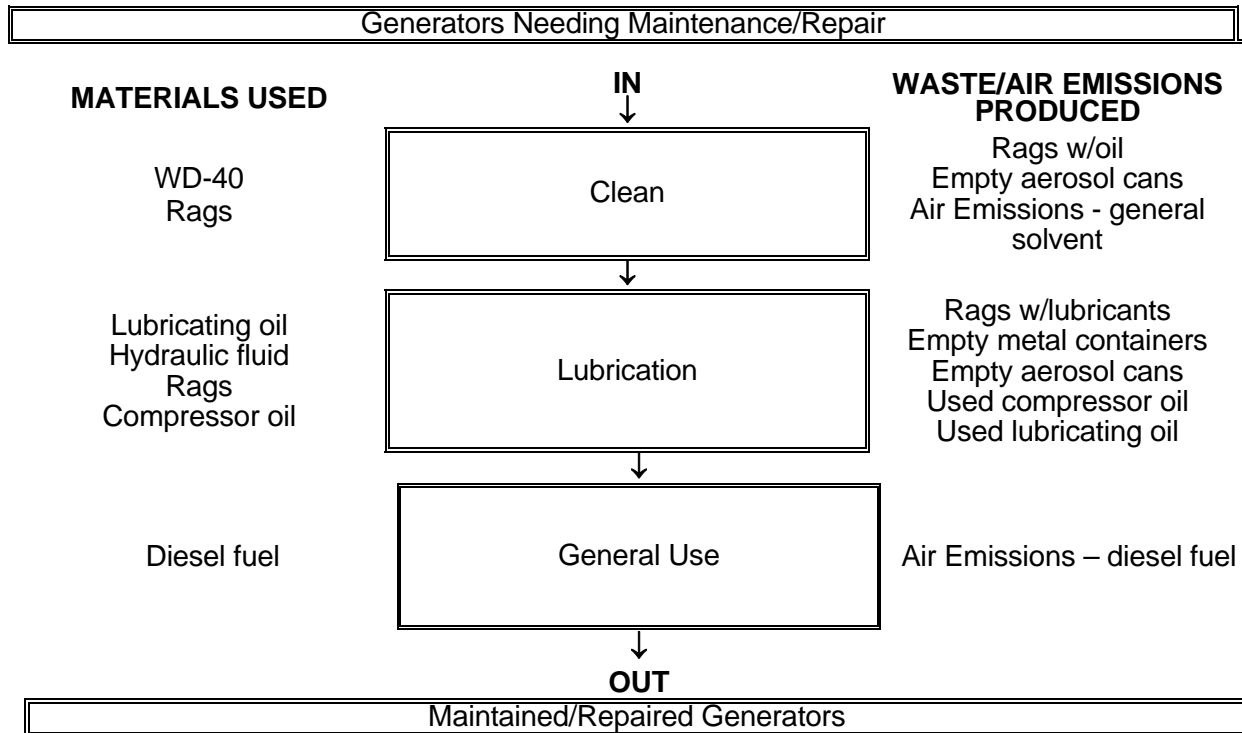
General generator lubrication.

Base Process ID #: PWUTIL-01
Substrate: Generators
Production Units:
 Description Generators
 Quantity 52

MRC/Technical Publication: Several.

P2/Environmental Equipment Used in Process:
 None noted.

PROCESS FLOW DIAGRAM PWUTIL-01 Generator Lubrication



PROCESS SUMMARY

Water Treatment

DESCRIPTION

Water treatment.

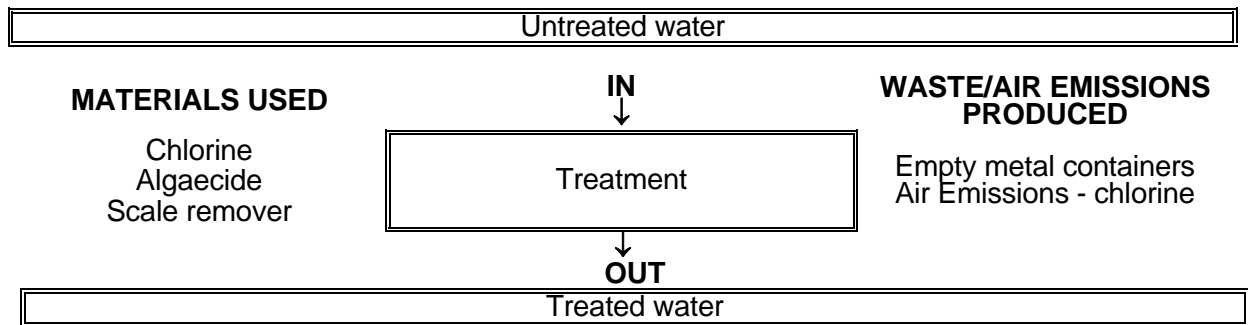
Base Process ID #: PWUTIL-02
Substrate: N/A
Production Units:
Description: Pools, wells, and cooling towers
Quantity: 104

MRC/Technical Publication: Several.

P2/Environmental Equipment Used in Process:

None noted.

PROCESS FLOW DIAGRAM PWUTIL-02 Water Treatment



RECYCLE

COMMAND: NCBC Gulfport
WORK CENTER #: N/A
SHOP NAME: Recycle
BUILDING #: 275
SHOP POC AND PHONE #: Shop Supervisor (228-871-4738)
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop is a collection point for excess materials (e.g., cans, brass, metals, paper, cardboard, plastics) that are destined for solid waste disposal. Materials are sorted depending on type and processed for reuse, sale, or disposal. Equipment, tools, and material suitable for reuse are diverted back to users on Base as a first option, sent to DLA Disposition Services for disposal through sales, offered for public sale, or disposed of as solid waste.

The primary process performed in this shop is:

Sorting and disposal.

The biggest waste producer in this shop is:

Materials that are mistakenly included in recyclable materials.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None Noted

P2 INITIATIVES NOT IMPLEMENTED

- N/A – this is a new shop identified during the August 2013 site visit.

CURRENT P2 PRACTICE AND EQUIPMENT

- Spill kits should be present in the shop.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- This is the center for basewide recycling at NCBC Gulfport.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Recycling

DESCRIPTION

Sorting and disposal of recyclable materials.

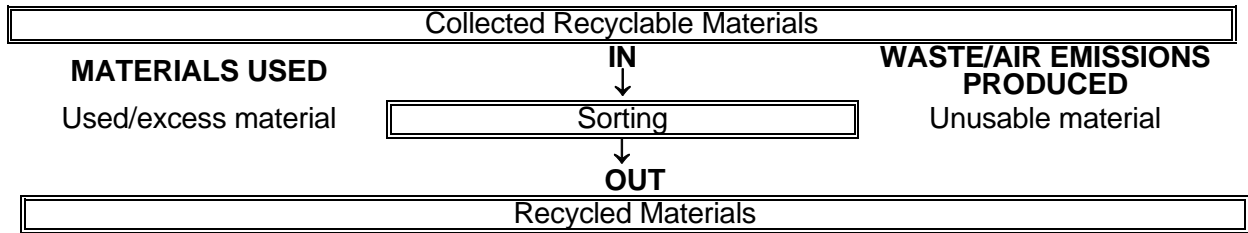
Base Process ID #: RECYCLE-01
Substrate: N/A
Production Units:
 Description: Recyclable materials
 Quantity: 928 tons of recyclable materials (FY2012)

MRC/Technical Publication: NCBC Gulfport Solid Waste Management Plan

P2/Environmental Equipment Used in Process:

Shredder, baler, can crusher, collection trailers.

PROCESS FLOW DIAGRAM
RECYCLE-01 Recycling



SUPPACK

COMMAND: Fleet Logistics Center
WORK CENTER #: 564
SHOP NAME: Packing and Preservation Center
BUILDING #: 437
SHOP POC AND PHONE #: Shop Supervisor, (228) 871-2450
LAST UPDATED: February 2014

WORK CENTER DESCRIPTION

This shop packages and ships new and used material for use by Navy customers. Shipping crates are painted/marked. For boxes/crates requiring weatherproofing, the entire box requires painting with enamel paint.

The primary process performed in this shop is:

Painting and marking plywood shipping crates.

The biggest waste producer in this shop is:

Contaminated rags.

The general housekeeping conditions (e.g., staining, absorbent pads under equipment, leaking equipment) are:

N/A – Shop was not visited.

If present, the floor drain and connections are:

N/A – Shop was not visited.

All HAZMAT in this shop have the proper ERP barcode:

N/A – Shop was not visited.

PLANNED POLLUTION PREVENTION (P2) INITIATIVES

- None noted.

P2 INITIATIVES NOT IMPLEMENTED

- None noted.

CURRENT P2 PRACTICES AND EQUIPMENT

- Spill kits should be present in the shop.
- Switched to environmentally-friendly enamel.

P2 EQUIPMENT NOT IN USE

- Note noted.

PARTICIPATION IN BASEWIDE P2 PROGRAMS

- Hazardous material is purchased through SERVMART/HAZMATCEN.
- Metal containers are drained, crushed, and picked up for recycling.
- Recycling Center – aluminum, cardboard, plastic, and glass are segregated for recycling.
- The shelf life of expired hazardous materials is extended through DLA's Shelf-life Extension Program.

P2 EFFORTS TO BE CONSIDERED IN THE FUTURE

- Promote P2, CHRIMP, and recycling awareness.

PROCESS SUMMARY

Crate Construction/Painting/Marking

DESCRIPTION

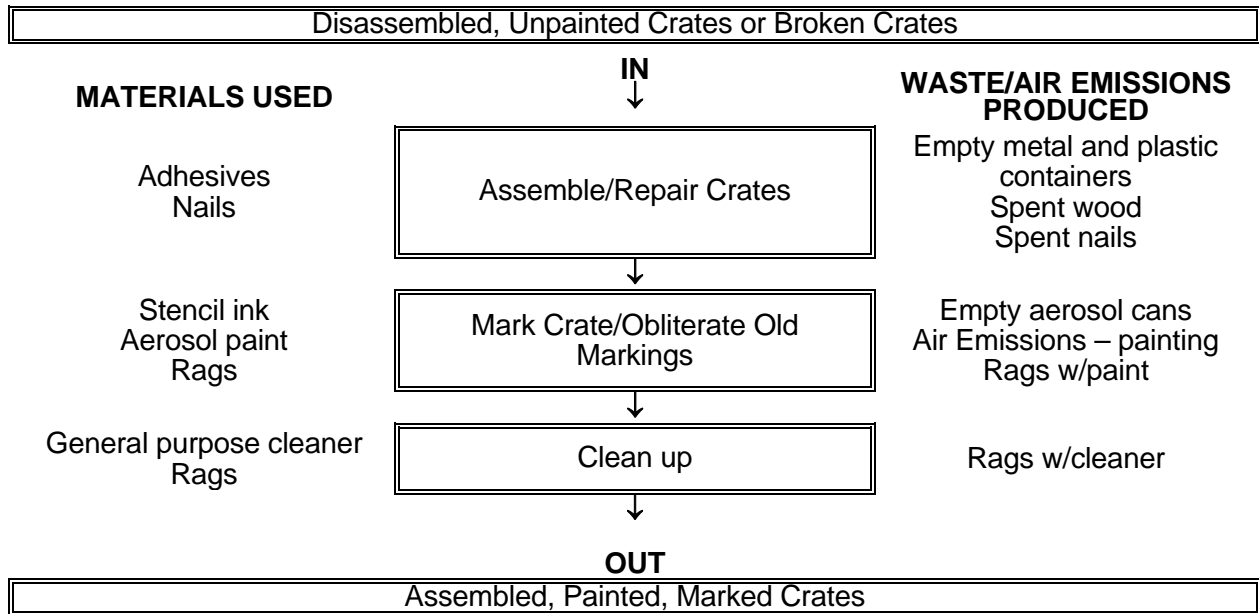
Crate construction/painting/marketing.

Base Process ID #: SUPPACK-01
Substrate: N/A
Production Units:
 Description Crates and Containers
 Quantity 67/month

MRC/Technical Publication: Several

P2/Environmental Equipment Used in Process:
 None noted.

PROCESS FLOW DIAGRAM SUPPACK-01 Crate Construction/Painting/Marking



APPENDIX D

WORK CENTERS WITH PREVIOUS P2 INITIATIVES

Previous P2 Program at NCBC Gulfport

The P2 Program at NCBC Gulfport, to date, has been executed to great effect. The installation has procured a wide variety of P2 equipment through the P2 Equipment Program (which is no longer in existence) and also through the use of installation funds. The end users have been trained and the equipment has been integrated into the installation operations, and its use is the standard operating procedure.

The installation-wide use of P2 equipment, the implementation of P2 initiatives affecting work process changes, and the introduction of base-wide recycling programs have resulted in tremendous reductions in quantities of hazardous and solid wastes, which would otherwise require costly offsite disposal.

Recycling programs for fuels, oils, antifreeze, scrap metals (sheet metal, aluminum cans, crushed oil filters, steel cans and drums, vehicle parts), paper, plastic, cardboard, pallets and other wood scraps, have all positively impacted the stations solid waste disposal costs and in many has cases generated income for the facility.

Implementation Status of Previous P2 Recommendations at NCBC Gulfport

Execution of the installation’s P2MP has reduced HAZMAT usage and HW generation. The following table lists Basewide recommendations, their implementation status, and the estimated specific reductions in HAZMAT usage and HW generated due to the initiative. Refer to the individual Work Center Reports for a listing of shop-specific strategies and their implementation status (i.e., implemented or not implemented).

P2 Recommendation	Implementation Status	Estimated HW/HAZMAT Reduction/Comments
Pursue Direct Sales Authority.	Implemented	NCBC received Direct Sales Authority in 2003, as described in the SWMP. It has been working since 2009.
Promote P2, CHRIMP, and recycling awareness.	Implemented/Ongoing	Each work center visited was aware of P2, CHRIMP, and recycling initiatives. Continued awareness and action is required. This will be facilitated during implementation of the EMS. The installation has a CHRIMP instruction and is currently using ERP for HAZMAT management. Recycling flyers are distributed throughout the installation
Encourage recycling of C&D waste.	Implemented	Nearly 100% of C&D materials are currently recycled or reutilized. Used asphalt is being diverted for reuse by local contractors. Concrete rubble is being reused for artificial reefs, site fill, and road base. Specific requirements and procedures are described in the SWMP. Lighting, electrical and bathroom fixtures

P2 Recommendation	Implementation Status	Estimated HW/HAZMAT Reduction/Comments
		are diverted for reuse by County Facilities.
Implement system to track water and electricity usage.	Implemented	Water, electricity, and gas usage are currently tracked by the Public Works Commodities Manager
Share a solvent tank or jet washer.	Implemented/Ongoing	Numerous shops, particularly within CED, share solvent tank parts washers allowing numerous others to be replaced with water-based parts washers. Solvent-based parts washers are still in use in cases where they cannot be replaced.
Use bullet traps at three locations on Woolmarket Range.	Not Implemented	Bullet traps have not been installed. Instead a 45-degree steel deflector plate has been installed to angle bullets back into the mound.
Use arc welding emission reduction equipment for welding, grinding, cutting and gouging operations.	Not implemented	This initiative has not been implemented. Shops are not using welding fume hoods and other air emissions control devices. Most welding is performed outside or bay doors are opened during welding operations to allow fumes to escape. However, about 80% of the arc welding has been replaced with wire welding to reduce emissions.
Replace Safety Kleen solvent tanks with an aqueous parts washer.	Implemented	Aqueous-based parts cleaners have been installed in numerous work centers, in place of solvent-based systems. There are solvent-based cleaning systems for specialized applications, many of which are shared between shops.
Procure pesticide applicator cart.	Implemented	Carts were procured in 2010.
Collect and recycle used oil.	Implemented	2,200 gallons; All used oil is sent to an offsite recycler contracted by DLA Disposition Services.
Collect and recycle spent antifreeze.	Implemented	500 gal; All used antifreeze at NCBC Gulfport is collected and sent to a plastics manufacturer for recycling. Additives are being used to extend the life of existing stock of antifreeze and as it is replaced in the vehicles, a new brand, with a seven-year useful life is being installed.
Collect, drain, and crush used oil filters.	Implemented	There is no local market for the low volume of oil filters generated. They are

P2 Recommendation	Implementation Status	Estimated HW/HAZMAT Reduction/Comments
		collected, crushed, and sent out as scrap metal for recycling.
Collect and recycle scrap metal parts.	Implemented	Scrap metal recycling is being done base wide through the facility's QRP. This recycling activity generates funds for the facility.
Switch from Safety Kleen 105 to Safety Kleen 150 solvent. After a base-wide switch to the Safety Kleen 150 solvent, a portion of the recycled solvent-based parts washers were replaced with aqueous-based parts washers.	Implemented	1,000 gallons of solvent per year and associated air emissions. Solvent use for parts cleaning has been eliminated at NCBC Gulfport with the exception of one unit in the CED shop area.
Renegotiate Safety Kleen contract to have tanks changed out on demand instead of monthly.	Implemented	With the switch to an aqueous cleaning solution, this is no longer a concern. The remaining solvent-based parts washers are cleaned quarterly.
Add filters to Safety Kleen solvent tanks to prolong service interval.	Not Implemented	The useful life of the aqueous solution is not improved significantly by filtering. Filters have not been installed

