

NHROTA\_Aspect rank\_April 2009

Program	Name	Process_Id	Process Name	Description	Ranking
Hazardous Materials	Chemical storage - fuels/oils	1025	Building Infrastructure - Operations & Maintenance		141
Hazardous Materials	Chemical Usage - amalgam	1031	Dental Cleaning and Surgery	Pre-measures dental amalgam capsules used for cavity repair. Daily average of 6 to 20 amalgam fillings applied daily.	146
Hazardous Materials	Chemical Usage - acids and corrosives	1024	Hazardous Material (Chemical) Usage & Storage	Various acid corrosive product usage concentrated in building 1802 laboratory & pharmacy spaces.	185
Hazardous Materials	Chemical Usage - formalin/xylene/alcohol	1024	Hazardous Material (Chemical) Usage & Storage	Very small amounts of formalin used to preserve tissue specimens sent to Germany for pathological analysis; typically 30 ml in small sealed specimen cups. Isopropyl alcohol used throughout patient care clinics & wards for disinfection.	185
Hazardous Materials	Chemical Usage - general laboratory chemicals	1070	Lab - Microbiology	Almost all volatile & liquid chemical product volume expended / evaporated during product usage--with very little remaining waste residue. Aspect managed via CNH Rota HAZMAT Control Program Policy,	141
Pesticides	Chemical Usage - pesticides	1059	Grounds Maintenance	Approximate annual application volume of pyrethrum-based insecticides = 165 liters over NH Rota's exterior landscaping. These environmental aspects managed vis Facilities dept. contractor Quality Assurance rep. per Naval Station Rota Pest Control Management Plan, NH Rota HAZMAT Control Program Policy, HAZMAT Spill SOPs, Hazardous Waste disposal procedures, OSHA "Right-to-Know" Std., NFPA & OSHA chemical storage regs and/or FGS for Spain, etc.	151
Hazardous Materials	Chemical Usage - photo development chemicals	259	Radiology - Wet Film Processing	Approximately 20 gallons of X-ray film fixer and developer solutions historically consumed in the closed-circuit automated processor each month; which ceased in 2009 when the digital mammography unit came online (40 to 50 mammogram films had been processed monthly).	141
Hazardous Materials	Chemical Usage - photo development chemicals	1074	Radiology - Mammography	Approximately 20 gallons of X-ray film fixer and developer solutions historically consumed in the closed-circuit automated processor each month; which ceased in 2009 when the digital mammography unit came online (40 to 50 mammogram films had been processed monthly).	141
Hazardous Materials	Chemical Usage (Worker Safety) - formalin/xylene/alcohols	1077	Mortuary Operation	Commercial embalming fluids composed of significant amounts of formaldehyde, methanol, xylenes, etc. for tissue preservation. General ratio of "30 - index" strength fluid is one gallon per 50 lbs. of case gross body weight. Due to formaldehyde being a suspect human carcinogen, morticians have effective general mechanical dilution ventilation control measures for their embalming room; and locally-exhausted ventilated embalming tables to capture embalming fluid vapors at their source. Morticians also provided Powered Air Purifying respiratory (PAPR) protection. This aspect managed by OSHA 1910.1048 Formaldehyde Standard, NH Rota HAZMAT spill SOPs, etc.	235

NHROTA\_Aspect rank\_April 2009

Hazardous Materials	Chemical Waste - amalgam scrap	1031	Dental Cleaning and Surgery	Pre-measures dental amalgam capsules used for cavity repair. Minimal, daily average of	146
Tanks	Diesel Fuel Spill Potential	261	Fuel Storage - UST	Fuel/oil spills can impact human health, air, soil, and water, especially if not handled and contained properly. Primary spill hazard potential exists during periodic truck delivery of diesel fuel; which would involve relatively minor amounts that would be immediately noticed, quickly contained and promptly cleaned up before any really deep, significant soil / ground water contamination could occur.	146
Affirmative Procurement	Energy usage - Diesel fuel consumption	257	Boiler Operations		146
Tanks	Fuel/Oil Spill Potential	260	Fuel Storage - AST	Fuel/oil spills can impact human health, air, soil, and water, especially if not handled and contained properly. AST has impervious Cement containment berm around it	146
Hazardous Waste	Fuel/Oil Spill Potential	262	Generator Operations/Maintenance	Fuel/oil spills can impact human health, air, soil, and water, especially if not handled and contained properly.	146
Hazardous Materials	Fuel/Oil Spill Potential	257	Boiler Operations	Fuel/oil spills can impact human health, air, soil, and water, especially if not handled and contained properly.	141
Hazardous Waste	Hazardous Waste Generation	263	Patient Care	Hazardous waste disposal contributes to the demand for landfill space and, over time, may leak out of disposal containers and impact soil and water.	146
Hazardous Waste	Hazardous Waste-Asbestos Materials	1062	Industrial Hygiene Lab	Approximately 5 to 30 samples analyzed monthly. Less than 5 kilograms total asbestos waste generated every two years. NH Rota's asbestos lab waste consolidated with the asbestos waste shipments of	141
Hazardous Materials	Potential Spillage - general hazmat spills	1043	Flammable locker - storage	Low potential for small volume (i.e., flammable lockers contain minimal 7-day working volumes by policy) HAZMAT spill incidents. Absorbant spill materials present in close proximity to all storage lockers	151
Regulated Medical Waste	Potential Spillage - medical waste	263	Patient Care	Relatively small medical waste volumes generated in relation to much larger local area Spanish hospitals. This env. aspect managed by the Final Governing Standards for Spain, with 2006 NAVSTA Rota host installation Medical Waste management plan adhered too.	185
Regulated Medical Waste	Potential Spillage - medical waste	1070	Lab - Microbiology	Small volume patient sample specimen cups.	185
Affirmative Procurement	Potential Spillage - pesticides	1025	Building Infrastructure - Operations & Maintenance		146

NHROTA\_Aspect rank\_April 2009

Energy	Resource Consumption - Thermal System Operation	1022	Building Infrastructure - Resource Consumption	NH Rota utilizes boiler-generated steam for water and workspace thermal heating. Boilers fired with diesel fuel stored in two onsite underground storage tanks. In FY-2005 approximately 51,000 gallons of diesel fuel were burned for water & space heating.	175
Energy	Resource Consumption-Electricity	1022	Building Infrastructure - Resource Consumption	Use of electricity dependent equipment incurs energy usage predominantly supplied by power plants that obtain that energy from burning fossil fuels. The Navy requires the purchase of energy efficient equipment, whenever possible, in order to help reduce the use of and demand for energy. FY-2008 NH Rota electricity usage was 3543 megawatt hours (MWHs); an approximate 20% drop from the FY-2007 consumption of 4279 MWHs.	175
Natural Resources	Resource Consumption-Water	1059	Grounds Maintenance	Potable water consumption for irrigation of NH Rota external landscaping a significant env. aspect to manage better due to inherent drought conditions of ou southern Spain location. For the summer 2009 watering season the NH Rota Env. of Care Committee (EOC) approved the EMS Mgr.'s proposal to shorten the sprinkler system's timer run-time by 20% to hopefully effect a concurrent 20% water consumption savings.	180
Affirmative Procurement	Resource Consumption-Water	1022	Building Infrastructure - Resource Consumption	In FY 2008 approximately 5,435,000 gallons of water were consumed; a significant increase over the 3,849,000 gallons used in FY-07. Primary factor in such increased consumption beleived to be the new grounds irrigation system around building 1802.	175
Tanks	Soil contamination	261	Fuel Storage - UST	Contamination of soil surrounding the two 4100 gallon bldg. 1802 underground diesel storage tanks possible from leakage of accidental spills during their periodic truck filling evolutions.	185
Solid Waste	Solid Waste Generation	267	Vehicle Usage and Maintenance	Oily rags, fan belts, and filters are among the solid waste generated. Solid waste is disposed in landfills or incinerated and may impact land and air.	146
Solid Waste	Used Electronic Equipment	265	Solid Waste Generation and Disposal	Electronic equipment contributes significantly to solid waste generation and the demand for landfill space.	141
Solid Waste	Waste Batteries Generation	265	Solid Waste Generation and Disposal	Waste batteries contribute to solid waste generation. In NH Rota's host nation of Spain, disposal of batteries as "hazardous waste" is mandatory to reduce the risk of impacting the air, soil, and water with heavy metals. Historical Battery Disposal Volumes for NH Rota Spain: --FY 2007 = 118 pounds --FY 2008 = 211 lbs	141
Solid Waste	Waste Battery Generation	267	Vehicle Usage and Maintenance	Lead/acid vehicle batteries that are disposed in landfills or incinerated contribute to heavy metals in air, soil, and water. NH Rota vehicle batteries recycled locally or disposed of as HAZWASTE to reduce these environmental impacts.	141
Solid Waste	Waste Fluorescent Tubes/Halogen Bulbs Storage	265	Solid Waste Generation and Disposal	NH Rota's maintenance contract specified our approximately 5,000 fluorescent bulbs be changed every 18 months per preventative maintenance schedule. Spent bulbs taken to local NAVFAC Rota maintenance yard for processing in a tube crusher. Our tubes are specified to be "ecologic" with low-mercury and lead - free content. They still can, however, present a significant impact to the environment and to human health if not disposed of properly.	156

NHROTA\_Aspect rank\_April 2009

Regulated Medical Waste	Waste Generation - biomedical waste	1070	Lab - Microbiology	Approximately 35 patient blood, body fluid specimens received, prepared & analyzed per week. From this about 80 agar media microbiological culture plates are cultured and subsequently discarded.	185
Regulated Medical Waste	Waste Generation - biomedical waste	1072	Patient Care - Birth Labor & Delivery	Each vaginal birth delivery generates one green biomedical waste container; with 5-6 deliveries occurring in a typical month. 1 to 5 red wall sharps containers generated per month.	185
Regulated Medical Waste	Waste Generation - biomedical waste - Sharps	1065	Lab - Phlebotomy / Hematology	Approximately 100 to 150 needles generated weekly from lab patient blood draws; which are disposed of in approved sharps disposal containers. Aspect managed via Final Governing Standards for Spain, 2006 NS Rota Host Installation base Medical Waste Management Plan, NH Rota Infection Control manual and Operating Management dept. MEDWASTE storage & handling SOPs, etc.	190
Regulated Medical Waste	Waste Generation - bodily fluids	1064	Laboratory (General)	Approximately 30 to 50 urine, sputum & fecal lab samples analyzed and disposed of as hazardous waste per week. Aspect managed via FGS Spain Medical Waste chapter & NAVSTA Rota Medical Waste Management Plan (MWMP), NH Rota Infection Control Manual, internal lab SOPs, etc.	195
Regulated Medical Waste	Waste Generation - bodily fluids	1065	Lab - Phlebotomy / Hematology	Approximately 100 to 150 patient blood sample tubes disposed of weekly in approved biomedical waste containers. Aspect managed via Final Governing Standards for Spain, 2006 NS Rota Host Installation base Medical Waste Management Plan, NH Rota Infection Control manual and Operating Management dept. MEDWASTE storage & handling SOPs, etc.	190
Hazardous Waste	Waste Generation - general hazmat	1057	Biomedical Repair	Majority of chemical products consumed during their application & usage--with insignificant HAZWASTE volume generation.	146
Hazardous Waste	Waste Generation - general hazmat	1064	Laboratory (General)	VERY minimal, insignificant amounts of lab Haz Waste generated due to the almost 100% consumption of the very small volumes (ml) of pre-packaged reagents used by automated analyzers.	146
Hazardous Waste	Waste generation - Hazardous waste	1030	Dental Care - Prosthetics	Very little waste generated, as products used in their entirety until containers empty.	146
Affirmative Procurement	Waste Generation - medical equipment	263	Patient Care	Disposal of medical equipment past its serviceable life; majority electronic waste.	141
Regulated Medical Waste	Waste Generation - medical sharps waste	1061	Immunization Clinic	Approximately 450 spent immunization needles generated each month by NH Rota immunizations clinic.	185
Regulated Medical Waste	Waste Generation - Regulated Medical Waste	263	Patient Care	In FY-2008 NH Rota produced 3,833 kilograms of RMW; which is regulated at the provincial level by the "Junta de Andalucia" Spanish authorities for the transport & incineration of our medical waste. Sharps the prime medical waste generated in non-surgical patient care areas. NH Rota Spain's internal environmental controls for RMW management include the Infection Control manual procedural SOPs for staff training, container labelling, proper RMW handling & it's temporary storage in the Biowaste storage room prior to contract transport hauler removal, etc.	190
Regulated Medical Waste	Waste Generation (Medical Waste)-Liquids	1044	General Surgery	Wastes collected in approved spill-tight containers for incineration by certified medical waste disposal contract firm at an incinerator facility fully certified by the Spanish government in meeting all applicable European Community regulations.	195

NHROTA\_Aspect rank\_April 2009

Regulated Medical Waste	Waste Generation (Medical Waste)-Pathological	1044	General Surgery	Relatively small medical waste volumes generated by NH Rota (in relation to much larger local Spanish hospitals). Waste incinerated by certified medical waste disposal contract firm at an incinerator facility fully certified by the Spanish government to all applicable EC standards.	195
Solid Waste/ Recycling/ Green Procurement	Waste Oil Generation	267	Vehicle Usage and Maintenance	Waste oil/sludge generation may eventually impact air, soil, and water depending on the disposal methods. Oil from NH Rota vehicles (serviced at base NAVFAC transportation garage) properly recycled on local market.	141