NAVFAC Southeast

Building 903 Yorktown Avenue
Jacksonville, Florida 32212

Hazardous Waste Management Plan

NAS Corpus Christi

October 2013

Work Order Number 1120129

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Acronyms and Abbreviations

ASD.....*Accumulation Start Date*
BMP .....*Best Management Pratices*
CA .....*Contracting Authority*
CE .....*Conditionally Exempt*
CFR.....*Code* of *Federal Regulations*
COLIWASA .....*Composite Liquid Waste Sampler*
DDA.....*Designated Disposition Authority*
DDESB .....*Department of Defense Explosives Safety Board*
DLA .....*Defense Logistics Agency*
DLA-DS.....*Defense Logisitics Agency Disposition Services*
DOD.....*Department of Defense*
DODIC.....*Department of Defence Identification Code*
DOE .....*Department of Engery*
DOT .....*Department of Transportation*
EMS .....*Environmental Management System*
EPA.....*Environmental Protection Agency*
EPCRA.....*Environmental Planning and Community Right to Know Act*
ESO.....*Explosive Safety Officer*
FOD.....*Foreign Object Debris*
HM .....*Hazardous Material*
HW.....*Hazardous Waste*
HWC .....*Hazardous Waste Coordinator*
HWCB.....*Hazardous Waste Commodities Branch*
HWMP .....*Hazardous Waste Management Plan*
HWPM.....*Hazardous Waste Program Manager*
IC.....*Incident Commander*
IEPD.....*Installation Environmental Program Director*
LDR.....*Land Disposal Restrictions*
MCE.....*Mercury Containing Equipment*
MM .....*Military Munitions*
MSDS.....*Material Safety Data Sheet*
NALC.....*Navy Ammunition Logistics Code*
NAS.....*Naval Air Station*
NASCC .....*Naval Air Station Corpus Christi*
NMC CED DET..... *Navy Munitions Command, CONUS East Division, Detachment Fort Worth Component Corpus Christi*
NOV.....*Notice of Violation*
NSN.....*National Stock Number*
OIC.....*Officer in Charge*
OPNAVINST.....*Naval Operations Instruction*
OSHA.....*Occupational Safety and Health Administration*
PWD.....*Public Works Department*
PWO.....*Public Works Officer*
QC.....*Quality Control*
RCRA.....*Resource Conservation and Recovery Act*

RQ ..... *Reportable Quantity*
SAA ..... *Satellite Accumulation Area*
SOP ..... *Standard Operating Procedure*
TAC ..... *Texas Administrative Code,*
TCEQ ..... *Texas Commission on Environmental Quality*
TCLP ..... *Toxicity Characteristic Leachate Procedure*
TOC ..... *Total Organic Carbon*
TOX ..... *Total Organic Halogens*
TPH ..... *Total Petroleum Hydrocarbon*
TSD ..... *Transfer, Storage and Disposal*
TSS ..... *Total Suspended Solids*
UHC ..... *Underlying Hazardous Constituent*
UW ..... *Universal Waste*
WMM ..... *Waste Military Munitions*
WTN ..... *Waste Tracking Number*
WPN ..... *Waste Profile Number*

1.0 Introduction

1.1 Background

Naval Air Station Corpus Christi (NASCC), Texas is located on the northern point of the Encinal Peninsula, approximately eight miles southeast of the city of Corpus Christi's business district. NAS Corpus Christi occupies 4,159 acres and is bounded on three sides by water, Corpus Christi Bay to the north, the Laguna Madre to the east, and Oso Bay to the west. The elevation of the base is approximately fifteen feet above mean sea level. The area is nearly level, with sandy soils and a local water table six to ten feet below the surface.

NASCC operates under Hazardous Waste Permit 50038. The permit issuance date is May 4, 2007 and the permit termination date is May 4, 2017. NASCC's EPA generator identification number is TX7170022787. This number is to be used for reference on all manifests, correspondence, and other documents relating to hazardous waste management

The Naval Air Station Corpus Christi (NASCC) Environmental Office maintains copies of the Hazardous Waste Management Plan (HWMP). This document is available upon request to regulators and facility personnel who manage Hazardous Waste (HW).

1.2 Authority

The Resource Conservation and Recovery Act (RCRA) authorized the Environmental Protection Agency (USEPA) to implement regulations for the management of Hazardous Waste (HW) from the point of generation through final disposal. The U.S. Congress waived sovereign immunity for Department of Defense (DOD) facilities subjecting them to full regulation including assessment of fines and penalties. The EPA granted the State of Texas the authority to implement and enforce HW regulations including the identification, packaging, labeling, storing, transporting, and the treatment standards for proper disposal of regulated waste.

The Naval Operations Instruction (OPNAVINST) 5090.1 series requires all shore installations to develop a HWMP in accordance with applicable federal, state, and local regulations.

The NAS Corpus Christi Commanding Officer is the Federal and State Permit holder for all hazardous waste management programs and has delegated authority to the NAS Environmental Director to administer the NASCC Environmental Compliance Program.

Tenant Commanding Officers, Officers-In-Charge, and Station Department Heads have delegated their authority to unit Hazardous Waste Coordinators (HWCs), Assistant HWCs, and/or other environmental personnel to administer each unit's responsibilities under this HWMP.

1.3 Applicability

The HWMP provides guidance for the proper management of regulated waste by departments, tenant commands, and contractors operating aboard this installation. This HWMP meets the requirements of the EPA and the State of Texas; therefore, compliance with this plan ensures compliance with the regulations.

1.4 Purpose

This HWMP provides instruction and guidance for the management of regulated waste generated by all commands and contractors operating aboard NAS Corpus Christi.

1.5 Applicable Federal Regulations

Regulations mandate the procedures and requirements identified in this HWMP; therefore, they are not discretionary. There is a potential for fines or criminal liability for personnel involved in violating HW regulations.

- 40 Code of Federal Regulation (CFR) Parts 260-268, 270, 273. The federal (EPA) regulations that establish a "cradle-to-grave" approach for managing, storing, and disposing of HW including characterization, manifest system, generator standards, treatment standards, and disposal requirements. These regulations also include the requirements for recycling materials.

- 40 CFR Part 279. The EPA regulations for the management of Used Oil and Used Oil filters including reporting, storage, disposal, recycling for energy value and other related requirements.

- 40 CFR Part 266.200. The EPA regulations, Waste Military Munitions (WMM) Rule, which exempts WMM from the RCRA regulations including the storage and manifest requirements when the WMM are managed under the conditions specified in this regulation.

- 49 CFR Parts 171-180. The Department of Transportation (DOT) regulations for the shipment of Hazardous Material and Waste (HM/HW) across public highways. Regulations include requirements for packaging, labeling, marking, and the placarding of vehicles. The DOT regulations include design specifications for containers used to hold HM/HW during transportation.

- 49 CFR Parts 390-397. The DOT rules that govern the qualifications of the drivers, the equipment in the vehicle, and in some cases, routing of HM or HW shipments.

- 40 CFR Part 112. The EPA regulations governing spill containment for petroleum storage tanks and spill reporting.

- 40 CFR **parts** 116-117. The EPA regulations governing when and how a release or spill of a chemical in quantities exceeding the reportable quantity (RQ) must be reported to the National Response Center.

1.6 Title 30 of the Texas Administrative Code (TAC) Chapter 335

Texas Commission on Environmental Quality (TCEQ) adopts by reference the federal regulations. TCEQ has additional regulations not found in the federal regulations that will be discussed in full in this Section.

1.6.1 Texas Generator Classification

Texas has two generator classifications, Industrial or Non-industrial; NASCC is an industrial waste generator.

1.6.2 Texas Waste Classification

Texas identifies three classes of non-hazardous waste that follows additional standards in Texas.

1.6.3 Texas waste codes system [30 TAC Section 335.503]

Texas requires all waste streams to be assigned an eight-digit waste code number consisting of:

- A four-digit sequence number, 0001-9999 assigned by the generator; the number need not be assigned in any order.

- A three-digit form code as listed in 30 TAC Chapter 335.521(c).

- A one digit classification codes: H, 1, 2, or 3.

  – Class "H" Hazardous Waste - Hazardous waste is any solid waste or combination of solid wastes exhibiting characteristics of, or listed as, a hazardous waste in 40 CFR 261 or 30 TAC 335.504.

  – Class "1" Waste [30 TAC Section 335.1(14)] Any waste or mixture of waste that, because of its concentration or physical or chemical characteristics is toxic; corrosive; flammable; a strong sensitizer or irritant; a generator of sudden pressure by decomposition, heat, or other means; or may pose a substantial present or potential danger to human health or the environment when improperly processed, stored, transported, disposed of, or otherwise managed. Class 1 indicates the waste exhibits one or more of the following:

    > A liquid with a Flash Point greater than 140° F but less than 150° F.

    > A solid or semi solids that when mixed with an equal amount of water produces a solution with a pH of 2.0 or less or 12.5 or greater.

> A TCLP Leachate contaminate at or above the concentrations listed in 30 TAC 335, Appendix 1, Table 1.

> A material that contains significant Regulated Asbestos Containing Material (RACM).

> Contains greater than 50 ppm of PCB.

> Contains greater than 1500 ppm Total Petroleum Hydrocarbons (TPH).

> Is not a hazardous waste and the generator chooses to classify the waste as Class "1".

- Class "2" Waste [30 TAC Section 335.1(15)] Any individual waste or combination of waste that cannot be described as hazardous waste or as nonhazardous Class 1 or Class 3 waste.

- Class "3" Waste [30 TAC Section 335.1(16)] Waste that is inert and essentially insoluble, usually including but not limited to materials such as rock, brick, glass, dirt, certain plastics, rubber, and similar materials that are not readily decomposable.

2.0 Definitions

Accumulation Start Date:

- In a Less Than 90-day Storage Area: The date the first drop or item is placed into a HW container or otherwise deemed a waste, or the Accumulation Start Date (ASD) already applied to a container moved from a Satellite Accumulation Point (SAP) into the <90 day storage area, from which the generator has 90 days to ship the waste to a TSDF. (40 CFR 262.34(a) and (b)).

- In a Satellite Accumulation Point: The date that the total amount of HW exceeds the 55-gallon limit or 1 quart of acutely HW, or the date that the container is deemed full or no longer to be utilized to accumulate waste, from which the generator has three days to move it to a <90 day storage area. (40 CFR 262.34(c)).

- Universal Waste: Whether at a SAP or <90 Day Accumulation Point, the date the first drop of waste or item is placed in the container, from which the generator has 1 year to remove it from the installation. (40 CFR 273.35).

- Non-Hazardous Waste and Used Oil: Whether at a SAP or <90 Day Accumulation Point, the date that the container is deemed full or no longer to be utilized to accumulate waste.

Authorized Representative: The person responsible for the overall operation of a facility or part of a facility. An authorized representative is normally the Commanding Officer or persons of equivalent responsibility. The Commanding Officer may designate an "authorized representative" to act on their behalf.

Best Management Practices (BMP): Practical work techniques that limit the introduction of pollutants into the environment. BMPs achieve a compromise between the environmental ideal (no pollution whatsoever) and what is realistic and practical from an economic and operational standpoint. Emphasis, however, is on the best environmental solution.

Waste Characterization: The process of identifying waste constituents, their concentrations, and the work process generating the waste. Characterization ensures waste is properly handled, treated and disposed, and is required to identify the EPA Waste Codes, the Underlying Hazardous Constituents, and the DOT proper shipping name.

Container: Any portable device, in which a material is stored, transported, treated, disposed or otherwise handled. (40 CFR 260.10)

Contaminant: Any foreign chemical or material that when present may cause a waste to be regulated.

Contaminated Medium/Media: Soil, sediment, surface water, groundwater, or air that contains a contaminant subject to regulations.

Contingency Plan: A document that contains an organized, planned, and coordinated course of action to be taken in case of a fire, explosion, or release of a hazardous material or waste. (40 CFR 260.10)

Debris: Any solid material, with a diameter of 2.4 inches or larger intended for disposal, including manufactured object, plant or animal matter, or natural geologic material; this includes brushes, rags, rollers, personal protection equipment (PPE), contaminated equipment, etc. (40 CFR 268.2 (g))

Dike: An embankment or ridge of either natural or man-made materials used to prevent the movement of liquid, sludge, solid, or other material. (40 CFR 260.10)

Dilution: The deliberate mixing of HW with another material for the purpose of changing either the characteristic(s) or the concentration of a constituent in the waste. Dilution of a HW is prohibited. (40 CFR 268.3)

Discharge: The accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water. (40 CFR 260.10)

Disposal: The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including grounds waters. (40 CFR 260.10)

Empty Container: (40 CFR 261.7)any HM or HW container, except a compressed gas cylinder, aerosol cans or an acute HW container, that has had all wastes removed that may be removed using all commonly employed techniques for the type of container, e.g., pouring, pumping, and aspirating, or when:

- No more than 2.5 centimeters (one inch) of residue remain in the bottom of the container; or
- No more than 3 percent by weight of the total capacity of the container remains in the container if the container is less than or equal to 119 gallons in size; or
- A compressed gas is empty when the pressure inside the container approaches atmospheric.
- A container with an inner liner shall have the liner removed.

Free Liquids: The liquid component of a waste, including liquids that are not absorbed into a media such as rags, clay, or soil. Free liquids include liquids that are contained but mobile within an inner container or enclosure (such as in a bag or can), or liquids that are loose within a container and could potentially be poured out.

Generator: Any person by site whose act first causes a waste to be subject to regulations. (40 CFR 260.10)

Halogenated Solvent: Solvents containing halogens (fluorine, chlorine, bromine or iodine) including but not limited to Freon; Halon; 1,1,1-trichloroethane; 1,1,2-trichloroethane; 1,2,2-trifluoroethane; and methylene chloride.

Hazardous Debris: Debris that contains a listed HW or that exhibits a characteristic of HW.

Hazardous Material (HM): Any material that because of its quality, concentration, physical, chemical, or infectious characteristics, may pose a substantial hazard to human health or the environment when incorrectly used, purposefully released, or accidentally spilled.

Hazardous Waste (HW): Before a waste can be a HW, it must first meet the definition of a Solid Waste (SW). A solid waste is a hazardous waste if it is a chemical listed in 40 CFR 261 or if a chemical listed in 40 CFR 261 is the sole active ingredient of a commercial product; or if a SW exhibits one or more of the HW characteristics listed below:

- Ignitable:
  - a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, that has a flash point less than 140^{o} F;
  - a non-liquid capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes, **and** when ignited burns so vigorously and persistently that it creates a hazard;
  - an ignitable compressed gas; or
  - an oxidizer.
- Corrosive:
  - an aqueous (water) solution that has a pH equal to or less than 2.0 or equal to or greater than 12.5; or
  - a non-aqueous liquid capable of corroding steel at a rate greater than 0.25 inches per year.
- Reactive:
  - is normally unstable and readily undergoes violent change without detonating;
  - reacts violently with water;
  - forms potentially explosive mixtures with water;
  - when mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;
  - is a cyanide or sulfide-bearing material that, when exposed to pH conditions between 2.0 and 12.5, it can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;

- is capable of detonation or explosive reaction if it is subjected to a strong ignition source or is heated under confinement;

- is readily capable of explosive detonation or reaction at standard temperature and pressure; or

- is a forbidden explosive or a Class A or Class B explosive as defined in 49 CFR 173.51, 173.53 or 173.88.

- Toxic : That a representative sample, using the toxicity characteristic leaching procedure (TCLP), leaches one or more hazardous constituents at a concentration equal to or greater than the concentration listed in 40 CFR 261.24.

Hazardous Waste Constituent: The chemical that causes the waste to be regulated.

Housekeeping: Maintaining a clean and orderly work environment, including Foreign Object Debris (FOD) removal, sweeping, vacuuming or washing of decks or floors to remove dirt and dust, and organizing and marking of operational and storage areas to promote cleanliness and safe, efficient work practices.

Incompatible: Materials that when in contact with one another have the potential to produce heat or pressure, fire, explosion, violent reaction, toxic or flammable dusts, mists, fumes, or gases.

Industrial Waste: A solid waste resulting from or incidental to any process of industry or manufacturing, or mining or agricultural operation that may include HW.

Inner Liner: A continuous layer of material placed inside a container that separates the container from the material stored in it.

Intermediate Bulk Containers (IBC): A ridged or flexible portable packaging, other than a cylinder or portable tank, which is designed for mechanical handling. Standards for IBC's manufactured in the United States are set forth in 49CFR178 Subparts N and O.

Lamp (Light Bulb): The bulb or tube portion of electric lighting devices. Common universal waste (UW) lamps include fluorescent, high intensity discharge, neon, mercury vapor, high-pressure sodium, and metal halide.

Land Disposal: Placement in or on the land and includes placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault, or bunker intended for disposal purposes.

Leachate: The liquid, including any suspended components in the liquid, which has percolated through or drained from a waste.

Manifest: The shipping document EPA Form 8700-22 (including, if necessary, EPA Form 8700-22A), originated and signed by the generator, that accompanies and is used for tracking the transportation of HW.

Manifest Tracking Number: The alphanumeric identification number pre-printed in Item 4 of the manifest by a registered source.

Mercury-Containing Equipment: Any device or part of a device (excluding batteries and lamps) that contains elemental mercury.

Military Munitions: All ammunition and their components produced or used by or for the U.S. Department of Defense or the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy (DOE) and the National Guard.

Municipal Waste: A solid waste that is not an industrial waste.

Non-Halogenated Solvents: A solvent not containing one of the halogens listed in the definition of halogenated solvents include Methyl Ethyl Ketone (MEK), alcohol, xylene, toluene, acetone and benzene.

Non-wastewaters: Waste that does not meet the criteria for wastewaters.

Paint and Paint-Related Waste: Liquid paints, thinners and debris such as rags, brushes, rollers, tape, etc. or a mixture of pigment and suitable liquids that form an adherent coating when spread on a surface or any material.

Pesticide: Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant.

Point of Generation: The date and location that a material first becomes subject to the HW regulations.

Portable Tanks: A bulk packaging (except a cyclinder having a water capacity of 1000 lbs or less) designed primarily to be loaded onto, or on, or temporarily attached to a transport vehicle or ship and equipped with skids, mountings, or accessories to facilitate handling of the tank by mechanical means. It does not include a cargo tank, tank car, multi-unit tank, car tank, or trailer carrying 3AX, 3AAX or 3T cylinders.

Profile Sheet: The DRMS DD-1930 or other forms that are used to document specific disposal information for each waste stream sent to the disposal facility.

Representative Sample: A sample taken in a manner that when analyzed can be expected to exhibit the average properties of all material in the container.

Reportable Quantity (RQ): The amount of material that when spilled or released triggers a reporting requirement to the regulatory agencies; RQ are specific for each material.

Satellite Accumulation Point (SAP): Designated locations, at or near the point of generation that is under the control of the operator generating the waste where waste is stored. No more than 55 gallons cumulative total of all types of HW may be stored in a SAP. This 55-gallon limit does not include universal waste, used oil or non-hazardous waste.

Sludge: Any solid, semi-solid, or liquid waste generated by a wastewater treatment plant, water supply plant, or air pollution control facility. This does not included the treated effluent from a wastewater treatment plant.

Soil: Unconsolidated earth material composing the superficial geologic strata, consisting of clay, silt, sand, or gravel size particles, or a mixture of such materials with liquids, solids, or sludge.

Solid Waste: Any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant or air pollution control facility, and other discarded material; including solid, liquid, semisolid, or contained gaseous material resulting from industrial, municipal, commercial, mining, and agricultural operations, and from community and institutional activities.

Sorbent: A material used to soak up free liquids by either adsorption or absorption, or both.

Spill: The accidental or intentional leaking, pumping, emitting, emptying, or dumping of a Hazardous material, solid or HW into or on any land or surface waters.

Thermostat (40 CFR 273.9): A temperature control device that contains an ampule of metallic mercury and mercury-containing ampules that have been removed from these temperature control devices in compliance with the regulatory requirements.

Toxic Characteristic Leachate Procedure (TCLP) (EPA SW846, Method 1311): The analytical procedure designed to determine the mobility of both organic and inorganic analytes present in liquid, solid, and multiphase wastes.

Transportation: The movement of Hazardous Waste or Hazardous Materials by air, rail, highway, or water.

Transporter: A person engaged in the offsite transportation of hazardous material or waste by air, rail, highway or water.

Treatment: Any method, technique, or process, including neutralization designed to change the physical, chemical, or biological character or composition of any HW so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.

Underlying Hazardous Constituent (UHC): Any constituent listed in §268.48—Universal Treatment Standards, except fluoride, selenium, sulfides, vanadium, and zinc, which can reasonably be expected to be present at the point of generation of the hazardous waste at a concentration above the constituent-specific UTS treatment standards.

Universal Waste (UW)(40 CFR 273, 30 TAC 335.262): Hazardous wastes including batteries, lamps, pesticides, and mercury containing equipment as described in, and managed under the requirements of, 40 CFR Part 273. Additionally, in Texas, paint and paint-related wastes as described in, and managed under the requirements of, 30 TAC Chapter 335.262 (b)

Used Oil: Any oil, refined from crude oil or synthetic oil that as the result of use is contaminated with physical or chemical impurities. Used oil does not include oil water mixtures that are mostly water.

Wastewaters (40 CFR 268): Waste that contain less that 1% by weight total organic carbon (TOC) and less than 1% by weight total suspended solids (TSS).

Waste Profile Number: The unique identification number used to designate waste disposal and transportation characteristics and requirements for a specific waste stream.

Waste Classification: Identification of wastes or waste stream hazards, physical and chemical characteristics, storage, shipment and disposal requirements, based on analytical testing and/or user knowledge of the process generating the waste.

3.0 Responsibilities

3.1 The NASCC Commanding Officer

- Retains ultimate responsibility for the environmental compliance and readiness of the installation including implementation of this HWMP.

- Assumes On-Scene Command authority and overall responsibility for major spills

- Will "Budget, fund, and manage HW in full compliance with applicable substantive and procedural Federal, State, and Local HW laws and regulations." (OPNAVINST 5090.1C)

- Designates in writing, with a copy to the Public Works Department (PWD) Environmental Division, the person(s) authorized to sign hazardous waste manifests.

- Ensures the HW program receives the appropriate level of attention to guarantee personnel are aware of and comply with the provisions of this plan.

3.2 The NASCC Public Works Officer (PWO)

- Ensures environmental compliance and stewardship.

- Monitors performance through metrics (e.g. Environmental Management Systems (EMS) implementation).

- Ensures environmental issues, especially those with the potential for Notices of Violations (NOV), are communicated to the Installation Commanding Officer.

- Obtains required Environmental Training through CECOS per OPNAVINST 5090.1C Appendix P.

- Supports the Installation Environmental Program Director (IEPD) who provides environmental management to all departments and tenant commands.

- Ensures vehicles are available to transport HW within the physical boundaries of the Installation.

3.3 The NASCC Installation Environmental Program Director (IEPD)

- Serves as the principal advisor to the Commanding Officer on environmental compliance matters including HW management.

- Serves as the single point of contact for all inquiries, inspections, and other actions from federal, state, and local environmental regulatory agencies.

- Oversee NASCC departments, tenants, and service provider operations to ensure compliance with federal, state, and local environmental regulations.

- Serves as the Planning, Programming, Budget, and Execution System (EPR Web) interface for installation environmental program requirements. This includes coordination, identification, and submission of environmental program requirements and management of environmental funding.

- Maintains an EMS that continually improves environmental quality consistent with regional and local objectives and targets.

- Coordinates with the Fire Department and Tenant Commands to develop HW spill procedures in accordance with the contingency plan as needed.

- Approves the purchase of HW spill response and waste handling equipment as well as reference materials when appropriate.

- Ensures this plan as well as the standard operating procedures delineating HW management are up to date.

- Ensures reports and compliance documents are complete and submitted to the appropriate federal, state, and local regulatory agencies and Navy activity in a timely manner.

- Performs long-range planning for HW reduction, recycling, and reclamation when practical.

- Responds to spills in support of the Fire Department, and act as emergency coordinator if needed.

3.4 The NASCC HW Program Manager

- Provides management and technical expertise to facilitate implementation of this HWMP.

- Documents inspections of SAPs and 90-Day Storage Areas in accordance with regulatory requirements and ensure available for review by the regulatory community.

- Ensures 90-day HW Storage Area(s) are in compliance with regulations.

- Signs HW manifests when designated by the Commanding Officer.

- Maintains organized records of required documentation including inspection logs and reports for a minimum of 3 years.

3.5 The NASCC HW Commodities Branch (HWCB)

- Maintains a list of SAPs and/or 90-day storage areas identifying each work center generating waste and the point of contact information.

- Ensures waste stream determinations are updated and documentation is available for review by the regulatory community.

- Schedules and supervise the pick-up and transportation of HW off site through DLA-DS approved transporters and TSDFs.

- Reviews, signs, tracks and maintains UHW Manifests, including follow-up and exception reporting as required by DOT.

- Maintains records of required documentation including waste inventories, manifests and inspections in accordance with the applicable regulations.

- Tracks and reports disposal costs, including reimbursable costs.

- Issues only DOT approved containers to the generating units.

- Schedules container deliveries and / or waste pickups.

- Ensures documentation is completed when transferring waste from a SAP to a 90-Day HW Storage Area or a permitted facility for storage until transported off site for disposal.

- Maintains Permitted Storage unit in accordance with Part B operating permit.

3.6 The NASCC Safety Officer

- Coordinates actions with the IEPD during spill responses.

- Informs the IEPD when deficiencies are identified during safety inspections of waste storage areas.

3.7 The NASCC Fire Department

- Serves as Incident Commander (IC) as delegated by the Commanding Officer until properly relieved.

- Provides initial emergency response to HM/HW incidents and technical support.

- Coordinates with the Public Works Department IEPD to obtain emergency spill cleanup equipment and supplies.

- Maintains response equipment necessary for initial emergency HAZMAT spill response.

3.8 The HAZMAT / Supply Department

- Maintains records of the HM issued to each activity and provide reports as requested to the IEPD.

- Ensures that Safety Data Sheets (SDSs) are available to the shop personnel who use the HM.

3.9 The Commanding Officers, Officers-In-Charge and Department Heads or Senior Civilian of tenant commands and activities

- Retain liability for misidentified and / or mismanaged waste generated and managed by their command.

- Ensure personnel are trained in, aware of, and comply with the provisions of this Plan.

- Designate in writing a Unit HW Coordinator and Alternate; include their names, phone numbers and email addresses.

- Ensure the Unit HW Coordinator completes required training and has the working knowledge to properly manage hazardous, universal, non-RCRA regulated waste, and used oil.

- Provide sufficient funding to NAVFAC SE for estimated waste disposal units. Contact the HWCB for further information.

3.10 The HW Coordinators and Alternates

- Ensure the proper management of waste within their unit in accordance with this plan.

- Ensure only containers issued or approved by the NASCC HWCB are used to store waste.

- Ensure all SAPs are approved by NASCC HWPM before waste is generated**.**

- Maintain approved HW SAP and Storage Areas in accordance with this plan.

- Establish funding for waste turn in to the HWCB.

- Inform the NASCC HWPM and HWCB of any changes in materials, work processes, or procedures that may affect HW generation before generating waste.

- Annually, review all work processes for changes, modifications or material substitutions and inform the NASCC HWCB of any changes.

- Schedule and be present for waste pick-ups by or drop-offs to the NASCC HWCB.

- Ensure containers are stored so that the label may be read when approaching each container and ensure direct access to each container.

- Ensure segregation of incompatible wastes.
- Conduct required SAP and 90 Day inspections and correct any deficiencies identified.
- Maintain organized records of required documentation including training and inspections for a minimum of 3 years.

4.0 Training Requirements

Personnel involved in all aspects of hazardous waste management activities at NAS Corpus Christi must successfully complete training that teaches them to perform their duties in a way that ensures the facility's compliance. Applicable training requirements are outlined below, according to the employees job and responsibilities. It is the responsibility of the individual command management or contractor to maintain compliance with all training requirements.

Contents of the formalized training will vary according to job categories and associated level of responsibility, including Navy, DLA, and appropriate station department, tenant command and contractor personnel. Levels of responsibility range from laborer up through supervisor and management. Table 4-1 summarizes the training required for each job type. General job categories related to HW/HM are:

- Management
- Emergency Responders
- HWCB Personnel
- <90-Day Site Personnel
- HW Coordinators
- All Personnel

All applicable training requirements must be met before an employee may perform related duties without the direct supervision and presence of an appropriately trained individual.

Job Responsibilities	Training Type	Regulation or Policy Requiring Training	Frequency
All Personnel	General Environmental Awareness	OPNAVINST 5090.1B	Annual
	Command Orientation	OPNAVINST 5090.1B	One Time
HW Coordinators	OJT to applicable parts of this plan	NASCORPINST [a] 5090.3B	Initial & as duties change
<90-Day Site Operators HWCB Personnel Emergency Responders	RCRA Initial within 6 months of hire	40 CFR 264.16 [a]	Initial
	RCRA Refresher	40 CFR 264.16(c)	Annual
<90-Day Site Operators HWCB Personnel	OSHA HAZWOPER 24-hour	29 CFR 1910.120(p)[c]	One Time
	OSHA HAZWOPER 8-hour refresher	29 CFR 1910.120(p)[c]	Annual
HW Coordinators <90-Day Site Operators HWCB Personnel Emergency Responders	DOT General Awareness[b]	49 CFR 172.704	Every 3 years
	DOT Function Specific[b]	49 CFR 172.704	Every 3 years
Emergency Responders	OSHA HAZWOPER 40-hour plus 3-day on-the-job training	29 CFR 1910.120(q)[c]	One Time
	OSHA HAZWOPER 8-hour refresher	29 CFR 1910.120(q)[c]	Annual
HW Management	Hazardous Material Supervisor	29 CFR 1910.120[c]	One Time

[a] Teaches facility personnel hazardous waste management procedures relevant to the positions in which they are employed.

[b] Training content specific to job function – required for personnel who directly affect hazardous materials transportation safety

[c] Also requires a medical surveillance program

Table 4-1 Training for Waste Generators and Spill Responders

4.1 Contents of the Training Program

The training program shall incorporate the following topics:

- Emergency Response - procedures for implementing the incident response plan, use of emergency equipment for spill control and use of alarms and communications systems
- Waste Handling - types of wastes handled at the facility hazardous, universal, non-hazardous, used oil, etc.), hazards associated with the wastes, safe handling practices, incompatible or reactive wastes and associated storage requirements, pollution prevention, waste minimization and the use of forms associated with the waste tracking system
- Safety - hazards associated with wastes generated on site, confined space entry, decontamination procedures, and the use of personal protective equipment for normal waste handling activities and in the event of a spill or release
- First Aid - basic procedures that may be administered to injured personnel prior to the arrival of an ambulance and communication procedures for reporting injuries
- Transportation - proper waste shipping names, numbers, and hazard classes, as well as proper DOT requirements for packaging, marking, and labeling
- Inspections - training in all areas of operation being inspected
- Regulatory Requirements - knowledge of Federal, State and DOD mandates for facility inspections, waste manifesting, submission of reports, and record keeping
- Facility-Specific – training required to address unique procedures, controls and emergency response related to buildings, processes or locations

4.1.1 HW Coordinator Training

Hazardous Waste Coordinators who operate <90 day storage facilities shall be trained in accordance with 40 CFR 264.16.

HWC who only operate Satellite Accumulation areas shall be trained, at a minimum, in the requirements of 40 CFR 263.34, and this plan.

HWC will be provided an opportunity to attend a HWC Specific Course presented by NASCC Environmental which will include duties as outlined in this plan.

4.1.2 RCRA Training

As required by 40 CFR 265.16, the Hazardous Waste program must include a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position.

This training program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:

- Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment
- Key parameters for automatic waste feed cut-off systems
- Communications or alarm systems
- Response to fires or explosions
- Response to ground-water contamination incidents
- Shutdown of operations

4.1.3 OSHA Training

In addition to hazardous communication program (HAZCOM) training [29 CFR 1910.1200] required for all station personnel, 29 CFR 1910.120 requires hazardous waste operations and emergency response (HAZWOPER) training for personnel "conducting operations at treatment, storage and disposal (TSD) facilities." HAZWOPER training is also required for:

- Emergency response operations for releases of hazardous substances
- Clean-up operations required by a governmental body conducted at uncontrolled hazardous waste sites
- Corrective actions involving clean-up operations
- Voluntary clean-up operations at uncontrolled hazardous waste sites

The initial training requirement is for 24 hours and refresher training shall be for eight hours annually. Personnel receiving the initial training shall be given a written certificate attesting that they have successfully completed the necessary training.

4.1.4 DOT Training

Requirements for HM employees – personnel who directly affect hazardous materials transportation safety:

- Awareness/familiarization training
- Function-specific training
- Safety training
- Security awareness training
- OSHA, EPA, and other training

4.2 Training Records

For each position aboard NAS Corpus Christi requiring hazardous waste training IAW Section 4.2 of this plan, the following documentation shall be retained:

- The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job
- A written job description for each position listed, including the requisite skill, education, or other qualifications, and duties of employees assigned to each position
- Records that document the training or job experience requirements have been met, a description of the training content and name and address of the training provider.

Training experience for each employee may be listed on a Personnel Training Record (or other similar document or database tracking system). Although regulatory requirements are less stringent, training records on all current NAS Corpus Christi and tenant personnel must be kept until closure of the facility.

Training records on former employees must be kept for at least three years from the date the employee last worked at the facility or until facility closure, whichever comes first. Personnel training records may accompany personnel transferred within the same company.

For OSHA and DOT training, employees shall receive and retain a written certificate attesting that they have successfully completed the necessary training that contains all information required by law.

5.0 HW Disposal Services

5.1 Navy Working Capital Fund

Hazardous Waste Services for NAS Corpus Christi (NASCC) operate under the Navy Working Capital Fund (NWCF) business model as of FY 2014. Customers will be charged flat, stabilized rates for regulated waste. The standardized NWCF rates are published annually in the NAVFAC SE NOTICE 7030. The process improves cost awareness and cost consciousness, encourages waste reduction and allows for more flexibility in use of resources to provide the best service for the lowest cost to the customer.

5.2 Hazardous Waste Services

NASCC Hazardous Waste Commodities Branch (HWCB) will provide waste containers, shipping labels, container pick up, waste identification and characterization, regulated storage, and disposal services. All labor and materials associated with these services are included in the HW disposal rates.

Labor above and beyond these services will be covered under the standardized labor rate. Examples of services requiring the labor rate include: repacking or over packing of containers due to incompatible or improperly packaged waste, improperly labeled or closed containers, or damaged containers that were the result of improper management or identification by the customer.

5.3 Applicability

All regulated waste generated aboard NAS Corpus Christi is subject to this plan, and shall be managed through the HWCB. Prior approval by NAS Environmental and the HWCB must be obtained to manage regulated waste in non-HWCB containers, or ship and dispose regulated waste outside of the HWCB HW services. Examples of wastes that may be approved for exclusion include one-time or intermittent high-volume debris from construction and demolition of facilities, and asbestos or lead abatement projects.

All manifests for regulated waste shipments must be pre-scheduled, approved and signed by the HWCB. The waste generator is responsible for arranging funding for manifesting services by the HWCB. Contact the HWCB for more information on HW services, labor rate requirements and funding.

5.4 HW Disposal Services Funding

Funding for HW services must be arranged prior to waste generation or requesting containers from the HWCB. The HWCB shall not supply containers or services to customers that have not arranged funding through the appropriate NWCF job order number (JON). For funding options and assistance, contact the HWCB.

6.0 Hazardous Material Disposal

An extensive effort shall be made to determine if a hazardous material (HM) is usable before it may be disposed of as a waste. To minimize waste generation, utilize proper inventory management e.g., use older material first, check expiration dates, order only what is required, and purchase less toxic or non-HM when possible.

Hazardous material not usable for its intended purpose shall be submitted for disposal using the Labpack Request Inventory Form below. The HWC must submit SDSs for each item on the inventory to initiate labpack services.

GENERATOR_____ **LABPACK REQUEST INVENTORY** DATE:_____
LOCATION_____

MSDS #	PRODUCT NAME AND MANUFACTURER	CONT SIZE	CONT TY	COUNT
INTERNAL TRACKING #. IF NONE, ASSIGN SERIES 001, 002...	Product official name and manufacturer as seen on MSDS and/or container(s).	Size and units. (1 GAL, 10 OZ...)	Type of container. (can, tube, bottle...)	Number of containers of each material, type and size.

NASCORP5090.3B/6

Form 6 - Labpack Request v1.1.pdf

7.0 Hazardous Waste Segregation

Hazardous Waste segregation is mandatory. Proper segregation prevents incompatible chemicals from mixing that could produce heat, pressure, fire, explosions, violent reactions, toxic dusts, mists and irritating or toxic fumes or gases.

Improper mixing may render the subsequent mixture difficult to identify and expensive to dispose. Waste streams should not be mixed without the approval of NAS Environmental or the HWCB. Any changes in a waste process or waste container shall be reported to the HWCB via a Waste Identification Form, Form 2.

Due to the diversity of wastes generated at NAS Corpus Christi, NAS Fire Department and Safety should be contacted for assistance in properly segregating wastes stored in satellites and <90-Day Sites.

Wastes deemed non-compatible may be separated by impermeable berms, dikes, containments or other structures that are compatible with the wastes stored within them. Containment systems should be sufficient to contain at least 10% of the volume of the waste containers.

8.0 Container Management

Waste shall be managed in containers provided by the NASCC HWCB. Containers provided will include an assigned Waste Tracking Number, and the appropriate labels and markings for the waste described by the requesting party. Wastes shall not be accumulated in containers other than those issued by the HWCB without prior approval. Non-HWCB issued containers must meet the requirements of this plan.

- Generators shall accumulate waste in DOT/UN approved containers that are compatible with the waste stored.

- Containers shall be kept closed at all times except when inspecting the contents or adding and removing waste.

- Sufficient aisle space shall be maintained and containers shall be positioned to allow for the unobstructed movement of personnel, fire protection equipment, spill control equipment, decontamination equipment and inspection of containers, labels and markings.

- Pallets and containers shall be complete and in good condition, and be used and handled in a manner that prevents ruptures and leaks. All containers shall be stored on pallets or in appropriate containments. Containers must be stacked with pallets only, and may be stacked no more than two layers high.

- Containers shall be properly closed, with HWCB provided lids and rings as appropriate, at time of pickup. Container lids and rings are not necessarily interchangeable, and should remain with the original container. Container closure instructions vary by type and manufacturer, and are available from the HWCB.

- Containers that cannot be properly sealed shall either have their contents transferred to an properly sized container, or have the container over packed into a DOT approved salvage container.

- There shall be no evidence or appearance of spills on the outside of containers, pallets, or at container storage or staging areas.

8.1 Container Labeling and Marking

Container labels and markings will be provided by the HWCB at the time a container is issued. Certain labels and markings are required for hazardous waste, non-hazardous waste, used oil and universal waste containers. Maintaining marking and labeling during waste accumulation is the responsibility of the HWC – replacement labels may be obtained upon request.

If a waste is generated prior to receipt of a proper HWCB container or container label and marking, proper marking and labeling is the responsibility of the HWC. Proper marking configurations are shown in Figure 8.1 – Container Marking and Labeling.

8.1.1 Waste Marking

Waste markings of containers having a capacity of less than 119 gallons will comply with the following:

- Be applied before waste is placed in the container

- Be marked with the words "Hazardous Waste, Non Hazardous Waste, Universal Waste or Used Oil" as appropriate to identify the contents of the container.

- Be marked with the DOT shipping description; including Identification Number, Proper Shipping Name, Hazard Class, Packing Group and Texas Waste Code (TCEQ Number), exactly as provided by the HWCB.

- Be marked with the appropriate Accumulation Start Date or Out-of-Service Date as described in section 2.0 of this plan.

- If hazardous, include the following text:

  - *"HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found contact the nearest police or public safety authority or the U.S. Environmental Protection Agency"*

  - *Generator's Name and Address:*

COMMANDING OFFICER
NAS CORPUS CHRISTI

CORPUS CHRISTI, TX 78419-5021
(361) 961-3760

- *Generator's EPA Identification Number:*

TX7170022787

- Be in English in indelible ink.
- Be displayed on a background of sharply contrasting color.
- Be located away from any other marking or attachments (such as advertising) that could substantially reduce its effectiveness.
- Be aligned vertically with the container opening (ring or bung), to be visible when opening the container.
- Be placed on the upper third of containers and shall not exceed a twenty-four inch width.
- Marking of container identification information as seen in Figure 8.1 may be done by stenciling or use of paint pens or other indelible ink. Letters should be one to two inches in height, in sharply contrasting colors.
- Proper marking configurations are shown in Figure 8.1 – Container Marking and Labeling.

8.1.2 Waste Tracking Number

The HWCB will provide waste tracking numbers with containers. The WTN must be stenciled or marked on all containers as seen in Figure 8.1. The WTN for each container of waste will be unique.

8.1.3 DOT Hazard Class Labels

In addition to the markings described above, the appropriate DOT hazard class label(s) must be placed on each waste container prior to shipment, as seen in Figure 8.1 [49 CFR 172.400].

DOT Hazard Class Labels Shall:

- Be clearly visible and not obscured by markings or attachments.
- Be placed adjacent to the proper shipping name, present on the waste label.
- Primary and subsidiary labels must be within six inches of each other.
- Primary and subsidiary label must have hazard class number.
- Meet DOT size, shape, and durability specifications.
- Be located so as to be visible at opening.

- All markings and labels shall be placed on the upper third of containers and shall not exceed a twenty-four inch span.

8.1.4 Salvage Drums

Salvage containers will be provided by the HWCB when necessary for waste turn-in. Container re-packing and additional materials may also be provided by the HWCB. [49CFR172.312]

- Inner container must be packed with closures upward.

- Inner container must include all applicable waste container labels and markings, identical to outer container labels and markings, on the top or visible side of the container.

- Each drum shall contain, when necessary, sufficient cushioning and absorption material to prevent excessive shifting of the damaged package and to eliminate the presence of any free liquid at the time the salvage drum is closed.

- Salvage container shall be labeled with package orientation arrows on 2 opposing sides of the outer container. An arrow for a purpose other than indicating proper package orientation may not be displayed on a package containing a liquid hazardous waste.

8.1.5 Consolidated Wastes and Overpacks

Do not mix incompatible wastes. Do **not** mix materials or wastes where uncertainty exists. Consult with unit HWC or NASCC PW Environmental or HWCB before combining materials.

Prior to consolidating any waste materials or waste streams, the HWCB shall be consulted, and an updated Form 2 submitted to reflect the proposed change.

When two or more packages containing compatible hazardous wastes are consolidated into the same container or overpack, the outside container or overpack must be labeled as required for each hazard class contained therein. [49 CFR 172.404(b)]

8.1.6 Marking Portable Tanks

Portable tanks less than 1000 gallons, containing hazardous material must follow the requirements of this plan, and shall be marked with:

- The DOT proper shipping name on two opposing sides of the tank, in 1 inch lettering. [49 CFR 172.302 and 172.326]

- The identification numbers on orange panels, square-on-point configurations or placards, as appropriate on two opposing sides.[49 CFR 172.332]

- If placards are not used to display the identification number on two opposing sides, then DOT hazard class labels must also be affixed. [49 CFR 172.514]

- The tank must remain marked until cleaned of residue, including triple rinsing if necessary, and/or purged of vapors.

8.1.7 Intermediate Bulk Containers

Intermediate Bulk Containers (IBC) containing hazardous material must follow the requirements of this plan, and shall be marked with:

- The identification numbers on orange panels, square-on-point configurations or placards, as appropriate.[49 CFR 172.332]

- If placards are not used to display the identification number on two opposing sides, then DOT hazard class labels must also be affixed. [49 CFR 172.514]

8.1.8 Package Orientation Markings.

Each non-bulk combination package having inner packaging containing liquid (e.g., lab packs, over packs and commodity packs) must be [49 CFR 172.312]:

- Packed with closures upward

- Legibly marked with package orientation markings (directional arrows) on two opposite vertical sides of the package.

- Not be marked with an arrow for a purpose other than indicating proper package orientation.

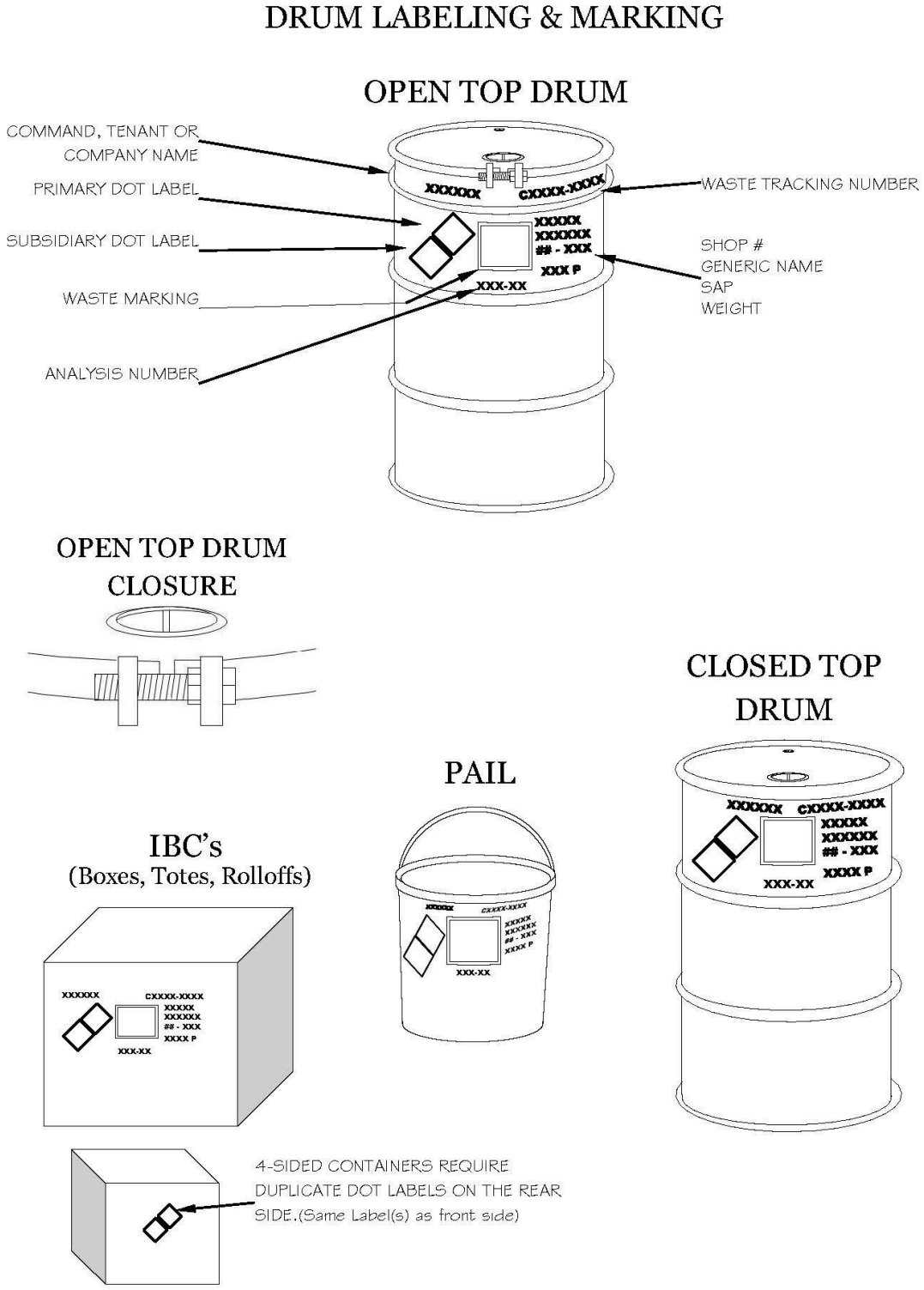

Figure 8.1 – Container Marking and Labeling

9.0 Hazardous Waste Management

Appendices A-K of this plan detail the procedures in place for handling specific aspects of Hazardous Waste Management. Please refer to these appendices for guidance.

APPENDIX A
SATELLITE ACCUMULATION POINTS

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A.1 Purpose

This SOP establishes procedures for the proper management of waste in Satellite Accumulation Points (SAPs).

A.2 Responsibilities

A.2.1 *Unit HW Coordinator and Alternates shall:*

- Be familiar with and operate in accordance with this HWMP.
- Ensure a copy of the Commanding Officer's letter of designation is provided to the NAS Corpus Christi Public Works (NASCC PW) Environmental. An example of the letter of designation is included as Enclosure A-1.
- Request authorization to establish Satellite Accumulation Points. SAPs may only be established with the authorization of NASCC Environmental. A request to establish a satellite shall be submitted to NAS Environmental using the Satellite Authorization Form provided in Enclosure A-2. A fillable pdf of the form is embedded in the Enclosure for download.
- Ensure appropriate HW services funding is arranged with the HWCB prior to requesting containers. Obtain and use only DOT approved containers for waste storage from the HWCB.
- Inform the HWCB of any changes that may affect a waste stream. At a minimum, annually review all waste streams to ensure that no changes have occurred. Provide waste stream information to the HWCB as required.
- Schedule HW pick-ups and container deliveries with the HWCB.
- Ensure work center personnel are trained and familiar with special management procedures for wastes generated in their work process.
- Train applicable work center personnel to respond to small spills/leaks and assist with clean-up procedures.
- Notify NAS Corpus Christi Emergency Response at 961-3333 when spills, leaks and emergencies occur.
- Conduct and maintain records of weekly inspections of SAPs per Appendix I of this plan and correct all discrepancies.
- Maintain a Generator's Waste Fill record (Enclosure A-3) that documents the contents of each HW container.

A.2.2 *All HW Personnel Shall:*

- Be aware of procedures for handling leaking or damaged containers and spill cleanup procedures and responsibilities.

- Collect and immediately containerize waste.
- Keep waste containers closed except when adding or removing waste.
- Properly segregate material and waste containers.
- Ensure good housekeeping of SAPs.

A.3 SAP Management

- SAPs are initial waste accumulation areas at or near the point of generation. SAPs must be under the control of the operator generating the waste.
- No more than 55 gallons of HW, or 1 quart of acute HW listed in 40 CFR 261.33(e), may be accumulated in a SAP, regardless of the number of containers used. The 55-gallons limit does not apply to Universal Waste, non-RCRA regulated waste or Used Oil.
- HWCs may have more than one SAP; however, each SAP shall be approved by the HWPM, have a unique identification number and have signage posted that clearly delineates it as a SAP.
- The applicable Accumulation Start Date (ASD) shall be applied by the HWC or operator in the format DDMONYY, as in: "01JAN14". See section 2.0 of this plan for a definition and explanation of ASDs for various types of regulated waste.
- HWCs shall use good housekeeping practices at all times.
- Empty containers shall be marked as such. If empty containers have HW labels they shall be covered.
- HWCs shall maintain a Waste Fill Record (NASCORPC 5090.3) for each container (Enclosure A-3) The Generator's Waste Fill Record provides documentation of the type and quantity of wastes placed within a particular container. The form is initiated by the Hazardous Waste Coordinator (HWC) when waste is first placed into a SAP. As additional waste is added to the container, the type and quantity of waste is recorded. The fill record is retained in the generator's records.

A.4 Daily Accumulation Containers

- Daily Accumulation Containers are an extension of a SAP. Daily accumulation containers should be strictly monitored and inspected along with the associated SAP. The following requirements shall be met:
  - Be at or near the point of generation, under the control of the operator.
  - Be closed except when adding or removing waste.
  - Though not required to be DOT rated, the container must be suitable and compatible for the waste contained, and capable of preventing the release of the waste, if the container were tipped on its side (as likely in an accident). In addition:

> Daily Accumulation Containers containing liquid waste must be sealed sufficiently to prevent evaporation of the waste.

> Daily Accumulation Containers containing solids must have lids that make complete lid-to-container contact.

- Be appropriately marked and located as to be clearly distinguishable as a regulated waste receptacle.

- Be fitted with a compatible inner-liner, which shall be removed with the waste each time the container is emptied, to ensure no residues or spills remain in the container.

- Be designated for transfer to one SAP only.

- Be clearly labeled, in contrasting colors with indelible ink:

> "Daily Accumulation Container for Satellite (_____)"

> "Empty at the End of Each Day or Shift"

> The name of the waste from the applicable waste profile.

A.5 Unknown Hazardous Waste

Immediately notify NASCC PW Environmental when a container of unknown or questionable material or waste is discovered.

A.6 Waste Turn-In Requirements

Waste exceeding the 55-gallon limit, or containers deemed full or no longer utilized, shall be transferred from the SAP to a 90-day accumulation area or the conforming storage facility within three calendar days.

When waste needs to be transferred to the HWCB, the HWC or Alternate shall:

- Call the HWCB and schedule pick up. It is the responsibility of the HWC to notify the HWCB no more than 24 hours after a container is deemed full or otherwise unused so that the regulatory 3 day transfer requirement can be met.
- Ensure required paperwork is received by the HWCB.
- Ensure the containers are staged for pickup.
- Ensure containers are properly labeled.
- Ensure containers are closed and ready for transport.
- Be present for waste pick up.

The waste may be inspected at the time of the pick-up; any discrepancies shall be immediately corrected.

When the HWC determines that a waste needs to be sampled or characterized, the SOP found in Appendix H of this plan shall be followed.

A.7 Spills and Releases

In the event of a shop spill, only trained personnel shall attempt to stop and contain the spill, without endangering their own safety or the safety of others.

Shop Personnel may respond to a shop spill only if all of the following criteria are in place:

- All spill responders have documented spill training for the type of spills encountered
- Adequate numbers of personnel are available to respond to a spill. Personnel shall always exercise the "buddy system" at all times, no matter how small the spill.
- All spill responders have the appropriate type of personal protective equipment necessary to respond to the spill. (Suits, gloves, boots, face shields, goggles, etc.)
- All spill responders have the appropriate resources to address the spill. (Absorbents, pads, socks, spark proof tools, etc.)

If all of the above criteria are not in place, then personnel shall not attempt to stop the spill. Personnel shall immediately contact NAS Corpus Christi Emergency Response at 961-3333 when emergency spills and leaks occur.

ENCLOSURE A-1

HWC LETTER OF DESIGNATION

SAMPLE FORMAT

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MEMORANDUM DATE

From: Your Commander or Project Manager

To: Name of Individual

Subj: DESIGNATION AS PRIMARY (OR ALTERNATE) HAZARDOUS WASTE COORDINATORS

Ref: (a) NASCORPINST 5090.3b

1. You are hereby appointed to perform the duties as the (your organization) Hazardous Waste Coordinator (HWC).

2. As the HWC, you will thoroughly familiarize yourself with reference (a) in the performance of your duties. You are responsible for ensuring positive management practices in the use, handling, storage and disposal of waste as well as compliance with the environmental quality standards, practices and procedures identified in reference (a).

3. This designation will remain in effect until properly relieved.

SIGNATURE BLOCK OF COMMANDER
OR PROJECT MANAGER

Copy to: Individual
NASCC Environmental

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ENCLOSURE A-2

SAP AUTHORIZATION FORM

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Satellite Accumulation Point Authorization Form		
1)FROM:		
2)PURPOSED LOCATION (Building and Area):	3)WASTE TO BE STORED:	
4)HAZARDOUS WASTE COORDINATOR (Print & Sign)	5)PHONE NUMBER:	6)DATE:
THE ABOVE HAS BEEN INSPECTED AND FOUND TO BE IN COMPLIANCE WITH THE HAZARDOUS WASTE MANAGEMENT PLAN REGULATIONS **ASSIGNED SATELLITE NUMBER IS:_____**		
7)PRINT & SIGN (ENVIRONMENTAL INSPECTOR)		DATE:
8)PRINT & SIGN (FIRE DEPARTMENT INSPECTOR)		DATE:
9)PRINT & SIGN (INTERNAL OR BASE SAFETY INSPECTOR)		DATE:
10)PRINT & SIGN (HAZARDOUS WASTE COMMODITIES BRANCH)		DATE:

Step 1) Hazardous Waste Coordinator identifies need for a Satellite Accumulation Point, initiates SAP authorization form
Step 2) Hazardous Waste Coordinator contacts Public Works Environmental to conduct initial site visit (signature required)
Step 3) Hazardous Waste Coordinator coordinates site visit from internal or Base Safety (signature required)
Step 4) Hazardous Waste Coordinator coordinates site visit from Base fire inspector (signature required)
Step 5) Hazardous Waste Coordinator submits signed SAP authorization, complete Form 2, and applicable MSDSs to Hazardous Waste Commodities Branch
Step 6) Hazardous Waste Commodities Branch ensures above criteria is met, and is the final authority to sign SAP authorization (signature required)

Form 3- SAP Authorization v1.1.pc

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ENCLOSURE A-3

GENERATOR WASTE FILL RECORD

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GENERATOR'S WASTE FILL RECORD

WORK CENTER	DATE BEGINNING TO FILL DRUM
WASTE DESCRIPTION	
SATELLITE NUMBER	CONTAINER IDENTIFICATION NUMBER

DATE	WASTE DESCRIPTION	QUANTITY	DEPOSITOR

DATE DRUM IS FULL	DATE DRUM IS PICKED UP

Form 5 - Generators
Waste Fill Record v1.

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APPENDIX B
LESS THAN 90 DAY STORAGE

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B.1 Purpose

The purpose of this Standard Operating Procedure (SOP) is to establish procedures for the proper management of waste in Less Than 90-Day Storage Areas, commonly called "<90-Day Sites". <90-Day Sites are used to store hazardous wastes for up to ninety-days. They do not require a permit, but they must comply with federal regulations in 40 CFR 262.34(a) and state regulations in 30 TAC 335.69. NASCC registered <90-Day Sites characteristics and locations can be found in Table B-1 below.

LESS THAN NINETY-DAY STORAGE AREAS		
***FACILITY*[1]**	***LOCATION***	***CAPACITY***
Facility 21	Bldg. 257 yard and adjacent roll-off box	640 Drums
Facility 22	Bldg. 363 – L3 AIMD Dept. – Hangar 51 apron	70 Drums
Facility 26	Bldg. 366 – COMTRAWING Four (VT 27, VT-28, VT-31) SSSI –	140 Drums
Facility 27	Hangar 41 – US Coast Guard Hangar	10 Drums
Facility 29	Bldg. 361 and adjacent roll-off box – Ground Service Yard	100 Drums
Facility 30	Bldg. 367 – NAS Public Works Department	70 Drums
Facility 33	Bldg. 50C, Center Bay – US Customs	40 Drums
Facility 40	IBC - Inside west end of Bldg. 340	1 cubic yd.
Facility 46	Bldg. 8, NE Corner at 4$^{th\ ST.}$ & Ocean Dr.	300 gallons
Facility 48	Bldg 355 and adjacent roll-off box located next to Bldg 259	648 Drums
Facility 53	Bulk Storage Containers located throughout facility; Roll-offs, Frac tanks, vacuum boxes, tote tanks, etc. of various sizes.	Various

Table B-1: Less Than 90-Day Storage Areas (Accurate as-of 01SEP2013)

B.2 Responsibilities

HW Coordinator and Alternates shall:

- Be familiar with this HWMP and manage waste accordingly.
- Ensure a copy of the HWC letter of designation is provided to the NAS Corpus Christi PW Environmental.
- Ensure work center personnel comply with the requirements of this SOP.

- Inform the HWCB of any changes that may affect a waste stream. At a minimum, annually review all waste streams to ensure that no changes have occurred.
- Schedule HW pick-ups.
- Ensure personnel are familiar with special management procedures for wastes generated in their work process.
- Provide information, such as SDSs, as requested.
- Train personnel to respond to small spills/leaks and assist with clean-up procedures.
- Telephone NAS Corpus Christi, Emergency Response at 961-3333 (not 911) when spills, leaks and emergencies occur.
- Conduct inspections in accordance with Appendix I.

B.3 Management of <90-Day Sites

HW shall be accumulated for no more than 90 days. This time limit does not apply to Universal Waste, Non-Hazardous Waste or Used Oil.

- Hazardous wastes must be removed from a <90-Day Site prior to 75 days from its ASD, whether the ASD was applied at a satellite area or a <90-Day Site. If a waste will not be ready for submittal to the HWCB by the 75 day limit, the HWCB should be contacted to arrange for proper storage.
- Access to <90-Day Sites shall be controlled at all times. Sites shall be kept locked except when appropriately trained personnel are present. No unauthorized or untrained person shall enter or be present in a <90-Day Sites without a trained, authorized escort.
- Weather resistant signs, clearly visible from a distance of 50 feet, stating

  "NO SMOKING WITHIN 50 FEET" and

  "NO FUMAR EN UN RADIO DE 50 PIES"

  And

  "DANGER - UNAUTHORIZED PERSONNEL KEEP OUT" and

  "PELIGRO – PERSONAL NO AUTORIZADO MANTENGASE AFUERA"

  shall be posted on all exterior sides of the 90-Day Site.
- An internal communication or alarm system capable of providing immediate emergency instruction to site personnel shall be available.

- A device (telephone or two-way radio) capable of summoning emergency assistance shall be available when personnel are present.

- Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), and decontamination equipment shall be available. Fire control equipment should be appropriate for the type and quantity of chemicals stored at that site.

- A spill kit/spill equipment shall be maintained at the <90-Day Site. The spill kit shall be clearly marked as "SPILL KIT" and contain material and equipment necessary to contain and clean up spills. The spill kit should be appropriate for the type and quantity of chemicals stored at that site

- An up-to-date contingency plan shall be available at the <90-Day Sites.

- Containments, floors, and sumps must be kept clean and dry, free of any dirt, debris or water, including rainwater. Dirt and rainwater collected in <90-Day Site shall be containerized as a waste and submitted for disposal by the HWCB.

B.4 Inspections

Inspections shall be performed and documented following Appendix I of this Plan.

B.5 Training Requirements

Personnel working at <90-Day Sites must receive training in hazardous waste management procedures and contingency plan implementation, consistent with 40 CFR 264.16. See Section 4.0 of this plan.

B.6 Unknown Waste

Immediately notify NAS Corpus Christi, PW Environmental when a container of unknown or questionable material or waste is discovered. A container of unknown waste may be stored in the <90-Day Sites. Label the container as HW and mark the date the waste was found. Immediately initiate the waste determination process by submitting a completed Waste Identification Form (Form 2) to the HWCB. Once a waste determination is completed, the container may be relabeled as required. Unknown waste shall be stored in secondary containment and be separated from all other wastes.

B.7 Transfer of Waste

HW shall be transferred from a <90-Day Sites to the RCRA permitted facility or another <90-Day Site only.

The HWC shall:

- Ensure required paperwork is received by the HWCB.
- Call the HWCB and schedule pick up.
- Ensure the containers are staged for pickup.
- Ensure containers are properly labeled.
- Ensure containers are closed and ready for transport to the HWCB.
- Be present for waste pick up.

The waste may be inspected at the time of the pick-up; any discrepancies shall be immediately corrected.

All HW transferred to the permitted facility shall meet requirements of the permit.

B.8 Spills

In the event of a spill, only trained personnel shall attempt to stop and contain the spill, without endangering their own safety or the safety of others.

Shop Personnel may respond to a shop spill only if all of the following criteria are in place:

- All spill responders have documented spill training for the type of spills encountered
- Adequate numbers of personnel are available to respond to a spill. Personnel shall always exercise the "buddy system" at all times, no matter how small the spill
- All spill responders have the appropriate type of personal protective equipment necessary to respond to the spill. (Suits, gloves, boots, face shields, goggles, etc.)
- All spill responders have the appropriate resources to address the spill. (Absorbents, pads, socks, spark proof tools, etc.)

If all of the above criteria are not in place, then personnel shall not attempt to stop the spill. Personnel shall immediately contact NAS Corpus Christi Emergency Response at 961-3333 when emergency spills and leaks occur.

APPENDIX C
CONTRACTOR SOP

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C.1 Purpose

The purpose of this Standard Operating Procedure (SOP) is to establish procedures for the proper management of regulated wastes by contractors operating aboard Naval Air Station Corpus Christi (NASCC).

C.2 Responsibilities

C.2.1 *NASCC Commanding Officer*

- Grants access to contractors working aboard the installation**;** therefore, any contractor who improperly manages waste or fails to comply with this instruction may be denied access to the installation.

C.2.2 *NASCC personnel*

- Review contracts and provide waste management guidance as requested by Contracting Authority (CA).
- Shall have immediate access to inspect contractor's work areas and shall report discrepancies to the CA.

C.2.3 *Contracting Authorities*

- Ensure contractors comply with federal, state, and local regulations, in addition to Navy and NASCC instructions.
- Ensure contractor establishes a line of credit or other method of reimbursement for waste disposal through the HWCB.
- Provide this plan including SOP to all contractors.
- Include/notify NASCC Environmental of any contractor projects that may produce a waste resulting in the HWCB HW Services.
- Ensure each Statement of Work (SOW) specifies the proper management of regulated wastes, including handling, storage, transportation, disposal, and:
  - Identifies an estimate of the type and amount of waste to be generated during the performance of the contract, and the method of funding for disposal.
  - Identifies and ensures required documents are accurate and timely.
  - Requires a State of Texas certified laboratory completes chemical analysis.
  - Requires proper disposal of regulated waste such as petroleum products and wastewater.

- Requires best management practices to minimize the amount of HW and other waste generated.
- Requires the HW disposal costs be included in the contract cost. NASCC **is not responsible nor will they pay for the disposal of contactor generated waste.**

- Require approval from NASCC for contractor's waste storage location(s).
- Immediately notify NASCC if:
  - a contractor unexpectedly generates waste.
  - a regulatory violation(s) is identified.
  - a spill / release to the environment occurs.
- Provide NASCC access to waste records.
- Provide the HWCB all necessary information to characterize waste.

C.2.4 *Contractors*

- Take no action or inaction that exposes the Government to liability for non-compliance or other findings or damages, penalties or fines related thereto. In the event a regulatory agency assesses either a monetary or non-monetary fine or penalty for Contractor's noncompliance, the Contractor shall reimburse the Government for all associated cost.
- Manage regulated wastes and Used Oil in accordance with applicable federal, state, and local regulations, Navy and NASCC policies and instructions including this plan, and contractual requirements.
- Before generating waste, obtain from NASCC via CA, approval for HW storage, including location and type of storage (i.e. SAP or <90-day Storage Area)
- Provide immediate access to NASCC personnel to inspect locked units.
- Inspect their waste storage areas and provide, via the CA, inspection reports. Immediately correct deficiencies identified during inspections.
- Establish a line of credit with the NASCC Hazardous Waste Commodities Branch for disposal of waste and provide required waste stream information **before generating any waste**.
- Remove all HM and waste upon completion of contract. Abandoned waste shall be managed as an unknown waste; the contractor shall bear the cost of any analytical, disposal and other costs incurred.

- Provide funding to the HWCB for manifest review and signing services for wastes not disposed through the HWCB HW Disposal services. Manifesting services will be charged using the standardized labor rate, available from the CA. Wastes not disposed through the HWCB require prior approval of NAS Environmental and the HWCB.

C.2.5 *NASCC Hazardous Waste Commodities Branch*

- Notify NASCC HW Program Manager when a contractor requests waste container(s) and do not provide HW services without concurrence. Provide drums to contractors only after the contractor has:
  - Established a line of credit.
  - Provided adequate waste stream information.
- Properly label all containers issued to contractor before delivering the container(s).
- Invoice the contractors for costs associated with management of their waste.

C.3 HW Management

HW shall be managed in accordance with federal, state and local regulations in addition to Navy and NASCC policies and instructions including this plan. Contact NASCC, via the CA regarding proper handling, storage and disposal procedures. Contract shall follow this HWMP for HW Management.

C.4 Manifests

Only personnel authorized in writing by the Commanding Officer of NASCC may sign manifests. Contractors shall ensure that only authorized NAS Corpus Christi personnel sign manifests; contactors shall contact the HWCB before making any arrangements to remove waste from the Installation.

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APPENDIX D
USED OIL SOP

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D.1 Purpose

The purpose of this Standard Operating Procedure (SOP) is to establish procedures for Used Oil management. The used oil rules are based on the presumption that used oil (oil contaminated by chemical or physicals impurities as a result of use) will be recycled. The Recycled Used Oil Management Standards (40 CFR 279, 30 TAC 324) are designed to promote the recycling of used oil while protecting human health and the environment.

D.2 Responsibilities

D.2.1 *NASCC Hazardous Waste Manager*

- Ensure compliance with this HWMP for Used Oil Management

D.2.2 *Generators of Used Oil*

- Establish a line of credit with the NASCC Hazardous Waste Commodities Branch for disposal of Used Oil and provide required waste stream information **before generating any Used Oil**.
- Request containers from the HWCB for the collection of Used Oil. Used Oil will be turned in to the HWCB for disposal.
- Manage Used Oil in accordance with this HWMP and SOP.
- Report any spills immediately. Contact NASCC Hazardous Waste Manager if a situation arises that requires immediate attention

D.2.3 *Hazardous Waste Commodities Branch*

- Manage, store and coordinate off site shipment of used oil.
- Sign and track Bills-of-Lading.
- Provide containers, waste characterization, and sampling.
- Maintain used oil records for reporting purposes.

D.3 General Used Oil Management

- It is prohibited to dispose of Used Oil into any wastewater treatment system, storm drain, surface water body, or onto the land.
- Used oil may not be used as a dust suppressant or other such applications.

- Segregation of Used Oil is mandatory. Proper segregation prevents incompatible chemicals from mixing that may produce heat, pressure, fire, explosions, violent reactions, toxic dust, mists and irritating or toxic fumes or gases.

- Under the used oil management standards, used oil is recyclable only if not mixed with a listed hazardous waste or rendered hazardous by mixing with a characteristically hazardous waste.

- Examples of used oil include: vehicle, aircraft, and equipment oils, such as engine oil, transmission oil, hydraulic oil, gear oil, brake fluids, compressor and power steering fluids.

- Used Oil does not include: animal or vegetable oils, solvents, unused oils or emulsified cutting oils.

- Do not mix Used Oil with regulated solvents, hazardous waste, solid waste, gasoline or aviation fuels.

- Store Used Oil in approved aboveground storage tanks or DOT approved, compatible containers that are in good condition, not leaking or rusting and are clearly labeled with the words "USED OIL".

- Storage areas that have 55 gal or greater of Used Oil require secondary containment equal to the volume of the largest single container. Storage areas that are outside and uncovered also require sufficient freeboard to contain precipitation. Refer to the installation's current Spill Prevention, Control and Countermeasure (SPCC) plan for more information.Containers and aboveground tanks shall be closed except when adding or removing Used Oil.

- Contact the HWCB to arrange for disposal of used oil.

D.4 Spills and Releases.

In the event of a release of Used Oil to the environment (a spill), trained personnel shall make every effort to stop and contain the spill, without endangering their safety or the safety of others. Follow contingency plan, Appendix L, in the event of a spill.

D.5 Used Oil Turn-in Requirements

When a Used Oil container is closed and waste needs to be transferred to the HWCB, the HWC or Alternate shall:

- Call the HWCB and schedule pick up. It is the responsibility of the HWC to notify the HWCB no more than 24 hours after a container is deemed full or otherwise closed, so that the regulatory 3 day transfer requirement can be met.

- Ensure required paperwork is received by the HWCB.
- Ensure the containers are staged for pickup.
- Ensure containers are properly labeled.
- Ensure containers are closed and ready for transport.
- Be present for and sign off on waste pick up.

The waste may be inspected at the time of the pick-up; any discrepancies shall be immediately corrected.

When the HWC determines that a waste needs to be sampled or characterized, the SOP found in Appendix H of this plan shall be followed.

D.6 Used Oil Labelling Requirements

- All waste streams managed as used oil shall be marked or labeled with the words "***USED OIL***." Label and mark containers in accordance with this plan.
- Label all buckets, drip pans, funnels, cans and other intermediate containers used to collect or temporarily store Used Oil with the words “Used Oil” via labels or legible, permanent printed or stenciled letters.
- Oil managed under the Used Oil program should not be marked with the words “Waste Oil” or “Spent Oil”. Conversely, oil NOT managed as Used Oil shall not be marked with the words “Used Oil”.

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APPENDIX E
UNIVERSAL AND PCB WASTE SOP

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E.1 Purpose

This SOP establishes procedures for the management of Universal Waste (UW) and Polychlorinated Biphenyls (PCB).

E.1.1 *Universal Waste (UW)*

TCEQ adapted the federal regulation for Universal Waste (40 CFR 273) and added state provisions in 30 TAC 335.261.

- TCEQ regulates the following types of waste as UW with their respective regulatory reference:
  - Batteries as described in 40 CFR 273.2
  - Pesticides as described in 40 CFR 273.3
  - Mercury-containing equipment as described as described in 40 CFR 273.9
  - Lamps as described in 40 CFR 273.5
  - Paints and paint related waste as described in 30 TAC 335.262

E.1.2 *Polychlorinated Biphenyl*

PCB products are regulated under Title I of the Toxic Substance Control Act (TSCA), "Control of Toxic Substances" and managed under 40 CFR Part 761.

E.2 Responsibilities

E.2.1 *NASCC HW Manager*

- Ensure UW and PCB wastes are managed in accordance with this HWMP and SOP.

E.2.2 *Generators of UW*

- Manage UW and PCB wastes in accordance with this HWMP and SOP
- Minimize waste generated.

E.2.3 *Hazardous Waste Commodities Branch*

- Manage, store and coordinate off site shipment of Universal and PCB Waste.
- Sign and track Bills-of-Lading and HW Manifests.
- Provide containers, waste characterization, and sampling.

- Maintain records for reporting purposes.

E.3 Universal Waste Management

- Store the UW in an appropriate container that is marked and labeled in accordance with this plan.

- Mark the accumulation start date on the container label. The accumulation start date begins when the first item of UW is placed in the satellite accumulation container or when the material is first deemed waste. Track and maintain UW accumulation data through the use of container fill logs and facility records as described in this plan.

- Submit waste to the HWCB for disposal as soon as a UW container is full or at the 9th month of accumulation.

E.4 Universal Waste – Battery Management

- Segregate UW batteries by type and store in compatible, closed and properly marked containers. Battery types may include: Nickel Cadmium, Lithium, Alkaline, Sealed Lead Acid. Contact the HWCB for information on battery types.

- Tape both terminals or seal each battery in an indiviual plastic bag as necessary to eliminate the possibility of short-circuiting.

- Label each container of UW batteries with the words "Universal Waste – Batteries."

- Broken batteries are not a candidate of UW rules. Contact NAS Corpus Christi, PW Environmental to report all new Waste Streams.

E.5 Universal Waste – Lamp Management

- Types of lamps managed as a UW may include, 4 ft. and 8 ft. fluorescent lamps, mercury and sodium vapor, high intensity discharge (HID), ultraviolet (UV), compact fluorescent (CFL), U-shaped and round fluorescent.

- Accumulate UW lamps in appropriate closed containers, in a manner to prevent breaking. Methods to prevent lamp breakage include the use of original or replacement packaging or bubble wrap to cushion lamps and prevent contact in containers, and proper usage of the HWCB provided fiber storage containers. Do not mix 4 ft. and 8 ft. lamps in fiber storage containers.

- Label each container of UW lamps with the words "Universal Waste – Lamps".

- Intentionally crushing or breaking UW lamps is forbidden, except in the NASCC PW Environmental, TCEQ approved, lamp crushing unit.

- Broken lamps cannot be managed as a UW. Contact NAS Corpus Christi, PW Environmental to report all new Waste Streams.

E.6 Universal Waste – Mercury Containing Equipment (MCE)

- Types of MCE may include: Thermometers, thermostats, switches and sealed ampules containing mercury, such as from fire suppression systems.
- Accumulate UW MCE in appropriate closed containers in a manner to prevent breaking. Methods to prevent breakage include the use of original or replacement packaging or bubble wrap to cushion Equipment and prevent contact in containers.
- For intact UW MCE where the mercury is not in a sealed ampule, the mercury must be inside a manufactured sealed air-tight casing.
- Label each container of UW MCE with the words "Universal Waste – Mercury Containing Equipment."
- Manage broken MCE, all leaked material and/or clean-up debris as hazardous waste. Contact NAS Corpus Christi, PW Environmental to report all new Waste Streams.

E.7 Universal Waste – Pesticides

- Contact NAS Corpus Christi, PW Environmental for identification of UW Pesticides.
- Accumulate UW pesticides in appropriate closed containers.
- Label each container of UW pesticides with the words "Universal Waste – Pesticides."

E.8 Universal Waste – Paint and Paint-Related Waste

- Paint and paint-related waste is defined as used or unused paint and paint-related material in any mixture of pigment and a suitable liquid which forms a closely adherent coating when spread on a surface or any material which results from painting activities and may. include:
  - Paint and coatings in liquid, solidified or aerosol forms:
    - Chemical agent resistant coating (CARC)
    - Oil-based (enamel, stains)
    - Water-based (latex)
  - Spent blast media from paint preparation and paint removal.
  - Paint thinners and primers in liquid or aerosol forms.

- Empty paint and thinner containers.
- Paint contaminated masking tape, masking paper, brushes, rollers, and PPE.

- Label each container of UW Paint and Paint Related Waste with the words "Universal Waste – Paint and Paint Related Waste."

E.9 Polychlorinated Biphenyl (PCB) Waste Management

- PCB wastes may include dielectric fluids; solvents; oils; waste oils; heat transfer fluids; hydraulic fluids; paints or coatings; sludges; slurries; sediments; dredge spoils; soils; and materials containing PCBs as a result of spills.
- PCB articles may include capacitors (small, large low and high voltage) capacitors, transformers, ballasts, electric motors, pumps, and pipes
- PCB articles and containers closed and designated for disposal shall be stored only in authorized the HWCB storage facilities.

E.9.1 *Marking and Labeling Waste PCBs*

40 CFR 761.40 requires that PCB items be marked at the time of removal from use. Marking and labeling requirements include:

- Each individual PCB article will be marked unless in properly marked approved container.
- The individual article or approved PCB container will be marked with the out of service date (OSD), the date the item is taken out of service or deemed a waste. For containers of multiple PCB articles, the oldest OSD applies to the entire container.
- Marking will consist of black letters on a yellow or white background and made in indelible ink.
- EPA requires the label to be at least six inches on each side (Figure 1). For items too small for the six inch size, the label may be reduced to two inches on each side (Figure 2).

Figure 1

Figure 2

E.9.2 *PCB Manifest Requirements*

- For each bulk load of PCBs, identify the PCB waste, OSD, and the weight in kilograms of the PCB waste.
- For each PCB article or PCB container, assign a unique identifying number and identify the type of waste (e.g., soil, debris, small capacitors), OSD, and weight in kilograms of the PCB waste.

E.10 UW and PCB Turn-In

Hazardous Waste Coordinators must contact the HWCB to schedule a turn-in of Universal or PCB waste when a container is full or when the container has been accumulating:

- Universal Waste for NINE MONTHS
- PCB Waste for SIX MONTHS

These turn-in requirements are due to heightened storage and disposal regulatory requirements for these waste types. Universal Waste must be manifested and removed from the facility by 12 months, and PCB waste must be manifested and removed from the facility by 9 months.

E.11 Universal Waste Training

Hazardous Waste Coordinators must ensure that all employees who handle or have responsibility for managing UW are familiar with the proper waste handling and emergency procedures relative to their responsibilities during normal facility operations and emergencies (40 CFR 273.36). HWCs shall document this training in employee training records with responsibilities noted in their job description.

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APPENDIX F
MUNITIONS RESPONSE SOP

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F.1 Purpose

The purpose of this SOP is to establish responsibilities and implement procedures for managing Waste Military Munitions (WMM) onboard NAS CC per the Military Munitions Rule (MMR) in accordance with the requirements of references (a) through (g).

Ref: (a) DoD MMR Implementation Policy, SER N457F/452-98, 27 Jul 98

(b) NAVSEA OP 5 Volume 1 (Ammunition and Explosives Safety Standards)

(c) NASCC Facility Response Plan dtd Oct 2012

(d) Emergency Planning and Community Right-to-Know Act (EPCRA)

42 USC 11001

(e) Defense Material Disposition Manual, DoD 4160.21 Series

(f) DoD Instruction Number 4160.28 Series

(g) DoD Ammunition and Explosives Safety Standards, DoD 6055.9-STD

F.2 Definitions

Chemical Munitions: Munitions containing chemicals with the potential to have dangerous or lethal effects on human health. This does not include riot control agents, chemical herbicides, smoke and other obscuration materials that are further defined in reference (a).

Conditionally Exempt (CE): This term identifies munitions stored that are exempt from certain Resource Conservation and Recovery Act (RCRA) requirements (Hazardous Waste (HW) storage regulations).

Disposition: An evaluation process designed to determine whether munitions are excess, unusable, reusable, recyclable, or should be treated and disposed.

Designated Disposition Authority (DDA): The only personnel in the DoD authorized to declare unused military munitions a WMM except in the case of an explosive or munitions emergency, abandoned munitions, or a declaration by the Authorized Military Official. Currently, the Navy has four DDAs; one for large Navy missile systems, one for small Navy missile systems, one for cartridge/propellant-actuated devices, and one for ammunition.

Explosive-Contaminated Waste: An explosive-contaminated waste is an inert material such as rags, paper, wood, plastic, or metal contaminated with an explosive material as defined by

NAVSEA OP 5. Explosive-contaminated waste that meets the reactivity characteristic, as defined in 40 CFR 261.23, is managed and disposed of as WMM.

Explosive Hazardous Waste (EHW): An EHW may be a military munition or a non-military munition. While both military and non-military munitions may contain energetic fillers and/or components that are reactive as defined in 40 CFR 261.23, only military munitions are regulated by the MMR. Non-military munitions that become EHW must be managed as HW in accordance with Subtitle C of 40 CFR.

Explosives or Munitions Emergency Response: An immediate/Level 1 response by explosives and munitions emergency response personnel to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions or their transport to another location to be rendered safe, treated, or destroyed. A reasonable delay (caused by a necessary, unforeseen or uncontrollable circumstance) to complete the explosives or munitions emergency response, does not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and do not need to be performed at a RCRA facility.

NOTE: HW and explosives safety regulations apply to both types of waste accumulation sites. When there is a conflict between these regulations, the more restrictive requirement applies.

Material Documented As Safe (MDAS): Materials Potentially Presenting and Explosive Hazard (MPPEH) that has been assessed and documented as not presenting an explosive hazard and for which the chain of custody has been established and maintained. MDAS is material that is no longer considered to be MPPEH.

Materials Potentially Presenting and Explosive Hazard (MPPEH): MPPEH is material that is owned or controlled by the Department of Defense (DoD) that, prior to determination of its explosives safety status, potentially contains explosives or munitions (e.g., munitions containers and packaging material; munitions debris remaining after munitions use, demilitarization, or disposal; and range-related debris) or potentially contains a high enough concentration of explosives that the material presents an explosive hazard (e.g., equipment, drainage systems, holding tanks, piping, or ventilation ducts that were associated with munitions production, demilitarization, or disposal operations). Excluded from MPPEH are munitions within the DoD-established munitions management system and other items that may present explosion hazards (e.g., gasoline cans and compressed gas cylinders) that are not munitions and are not intended for use as munitions.

Military Munitions (MM): All ammunition products and components produced for or used by the U.S. DoD or the U.S. Armed Services for national defense and security. This includes MM under the control of the DoD, the U.S. Coast Guard, and/or the U.S. Department of Energy and

National Guard personnel. MM includes confined gaseous, liquid and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes and incendiaries used by DoD Components, including bulk explosives, chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, devices and components thereof. It does not include wholly inert items, improvised explosive devices, and nuclear weapons, devices and components thereof. See reference (a) for additional information.

Minutely Explosive-Contaminated Waste: Minutely explosive-contaminated waste is any inert material such as rags, paper, wood, plastic, or metal that has come in direct contact with explosives and has only trace amounts of explosives contamination. Such items do not meet the RCRA definition of reactivity and are not WMM. These items, however, if not being recycled still require decontamination. Additionally, if any items were contaminated with chemicals making a waste a hazardous waste (acetone, methylene chloride), the waste must be managed as HW.

Military Munitions Rule (MMR): A rule that identifies when conventional and chemical military munitions become a hazardous waste under the RCRA. The MMR also amends existing regulations regarding emergency response involving both military and non-military munitions and explosives. The MMR exempts all generators and transporters of HW from the RCRA manifest for the transportation of HW on public and/or private right-of-ways on or along the border of contiguous properties, under the control of the same person, regardless of whether the contiguous properties are divided by right-of-ways provided DoD shipping controls applicable to WMM are met.

NOTE #1: To use the transportation exemption, all States that the waste passes/transits through during transport must have adopted the MMR.

NOTE #2: WMM stored as HW may be transported under the conditional exemption.

Permitted Explosive Hazardous Waste Storage Facility: A facility permitted under RCRA to store WMM for longer time periods than allowed at accumulation sites. The specific conditions of the permit determine the types, quantities, and procedures for storing waste at the facility.
Reclaim: Materials processed or disassembled to recover a usable component from an MM.

Recycle: Material used, reused, or reclaimed.

Waste Military Munition (WMM): A military munition is a “waste” military munition if it has been identified as (1) A solid waste per 40 CFR Section 266.202; or (2) An HW per 40 CFR 261.

In general, WMM are HW when they exhibit the characteristic of ignitability, corrosivity, reactivity or toxicity or are listed HW.

F.3 Responsibilities

F.3.1 *Navy Munitions Command, CONUS East Division, Detachment Fort Worth Component Corpus Christi(NMC CED DET):*

- Manage and store WMM onboard NASCC in accordance with references (a) through (d) and this instruction.
- Prepare and submit disposition requests
- Implement disposition instructions once directed.
- Ensure NMC CED DET personnel receive HW and MMR training as required and maintain records of this training.
- Immediately notify ESO and NASCC PW Environmental of any loss or theft of WMM
- Ensure magazines are maintained in compliance with reference (a)
- Notify NAVFACSE CC Environmental Division in writing when a magazine is designated, used, or no longer used for CE WMM storage
- Ensure that only trained and authorized personnel are allowed entry to CE magazine
- Support ESO in preparing an explosives safety briefing given to all personnel accessing CE magazines
- Conduct annual inventory of CE WMM
- Maintain inventory records for three years
- Provide copies of inventory to the ESO and NASCC PW Environmental
- Conduct and document quarterly compliance inspections with the NASCC Explosive Safety Officer, maintain records for three years and provide copy to the ESO and NASCC PW Environmental.

F.3.2 *Explosive Ordnance Disposal Fort Hood Texas :*

- Complete emergency response activities involving military munitions of any type (both foreign and domestic).
- Complete Level 1 and/or Level 2 emergency responses as required.

F.3.3 *NASCC Safety Department Explosive Safety Officer (ESO):*

- Prepare and submit documentation of any conflict that occurs between this instruction and references (a) through (d)

- Support Explosive Ordinance Disposal (EOD) Fort Hood and NMC CED DET Fort Worth Comp Corpus Christi in identifying magazines for storage of CE WMM.

- Obtain required DoD Explosives Safety Board (DDESB) explosive safety site approval(s) for magazines used to store WMM.

- Ensure appropriate personnel receive HW/MM Rule training as required by this section and maintain records of this training

- Support NMC CED DFW CC Weapons Officer in identifying magazines used for storage of CE WMM

- Provide an explosives safety briefing to be given to all authorized visitors to CE magazines

F.3.4 *NASCC PW Environmental:*

- Serve as liaison for all WMM issues.

- Support NASCC ESO's documentation of conflicts that occur between this instruction and references (a) through (d).

- Notify TCEQ in writing within 90 days when a magazine is designated, used, or no longer used for CE WMM storage.

- Provide verbal notification to TCEQ within 24 hours of any loss, theft or violation of the storage standards, Department of Transportation or DoD standards or policies that may pose a threat to human health or the environment. Provide follow-up written notice to TCEQ within 5 days as required.

- Accompany TCEQ personnel during inspections of CE magazines.

- Ensure compliance with EPCRA Level 1 emergency response notification requirements to responsible agencies (TCEQ and the City of Corpus Christi).

- Obtain an emergency permit from the TCEQ for EPCRA Level 2 responses when response actions are delayed.

- Assist NMC CED DET Fort Worth Comp Corpus Christi and EOD Fort Hood with the documentation required for the shipment or thermal treatment of WMM as needed. This must be conducted before the shipment or treatment of the WMM.

- Assist NMC CED DET Fort Worth Comp Corpus Christi personnel on WMM characterization, storage, labeling, packaging, transportation, manifesting, and other regulatory requirements for shipment of WMM that are managed under RCRA as HW.

- Maintain a contract for the proper disposal of Explosive Hazardous Waste (EHW) or WMM managed in accordance with HW regulations.

- Ensure all appropriate personnel receive RCRA HW and Military Munitions training and maintain training records.

- Coordinate the closure of magazines previously storing WMM.

F.4 General Requirements

- If this instruction conflicts with explosive safety requirements, use the guidance set forth in reference (b) until a resolution can be made. The NMC CED DET Fort Worth Officer in Charge (OIC), EOD Fort Hood OIC,, NASCC Environmental and NASCC ESO shall work together to immediately identify and resolve a conflict using the process found in reference (a).

- All WMM and their components shall be managed according to this instruction. Failure to properly manage WMM and components puts NASCC and its personnel at risk of fines, penalties and/or imprisonment.

- State and Federal HW regulations require a waste determination be made to determine if WMM are HW. The waste determination must be documented, and disposal of WMM must be tracked from the point of generation through final disposal. This does not apply to WMM managed under the CE provisions.

- Reference (a) provides a flow chart that can be used to assist in determining if a MM is a WMM and the approved disposal requirements.

F.5 WMM Disposition Process

- The Navy Designated Disposition Authority (DDA) determines whether a WMM is to be recycled, repaired, treated or disposed of, etc.
- If the MM is determined to be a waste, the DDA will provide specific instructions for disposal (local treatment or shipment to a permitted treatment facility).

F.6 Non-waste Military Munitions

Military Munitions are NOT a waste when:

- Used in training; or
- Used in Research, Development, Test and Evaluation (RDT&E); or
- Recovered, collected and destroyed on-range during range clearance operations at active or inactive ranges; or
- Unused munitions and associated components are repaired, reused, recycled, reclaimed, disassembled, reconfigured or otherwise subjected to material recovery activities.

When removed from a range for the purpose of:

1. Evaluation and testing, provided that once the evaluation or test has been completed, the remaining munitions or components are managed in accordance with HW requirements.

2. Repair or reuse. Used MM removed from a range for repair, reuse or evaluation (for the purpose of determining whether or not the munitions are repairable or reusable) are not WMM. MM that cannot be repaired or reused are WMM.

F.7 Unused Military Munitions

Unsused Military Munitions are Waste Military Munitions (WMM) when:

- Declared a waste by the DDA through a Notice of Ammunition Reclassification (NAR);
- Abandoned by disposal (buried, landfilled, dumped at sea, burned, detonated, incinerated or treated prior to disposal);
- Removed from storage for the purpose of treatment or disposal (burning, incinerating, etc.);

- Determined to be damaged or deteriorated to the point where the MM cannot be made serviceable, recycled or used for other purposes.

F.8 Used or Fired Military Munitions

Used or fired Military Munitions become Waste Military Munitions (WMM) when:

- Transported off-range for reclamation, treatment or disposal, or during storage prior to reclamation, treatment or disposal;
- Fired off-range and not promptly rendered safe and/or retrieved (see reference (a)).

NOTE: Firing range scrap metal (such as expended brass and mixed metals) identified during range clearance activities is excluded from WMM after it has been inspected and certified as Material Documented as Safe (MDAS), and recycled.

Storage of CE WMM

- MM items determined to be WMM (by definition or via the disposition process) shall be stored in a magazine that meets CE requirements as specified in references (a) through (d). Magazines shall not be used to store WMM under CE status if a waiver or exemption is required.

- WMM may be indefinitely stored in approved CE magazines, and are subject to the following conditions:

  - The WMM cannot be a chemical munition (smoke, obscurant, and riot control agent are NOT included in the definition of chemical weapons or agents).

  - The WMM must be stored in accordance with reference (g).

  - The CE magazines have DDESB explosives safety site approval and the documentation is made available to TCEQ upon request.

  - Required notices are provided to TCEQ when:

    > A loss or theft of WMM occurs.

    > The DDESB standards are violated potentially causing a danger to human health or the environment.

  - Access to the CE magazine is limited to trained and authorized personnel.

NOTE: TCEQ personnel are authorized to access magazines only after receiving the explosive safety brief and when escorted by qualified and certified EOD Fort Hood and NASCC PW Environmental personnel.

- Annual inventories are completed and the records are maintained for at least 3 years;

- Written records of all WMM stored are maintained for 3 years from the date inventoried, inspected or removed.

- Records are made available for review upon request by the TCEQ or EPA. These records shall contain the following information:

  > The type of WMM stored by standard nomenclature, lot number, Federal Supply Class (FSC), National Stock Number (NSN), DoD Identification Code (DODIC), Navy Ammunition Logistics Code (NALC), and material condition code.

  > The quantity of each type of WMM stored.

  > The date that each MM, by type, was identified as a waste.

  > The last storage date (date removed from storage) for each type of WMM.

  > The storage location or locations.

  > The disposition of the WMM (destroyed, demilitarized, shipped) and date of action,

  > The sending and receiving sites for WMM received from or shipped to an off-site location, when applicable.

- The magazine storing WMM may store non-WMM if:

  > The magazine is in compliance with the following explosive safety requirements:

    1. The WMM is stored on separate pallets.

    2. The WMM is marked as WMM.

    3. CE WMM is marked CE WMM.

NOTE: Individual container markings are not required if a group of containers are marked as "CE WMM".

- WMM that is not stored as CE WMM must follow all HW storage requirements for a <90 day HW storage site. The FDEP does not require notification of WMM storage in a <90 day waste storage area.

F.9 Identification of WMM Components

RCRA requires generators to determine waste characteristics; WMM may be characterized using generator knowledge or information listed in publications.

- Generator Knowledge may be used when the WMM is an MM that has known components. MM in inventory are designated with a DODIC or NALC and these codes may be used to look up filler constituents.

NOTE: If a DODIC or NALC cannot be used to identify the components, because the MM items appear unstable or decomposed (crystals have formed and the visual appearance offers no further assistance for its identification), request EOD Fort Hood handle and treat WMM as an emergency.

- Publications can be used to identify standard munitions waste and laboratory waste of the military munitions type. Use one of the following publications to identify the physical and chemical characteristics.

  - EOD 60-Series publications include information on obsolete, classified, and foreign military munitions, and all standard munitions.

  - Demolition Materials and Properties NAVSEA SW060-AA-M-AA010 lists NSNs and DODICs and NALCs (when available) for each item.

  - Transportation and Storage Data for Ammunition Explosives and Related Hazardous Materials NAVSEA SW020-AC-SAF-010 lists NSNs, DODICs and NALCs (when available).

  - List of Explosives for Navy Munitions SW010-AG-ORD-010 lists all explosives used in current Navy munitions.

  - Munitions Items Disposition Action System (MIDAS) is a web-based data source, developed by the Defense Ammunition Center and provides over 6,500 munitions items. MIDAS can be found at http://www.dac.army.mil/td/midas or at http://206.37.241.30/.

F.10 Storage of WMM in <90 Day Waste Storage Area

A Less than (<) 90 Day Waste Storage Area is a site where any amount of WMM may be accumulated for up to 89 days (<90 days) from the accumulation start date (ASD) in accordance with the station's HWMP.

NOTE: If a Notice of Ammunition Reclassification (NAR) is issued and specifies a shorter disposal timeframe that 89-days, the NAR timeframe takes precedence.

- WMM must be stored in a safe manner that minimizes the possibility of a fire, explosion, or unplanned release of waste to the environment.

- Ignitable WMM must be contained in grounded containers, tanks, or metal pallets prior to conducting liquid transfer operations.

F.11 Storage and Segregation of WMM

- WMM shall be stored physically separate from serviceable munitions whenever possible.

- WMM may be stored in the same building with serviceable munitions if the following conditions are met:

  - WMM is stored physically separate (e.g., on a separate pallet or shelf) and is clearly identified as WMM.

  - WMM and serviceable munitions are stored in accordance with compatible storage requirements found in reference (b).

  - Liquid wastes do not share a secondary containment with non-waste materials.

  - WMM are NOT unstable or deteriorating.

F.12 Transportation of WMM under CE Provisions

The following conditions shall be followed when transporting WMM as CE:

- The WMM is not a chemical agent or chemical munition.

- The WMM is transported from NASCC to another military owned or operated treatment, storage, or disposal facility. EXAMPLE: WMM transported from NASCC to an installation with a Subpart X permit, are exempt from HW transportation regulations.

- All States that the WMM passes/transits through must have adopted the MMR.

- The WMM are transported in accordance with all DoD shipping requirements.

Transportation Forms

NASCC shall utilize the following forms when transporting CE WMM over public roads or waterways:

- (DD Form 1907)Signature and Tally Record.

- (DD Form 626)Motor Vehicle Inspection Report (Transporting Hazardous Materials.

- (DD Form 836 Shipping Paper and Emergency Response Information for Hazardous Materials Transported by Government Vehicles. This form is for military vehicles with military drivers. (DD Form 1348-1A) DoD Single Line Item Release/Receipt Document.

F.13 Disposal of WMM as HW:

- WMM shipped to a non-military installation for disposal shall be in accordance with RCRA HW regulations and DOT transportation requirements.

- Disposal of all WMM shall be at a facility having a RCRA Part B, Subpart X permit. The disposal facility location is determined by the DDA and cannot be changed without direction from the DDA.

- A waste profile and document identifying waste constituents to be monitored by the treatment facility (i.e., Land Disposal Restriction (LDR)) must be completed prior to off-site shipment.

- The waste profile must list the material composition and constituents of concern found in the WMM to be disposed. A WMM acceptance letter must be issued by the receiving facility for WMM acceptance PRIOR to off-site shipment of the WMM.

- The transporter used to transport WMM must be licensed to transport both Hazardous and Explosive Wastes.

- Use the current version of the Uniform HW Manifest. The manifest will be signed by NASCC Environmental personnel who have current RCRA HW and DOT HM training.

F.14 Emergency Response

All EOD emergency response actions shall be conducted in accordance with reference (a) and (b). Once an EOD emergency response is declared completed by the EOD officer, any munitions item requiring storage will be turned over to the Navy Munitions Command, CONUS East Division, Detachment Fort Worth Component Corpus Christi.

APPENDIX G
HAZARDOUS WASTE COMMODITIES BRANCH

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G.1 Purpose

The purpose of this Standard Operating Procedure (SOP) is to establish procedures for the proper management of waste at the Hazardous Waste Commodities Branch.

G.2 Responsibilities

G.2.1 *HWCB Supervisor*

- Dispose of waste via Defense Logistics Agency Disposition Services (DLA-DS) or through disposal contracts with licensed contractors utilizing DLA approved transporters and disposal facilities.
- Maintain NAS Corpus Christi (NASCC) permitted HW storage facility.
- Operate facilities per NASCC Part B permit No. HW-50038.
- Ensure Permitted Part B HW storage facility personnel receive OSHA-required training (HW Operations and Emergency Response), EPA-required training (HW Facility Operations), and DOT-required training (HM Handling).
- Designate an Emergency Coordinator in the spill contingency plan for the HW storage facilities.
- Ensure required reports, data and information are current and accurate.

G.2.2 *Profile Coordinator*

- Maintains waste profiles for all wastes stored on and shipped from NASCC.
- Process SAP Authorization forms.
- Facilitates annual waste stream analysis per the NASCC RCRA Part B HW Operating Permit.
- Provides additional analytical support, on a reimbursable basis, whenever needed.
- Update waste tracking database to reflect current waste stream and profile records.

G.2.3 *HW Database Operator*

- Ensures waste stream determinations are updated and documentation is available for review by the regulatory community.
- Maintain waste tracking database, including waste billing, storage, shipment, and container issuance and receiving.

- Manage and report waste data, to include: local, state and federal reporting requirements, customer billing information, and other customer and command requests.
- Process and submit waste disposal files to DLA-DS as required.

G.2.4 *Delivery Order Manager*

- Schedules and supervise the pick-up and transportation of HW off site through DLA-DS approved transporters and TSDFs.
- Process delivery orders (DO), to include marking container shipment information and quality assurance.
- Verify waste manifests and DO information for completeness and accuracy.
- Reviews, signs, tracks and maintains UHW Manifests, including follow-up and exception reporting as required by DOT.
- Update waste tracking database to reflect DO manifest, and disposal information.

G.2.5 *Warehouse Personnel*

- Deliver DOT / UN approved containers to accumulation sites for departments and tenant commands.
- Pickup customer waste containers, ensuring container compliance. Report non-compliance to the HWC for corrective action.
- Process, log-in and store waste containers in the appropriate HWCB HW storage facility.
- Stage waste containers for DO inspection and shipment.
- Perform waste sampling as requested by Profile Coordinator, IAW HW Permit.
- Update waste tracking database to reflect receipt and storage of waste containers.
- Conduct inspections of HW storage facilities, including waste containers, safety equipment, and spill control equipment.

G.3 Management of the Conforming Storage Facility

The NASCC Part B permit No. HW-50038 authorizes NASCC to operate the conforming storage facility, Building 257 to store up to 17,200 gal of hazardous waste (HW) for up to 1 year. The Permitted Facility is operated by the HWCB IAW this plan and the Part B permit, including:

- HW shall not be stored for more than one year.

- The CSF shall be fenced or otherwise enclosed and shall be kept locked at all times except when staff is present.

- The CSF shall be maintained and operated to minimize the possibility of fire, explosion, or unplanned release of HW.

- The CSF shall be equipped with a fire extinguisher, decontamination kit, and spill kit. All safety equipment must be inspected, tested, and maintained as necessary to ensure proper operation in the event of an emergency.

- The CSF shall have a source of water with adequate volume and pressure or foam producing equipment for firefighting.

- The CSF shall have an internal communication or alarm system to alert facility personnel when there is an emergency.

- Post weather resistant signs, clearly visible from a distance of 50 feet, on all exterior sides of the CSF stating

"NO SMOKING WITHIN 50 FEET" and

"NO FUMAR EN UN RADIO DE 50 PIES"

- Post weather resistant signs, visible from a distance of 25 feet, stating.

"DANGER - UNAUTHORIZED PERSONNEL KEEP OUT" and

"PELIGRO – PERSONAL NO AUTORIZADO MANTENGASE AFUERA"

G.4 Inspections

The HW Permitted Facility must be inspected IAW the NASCC HW Permit. Inspection and Inventory records associated with the permitted storage facility must be maintained indefinitely.

G.5 Training Requirements

All HWCB personnel must receive training IAW 40 CFR 264.16 and 49 CFR 172

These requirements include:

OSHA HAZWOPER 24-hour – Upon hire

OSHA HAZWOPER 8-hour Refresher- annually

DOT Hazardous Materials Training- Upon hire and every 3 years

Training shall be documented on a Hazardous Waste Training Form. These records shall be maintained for each individual indefinitely. Refer to Table 4-1 for a full list of training requirements for installation personnel.

G.6 Transfer of Waste

G.6.1 *Transfer from SAP to the HWCB*

- HWC shall request container pickup on the day of container closure.
- On the day of the pickup the HW Coordinator for the tenant shall:
  - Ensure the containers are staged for pickup.
  - Ensure containers are properly labeled.
  - Ensure containers are closed and ready for transport to the HWCB.
- The HW Coordinator shall be present for the pick-up of waste.
- The HWCB shall receive containers within 3 days of container closure.

G.6.2 *Transfer from HWCB to DLA Disposition Services*

- Hazardous Waste shall be disposed of via Defense Logistics Agency Disposition Services (DLA-DS) or through disposal contracts with licensed contractors utilizing DLA approved transporters and disposal facilities.
- Wastes will be prepared and staged for pick up in front of the HWCB.
- The HWCB and DLA-DS will ensure through physical container count and verification that the waste listed on the Delivery Order is consistent with the waste being picked up.
- A Uniform Hazardous Waste Manifest must be prepared and accompany all shipments of hazardous or Class-1 non-hazardous wastes.
- Ensure all waste that was transferred to DLA Disposition Services is correctly logged in the appropriate system(s).

G.7 Spills

In the event of a spill only trained personnel shall attempt to stop and contain the spill, without endangering their own safety.

Immediately telephone NAS Corpus Christi, Emergency Response at 961-3333 when spills, leaks and emergencies occur.

APPENDIX H
WASTE IDENTIFICATION FORM (FORM 2) SOP

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H.1 Purpose

The Purpose of this Standard Operating Procedure (SOP) is to establish the method of communicating waste stream generation data by a Hazardous Waste Coordinator (HWC) to the HWCB, using the standard Form 2, Waste Identification Form. Enclosure H-1 contains a blank Form 2 and a fillable pdf is embedded in the enclosure.

H.2 Responsibilities

H.2.1 *NASCC HW Manager*

- Be the liaison between the originators and the HWCB when necessary.

H.2.2 *Hazardous Waste Coordinators*

- Fill out Form 2 requests to the best of their knowledge and ability, as stated in the signature block of the form.
- Determine when an updated Form 2 is required, and to turn in the form to the HWCB prior to or at the time the container is turned in.

H.2.3 *Hazardous Waste Commodities Branch (HWCB)*

- Process Form 2 requests in a timely manner to meet regulatory requirements for the characterization of waste.

H.3 Completion of Waste Identification Form (Form 2)

- Fill out Form 2 with the following information critical to waste characterization. The information provided on the Form 2 is based on visual observation and working process knowledge of the HWC.
- Submit completed Forms to the HWCB Profile Coordinator via email or delivered with original signature.
- An updated Form 2 is required:
    - at the establishment of a new waste stream
    - When waste is generated from a spill cleanup evolution
    - When there is a change in the composition or process generating the waste
    - When the assigned profile is within 30 days of expiration at the time of waste turn-in
    - If waste stream is compromised or tampering is suspected

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ENCLOSURE H-1
FORM 2

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WASTE IDENTIFICATION - FORM 2	COMMAND / DEPARTMENT	ANALYSIS #

GENERAL INFORMATION

GENERATOR NAME (HWC OR SUPERVISOR) & PHONE #	WORK CENTER / BUILDING NUMBER / LOCATION / SATELLITE	
GENERIC WASTE NAME	PREVIOUS ANALYSIS #	PREVIOUS TCEQ # AND EPA CODES
PROPER SHIPPING NAME		
PROCESS GENERATING WASTE		
ANTICIPATED GENERATION: _____ GALLONS PER MONTH	TYPE OF REQUEST PROFILE UPDATE	

WASTE DESCRIPTION (Complete to best of generator's knowledge)

PHYSICAL STATE ☐ LIQUID ☐ SEMI-SOLID ☐ SOLID ☐ POWDER — COLOR

ODOR ☐ NONE ☐ MILD ☐ STRONG DESCRIBE_____

ARE THERE FREE FLOWING LIQUIDS PRESENT? ☐ NO ☐ YES IF YES, % OF WASTE _____% — LAYERING (LIQUIDS ONLY) ☐ MULTI-LAYERED ☐ BI-LAYERED ☐ SINGLE PHASE

WAS THIS WASTE USED AS, OR CONTAMINATED WITH, A **SOLVENT**? ☐ NO ☐ YES (IF YES, PROVIDE MSDS FOR SOLVENTS)

CONCENTRATION BEFORE USE	CHEMICAL COMPOSITION (MSDS'S OPTIONAL)	FINAL CONCENTRATION
%		%
%		%
%		%
%		%
%		%
%		%
%		%
%		%
%		%

(MUST ADD UP TO 100%) TOTAL _____%

ADDITIONAL REMARKS / MATERIALS USED (*Provide chemical name, manufacturer, MSDS if applicable, other descriptive information*)

NUMBER OF CONTAINER(S)	SIZE/TYPE OF CONTAINER(S)	CONTAINER ID NUMBER(S)	ACCUMULATION START DATE
	_____ GALLONS DM		

CERTIFICATION STATEMENT: This is to certify that the above information submitted on this and all attached documents is, to the best of my knowledge, an accurate representation of the waste turned in for disposal.

HWC SIGNATURE

ADDITIONAL COMMENTS/VERIFICATION AS REQUIRED (OPTIONAL)

ADDITIONAL SIGNATURE

HWCB SIGNATURE

LOCATION OF CONTAINER(S)

PARAMETERS FOR LABORATORY ANALYSIS

SIGNATURE OF ENVIRONMENTAL PROTECTION SPECIALIST — DATE

NASCORPC 5090/3 (V13.1) POINT OF CONTACT: PHONE (361) 961-3760

Form 2 - Waste Identification v1.1.pc

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APPENDIX I
INSPECTION SCHEDULE

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I.1 Purpose

The purpose of this SOP is to maintain a standardized comprehensive Hazardous Waste Inspection Program at NAS Corpus Christi (NASCC). This procedure assigns responsibility and offers general guidance applicable to all station departments, tenant commands and contractors working on the station.

Hazardous waste management facilities are required to be inspected by the owner or operator under 40 CFR 264.15. Authorized EPA, state, NAS Environmental, and unit HWCs or their representatives, will be allowed to enter a facility at reasonable times to examine or copy records, inspect waste management practices, and take samples of waste or other materials. The purpose of the inspections is to ensure overall facility compliance.

I.2 Responsibilities

I.2.1 *Hazardous Waste Coordinators*

- Perform written weekly and monthly inspections of satellite accumulation points
- Maintain inspection records IAW section I.3 of this Appendix.
- Develop and follow a written schedule based on the inspection checklist in Enclosure I-1 for each of the hazardous waste management facilities under his/her control.
- Immediately correct, document and report any non-compliance issues that an inspection reveals.

I.2.2 *NASCC Environmental*

- Conduct weekly inspections of all less than 90 Day sites.
- Conduct Annual inspections of all satellite accumulation points.

I.2.3 *HWCB*

- Inspect and maintain records of the permitted storage facility IAW permit requirements.

I.3 Record Keeping Requirements

All inspection logs must be completed and maintained by the responsible parties listed in Section 2 of this SOP. Inspection records shall be available to NASCC Environmental as requested. Inspection records must be kept for at least three (3) years from the date of inspection.

I.4 Corrective Action

Tenant Commanding Officers, Officers-In-Charge, Department Heads and HWCs must expedite corrective actions for all discrepancies documented on inspection log sheets. It is imperative that each problem, infraction, or discrepancy and the resulting action be documented. Records of completed corrective actions must include the date, time, responsible party's name and the nature of the repair or action. In accordance with the facility-operating permit, any structural remedial action performed on conforming storage areas shall be approved by NAS Environmental and supervised by a Structural Engineer.

I.5 Inspection Schedule

A hazardous waste storage area inspection guide is presented in the table in Enclosure I-1. This schedule incorporates facility management requirements imposed by 40 CFR 261 through 265. The schedule identifies the weekly and monthly checklist requirements for compliance. Tenants and contractors shall provide their own inspection forms, which must comply with the applicable parts of these inspection items. For assistance or generic inspection forms, contact NASCC Environmental Division.

ENCLOSURE I-1

INSPECTION SCHEDULE TABLE

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Less Than 90 Day Inspection Items		
Weekly Inspection - Page 1 of 2		
FACILITY COMPONENTS AND BASIC ELEMENTS	**INSPECTION ITEM**	**REFERENCE AND/OR REQUIREMENT(S)**
Security	Fence/gate unlocked or opened	40 CFR 264.14(b)
	Satellite containers secured	
	Keys under the control of the operator	
Condition of Containers	Containers closed, no leaks/spills	40 CFR 264.173
	Deteriorating or damaged containers	40 CFR 264.171
	Missing lid, bolt, or ring	49 CFR 178.504(b)
	Container outage or overflow	49 CFR 173.24(h)
Compatibility of Container	Container liner required - waste compatible with container	40 CFR 264.172; 49 CFR 173.24(e)
	Reuse of container - cleaned or inspected	49 CFR 173.28
Packaging	No releases	49 CFR 173.24, 173.25 and 171.3
	Compatible with lading	
	Securely closed	
	Filled in such a manner that they are not liquid full at 131°F	
	No residue on outside of container	
	No visible bulges/damage	
Waste Accumulation	Co-mingling of waste	40 CFR 264.17 and 264.177
	Recordkeeping – fill sheet entries	40 CFR 264.73 and 264.74
	Accumulation time/volume No more than 55 gallons Accumulation date on container	40 CFR 262.34
	Container to storage within 72 hours	
Marking and Labeling	Correct marking & labeling	40 CFR 262.31, 262.32 and 262.34
Empty Container Management	Not purged of residue	40 CFR 261.7 and 261.33(e)
	Stored, marked, labeled	49 CFR 173.29
Tanks and Surface Impoundments	Waste feed cut-off systems, corrosion, freeboard, gauges, contingency plan	Tanks: 40 CFR 264.190; Surface
		Impoundments: 40 CFR 264.220

Less Than 90 Day Inspection Items		
Weekly Inspection - Page 2 of 2		
FACILITY COMPONENTS AND BASIC ELEMENTS	**INSPECTION ITEM**	**REFERENCE AND/OR REQUIREMENT(S)**
Housekeeping	Spills and contamination	40 CFR 264.56 and 264.178
	Area clean, orderly	
	Floors clean, free from debris	
Signs	"Danger Unauthorized Personnel…"	40 CFR 264.14(c) and 264.17
	posted, legible from 25', posted in	
	English & Spanish	
	"No Smoking…" posted, legible from 50', posted in English & Spanish	
	Incident Response Plan/information posted	
	Notice of registration (NOR) posted	
	Emergence telephone numbers posted	
Structural Equipment	Integrity of foundation, walls, roof, and containment system	40 CFR 264.175 and 264.177
	Foundation free of gaps and cracks	
	Containment system capacity – 10% of the volume of containers or volume of the largest container – whichever is greater	
	Liquids & debris removed from sump or curbed area	
	Walls & roof in good condition	
Container Storage	Containers conform to DOT requirements	40 CFR 262.34
	Proper marking and labeling	
	Label visible upon entering storage area	
	Aisle Space	40 CFR 264.35 and 264.177(c)
	Secondary containment	40 CFR 264.175
	Proper palletization of containers	40 CFR 264.175(b)(2)
	Segregation of incompatible wastes	40 CFR 264.17 and 264.177
	Drums stacked more than two high	29 CFR Part 1910

Less Than 90 Day Inspection Items		
Monthly Inspection		
FACILITY COMPONENTS AND BASIC ELEMENTS	**INSPECTION ITEM**	**REFERENCE AND/OR REQUIREMENT(S)**
Fire Control Equipment	Fire extinguishers charged and inspected	40 CFR 264.32 and 264.33
	Fire evacuation plan posted	
Eye Wash and Shower	Available, not leaking, working properly, adequate pressure	40 CFR 264.33; 29 CFR 1910.151
Self-Contained Breathing Apparatus	Tested & inspected	29 CFR 1910; 40 CFR 264.33
	Maintained and stored properly	
Cartridge Respirators	Correct type for working conditions	29 CFR 1910; 40 CFR 264.33
	Maintained and stored properly	
Protective Clothing	Proper selection to match hazard	29 CFR 1910; 40 CFR 264.33
	Proper storage and maintenance	
Spill Control Equipment	Adequate & available	40 CFR 264.32
Recovery Drums	Available & in good condition	40 CFR 264.32
Bonding and Grounding	Available where required	29 CFR 1910.106(a)(b)
Letter of Designation of HWC	Available & current	NASCORPCINST 5090.3
Waste Identification and Analysis	Available & current	40 CFR 262.11 and 264.13
Personnel Training Records	Available & current	40 CFR 264.16
Inspection Plan	Available & current	40 CFR 264.15 and 264.174
Spill Incident Response Plan	Available & current	40 CFR 264.51 and 264.55
Hurricane Plan	Available & current	
Operating Records and	Analysis & characterization	40 CFR 264.73 and 264.74
Recordkeeping	Fill sheets	
Manifest System, Recordkeeping and Reporting	Available & current	40 CFR 264.70, 40 CFR 262.20, 40CFR 262.23

Satellite Accumulation Point Weekly Inspection Items		
FACILITY COMPONENTS AND BASIC ELEMENTS	**INSPECTION ITEM**	**REFERENCE AND/OR REQUIREMENT(S)**
Signage	Emergency telephone numbers posted	40 CFR 264.149©, 264.17
Container Management	Containers conform to DOT requirements	40 CFR 262.34
	Proper marking and labeling	
	Co-mingling of waste	40 FR 264.17 and 264.177
	Recordkeeping - fill sheet entries	40 CFR 264.73 and 264.74
	Accumulation time/volume	40 CFR 262.34
	No more than 55 gallons of waste	
	Accumulation Start Date on container when appicable	
	Container to storage within 72 hours	
	Segregation of incompatible wastes	40 CFR 264.17 and 264.177
Condition of Container	Container closed, no leaks/spills	40 CFR 264.173
	Deteriorating or damaged container	40 CFR 264.171
	Missing lid, bolt, or ring	49 CFR 178.504(b)
	Container outage or overflow	49 CFR 173.24(b)(h)
	Waste compatible with container - container liner required	40 CFR 264.172, 49 CFR 173.24€
	No residue on outside of container	49 CFR 173.24(b)(4)
Marking and Labeling	Proper marking and labeling	40 CFR 262.31, 262.32, and 262.34
Empty Container Management	Not purged of residue	40 CFR 261.7 and 261.33
	Stored, marked, and labeled properly	49 CFR 173.29
Housekeeping	Spills and Contamination	40 CFR 264.56 and 264.178
	Area clean, orderly, free of debris	
Bonding and Grounding	Maintained and available where required	29 CFR 1910.106(a)(b)
Waste Identification and Analysis	Available and current	40 CFR 262.11 and 264.13
Letter of Designation of HWC	Available and current	NASCORCINST 5090.3

APPENDIX J
WASTE ANALYSIS PLAN

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J.1 Purpose

This waste analysis plan describes the sampling and analytical procedures which will be followed by NAS Corpus Christi to properly characterize the wastes produced and to ensure their management in the appropriate manner.

The plan has been developed to comply with federal regulations contained in 40 CFR 264.13 and state regulations in 30 TAC 335.501 through 515. These regulations require a detailed initial chemical and physical analysis of a representative sample of waste to facilitate proper treatment, storage, and disposal of the waste. The analyses are repeated as necessary to ensure that it is accurate and up-to-date. At a minimum, the analysis must be repeated when the owner/operator is notified, or has reason to believe that the process or operation generating the waste has changed.

J.2 Responsibilities

J.2.1 *NASCC Environmental*

Assist Waste Generators in maintaining Waste Identification Forms

J.2.2 *Waste Generators*

Maintain Waste Identification Forms, submitting them to NASCC Environmental annually or when processes change.

J.3 Initial Waste Characterization

The Waste Identification Form is used to provide the following information on the wastes handled at NASCC.

Generator information

- Source of the waste
- A detailed process generating the waste
- Estimated quantity, in pounds, of waste generated annually
- Area where the waste is generated and initially stored
- Physical characteristics
- Chemical composition of waste

The information presented on the Waste Identification Form is based on visual observation and knowledge of the processes generating the waste.

J.4 Waste Analysis

Analysis will be conducted or directed by NAS Environmental to characterize each waste adequately for proper management. The Waste Identification Form provides a physical description and serves as a request for analysis. The following reasons for waste analysis may be required:

- An initial characterization
- A periodic verification
- An unknown waste
- Detailed analysis for verification of specific component(s)

J.5 Initial Characterization and Analysis

Unless process knowledge, MSDS information, waste history, and/or product specification is sufficient to properly characterize a waste, each frequently generated waste will be subjected to an initial analysis. The parameters for the initial analysis, along with their rationale for selection, are listed in Table J-1.

In addition, if sufficient information is not available, aqueous waste samples may be subjected to the DOT corrosivity tests outlined in 40 CFR 261.22(a)(2) and 49 CFR 173.136 and 173.137 to determine the appropriate type of storage container. Appropriate test methods include Method 1110 in EPA Publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," and NACE Standard TM-01-69.

J.5.1 *Periodic Verification*

If warranted, periodic analysis will be conducted annually. Analysis will also be conducted:

- When the generator suspects a significant change in the waste stream
- When the gross physical properties of the waste stream are observed to be different during the course of handling
- As required by the TSD facility
- As requested by NAS Environmental, at random, to verify waste certification

The parameters for the periodic analysis are generally the same as those for the initial analysis. However, the DOT corrosivity analysis may not be required. The parameters for the periodic

analysis are repeated in Table 4-1. The periodic analysis concentrates on gross properties of the waste and characteristic hazards as found in 40 CFR 261, including corrosivity, reactivity, ignitability, and toxicity, and in 49 CFR 172 and 173 for the determination of hazard class.

J.5.2 *Detailed Analysis for Specific Component(s)*

A detailed analysis is a directed analysis for a specific volatile, a hydrocarbon or other compounds. The detailed analysis will be performed if any one of the following conditions is met:

- An initial analysis for Total Organic Halogens (TOX) indicates that the waste is greater than or equal to 1,000 parts per million (0.1 percent) halogen
- A periodic analysis for TOX indicates the waste is greater than 1,000 parts per million (0.1 percent) halogen
- It is known or suspected that a PCB-containing waste has been introduced
- For potential reclassification to Class 1 waste
- The disposal facility requires additional information
- The flash point is less than or equal to 140° Fahrenheit (60^{o} C) and low flash constituents have not been declared through generator knowledge
- Specific analysis is required to comply with the Land Disposal Restrictions (LDR) given in 40 CFR 268

Based on the process, the identified substances are those, which are expected to appear in the wastes, since no others are introduced as process reagents. For the same reason, the waste streams are not expected to contain dioxins. Analysis for this class of compounds will not be performed unless expressly required by the off-site waste acceptor.

J.5.3 *Land Disposal Restricted (LDR) Waste*

Hazardous waste that is to be land disposed has special analytical requirements. Adequate analysis or process knowledge is required to provide a generator certification that the waste complies with the LDRs in 40 CFR 268.40. Specific analysis is required based on EPA waste code.

J.5.4 *Infrequently Generated Wastes*

Wastes that are generated infrequently, new wastes that are expected to be generated only once or waste residuals in containers will undergo initial waste characterization. Waste characterization will depend primarily on the knowledge from the generating personnel. The

generator will fill out the Waste Identification Form and submit it to NASCC Environmental Personnel. Generator will indicate on the form that this is a one-time only or infrequently generated waste, or a waste residual in a container, and provide a current MSDS or other pertinent data along with a description of the waste including any potential hazards.

If NASCC Environmental determines that enough is known of the waste based on the above description and consultation with generating personnel, transportation of the waste to the appropriate accumulation area will be authorized. Wastes that are shipped off-site may need to be analyzed for all parameters or, if sufficient information is available through MSDSs or other sources, NAS Environmental personnel may use "Process Knowledge" to characterize the waste for the receiving disposal facility. NAS Environmental personnel in consultation with generating personnel will determine the appropriate parameters for analysis.

J.5.5 *Unknown Waste Streams*

Occasionally, unidentified waste may be discovered on the station. In this event, the following procedure should be followed to determine whether the material is a hazardous waste:

- Use extreme caution when handling unknown wastes
- Record all marks on the drum, particularly NSN number, product name, or chemical name
- If an NSN is found, locate the NSN in the Hazardous Material Information System (HMIS) database, and check to see if the physical description is the same as the waste stream. If so, it may be assumed that the waste in the drum is the same
- If only a chemical name is present, information on chemicals can be found in SAX "Dangerous Properties of Industrial Materials," "The Fire Protection Guide to Hazardous Materials," or MSDSs available at the NASCC Safety and Environmental Offices
- If the material does not match the container markings, it is necessary to test it to determine if the waste is hazardous. Refer to Table 4-1 for parameters

J.6 Analytical Methods

Table J-1 summarizes the analytical methods to be used to develop the data required for the listed parameters.

. **TABLE J-1**

WASTE ANALYSIS PARAMETERS AND RECOMMENDED ANALYTICAL METHODS

Physical Characteristic or Parameter	Liquid	Sludge	Solid	Method	Rationale for Selection
Odor	X	X	X	Smell (with caution)	Provides a description of the gross appearance of the waste. Changes may indicate a change in the waste properties.
Color	X	X	X	Visual	
Layers	X	X		Visual	
Physical State	X	X	X	Visual	
Density or Specific Gravity	X	X	X	D1298 (ASTM)	
pH	X	X		150.1 (EPA-600)	Indicator of corrosivity
pH (1:1 in water) or (1% in water) *			X		Indicator of corrosivity. * If required by waste acceptor
Flashpoint	X	X		EPA 1010	Ignitability

Physical Characteristic or Parameter	Liquid	Sludge	Solid	Method	Rationale for Selection
Toxic Characteristic Leaching Procedure (TCLP) for Metals*, Volatiles, and Semi-volatiles	X	X	X	1311, 6010, 7060A, 7470, 7421, 7080A, 7741, 8270, 8260 (SW-846)	Toxicity characteristic; TCLP required for two (2) phase liquids
Total Organic Halogens TOX (Aqueous)	X	X	X	9022 (SW-846) 9020 (SW-846)	Measure of halocarbon content
Reactivity † Sulfide Cyanide	X	X	X	 9010 9030 (SW-846)	Potential for release of toxic fumes; for solid wastes, required only on alkaline wastes
Total Metals*	X	X	X	200/7000 Series (SW-846)	Toxicity characteristic
Total Nickel (Ni) and Thallium (Th)	X	X		6010 (SW-846)	Measure for Land ban quantity
PCB (if suspected)	X	X	X	8082 (SW-846) 8082A (SW-846)	Measure PCB concentration
Total Organic Carbon (TOC)	X			EPA 415.1 9063 (SW-846)	Total Organic Carbon
Dry Weight	X	X		31 TAC 335.332	Measure of total solids

Physical Characteristic or Parameter	Liquid	Sludge	Solid	Method	Rationale for Selection
BTUs	X	X			For recycling as fuel
Reid Vapor Pressure Test	X			ASTMD-519 (EPA-600)	To determine DOT Packing Group
Free Cyanides	X				To provide information necessary for possible deep well injection
Total Cyanide	X			EPA 335.2	
Paint Filter Test		X	X	9095A (SW-846)	Free liquid indicator; if a solid waste has any free liquid
Total Suspended Solid	X			EPA 160.2	Wastewater or non-wastewater determination
Boiling Point	X			ASTM D-86	Determine PG for Class 3 material
ADDITIONAL ITEMS FOR INITIAL WASTE ANALYSIS					
Steel Corrosion (oil solution)	X			1110A WATER (SW-846)	Indicator of corrosivity

- Arsenic (As), Barium (Ba), Cadmium (Cd), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni); Selenium (Se), Silver (Ag); Thallium (Tl).

† These methods measure total cyanides and sulfides, respectively. It has been proposed that concentrations of 100 to 200 ppm of cyanide be considered possibly reactive, while greater than 250 ppm is definitely reactive. Wastes with a total releasable sulfides greater than or equal to 500 ppm, are considered hazardous waste.

References:

SW-846: EPA Test Method for Evaluating Solid Waste, Physical/Chemical Methods (most recent edition or equivalent of EPA approval)

ASTM: American Society for Testing and Materials

UOP: Universal Oil Providers Company

J.7 Analytical Quality Assurance

The quality of the waste analyses will be assured by performing appropriate laboratory testing procedures. NAS Environmental will ensure that the laboratory performing the analyses follows the quality control (QC) procedures listed below:

- Use EPA approved sample preparation and analytical methods, as specified by the procedures listed in the table
- Calibrate laboratory instruments to within acceptable limits according to EPA's or manufacturer's specifications before, after, and during use (reference standards must be used when necessary)
- Conduct periodic inspection, maintenance, and servicing of all laboratory instruments and equipment
- Use reference standards and QC samples (e.g., checks, spikes, laboratory blanks, duplicates, splits) as necessary to determine the accuracy and precision of procedures, instruments, and operators
- Use adequate statistical procedures, such as QC charts, to monitor the precision and accuracy of the data and to establish acceptable limits
- Continuously review results to identify and correct problems within the measurement system (e.g., instrumentation problems, inadequate operator training, inaccurate measurement techniques)
- Document the performance of systems and operators
- Regularly participate in laboratory evaluations such as the EPA Performance Audit Program to determine the accuracy and overall performance of the laboratory
- Maintain and store complete records, charts, and logs of all pertinent laboratory calibration, analytical and QC activities, and data
- Ensure all data outputs are presented in the prescribed format

J.8 Sampling Procedures

Many waste streams are heterogeneous. Care must be taken to obtain a representative sample. Samples will be taken from drums and portable tanks once it is determined they have a representative sample of the waste or they are designated for disposal.

J.8.1 *Sampling Liquid Wastes*

Liquid waste samples will be obtained by using an EPA-approved method, such as a composite liquid waste sampler (COLIWASA), as described in Test Methods for Evaluating Solid Waste,

Physical/Chemical Methods, SW 846 3rd Edition. This device collects liquid throughout the depth of waste in a container.

The COLIWASA is constructed of plastic or glass. It consists of a tube open at both ends and a solid rod that slides down the middle of the tube to plug the bottom opening. A glass COLIWASA should be used for sampling all waste streams except those that contain hydrofluoric acid and concentrated alkali solutions. Hydrofluoric acid and concentrated alkali solutions should be sampled using a plastic COLIWASA. The sample should be collected through the top of the drum or portable tank using the following procedure:

- Choose the plastic or glass COLIWASA for the liquid waste to be sampled
- Clean the sampler before sampling, if necessary, using soap and water or an appropriate solvent
- Put the sampler in the open position by pulling up on the solid rod
- Lower the COLIWASA into the container slowly (at a rate where the level of the waste outside and inside the COLIWASA remain the same) to ensure that a representative sample is caught
- After the COLIWASA reaches the bottom of the container, push the solid rod slowly downward to plug the opening on the bottom end of the tube
- Slowly withdraw the sampler from the waste container with one hand while wiping the sampler tube with a disposable cloth or rag with the other hand, while continuing to press on the top end of the rod to keep the hole at the bottom plugged
- Discharge the sample into a one liter glass or plastic (whichever is appropriate) sample bottle by pulling up on the rod while the lower end of the sampler tube is positioned in the sample container. Several grab samples may be required to fill a one-liter sample bottle. A glass container with a Teflon lined septum or cap may be required for samples anticipated containing volatile organic compounds
- To collect sample of sludge sediment from the bottom of the drum, press on the top end of the rod to keep the hole at the opening plugged while lowering the COLIWASA slowly until the opening is on the bottom of the drum. Unseal the COLIWASA and the sediment/sludge will be drawn up into the sampler. Reseal the COLIWASA and remove sampler from the drum. Discharge into a sample bottle.
- For aqueous waste collect two liters of sample as needed for analysis
- Hydrocarbon samples shall be filled to the top to reduce loss of volatile vapors
- After a one liter sample has been obtained, cap the sample bottle, attach a label as described in Section 4.6.6, and record appropriate information in the field log book

- After the sample of the waste stream has been collected, dispose of the COLIWASA in an approved satellite storage area or properly decontaminate
- Deliver the sample to the laboratory for analysis along with a chain-of-custody form as described in Section 4.6.6

J.8.2 *Sampling Multiple Containers*

If there are a number of containers of the same waste stream, random containers will be sampled until a one-liter composite sample is obtained. The number of containers to be sampled will be as indicated in Table J-2.

J.8.3 *Sampling Solid Wastes*

Solid or granular waste materials will be sampled using a scoop as described in SW-846. The scoop will be inserted at an angle from top to bottom into the container to remove a core sample of waste. The sample procedures for selecting the number of containers to be sampled is the same as described in Section J.8.2.

A one-liter sample of solid waste will be collected in a glass or plastic bottle. Several grab samples may need to be composited to obtain the required amount. Be sure the scoop is cleaned before and after sampling to prevent contaminating samples.

J.8.4 *Sampling Sludges*

Sludge samples may be collected using either the COLIWASA method described in Section J.8.1, the scoop method described in Section J.8.3 or utilizing equipment such as a sludge judge, depending on the consistency of the sludge waste stream.

J.8.5 *Sample Preservation*

No additives or chemicals will be used to preserve wastes at the time of sampling. The laboratories will preserve samples as they are received, if necessary. Samples will be stored at 4o Centigrade.

J.8.6 *Chain-of-Custody and Labeling*

Tracking the custody of samples is extremely important to ensure that correct and accurate analyses are done for each waste sample. A chain-of-custody form shall be used to accompany each sample submitted for analysis and the label that will be attached to each sample container. An example Chain of Custody Form is located in Enclosure J-1. The Enclosure also contains a fillable, embedded pdf of the form. NASCC Environmental is responsible for ensuring completion of the chain-of-custody form, shipping the samples, and receiving all data from the laboratory performing the sample analysis.

J.8.7 *Sampling Quality Assurance*

The quality of the sampling program has a direct bearing on how representative the samples are of the waste stream. In order to ensure sampling integrity, the procedures previously outlined will be strictly followed. A person thoroughly familiar with the sampling techniques will supervise sampling operations. Special care should be taken to ensure selection of an appropriate sampling device and to prevent cross contamination of samples.

J.8.8 *Frequency of Analysis*

All frequently generated wastes will be considered for analysis annually or whenever a change occurs in the process generating the waste stream. Since the stripping, painting, and repair activities generating these wastes normally do not change significantly, only a change in the products used (either paints or stripping agents) is likely to alter the characteristics of the waste streams. Non-routine or infrequently generated wastes may be analyzed as generated.

TABLE J-2

RECOMMENDED NUMBER OF CONTAINERS TO BE SAMPLED

Containers in Lot	**Containers to be Sampled**
2 - 8	2
9 - 27	3
28 - 64	4
65 - 125	5
126 - 216	6

ENCLOSURE J-1

CHAIN OF CUSTODY FORM

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ENVIRONMENTAL PROTECTION

(SAMPLE CHAIN OF CUSTODY)

NAVAL AIR STATION CORPUS CHRISTI, TX 78419-5000 PHONE (361) 961-3776	SAMPLE NO.
SAMPLE DESCRIPTION	
SAMPLE POINT DESCRIPTION	
SAMPLER'S NAME	DATE/TIME SAMPLED
AMOUNT COLLECTED	PRESERVATION
PRECAUTIONS	

CHAIN OF POSSESSION	
RECEIVED FROM	
RECEIVED BY	DATE/TIME RECEIVED
NAME OF RECEIVING COMPANY	
COMMENTS	
RECEIVED FROM	
RECEIVED BY	DATE/TIME RECEIVED
NAME OF RECEIVING COMPANY	
COMMENTS	
RECEIVED FROM	
RECEIVED BY	DATE/TIME RECEIVED
NAME OF RECEIVING COMPANY	
COMMENTS	
RECEIVED FROM	
RECEIVED BY	DATE/TIME RECEIVED
NAME OF RECEIVING COMPANY	
COMMENTS	

NASCORPC 5090/4 (12-96)

Form 4 - Chain of Custody v1.1.pdf

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APPENDIX K
SITE SPECIFIC CONTINGENCY PLANS

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K.1 Purpose

The permitted storage facility and each <90 Day storage facility will have a site specific contingency plan.

The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

In addition, NASCORP 3440.17 requires all tenant commands to prepare a Destructive Weather/Hurricane Plan, which should will include provisions for storage of hazardous wastes in case of forecasted destructive weather.

K.2 Responsibilities

K.2.1 *Tenant organizations*

Tenant Organizations will:

- Prepare a Site Specific Contingency Plan for each HW storage location
- Ensure personnel engaged in HW operations are aware of plan contents
- Ensure copy of Site Specific Contingency Plan is available at or near HW storage facility
- Submit electronic copy of Site Specific Contingency and Destructive Weather/Hurricane Plan to NASCC Environmental
- Review plans annually or when change necessitates

K.2.2 *NASCC Environmental*

NASCC Environmental will:

- Provide guidance and assistance to organizations for plan preparation
- Review site specific contingency plans for compliance with 40 CFR 264 Subpart D

K.2.3 *Site Specific Plan Content*

In accordance with requirements of 40 CFR 264.52, the Site Specific Contingency Plan shall include:

- The name and phone number of persons to contact in case of emergency.
- A list of emergency equipment and their locations:
  - Fire extinguishers
  - Spill control equipment (spill kits)
  - Decontamination equipment
  - Communication devices (phones, two-way radios, alarm systems)
- Evacuation routes
- Spill response and decontamination procedures

K.2.4 *Example of Site Specific Contingency Plan*

An example of a Site Specific Contingency Plan and Evacuation Route:

UNIT XX: <90 DAY HW STORAGE BUILDING XXX CONTINGENCY PLAN			
WARNING: IF MATERIAL SPILLED PRESENTS A POTENTIAL FOR HARM TO HUMAN LIFE, EVACUATE THE AREA IMMEDIATELY. Designated personnel at this facility have been specifically tasked, trained, and equipped to respond to oil and hazardous substance spills. Unauthorized individuals shall never undertake the response or investigation to any actual or suspected oil or hazardous substance spills			
I. IMMEDIATELY REPORT spills by the most expeditious means (e.g., voice, telephone) to your supervisor, or contact the **HAZARDOUS WASTE COORDINATOR** as listed below:			
Hazardous Waste Coordinator	**Shop**	**Title**	**Phone Ext.**
Jane Doe	Environmental	Hazardous Waste Handler	961-1111

UNIT XX: <90 DAY HW STORAGE BUILDING XXX CONTINGENCY PLAN			
John Smith	Environmental	Supervisor	961-0000

IF CONTACT CANNOT BE MADE WITH THE HAZARDOUS WASTE COORDINATOR,

REPORT SPILLS IMMEDIATELY TO: FIRE DEPARTMENT EXT. 961-3333

Number of Persons Working at this Site: 7

II. FIRE SAFETY PLAN

A. Equipment

The building is equipped with a Dry Chemical fire extinguisher. Emergency Response is initiated by sounding the alarm horn, FM Portable Radio, or telephone in the adjacent building. Building is equipped with containment berms and sumps.

B. Building Construction/Activity Description

The frame of the shed is metal. Three sides of the shed are metal walls; the entrance side is a cyclone fence gate. Floor is impervious concrete with containment berms and a sump. Floor is pitched to the sump.

Roof is Metal.

III. SITE HAZARDOUS SUBSTANCE INFORMATION

A. Capacity and Inventory

Up to 250 drums consisting of 5, 20, 30 & 55 gallon containers of Hazardous, Non-hazardous or Universal Waste. All containers are UN-rated DOT performance oriented packaging, have HW Markings, DOT Labels and are closed.

B. Probable Spill Route

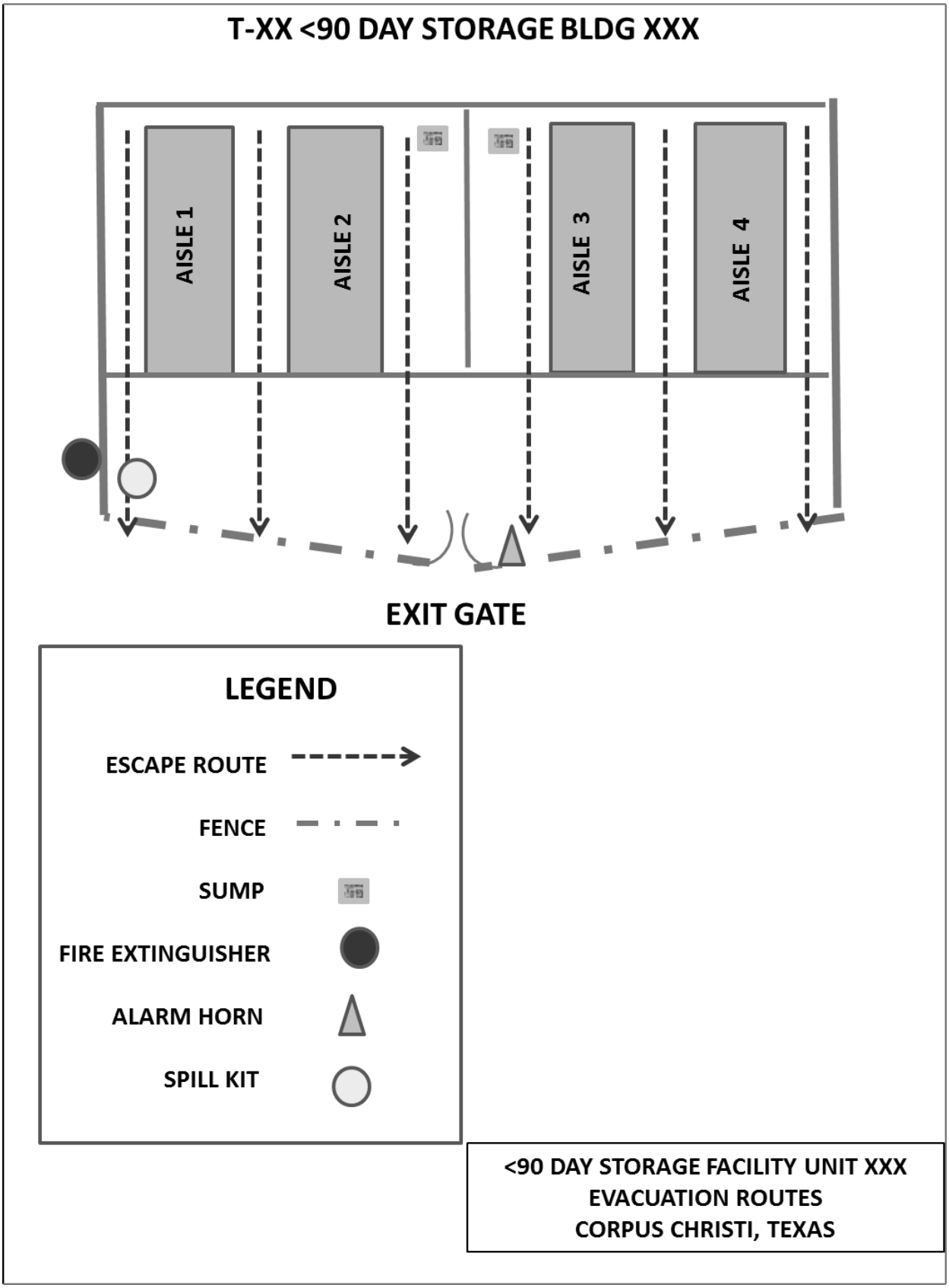
Ruptured or damaged drums would leak into berms and the product would collect in the sump.

C. Spill Response Actions and Decontamination Procedures

Spill Response Actions: Clean-up spilled product, overpack leaking drum, place spilled product and cleanup debris in additional drum.

Decontamination Procedures: Standard RCRA decontamination

UNIT XX: <90 DAY HW STORAGE BUILDING XXX CONTINGENCY PLAN		
D. Evacuation Procedures		
Who Declares Evacuation	First Responder	
Method of Notification	Alarm horn, two way commo	
Route of Evacuation	Out of Gates	
Safe Staging Area	Up-wind, across the street	
How Personnel are accounted for	Supervisor head count	


T-XX <90 DAY STORAGE BLDG XXX
AISLE 1
AISLE 2
AISLE 3
AISLE 4
EXIT GATE
LEGEND
ESCAPE ROUTE
FENCE
SUMP
FIRE EXTINGUISHER
ALARM HORN
SPILL KIT
<90 DAY STORAGE FACILITY UNIT XXX
EVACUATION ROUTES
CORPUS CHRISTI, TEXAS