Golden Gate
National Recreation Area

Standard Operating Procedures

SUBJECT: HAZARDOUS WASTE MANAGEMENT

PROCEDURE NUMBER: 804 – REVISED

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1. AUTHORITY

National Park Service (NPS) facilities, operations, and personnel are required to comply with all Federal, State, and local laws and regulations pertaining to management of hazardous waste. The following provide the regulatory framework for management of hazardous waste in the Golden Gate National Recreation Area (GOGA):

- Resource Conservation and Recovery Act (RCRA), Subtitle C - (regulations found in 40 CFR Parts 260 -262, 265, 266, 268, 270, and 279);
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - regulations found in 40 CFR Parts 300, 302, 311, 355, and 370);
- Occupational Safety and Health Act (OSHA) – (regulations found in 29 CFR Parts 1910.120 and 1910.1200);
- California Code of Regulations – (regulations found in Title 22, Division 4.5, Chapters 10-12, 15, 16, 18, 23, and 31);
- Executive order No. 12856, "Federal Compliance with Community Right-to-Know Laws and Pollution Prevention Requirements";
- Department of Transportation Requirements (regulations found in 49 CFR Parts 171-179);
- City and County of San Francisco Hazardous Materials Operations and Disclosure Ordinance (Article 21);
- Marin County Code, Chapter 7.8.

2. CONSEQUENCES OF NON COMPLIANCE

As a result of the waiver of sovereign immunity contained in the Federal Facilities Compliance Act of 1992, regulatory agencies can undertake civil and criminal enforcement actions in response to violations of the above statutes.

The National Park Service (NPS) is subject to civil penalties as an organization; however, individuals are potentially held personally liable and are subject to criminal prosecution. U.S.

Environmental Protection Agency (EPA) may bring criminal charges against any individuals believed to have knowingly violated the law. Criminal penalties may include substantial fines and imprisonment. In addition to targeting the individual who was directly responsible, criminal prosecutions typically target upper management under assumption that management is responsible for its employee's actions. If a criminal action is taken against a Federal employee, the U.S. Department of the Interior's Solicitor's Office and the U.S. Department of Justice will not represent an individual so charged.

Because the NPS is the landowner, regulatory agencies can hold NPS civilly and criminally liable for the violations of non-NPS park users. NPS may also bear the expense of cleaning areas of contamination caused by non-NPS park users if NPS does not monitor their activities and ensure conformance to applicable laws and regulations. Therefore, the NPS managers are responsible for monitoring the actions of tenants, concessionaries, and special use groups.

3. INTRODUCTION

The Resource Conservation and Recovery Act (RCRA) is the primary regulatory driver for hazardous waste management in the United States. Passed in 1976 and amended twice in the early 1980's, it established the following goals:

- To protect human health and the environment from the potential dangers of waste disposal;
- To conserve energy and natural resources through waste minimization, recycling, and recovery; and
- To ensure that wastes are managed in an environmentally sound manner.

This document serves as GOGA Hazardous Waste Management Standard Operating Procedures (SOP) and was developed to meet the Federal and State laws and regulations.

The SOP is one of the elements comprising park's comprehensive Hazardous Waste Management Program and is tailored to those facilities and operations that routinely generate hazardous waste in the park. The GOGA Hazardous Waste Management Plan

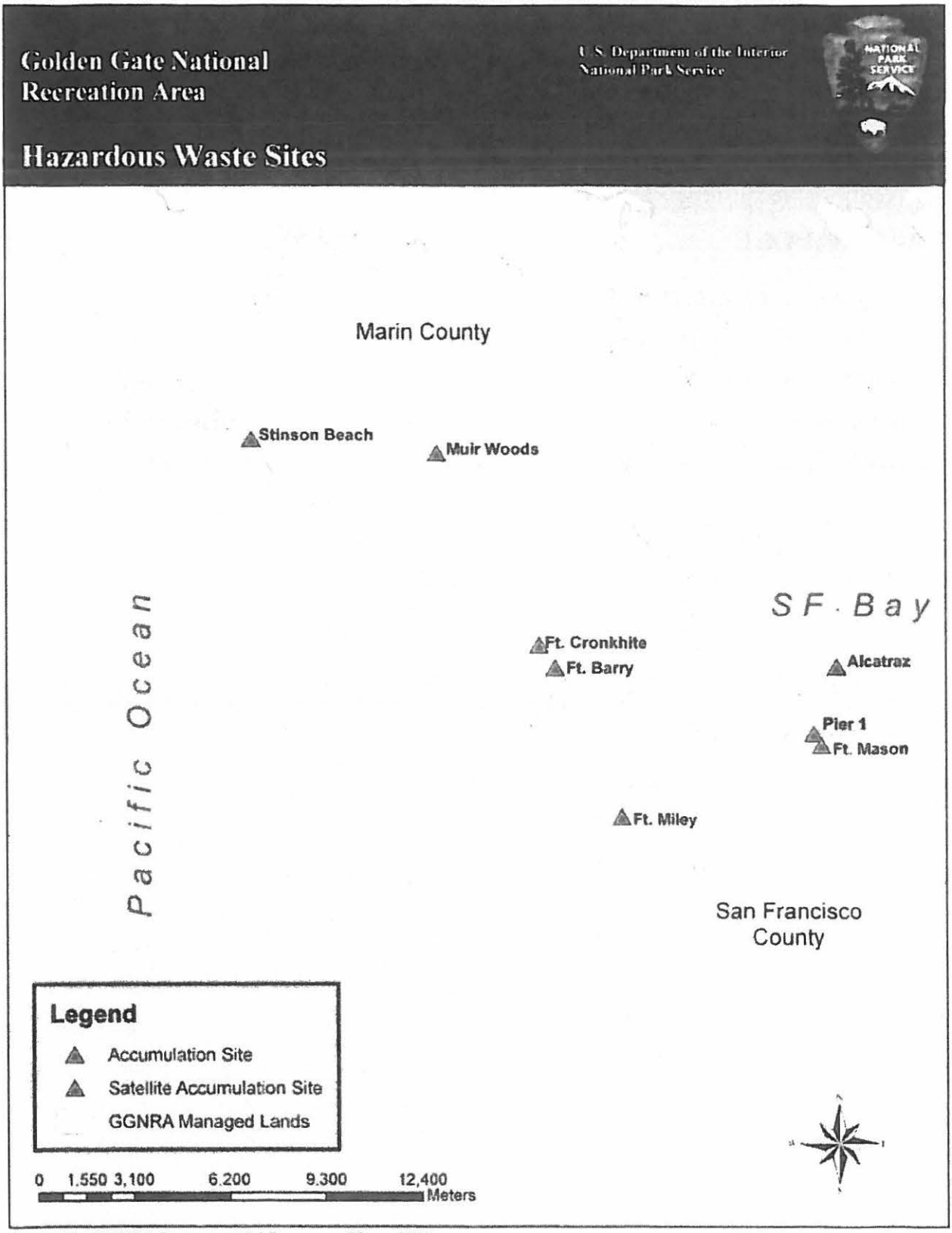
and GOGA Hazardous Waste SOP are complementary and together make up the written park's program.

This SOP applies to GOGA hazardous waste accumulation and satellite accumulation sites (See Figure I for a map of accumulation sites.) The SOP also applies to anyone who is involved in management and generation of Universal Waste.

4. PURPOSE

The purpose of this SOP is to ensure that all GOGA employees that routinely come into contact with hazardous waste know the proper management procedures to ensure regulatory compliance and safe practices. The SOP identifies roles and responsibilities and covers procedures for labeling, storage, transportation, inspections, training, emergency preparedness/response and records keeping associated with managing hazardous waste in the State of California.

FIGURE I: GOGA Hazardous Waste Accumulation Sites



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5. ROLES AND RESPONSIBILITIES

The following are the roles and responsibilities assigned to GOGA personnel in the following positions. See Appendix A for the names of GOGA personnel and their assigned responsibilities.

Superintendent: The Superintendent has the primary responsibility for ensuring that operations and facilities are in compliance with the laws and regulations affecting the management of hazardous waste. He/she is responsible for allocating staff and funding to compliance-related activities. The Superintendent is also responsible for ensuring that non-NPS Park users who generate hazardous waste are in full compliance with all applicable Federal, State, and local laws and regulations.

Park Hazardous Waste Coordinator: The Park Hazardous Waste Coordinator is responsible for the overall implementation of the GOGA Hazardous Waste Management Program. He/she is responsible for revising and updating the program on an as needed basis. An alternate Coordinator shall be designated to act in the absence of the Park Hazardous Waste Coordinator. The alternate Coordinator shall be knowledgeable in all aspects of the hazardous waste program.

Emergency Coordinator: Each Hazardous Waste Accumulation and Satellite Accumulation Areas shall designate in writing its own appropriate Area Emergency Coordinator who will be responsible for initial response to any type of emergencies.

Supervisors: Division Chiefs and all other supervisors shall be responsible for ensuring that all personnel within the area of their responsibility comply with the program.

Waste Accumulation Area Manager: Each Hazardous Waste Accumulation Area shall have a designated Hazardous Waste Accumulation Area Manager who will be responsible for day to day operations.

Satellite Accumulation Area Manager: If applicable, each area in the Park that generates hazardous waste shall designate its own Satellite Accumulation Area Manager. The Satellite

Accumulation Area Manager shall be responsible for complying with regulations pertaining to Satellite Accumulation Areas as outlined in this SOP.

GOGA Personnel: GOGA personnel shall deposit their hazardous waste at the nearest Hazardous Waste Accumulation Area. Waste may not be left unless it is logged in by the Storage Area Waste Manager or appropriate Maintenance Foremen. If unsure whether the waste is hazardous or not, contact GOGA Hazardous Waste Coordinator.

Non-NPS Users: Hazardous Waste generated by non-NPS users will not be accepted at the Hazardous Waste Accumulation Areas. The users will be responsible for managing their own hazardous waste and complying will all applicable Federal, State, and local regulations. If ground disturbing activities are anticipated, the users will be notified of any potential environmental hazards through dig permit process. Users will be responsible for bearing the cost of any necessary sampling, worker protection, hazardous waste handling and disposal.

6. HAZARDOUS WASTE DEFINED

Under RCRA, GOGA is required to make a determination whether the waste it generates is hazardous. There are several categories of hazardous waste as defined by the Federal and State statues. Hazardous waste management practices depend on how the waste is classified and its final destination.

6.1 Federal (RCRA) Hazardous Waste

Listed RCRA Waste

Subpart D of 40 CFR 261 (Resource Conservation and Recovery Act) lists certain materials from specific and non specific sources and processes that are hazardous wastes by definition. This waste is often called "Federally Listed RCRA Waste". The list is broken down into four major categories as follows:

- "F" Waste – from non specific sources such as solvents, plating solutions, and chemical manufacturing processes (< 28 types of materials).

- "K" Waste – from specific sources such as industrial processes (<100 types of materials).
- "U" Waste – toxic discarded chemicals, off specification species, container and spill residues (< several 100s materials).
- "P" Waste – meets definition of "U" waste and is Acutely Toxic Commercial Chemicals

Each listed waste has an assigned EPA number. See Appendix B in GOGA Hazardous Waste Management Plan for listed RCRA wastes.

Characteristic Waste

Characteristic Waste is waste that exhibits the following characteristics: ignitability, corrosivity, reactivity, & toxicity as defined in Subpart C of 40 CFR 261.

Corrosivity – the waste is a characteristic corrosive (C) waste if the pH of a substance is less or equal to 2 or more than or equal to 12.5.

Ignitability – the waste is a characteristic ignitable (I) waste is it can be ignited or will burn at certain conditions. The following are examples of ignitable waste: liquids with less than or equal to 24% alcohol in its mix and has a flash point of less than 140° F; flammable solids that can ignite through friction or contact with water, can combust spontaneously or if ignited, extremely hard to extinguish; flammable gases; oxidizers which by yielding oxygen cause other materials to ignite.

Reactivity - the waste is a characteristic reactive (R) waste if it is unstable, reacts violently with water, is explosive, is capable of detonation, or has a potential to undergo violent change of state.

Toxicity - the waste is a characteristic toxic (T) waste if it is listed in Section 261.24 of 40 CFR. An example of toxic waste is lead (at levels of more than 5 mg/Liter) and chloroform (at levels of 6 mg/Liter).

Wastes are presumed to be RCRA wastes unless determined otherwise (22 CCR § 66261.100 (b)). Any waste mixed with a listed waste is a RCRA hazardous waste.

6.2 Non-RCRA Hazardous Waste

Non-RCRA waste is presumed to be hazardous by the State of California even though it is not recognized as such by the Federal government and includes

- California listed wastes (Appendix XII, 22 CCR Chapter 11);
- Additional 20 inorganic and 18 organic constituents above certain threshold values (Table II and III in Article 3 of Title 22 CCR);
- Containers that are "RCRA-empty" but not "California-empty".[1]

See Appendix C in GOGA Hazardous Waste Management Plan for California listed wastes and additional inorganic and organic constituents.

6.3 Extremely Hazardous Waste

Extremely hazardous wastes are regulated by the State of California and are defined in 22 CCR § 66261.110 and § 66261.113. According to State regulation a waste is extremely hazardous if it:

- Has an Acute Oral Toxicity at LD_{50} <=50 mg/kg.
- Has an Acute Dermal Toxicity at LD_{50} <= 43 mg/kg.
- Has an Acute Inhalation Toxicity at LC50 <= 100 ppm.
- Is listed as carcinogenic in Section 6661.24(a)(7) at a single or combined concentration => 0.1% by weight.
- Is water reactive.
- Is persistent and bioaccumulative.[2]

[1] "RCRA-empty" is defined in 40 CFR 261.7. "California-empty" is defined in Title 22 CCR, § 66261.7.
[2] For complete and detailed extremely hazardous waste regulation consult Title 22 CCR, § 66261.110 and § 66261.113.

6.4 Special Waste

- Subset of Non-RCRA hazardous wastes and includes such materials as ash from burning a fossil fuel, auto shredder waste, sand from sandblasting etc.
- Generated in large volumes but pose less hazard.
- A generator must apply to California Department of Toxic Substance and Control (DTSC) to receive an approval to manage hazardous waste as special waste.
- Eligible to be managed at less stringent standards once approved by DTSC.[3]

6.5 Universal Waste

Universal waste is a special subset of hazardous waste which is generated universally in large amounts and poses lower health risk to people and the environment. Universal waste is subject to special management provisions under RCRA (40 CFR 273). The provisions were issued to ease the burden of management and encourage recycling of such materials.

Under Federal standards there are currently four types of waste that are covered by the universal waste regulations: batteries, pesticides, Mercury-containing equipment, and lamps. California Universal Waste Rule adopted in 2000 recognized additional wastes as universal wastes and includes consumer electronic devices, non-empty aerosol cans and Cathode Ray Tube materials.[4] California does not recognize pesticides as universal waste; therefore, GOGA will manage all waste pesticides as hazardous waste if they meet the definition.

Universal Waste Lamps

Universal waste lamps include but not limited to Fluorescent, High Intensity Discharge (HID), Mercury vapor, High pressure sodium, Metal halide, and Neon.

Mercury Containing Materials

Mercury containing materials include mercury-containing motor vehicle light switches, non-automotive mercury switches, dental amalgam waste, mercury-containing gauges, mercury-added novelties, counterweights and dampers, mercury-containing thermometers, mercury-

[3] For complete special waste regulations consult Title 22 CCR, § 66261.120 – 122.
[4] For complete California Universal Waste regulations consult Title 22 CCR Division 4.5 Chapter 23.

containing medical devices, mercury-containing rubber flooring, and mercury gas flow regulators.

Consumer Electronic Devices

Consumer Electronic Devices (CED) include but not limited to computers, telephones, answering machines, radios, stereo equipment, tape players, recorders, CD players, phonographs, VCRs, calculators, and some appliances. CED considered hazardous due to the presence of various metals and other hazardous constituents.

Cathode Ray Tubes

Cathode Ray Tube (CRT) is a vacuum tube or a picture tube used to convert electrical signal into a visual image. "Picture tube" is a more common terminology used to refer to the CRT. Computer monitors, television, some camcorders, and other electronic devices usually contain CRTs. CRTs which are more than 4 inches in diameter are presumed to be hazardous unless proved otherwise.[5]

Non-Empty Aerosol Cans

Aerosol cans are not hazardous waste when they have been completely emptied of their contents (does not include cans that contained Federal (RCRA) waste). However, non – empty ones can be classified as hazardous waste if their contents are ignitable, corrosive, reactive, or toxic. Most of the aerosol cans contain flammable propellants which is a characteristic of ignitability.

Batteries

Universal waste batteries include all batteries except vehicle (cranking) spent lead-acid batteries. Universal waste batteries are hazardous for corrosivity (alkaline or acidic electrolyte), heavy metals (lead, zinc, nickel, cadmium, mercury, silver, etc), and reactivity (unspent lithium batteries).

[5] 22 CCR Chapter 11, Appendix X.

6.6 Recyclable Hazardous Waste

The State of California has an additional category of waste called Recyclable Hazardous Waste which presumed to be economically and technologically feasible to recycle. This category includes the following materials:

- Acetone
- Benzene
- Butanol
- Carbon Tetrachloride
- Chloroform
- Ethanol
- Ethyl acetate
- Ethylene glycol
- Freons
- Hexanes
- Methanol
- Methyl dichloride
- Methyl ethyl ketone
- Mixed hydrocarbon solvents
- Paint thinner
- Perchloroethylene
- Trichloroethane
- Toluene
- Xylenes
- Used Oil
- Lead acid batteries

Within 365 days of the disposal of recyclable waste, DTSC may request the generator to provide a written explanation justifying why the recyclable hazardous waste was not recycled.[6]

6.7 Waste Determination

Each accumulation area is responsible for determining if the waste it generates is hazardous or not. Determination may be based on generator knowledge, commonly taken from a Material Safety Data Sheet (MSDS). If a determination cannot be made using generator knowledge, contact Park Hazardous Waste Coordinator for further assistance.

A generator must know whether or not the waste is classified as hazardous because:

- Improper identification can result in health, safety and environmental problems.

- It is the Law: Federal and State regulations require any person who generates waste to determine if it is a hazardous waste as defined by the regulations.

[6] For complete Recyclable Hazardous Waste regulations see Title 22 CCR Division 4.5 Chapter 16.

- Management of hazardous waste is subject to a number of regulatory requirements. Violations of these requirements can result in notices of violations and fines. Information about the identity of the waste is essential.

If you encounter an unknown waste, contact GOGA Hazardous Waste Coordinator for further assistance.

7. GENERAL REQUIREMENTS

The following general requirements apply to all hazardous waste accumulation sites and their managers. The Section numbers refer to sections of this SOP that cover a particular topic.

- ID the waste present (Section 6)
- Possess an EPA ID Number (Section 8)
- Package waste in Department of Transportation (DOT) containers (Section 16)
- Follow accumulation time limits (Section 13)
- Designate an emergency coordinator and develop and implement contingency, hazard prevention and personnel training plans (Sections 23)
- Retain copies of all manifests, test results, and waste analysis for at least 3 years (Section 22)
- Dispose of all waste at an EPA permitted Treatment, Storage, and Disposal facilities
- Never accumulate more than 13,200 lbs (6,000 kg) of hazardous waste or 2.2 lbs (1 kg) of acutely hazardous waste (Section 14)
- Follow requirements for accumulation & satellite accumulation areas (Sections 10 and 12)
- Follow waste segregation requirements (Section 17)
- Follow labeling requirements (Section 15)
- Maintain an inventory (Section 20)

- Conduct weekly inspections (Section 19)
- Maintain Training (Section 21)

8. EPA IDENTIFICATION NUMBERS

Both U.S. EPA and California DTSC issue **EPA ID numbers** to facilities generating hazardous waste. EPA ID number allows regulatory agencies to monitor and track each generator of hazardous waste. EPA ID numbers are site specific. For businesses that have several waste generation locations that are not contiguous, one EPA ID number is needed for each separate address. GOGA has seven EPA ID numbers for each of its current and former hazardous waste accumulation sites which include

- Marin Headlands: CAL921192839;
- Fort Mason: CAL141790195;
- Fort Miley: CAR000006494;
- Alcatraz: CAR000006106;
- Stinson Beach: CAR000009761;
- Muir Woods: CAR000009753; and
- Presidio: CA0000616094.

Permanent EPA ID numbers can only be used for routine waste generated by each site.[7] For all other projects that have a potential for generating hazardous waste, a provisional ID number shall be obtained either from the DTSC or the U.S. EPA depending on the expected waste stream and its volume. If you are anticipating a need for an EPA ID number, contact GOGA Hazardous Waste Coordinator as soon as possible.

No one shall obtain an EPA ID number prior to consulting with GOGA Hazardous Waste Coordinator.

[7] Routine means waste generated on a day to day basis by maintenance operations.

9. GENERATOR STATUS DETERMINATION

The determination of the generator's status is important since it determines the applicable of hazardous waste management requirements. The RCRA recognizes three categories of hazardous waste generators:

- Large quantity generator (LQG): facilities generating more than 1,000 kg (2,200 lbs or approximately 275 gallons) of hazardous waste per calendar month or more than 1 kg (2.2 lbs) of acutely hazardous waste per calendar month.

- Small quantity generator (SQG): facilities generating between 100 kg (220 lbs) and 1,000 kg (2,200 or approximately 275 gallons) of hazardous waste per month or accumulate less than 6,000 kg (13,200 lbs) of hazardous waste an any time.

- Conditionally exempt small quantity generators (CESQG): facilities generating less than 100 kg (220 lbs or approximately 27 gallons) of hazardous waste per calendar month or less than 1 kg (2.2 lbs) of acutely hazardous waste per calendar month. CESQG cannot accumulate more than 1,000 kg (2,200 lbs) of hazardous waste, 1 kg (2.2 lbs) of acutely hazardous waste, or 100 kg (220 lbs) of any residue from the clean up of a spill of acute hazardous waste at any time.

LQGs have to comply with the strictest requirements. The analysis of past GOGA hazardous waste generation rates showed that the status of its accumulation sites varied from CESQG to LQG. Currently, all GOGA accumulation sites meet the Federal CESQG status which the State of California does not recognize; and therefore, all hazardous waste accumulation sites within GOGA are and will be managed as SQG unless they become LQG at any point in time.

GOGA shall strive to maintain its Small Quantity Generator Status.

10. ACCUMULATION SITE REQUIREMENTS

All accumulation areas shall be constructed and managed to include all of the following specifications:

A. Each site shall be secured from unauthorized entry by an enclosure that completely surrounds the accumulation area. The following GOGA personnel, excluding site workers, shall have access keys to the site: Presidio Fire Department, site specific emergency contact person and his back up, and GOGA Hazardous Waste Management Coordinator.

B. Each containment building shall have signs, visible from at least 25 feet away, that state: "DANGER – HAZARDOUS WASTE AREA – UNAUTHORIZED PERSONNEL KEEP OUT" as well as "NO SMOKING".

C. Each containment building shall be labeled according to each hazard class of hazardous waste stored in the area such as "FLAMMABLE", "CORROSIVES", "TOXIC", etc. If the containment building accumulates a combination of hazardous waste classes, either both or the predominant hazard shall be posted.

D. A sign listing the telephone numbers of people/organizations to call in case of an emergency such as a fire or a spill. In addition, the sign shall state the name of the site's supervisor and his phone number. At a very minimum, the sign should state: "IN CASE OF A SPILL OR EMERGENCY, IMMEDIATELY CONTACT PARK DISPATCH 561-5505".

E. Spill contingency materials must be present in sufficient quantities to contain and manage all possibly emergencies such as small leaks and spills. At a minimum, the required spill contingency materials shall include: one empty 85 gallons Overpack drum, absorbent suitable for the type of waste handled, push broom, flat head shovel, and personal protective equipment such as dust masks, gloves, goggles, and Tyvek suits. Each area

where spill contingency material is stored shall be labeled to its content such as "SPILL KIT" or "SPILL ABSORBENT STORAGE", and "SPILL CLEAN UP EQUIPMENT".

F. A portable or stationary eye-wash station capable of providing a continuous flow of water for at least 5 minutes. Each station shall be in the vicinity of a hazardous waste accumulation building.

G. Each container used to accumulate hazardous waste shall be labeled to its content.

H. Non – compatible wastes shall be segregated.

I. An up to date inventory shall be kept on site at all times.

J. Only DOT approved containers shall be used to accumulate hazardous waste.[8]

K. Each accumulation site shall be managed by personnel trained in hazardous waste management.

L. Each accumulation site shall be inspected by the site manager on a weekly basis and by GOGA Hazardous Waste Coordinator an annual basis to ensure proper and safe management of hazardous waste.

M. Each area shall have a site business plan outlining procedures to follow in cases of emergency.

The following GOGA sites, due to the amount and the type of waste generated, shall be managed as Hazardous Waste Accumulation Areas: Marin Headlands, Fort Miley, and Fort Mason.

[8] There will be instances where non DOT containers can be used to accumulate hazardous waste such as universal waste.

11. CONTAINMENT BUILDING REQUIREMENTS

GOGA operates several containment buildings park wide. Under RCRA, at a very minimum, the containment building should have the following features[9]:

- Completely enclosed and self-supporting structure and is 2 hour fire-rated
- Secondary containment
- Leak detection system & internal communication or alarm system capable of providing emergency instructions
- A device capable of summoning emergency assistance (must be immediately available on site)
- Portable fire extinguishers, spill control equipment, and decontamination equipment
- Automatic sprinklers or water at adequate volume and pressure on site
- Aisle space to allow unobstructed movement of personnel
- Certification by a qualified registered professional engineer (PE) that the building meets the requirements of Federal and State requirements.
- Each containment building shall have the following signs displayed at all times: manufacturer's name, National Fire Prevention Association (NFPA) diamond, and all other applicable signage.
- In addition to structural and engineering controls, specific work practices, outlined in this SOP, shall be followed to prevent releases and unsafe working conditions.

[9] Every hazardous waste accumulation area within GOGA shall accumulate its waste in containment buildings that meet the requirements outlined in 40 CFR Parts 265.30 through 265. 37 and 265. 1100 through 265.1102 as well as 22 CCR § 66265.1100 through § 66265.1102 and 22 CCR § 66265.30 through § 66265.37.

12. SATELLITE ACCUMULATION SITE REQUIREMENTS

In addition to hazardous waste accumulation areas, there are areas throughout the park that qualify to be managed as Satellite Accumulation Areas. Satellite accumulation is the collection of hazardous waste in a container, not a tank, located at or near the point where the waste is generated. The container must be under the control of the operator of the waste generation process.

Within a Satellite Accumulation Area, a generator may accumulate up to 55 gallons of hazardous waste at the point of generation. If there are two incompatible waste streams, the generator is allowed to store up to 55 gallons of each waste stream. Within three days of reaching the 55 gallons limit, waste must be transported to the nearest hazardous waste accumulation area. A generator can keep a satellite accumulation container on-site for a maximum of one year from the date the waste was first placed in the container. Additional requirements are provided in the following sections.

The following sites within GOGA due to the amount and the type of waste generated shall be managed as Satellite Accumulation Areas: Stinson Beach, Muir Woods, and Fort Barry NIKE facility.

13. ACCUMULATION TIME LIMITS

There are certain requirements for how long hazardous waste can be accumulated on site.

13.1 Hazardous Waste

Each hazardous waste accumulation area shall accumulate hazardous waste for no more than 180 days. In those cases where the disposal facilities located more than 200 miles away from GOGA, the waste can be accumulated for up to 270 days.

13.2 Universal Waste

Universal waste shall not be accumulated for more than 1 year. The disposal of universal waste shall be in sync with hazardous waste to minimize and eliminate the occurrences of the universal waste being accumulated for longer than 1 year.

Hazardous Waste Coordinator is responsible for making sure that the waste is not stored on site for more than 180 days or 270 days if applicable. Each Site Manager shall contact Hazardous Waste Coordinator when the waste pick up is needed before the 180 days limit.

14. ACCUMULATION QUANTITY LIMITS

There are certain requirements for how much hazardous waste can be accumulated on site at anytime.

14.1 Hazardous Waste

Each hazardous waste accumulation site shall not accumulate more than 13,200 pounds of hazardous waste or 2.2 pounds of acutely hazardous waste. These quantity limits do not include universal waste. Each hazardous waste satellite accumulation area shall not accumulate more than 55 gallons of each waste stream.

14.2 Universal Waste

The quantity limits for universal waste include not accumulating more than 5,000 kilogram and not more than 35 kilogram of drained mercury.

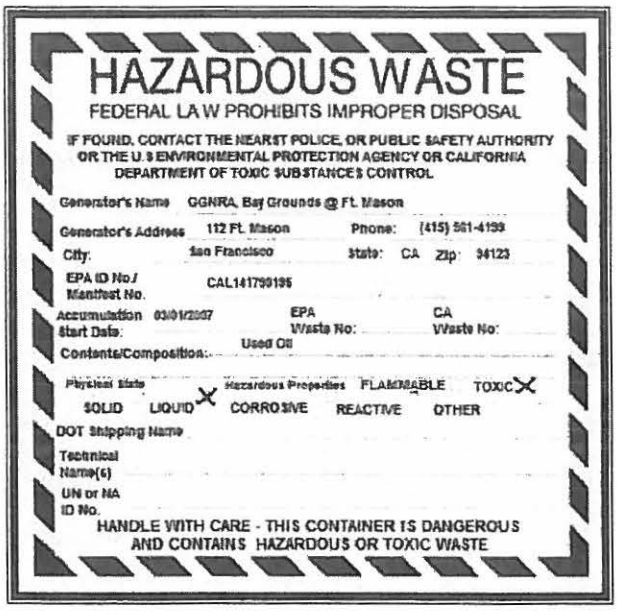
15. LABELING REQUIREMENTS

The Resource Conservation and Recovery Act, Toxic Substances Control Act, and Title 22, California Code of Regulations established specific labeling/marking requirements for hazardous waste containers. All activities that generate and/or accumulate hazardous waste shall comply with all labeling requirements of the aforementioned laws and regulations.

15.1 Hazardous Waste

Each hazardous waste container shall be labeled and marked in full compliance with the following. The original product's Material Safety Data Sheet is a conventional way to get the information needed to feel out the label. If further guidance is needed, please contact GOGA Hazardous Waste Coordinator.

A. A hazardous waste label must be placed on the container as soon as the first drop of hazardous waste is placed in it.
B. All labels shall be completed using permanent ink that is not water soluble and will not readily fade i.e. sharpie & china marker.
C. Each hazardous waste label shall have the following information listed:
    1. Common name which accurately identifies the content i.e. used oil.
    2. Hazard Class i.e. flammable, combustible, etc.
    3. Accumulation Start Date.
    4. EPA ID number.
    5. Site Address
    6. Point of Contact
    7. Physical state i.e. liquid, solid, etc.


HAZARDOUS WASTE
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE, OR PUBLIC SAFETY AUTHORITY OR THE U.S ENVIRONMENTAL PROTECTION AGENCY OR CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL
Generator's Name GGNRA, Bay Grounds @ Ft. Mason
Generator's Address 112 Ft. Mason Phone: (415) 561-4139
City: San Francisco State: CA Zip: 94123
EPA ID No./ Manifest No. CAL141799195
Accumulation Start Date: 03/01/2007 EPA Waste No: CA Waste No:
Contents/Composition: Used Oil
Physical State SOLID LIQUID X Hazardous Properties CORROSIVE REACTIVE FLAMMABLE TOXIC X OTHER
DOT Shipping Name
Technical Name(s)
UN or NA ID No.
HANDLE WITH CARE - THIS CONTAINER IS DANGEROUS AND CONTAINS HAZARDOUS OR TOXIC WASTE

The label has to be readable, legible, and visible for inspection.

15.2 Universal Waste

A different set of labeling/marking requirements apply to generators of universal waste. All universal waste labels shall have the accumulation start date and the point of contact. A generator shall mark each individual universal waste to identify the type of waste as specified below.

A. Universal waste batteries or a container in which the batteries are stored, shall be marked as **"UNIVERSAL WASTE – BATTERIES"**, **"WASTE BATTERIES"**, or **"USED BATTERIES"**.

B. Universal waste lamps or a container in which the lamps are stored, shall be marked as **"UNIVERSAL WASTE – LAMPS"**, **"WASTE LAMPS"**, or **"USED LAMPS"**.

C. Each universal waste electronic device or container/pallet, shall be marked as **"UNIVERSAL WASTE – ELECTRONIC DEVICE(S)"** or **"UW – ELECTRONIC DEVICE (S)"**.

D. Each universal waste containing mercury (Hg) or a container in which the mercury waste is stored shall be marked as **"UNIVERSAL WASTE – MERCURY ELEMENTS"**

E. Cathode Ray Tubes (CRT) or devices containing CRT, such as a television or a computer monitor, shall be labeled as **"UNIVERSAL WASTE – CRT"**.

F. Universal waste aerosol cans or a container in which cans are stored, shall be marked as **"UNIVERSAL WASTE – AEROSOL CANS"**, **"WASTE AEROSOL CANS"**, or **" USED AEROSOL CANS"**.

15.3 Special Labeling Requirements

A different set of labeling/marking regulations apply to generators of certain recyclable wastes. All recyclable waste shall have the accumulation start date and the point of contact. A generator shall mark individual recyclable waste as specified below.

USED OIL/FUEL FILTERS

Used oil and fuel filters, or the containers in which the filters are stored, shall be marked as **"DRAINED USED OIL FILTERS"**.

USED LEAD-ACID BATTRIES

Used lead-acid batteries, or a container/pallet in which the batteries are stored, shall be marked as **"USED LEAD-ACID BATTERIES"**.

USED OIL

In addition to affixing a hazardous waste label per Section 17.1, used oil container has to be visibly marked as **"USED OIL".**

See Section 21.5 for labeling requirements of Treated Wood Waste.

16. CONTAINERS USE & MANAGEMENT

Containers used to accumulate hazardous waste are managed under 40 CFR Parts 264. 171 – 178 and 22 CCR Section 66265.170. The following provisions apply to containers use and management at all GOGA hazardous waste accumulation sites and hazardous waste satellite accumulation sites.

16.1 Hazardous Waste Containers

Container Has to Be in Good Condition

If a container holding hazardous waste is not in good condition (e.g. severe rusting, apparent structural defects) or if it begins to leak, Area Manager must transfer the hazardous waste form the defected container to a container that is in good condition or to an Overpack drum. When

using an overpack drum, adhere to the following guidelines and contact GOGA Hazardous Waste Coordinator for further guidance if needed.

- Overpack containers are available in a variety of sizes and materials. Many hazardous wastes require a specific type of overpack container. Using the wrong container can lead to adverse personal and environmental impacts.

- When overpacking leaking containers, it is necessary to place absorbent in the overpack drum. The absorbent material must be capable of soaking up all the liquid contents of the leaking container being overpacked.

- Leaking containers of non-liquid hazardous waste (such as powders) may not need be overpacked with absorbent material. In most cases, it is sufficient to place the leaking container in an appropriate overpack drum.

- Overpack containers must be labeled and marked in the same manner as all hazardous waste containers.

Container Has to Be Compatible with Waste

The Area Manager shall make sure that the container made of or lined with material which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not compromised. Consult original product's MSDS for compatibility guidelines. If more information is needed, contact GOGA Hazardous Waste Coordinator.

Containers Holding Ignitable or Reactive Wastes

Precautions must be taken to prevent accidental ignition or reaction of these wastes by separating and protecting them from source of ignition or reaction including but not limited to open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks, spontaneous ignition, and radiant heat.

Containers Must Be Closed and Handled Carefully

Containers holding hazardous waste must always be closed except when adding/removing the waste. Containers must be handled and stored in a manner which may not rupture the container and cause it to leak.

Containers Must Be Inspected Weekly

At least weekly, the Area Manager shall conduct a documented inspection of all containers (see Section 20.4 for additional information).

Containers Must Have a Containment System

Container storage area must have a containment system. The containment system must be free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed. The base of the containment system must be sloped or must otherwise be designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation. The containment system must have sufficient capacity to contain 10% of the volume of the containers or the volume of the largest container, whichever is greater. Spilled waste and/or accumulated precipitation must be removed immediately from the sump/collection area to prevent any potential overflows.

Pre-Transport Requirements

Before hazardous waste can be transported it has to be packed according to the Department of Transportation (DOT) requirements as provided in 49 CFR, Subchapter C, Part 178. GOGA is contacting out the transportation and disposal of hazardous waste. The contractor, with GOGA Hazardous Waste Coordinator oversight, shall meet all applicable DOT requirements.

16.2 Universal Waste Containers

Containers used to accumulate universal waste shall be kept closed, be structurally sound, compatible with waste stored, and lacking evidence of leakage or spillage.

The following containers are being used currently to accumulate universal waste:

- Universal waste batteries, used fuel and oil filters – A closed 5 gallons pail.
- Universal waste lamps – structurally sound cardboard box and/or 5 gallon pails.

Special Cases

Aerosol Cans – containers must be stored in a well ventilated area to avoid formation of an explosive atmosphere. Must be kept away from heat and open flames.

Universal Waste Lamps, Mercury Containing Materials, Consumer Electronic Devices, and Cathode Ray Tubes – plastic airtight bag is required if signs of spillage, breakage, & damage are evident.

17. REQUIREMENTS FOT INCOMPATIBLE WASTES

One of the most important rules of any chemical storage, including hazardous waste, is to segregate incompatible chemicals which, if accidentally mixed, could cause fire, explosion, or generate toxic gases. Hazardous chemical reactions can occur from improper storage when incompatible materials mix because of accidental breakage, container failure, fires and earthquakes, mixing of gases or vapors from poorly closed containers, and mistakenly storing incompatibles together because of improperly labeled containers. Additionally, hazardous waste must not be placed in an unwashed container that previously held an incompatible waste/material.

Consult product's MSDS if you are unsure about waste's incompatibility. If more information is needed, contact GOGA Hazardous Waste Coordinator.

To minimize the accidents resulting from storing incompatible materials store each of the following groups of chemicals separately from one another, either in separate cabinets/containers or secondary containers: FLAMMABLE LIQUIDS, COMPRESSED GASES, ACIDS, BASES LIQUID OXYDIZERS, AND VOLATILE POISONS.

The U.S. Environmental Protection Agency (EPA), Office of Research and Development has developed a method for determining chemical compatibility (EPA-600/2-80-076, April 1980). This method in a form of a chart can be used to determine compatibility between various groups of chemicals. The chemical compatibility chart can be found in Appendix B of the SOP. The chart should be used as a guiding reference only. Consult an MSDS for product specific information if needed.

18. MANAGEMENT OF EMPTY CONTAINERS

The U.S. EPA along with DTSC have developed and issued specific management requirements for the containers that used to hold hazardous waste and hazardous materials. Many properties throughout California have been contaminated because containers holding residual hazardous waste and materials were not managed properly.

The State of California has more stringent standards, which GOGA has to follow, for the management of empty containers than what the Federal government has promulgated. The specific State requirements can be found at Title 22, Section 66261.7. The specific Federal requirements can be found at 40 CFR, Part 261.7.

18.1 Empty Container Defined

According to both Federal and State provisions, a container is any portable device in which material can be stored, handled, treated, transported, recycled, or disposed of. The containers can be grossly divided into two categories: containers that have a capacity of more than 110 gallons (bulk containers) and those with a capacity of less than 110 gallons (non bulk containers). Most of the empty containers managed within GOGA are non bulk containers.

U.S. EPA Definition of an Empty Container[10]

A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste is empty if:

[10] For a full definition see 40 Code of Federal Regulations, Part 261.7.

- All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating, and no more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner, or

- No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size, or

- No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons in size.

A container or an inner liner removed from a container that has held an acute hazardous waste is empty if:

- The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product;

- The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

- In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.

CA DTSC Definition of an Empty Container[11]

A non bulk container, or an inner liner which previously held a hazardous material, including hazardous waste, is empty if

- The hazardous material which the container held is pourable, no hazardous material can be poured or drained from the container when it is held in any orientation (e.g., tilted, inverted, etc.); and

- If the hazardous material which the container held is not pourable, no hazardous material remains in or on the container that can feasibly be removed by physical methods (excluding rinsing). A thin uniform layer or dried material or powder is considered acceptable.

A container or an inner liner that has held an acute or extremely hazardous waste is empty if:

- It has been triple rinsed using a solvent capable of removing the waste and all pourable residues have been removed. Triple rinsing activities shall require specific authorization from the Department

A bulk container, or an inner liner which previously held a hazardous material, including hazardous waste, is empty when

- The residue is no more than 0.3% by weight of the total capacity of the container.

A bulk container or an inner liner that has held an acute or extremely hazardous waste is empty when

- The standard provided for non bulk containers is met.

[11] For a full definition see California Code of Regulations, Title 22, Section 66261.7.

18.2 Management Requirements for "Empty" Containers

Under California rule, containers that meet the "empty" standard have to be managed according to the following principles. If these management principles are not met than the containers have to be managed as hazardous waste.

- Containers of five (5) gallons or less in capacity are disposed of as solid waste.
- Containers scrap value is reclaimed either onsite or offsite.
- Containers are reconditioned either on site or offsite (other standards apply).
- Containers are shipped to another intermediate collection location for accumulation prior to managing the container.
- Container larger than five (5) gallons in capacity is marked with the date it has been emptied and is managed within one year of being emptied according to the above listed principles.
- A disposal record is kept on site for containers that are 5 gallons or more for at least three years.
- Uncontaminated containers, where an inner liner has prevented contact of the hazardous material with the inner surface of the container, are not hazardous waste.
- Containers which previously held a hazardous material are sent back to the supplier for the purpose of being refilled (other standards apply)

Any rinsate or other residue generated by these activities has to be completely captured, classified, and managed in accordance with various Federal and State provisions.

18.3 Provisions for Special Containers: Compressed Gas Cylinders, Aerosol Cans, and Containers Made of Absorptive Materials

There are special provisions for certain containers including compressed gas cylinders and aerosol cans.

Compressed Gas Cylinders

A compressed gas cylinder is exempt from regulations if the pressure in the container approaches atmospheric pressure.

Aerosol Cans

Aerosol cans are exempted from regulations when the container is emptied to the maximum extend practical under normal use provided that the empty can is not regulated under RCRA and the can did not hold an acute or extremely hazardous waste. Aerosol cans with hazardous materials still remaining due to clogged nozzle, damaged valve, or loss of propellant are not exempt but have to be managed as Universal Waste.

Containers Made of Absorptive Materials

Containers made of absorptive materials such as wood, cardboard, cloth, or paper are not exempt from the regulations if the container has been in direct contact with and has absorbed hazardous material or waste.

19. TRAINING REQUIREMENTS

GOGA personnel who routinely handle hazardous material and hazardous waste are required to have the following trainings:

- 24-h Hazardous Waste Operations and Emergency Response (29 CFR 1910.120);
- Hazardous Waste Management for Small Quantity Generators (40 CFR 262.34 (d)(5)(iii) & 22 CCR § 66262.34);
- Hazard Communication (29 CFR 1910.1200); and

- Universal Waste Management (40 CFR 273.16 and 22 CCR, Section 66273.16 & 66273.86)

Hazardous Waste Operations and Emergency Response Training (HAZWOPER)

The Occupational Safety and Heath Administration (OSHA) developed the HAZWOPER standard and published it in 29 CFR Part 1910.120. The standard applies to five distinct groups of employers and their employees. This includes any employees who are exposed or potentially exposed to hazardous substances including hazardous waste and who are engaged in one of the following operations:

- Clean-up operations required by a governmental body, whether federal, state, local, or other involving hazardous substances -- that are conducted at uncontrolled hazardous waste sites;

- Corrective actions involving clean-up operations at sites covered by the **Resource Conservation and Recovery Act of 1976 (RCRA)** as amended (42 U.S.C. 6901 et seq.);

- Voluntary clean-up operations at sites recognized by federal, state, local, or other governmental body as uncontrolled hazardous waste sites;

- Operations involving hazardous wastes that are conducted at treatment, storage, and disposal facilities regulated by **Title 40 Code of Federal Regulations** Parts 264 and 265 pursuant to RCRA, or by agencies under agreement with U.S. Environmental Protection Agency to implement RCRA regulations; and

- Emergency response operations for releases of, or substantial threats of releases of, hazardous substances regardless of the location of the hazard.[12]

[12] http://www.osha.gov/html/faq-hazwoper.html Accessed on November 20, 2006.

The standard requires an annual 8-hour refresher training. The Department of the Interior has recently developed Collateral Duty Safety Officer Training through DOI Learn. This training offers several modules including 8-h HAZWOPER Refresher. From now on, unless funding is available, HAZWOPER refreshers will have to be taken online through DOI Learn.

GOGA Environmental Programs Office will make an effort to bring 24-h HAZWOPER training to the park as often as possible to accommodate new employees that are required to have one. If the training is not available the year an employee starts working, it is the responsibility of the immediate supervisor to make sure that the employee is properly trained.

Hazard Communication (HAZCOM)

Hazard Communication standard has been promulgated by OSHA in 1988 to ensure that the hazards of all chemicals produced or imported are evaluated and that the information concerning the hazard associated with the chemicals is transmitted to employers and their employee. The HAZCOM standard was published under 29 CFR Part 1910.120. See GOGA HAZCOM SOP for more information.

Hazardous and Universal Waste Training for Small Quantity Generator

SQG facilities are required to have trained personnel managing its hazardous waste. To meet the training requirements, GOGA Environmental and Safety Programs Office has developed a training module for employees that manage hazardous waste. The initial training has been given in 2007. Ultimately, it is the responsibility of the immediate supervisor to make sure that their employees are current on their training requirements.

Annual refresher course is not required for SQG; however, GOGA Hazardous Waste Coordinator is responsible for regularly providing new information to employees when it becomes available.

20. RECORDS KEEPING REQUIREMENTS

The management of hazardous waste requires accurate and consistent records keeping due to the liability associated with hazardous waste management. Federal and State laws and regulations require several different sets of information. The records keeping requirements and procedures are outlined below.

20.1 Shipping Papers

Every time hazardous waste leaves GOGA facilities it has to be accompanied by shipping papers. The shipping papers might include a Uniform Hazardous Waste Manifest, a Non Hazardous Waste Manifest, a Medical Waste Tracking Document, or a Bill of Lading. In general, the Uniform Hazardous Waste Manifest accompanies each shipment of hazardous waste and the Bill of Lading accompanies each shipment of Universal Waste. The Non Hazardous Waste Manifest usually tracks solid waste which is not hazardous. The Medical Waste Tracking Document accompanies each shipment of biohazardous waste such as sharps.

Uniform Hazardous Waste Manifest

The Uniform Hazardous Waste Manifest is the single most important tool in tracking hazardous waste from cradle (the generator) to grave (final destination). If anything goes wrong with the shipment or the disposal of hazardous waste, the generator can be tracked by the manifest and held responsible. Because this document creates liability for the generator, the signatory has to make sure that the document is filled out completely and properly.

Every shipping paper has to be kept on file for at least three years. The periods of retention are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the U.S. EPA Administrator or the DTSC (Title 22, Section 66262.40(d)).

GOGA Environmental and Safety Programs Office is the keeper of all shipping documents for the disposal of hazardous waste which was generated by the park's operations. GOGA is not

responsible for tracking hazardous waste generated by neither Park's partners nor concessionaires.

Only GOGA Environmental & Safety Programs Office representative, or it's designator, shall sign Uniform Hazardous Waste Manifests.

Other Shipping Documentation

The administration of the Non Hazardous Waste Manifest, the Bill of Lading, and the Medical Waste Tracking Document is less complicated than that of the Uniform Hazardous Waste Manifest. However, the liability of shipping waste is still attached and each shipping document has to be filled completely and accurately. The retention period for these shipping documents is three years.

20.2 Waste Analysis

Sometimes it will be necessary to conduct a test in order to determine the nature of hazardous waste. Very often GOGA has to deal with unknown abandoned wastes. In those cases when the waste is unknown, GOGA has the responsibility of identifying the type of waste through laboratory testing or other comparable methods. As a generator, GOGA is required to keep records of any test results, waste analyses, or other determinations made in identifying waste for at least three (3) years from the date the waste was last sent to on-site or off-site treatment, storage, or disposal facility.

20.3 Hazardous Waste Accumulation Log

Each GOGA Hazardous Waste Accumulation Area and Hazardous Waste Satellite Accumulation Area is required to keep a log of all hazardous waste deposited on any given day. The purpose of the log is to keep track of the wastes generated, its origin, and to ensure that GOGA maintains its Small Quantity Generator status. In addition, the log will serve as an inventory of the waste

present on-site and ensure compliance with various provisions such as labeling and waste compatibility.

Prior to each hazardous waste shipment, every Hazardous Waste Accumulation Area Manager and each Satellite Accumulation Area Manager shall submit a copy of the log to GOGA Hazardous Waste Coordinator. The copy will cover the waste accumulation activities taking place in between each waste pick up. Refer to Appendix C for a Hazardous Waste Accumulation Log.

20.4 Hazardous Waste Accumulation Area Weekly Inspection Log

In addition to keeping a Hazardous Waste Accumulation Log, each Site Manager is required to conduct weekly inspections to ensure that the waste is being stored properly and safely. Each inspection shall take place in the beginning of a work week. At any point of time, GOGA Hazardous Waste Coordinator may request a copy of an inspection log from the Site Manager. The weekly inspections are required per 40 CFR 265.174 and Title 22 66275.174. Refer to Appendix D for a Hazardous Waste Weekly Inspection Log.

20.5 Training

Hazardous waste managers are responsible for keeping all training documentation. The main GOGA administrative record of the hazardous waste and universal waste training for each employee currently resides with GOGA Environmental and Safety Programs Office. Training records shall be kept on file for at least three years.

21. SPECIAL WASTE MANAGEMENT REQUIREMENTS

Both Federal and State agencies have developed specific management requirements for certain wastes in order to promote recycling through relaxed regulatory burdens. These wastes include used oil, used oil and gasoline filters, treated wood, and lead acid batteries. Additionally, certain wastes such as light ballasts containing Polychlorinated Biphenyls (PCB) and treated wood have management standards that apply only to these specific wastes.

21.1 Used Oil

Used oil is a special type of recyclable hazardous waste and is not subject to hazardous waste regulations applicable to other recyclable materials. The used oil standards are codified in 40 CFR Part 279 and Title 22 CCR, Chapter 29 and California Health and Safety Code (HSC), Section 25250.

USED OIL INCLUDES Vehicle Crankcase Oil, Engine Lubricating Oils, Transmission Fluids, Gearbox and differential Oils, Hydraulic Oils, Compressor Oils, Turbine Oils, Bearing Oils, Electric Oils, Refrigeration Oils, Metalworking Oils, and Railroad Oils.

USED OIL EXCLUDES Antifreeze, Break Fluid, Transmission Fluids, Fuels, Grease, Solvents, Oils with flashpoint of < 100 ° F, Oils containing < 1,000 ppm total halogens, Cooking oil (edible), Oily wastewater, Oils containing < 5 ppm of PCBs, and Oils mixed with hazardous waste.

Title 22 of the California Code of Regulations calls for managing used oil as hazardous waste. Generators of used oil are required to comply with standards applicable to generators of hazardous waste (22 CCR, Chapter 29) unless the oil is "Exempt Used Oil". In order to claim the "exempt used oil" status, the generator has to meet the standards of purity per California HSC, Section 25250(a)(3)(b) and management standards per California HSC, Section 25250.1(b)(1). Refer to GOGA Hazardous Waste Management Plan for more information on "exempt used oil".

GOGA shall managed its used oil as any other hazardous waste generated by the park
In addition to labeling requirements outlined in Section 17.1 of this SOP, used oil containers have to be clearly marked with the words "USED OIL".

21.2 Lead-Acid Batteries

The batteries discussed under this section includes batteries which are equivalent in size and type to common vehicle batteries, including utility batteries and those used in emergency power supply. Because these batteries contain lead and sulfuric acid they have to be fully managed as

hazardous waste unless they are recycled. Motor vehicle batteries contain about 18 pounds of lead and about one gallon of corrosive lead-contaminated sulfuric acid. When lead acid batteries are managed to recycle, the management standards are relaxed. The management standards for lead acid batteries can be found in 22 CCR, Sections 66266.80 and 66266.81.

GOGA shall follow the following standards in managing lead acid batteries:

- Undamaged batteries shall be stored upright on a covered pallet over a non reactive, curbed and sealed surface such as coated concrete or asphalt and care should be taken to prevent the terminals from short-circuiting.

- Damaged/Leaking batteries shall be stored and transported in a non-reactive, structurally secured, closed containers such as polyethylene drums/buckets.

- A container holding a damaged battery must be labeled with content and the accumulation start date.

- Lead-acid batteries shall not be accumulated for more than one (1) year.

- If shipping more than 10 batteries at a time a Uniform Hazardous Waste Manifest or a Bill of Lading is required. GOGA personnel shall not ship more than ten (10) lead-acid batteries in order to comply with this exemption.

- Each lead-acid battery generated by GOGA shall be recycled via commercial exchange programs. The retailers in California are required to accept the trade in by a consumer per California H&SC, Section 25215.3

21.3 Used Oil, Gasoline, and Diesel Filters

Used filters, including used oil, gasoline, and diesel filters, exhibit hazardous characteristics for lead and other heavy metals and used to be fully managed as hazardous waste. Unless used oil

and fuel filters are managed according to standards outlines below, they have to be fully managed as hazardous waste. The management standards for used oil and fuel filters can be found in Title 22 CCR, Section 66266.130 and California H&SC, Section 25250.22.

The following management standards apply to used oil and fuel filters:

- Each filter has to be drained from free flowing liquids. The collected material has to be managed under standards applicable to used oil management (See Section 23.1. of this SOP). Free flowing is defined as continuous stream of liquid exiting the filter when inverted. Liquid exiting drop by drop considered not to be free flowing.

- The drained filters have to be accumulated in a closed, non leaking, rainproof container.

- Accumulation containers have to be labeled as "USED OIL & FUEL FILTERS" including accumulation start date.

- The filters shall not be accumulated for more than 1 year.

- A Bill of Lading shall be used when filters are sent to a recycling facility.

- Used drained filters have to be sent to a recycling facility.

21.4 Chlorofluorocarbons and Halon Management

Chlorofluorocarbons (CFCc) and Halons are chemicals that have been identified by the EPA as stratospheric ozone layer depleting substances (ODSs). ODSs are found in a variety of equipment used in the Park and include walk-in, household, and cold storage case refrigerators

and freezers, water coolers, chillers, and window or mobile air conditioning units, halon fire extinguishers and fire suppressant systems, and water fountains.

Repair and Service Requirements

The disposal, repair and service of the equipment containing ODSs is regulated by both Federal and State statutes. No Park personnel is allowed to repair or service equipment containing ODSs unless they have received proper training and certification from a technician-certification program approved by the EPA (40 CFR 82.34(a)(2)).

If Park chooses to certify its employees, the following requirements shall be followed:

- Notify EPA Regional Administrator of the certification once certified (40 CFR 82.42(a));
- Maintain records indicating the name and address of any facility to which refrigerant is sent (40 CFR 82.42(b)(1));
- Maintain certification records (40 CFR 82.42(b)(2));
- Other requirements may apply.

As of the date of this SOP, GOGA does not have any employees who are certified under the EPA ODSs program. Therefore, all repair and service work involving ODSs shall be contracted out. GOGA is responsible for making sure that the contractors hired to service equipment containing ODSs are certified and follow all applicable EPA provisions (see above). In addition, all services involving ODSs have to be documented. The documentation pertaining to such services shall be kept with GOGA Contracting Office, Maintenance Division (Project Manager), and Environmental Programs Office.

Disposal Requirements

GOGA has several waste streams of equipment containing ODSs including GSA equipment, DOI equipment, and abandoned equipment. No matter what the waste stream is, the following disposal requirements shall be followed whenever GOGA disposes of equipment containing ODSs:

- Refrigerants have to be evacuated from the entire unit to a recovery or recycling machine before the final disposal occurs (40 CFR 82.156(a)). GOGA personnel shall not be involved with the actual evacuation of the fluids but will make sure that the contractor hired to do the job follows the procedures.

- Halon will be recycled rather than disposed (40 CFR 82.270(d) and (e)).

- Equipment disposal, such as refrigerators, shall be done only through a certified appliance recycler per California Health and Safety Code, Chapter 6.5, Section 25211 et seq. and California Public Resources Code. A copy of the certification shall be obtained prior to disposal and routed to GOGA Hazardous Waste Coordinator.

- The evacuation of ODSs from appliances shall be done only by personnel who have passed U.S. EPA refrigerant recovery program per 40 CFR Part 82, Subpart F. Prior to evacuation of ODSs, a copy of the certification shall be obtained and routed to GOGA Environmental Programs Office.

- All documentation pertaining to the disposal of equipment containing ODSs and/or the evacuation of ODSs shall be kept on file with GOGA Environmental Programs Office.

21.5 Treated Wood Waste

Treated Wood Waste (TWW) is wood lumber commonly used in ground and water contact applications that has been removed from service. This wood is typically treated with preservatives to protect it from insects and fungal attacks. TWW contains hazardous chemicals that pose risk to human health and the environment.

Because TWW contains hazardous chemicals, at elevated levels, it is subject to California's Hazardous Waste Control Law. DTSC has developed alternative management standards (AMS) for TWW (California Code of Regulations (CCR), Title 22, Division 4.5, Chapter 34) that are based upon full hazardous waste requirements but are adjusted for the unique circumstances associated with TWW. The new AMS, which went into effect on July 1, 2007, are intended to ease regulatory burdens. Although hazardous waste generators are required to properly classify their waste through knowledge or laboratory analysis, generators of TWW can presume their TWW is hazardous waste and avoid expensive laboratory testing.

Generators can then manage their waste in accordance with the AMS, including disposal at certain non-hazardous waste landfills. Upon acceptance at these certain landfills, the TWW, at that point, becomes non-hazardous (Health & Safety Code § 25150.8).

Requirements for Businesses generating incidental TWW

Incidental generation occurs when a business generates TWW as a result of activities not associated with the business's core operation. Under AMS, businesses that "incidentally" generate TWW can comply with handling and disposal requirements by:

1. Keeping TWW segregated from other materials.

2. Storing no more than 1,000 pounds of TWW for no longer than 30 days. Incidental generators who store TWW for more than 30 days are subject to the additional requirements for businesses that are routine generators of TWW.

3. Labeling all TWW bundle/shipments with the following information:

TREATED WOOD WASTE – Do not burn or scavenge.

TWW Handler

Name:_____

Address:_____

Accumulation Date:_____

4. Taking TWW to an authorized TWW facility.

Requirements for Businesses generating TWW during normal course of business

Businesses that generate, handle, or accumulate more than 1,000 pound in 30 days engaged in activities expected to routinely generate or handle TWW, such as, construction/demolition contractors, and business and homeowners generating large quantities (i.e., accumulating more than 1,000 pounds in 30 days) must meet the requirements listed below.

1. Get prior confirmation that the solid waste facility or hazardous waste facility will accept your TWW shipment. Not all facilities accept TWW. To locate the nearest TWW facilities, contact DTSC at (916) 324-0064.

2. Store TWW off the ground by placing it on blocks, on concrete surfaces, or in containers.

3. Do not store TWW beyond the allowed limits (90 days – blocked, 180 days – concrete surfaces, 1 year – container).

4. Cover TWW during inclement weather to prevent rain water from leaching chemicals.

5. Accumulate the waste away from public access.

6. Do not burn TWW.

7. Contact DTSC if you plan to reuse the removed TWW.

8. Keep segregated TWW from mixing with other waste.

9. Label all TWW bundle/shipments.

10. Keep records for three years. Records should include: (1) name and address of the TWW facility to which the TWW was sent; (2) estimated weight of TWW, or the weight of the TWW as measured by the receiving TWW facility; and (3) shipment date.

11. Notify DTSC if you generate more than 10,000 lbs of TWW per calendar year. The following information must be submitted: (1) your name and mailing address; (2) Identification Number; (3) name and telephone number of the TWW contact person; (4) address or physical location of the TWW management activities; (5) date you exceeded the 10,000 pound limit; and (6) a statement indicating that the handler is generating more than 10,000 pounds of TWW per calendar year.

12. Arrange for shipment to a TWW facility. Disposal is allowed at a hazardous waste landfill or a qualified solid waste landfill.

13. Train your employees involved in TWW handling and keep the training records for 3 years. The training shall include applicable Cal/OSHA requirements, methods for identifying and segregating TWW, safe handling practices, requirements of AMS; and proper disposal methods.

22. TRANSPORTATION OF HAZARDOUS WASTE

Transportation of hazardous materials by GOGA personnel will be limited to transporting hazardous materials from the point of generation (Satellite Accumulation Area) to one of the designated hazardous waste accumulation sites. GOGA personnel shall not transport more than

1,001 pounds of the following hazardous materials/wastes: Corrosives, Flammable and Non Flammable Gases, Flammable Solids, Flammable Liquids, and Compressed Gases. In addition, **Golden Gate Bridge District** (GGBD) has specific provisions relating to transportation of hazardous materials over the bridge. Refer to GOGA Hazardous Waste Management Plan for additional information.

The transportation of hazardous materials from the point of generation (satellite accumulation area) to the designated accumulation area, the following standards shall be done in strict accordance with the following specific requirements:

- Hazardous materials shall be transported only in DOT approved containers. A "DOT approved container" is a container designed and constructed according to ASTM standards. A container shall be compatible with the material transported.

- Each container shall be labeled to its content. An original hazardous waste label shall be left in place.

- Containers shall be secured in place during transportation to avoid and prevent spills.

- Drums with hazardous materials shall not be stacked.

- All containers shall be transported in the upright position.

- Containers transported on the pallets shall be banded or strapped with reinforcement material.

- Incompatible materials shall not be transported on the same vehicle.

23. EMERGENCY RESPONSE PROCEDURES

Even though the provisions given in this SOP should minimize the possibilities of events that would require emergency response, accidents do happen. For general emergency response procedures please consult GOGA Emergency Response Plan, 2006.

23.1 Emergency Procedures for Hazardous Waste Accumulation Sites

Per 40 CFR, Section 265.31 and 22 CCR, Section 66265.31, all operations involving hazardous waste management must minimize the possibility of a fire, explosion, and any unplanned release of hazardous waste or hazardous waste constituents to air, soil, or surface and subsurface waters that could threaten human health, safety, and environment.

Each GOGA Hazardous Waste Accumulation Site (Fort Mason, Fort Miley, and Marin Headlands Sites) must and shall be equipped with the following:

- Internal communication or alarm system providing immediate instruction to personnel;
- A telephone, two way radio, or similar device, capable of summoning emergency assistance from either Presidio Fire Department, Park Police, and/or Park Rangers;
- Portable fire extinguishers, spill containment material such as spill kits, and decontamination equipment; and
- Water at adequate volume and pressure to supply water hose streams or foam producing equipment or automatic sprinklers or water spray systems.

The following are the additional management requirement that have to be followed to ensure rapid response when needed:

- All communications and alarm systems, fire protection equipment and decontamination equipment must be tested and maintained to ensure its proper operation in time of emergency;

- Whenever hazardous waste is being handled, all personnel involved in the operations must have immediate access to an internal alarm or emergency communication deice, either directly or through visual and/or voice contact with another employee;

- If only one employee is on the premises while the facility is operating, he/she must have an immediate access to a communication device capable of summoning help;

- An aisle space must be maintained in each containment building to allow an unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of operation in an emergency;

- At all times there must be at least one employee either on the premises or on call with the responsibility for coordinating all emergency response measures and be able to reach the facility within short period of time. This person is the Emergency Coordinator. The responsibilities of the Emergency Coordinator, per 40 CFR, Section 262.34(d)(5)(iv), are as follows in the event of a:

  - Fire, call Presidio Fire Department or attempt extinguish it using a fire extinguisher;
  - Spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;
  - Fire, explosion, or other release that could threaten human health outside the facility or when the spill has reached surface water, notify the National Response Center at 1-800-424-8802 and provide the following information:

    - The name, address, and EPA ID Number of the site;
    - Date, time, and type of incident;
    - Quantity and type of hazardous waste involved in the incident;
    - Extent of injuries, if any; and estimated quantity and disposition of recovered materials, if any.

- The following information must be posted next to the telephone at each hazardous waste accumulation site:
  - The Name and Number of the Emergency Coordinator
  - The location of fire extinguishers, spill control material, and fire alarm if present;
  - The 24-h emergency telephone number of Park Dispatch

AS A GENERAL PRECAUTION, CALL FOR HELP IMMEDIATELY AND DO NOTHING, IF RESPONSE IS BEYOUND AVAILABLE RESOURCES AND/OR THE LEVEL OF TRAINING.

23.2 Emergency Response to Releases of Universal Waste

Broken Universal Waste Lamps

The following response procedures shall be followed if a **small number** of universal waste lamps is broken:

- Sweep up debris with a small broom or a whisk broom. Sweep gently to avoid suspending phosphor powders in the air.

- DO NOT VACUUM broken lamp debris. The exhaust from the vacuum will disperse mercury into the air. If you must vacuum the debris, only vacuum after sweeping up as much debris as possible and wiping up the powder with a wet paper towel.

- Place the debris in an airtight container (a sealable bag, glass jar, or pail with a tight fitting lid).

- Seal the container and label it as "Broken Universal Waste Lamps".

- Try to disperse the mercury vapor by opening windows or doors.

- Dispose of the contained debris using the same guidelines for recycling intact waste mercury lamps.

If a **large number** of universal waste lamps break, there is a high potential for exposure to airborne Mercury. DO NOT ATTEMPT TO RESPOND. Immediately close off the area where broken lamps are and instantly notify Park Dispatch.

Broken Cathode Ray Tubes

The following response procedures shall be followed if the incident involves broken Cathode Ray Tubes:

- Immediately sweep up broken CRT and place it in a bag or a box.
- Do not dispose of the glass in the trash.
- Send the broken CRT off to a recycling facility.

Universal Waste Batteries

The following response procedures shall be followed if the incident involves leaking batteries:

- Damaged/leaking batteries must be separated and placed into a compatible container (Polyethylene drum/bucket).
- If release occurs, isolate the area and contain the spill.
- The resulting waste should be analyzed to determine proper disposal.

Mercury

A Mercury spill kit shall be available at each Hazardous Waste Accumulation Site. The following response procedures shall be followed if the incident involves a release of Mercury in the **amounts less than or equal to the amount of Mercury contained in a generic household thermometer (approximately 5 milliliters)**:

Contain the Spill

Mercury will bead up and spread readily. If the further spread of mercury beads is possible, place a barrier such as kitty litter, sand, towels etc. around the spill site.

Evacuate the Spill Area

Before people leave the spill area, be sure they had not come into contact with Mercury. Avoid traffic going through the spill area. Those who may have come into contact with mercury should be directed to a nearby location away from the spill. Once immediately outside of the spill area, contaminated articles should be removed and double-bagged.

Turn Off Ventilating or Air Conditioning Systems

If the spills happened inside of a building, if feasible, turn off heating, ventilation or air conditioning systems for the parts of the building affected by the spill and seal the ventilation openings.

Wear Personal Protective Equipment

Wear gloves (latex or nitrile), clothes and shoes that can be discarded if they become contaminated. Wear safety goggles. Place Tyvek booties, or use plastic bags as booties over shoes, to prevent your shoes from being contaminated.

Pick Up All Visible Mercury Droplets

Inspect the spill area with a bright light to help illuminate any hidden droplets. Clean up any beads of mercury by using a squeegee or index card and plastic dustpan. Push the mercury droplets away from any carpet, fabric, or porous surfaces and toward other droplets to combine them into larger droplets. Slide droplets onto a sheet of rigid paper such as index card.

Containment

Use a plastic jar or double-bagged ziplock baggie, to deposit the mercury into. If necessary, suction off the droplets using an eyedropper or syringe. Adhesive tape strips may also be used to

clean up any tiny remaining mercury droplets. Place the plastic container inside an airtight plastic bag to provide additional safety.

Set Aside Everything You Think Might Be Contaminated With Mercury

Package materials securely and label as "Mercury-Contaminated."

Continue Ventilation

For spills occurred inside of a building, ventilate as much as possible to completely air out the room or spill zone with outside air.

Additional Precautions

Never use a vacuum cleaner to clean up mercury. The vacuum will put mercury into the air and increase exposure. The vacuum appliance will be contaminated and have to be thrown away.

Never use a broom to clean up mercury. It will break the mercury into smaller droplets and spread them.

Never pour mercury down a drain. It may lodge in the plumbing and cause future problems during plumbing repairs. If discharged, it can cause pollution of the septic tank or sewage treatment plant.

Never wash mercury-contaminated items in a washing machine. Mercury may contaminate the machine and/or pollute sewage.

Never walk around if your shoes might be contaminated with mercury. Contaminated clothing will spread mercury around.

Never attempt to clean up large Mercury Spills (more than 5 mililiters).

If an incident involves a release of more than 5 milliliters of Mercury

- Isolate the area.
- Turn down temperature.
- Open windows.
- Don't let anyone walk through the mercury.
- Don't vacuum.
- Call local health department

If the incident happened in San Francisco County, notify San Francisco Department of Public health at 415-252-3800.

If the incident happened in Marin County, notify Marin Health and Human Services at (415) 499-3696.

24. Audit Program

To ensure continuous compliance and program improvements, all hazardous waste accumulation (including satellite accumulation) sites will be internally audited by the GOGA Environmental & Safety Programs Office on an annual basis. The report of findings will be sent to site's primary supervisor as well as GOGA Chief of Maintenance. Site Managers will work with GOGA Hazardous Waste Coordinator to correct and prevent findings from occurring. GOGA Hazardous Waste Audit Protocol can be found in Appendix F.

APPENDIX A – Roles and Responsibilities

Park's Superintendent

The Superintendent has the primary responsibility for ensuring that operations and facilities are in compliance with the laws and regulations affecting the management of hazardous waste.

Park Hazardous Waste Coordinator

The Hazardous Waste Coordinator is responsible for the overall implementation of the GGNRA Hazardous Waste Management Plan.

Alternate Hazardous Waste Coordinator

The alternate Hazardous Waste Coordinator is responsible for implementation of the GGNRA Hazardous Waste Management Plan in the absence of the primary coordinator.

Emergency Coordinators:

Fort Mason – Bay Grounds Supervisor
Marin Headlands – Roads Supervisor
Fort Miley – Bay Grounds Supervisor
Stinson Beach – Marin Grounds Supervisor
Muir Woods – Marin Grounds Supervisor
Ft. Barry NIKE Site – Maintenance Supervisor, Area A
Pier 1 – Work Leader

The Emergency Coordinators are responsible for initial response to hazardous waste spills in their area of operations.

Division Chiefs, Supervisors, and Project Managers:

All Chiefs, Supervisors, and Project Managers shall be responsible for ensuring that their immediate employees comply with the program.

Project Managers shall evaluate potential for hazardous waste generation by each of their project and coordinate with GOGA Hazardous Waste Coordinator for appropriate management practices.

Hazardous Waste Accumulation Site Managers:
Fort Mason – Work Leader
Marin Headlands – Work Leader
Fort Miley – Work Leader

Each Site Manager shall be responsible for implementation of all management practices applicable to hazardous waste accumulation sites as outlined in the plan.

Satellite Accumulation Area Managers:
Stinson Beach – Work Leader
Muir Woods – Work Leader
Ft. Barry NIKE Site – Site Manager

Each Site Manager shall be responsible for implementation of all management practices applicable to hazardous waste satellite accumulation sites as outlined in the plan.

GOGA Personnel:
Every GOGA employee shall be responsible for minimizing the generation of hazardous waste and shall be familiar with the plan to ensure compliance.

Non-NPS Employees:
Non-NPS Employees, such as Park's Partners and Concessionaires, are responsible for managing their own hazardous waste. Every partner that generates hazardous waste shall be responsible for submitting Hazardous Waste Management Plan to GOGA Hazardous Waste Coordinator.

APPENDIX B - Hazardous Materials/Waste Incompatibility Chart

Substances in bold have detailed example lists on the next page.

If the material contains:	It may not be stored with any of the following:
Acid (pH below 2.0)	**Caustics** (pH above 12.5) **Reactive Metals** Alcohol Water Aldehydes Halogenated, Nitrated, or Unsaturated Hydrocarbons **Reactive Organic Compounds and Solvents** Spent Cyanide and Sulfide Solutions **Oxidizers**
Caustic (pH above 12.5)	**Acid** (pH below 2.0) **Reactive Metals** Alcohol Water Aldehydes Halogenated, Nitrated, or Unsaturated Hydrocarbons **Reactive Organic Compounds and Solvents**
Reactive Metals	**Caustics** **Acids** Alcohol Aldehydes Halogenated, Nitrated, or Unsaturated Hydrocarbons **Reactive Organic Compounds and Solvents** **Oxidizers**
Reactive Organic Compounds & Solvents	**Caustics** **Acids** **Reactive Metals**
Spent Cyanide & Sulfide Solutions	**Acids**
Oxidizers	Acetic or Other Organic Acids Concentrated Mineral Acids **Reactive Metals** **Reactive Organic Compounds and Solvents** **Ignitable [Flammable/Combustible] Wastes***

*"**Ignitable**" in this context refers to substances with a flashpoint below 140 ^{o}F and includes: Combustible substances, with a flashpoint below 140 ^{o}F Flammable substances, with a flashpoint below 100 ^{o}F.

IN GENERAL:
Reactives must be segregated from **Ignitables**
Acids must be segregated from **Bases**
Corrosives should be segregated from **Flammables**
Oxidizers should be segregated from EVERYTHING
Many Corrosives are "Water Reactive"
Most **Organic Reactives** must be segregated from **Inorganic Reactives** (metals)

Ignitables **Flammables/Combustibles**	**Corrosives** **Acids**	**Bases**
Carburetor Cleaners Engine Cleaners Epoxy, Resins, Adhesives, and Rubber Cements Finishes Fuels Lacquers Paints Paint Thinners Paint Wastes Pesticides that contain Solvents (such as Methyl Alcohol, Ethyl Alcohol, Isopropyl Alcohol, Toluene, Xylene) Petroleum Solvents (Drycleaning Fluid) Solvents: Acetone Benzene Carbon Tetrachloride (Carbon Tet) Ethanol (Ethyl Alcohol) Ethyl Benzene Isopro panol (Isopropyl Alcohol) Kerosene (Fuel Oil #1) Methanol (Wood Alcohol) Methyl Ethyl Ketone (MEK) Petroleum Distillates Tetrahydrofuran (THF) Toluene (Methacide, Methylbenzene, Methylbenzol, Phenylmethane, Toluol, Antisal 1A) White Sprits (White Spirits, Mineral Spirits, Naptha) Xylene (Xylol) Stains Stripping Agents Varsol Waste Fuels Waste Ink Wax Removers Wood Cleaners	Battery Acids Degreasers and Engine Cleaners Etching Fluids Hydrobromic Acid Hydrochloric Acid Nitric Acid Phosphoric Acid Rust Removers Sulfuric Acid	Acetylene Sludge Alkaline Battery Acids Alkaline Cleaners Alkaline Degreasers Alkaline Etching Fluids Lime and Wastewater Potassium Hydroxide Rust Removers Sodium Hydroxide
	Reactive Metals	**Reactive Organic Compounds & Solutions**
	Lithium (Batteries) Aluminum Beryllium Calcium Magnesium Sodium Zinc Powder	Alcohols Aldehydes Chromic Acids (from chrome plating, copper stripping and aluminum anodizing) Cyanides (from electroplating operations) Hypochlorides (from water treatment plants, swimming pools, sanitizing operations) Organic Peroxides (including Hydrogen Peroxide) Perchlorates Permanganates Sulfides
	Oxidizers	
	Chlorine Gas Nitric Acid (>40%), aka Red Fuming Nitric Nitrates (Sodium Nitrate, Ammonium Nitrate) Perchlorates Perchloric Acid Perioxides Calcium Hypochlorite (>60%)	

DEADLY COMBINATIONS

Acids + Oil or Grease = **Fire**

Acids + Caustics = **Heat/Spattering**

Caustics + Epoxies = **Extreme Heat**

Chlorine Gas + Acetylene = **Explosion**

Flammable Liquids + Hydrogen Peroxide = **Fire/Explosion**

Aluminum Powder + Ammonium Nitrate = **Explosion**

Sodium Cyanide + Sulfuric Acid = **Lethal Hydrogen Cyanide**

Ammonia + Bleach = **Noxious Fumes**

APPENDIX C - GOGA Hazardous Waste Accumulation Log

Site Location: _____ Site's Waste Manager: _____

Site's EPA ID Number: _____

Drop Off Date	**Person Delivering Waste**	**Person Logging Waste In**	**Generation Process**	**Common Waste Name**	**Quantity (list units)**	**Storage Container and Location**	**Accumulation Requirements Met** (i.e., labeling, container integrity, compatibility)

APPENDIX D - GOGA Hazardous Waste Accumulation Area Weekly Inspection Checklist

Date:_____ Location: _____ Inspector:_____

GENERAL

Yes	No*	
□	□	Area posted with appropriate hazard and cautionary signs
□	□	Area free of spills
□	□	Secondary containment basin free of deterioration, liquid, and debris
□	□	Emergency equipment present and is in proper operating condition
□	□	All personal protective equipment is on site and is ready to use
□	□	Current Hazardous Waste SOP is available on site
□	□	Emergency notification procedures are posted by the telephone
□	□	Total volume of waste does not exceed 6,000 kilogram limit

CONTAINERS

□	□	All containers labeled with completed hazardous waste labels visible for inspection (Waste name, Accumulation Start Date, EPA ID No., Hazards etc.)
□	□	No waste containers present over the 180-day accumulation limit
□	□	Containers compatible with waste being stored
□	□	Containers closed except when adding or removing waste
□	□	Adequate separation of incompatible waste is provided
□	□	Ignitable and reactive waste isolated from sources of ignition and at least 50 f from property line
□	□	Adequate aisle space between rows of containers/pallets (36 to 48 inches)
□	□	Containers are in good condition and are not leaking

*Describe corrective action needed: _____

Date corrective action completed: _____

APPENDIX E - GOGA Hazardous Waste Inventory

Date: _____ Location: _____

Site's Waste Manager: _____ Site's EPA ID Number: _____

No.	Waste Stream (Common Name)	Amount	Units	Notes

APPENDIX F - GOGA Hazardous Waste Audit Protocol

Golden Gate NRA
Annual Hazardous Waste Audit Checklist

Date:_____ **Location:**_____ **Site Manager:**_____

Auditor:_____ **Corrective Actions Due Date:** _____

1. Hazardous Storage Areas Are Clearly Marked:	Y	N	N/A
2. All Incompatible Wastes Are Stored Separately:	Y	N	N/A
3. Hazardous Waste Storage Shelves Are Braced & Have Lip Guards:	Y	N	N/A
4. All Containers Are Properly Labeled:	Y	N	N/A
5. Hazardous Waste is not Stored On Site for More than 180 Days:	Y	N	N/A
6. Hazardous Waste is Stored in appropriate and compatible containers:	Y	N	N/A
7. Empty Containers Are Marked as "EMPTY":	Y	N	N/A
8. All Hazardous Waste Containers are closed when Not in Use:	Y	N	N/A
9. All Hazardous Waste Containers have Secondary Containment:	Y	N	N/A
10. Spill Kit is on site and is readily available:	Y	N	N/A
11. Weekly Inspections are Performed:	Y	N	N/A
12. Hazardous Waste Accumulation Log is up to date:	Y	N	N/A

Notes:

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX G – ABC of Hazardous Waste Management

A. All GOGA personnel that come in contact with hazardous waste must follow the practices outlined in GOGA Hazardous Waste Management SOP.

B. Hazardous Waste Accumulation Area Managers are responsible for day to day operations.

C. A determination must be made whether the waste managed is hazardous.

D. All accumulation areas must conform to the requirements outlined in the SOP.

E. Hazardous waste must not be accumulated for more than 180 days.

F. Universal waste must not be accumulated for more than 1 year.

G. Hazardous and universal waste must be properly labeled at all times.

H. Each accumulation area must not accumulate more than 13,200 lbs of waste.

I. Every hazardous waste containers must have secondary containment and be compatible with waste accumulated.

J. When not in use, hazardous waste containers must be closed at all times.

K. Weekly inspections of hazardous waste accumulation areas must be carried out.

L. Hazardous Waste accumulation log must be kept up to date.

M. Training requirements must be met.

N. Shipping papers can only be signed by GOGA Hazardous Waste Coordinator or its designee.

O. Each accumulation site must have a designated emergency response coordinator in writing.