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Hazardous Waste Guidance
for
EPA ID Numbers & Manifest Signature Authority

- EPA ID Numbers are issued by both the US EPA and DTSC (California ID Number). The number identifies each handler of hazardous waste on manifests and other paperwork, and enables regulators to track waste from "cradle to grave."

- Installations have permanent EPA ID Numbers which must be used for all Navy and co-generated hazardous wastes.

- Contractors must obtain a California ID Number for any contractor-generated waste. Contract specifications may dictate if the contractor and subcontractors manage the waste as separate from a Navy EPA ID Number.

- If a contractor must obtain an EPA ID number for work being performed on a federal installation, the contractor is not authorized to name the federal government (especially not vessels) as the generator or owner of the hazardous waste.

- Contractors are encouraged to use the installation-specific EPA identification number whenever possible. This will require coordinating with installation environmental offices in advance of shipping the waste.

- The use of EPA ID Numbers triggers many reporting requirements, additional fees, and potential fines. Always coordinate with the installation environmental office or duly authorized installation environmental service provider.

- Only duly authorized, appropriately trained individuals, ***with delegated signature authority*** may sign hazardous waste manifests. For government-generated waste or co-generated waste, signature authority is limited to specific individuals.

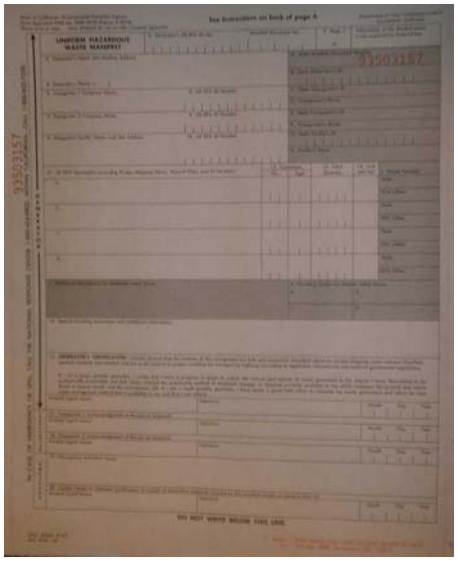
Refer to Appendices 7, 8 &11 for Region Policy, which provides more detailed guidance.

Hazardous Waste Guidance for HAZARDOUS WASTE & SPECIAL WASTE MANIFESTING

HAZARDOUS WASTE

- Commands and Activities that transport or have Hazardous Waste transported off-base for storage or disposal must use a properly completed Uniform Hazardous Waste Manifest.

- Effective September 5, 2006, only the federal hazardous waste manifest forms may be used. These forms are to be used on a national basis and there have been some revisions to manifesting procedures. More information and training is at: http://www.dtsc.ca.gov/IDManifest/Manifests.cfm



- Per OPNAV 5090 and CNRSW Hazardous Waste Policy, only authorized individuals may sign a Hazardous Waste Manifest using a government owned EPA ID number, regardless of who provides the manifest or transports the waste.

SPECIAL WASTES

FOR SPECIAL WASTE MANIFESTING REFER TO PART II SPECIAL WASTE MANAGEMENT

- Commands or Activities that transport or have Special Waste (such as Treated Wood) transported off-base for disposal must use a properly-completed Special Waste Manifest.

- Command or Activity personnel may complete and sign a Special Waste Manifest.

- Special Waste Manifest and Disposal Request Forms may be obtained through your installation Environmental Office.

Hazardous Waste Guidance
for
DUMPSTER & LANDFILL RESTRICTED ITEMS

Below is a list of many items, materials and products that are **PROHIBITED** from being placed into dumpsters, roll-offs, or trash receptacles destined for landfill disposal. This list is not considered all-inclusive.

- **ANY HAZARDOUS WASTE**
- Pesticides, Herbicides, and Fertilizers.
- OBAs, EEBDs, Oxygen Candles or igniters.
- PCB-contaminated or containing items or products.
- Non-Empty Containers of Paint, POLs, or Adhesives.

- Paint Chips & Paint Contaminated Debris (unless otherwise specified).
- Cathode Ray Tubes (CRTs).
- Wood that has been Treated, Painted, or contains Cresol.
- Asbestos and Asbestos-Containing Materials.
- Batteries (Dry Cell, Nickel Cadmium, Lead-Acid etc.).
- Fluorescent, Mercury Vapor, Metal Halide and similar type lamps or tubes.
- Non-Empty Aerosol Containers.

- Abrasive Blast Media and Debris.
- Used Oil Filters/Used Fuel Filters.
- Terrazzo contaminated with paint (pending analytical results).
- Scrap Metal (cuttings, borings, shavings & grindings that meet the definition of hazardous waste).
- Solvent-Contaminated Rags & Debris.
- Toner Cartridges (non-empty).
- Any industrial materials or items that contain free liquids.
- Any item, device, or material that is considered special or medical waste.
- Oil or POL saturated rags or debris

If you have any questions regarding items placed into dumpsters, contact your installation Environmental Office.

Hazardous Waste Guidance for SHIP-TO-SHORE OFFLOAD PROCEDURES

- Determine if the contents of each package are unused or spent, use the Profile Guideline Summary to categorize the materials and determine what paperwork is needed. Although OPNAVINST 5100.19D requires ships to turn in waste via 1348 forms, Clean Harbors will perform that function by aiding in the completion of Waste Turn-In forms. Clean Harbors will supply blank Turn-In forms, hazardous waste storage labels, and empty containers that meet DOT regulations as needed.

- Radioactive waste or material, biohazardous wastes, medical wastes, compressed gas cylinders, explosives, ammunition, pyrotechnics, trash, garbage, and food are PROHIBITED for acceptance as hazardous wastes.

- All hazardous waste must be labeled in accordance with local, state, federal and Navy regulations. Utilize overpack containers for damaged containers and containers that cannot be properly secured.

- Hazardous waste must be packaged and staged in a manner that completely segregates incompatibles. Containers must be in good condition, tightly sealed, and free from leaks. Lids must have all bungs, nuts and bolts in place to prevent the release of hazardous waste and volatiles.

- Include any available MSDS sheets and analytical information, and verify that labeling of contents are consistent with documentation. If there is more than one applicable MSDS, a copy of each may be attached to the outside of the container. At a minimum, a list of applicable MSDSs must be marked/attached to each container.

- Containers larger than 5 gallons will be opened by Clean Harbors (if considered safe to do so) to verify the contents. Opening of some containers may require special consideration, i.e. special equipment or PPE.

- Certain hazardous wastes will require lab analysis to resolve uncertainties and for proper disposal of the hazardous waste item. This can significantly impact the final cost of hazardous waste disposal; therefore, it is important to maintain accurate documentation. The following types of waste will generally require analysis: Mixed or consolidated hazardous wastes from processes, spent products (i.e. cleaners, degreasers, etc.), unknown wastes, non-routine and open purchase hazardous waste lacking documentation.

Hazardous Waste Guidance
for
USED OIL MANAGEMENT

- **USED OIL** includes: engine, transmission, gear/gearbox, hydraulic, turbine, bearing, refrigeration, compressor, transformer (electrical) or metalworking oils.

- **USED OIL** does not include: antifreeze, brake fluids, solvents, fuels, grease, tank bottoms, oily wastewater or oils contaminated with halogens (1000ppm) or PCBs (5ppm), with flash points less than 100 degrees F or mixed with any RCRA-listed hazardous waste.

- Used oil in any quantity shall be labeled, stored, disposed or otherwise managed as hazardous waste prior to testing and disposal or recycling.

- Used oil should be tested annually to ensure proper waste determination and profiling.

- Above ground tanks or containers accumulating used oil and fill pipes that transfer used oil to underground tanks shall be labeled "Used Oil – Hazardous Waste", and include the initial accumulation start date and the name and address of the generator.

- Commands recycling used oil at their location must follow the hazardous waste recycling requirement.

Note: Used oils may be managed as recyclable material provided that the provisions of the California Health and Safety Code, beginning with Section 25250.1 or 25143.2 for onsite recycling are followed, provided that all certification and record keeping requirements are met.

Hazardous Waste Guidance for USED OIL and FUEL FILTERS

- Disposal of used oil and fuel filters in the trash or at municipal landfills is prohibited.

- Used oil and fuel filters must be stored, labeled, and managed as hazardous waste or must be managed to meet *ALL* the following requirements:
  - Used filters must not contain any free flowing product – (free flowing means a continuous stream, not drop by drop).
  - If the filter has a device that impedes drainage, that device must be manipulated to allow the oil to be removed.
  - Containers must be labeled "Drained Used Oil (or Fuel) Filters", the initial accumulation start date or the date that the filters were first received.

- Filters must be stored in containers that are rainproof, non-leaking, and have tightly sealed lids.

- Maximum storage limit is up to 1 year for less than 1 ton of drained filters or up to 180 days for greater than 1 ton.
- If filters are transported off-base, a "Bill of Lading" or Hazardous Waste Manifest must be used and retained for 3 years at the generator location. If filters are turned-in as hazardous waste, turn-in documents must be maintained for 3 years.
- Any residual petroleum remaining in the container which held used oil or fuel filters shall be collected and managed as hazardous waste.

Hazardous Waste Guidance
for
OILY RAGS & DEBRIS

- Environmental regulations require Oil/POL *saturated* rags & debris to be managed as hazardous waste unless the items are being recycled (such as Red Rags) at an authorized recycling facility.

- Non-saturated rags or debris contaminated with Oils/POL may be managed as solid waste and disposed of into the trash.

- Any rags or debris which becomes saturated with Oils/POLs shall *not* be disposed of in the trash and is considered hazardous waste.

- For the purpose of the guidance only; POLs are identified as:

  - Oils (all types)
  - Hydraulic Fluids
  - Greases/Graphites

- Rags that become saturated with these types of substances must be accumulated in lined containers. The containers must be emptied daily, and the contents taken to a hazardous waste accumulation area for proper management and disposal.

- Rags & debris contaminated with substances other than POLs (such as fuels, pesticides, paints and solvents) must be identified with the specific contaminant and managed separately.

- Additionally, rags & debris *contaminated* with POLs that contain PCBs or with hazardous waste must be managed as hazardous waste.

- Plastic oil containers may be recycled or disposed of in the trash if the container meets the empty container requirements as defined in Guidance for "Contaminated Containers".

- Porous containers that become saturated with Oils/POL must be managed as hazardous waste.

Note: If no liquid can be released from the oily rags or debris by hand pressure, and the item is not contaminated with a hazardous waste as indicated above, then it may be managed as trash.

Hazardous Waste Guidance for USED ABSORBENT

- Absorbent materials are only considered contaminated when they come in contact with and absorb a hazardous material or substance.

- Contaminated absorbent may be re-used to clean up another mishap where a similar material or substance was spilled (i.e. POLs).

- Absorbent contaminated with specific hazardous materials such as battery acid, hydrogen peroxide, or pesticides should be promptly disposed of as hazardous waste.

- Contaminated absorbent material is classified as hazardous waste when it becomes unable to absorb the spilled substance or material, becomes saturated with a spilled substance or material, or reaches the concentration level that exceeds the regulatory limit for that specific material or substance.

- Absorbent materials, which absorb a hazardous waste with a listed characteristic, must be managed as hazardous waste.

- Usable contaminated absorbent materials can either be placed into containers for future use and labeled “Usable Absorbent,” or managed as the appropriate waste type. Labels must also include name/type of contaminant already absorbed.

- Segregate absorbent materials based on the hazardous properties of the contaminant, for example, flammable materials separated from corrosive, etc.

- Saturated absorbent materials containing free liquids must be placed in a container that will prevent spills, such as a drum. Dry absorbent materials may be bagged.

Note: If a shop consistently generates the same type of absorbent waste the initial testing of a representative sample may be used as a basis in determining when the used absorbent reaches the concentration level and becomes hazardous waste.

Hazardous Waste Guidance
for
AUTOMOTIVE TYPE SPENT LEAD ACID BATTERIES

- The following management requirements apply to persons that generate, store, or transport off-site spent lead acid batteries.
  - If more than one ton of batteries are stored at the generator location, the maximum storage time is up to 180 days.
  - If less than one ton of batteries are stored at the generator location the maximum storage time is up to one year.
  - Generators shall use a “Bill of Lading” or “Manifest” to transport lead acid batteries to the Base recycling office, or to a person or persons who stores, reuses, recycles or reclaims batteries.
  - Generators must retain copies of the manifests or bill of lading for shipments of lead acid batteries for a period of 3 years.

Note: *ONLY* duly authorized, appropriately trained individuals, and with *delegated signature authority* may sign manifests. Refer to the Hazardous Waste Guidance for EPA ID Numbers & Manifest Authority for more specific information.

- Individual batteries or containers holding non-damaged batteries must be labeled with indelible ink, paint or other weather resistant materials, and managed in a manner that prevents the container from tipping, spilling or leaking.
- Generators shall obtain a receipt or other documentation for spent batteries provided to vendors. These records must be readily available upon request.

- Damaged or leaking batteries shall be managed as hazardous waste.
- Damaged batteries must be stored in non-reactive (polyethylene/plastic, *not* metal or cardboard), structurally secure, closed container labeled with the date when the first battery was placed into that container.

Note: Batteries missing one or more caps are considered damaged.

Hazardous Waste Guidance for
SPENT DRY CELL BATTERIES

- Spent or discarded alkaline or other types of dry cell batteries are to be managed as hazardous waste *or* universal waste and are not to be placed or disposed of into the trash.

- Effective February 2006, there is no exemption for household-generated waste batteries.

- All batteries regardless of type shall be stored, accumulated or transferred in a manner that minimizes the possibility of fire, explosion, or any release of hazardous substance into the environment.

- DRMO and recyclers may reject the batteries if they do not arrive in DOT-conforming packaging.

- Batteries shall be segregated by type (i.e. NiCad, NiMH, alkaline, silver-zinc, etc.) both during storage and transport. Storing piles of mixed types of batteries in a bucket is NOT acceptable.

- Batteries fall under different DOT hazard classes. Lithium and lithium-ion batteries are Class 9. Potassium hydroxide batteries are Class 8.

- DOT regulations for packaging require that most *rechargeable batteries* (with the exception of 9-volt batteries) be kept from short-circuiting and generating heat from terminals touching. Batteries can be bundled together to form a "puck" and applying clear tape over the positive terminals. Alternatively, batteries can be individually packaged in plastic sealable baggies.

- DOT has recently determined that spent *non-rechargeable* alkaline, NiCad, and nickel-metal hydride batteries described as "Batteries, dry, sealed, n.o.s.", and not specifically covered by another proper shipping name, up to 9-volts, are not likely to generate dangerous quantities of heat, or to short-circuit when they are transported. *Rechargeable* batteries less than 9-volt also do not need to be kept from short-circuiting during transport. Lithium batteries and Lead Acid batteries *do not* qualify for the transport exemption.

- Batteries managed as Universal Waste shall be labeled as "Used Batteries" or "Universal Waste – Batteries".

- Containers of batteries shall be labeled for hazard classification along with the date the batteries began to be accumulated.

- Wear appropriate PPE when dealing with leaking or damaged batteries. These must be separated (by type) from non-damaged batteries.

Hazardous Waste Guidance for
ASBESTOS CONTAINING MATERIALS

- Asbestos Containing Materials (ACM) include, but are not limited to: floor tile, roofing materials, acoustic materials, pipe, boiler, and duct insulation, and ceiling panels.

- Materials containing "friable asbestos" in concentrations equal to or greater than 1% must be managed as hazardous waste.

- Friable means: any ACM that may be crumbled, crushed, pulverized, or reduced to a powder or similar type debris by hand pressure.

- Friable ACM must be wetted and double-bagged for storage and transfer.

- ACMs containing friable asbestos in concentrations less than 1% may be sent to a municipal solid waste landfill for disposal (Pending landfill approval).

- For demolition & restoration operations, determine the quantity and type of ACM (friable/non-friable) before starting the project and retain the documentation for your records.

- Under CERCLA, any person or operation that releases 1 pound or more of friable asbestos into the environment must comply with regulatory reporting requirements within 24 hours.

NOTE: All ACM (friable or non-friable) sent to municipal solid waste landfills for disposal must be managed under **Part II** of this plan, Special Waste Management.

Hazardous Waste Guidance for
MERCURY CONTAINING WASTES

- Mercury is a regulated hazardous substance, and when any item or device which contains mercury or mercury compounds is discarded, abandoned or is no longer usable, the mercury then becomes regulated as a hazardous waste or universal waste.

- Mercury and mercury compounds can be found in major appliance light switches, thermometers, thermostats, dry cell batteries, blood pressure monitoring instruments, fluorescent light tubes, and vehicle hood and trunk light switches.

- Mercury containing switches must be removed only by a Certified Appliance Recycler. These switches must be properly managed before any appliance, vehicle, or other item is discarded. If these items are turned in to an authorized recycling center or buy back program the removal of the mercury is not required. The mercury will become the responsibility of the receiving entity.

- All removed switches being discarded and any broken or no longer functioning or usable mercury containing devices in which the mercury or mercury compound cannot be removed shall be managed and disposed of as hazardous waste if not being recycled or a universal waste if being recycled.

- Per BUMEDINST 6260.30A, dental amalgam scraps (both wet and dry) do NOT qualify as a recyclable material, and are considered hazardous waste. All dental scraps must be transferred to the DRMO in a tightly-closed unbreakable container. Label the container and all documentation as “RCRA Hazardous Waste-Dental Scrap Material.”

- Chair side dental vacuum pump filters (traps) contain mercury amalgam sludge/water and must be disposed of as hazardous waste. Do not rinse the collection devices over drains or sinks.

Hazardous Waste Guidance for COMPRESSED GAS CYLINDERS

- Compressed gas cylinders are exempt from hazardous waste requirements when the pressure within the cylinder approaches atmospheric pressure.

- Gas cylinders **may not** be intentionally punctured, vented, or discharged into the environment to avoid regulatory requirements.

- Empty/intact gas cylinders shall not be placed into trash or scrap metal containers.

- Per hazardous waste regulations, aerosol containers (such as spray paints, lubricants or dye penetrants) are not compressed gas cylinders.

NOTE: With the exception of **acetylene bottles**, which may contain **asbestos**, if the gas cylinder has been cut in half, has the pressure valve removed, or can be verified (visibly) that the cylinder is empty, the cylinder may then be managed as scrap metal.

- With the exception of gas cylinders attached or associated with bar-b-que grills, all cylinders must meet the hazardous material standards of being:
  - Closed when not in use.
  - Labeled with the cylinder's contents.
  - Be in good condition and capable of holding the product.

- Pending disposal, gas cylinders shall be managed as hazardous waste or material depending on the final disposition of the cylinder through Stoody, DRMO, or FISC.

- For compressed gas cylinder disposal, regardless of size, contact :

Stoody Industrial and Welding Supplies @ (619) 234-6750
Or
DRMO if the cylinders cannot be accepted by Stoody (FISC contractor).

Hazardous Waste Guidance for
OZONE DEPLETING SUBSTANCES (Halons/Freon/CFCs)

- Ozone Depleting Substances (ODS) include halons, refrigerants (such as Freon), and solvents. Because these substances contain bromine and chlorine which deplete the ozone layer, they are no longer available locally, though they remain necessary for Naval mission-critical uses. ODS is available in both liquid and vapor (gas) forms, and if not disposed of properly, ODS will break down into a variety of acutely toxic products, being very dangerous even in low concentrations.

- Freon is a trade name for a Dupont product, and the generic ODS you use may be labeled as carbon tetrachloride (Freon-10); Trichloromonofluoromethane or CFC-11 (Freon-11); Dichlorodifluoromethane or CFC-12 (Freon-12); 1, 1, 2-trichloro-1, 2, 2-trifluoroethane, CFC-113, TTE, or "flush" (Freon-13); chloroform (Freon-20). Other trade names include Genetron, Isotron, Ucon, and Arcton.

- ODS are used as refrigerants, fire extinguishing agents, local anesthetics, aerosol propellants, blowing agents for foams, chemical/synthetic intermediates, and heat transfer mediums, degreasing solvents and for dry cleaning.

- DoD policy mandates that all ozone depleting substances (ODS) be turned-in to the ODS Reserve in Richmond, VA through the DDDC San Diego, 2680 Woden St, Bldg. 3322, San Diego, CA 92136, after cylinders are properly secured with safety caps and manifested using DD Form 1149. However, local reuse options may be available.

- Used filters which have come in contact with ODS must be treated as a hazardous waste and you need to keep proper records of their disposition.

ODS cylinders at ODS Reserve, Richmond, VA

- Halon fire-suppression systems (e.g. Halon 1301) are under extremely high pressure, and actuation systems must be deactivated and safety caps must be installed. In the absence of manufacturer's safety caps, anti-recoil devices must be specially installed prior to packing and transport. Appropriate PPE is required for personnel deactivating cylinders.

- The Defense Supply Center maintains a website with DoD Ozone Depleting Substances Reserve background information and general instructions: http://www.dscr.dla.mil/ExternalWeb/UserWeb/aviationengineering/OZONE/index.htm . These instructions *must be read and understood* before attempting to deactivate or transport any ODS containing equipment.

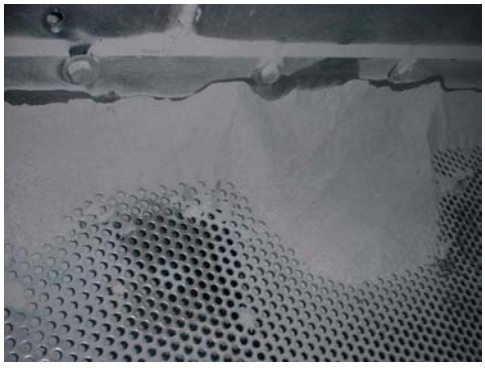
- Local reuse options may be available. Contact your local FISC HAZMIN Center to discuss current redistribution possibilities.

Hazardous Waste Guidance for
ABRASIVE BLAST MEDIA

- Steel shot, aluminum oxide and similar types of abrasive blast grits may be collected, returned to the process, reused and managed as material until the grit becomes unable to be used for its intended purpose.

- Once blast grit becomes unusable or spent, it must be managed as hazardous waste **or** excluded recycled material, depending on its properties, constituents and ability to be recycled.

- All blast grit emitted from blast rooms or booths (usable or spent) must be immediately collected, containerized, and labeled. Any grit not collected and containerized is considered discarded and presumed to be hazardous waste.



- Used blast media collected for *reuse* in the blasting process shall be labeled "***Usable Blast Media***," "Blast Media," or in some other manner that identifies the grit as a usable material.

- Spent or otherwise non-useable blast media must be labeled as hazardous waste or excluded recycled material depending how it will be managed.

- Activities using blast grit such as plastic media being recycled at an off-site facility must review the hazardous waste recycling, Section 3.9 of this plan for possible notification requirements for recyclable waste pursuant to the health and safety code.

Hazardous Waste Guidance for PROCESS ASH RESIDUALS

- Residual ash generated by combustion operations such as baking, or burning-off of paints or other coating may need to be managed as hazardous waste.

- Ash residuals may contain heavy metals from the burned-off coating (lead, chrome, and zinc) in concentrations that exceed regulatory limits for hazardous waste. Often the parts are first treated in a corrosive solution, making the resulting ash corrosive.

- In addition, dioxins or vinyl chlorides may be present if plastics (PVC) or other chlorinated compounds were placed in the incineration process. Because of the widespread use of PCBs used in paint pigments intentionally or as an impurity, the residual ashes need to be analyzed to determine if regulatory thresholds have been exceeded.

- When analyzing samples, request Title 22 metals and corrosivity. Consult with the lab and disposal facility representative for the proper analysis for dioxins.

- After the ash has been analyzed and determined not to be a hazardous waste it may be disposed of as an Industrial Solid Waste at a municipal landfill under Special Waste provisions. (Refer to guidance regarding Special Waste).

- Lab analyses must be retained for a minimum of 3 years for waste stream determination.

Hazardous Waste Guidance for POLYCHLORINATED BIPHENYLS

- Older electrical equipment or components (pre 1979) may contain PCB material. PCBs appear as an amber colored or dark oily liquid that resembles motor oil and may have an odor similar to mothballs.

- PCBs may also be known by several trade names, such as; Aroclor, Askarel, Eucarel, Pyanol, Clorinol, Nepolin, Saf-T-Kul, EEC-18, Elemex and Intereen.

- PCBs become regulated as hazardous waste when the concentration is equal to or greater than 5 ppm (parts per million) in liquids and 50 ppm in non-liquids.

- PCB concentrations of 5,000 ppm or greater is considered extremely hazardous waste.

- Transformer cases or other similar items must be managed as hazardous waste if the material they contained had concentrations of PCBs greater than or equal to 5 ppm. These items must be labeled with the date they were removed from service and must be disposed of within 30 days.

- Electrical equipment (capacitors, light ballast or fixtures) with a concentration of 5 ppm or greater of PCBs are to be managed as hazardous waste.

- Fluorescent light ballast that have *no* concentration level stated or are *not* marked "PCB Free" or "NO PCBs" should be considered and managed as hazardous waste.

- Non-PCB ballasts may contain the regulated chemical Diethylhexyl Phthalate (DEHP). This chemical may be found in ballast F-40 & F-96. These ballast must be managed as hazardous waste.

- Light ballast that contains no PCBs, DEHP or other liquids may be managed as trash.

- Marine wire cable sheathing is known to contain PCBs and these must be managed as a hazardous waste.

- EPA has recently determined that PCBs can be present in caulk used in windows, door frames, ceilings, masonry columns and other masonry materials buildings built or renovated between 1950 and 1978. Please see separate PCB in Caulk guidance for more information.

Note: If you are unable to determine if your electrical equipment contains PCBs, contact your installation Environmental Office for assistance.

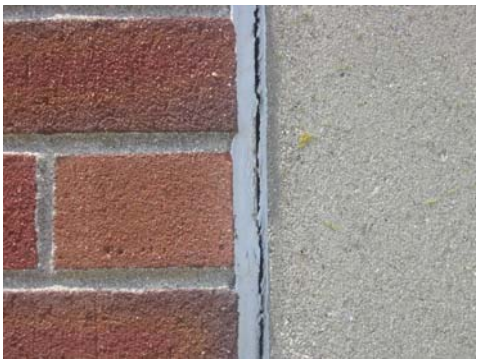
Hazardous Waste Guidance for PCBs in Caulk

- EPA has recently determined that polychlorinated biphenyls (PCBs) may be present in caulk used in windows, door frames, masonry columns and other masonry materials in many buildings built or renovated between 1950 and 1978. PCBs may also be present in caulked joints in concrete water storage basins. PCB-containing caulk may contaminate adjoining materials such as wood and soil.

- EPA recommends the testing and removal/ replacement of peeling, brittle, cracking, or deteriorating caulk. The testing method is EPA Method 8082 (approximately $150 per sample).

- For buildings constructed or renovated between 1950 and 1978, the caulking can be assumed to contain PCBs, and the base could proceed directly with the removal and proper disposal of the material as hazardous waste, without the delay of additional testing.

- PCBs can be transmitted to the air during the removal process, therefore proper safety and PPE procedures should be used during removal and handling. The work area must be contained as much as possible to prevent PCB-containing caulk dust from getting into the surrounding environment. Older caulking has a tendency to have become brittle, increasing the risk of creating hazardous dust during removal activities. The PCB-containing debris should be wrapped in heavy-duty plastic bags. Wrap waste building components, such as windows and doors, in heavy plastic sheeting and tape shut.



- PCB-containing caulk is considered *PCB bulk product waste* if the concentration of PCBs in the caulk is equal to or greater than (≥) 50 ppm. The definition includes masonry, wood, metals, and other building materials that have been serviced or coated with PCBs. Follow TSCA requirements to dispose of PCB-bulk product, which includes using a RCRA hazardous waste landfill.

- PCBs ≥5 to 49 ppm are managed as California-only (non-RCRA) hazardous waste.

- Older caulking may be also be associated with surfaces containing lead-based paint, and the guidance for lead-based paint needs to be considered as well.

- Additional information regarding PCB-containing wastes can be found at: http://www.epa.gov/osw/hazard/tsd/pcbs/pubs/caulk/caulkdisposal.htm and in the Guidance Document for PCBs.

- EPA Region 9 is working with the Navy to provide more detailed guidance in managing the Navy's demolition and related activities in compliance with the Toxic Substances Control Act and its implementing regulations. If PCBs are found during building survey, Project Managers should contact EPA Region 9: John Beach (415) 972-3347 for PCB Remediation work plan review/approval.

Hazardous Waste Guidance
for
DISCARDED CONSUMER AND INDUSTRIAL DEVICES

- A/C Units, compressors, water fountains, various types of electrical equipment, and refrigerators may contain hazardous materials that must be removed prior to disposal or recycling. This work must be performed by a Certified Appliance Recycler (CAR). A current list of CARs may be found at: http://www.dtsc.ca.gov/HazardousWaste/Mercury/upload/Approved-CAR-List.pdf

- These devices may contain:
  - Oils, Dielectric Fluids
  - Refrigerants (CFCs)
  - Mercury Switches
  - PCBs & DEHPs (older devices)

- Once removed from the device these hazardous materials become classified as relinquished or discarded, and must be reused, recycled or managed as hazardous waste.

- Halons, Freons, CFCs or other refrigerants shall not be intentionally vented into the environment.

- Those items turned over to the Sustainable Solid Waste (SSW) Program are subsequently sold to a CAR and the SSW Program retains the records.

Note: The owner is responsible for paying for having any hazardous material removed from devices prior to disposal or recycling.

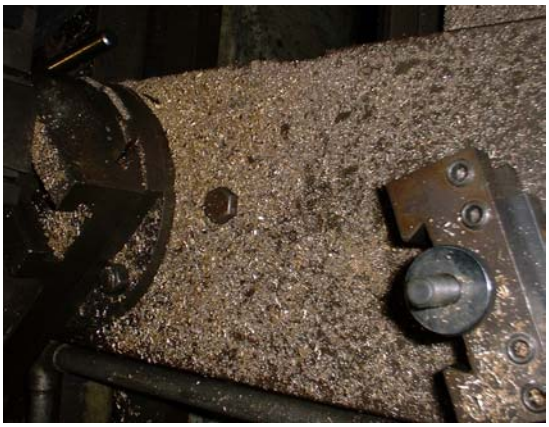
Once the material is removed and the material will be disposed of as a hazardous waste, the Environmental Office will be responsible for the disposal cost.

- For those items not turned over to the SSW Program, prior to disposal or recycling, contact Facilities or PWC Code 500 to have your refrigerant removed or recovered by a CAR.

- Once all hazardous materials are removed, the device can be discarded, recycled, or placed into scrap metal containers.

Hazardous Waste Guidance for SCRAP METAL

- **Scrap metal is defined as one or more of the following:**
- Manufactured solid metal objects and products.
- Metal workings, including cuttings, trimmings, grinding, shavings, or sandings with a particle size greater than 100 micro meters.



- Solid metal residues of metal products.
- Empty containers meeting the requirements of Guidance for Contaminated Containers

- Scrap metal does *NOT* include the following:
- Spent lead-acid batteries, elemental mercury or water reactive metals such as sodium, potassium and lithium.
- Metal products that have been painted and the paint has deteriorated to the point where it is chipping, peeling, or flaking, and when tested, would be classified as hazardous waste.

Once the loose material (as shown above) is removed, the metal product would revert to scrap metal.

- Magnesium or Beryllium borings, trimmings, grindings, shavings or sandings.
- Metals contaminated with oil that is a hazardous waste and is free-flowing.
- Waste metal products or byproducts that are sludges, fine powders(less than 100 micrometers), semi-solids or in liquid solutions that are hazardous wastes.

Note: Metal not meeting the definition of “Scrap Metal” must be managed and disposed of as hazardous waste.

Hazardous Waste Guidance for
CONSTRUCTION DEBRIS CONTAINING LEAD BASED PAINT

- Painted construction debris containing lead or other heavy metals above the regulatory limits is not considered to be hazardous waste if the paint is not peeling, flaking, chipping or what is considered "finely divided". Debris that contains lead or other heavy metals in the paint is not required to be managed as Hazardous Waste or Special Waste if the paint is "Tightly Adhered" to the substrate.

- Construction debris may be transported to a landfill as solid waste in containers or bins that have covers or tarps.

- Any paint (chips or dust) that separates from the debris must be collected and evaluated to determine if the paint is a hazardous waste, by having a lab analyze a sample using a Title 22 metals test method. First analyze to compare with the Total Threshold Limit Concentration (TTLC). If the results are ten times greater than the Soluble Threshold Limit Concentration (STLC) values or twenty times greater than the Toxicity Characteristic Leachate Procedure (TCLP) values, conduct additional testing. A Waste Extraction Test (WET) is needed to compare to the STLC values. If the STLC results are lower than the TCLP values, there is no need to perform the TCLP testing.

- While pending analysis, paint chips must be containerized and identified as "Paint Chip Pending Analysis"

- Most commonly, the metals lead, chromium, nickel and zinc cause paints to be considered hazardous waste.

- In August 2006, Cal-EPA DTSC began the process of drafting regulations for revising the TTLC for lead. The TTLC level for lead may be set at 250 or 500 mg/kg. Regardless, this change will affect Lead Based Paint (LBP) construction debris.

- A waste that does not meet California hazardous waste criteria but has 350 mg of Lead per kg of waste must still be manifested per HSC 25157.8

- PCBs can be present in caulk used in buildings built or renovated between 1950 and 1978. Refer to separate PCB in Caulk guidance for more information.

Note: If paints or debris are hazardous waste they must be managed and disposed of accordingly and not sent to the landfill for disposal. If you are unable to determine if your painted debris is hazardous contact the installation Environmental Program for assistance.

Hazardous Waste Addendum
for
PAINTS AND PAINTED DEBRIS

Paints come in a variety of toxicities, from haze gray to anti-foulant to latex. Each has its own hazardous properties and management requirements. The following is a general outline of the different groupings of paints and their waste management requirements.

Water-based, more commonly known as latex paints, are widely used in architectural applications and are the least toxic group of paints. Notice the term "Least Toxic" and not non-toxic. Some latex paints contain fungicides or algaecides as additives to inhibit the growth of these organisms, and may fail the California hazardous waste test for acute aquatic bioassay. Never rinse or pour latex paint onto the ground or into drains or storm drains. Rinsing these types of paints from paintbrushes or painting equipment into the sanitary sewer is acceptable under normal conditions, if the paint does not contain fungicides or algaecides.

Pouring liquid latex paint into a deep sink is prohibited. Additionally, intentionally air drying latex paints for disposal as solid waste (trash) by leaving the lid off is prohibited by environmental law, although dried paintbrushes, tape, tarps, or other non-hazardous debris contaminated with dried latex paint may be placed into the trash.

Solvent and oil-based paints. These paints normally have flashpoints that cause them to be classified as ignitable or flammable, and contain heavy metals such as chrome, cadmium, and zinc that are regulated as hazardous waste if specific levels are present. Even when dry, these heavy metals still remain within the paint's chemical composition. In addition, when these paints are removed from a surface they can absorb or retain contaminants from the removed substrate. Paint chips require lab analysis to determine their composition and are almost always classified as hazardous waste.

Also, even debris contaminated with a significant amount (20% or more coverage) of dried paint having heavy metals needs to be managed as hazardous waste and must not be placed into the trash.

Epoxies or other two-part coating systems are unique. When mixed and in liquid form these paints have higher flashpoints and are not classified as flammable. They do, however, fail the aquatic bioassay test for toxicity and must be managed as a hazardous waste. On the other hand, once dried and fully cured epoxy paints do not normally have any characteristics of toxicity and may be placed in the trash. However, as mentioned above, paint removed from a substrate (including epoxies) may become hazardous. As a best management practice, always test your paint/ paint chips before disposal as MSDSs do not normally identify ingredients below 1% (10,000 ppm), and heavy metals are regulated at much lower concentrations. Remember that any container, which contains dried epoxy paint, must comply with the requirements of Guidance for Contaminated Containers.

Anti-foulant paints. These types of paint in some cases are pesticide variants and are even registered as pesticides with the USEPA. Anti-foulant paints contain ingredients that kill marine organisms and contain the heavy metal copper. Discarded paints, paint chips, and all debris from these paints must be managed as hazardous waste.

Remember it is your responsibility as a generator to test your paint and paint debris before disposal and determine the appropriate management technique. If you have questions regarding proper disposal of paints contact your installation Environmental Office.

Hazardous Waste Guidance for
RESINS, URETHANES & EPOXY PAINTS

- Liquid, unhardened or uncured resins, two-part epoxy, paints and urethane specialty coatings, when disposed of, shall be containerized, labeled, and otherwise managed as hazardous waste.

- Resins, epoxy paints and urethanes may be managed as solid waste and placed into the trash, provided that:
  - Resins, urethanes and paints are hardened and fully cured.
  - Are not contaminated or mixed with other hazardous materials or wastes.
  - Do not contain other ingredients that would classify them as hazardous waste.
- Containers holding resins, epoxy paint and urethanes must be managed in-accordance with Guidance for Contaminated Containers.

- Non-hazardous debris (cardboard, rags, tarps, paintbrushes etc.) contaminated with resins, paint, or urethane may also be managed as solid waste and placed into the trash when the material becomes completely dry.

- Resins, epoxy paints and urethanes SHALL NOT be intentionally mixed, spread, blended or otherwise dried for the sole purpose of disposal as solid waste.
- Epoxy paint chips should be managed as hazardous waste. These paint chips may have absorbed or come in contact with other contaminants or substrates that would cause them to be classified as hazardous.

See additional guidance for paint debris management.

Hazardous Waste Guidance for
LATEX PAINT AND DEBRIS

- Non-hazardous debris contaminated with dried latex paint may be managed as solid waste and disposed of into the trash.

- For the purpose of this document, non-hazardous debris is cardboard, drop cloths, clothing, rags, tape, roller pad, brushes, paint trays, and similar items not contaminated with non-latex paints, oils, solvents or hazardous waste.

- Paintbrushes, roller pads or other painting equipment containing latex paints may be rinsed and cleaned with water into deep-sinks that discharge into industrial sewers.

- Rinsing out or cleaning paint brushes, roller pads or other painting equipment on the ground or into storm drains is strictly prohibited.

- Latex paint chips shall be managed as hazardous waste unless lab analysis determines otherwise. These chips may have absorbed or come in contact with other contaminants that would cause them to be classified as hazardous.

- Discarded cans or containers of latex paint must be managed in accordance with Guidance for Contaminated Containers.

- Liquid or semi-solid latex paint or containers holding such paint shall not be placed, poured or otherwise discarded into deep sinks, trash containers, or dumpsters.

NOTE: Check all latex paints MSDSs. If the paint being applied contains fungicides or algaecides, this guidance does not apply. Manage all residual discarded paints, debris or contaminated items for these paints as hazardous waste.

Hazardous Waste Guidance for LOW-LEVEL RADIOACTIVE WASTES (LLRW)

- LLRW is any discarded or non-usable item or device that contains a low-level radioactive material, such as specifically labeled or marked:
  - Smoke Detectors
  - Combat Systems Electron Tubes
  - Radioactive Calibration Samples
  - Helicopter Counter-Balance Weights
  - Deck Markers
  - Radium Dials
  - Tritium Exit Signs (label with location where the sign[s] were installed)

- LLRW shall not be disposed of in the trash. LLRW that has been mixed or contaminated with hazardous waste shall be managed and disposed of as hazardous waste. Note: Special arrangements will have to be made with a hazardous waste disposal facility authorized to accept Mixed Waste. CNRSW Hazardous Waste Facilities do not accept mixed waste.

- Once identified as LLRW (MSDS or manufacturer) the item or device shall be containerized (if possible) and labeled, such as: “Exit Signs,” “Smoke Detectors,” etc. Do NOT use hazardous waste or excluded recyclable labels.

NOTE: Afloat commands are required to contact their respective Logistic Support Representative (LSR) for the removal and disposal of LLRW.

- The Radiologic Affairs Support Program is the lead office for managing Navy LLRW. The main instruction is NAVSEA S0420-AA-RAD-010, Radiological Affairs Support Program (RASP) Manual. Additional
- information is provided in OPNAVINST 6470.3, Naval Radioactive Materials Permit Program and NAVSEAINST 5100.18A, Radiological Affairs Support Program. The Navy Low-Level Radioactive Waste (LLRW) Program is covered by OPNAVNOTE 5100 of 7 April 1992 and the DoD LLRW Charter.

- Starting the process begins with accessing the RASO website at: https:// wwwa.nko.navy.mil/portal/navsea/raso/ home/lowlevelradwaste. Here you will find the following:

-LLRW Disposal Request Letter - Sample
-Point Of Contacts Excel Spread Sheet
-Inventory Excel Spread Sheet
-Instructions For Filling Out This Paperwork

Coordinate with your Activity Radiation Safety Officer (RSO), the individual at each activity responsible for ensuring that all radiation practices and procedures are followed.

This includes the proper identification, control, storage, and disposal of LLRW.

Within the San Diego Metro area, contact your base Radiation Safety Officer for specific instructions regarding LLRW identification and turn-in procedures.

Hazardous Waste Guidance for Electronic Waste Management

- Electronic Devices, Cathode Ray Tubes (CRTs) and CRT glass that are no longer usable are called e-waste. In California, e-waste is managed as a Universal Waste in order to promote recycling.

FOR PROPER MANAGEMENT OF UNIVERSAL WASTE, REFER TO PART I, SECTION IV OF THIS PLAN, HAZARDOUS WASTE MANAGEMENT

- E-Waste often contains heavy metals including, but not limited to, lead, mercury, copper, chromium, cadmium, and zinc. These substances are removed from e-waste for recycling or disposal as hazardous waste.

- Universal wastes must be recycled at an authorized facility, taken to a CNRSW hazardous waste facility or otherwise managed as hazardous waste and may not be placed or discarded in solid waste (trash) containers.

- CRTs must be handled, stored or otherwise managed in a manner to reduce the possibility of being broken or otherwise damaged.

- E-waste includes any device with a circuit board, including but not limited to:
  - TVs
  - Computers
  - Cell phones
  - CD/DVD players
  - Stereos
  - Computer peripherals
  - Calculators
  - Some minor appliances

- All universal wastes shall be segregated and stored under the requirements for hazardous waste management, and not be accumulated for longer than *6 months* at the generator location.

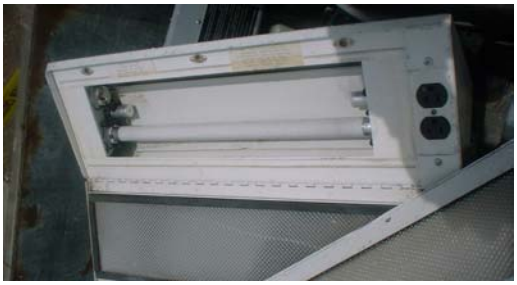
- Turning unwanted electronics into DRMO is good environmental stewardship. It allows the Federal government to reduce waste, responsibly reuse valuable resources, and protect our environment.

- Universal wastes may be transported to another universal waste handler or authorized disposal facility without using a hazardous waste manifest. However, the transporter must comply with Department of Transportation DOT shipping requirements for hazardous materials by using a bill of lading or other approved shipping document. In addition, universal wastes shall not be classified as hazardous waste or waste on the shipping document.

Note: For more information on CRT management, refer to *the Hazardous Waste Guidance for Cathode Ray Tubes* section of this plan.

Hazardous Waste Guidance for FLUORESCENT & HIGH DISCHARGE LIGHTING WASTE

- All spent, intact fluorescent light tubes (including green end capped “Phillips Altos”) and high intensity discharge (HID) lamps (mercury, sodium or metal halide) that are not being recycled shall be managed as hazardous or universal waste.



- Broken or spent fluorescent tubes and HID lighting wastes shall be labeled and managed as hazardous waste.

- Intact tubes or lamps shall be managed in a manner that minimizes the possibility that they may become broken or otherwise damaged.

- All lamps or tubes being disposed of shall not be accumulated at the generator location for longer than 90-days.

- Fluorescent tubes or HID lamps, broken or intact, shall NOT be disposed of into trash containers, dumpsters, or other solid waste receptacles.

- Incandescent light bulbs are not classified as hazardous waste and may be disposed of into the trash.

- Spent, non-broken lamps shall be labeled “Used Lamps”, Waste Lamps” , and whenever possible, placed into the original boxes.

NOTES:

The long standing DTSC Policy allowing the disposal of 25 fluorescent tubes per day in dumpsters **HAS BEEN REPEALED**. Any disposal of above mentioned light tubes or lamps as solid waste is a violation of California Environmental Law.

As of February 9, 2004, green-tipped “Phillips Alto” light bulbs are no longer considered non-hazardous. They must now be managed as universal or hazardous waste.

As of February 8, 2006, there is no longer a household waste exemption for universal wastes.

Hazardous Waste Guidance for

Light Emitting Diode (LED) Bulbs

- All spent, intact LED bulbs shall be managed as universal waste due to their potential lead and arsenic content.

LED bulbs

- Intact bulbs shall be managed in a way to prevent them from becoming broken or damaged.

- Broken LED bulbs shall also be labeled and managed as universal waste. The broken LED bulbs shall be placed in a sealable plastic bag.

Broken LED bulb

- Although there is no distinction between intact or broken LED bulbs by USEPA or DTSC, be aware that if/when the LED bulb is broken any other material generated (e.g. cleanup supplies) would be identified as hazardous waste if identified as hazardous waste (i.e. arsenic exceeds allowable TCLP).

- All bulbs being disposed of shall not be accumulated at the generator location for longer than 1 year.

- Spent LED bulbs shall NOT be disposed of into trash containers, dumpsters, or other solid waste containers.

- Incandescent light bulbs are not classified as universal or hazardous waste. Used incandescent bulbs may be disposed into trash containers.

Incandescent bulbs

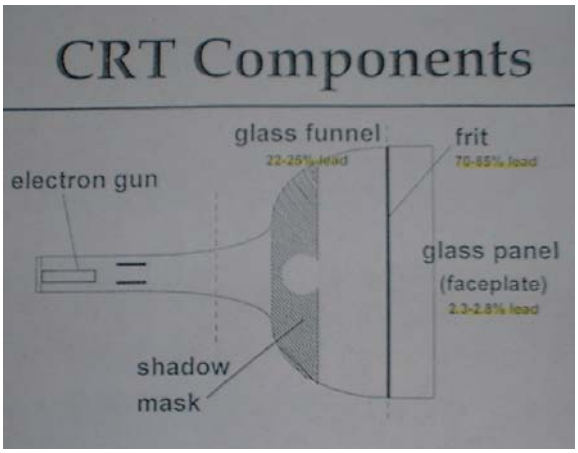
CONTACT BASE ENVIRONMENTAL FOR GUIDANCE ON ALL QUESTIONS

Hazardous Waste Guidance
for
CATHODE RAY TUBES

- Spent, discarded or unserviceable CRTs (not being recycled) including computer monitors, vacuum tubes, television picture tubes or similar type tubes are considered hazardous waste unless lab analysis or other documentation determines otherwise.

- Depending on the size and year manufactured, CRTs can contain between 1.5 and 6 pounds of lead, lead compounds (lead oxide) or lead containing materials (leaded glass).

- CRTs must be handled, stored or otherwise managed in a manner to reduce the possibility of being broken or otherwise damaged.



- Broken CRTs shall be labeled and managed as hazardous waste and may not be discarded in the trash or other solid waste receptacles.

- Intact, spent or discarded CRTs shall be labeled "Waste CRTs", "Used CRTs" or "Universal Waste-CRTs," and the label shall include the accumulation start date.

  (You are *not* required to use a hazardous waste label for intact tubes labeled in this manner).

- All CRTs being recycled or disposed of shall not be accumulated at the generator location for longer than 90-days.

Hazardous Waste Guidance

IS IT TREATED WOOD WASTE ?

- Treated woods are woods that have been impregnated, coated or infused with chemicals, preservatives or poisons to reduce the deterioration of these woods due to weather, insects, or other specific elements to which these woods are exposed. Woods are often treated with preservatives that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) or with chemicals to prevent rotting or decay, and when disposed, are known as Treated Wood Waste (TWW).

FOR PROPER IDENTIFICATION OF TREATED WOODS REFER TO PART II, APPENDIX D OF THIS PLAN, SPECIAL WASTE MANAGEMENT

- TWW includes chemically-treated or pressure-treated toxic constituents such as pentachlorophenol, creosols (creosotes), and chromium copper arsenate. Most TWW exhibits RCRA or non-RCRA HW characteristics.

- Landscaping Stakes, Pressure-Treated Woods (green or yellow), and other chemically-treated woods such as batten boards, have been classified as Hazardous Waste.

- Pier Pilings, Railroad Ties, Wooden Crates, Mammal Pens, USDA-APHIS pallets and some construction debris may be classified as TWW. Such types of TWW may be considered non-hazardous, depending upon sample analyses.

- Green or yellow pressure-treated woods have pressure indentations indicating that they have been chemically treated.

- Fire/Flame Retardant Woods (FRX) typically do not use FIFRA products. However some FRX woods are using dyes to readily distinguish the type of product. MSDS information on those dyes indicates heavy metals may be present up to 1%. Therefore, analytical testing for heavy metals such as copper, nickel, chromium and zinc may be necessary.

- Utility poles which have only been used for the transmission of electricity, gas and telephonics, and on which additional coatings have not been applied, may qualify for certain testing exemptions.

- For more information on TWW, refer to Treated Wood Waste Management & Disposal guidance, Part II, Appendix D, and the Cal-EPA DTSC website: Treated Wood Waste.

Hazardous Waste Guidance
For
TREATED WOOD WASTE MANAGEMENT & DISPOSAL

- Woods treated with preservatives that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) or with chemicals to prevent rotting or decay, are known as Treated Wood Waste (TWW).

FOR PROPER MANAGEMENT OF TREATED WOODS REFER TO PART II OF THIS PLAN, SPECIAL WASTE MANAGEMENT

- Fire/Flame Retardant Woods (FRX) typically do not use FIFRA products. However, some FRX woods are using dyes to distinguish the type of product, and heavy metals may be present up to 1%. Therefore, analytical testing for heavy metals such as copper, nickel, chromium and zinc may be necessary.

- Alternative management standards for TWW have been in effect since July 2007. Some requirements include segregated, covered storage that prevents ground contact, away from public access, labeled as "TREATED WOOD WASTE – Do not burn or scavenge," and shall include the generating activity name, address, and accumulation date.

- TWW generation has notification requirements and reuse has restrictions. Saw dust from cutting TWW that meets hazardous waste criteria will not be accepted at the landfill for disposal and must be managed and disposed of as Hazardous Waste.

- TWW may be disposed of using a bill of lading instead of a uniform hazardous waste manifest. Some landfills are approved to accept TWW under special permit. Any disposal of hazardous TWW from a military installation must be coordinated with the installation environmental office.

- Miramar landfill only accepts Non-Hazardous (NH) TWW. Typically a Special Waste request is submitted and once approval has been granted, the NH-TWW can be sent to the landfill using a Special Waste Manifest and solid waste Disposal Coupons obtained from the CNRSW Solid Waste Program Office.

- ROICC/FEAD, contractors/executing agents may sign Non-Hazardous Waste Special Waste Manifests for TWW only with test results or proof of non-hazardous characterization.

- For more information on TWW, refer to Cal-EPA DTSC website: Treated Wood Waste

Hazardous Waste Guidance for EXPIRED CHEMICALS & MATERIALS

- Hazardous materials or chemicals become regulated as hazardous waste when:
  - They are discarded, regardless of their expiration date
  - They pose a threat to human health or the environment
  - They are mislabeled or inadequately labeled (unless corrected within 10 days)
  - Their packaging or container is damaged (unless corrected within 4 days) regardless of the expiration date.

- The material or chemical is a "retrograde material," meaning it will not be used or distributed for its original or intended purpose and has exceeded the specific or recommended shelf life after the specified date:
  - One year after the date when the material becomes a retrograde material or chemical.
  - After one year, the material or chemical is a "recyclable material" which is managed as a hazardous waste unless it falls into a provision of the Health and Safety Code for reuse or recycling.

- All excess/expired hazardous materials must be reviewed by FISC and DRMO for reuse before turning in to the HW Facility for disposal.
- The expired/excess material must be segregated based on compatibility and hazardous classification (flammable/ oxidizer/ corrosive/reactive/poison), and any leaking containers must be placed in a container that will prevent release. Refer to compatibility chart for additional info: (http://www.sefsc.noaa.gov/HTMLdocs/appendix-H.htm)
- The applicable MSDS must accompany the waste at the time of pick up.

Note: Used or excess hazardous material, chemicals or substances, expired or not must never be disposed of into any solid waste (trash) containers or receptacles

Hazardous Waste Guidance for
HAZARDOUS MATERIALS MANAGEMENT

- Hazardous Material Business Plans and Unified Facility Permits are required for shops that store hazardous materials exceeding 200 cubic feet of a compressed gas, 500 pounds of solid, or 55 gallons of a liquid at any one time.

- Business Plan refresher training must be conducted and documented annually. Newly assigned personnel must be trained on the Business Plan requirements prior to the annual refresher review.

- Ensure all containers are identified with readable labels or markings; replace any labels that are unreadable, torn, faded or missing

- Keep all containers closed with proper fitting lids, seals or gaskets. Replace or repack any containers that are leaking, in poor condition, or that have torn bags or boxes.

- Separate ignitable, corrosive, or oxidizing material in storage lockers or cabinets.

- During hazardous waste compliance inspections, the inspector has the authority to review and inspect hazardous material lockers for the following areas of compliance:

- Is the material labeled? Material that is unlabeled or inadequately labeled or that cannot be identified is considered waste and must be managed in accordance with its hazardous properties or characteristics, unless the material can be identified and be properly labeled within 10 days.

- Is the material container in good condition? Damaged containers either badly rusted, with large dents or not otherwise structurally sound must be re-packaged within four days to avoid being classified as a waste.

- Is the container closed? Containers must remain closed when the product is not being used.

- A material is classified as “Retrograde” and is considered a hazardous waste if the material is not used or returned to the manufacture 1 year after the materials expiration or extension date.

Hazardous Waste Guidance for PESTICIDE CONTAINER MANAGEMENT

Certification and Licensing

- Any person applying pesticides is required to be licensed or certified by the Dept. of Pesticide Regulation Licensing and Certification Program as a "Qualified Applicator." A copy of the certificate must be readily available or can be checked at http://www.cdpr.ca.gov/docs/license/currlic.htm

- For more specific information regarding pest management and certification, contact the NAVFAC Pest Management Consultant, Michael Medina at 532-1157.

Note: Personnel applying products in work spaces for personal relief and military housing residents applying pesticide for personal use are exempt from this certification requirement.

Approval & Record Keeping

- All pesticides to be used on DoD installations shall be submitted for approval to the NAVFAC Pest Management Consultant via your respective pest management coordinator. There are no coordinators within the San Diego Metro area. Records shall be maintained on all pesticides applied at the facility and submitted to the pest management coordinator. Within the San Diego Metro area, these records are submitted to the NAVFAC Consultant Mike Medina.

Container Management

- Empty containers that held liquid pesticides may be recycled or managed as solid waste after the container has been triple-rinsed. Only non-acute hazardous waste (not P or U listed) pesticide product containers may be rinsed. Acute hazardous waste pesticides are P or U listed in 22 CCR 66261.33 (examples are warfarin, strychnine, and toxaphene). Triple-rinsing must be performed by a licensed pesticide applicator, and the effort must follow prescribed regulatory techniques of 22 CCR 66261.7 (e) and (f) such that the containers will subsequently be used as a recyclable material in a solid waste disposal program. However, any rinsed material from pesticide containers must be applied in the pest control process and not disposed of into the sewer system, storm drains, or discharged onto the ground.

- All aerosol containers that contain or contained pesticides, regardless of whether they are empty or not, shall be managed as hazardous waste, unless it can be proven that the pesticides do/did not contain extremely or acutely listed hazardous wastes.

- Bags that contain non-acute hazardous waste (not P or U listed) pesticides may be disposed of as trash after all the material has been removed.

Note: Any pesticide container that is not completely empty when discarded must be managed as a hazardous waste

Hazardous Waste Guidance for
AEROSOL CONTAINER MANAGEMENT

- Aerosol containers which contain food and personal hygiene products are exempt from these requirements.

- Aerosol containers which contain hazardous materials or substances that are no longer usable, when discarded shall be managed as hazardous or universal waste.

- Aerosol containers with defective, missing, clogged or non-functioning valves, which contain hazardous substances, shall also be managed as hazardous waste and not placed into the trash.

- Once all hazardous materials and substances are removed, empty aerosol containers can be recycled and placed into scrap metal containers.

- EMPTY: Means that all hazardous materials, products and propellants have been used during normal application of the aerosol produce.

- All aerosol containers that contain/contained pesticides, regardless of whether they are empty or not, shall be managed as hazardous waste, unless it can be proven that the pesticides do/did not contain extremely or acutely listed hazardous wastes.

- Aerosol containers shall not be intentionally vented, punctured or otherwise depleted into the environment to achieve the status of empty.

Note: Compressed gas cylinders, regardless of size or content are not classified as aerosol containers and must be managed accordingly.

Hazardous Waste Guidance for CONTAMINATED CONTAINERS

- All containers or liners that previously contained hazardous materials must be EMPTY before being placed into recycling bins or the trash.
- Containers or liners include; drums, bottles, buckets, plastic bags, boxes or similar items.
- Empty: means that ALL of the remaining material must be removed by chipping, scraping, pumping or draining. Certain rinsing is allowed (refer to Pesticide Management Guidance) and triggers permit requirements.
- Containers or liners greater than 5 gallons in capacity must be marked empty and dated with the date that the container or liner became empty and managed (recycled or disposed) of within 1 year.

- For containers over 5 gallons in capacity, a record must be maintained of the person or vendor that the container was sent to. Turn-in records are acceptable if the containers are turned in for hazardous waste disposal.
- Porous containers such as cardboard, paper or fabric must be disposed of as hazardous waste if they come in contact with a hazardous waste or absorb and become saturated with a hazardous material.

- Compressed gas cylinders are empty when they reach atmospheric pressure through normal operations, venting is not authorized.
- Empty containers or liners less than 5 gallons in capacity may be placed into scrap metal or recyclable plastic bins.
- Household type cleaning materials (cleaners or disinfectants) containers less than 5 gallons are exempt and empty when they are rinsed and the rinse water is used in the cleaning process.
- Under no circumstances are any acute hazardous waste listed (P or U coded) pesticide product containers to be placed into solid waste or recycling bins. If not hazardous waste or recyclable then cleaned (triple-rinsed by licensed pesticide applicator) and emptied pesticide containers must be disposed to sanitary trash. (refer to Pesticide Management Guidance for specific requirements).

  Note: If all of the residual material cannot be removed or the container or liner held acute or extremely hazardous material, then the container must be disposed of as hazardous waste.

Hazardous Waste Guidance for Pharmaceutical and Personal Care Product Management

- A pharmaceutical is any drug or medicine used in medical treatment. Both over-the-counter (OTC) and prescription medicines are included.
- Personal care products include any product used for personal health or cosmetic reasons. Sunscreen, cosmetics, fragrances, vitamins, supplements, and ***any*** medicated personal use products are included.
- Pharmaceuticals must be turned-in to the Reverse Distribution Program (RDP) or Guaranteed Return Program (GRP). Products are redistributed, incinerated, or returned to the manufacturer.
- Personal care products should be disposed of as medical waste, hazardous waste, or solid waste depending on the product.

FOR ADDITIONAL INFORMATION REFER TO PART IV OF THIS PLAN, MEDICAL WASTE MANAGEMENT

- Pharmaceuticals and personal care products (PPCPs) are waste if expired, damaged, contaminated, or were not used for intended purposes.

- Unused or waste PPCPs shall be disposed of in the following order of priority:
    1. Turn-in to RDP.
    2. Turn-in to GRP.
    3. Dispose as medical waste.
    4. Dispose as hazardous waste.
    5. Dispose as solid waste.

DO NOT FLUSH PHARMACEUTICALS DOWN A TOILET

- Hazardous pharmaceuticals include epinephrine, chloraseptics, and some antineoplastics.
- PPCPs requiring special management include, but are not limited to:
    - Antihistamines
    - Nicotine patches, gum and lozenges
    - Aspirin, acetaminophen and ibuprofen
    - Pain medications
    - Blood pressure medications
    - Antibiotics
    - Decongestants
    - Anti-fungal products
    - Psoriasis and eczema topical treatments
    - Products that contain lidocaine
    - Dandruff shampoo
    - Antiperspirant deodorant
    - Antiseptics such as iodine, betadine and alcohol based hand wipes
    - Antibacterial soap
    - Nail polish and remover
    - Lotion containing vitamins
    - Aftershave
    - Eyeliner
    - Hair styling gel

Note: Orthophthalaldehyde (OPA) and glutaraldehyde products are non-RCRA hazardous waste due to acute aquatic toxicity, and must be disposed of as hazardous waste unless neutralized onsite with glycine. Healthcare facilities are exempt from tiered permitting regulation when this process is carried out onsite.

CONTACT BASE ENVIRONMENTAL FOR GUIDANCE ON ALL QUESTIONS

Hazardous Waste Guidance For

Trauma Scene Waste Management

- Trauma scene waste" means waste that is a regulated waste, as defined in Section 5193 of Title 8 of the California Code of Regulations, and that has been removed, is to be removed, or is in the process of being removed, from a trauma scene by a trauma scene waste management practitioner.

- According to the California Medical Waste Management Act (MWMA), Section 117776, a trauma scene is defined as:

  - "Trauma scene" means a location soiled by, or contaminated with, human blood, human body fluids, or other residues from the scene of a serious human injury, illness, or death.

  - A location may include, but is not limited to, a physical structure that is not fixed geographically, such as mobile homes, trailers, or vehicles.

- "Trauma scene waste management practitioner" means a person who undertakes as a commercial activity the removal of human blood, human body fluids, and other associated residues from the scene of a serious human injury, illness, or death, and who is registered with the department (of Public Health).

- Because the definition of trauma scene waste depends on its management by a Trauma Scene Waste Management Practitioner, persons who volunteer to clean such sites (a neighbor or family member, for instance) and are NOT specifically hired to clean a trauma scene do not fall under the Act .

REMOVAL TRANSPORTATION AND STORAGE REQUIREMENTS FOR TRAUMA SCENE WASTE

- Trauma scene waste shall be removed from the trauma scene immediately upon completion of the removal phase of a trauma scene waste removal operation.

- Trauma scene waste shall be transported to a permitted medical waste transfer station or treatment facility pursuant to subdivision (d) of CA MWMA Section 118000, or may be stored in a dedicated freezer at the business location of the trauma scene waste management practitioner for a period of not more than 14 days, or as otherwise approved by the CA Department of Public Health.

- The California Department of Public Health list of registered trauma scene waste practitioners is found at:

- **http://www.cdph.ca.gov/certlic/medicalwaste/Documents/MedicalWaste/Practitioners.pdf**

CONTACT BASE ENVIRONMENTAL FOR GUIDANCE ON ALL QUESTIONS

Hazardous Waste Guidance for

Waste Leather Product Management

- The tanning of leather with chromium salts has been used since the 19th century. Today 85-90% of the worldwide leather production is tanned with chrome, the remainder is tanned using vegetable products as a less toxic alternative.

- Trivalent chrome is the form used for tanning leather, however depending on the quality of the tannins used by the leather tannery, contaminations of toxic chrome (VI) are possible and likely according to the leather industry.

- Occupational leather items you may encounter at work include:

- Welding gloves

- Leather chaps and aprons

- Leather utility belts, holsters and keepers

- Steel toed boots

- Used occupational leather products including personal protective equipment should be assumed to be chrome leather tanned. While the US Consumer Product Safety Commission has determined that the use of chrome tanned leather products is safe for the user, it is the potential for chrome to leach from discarded leather products in landfills which is the issue of concern.

DETERMINATION FACTORS FOR HW CLASSIFICATION

- If the soluble chromium as determined by the TCLP is less than 5 mg/L, and the soluble chromium as determined by the STLC test equals or exceeds 560 mg/L, and the waste is not otherwise identified as a RCRA hazardous waste, then the waste is a California non-RCRA hazardous waste.

- Testing of all occupational leather items being used by CNRSW is not feasible or cost effective. Results of random testing of these articles by Navy activities in the Pacific Northwest show that numerous occupational leather products fail RCRA TCLP.

- Unused or waste occupational leather items being disposed shall be placed in plastic bags, labeled with a HW label, placed in an appropriate HW accumulation area and disposed as a presumed RCRA HW. The contents/composition field of the HW label should read, “Waste chrome tanned leather item D007.” In the hazardous properties section the “Toxic” box should be marked with an X, in addition to the usual information required by this instruction.

CONTACT BASE ENVIRONMENTAL FOR GUIDANCE ON ALL QUESTIONS

Hazardous Waste Guidance For

Flares and Pyrotechnic Perchlorate Materials

- A flare is a type of pyrotechnic that produces a brilliant light or intense heat without an explosion. The basic form is a tube packed with explosive chemicals that burn very brightly or give off smoke, and is used to attract attention in an emergency.. The main ingredients of flares include strontium nitrate (which provides the color—it burns with a bright red or orange-red flame), potassium perchlorate or potassium nitrate (as powerful oxidizer, which makes the strontium burn rapidly), and/or an energetic fuel such as magnesium (which burns very brightly) or aluminum is added to give the extra energy needed for a fast combustion.

- California outlines the following as "Best Management Practices" in CA CCR, Title 22, Section 67384.8, which are applicable to Public Safety Professionals.

- Road safety flares shall be used in a manner that minimizes releases of perchlorate to the environment. The following practices shall be implemented to the extent practical without impeding immediate safety considerations:

- Flares should be allowed to burn completely;

- Flares used in an emergency incident shall be limited in number and duration necessary to ensure safety.

- All personnel who routinely use flares in the normal course of employment should receive instruction on the potential environmental hazards associated with the use of perchlorate materials and on the perchlorate Best Management Practice requirements of CCR 22 Section 67384.8. Note it is recommended to document this training as it is a Navy Environmental Quality Assessment finding if not completed.

- Marine safety flares shall be used in a manner that minimizes releases of perchlorate to the environment.

- Within twenty-four (24) hours of a public display of fireworks or the use of dangerous fireworks, the pyrotechnics operator, in addition to complying with title 19 of the California Code of Regulations, section 1003, shall, to the extent practical, collect any stars and un-ignited pyrotechnic material found during the required inspection of the entire firing range.

- Unused, expired flares are a reactive hazardous waste and should be turned in for proper disposal. Because they are reactive, they must be properly segregated and kept dry in the HW accumulation area while waiting disposition.

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