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SSIC # 5090.3

Final

Marine Corps Air Station
El Toro, California

Oil and Hazardous Substances Spill Prevention, Control and Countermeasure Plan
and
Oil and Hazardous Substances Spill Contingency Plan

Amended March 1996

Submitted to:

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ACRONYMS

AST	Aboveground Storage Tank
CFR	Code of Federal Regulations
DOT	Department of Transportation
HAZMAT	Hazardous Materials
MCAS	Marine Corps Air Station
MCO	Marine Corps Order
NEESA	Naval Energy and Environmental Support Activity
NPDES	National Pollution Discharge and Elimination System
OSOT	On-Scene Operations Team
POL	Petroleum, Oils and Lubricants
SAIC	Science Applications International Corporation
SCP	Spill Contingency Plan
SPCC	Spill Prevention Control and Countermeasure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank

EXECUTIVE SUMMARY

Oil Spill Prevention, Control and Countermeasure (SPCC) Plans are required at all facilities that have a potential to discharge a harmful quantity of oil to the navigable waterways of the United States. Applicable facilities are those with a single tank with a storage capacity greater than 660 gallons, or with an accumulative storage capacity of greater than 1,320 gallons. This requirement is directed by the Clean Water Act with the regulations promulgated in 40 CFR 112. It is also required that personnel be instructed in proper spill prevention procedures, that standardized written operating procedures be used, that routine inspections be conducted, and that documentation of the successful implementation of these requirements be maintained. In addition, the State of California requires that any facility storing 10,000 gallons or more of petroleum, regardless of the location, meet the requirements of 40 CFR 112. The Department of Defense, in addition, recommends that SPCC Plans be prepared to address all hazardous substances as well as oil.

Spill Contingency Plans are required at all facilities managing oil and hazardous substances to address response measures after a spill has occurred. These requirements are directed by the Comprehensive Environmental Recovery, Compensation, and Liability Act and the Resource Conservation and Recovery Act with the regulations promulgated in 40 CFR 300 and 40 CFR 265, respectively.

The ultimate responsibility for oil and hazardous substances spill prevention and response measures at MCAS El Toro remains with the Commanding Officer. However, MCAS El Toro has established a hierarchy of responsibility to ensure compliance with the requirements of the SPCC and Contingency Plans. The first responder to a spill or release of oil or hazardous substances will usually be the Unit Environmental Manager. In instances where the Unit Environmental Manager cannot completely respond to the incident, the MCAS El Toro Fire Department/HazMat Team or Crash Crew will be contacted for assistance.

Based on a survey conducted at MCAS El Toro by Science Applications International Corporation (SAIC) in October 1993, fifteen sites have been identified requiring a SPCC Plan.

These sites include oil and petroleum storage areas with underground and aboveground tanks (Tank Farms), vehicle service stations, engine test sites, and hazardous waste accumulation and storage areas. This *Oil and Hazardous Substances Spill Prevention, Control and Countermeasure Plan and Oil and Hazardous Substances Spill Contingency Plan*, prepared by SAIC under contract to the Southwest Division Naval Facilities Engineering Command, has been drafted in an effort to aid each unit in locating the procedures for both spill prevention and response measures for oil and hazardous substances. It updates and combines both the *Oil SPCC Plan* and *Contingency Plan*, May 1990, prepared by ASI. Section 1.0 provides general information regarding oil and hazardous substance uses, spill histories, and organizational responsibilities for spill prevention and response. Section 2.0 presents the SPCC Plans for each of the 15 sites identified during the October 1993 survey. Section 3.0 is a general Spill Contingency Plan for MCAS El Toro, (but does not replace the Contingency Plan developed for the RCRA-permitted hazardous waste storage area). In addition, very generalized Spill Contingency Plans are included with each discussion of the SPCC Plans for each of the 15 sites in Section 2.0. To further assist each unit in preventing and responding to spills of oil and hazardous substances, it is recommended that the pages that pertain to a specific unit be extracted and copied for the unit in question. It is unnecessary for each unit to keep a copy of the entire SPCC Plan, but essential that each Unit Environmental Manager be intimately familiar with all aspects of his unit.

This *Oil and Hazardous Substances Spill Prevention, Control, and Countermeasure Plan and Spill Contingency Plan* was prepared in accordance with the guidelines set forth in the following documents and remains in effect for the next 3 years:

- "Oil Spill Prevention, Control and Countermeasures Planning Manual" (NEESA 7-030), June 1988;
- "Hazardous Substance Spill Prevention Planning Manual" (NEESA 15-030), July 1988;
- "Hazardous Substance Spill Contingency Planning Manual (NEESA 15-022), Part I, May 1986; and
- "Oil Spill Contingency Planning Manual" (NEESA 7-029), Part II, June 1987.

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of Title 40, Code of Federal Regulations Part 112, attest that this Spill Prevention, Control and Countermeasure Plan has been prepared in accordance with good engineering practices.

REGISTERED PROFESSIONAL ENGINEER
JOHN B. GABBARD
No. M 025398
MECHANICAL
STATE OF CALIFORNIA

John B Gabbard
Print Name of Professional Engineer

John B. Gabbard
Signature of Professional Engineer

Date: 4/24/96 Registration No.: 025398 State: CA

RECORD OF REVIEW AND AMENDMENTS

A Spill Prevention Control and Countermeasure Plan must be reviewed and recertified every three years by a professional engineer as required by 40 CFR 112. The MCAS El Toro Facilities Management Department Environmental Director will ensure that this plan is reviewed in a timely manner and will be responsible for maintaining the definitive copy of this plan.

The following items have been revised since the previous SPCC Plan, dated July 1992. The remainder of this page should be used to record updates until the next SPCC Plan is prepared.

DATE	PROFESSIONAL ENGINEER	REG. NO.	AMENDMENT
			Tank Farm 2 has been taken out of service; all tanks are empty, and therefore, no longer included in this SPCC Plan.
			Day Tank 398 has been taken out of service and is not included in this SCPP Plan.
			No space heating tanks with No. 2 fuel oil were observed during the October 1993 base survey.
			Thirteen new hazardous waste accumulation areas have been constructed since the submittal of the previous SPCC Plan.
			Tank Farm 902 was added since the previous SPCC Plan submittal.
			Fuel Pit 101 is included for the first time in this revision of the SPCC Plan.

1.0 INTRODUCTION

1.1 Purpose

Owners and operators of facilities that have discharged, or could discharge, oil in harmful quantities into or upon the navigable waters of the United States must prepare a Spill Prevention Control and Countermeasure (SPCC) Plan. This requirement is found in the regulations promulgated under the Clean Water Act (Title 40, Code of Federal Regulations, Part 112). The SPCC Plan focuses on oil spill prevention measures. The Department of Defense anticipated a proposed U.S. Environmental Protection Agency (USEPA) regulation requiring SPCC plans for hazardous substances. As of this time, the requirement has not been issued, but the Department of Defense recommended that military installations prepare a Hazardous Substance SPCC Plan as well. The USEPA evaluation of the requirement for a Facility Response Plan is included as Attachment H.

To assist in the development of an oil SPCC Plan, the Naval Energy and Environmental Support Activity (NEESA) prepared a guidance document, "Oil Spill Prevention Control and Countermeasures Planning Manual" (NEESA 7-030, June 1988). NEESA also prepared "Hazardous Substance Spill Prevention Planning Manual" (NEESA 15-030) to assist in the preparation of a Hazardous Substance SPCC Plan.

According to the guidance found in 40 CFR 112.7, the SPCC Plan should include the following elements:

- Description of each spill, corrective action, and plans for preventing recurrence;
- In the event of a potential for equipment failure (tank overflow, rupture, leakage), a prediction of the direction, rate of flow, and total quantity of oil (or hazardous substance) discharged;
- Appropriate containment and diversionary structures to prevent oil (and hazardous substances) from reaching navigable waters;
- Discussion of conformance with applicable guidelines, effective spill prevention, and containment procedures;

- Recommendations for improved spill prevention methods and equipment under separate paragraphs; and

- Written inspection procedures.

When it is determined that the installation of structures or equipment is not practicable, then the SPCC should also include the following:

- Discussion of the impracticability;

- Oil (and hazardous substance) spill contingency plan; and

- Commitment of personnel, equipment and materials to remove any harmful quantity of oil (and hazardous substance) discharged.

As opposed to the requirements to implement spill preventative measures, a Spill Contingency Plan details how personnel will respond to a spill that has already occurred. The requirement to prepare a Spill Contingency Plan is found in the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300). Two types of Spill Contingency Plans are required by the Marine Corps, in accordance with MCO P5090.2, Section 11301 (although they can be combined); one for hazardous substances and one for oil. In addition to the requirements found in 40 CFR 300.210(c)(2), NEESA prepared two manuals to assist in the preparation of Spill Contingency Plans: "Oil Spill Contingency Planning Manual" (NEESA 7-029) and "Hazardous Substances Spill Contingency Planning Manual" (NEESA 15-022). Spill Contingency Plans must:

- Establish responsibilities of response personnel prior to a spill or release to minimize confusion regarding individual duties during an emergency;

- Provide for a pre-arranged organization and coordination with various Federal, State, and local response agencies to achieve a more accurate, effective response and minimize the spread of a release and additional damages;

- Identify probable locations of discharges and releases;

- Identify resources to respond to multi-media incidents;

- Provide procedures for responding to a release and notification to the Emergency Coordinator and the Public;

- Provide a description of the emergency equipment and the personnel responsible for the equipment; and
- Identify the actions for responding to a release.

Science Applications International Corporation (SAIC) has been contracted by the Southwest Division Naval Facilities Engineering Command, (Contract No. N68711-92-D-4658) to prepare Oil and Hazardous Substances SPCC Plans and Spill Contingency Plans for the Marine Corps Air Stations El Toro and Tustin. (The SPCC and Spill Contingency Plans for MCAS Tustin are under separate cover.) In order to make this document more useful, both the SPCC Plan and the Spill Contingency Plan are incorporated into this one document.

1.2 Site Information

Marine Corps Air Station (MCAS) El Toro is located in an unincorporated area within Orange County, California, approximately 7 miles east of Irvine, and 10 miles northeast of Newport Bay. Figure 1-1 shows the location of MCAS El Toro in relation to MCAS Tustin and major roads and waterways. The Station is bordered by agricultural land on the north and southeast, and commercial, light industrial, and some residential usage to the south, southeast, and southwest.

In 1950, MCAS El Toro was selected for the location of a master jet air station and permanent center for Marine aviation on the West Coast supporting the Fleet Marine Forces, Pacific. Its mission is to provide support to the aviation activities. MCAS El Toro is scheduled to close by 1997 under the current Base Closure Plan.

1.3 Oil and Hazardous Substance Use

In fulfilling its mission, MCAS El Toro provides maintenance of military aircraft and ground support equipment. In providing support, oil and hazardous substances are used and wastes are generated. Oil and hazardous substances used include jet fuel (JP-5), diesel fuel, three grades of motor fuel, motor oil, lubricants, antifreeze, degreasing solvents, paints, paint thinner, strippers, and batteries.

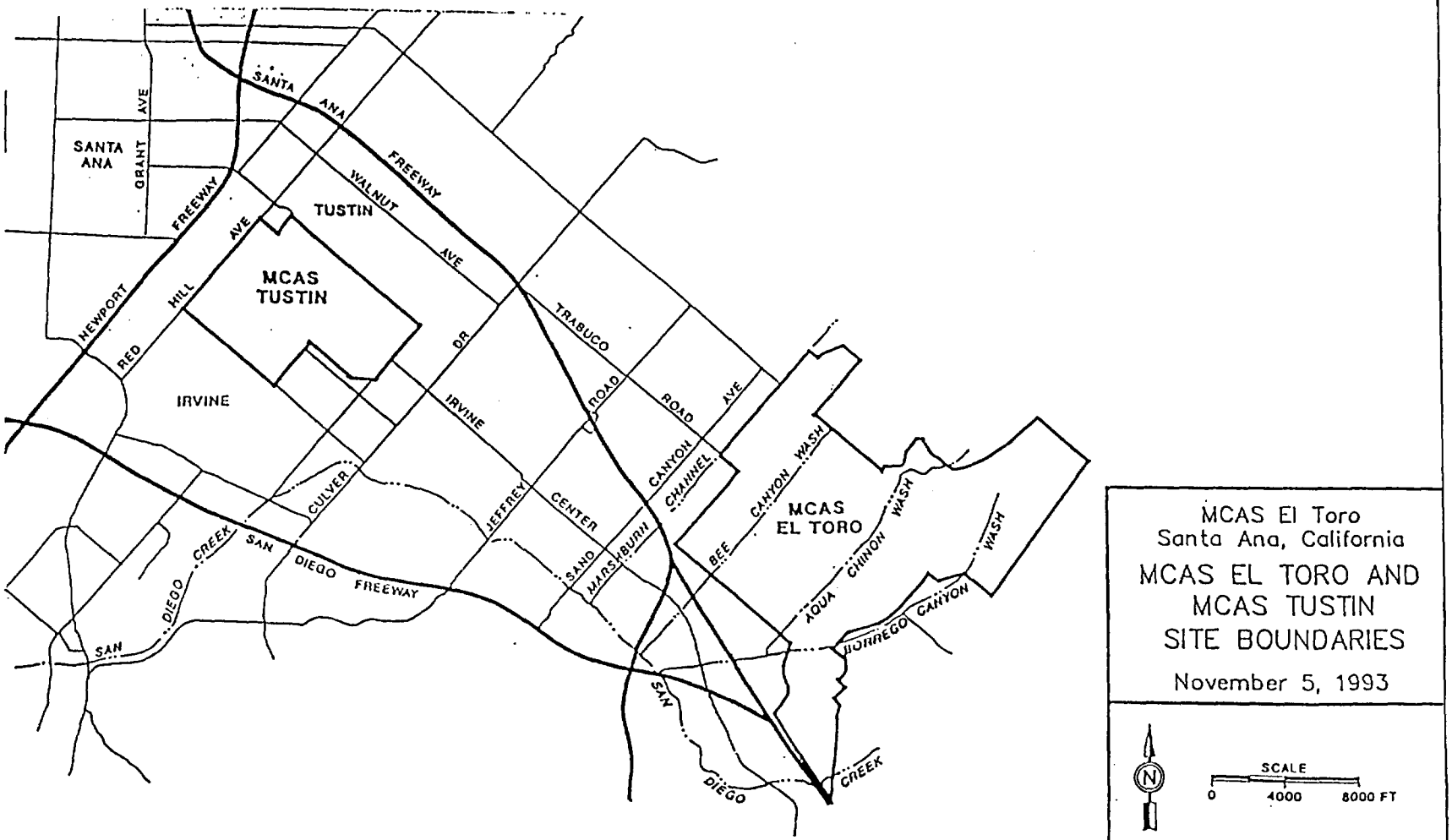


Figure 1-1: MCAS El Toro and MCAS Tustin Site Boundaries

1.4 Surface Water Drainage

Off-site drainage from the northeast combines with on-site storm runoff and flows into four main drainage channels: Borrego Canyon Wash, along the eastern and southeastern borders of the Base; Rifle Range Road Ditch, the northwestern border of the Station; and Agua Chinon Wash and Bee Canyon Wash, both crossing the central portion of the Station (see Figure 1-1). Borrego Canyon, Agua Chinon, and Bee Canyon Washes are continuous with natural washes originating in the Santa Ana Mountains to the northeast. Borrego Canyon Wash is concrete-lined and flows into Agua Chinon Wash approximately 0.25 mile downgradient from MCAS El Toro. Agua Chinon and Bee Canyon Washes collect storm water runoff from the runway and apron areas. Their flows are contained within culverts as they cross the Station, and flow into San Diego Creek. Rifle Range Road Ditch is also concrete-lined and also flows into San Diego Creek. San Diego Creek flows to the west into Upper Newport Bay, approximately seven miles from the confluence with Rifle Range Road Ditch. Beneficial uses of San Diego Creek include groundwater recharge, recreation, warm freshwater habitat, and wildlife habitat. Beneficial uses of Upper Newport Bay include recreation, commercial sportfishing, preservation of areas of special biological significance, wildlife habitat, marine habitat, and shellfish harvesting. MCAS El Toro and the storm water drainage system overlie the Irvine Forebay Groundwater Subbasin, the beneficial uses of which include municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.

Stormwater discharge from MCAS El Toro is currently regulated under Order No. 93-16, (NPDES No. CA0106593) dated March 5, 1993. This National Pollution Discharge and Elimination System permit allows MCAS El Toro to discharge stormwater runoff from the aircraft runways and parking areas, aircraft and vehicle maintenance areas, and wash rack and fueling areas. Four discharge points have been permitted (see Figure 1-2):

- Discharge Serial No. 1: Agua Chinon Wash. Non-stormwater discharges (i.e., aircraft washwater commingled with agricultural runoff) are prohibited. (Non-stormwater is pumped to the sanitary sewer.) Agricultural and irrigation runoff from strawberry fields discharges through this discharge point;

- Discharge Serial No. 2: Bee Canyon Wash. Non-stormwater discharges are prohibited and are pumped to the sanitary sewer. Agricultural and landscape irrigation runoff from

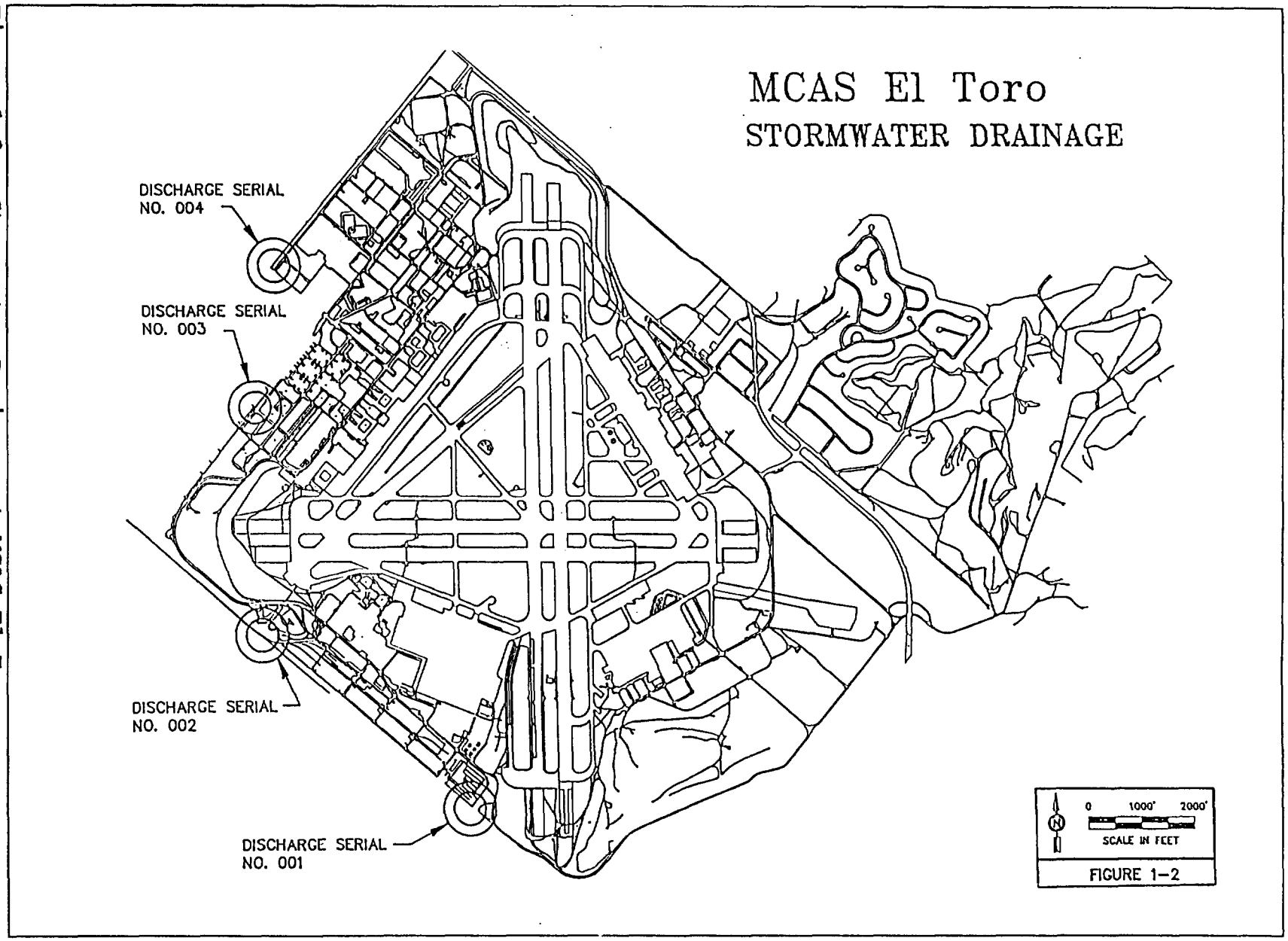


Figure 1-2: Stormwater Drainage at MCAS El Toro

the University of California Agriculture Research Station located upstream of MCAS El Toro discharges through this discharge point;

- Discharge Serial No. 3: Rifle Range Road Ditch. Stormwater and agricultural and landscape irrigation runoff from administration, housing and recreation areas discharge through this discharge point; and

- Discharge Serial No. 4: Rifle Range Road Ditch at Trabuco Road. Stormwater and agricultural and landscape irrigation runoff from administration, housing and recreation areas, and agricultural runoff from commercial nurseries upstream of MCAS El Toro discharge through this discharge point.

Waste discharge requirements were established for the discharge points and include maximum daily concentration limits for total suspended solids, oil and grease, methylene blue active substances, and Ph. Whenever a storm event occurs, MCAS El Toro must collect a representative sample from each discharge point and analyze it for EPA priority pollutants and other constituents.

Oil/water separation systems have been placed at the discharge points on the Agua Chinon and Bee Canyon Washes. The systems consist of weirs to contain dry weather flows, pumps to discharge to the sanitary sewer, and oil recovery equipment. Effluent from the separators passes through a sewage monitoring station prior to discharge to the sewer system.

1.5 Spill History

Based on the Statement of Basis included with MCAS El Toro's Waste Discharge Requirements, numerous incidences of unauthorized discharges (discharges beyond the authorized discharge point during dry weather conditions) to San Diego Creek occurred through Discharge Serial Nos. 1 and 2. Analytical results of the samples collected during the unauthorized discharges indicated that the concentrations of pollutants exceeded the discharge limits. MCAS El Toro developed and implemented a facility vehicle/aircraft washing schedule to eliminate unauthorized discharges. However, unauthorized discharges continue to occur at Discharge Serial No. 1, such as an unauthorized discharge of 5,000 to 10,000 gallons of oily water caused by the flushing of a fuel tank. Also, on several occasions, the oil/water separation systems associated with the discharge points were inoperable or malfunctioning.

MCAS El Toro provided information regarding spills of oil and hazardous substances (see Table 1-1) where MCAS El Toro needed to implement their Oil and Hazardous Substances Spill Contingency Plan since the previous SPCC Plan. It is not known if this is a complete list.

1.6 Organization of Responsibility

It is the ultimate responsibility of the Commanding General of MCAS El Toro to ensure oil and hazardous substances are not discharged to the waterways of the United States. However, MCAS El Toro has established a chain of command to ensure compliance with the SPCC Plan and Contingency Plan. The following subsections outline that chain of command.

1.6.1 Facility Management Department, Environmental Department

The Environmental Department, under the direction of the Environmental Director, Captain Don Clark, is responsible for implementing the following activities as they relate to Oil and Hazardous Substances SPCC and Spill Contingency Plans:

- Conduct surveys at least once every 3 years to determine if modifications to the SPCC Plan are required and update the SPCC Plan as necessary;
- Review plans and drawings for new construction, maintenance, or remodeling of oil and hazardous substances handling facilities;
- Provide training in spill prevention and the implementation of the Spill Contingency Plan and maintain the training records;
- Inspect each unit's spill control equipment at least four times per year, record these inspections, and maintain inspection records for at least 3 years;
- Maintain a file of all spill or emergency response investigations and submit any required reports to the appropriate regulatory agency;
- Implement the Oil and Hazardous Substances Spill Contingency Plan;

Table 1-1: MCAS El Toro Spill History

Date	Incident #	Description
November 28, 1995	N/A	Approximately 2 quarts of hydraulic fluid were lost on the roadway and shoulder when a forklift's hydraulic line was inadvertently punctured. A drip pan was placed under the leaking line to contain the leak and contaminated soil was removed and drummed as hazardous waste.
September 18, 1995	N/A	A one gallon container of liquid scale dissolver spilled when it was dropped by warehouse personnel. The spill was diked and absorbed with ash. Spill contained to the warehouse floor.
September 12, 1995	N/A	Three quarts of hydraulic fluid spilled onto the concrete warehouse floor when a forklift's fork punctured the stored material during issuance. Spilled cleaned up with speedy dry absorbent. Spill contained to the warehouse floor.
July 21, 1995	N/A	Approximately 80 gallons of JP-5 fuel spilled when a fuel truck attempted to fuel an aircraft with an open fuel cell. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
July 20, 1995	N/A	Approximately 10 gallons of JP-5 fuel spilled when an aircraft vented it's tanks. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
June 29, 1995	N/A	Approximately 70 gallons of JP-5 fuel spilled from an aircraft fuel tank with a dysfunctional valve. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
November 01.1994	N/A	Approximately 400 gallons of JP-5 fuel leaked from an F/A-18 aircraft. Three hundred gallons were recovered and 100 gallons were cleaned up with speedy dry absorbent. Spill contained to the flightline.
November 01,.1994	N/A	Approximately 250 gallons of JP-5 fuel leaked from an F/A-18 aircraft. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
September 01, 1994	N/A	Approximately 1 gallon of hydrochloric acid and another gallon of chlorine spilled when their lines ruptured. Pumping through the line was stopped immediately and the spill was cleaned up with sodium bicarbonate. Spill contained to the flightline.
August 12, 1994	N/A	A small amount of paint stripper (methylene chloride) from a 5 gallon can spilled when the can overheated and blew its cap. The small amount evaporated before cleanup could occur.
July 14, 1994	249777	Approximately 25 gallons of transformer oil, possibly containing more than 55 ppm PCBs, spilled when the personnel handling the transformer overturned it. The initial responders laid down absorbent socks, mats pads and Lite-Dri absorbent around the spill and on the liquid. Workers then removed and drummed soil from the spill area as hazardous waste. Cleanup began immediately on 14 July 94 and was completed 15 July 94. Additional hazardous waste included the absorbent materials, personal protective gear rags and mops used to cleanup the spill.
April 26, 1994	N/A	Approximately 100 gallons of JP-5 fuel spilled when an aircraft vented its tanks. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
March 08, 1994	N/A	Approximately 20 gallons of JP-5 fuel spilled when an aircraft was refueling. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
May 11, 1993	318	Caustic soap concentrate leaked from its container located in a trailer behind Bldg. 317.
March 1, 1993	146	Approximately one quart of methyl ethyl ketone was spilled onto the ground near Bldg. 306. The spill was contained with absorbent and disposed.
Sept. 9, 1992	873	Unknown quantity of Vapum (a fumigant) released to the soil at Strawberry Field.

- Respond to the chemical spills and ensure cleanup and decontamination procedures are carried out correctly;
- After a spill cleanup, certify an area acceptable for returning to normal use;
- Assign employees to the On-Scene Operations Team;
- Ensure proper training for the On-Scene Operations Team and the individuals responsible for small spills, and maintain training records;
- Coordinate evacuation activities with the Provost Marshall's Office;
- Initiate facility modifications to achieve compliance with the SPCC guidelines by submitting a project request as soon as possible;
- Provide necessary spill cleanup equipment; and
- Provide trained personnel for spill mitigation.

1.6.2 Supply Department

The Supply Department is responsible for procurement of materials and dispensing fuel. It also performs the following tasks:

- Inspect fuel systems and maintain inspection records for at least 3 years;
- Provide equipment and materials for spill investigations; and
- Contact the Environmental Department in case of problems.

1.6.3 Provost Marshall's Office

The Provost Marshall's Office provides security functions at MCAS El Toro. The functions of the Office are to:

- Conduct daily inspections of security systems such as access control, locked storage areas, lighting, fencing, and traffic control areas to ensure spills do not result from vandalism or unauthorized entry;
- Inspect vehicles delivering fuels for leaks and obvious mechanical problems which could cause a spill;

- Assist in evacuation procedures with the Environmental Department; and
- Maintain inspection records for at least 3 years.

1.6.4 Unit Environmental Managers

Each military unit at MCAS El Toro has a designated Environmental Manager responsible for managing the hazardous materials and hazardous wastes generated and for making the proper notifications when a spill or emergency occurs. The responsibilities related to this Plan include:

- Attend training of at least 24 hours initially and 8 hours of refresher courses annually related to spill prevention and remediation;
- Conduct inspections at least weekly of each oil and hazardous substance storage area, and maintain the inspection records for at least 3 years;
- Initiate corrective actions for deficiencies discovered during the inspection;
- Ensure the proper handling and storage of oil and hazardous substances;
- Act as first line of command during a spill;
- Implement the Spill Contingency Plan;
- Ensure the On-Scene Operations Team and Facilities Management Department are notified whenever a spill greater than 5 gallons occurs. If a spill of less than 5 gallons occurs, then assist and provide guidance in the proper cleanup methods;
- Evacuate all affected personnel if needed, and account for all evacuated personnel; and
- Ensure that emergency response equipment is available and functional to respond to an emergency.

1.6.5 On-Scene Operations Team

The On-Scene Operations Team, (OSOT) responds to spills and related incidents in conjunction with the MCAS El Toro Crash Crew and Fire Department/HazMat Team. If a spill occurs on or near the aircraft runway or aircraft operation areas, the Crash Crew responds; elsewhere, the Fire Department/HazMat Team responds. Responsibilities of the On-Scene Operations Team include:

- Attend training of at least 24 hours initially and 8 hours of refresher courses annually related to spill prevention and remediation;

- Inspect each unit at least every 6 months and become familiar with the individual units and oil and hazardous substances used;

- Inspect the spill control equipment at each unit at least every 6 months to ensure operability;

- Respond to all calls involving chemical spills; and

- Maintain inspection records for at least 3 years.

1.6.6 Military and Civilian Personnel

All MCAS El Toro personnel are responsible for following the guidelines and procedures presented in this Oil and Hazardous Substances SPCC Plan and Spill Contingency Plan. Specifically, the employee must:

- Notify a supervisor or the Unit Environmental Manager immediately after discovering a spill;

- Notify the On-Scene Operations Team if a supervisor or Unit Environmental Manager cannot be found; and

- Minimize the possibilities of a spill by following all safety rules and spill prevention guidelines when handling oil or hazardous substances.

1.7 General Spill Prevention Measures

The following countermeasures will reduce the risk of spills at MCAS El Toro:

- Each unit handling oil or hazardous substances will prepare an inspection checklist specific for that unit. The checklist will include the frequency of the inspections, the signature of the inspector, date of inspection, and the items to be checked. The Unit Environmental Manager (or his alternate) will conduct the inspections. All hazardous waste accumulation areas will be inspected daily, and all vehicles and equipment will be inspected at least weekly in order to detect leaks or deterioration. Example inspection checklists are provided in Attachment D.

- If during an inspection, a release or potential release is discovered, the Unit Environmental Manager will initiate corrective action immediately. Preventative maintenance practices will be evaluated such as better housekeeping and security.

- The Environmental Department and Supply Department will ensure that petroleum handling operations comply with the spill prevention measures described in the equipment operator's manual.

- The Unit Environmental Manager will ensure drip pans are used whenever the possibility of liquid release from vehicles or equipment is expected. Drip pans will be emptied into appropriate waste containers at the end of each day, and during the day as needed.

- The Unit Environmental Manager will ensure flammable materials are stored in flammable cabinets, incompatible wastes (e.g., acids and bases) will be separated.

- The Unit Environmental Manager will ensure hazardous waste and waste POL (petroleum, oil, and lubricants) accumulate in designated containers, labelled with the date of accumulation and the contents of the container, or full hazardous waste labels.

- Generators of hazardous waste will initiate disposal procedures by contacting the Environmental Division and completing Form DD-1348-1. Waste will not accumulate for periods longer than 90 days.

- Copies of Material Safety Data Sheets will be maintained with the unit.

- Personnel routinely involved in the handling and disposal of oil and hazardous substances (i.e., Unit Environmental Managers, Environmental Department, Supply Department, Fire Department, Emergency Coordinators [On-Scene Coordinator], and On-Scene Operations Team) will be provided with an initial training of at least 24 hours and at least 8 hours of annual refresher training in handling and storage of oil and hazardous wastes, and emergency response. In addition, all personnel will be trained in the operation and maintenance of equipment to prevent oil and hazardous substance spills.

Best management practices implemented since the submittal of the previous SPCC Plan include:

- Routine sweeping schedule in and around indoor/outdoor work areas;

- Separate and isolated storage areas for hazardous materials and hazardous wastes; and

- Oil/water separation systems at all aircraft, vehicle, and equipment wash rack stations.

1.8 Plan Review and Amendment

This Oil and Hazardous Substances SPCC Plan and Spill Contingency Plan supersedes an Oil SPCC and Spill Contingency Plan prepared for MCAS El Toro in July 1992 by ASI (and signed by a Registered Engineer on August 7, 1992), and remains in effect for 3 years. When the Environmental Director determines that a change in facility design, construction, operation, or maintenance affects the potential for a spill, this Plan will be amended. This Plan will also be reviewed (and revised, if necessary) whenever an oil spill of 1,000 gallons or more occurs, or a reportable quantity spill of hazardous substances occurs; or after two or more spills greater than 5 gallons occurs within a 12-month period.

Within 3 years of the effective date of this plan, a complete audit of the facility will be performed to verify the conformance with the requirements of 40 CFR 112. This review will include an assessment of new spill prevention technology (see Section 1.10). All amendments to the Oil and Hazardous Substances SPCC Plan will be certified by a Registered Professional Engineer.

1.9 Summary of Construction and Work Projects

Identified in Table 1-2 are construction and work projects related to oil and hazardous substances, completed or in progress, since July 1992. The status in March 1996 is also shown in order to indicate the progress since the initial work request.

1.10 Best Available Demonstrated Technology

Numerous available and demonstrated technologies to prevent leaks and discharges of oil and hazardous substances have been on the market for some time. These include leak detection and monitoring systems, and double-walled steel and fiberglass tanks. New technologies have been emerging that assist in monitoring for leaks from underground tanks in the vadose zone. Most of these are sampling devices used to detect if a release occurs from underground tanks not already equipped with leak detection systems. One of these is a diffusive sampler for passive

monitoring of underground storage tanks (Karp, 1993). Another is conducting soil-gas monitoring (Durant, et al, 1993).

Table 1-2: Summary of Work Projects

Project Number/ Work Request	Description	Status: July 1992	Status Mar 1996
P-341	Hazardous/Flammable Material 16,000 ft^2 storage and ten 150 ft^2 lockers	Under Design	Completed
37-048-89	Five concrete sumps in Hazardous Waste Storage Building	Scheduled	No sumps in place
37-058-89	20 ft x 20 ft x 4 in berm for Hazardous Waste Staging Area	Scheduled	No berm constructed
	Closure of six 12 ft x 16 ft Hazardous Waste Accumulation areas	Proposed	Unknown
	Underground storage tank testing program	In Progress	Completed
ET821R	Drop Tank Drainage Area	Under Design	Completed
ET823R	Hazardous Waste Storage Facility	Under Design	Canceled
	Construction of a berm around Test Cell T-26		Completed

1.11 Oil and Hazardous Substances Storage Sites

Based on a survey conducted by SAIC in October 1993, a total of 15 sites have been identified that require a SPCC Plan. These sites include large underground fuel tank farms, vehicle maintenance stations, and hazardous waste and hazardous materials storage areas. Table 1-3 lists those sites.

Table 1-3: Oil and Hazardous Substances Storage Sites

Section	Site	Building	Description
2.1	Tank Farm 4	196 - 199 200 - 203 216 - 218	Tank 216: 50,000-gal diesel UST; will be closed, fuel transferred to Tank Farm 5 Tank 200 & 203: 25,000-gal JP-5 USTs Tank 201 & 202: 50,000-gal JP-5 USTs Tanks 196-199, 217 & 218: empty USTs T-02 & T-03: 2,000-gal spill containment USTs Entire Tank Farm will be closed in the future
2.2	Tank Farm 5	208 - 215	Tank 208: 50,000-gal UST, empty; will be used for diesel Tanks 209 & 213: 25,000-gal JP-5 UST Tanks 211 & 215: 50,000-gal JP-5 UST Tanks 210, 212, & 214 are empty USTs T-06 & T-08: 2,000-gal spill containment USTs
2.3	Tank Farm 6	204 - 207	Tank 206: 50,000-gal UST for unleaded gasoline Tank 207: 50,000-gal empty UST used as back-up for AVGAS Tanks 204 and 205 are empty USTs; scheduled to be closed Tank T-07: 2,000-gal spill containment UST
2.4	Tank Farm 555	547-551	Tanks 547-551: 567,000-gal JP-5 USTs Tank T-01: 2,000-gal spill containment UST
2.5	Tank Farm 902	902-A, 902-B	Tanks 902-A, -B: 50,000-gal JP-5 USTs Tank 902-C: 2,500-gal spill containment UST
2.6	Fuel Pit	101	Two 30,000-gal JP-5 USTs One 4,000-gal UST spill recovery tank
2.7	C-Pool Service Station	298	Tank 298A: 3,000-gal UST for unleaded gasoline Tank 298B: 2,000-gal diesel UST Tank 298C: 100-gal oil/water separator Tank 298D: 185-gal waste oil UST
2.8	Government Motor Vehicle Filling Station	800	Two 10,000-gal diesel USTs One 10,000-gal unleaded gasoline UST Two 1,000-gal waste oil UST; not in use since Oct. 1992 Up to 55-gallon containers of waste and product oil, antifreeze, hydraulic fluid, and grease, Safety-Kleen solvent, and lead-acid batteries
2.9	MWR Automotive Center	651	Four 12,000-gallon USTs for unleaded fuel One 500-gallon UST for new bulk oil One 1,000-gallon aboveground propane tank Up to 55-gallon containers for waste and product oil, antifreeze, hydraulic fluid, and grease, Safety-Kleen solvent, and lead-acid batteries
2.10	Service Station/ Mini Mart	637	Three 12,000-gal unleaded gasoline USTs One 500-gallon aboveground propane tank
2.11	Test Cells	Various	T-6A: Two 10,000-gal JP-5 UST and oil/water separator T-6C: Two 10,000-gal JP-5 UST and oil/water separator T-17: 1,000-gal JP-5 UST T-23: 2,500-gal JP-5 UST T-26: 100-gal aboveground JP-5 tank and oil/water separator
2.12	Haz Waste/ Haz Mat'ls Accum Areas	40 known sites	Hazardous wastes and hazardous materials accumulate in designated accumulation areas and in underground and aboveground tanks (see Attachments A and B)
2.13	Hazardous Waste Storage Area	673T3	RCRA-permitted hazardous waste storage area
2.14	Oil/Water Separators	39 known sites	Included with Attachment B
2.15	Miscellaneous Tanks	Various	Several tanks throughout the Station; one containing propane, one containing contaminated JP-5

2.0 SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLANS

This section presents the spill prevention and response measures in place and additional measures recommended for sites within MCAS El Toro that have the potential for an oil or hazardous substance spill or release. A survey of MCAS El Toro was conducted by SAIC in October 1993 to determine which facilities, because of their storage capacities, location in environmentally sensitive areas, or potential to discharge oil or hazardous substances into navigable waters, require SPCC Plans. Attachment A is an oversized figure of all the hazardous waste accumulation points and hazardous materials storage points; Attachment B is an oversized figure of all the underground storage tanks including the oil/water separators.

2.1 Tank Farm 4

Eleven underground fuel storage tanks comprise Tank Farm 4. The tanks are constructed of concrete, coated with tar, and have steel tops and bottoms. The Tank Farm is located in the north-central portion of MCAS El Toro on 8th Street, off of North Marine Way, Grid Nos. M-7 and N-7 on Attachment B.

Tank Farm 4 is separated into two sections, upper and lower. The lower section consists of four JP-5 underground storage tanks; Tanks 200, 201, 202, and 203; and four empty underground storage tanks; Tanks 196, 197, 198, and 199. Tanks 200 and 203 each have a 25,000-gallon capacity and Tanks 201 and 202 each have 50,000-gallon capacities. Tanks 196 and 199 each have 25,000-gallon capacities and, at one time, contained diesel and JP-5, respectively. Tanks 197 and 198 each have 50,000-gallon capacities and once contained diesel.

The upper section consists of three underground storage tanks for diesel fuel; Tanks 216, 217, and 218. Tank 218 has a 25,000-gallon capacity. Tanks 216 and 217 are empty, Tank 216 has a 50,000-gallon capacity, and Tank 217 has a 25,000-gallon capacity.

Tank Farm 4 is very old and will be abandoned in the near future, once the JP-5 fuel is depleted. The plan is to transfer diesel fuel usage from Tank 218 to Tank 208 in Tank Farm

5. It is also planned to remove Tanks 216-218 and 196-199. No other hazardous substances are handled.

Fuel Transfer

Fuel is delivered to Tank Farm 4 by tanker trucks. Transfer piping consists of both underground and aboveground piping. The aboveground pipelines lead from the tanks to the loading racks. Valves, pumps, and hose connections are located in concrete vaults below grade to aid in preventing releases of fuel during transfer operations.

Security

The Tank Farm is secured by a chain-link fence with locked gates. Starter controls are locked in the "off" position and are only accessible to authorized personnel. Personnel in the Supply Department of MCAS El Toro perform daily inspections of the Tank Farm to check for leaks.

Containment and Drainage Control

Two underground tanks, Tanks T-02 and T-03, are used as part of a spill containment system to contain spills that may occur as fuel is pumped between Tank Farm 4 and the vacuum trucks. They have 2,000-gallon capacities and are fiberglass-coated steel tanks. Tank T-02 is located about 10 feet south of the southwest corner of Tank Farm 4 and Tank T-03 is located about 8 feet north of the northeastern corner. A concrete pad surrounded by a concrete berm marks the location of each tank.

Tank Farm 4 underground tanks and piping are not double-walled or otherwise equipped with a leak collection system; therefore, a release of fuel could contaminate the environment. Containment of spills is controlled by a berm that surrounds the truck loading/unloading area. In addition, the area is paved and sloped so that spillage and runoff are directed to Tanks T-02 and T-03.

Spill Prediction

Releases of fuel are mostly limited to those that might occur if one of the underground tanks or piping leaks. Although the quantity of fuel which would be released from a leak from an underground tank cannot be predicted accurately, it is unlikely that the entire contents of a tank (maximum 50,000 gallons) would be released as underground tanks cannot drain by gravity. Spillage during fuel transfer is likely, but release to the environment is prevented because the area surrounding the tanks is paved, transfer of fuel occurs within a concrete vault, surface spills and runoff drain to spill containment tanks, and the underground tanks recently passed tank integrity tests.

Spill Prevention and Responsible Personnel

The primary responsibility for oil spill prevention lies with MCAS El Toro Supply Department, currently managed by Vern Zepp (extension 2558). No personnel are permanently stationed at this tank farm. Supply Department personnel check tank liquid levels daily, perform general inspections, and maintain fuel delivery, transfer, and inspection records. Maintenance is provided by the Facilities Management Department.

Other spill prevention techniques employed include painting the aboveground pipes to protect them from corrosion, cathodically protecting the underground pipelines, and testing each tank periodically for structural integrity. The last time the tanks were tested was in August 1993.

Spill Contingency Plan

In case of a spill during loading/unloading operations, Supply Department personnel would respond with absorbent material, brooms and shovels. MCAS El Toro Fire Department/HazMat Team is notified at extension 9911 when a spill of 5 gallons occurs or if a spill could reach the storm drain system.

Recommendations

Unless this Tank Farm is abandoned in the near future, it is recommended that each tank be equipped with overfill protection including an automatic shut-off on the fill port and ball float valves on the vent and vapor lines. Indicators with high and low level alarms should also be installed. The loading/unloading areas should have physical barriers to protect them from vehicular collisions.

2.2 Tank Farm 5

Tank Farm 5 consists of eight underground, concrete tanks that are coated with tar each with steel tops and bottoms. It is located in the northeastern corner of the Station on North Marine Way, Grid No. N-10 on Attachment B. Four of these tanks are empty (Tanks 208, 210, 212, and 214). The remaining tanks (Tanks 209, 211, 213, and 215) contain JP-5. The storage capacities for Tanks 209 and 213 are 25,000 gallons each; the storage capacities for Tanks 211 and 215 are 50,000 gallons each. Tank 209 is used to fill the test cells. Diesel from Tank 216 in Tank Farm 4 will be transferred to Tank 208 sometime in the future. No other hazardous substances are handled.

Fuel Transfer

JP-5 fuel is delivered to this Tank Farm directly from Tank Farm 555. Transfer piping consists of both underground and aboveground piping. The aboveground pipelines lead from the tanks to the loading racks. Valves, pumps and hose connections are located in concrete vaults below grade to aid in preventing releases of fuel during transfer operations to and from the vacuum trucks.

Security

The Tank Farm is secured by chain-link fence with locked gates. Starter controls are locked in the "off" position and are only accessible to authorized personnel. Personnel in the Supply

Department of MCAS El Toro perform daily inspections of the tank farm to check for leaks. In addition, the Provost Marshall's Office inspects the tank farm for security purposes during their routine, daily patrols. Adequate lighting is available.

Containment and Drainage Control

Two underground tanks, Tanks T-06 and T-08 are used as part of a spill containment system to contain spills that may occur as fuel is pumped from Tank Farm 5 to vacuum trucks. They have 2,000-gallon capacities and are fiberglass-coated steel tanks. Tank T-06 is located about 8 feet west of the southeastern corner of Tank Farm 5 and Tank T-08 is located between Tank Farms 5 and 6, about 40 feet south of the southwestern corner of the Pump Station. A concrete pad surrounded by a concrete berm marks the location of each tank.

Tank Farm 5 underground tanks and piping are not double-walled or equipped with a leak collection system; therefore, a release of fuel could contaminate the environment. Containment of spills is controlled by a berm that surrounds the truck loading/unloading area. The containment area is paved and sloped so that spillage and runoff are directed to Tanks T-06 and T-08.

Spill Prediction

Releases of fuel are limited to those that might occur if one of the underground tanks begins to leak. Although the quantity of fuel which would be released from a leak from an underground tank cannot be predicted accurately, it is unlikely that the entire contents of a tank (maximum 50,000 gallons) would be released as underground tanks cannot drain by gravity. Spillage during fuel transfer is likely, but a release to the environment is limited since the area surrounding the tanks is paved, transfer occurs within a concrete vault, releases and runoff drain to spill containment tanks, and the tanks recently passed integrity tests.

Spill Prevention and Responsible Personnel

The primary responsibility for oil spill prevention rests with MCAS El Toro Supply Department, currently managed by Vern Zepp (extension 2558). No personnel are permanently stationed at this tank farm. Supply Department personnel check tank liquid levels and perform general inspections daily and maintain fuel delivery, transfer, and inspection records. Maintenance is provided by the Facilities Management Department.

Other spill prevention techniques employed include painting the aboveground pipes to protect them from corrosion, cathodically protecting the underground pipelines, and testing each tank periodically for structural integrity. The last time the tanks were tested was in August 1993.

Spill Contingency Plan

In case of a spill during loading/unloading operations, Supply Department personnel would respond with absorbent material, brooms and shovels. MCAS El Toro Fire Department/HazMat Team is notified at extension 9911 when a spill of more than 5 gallons occurs or if a spill could reach the storm drain system.

Recommendations

It is recommended that each tank be equipped with overfill protection including an automatic shut-off on the fill port and ball float valves on the vent and vapor lines. A high-level indicator with high and low level alarms should also be installed. The loading/unloading areas should have physical barriers to protect them from vehicular collisions.

2.3 Tank Farm 6

Tank Farm 6 consists of four underground concrete tanks with steel tops and bottoms; Tanks 204, 205, 206, and 207. It is located in the northeastern corner of the Station off of U Street, Grid No. N-10 on Attachment B. The tanks are constructed of concrete, coated with tar, with

steel tops and bottoms. Only Tank 206 contains fuel (50,000-gallons of premium unleaded gasoline). The other three are empty. Tanks 204 and 205 once contained JP-5, have 50,000 and 25,000-gallon capacities, respectively, and are scheduled to be closed. Tank 207 is 50,000-gallons and is used as a back-up tank for AVGAS during the air shows. No other hazardous substances are handled.

Fuel Transfer

Fuel is delivered to this Tank Farm by tanker trucks. Transfer piping consists of both underground and aboveground piping. The aboveground pipelines lead from the tanks to the loading racks. Valves, pumps, and hose connections are located in concrete vaults below grade to aid in preventing releases of fuel during transfer operations.

Security

The Tank Farm is secured by chain-link fence with locked gates. Starter controls are locked in the "off" position and are only accessible to authorized personnel. Personnel in the Supply Department of MCAS El Toro perform daily inspections of tank farm to check for leaks.

Containment and Drainage Control

Two underground tanks, Tanks T-07 and T-08 are used as part of a spill containment system to contain spills that may occur as fuel is pumped to vacuum trucks. They have 2,000-gallon capacities and are fiberglass-coated steel tanks. Tank T-07 is located about 30 feet west of the southwestern corner of Tank Farm 6 and Tank T-08 is located between Tank Farms 5 and 6, about 40 feet south of the southwestern corner of the Pump Station. A concrete pad surrounded by a concrete berm marks the locations of each tank.

Tank Farm 6 underground tanks and piping are not double-walled or otherwise equipped with a leak collection system; therefore, a release of fuel could contaminate the environment. Containment of spills is controlled by a berm that surrounds the truck loading/unloading area.

The containment area is paved and sloped so that spillage and runoff is directed to Tanks T-07 and T-08. In addition, the tanks recently passed tank integrity tests.

Spill Prediction

Releases of fuel are limited to those that might occur if one of the underground tanks begins to leak. Although the quantity of fuel which would be released from a leak from an underground tank cannot be predicted accurately, it is unlikely that the entire contents of a tank (maximum 50,000 gallons) would be released as underground tanks cannot drain by gravity. Spillage during fuel transfer is likely. However, release to the environment is limited since the area surrounding the tanks is paved, transfer occurs within a concrete vault, releases and runoff drains to spill containment tanks, and the tanks recently passed tank integrity tests.

Spill Prevention and Responsible Personnel

The primary responsibility for oil spill prevention lies with MCAS El Toro Supply Department, currently managed by Vern Zepp (extension 2558). No personnel are permanently stationed at this tank farm. Supply Department personnel check tank liquid levels and perform general inspections daily and maintain fuel delivery, transfer, and inspection records. Maintenance is provided by the Facilities Management Department.

Other spill prevention techniques employed include painting the aboveground pipes to protect them from corrosion, cathodically protecting the underground pipelines, and testing each tank periodically for structural integrity. The last time the tanks were tested was in August 1993.

Spill Contingency Plan

In case of a spill during loading/unloading operations, Supply Department personnel would respond with absorbent material, brooms and shovels. MCAS El Toro Fire Department/HazMat Team is notified at extension 9911 when a spill of more than 5 gallons occurs or if a spill could reach the storm drain system.

Recommendations

It is recommended that each tank be equipped with overfill protection including an automatic shut-off on the fill port and ball float valves on the vent and vapor lines. A high-level indicator with high and low level alarms should also be installed. The loading/unloading areas should have physical barriers to protect them from collisions.

2.4 Tank Farm 555

Tank Farm 555 consists of five 567,000-gallon underground tanks, 88 feet in diameter, and constructed of concrete with steel tops and bottoms. It is located across Irvine Boulevard in the extreme northeastern corner of the Station, Grid No. K-12 and K-13 on Attachment B. The tanks contain JP-5 fuel. No other hazardous substances are handled.

Fuel Transfer

The tanks receive JP-5 fuel directly through a pipeline from Norwalk, California twice a week. When fuel is being delivered, valves are opened and operated manually. Pressure is monitored to detect a closed or clogged valve. Norwalk personnel provide MCAS El Toro with the volume of fuel being delivered and an "allowance, plus or minus." This allowance accounts for the difference in computed fuel volume at different temperatures and pressures. MCAS personnel stated that they have always been within their allowance. In addition, excess JP-5 fuel emptied from a jet is transferred to Tank Farm 555 via tank truck. In these cases, the fuel may be pumped through a filter system before it is transferred to the underground tanks. The ports where the fuel is pumped from the tanker truck is surrounded by a concrete berm and any spillage is directed to a spill containment tank.

Security

This tank farm is different from the others in that there is someone on-site during operating hours. The main office of the Supply Department is located here. The tank farm is surrounded

by a locked, chain-link fence. Starter controls are locked in the "off" position and are only accessible to authorized personnel. Personnel in the Supply Department of MCAS El Toro perform daily inspections to check for leaks or spillage around the tank truck loading area.

Containment and Drainage Control

Tank T-01 is a 2,000-gallon, fiberglass-coated steel, underground spill containment tank located adjacent to the northeastern corner of Tank Farm 555. A concrete pad surrounded by a concrete berm marks the locations of each tank. Containment of spills is controlled by a berm that surrounds the truck loading/unloading area. The containment area is paved and sloped so that spillage and runoff are directed to Tank T-01 and is designed to hold the entire contents of the tank truck plus sufficient freeboard for precipitation.

Spill Prediction

Spills or releases from this tank farm can be catastrophic if a rupture or leak in one of the delivery pipelines occurs. Releases are also likely during tank truck transfer, however, release to the environment is controlled since spillage is directed to a spill containment tank. A release to the environment is also possible from Tank T-01 should it begin to leak. Although the quantity of fuel which would be released from a leak from an underground tank cannot be predicted accurately, it is unlikely that the entire contents of a tank (maximum 567,000 gallons) would be released as underground tanks cannot drain by gravity.

Spill Prevention and Responsible Personnel

The primary responsibility for oil spill prevention lies with MCAS El Toro Supply Department. Supply Department personnel check tank liquid levels and perform general inspections daily, and maintain fuel delivery, transfer, and inspection records. Maintenance is provided by the Facilities Management Department.

Tank Farm 555 is equipped with a portable trailer loaded with spill prevention and response equipment including absorbent materials, empty 55-gallon drums, brooms, shovels, fire extinguishers, and personal protective equipment.

Spill Contingency Plan

In case of a spill during tank truck unloading operations, Supply Department personnel would respond with absorbent material, brooms and shovels. MCAS El Toro Fire Department/HazMat Team is notified at extension 9911 when a spill of more than 5 gallons occurs or if a spill could reach the storm drain system.

Recommendations

It is recommended that each tank be equipped with overfill protection including an automatic shut-off on the fill port and ball float valves on the vent and vapor lines. A high-level indicator with high and low level alarms should also be installed. The loading/unloading areas should have physical barriers to protect them from collisions.

2.5 Tank Farm 902

Tank Farm 902 is a new tank farm installed in early 1993. The tank farm consists of two 50,000-gallon underground tanks for JP-5, Tanks 902-A and 902-B, and a 2,500-gallon underground recovery tank, Tank 902-C. No other hazardous substances are handled. The location of Tank Farm 902 is shown in Attachment B, Grid No. N/0-8.

Fuel Transfer

Fuel is delivered by tanker trucks. Transfer piping consists of both underground and aboveground piping. The aboveground pipelines lead from the tanks to the loading racks. Valves, pumps, and hose connections are located in concrete vaults below grade to aid in preventing releases of fuel during transfer operations.

Security

The Tank Farm is secured by chain-link fence with locked gates. Starter controls are locked in the "off" position and are only accessible to authorized personnel. The tank farm is provided with adequate lighting during operations. Personnel in the Supply Department of MCAS El Toro perform daily inspections to check for leaks. In addition, the Provost Marshall's Office inspects the tank farm during their routine, daily patrols.

Containment and Drainage Control

Tank 902-C is a 2,500-gallon underground, fiberglass-coated steel tank used as part of a spill containment system to contain spills that may occur as fuel is pumped to and from vacuum trucks. Containment of spills is controlled by a berm that surrounds the truck loading/unloading area. The area is paved and sloped so that any spillage or runoff is directed to Tank 902-C and is designed to contain a release from the largest compartment of the tank truck plus sufficient freeboard for precipitation. Since this is a new underground tank farm, leak detection and leak control equipment were installed. All of the tanks are double-walled with leak detection between the walls. A computer monitoring system was also installed to register if a leak had occurred.

Spill Prediction

Releases of fuel are limited to those that might occur if one of the underground tanks begins to leak. Spillage during fuel transfer is likely, however, release to the environment is limited since the area surrounding the tanks is paved, transfer occurs within a concrete vault, and releases and runoff drain to a spill containment tank. Although the quantity of fuel which would be released from a leak from an underground tank cannot be predicted accurately, it is unlikely that the entire contents of a tank (maximum 50,000 gallons) would be released as underground tanks cannot drain by gravity.

Spill Prevention and Responsible Personnel

The primary responsibility for oil spill prevention lies with MCAS El Toro Supply Department. No personnel are permanently stationed at this tank farm. Supply Department personnel check tank liquid levels and perform general inspections daily and maintain fuel delivery, transfer, and inspection records. Maintenance is provided by the Facilities Management Department.

Spill Contingency Plan

In case of a spill during loading/unloading operations, Supply Department personnel would respond with absorbent material, brooms and shovels. MCAS El Toro Fire Department/HazMat Team is notified at extension 9911 when a spill of more than 5 gallons occurs or if a spill could reach the storm drain system.

Recommendations

It is recommended that each tank be equipped with overfill protection including an automatic shut-off on the fill port and ball float valves on the vent and vapor lines. A high-level indicator with high and low level alarms should also be installed. The loading/unloading areas should have physical barriers to protect them from collisions.

2.6 Building 101 Fuel Pit Area

This fuel pit is located adjacent to the runway in the southeast section of the Station (Grid No. Q-10 on Attachment B) and consists of two 30,000-gallon underground tanks for JP-5 fuel and one 2,500-gallon underground recovery tank. The fuel pit was intended to be operated remotely. However, clean up from a major spill that occurred in the 1970s depleted the funds and the remote equipment was never installed. Instead, a trained individual from the Supply Department must manage each fuel transfer.

Fuel Transfer

Fuel is delivered directly from Tank Farm 555. The fuel is then pumped into vacuum trucks or piped directly to be delivered to the aircraft.

Security

An employee from the Supply Department is stationed at the Fuel Pit during the day. In the evenings, the area is patrolled by MCAS Security. The Fuel Pit has a gravel base instead of concrete; an employee remains on-site during operating hours to ensure no spillage occurs. The fuel pit has adequate lighting during operations.

Containment and Drainage Control

Secondary containment has never been installed for any of the aboveground piping; therefore, Supply Department personnel must be on-site when fuel is being loaded or unloaded to watch for leaks or releases. The underground tanks are double-walled with leak detection cables between the walls.

A computerized alarm system was installed in August 1993 and is located within a locked building. Each morning, the operator checks the computer to determine if any leaks were detected. If a leak is detected, the cables for the monitoring equipment are pulled to double-check if a leak actually did occur. According to Supply Department personnel, the system often registers false alarms.

Spill Prediction

A "major release" was reported to have occurred in the early 1970s resulting in free product floating on the groundwater table. The quantity of the "major release" was not documented in any reports prepared by, or for, MCAS El Toro. The contaminated soil was excavated and landfarmed on-site. Although another release could still occur, the newly installed computerized

leak detection system should prevent a major release. Although the quantity of fuel which would be released in a major release from a leak from an underground tank cannot be predicted accurately, it is unlikely that the entire contents of a tank (maximum 30,000 gallons) would be released as underground tanks cannot drain by gravity.

Spill Prevention and Responsible Personnel

The primary responsibility for oil spill prevention lies with MCAS El Toro Supply Department. Supply Department personnel check tank liquid levels and perform general inspections daily and maintain fuel delivery, transfer, and inspection records. Maintenance is provided by the Facilities Management Department.

Other spill prevention techniques employed include painting the aboveground pipes to protect them from corrosion, cathodically protecting the underground pipelines, and testing each tank periodically for structural integrity. The last time the tanks were tested was in August 1993.

Spill Contingency Plan

In case of a spill during loading/unloading operations, Supply Department personnel would respond with absorbent material, brooms and shovels. MCAS El Toro Fire Department/HazMat Team is notified at extension 9911 when a spill of more than 5 gallons occurs or if a spill could reach the storm drain system.

Recommendations

It is recommended that secondary containment be installed for the piping and a concrete or asphalt base be constructed and the computer leak detection system be desensitized to apparent condensation on the check cables.

2.7 C-Pool Service Gas Station

This service station, located in the western corner of the Station on South Marine Way, Grid No. U-7 on Attachment B, dispenses fuel and provides maintenance services for government-owned vehicles. There are ten service bays where maintenance activities are conducted located behind the fuel dispensing islands, in Building 386.

Two underground tanks store fuel; one 3,000-gallon tank for unleaded gasoline (Tank 298A) and one 2,000-gallon tank for diesel (Tank 298B). In addition, one 185-gallon underground, steel tank (Tank 298D) was used to collect waste oil during oil changes. Currently, however, waste oil is collected in 55-gallon containers. An oil/water separator is also associated with this service station. Hazardous wastes, including waste oil, waste antifreeze, batteries, and contaminated dry sweep, are stored in a separate, fenced and locked hazardous waste accumulation building, behind the service station, in Building 770. Hazardous materials, including fresh motor oil, lube oil, hydraulic fluid, grease, and antifreeze, are stored in a separate fenced and locked building, adjacent to the hazardous waste accumulation building.

Fuel Transfer

Fuel is transferred to the underground tanks by tanker truck. The tank truck hose connects directly onto the fill port for each tank and is equipped with an automatic cut-off in the event of overfilling. Waste oil and waste antifreeze are collected during maintenance in small containers and hand-carried by facility personnel to the appropriate waste drums in the hazardous waste accumulation building. Fresh product is also transferred to the service bays by hand.

Security

The filling station is activated by starter controls within a locked building. Security personnel check the station as part of their regular patrol. The hazardous waste and hazardous materials buildings are locked and only authorized personnel are permitted to enter.

Containment and Drainage Control

The underground fuel tanks are single-walled steel tanks and lack any overfill protection. The surrounding surface is paved so any spills during fuel unloading would be directed to the storm water drainage system. Spills in the service bays drain to an oil/water separator (Tank 298C). A new computerized leak detection system was installed after the underground tanks were tested for structural integrity in August 1993. The base of the hazardous waste accumulation building is constructed of concrete and surrounded by a berm so any spillage would remain within the building. The base of the hazardous materials storage building is also constructed of concrete; however, as it does not have a berm, any spillage can drain to the storm drain system. An inspection of the storage building was conducted in September 1993 by the MCAS Fire Department/HazMat Team. It is anticipated that a Report of Violation will be issued and a berm will have to be constructed.

Spill Prediction

Spills during fuel unloading could result in a release of up to one tank truck compartment (volume varying with the size of the tanker). Spillage during fuel dispensing could result in a release of less than five gallons. Leaks from the underground tanks could result in a release to the surrounding soil. Although the quantity of fuel which would be released from a leak from an underground tank cannot be predicted accurately, it is unlikely that the entire contents of a tank (maximum 3,000 gallons) would be released as underground tanks cannot drain by gravity. If a rupture of one of the material containers occurs, up to 55 gallons could be released to the storm drain system.

Spill Prevention and Responsible Personnel

Filling station personnel are responsible for spill prevention, tank integrity testing, and record keeping for the underground tanks. Tank levels are checked daily and inspection records are maintained at the service station. The Unit Environmental Manager assigned to the MCAS El Toro Garrison Mobile Equipment Department is responsible for spill prevention at the

hazardous waste and hazardous materials storage buildings. Both the hazardous materials and hazardous waste accumulation areas are equipped with spill kits. The kits are stocked with absorbent material, shovels, brooms, personal protective equipment, and a copy of the site-specific spill contingency plan. Spill prevention equipment and procedures consist of fire extinguishers, overpack drums, internal and external alarm systems, and maintenance of adequate aisle space.

Spill Contingency Plan

Should a spill occur that cannot be addressed simply (such as applying kitty litter to a small oil spill), the MCAS El Toro Fire Department/HazMat Team is notified at extension 9911. They would be assisted by the On-Scene Operations Team. After the Fire Department/HazMat Team is notified, the MCAS El Toro Environmental Department is notified at extension 2772 or 6607.

Recommendations

It is recommended that waste accumulation drums be left within the service station so that transfer of the waste oil and other wastes from the vehicles to the drums can be accomplished with minimal possibility of spillage. The wastes can then be transferred to the waste accumulation building at the end of each day, thus minimizing the number of trips to the building and the number of personnel entering the building. It is also recommended that a berm be constructed around the hazardous materials storage building and that overfill protection, alarms, and automatic shut-offs be installed on the fuel tanks.

2.8 Government Motor Vehicle Filling Station

This service station, Building 800, provides maintenance for government-owned vehicles and is located in the southwestern portion of the Station on South Marine Way, Grid No. U-10 on Attachment B. Maintenance operations occur within 16 service bays. The service station has three 10,000-gallon capacity underground storage tanks, two for diesel and one for unleaded

gasoline. Two 1,000-gallon capacity underground waste oil tanks were emptied in October 1992 and have not been used since. Waste oil is currently collected in 55-gallon drums within the service station.

Hazardous materials are stored outdoors within a paved and bermed area. The berming height has been increased by sandbags. A blind sump in the middle of the area collects any spillage. Hazardous substances include oil, antifreeze, grease, batteries, and Safety-Kleen solvent. Hazardous waste is stored within a structure with walls on three sides, a corrugated roof, and a berm surrounding the entire building. The station is also equipped with a wash rack and associated oil/water separator, Building 802.

Fuel Transfer

Fuel is transferred to the underground tanks by tanker truck. The tank truck hose connects directly onto the fill port for each tank and is equipped with an automatic cut-off in the event of overfilling. Waste oil and waste antifreeze is collected during maintenance in small containers and temporarily stored within the service bay. When the container is full, it is brought to the hazardous waste accumulation building, Building 825. Fresh product is also transferred to the service bays by hand.

Security

The filling station is activated by starter controls within a locked building. Security personnel check the station as part of their regular patrol. The hazardous waste and hazardous materials buildings are locked and only authorized personnel are permitted to enter.

Containment and Drainage Control

The underground fuel tanks are single-walled steel tanks and lack any overfill protection. The surrounding surface is paved so any spills during fuel unloading would be directed to the storm water drainage system. Collection of spillage within the service bays occurs within shallow

trenches located along the entrance of the service bays. Drainage from the trenches flows to an oil/water separator. Spillage outside of the service bay would flow to the storm drain system. Drainage from the truck wash rack flows down the pavement to a ditch and eventually to the oil/water separator. The hazardous waste accumulation building is equipped with a berm. Spillage of hazardous materials would be captured in the sump.

Spill Prediction

Spills during fuel unloading could result in a release of up to one tank truck compartment, the volume depending on the size of the tank truck. Spillage during fuel dispensing could result in a release of a couple of gallons. Leaks from the underground tanks could result in a release to the surrounding soil. Although the quantity of fuel which would be released from a leak from an underground tank cannot be predicted accurately, it is unlikely that the entire contents of a tank (maximum 10,000 gallons) would be released as underground tanks cannot drain by gravity. If a rupture of one of the material containers occurs, up to 55 gallons could be released to the storm drain system.

Spill Prevention and Responsible Personnel

Filling station personnel are responsible for spill prevention, tank integrity testing, and record keeping for the underground tanks. Tank levels are checked daily and inspection records are maintained at the service station. The designated Unit Environmental Manager is responsible for spill prevention of the hazardous waste and hazardous materials storage buildings. The tanks were last tested for structural integrity in August 1993.

Both the hazardous materials and hazardous waste accumulation areas are equipped with spill kits. The kits are stocked with absorbent material, shovels, brooms, personal protective equipment, and a copy of the site-specific spill contingency plan. Spill prevention equipment and procedures consist of fire extinguishers, overpack drums, internal and external alarm systems, and maintenance of adequate aisle space.

In addition to the spill prevention equipment, the squadron also maintains a mobile spill kit. It is a trailer that can be hitched to a truck and is loaded with drums, absorbent material, shovels, brooms, and personal protective equipment.

Spill Contingency Plan

Should a spill occur that cannot be addressed simply (such as applying kitty litter to a small oil spill), the MCAS El Toro Fire Department/HazMat team is notified at extension 9911. They would be assisted by the On-Scene Operations Team. After the Fire Department/HazMat Team is notified, the MCAS El Toro Environmental Department is notified at extension 2772 or 6607.

Recommendations

It is recommended that overfill protection, alarms, and automatic shutoffs be installed on all fuel tanks.

2.9 MWR Automotive Center

MWR Automotive Center, Building 651, is a Chevron gas station that also provides maintenance services on privately-owned vehicles within eight service bays. It is located in the northern portion of the Station on C Street, Grid No. O-2 on Attachment B. Four 12,000-gallon underground tanks contain three grades of unleaded gasoline (regular, plus, and premium). In addition, two 500-gallon underground tanks contain new bulk oil. A 500-gallon underground tank once contained waste oil, although it is not currently being used. Instead, waste oil is placed directly into 55-gallon drums. Other hazardous substances include antifreeze, grease, batteries, Safety-Kleen solvent, and a biodegradable, water-based degreaser. Hazardous waste is stored within a locked, bermed shed outside of the service station. An aboveground 1,000-gallon propane tank is located on the edge of the parking lot. All of the underground tanks have an electronic leak detection system, installed in August 1993, although not yet operational.

Fuel Transfer

Fuel is transferred to the underground tanks by tanker truck. The tank truck hose connects directly onto the fill port for each tank and is equipped with an automatic cutoff in the event of overfilling. Waste oil and waste antifreeze is collected during maintenance in small containers and temporarily stored within the service bay. When the container is full, it is brought to the hazardous waste accumulation building, Building 825. Fresh product is also transferred to the service bays by hand.

Security

The filling station is activated by starter controls within a locked building. Security personnel check the station as part of their regular patrol. The hazardous waste building is locked and only authorized personnel are permitted to enter.

Containment and Drainage Control

The underground fuel tanks are single-walled, steel tanks lacking any overfill protection. The surrounding surface is paved so spills during fuel unloading would be directed to the storm water drainage system. Collection of spillage within the service bays occurs within shallow trenches located along the entrance of the service bays. Drainage from the trenches flows to an oil/water separator. Spillage of hazardous materials inside the maintenance bays would be captured in the sump. Spillage outside of the service bay would flow to the storm drain system. Berms surround the hazardous waste accumulation building and the propane tank.

Spill Prediction

Spills during fuel unloading could result in a release of up to one tank truck compartment, (the volume depending on the size of the tank truck). Spillage during fuel dispensing could result in a release of a couple of gallons. Leaks from the underground tanks could result in a release to the surrounding soil. Although the quantity of fuel which would be released from a leak

from an underground tank cannot be predicted accurately, it is unlikely that the entire contents of a tank (maximum 12,000 gallons) would be released as underground tanks cannot drain by gravity. If a rupture of one of the material containers occurs, up to 55 gallons could be released to the oil/water separator.

Spill Prevention and Responsible Personnel

Filling station personnel are responsible for spill prevention, tank integrity testing, and record keeping for the underground tanks. An electronic leak detection system was installed in August 1993, however, it is not yet operational. Tank levels are checked daily and inspection records are maintained at the service station. The tanks were last tested for structural integrity in August 1993.

The designated Unit Environmental Manager is responsible for spill prevention of the hazardous waste storage building. The hazardous waste accumulation building is equipped with a spill kit stocked with absorbent material, shovels, brooms, personal protective equipment, and a copy of the site-specific spill contingency plan. Spill prevention equipment and procedures consist of fire extinguishers, overpack drums, internal and external alarm systems, and maintenance of adequate aisle space.

Spill Contingency Plan

MWR Automotive Center has two emergency coordinators, termed primary and secondary Division Managers. If a spill occurs during working hours, automotive personnel are to notify the Automotive Duty Manager who will notify the MCAS El Toro Fire Department/HazMat Team. The Division Manager is responsible for containing any spill within his capabilities. Should a spill occur that cannot be addressed simply (such as applying kitty litter to a small oil spill), the MCAS El Toro Fire Department/HazMat Team is notified at extension 3917. They would be assisted by the On-Scene Operations Team. After the Fire Department/HazMat Team is notified, the MCAS El Toro Environmental Department is notified at extension 2772 or 6607.

Recommendations

It is recommended that overfill protection and alarms and automatic shutoffs be installed on all fuel tanks.

2.10 Service Station/Mini Mart

This service station/mini mart, Building 637, is located in the northeastern portion of the Station on North Marine Way, Grid No. M-8 on Attachment B. No service is provided here except for fuel dispensing. Three 12,000-gallon underground tanks store three grades of unleaded fuel. A 500-gallon aboveground propane tank is located near the parking lot within a paved, bermed area.

Fuel Transfer

Fuel is transferred to the underground tanks by tanker truck. The tank truck hose connects directly onto the fill port for each tank and is equipped with an automatic cutoff in the event of overfilling.

Security

The filling station is activated by starter controls within a locked building. Security personnel check the station as part of their regular patrol.

Containment and Drainage Control

The underground fuel tanks are single-walled steel tanks lacking overfill protection. The surrounding surface is paved so any spills during fuel unloading would be directed to the storm water drainage system.

Spill Prediction

Spills during fuel unloading could result in a release of up to one tank truck compartment (the volume depending on the size of the tank truck). Spillage during fuel dispensing could result in a release of a couple of gallons. Leaks from the underground tanks could result in a release to the surrounding soil. Although the quantity of fuel which would be released from a leak from an underground tank cannot be predicted accurately, it is unlikely that the entire contents of a tank (maximum 12,000 gallons) would be released as underground tanks cannot drain by gravity.

Spill Prevention and Responsible Personnel

Filling station personnel are responsible for spill prevention, tank integrity testing, and record keeping for the fuel underground tanks. The tanks were last tested for structural integrity in August 1993. An electronic leak detection system was installed in August 1993, however, it is not yet operational. Tank levels are checked daily and inspection records are maintained at the service station.

Spill Contingency Plan

If a release occurs, filling station personnel contact the MCAS El Toro Fire Department/HazMat Team.

Recommendations

It is recommended that overfill protection, alarms, and automatic shutoffs should be installed on all of the fuel tanks.

2.11 Test Cells Fuel Tanks

Engines are tested in five test cells by the Marine Aviation Logistics Squadron (MALS-11). Four of these test cells are large concrete buildings where the engines are fueled from underground

tanks; Test Cell T-6A is supplied by two underground 10,000-gallon underground tanks (658A, B, Grid No. N-10, Attachment B); Test Cell T-6C is supplied by two 10,000-gallon underground tanks (447, A, B) Grid No. Q-11, B); Test Cells T-17 and T-23 (Grid No. N-10, Attachment B) are supplied by one 1,000-gallon tank and one 2,500-gallon tank, respectively. Test Cell T-26 is a small yellow structure located outside Building 655 where smaller engines are tested. A 100-gallon aboveground tank is located within another locked, small yellow structure next to Test Cell T-26.

Fuel Transfer

Fuel is delivered to the tanks by tanker truck. The hose from the trucks connects directly to the fill port of each tank. Overfilling is prevented by automatic shutoffs in the valves of the truck hoses. All but Test Cell T-26 is supplied by underground piping from the tanks. Fuel is supplied to Test Cell T-26 by aboveground piping from the 100-gallon aboveground tank.

Security

Each test cell is locked and only authorized personnel can enter. Starter controls for the fuel supplied to the test cells are located within the test cell, thus they are secured.

Containment and Drainage Control

The fuel tank for Test Cell T-26 is surrounded by sandbags to contain any spillage. The area surrounding Test Cell T-26 is not bermed, but a work order is in place to construct berms in the near future. The surface of Test Cell T-26 is asphalt so any spillage would not contaminate the soil; however, drainage to the surrounding soil is still likely until the berms are constructed.

Oil/water separators collect spillage around Test Cells T-6A, T-6C, and T-26. Test Cells T-17 and T-23 do not have oil/water separators, but instead have drip pans. Any spillage collected in the drip pans is poured into 55-gallon drums. MALS-11 personnel perform daily inspections to detect leaks or releases.

Spill Prediction

The underground tanks are not cathodically protected or equipped with liquid level indicators or overfill alarms. A release to the environment is possible from the underground tanks should it begin to leak, although the volume released cannot be predicted. MALS-11 personnel stated that a 60-gallon spill occurred during fuel transfer. Although the quantity of fuel which would be released from a leak from an underground tank cannot be predicted accurately, it is unlikely that the entire contents of a tank (maximum 10,000 gallons) would be released as underground tanks cannot drain by gravity. In addition, since none of the tanks have overfill alarms, spillage of up to one hundred gallons could occur if nobody notices during fueling.

Spill Prevention and Responsible Personnel

Oil spill prevention rests with MALS-11. All of the underground tanks were tested for structural integrity in August 1993 and passed. Each test cell is equipped with a complete spill kit including absorbent material, pillows, personal protective equipment, and shovels.

Spill Contingency Plan

In case of a spill of JP-5 during loading/unloading operations, the MCAS El Toro Fire Department/HazMat Team would respond.

Recommendations

It is recommended that a berm be constructed around Test Cell T-26 and that overfill protection and alarms and automatic shutoffs be installed on all fuel tanks.

2.12 Hazardous Waste Storage Building

MCAS El Toro has a RCRA hazardous waste permit to store waste in 55-gallon drums for up to 1 year. Building 673T3, the designated storage building, is located in the southeastern portion

of the Station on East Marine Road, Grid No. P-12 on Attachment A. The building is constructed of corrugated metal and surrounded by a berm. Drums are stored on pallets within 6 bays designated for flammables, corrosives, reactives, and toxic wastes. Each bay is separated by six-inch berms. Typical wastes in storage include oils, hydraulic fluid, solvents, paints, paint thinner, antifreeze, and batteries.

Fuel Transfer

Waste drums are transferred to the staging area outside of the hazardous waste storage building by truck. There, facility personnel inspect the containers for leakage, deterioration, and labelling, and sort the containers based on their hazard classification. Physical transfer of the drums to the appropriate storage bay is accomplished by fork lift.

Security

Building 673T3 is secured by a locking chain-link fence. The building is inspected daily for leakage or releases as part of the requirements for a permitted hazardous waste storage area. A telephone and alarm system are available in case of emergencies.

Containment and Drainage Control

The hazardous waste storage building is bermed on all sides. Each of the storage bays are also bermed so that any release from a drum is captured within the bay and cannot commingle with a release from one of the other bays. The drum storage area has sufficient secondary containment to hold up to 10 percent of the total volume of the containers. The staging area, however, does not have spill containment. A ditch running in front of the building would collect any runoff from the staging area, including spillage, and direct it to the storm drain system.

Spill Prediction

It is probable that a spill from one of the drums in the staging area could result in up to 55 gallons of waste running off into the storm drain system. Spillage within the drum storage building would be contained by the berming.

Spill Prevention and Responsible Personnel

As described in MCAS El Toro's hazardous waste facility permit, the waste storage building is equipped with a telephone and internal alarm system so emergency support can be enlisted and personnel can be alerted in case of an emergency. Spill prevention techniques include maintaining the berming around the drum storage building, maintaining adequate aisle space, segregating incompatible waste streams, responding immediately to small leaks with absorbent material, conducting daily inspections in order to identify leaks or containers that may be compromised, and overpacking the containers that have been found to be leaking. The Environmental Department operates the hazardous waste storage building and is responsible for conducting the inspections and maintaining the records.

Spill Contingency Plan

Since this building has a RCRA hazardous waste storage permit, it is required to have a spill contingency plan, approved by California Department of Toxic Substances Control. The spill contingency plan consists of applying absorbent material to small spills, extinguishing small fires, and notifying the MCAS El Toro Fire Department/HazMat Team for assistance.

Recommendations

It is recommended that secondary containment be installed for the drum staging area. The secondary containment can consist of berming around the area to contain up to 10 percent of the maximum volume of waste in the staging area, and/or sloping the area toward a waste collection sump to contain any release.

2.13 Hazardous Waste/Hazardous Material Accumulation Areas

Forty hazardous waste accumulation areas have been constructed around MCAS El Toro to temporarily store waste (less than 90 days) generated by each of the units (see Attachment A). Most of the accumulation areas are located outdoors, near the generation point, constructed of concrete or asphalt base, chain-link fence walls, and metal roofs. Wastes accumulate in 55-gallon or smaller containers specific to the generator.

Hazardous materials are stored within similarly constructed buildings, adjacent to the hazardous waste accumulation buildings, and separated by a chain-link fence. During the October 1993 Station survey it was observed that the volume of hazardous materials in storage was not excessive indicating good inventory control.

The type of hazardous wastes and hazardous materials in storage would be specific to each unit. Typical hazardous materials, and therefore, hazardous wastes stored in these buildings include oil, grease, lube oil, paints, paint thinners, aerosol cans, degreasing solvents, hydraulic fluid, antifreeze, and contaminated absorbent material.

Fuel Transfer

In most cases, waste accumulates in 55-gallon drums at the point of generation. When the drum is filled, it is brought to the hazardous waste accumulation area by forklift. In other cases, such as that at the C-Pool Gas Station, wastes are collected in pans and other containers and carried to the waste accumulation drum in the hazardous waste accumulation building. As the accumulation drum is filled, or the 90 day limit is reached, the drum is transferred to the permitted hazardous waste storage building (Building 673T3) by forklift or truck.

Security

Most of the waste accumulation buildings and the hazardous materials storage buildings are fenced and locked with access only being authorized by the designated Unit Environmental Manager or his alternate.

Containment and Drainage Control

All of the hazardous waste accumulation buildings have been constructed with berms so any spillage within the buildings would be contained. If a spill occurred while transporting the waste from the point of generation to the waste accumulation building, then runoff would be directed to the storm drain system.

Spill Prediction

Spills while transferring waste from pans and pails to the 55-gallon drums is highly likely, however, the spillage would be limited to small volumes. Leakage from a waste accumulation drum could occur, however, a release of more than a few gallons is not likely since these areas are inspected daily for leaks and deteriorated containers.

Spill Prevention and Responsible Personnel

The accumulation areas are maintained by a designated Unit Environmental Manager. This person is responsible for conducting daily and weekly inspections, and ensures that waste drums are transferred to the permitted storage building within the 90-day limit. The Unit Environmental Manager receives special training on waste management, spill prevention, and spill response. Inspection records are maintained by the Unit Environmental Manager for at least 3 years. Usually located between each hazardous waste and hazardous material storage building is a locker with copies of Material Safety Data Sheets, inspection logs, assorted personal protective equipment, and a copy of the unit spill contingency plan. In addition, most hazardous waste accumulation buildings have spill kits (sometimes portable) which contain absorbent material,

personal protective equipment, shovels, dust pan, brooms, fire extinguisher, extra 55-gallon drums, and personal protective equipment.

Spill Contingency Plan

Each hazardous waste accumulation area has its own spill contingency plan, usually located within the spill kit or posted on the outside of the chain-link fence wall. The plans include the instructions for spill cleanup, the extension numbers for the MCAS El Toro Fire Department/HazMat Team and the home and office address and phone numbers for the emergency hazardous waste coordinator. General spill prevention techniques include pouring hazardous waste and hazardous materials slowly to avoid splashes and spills and opening sacks with a knife rather than tearing.

Recommendations

Although there is no regulatory requirement for secondary containment for container accumulation areas, it is recommended that berms and permanent structures be constructed for all hazardous waste accumulation buildings similar to that for permitted container storage areas (i.e. capable of containing 10% of the maximum volume of liquid hazardous waste drums, inhibits runon, and/or has additional capacity to contain runon).

2.14 Oil/Water Separators

Oil/water separators are used throughout MCAS El Toro to remove floating objects and spilled fuel. They are associated with truck wash racks, steam cleaning racks, and the storm drain and sewer drainage controls. Oil/water separation systems have been placed at the discharge points on the Agua Chinon and Bee Canyon Washes. (See Attachment B.)

Fuel Transfer

Discharges from regular run-off at the generation points and fuel transfer areas are directed to the oil/water separators. Effluent from the separators passes through a sewage monitoring station prior to discharge to the sewer system.

Security

The oil/water separators are not fenced or otherwise controlled. They are inspected at least weekly by the Unit Environmental Manager to ensure no oil or other objects are floating in the oil/water separators.

Containment and Drainage Control

The oil/water separators are part of MCAS El Toro's drainage control system. Most of the oil/water separators are equipped with high-level alarm systems to sound when they are full. However, according to MCAS El Toro personnel, the separators are emptied regularly, even if a high-level alarm has not sounded. The oil/water separators associated with the Bee Canyon and Agua Chinon Washes (part of MCAS El Toro's NPDES permit) consist of weirs to contain dry weather flows, pumps to discharge to the sanitary sewer, and oil recovery equipment. However, as discussed in Section 1.4, releases from the oil/water separators at the Bee Canyon and Agua Chinon Washes have occurred either because the discharges bypassed the oil/water separators or because the systems were overloading.

Spill Prediction

Spills are not likely to occur from the oil/water separators associated with the wash racks since they are part of a Station-wide spill collection program and they are reportedly pumped regularly. However, as mentioned above, releases have occurred in the past. Under order from the California Regional Water Quality Control Board, MCAS El Toro developed and implemented a facility vehicle/aircraft washing schedule to attempt to eliminate unauthorized discharges, but

releases continue to occur at Discharge Serial No. 1 (Agua Chinon Wash). One such release was 5,000 to 10,000 gallons of oily water caused by the flushing of a fuel tank. Also, on several occasions, the oil/water separation systems associated with the discharge points become inoperable or malfunction.

Spill Prevention and Responsible Personnel

The Unit Environmental Manager receives special training on waste management, spill prevention, and spill response. This person conducts inspections to determine the condition of the oil/water separator. If any oil is floating in the oil/water separator, it is pumped to a drum and the water is allowed to be discharged to the sewer system.

Spill Contingency Plan

If a release to an oil/water separator occurs, a pump either automatically or manually transfers the aqueous portion to a sewage treatment system. The floating product is collected and transferred to a recovery tank.

Recommendations

It is recommended that the oil/water separators be checked for structural integrity, and be maintained so that no oil reaches the discharge points. Typical maintenance can include regular pumping of any product in the separators and immediate removal of any collected debris such as leaves, twigs, or trash.

2.15 Miscellaneous Tanks

Several aboveground tanks were observed around MCAS El Toro, not apparently associated with any unit. Two of the tanks were identified. One was located next to Building 245 and it appeared to be a fuel tank with approximately a 1,000-gallon capacity. A second aboveground tank was located across from the Environmental Office near Building 862. It was labelled as

containing JP-5 fuel and had a capacity of approximately 10,000 gallons. Upon further investigation, it was determined this tank contained "contaminated JP-5." The contaminate was found to be JP-4 fuel. The contents of the tank will be recycled.

Containment and Drainage Control

No berm or other drainage control was apparent for the 1,000-gallon capacity tank adjacent to Building 245. The 10,000-gallon capacity tank adjacent to Building 862 is surrounded by a concrete-lined berm with sufficient capacity to contain the contents of the tank. In the event of stormwater accumulation within the bermed area, the stormwater, after determination as nonhazardous, is released to the storm drains.

Spill Prediction

Spillage from aboveground tanks is associated with leaking valves or other connections. the required facility inspections should identify such leaks and prevent a catastrophic release. Should a catastrophic leak occur, the entire contents of the tank (1,000 or 10,000 gallons) could be released.

Spill Prevention and Responsible Personnel

Maintenance of aboveground tanks is provided by the Environmental and Safety Department who conduct the required daily inspection of aboveground tanks for leaks. Release during fuel transfer is prevented by having at least two persons on site, each of who could shut off the flow of fuel.

Spill Contingency Plan

On-site spill control equipment for the 10,000-gallon aboveground tank is located within a locked shed adjacent to the tank. For the 1,000-gallon aboveground tank, spill control equipment is stored in Building 245. Equipment includes absorbent material, brooms, shovels, and a fire

extinguisher. For releases of less than five gallons, personnel of the Environment and Safety Department will attempt to clean up the spill. For larger releases, MCAS Fire Department will be contacted.

3.0 SPILL CONTINGENCY PLAN

3.1 Introduction

Title 40, Code of Federal Regulations Part 112.7(d) requires that an oil spill contingency plan (SCP) be prepared when spill control structures or equipment would not prevent spills from reaching navigable waters. Although most of the units handling oil at MCAS El Toro have spill control equipment, releases to the storm drain system have occurred. In addition, a spill contingency plan is required for hazardous waste generators by 40 CFR 262.34(a)(4). This SCP presents the procedures for responding to spills and other emergencies and is in accordance with Federal, State, and Navy regulations.

3.2 Emergency Coordinators

All facilities that handle hazardous wastes are required to have, at all time, at least one employee either on the facility or on call, with the responsibility for coordinating all emergency response measures. The emergency coordinator, or in the terms employed by MCAS El Toro, the On-Scene Coordinator, must be thoroughly familiar with all aspects of the facility's Contingency Plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, the emergency coordinator must be trained in emergency response and have the authority to commit the resources necessary to carry out the Spill Contingency Plan.

Table 3-1 and 3-2 are lists of individuals responsible to be emergency coordinators during an eemergency event both on and off the Flightline.

3.3 Coordination

Coordination among the various departments within MCAS El Toro is imperative to ensure the proper and complete response to a spill or emergency event. In most instances, the coordination activities will occur among the Environmental Department, Crash Crew, Fire Department/HazMat

Table 3-1: Emergency Coordinators

Shift A	**Shift B**
Primary - Fire Department	Primary - Fire Department
Capt. Dan Beerer 4081 West 1st Street #53 Santa Ana, CA 92703 Work (714) 726-3716 Home (714) 554-8559	Asst. Chief William Cook 3923 South Harvard Blvd. Los Angeles, CA 90006 Work (714) 726-3919 Home (714)296-6484
Alternate #1 - Fire Department	Alternate #1 - Fire Department
Capt. Richard A. Davis 20261 Chaucer Lane Huntington Beach, CA 92646 Work (714) 726-3919 Home (714) 963-6310	Same as that for shift A
Alternate #2 - Environmental Dept	Alternate #2, #3, and #4 - Env. Dept
Sgt. R.S. Pashalian Work (714) 726-3035/2164 Pager (714) 286-8225 Home (714) 733-2088	Same as those for Shift A
Alternate #3- Environmental Dept	
MSgt R. Nelson Work (714) 726-3035/2164 Pager (714) 286-8229 Home (619) 722-4794	
Alternate #4- Environmental Dept	
Sgt. E. A. Ibarra Work (714) 726-3035/2164 Pager (714) 286-8226 Home (714) 733-3044	

Table 3-2: Emergency Coordinators (Additional for Flightline)

Duty Section 1

Primary - Aircraft Rescue and Fire Fighting

SSgt Thomas E. Peters
183 Commor Ave.
Irvine, CA 92718
Work (714) 726-3922
Home (714) 733-2505

Alternate #1 - ARFF

LCpl Michael Higley
Barracks 842, Room B105
Santa Ana, CA 92709
Work (714) 726-3922
Home (714) 726-3198

Alternate #2 - Environmental Dept

Sgt. R.S. Pashalian
Work (714) 726-3035/2164
Pager (714) 286-8225
Home (714) 733-2088

Alternate #3- Environmental Dept

MSgt R. Nelson
Work (714) 726-3035/2164
Pager (714) 286-8229
Home (619) 722-4794

Alternate #4- Environmental Dept

Sgt. E. A. Ibarra
Work (714) 726-3035/2164
Pager (714) 286-8226
Home (714) 733-3044

Duty Section 2

Primary - ARFF

SSgt Thomas E. Peters
183 Commor Ave.
Irvine, CA 92718
Work (714) 726-3922
Home (714) 733-2505

Alternate #1 - ARFF

Sgt Paul Taylor
3184 C-Gard Ct.
Irvine CA 92714
Work (714) 726-6847
Home (714) 551-3592

Alternate #2, #3, and #4 - Env. Dept

Same as those for Duty Section 1

Team, Provost Marshall's Office, and the Facilities Management Department whose responsibilities are discussed in Section 1.6. In general, the Environmental Department will provide technical support. The MCAS El Toro HazMat Team has access to an emergency van, the contents of which are included in Table 3.4, while the Crash Crew, Provost Marshall's Office, Fire Department/HazMat Team, and Facilities Management Department will provide all necessary equipment and personnel for the On-Scene Operations Team. The MCAS El Toro Fire Department and Crash Crew will be the primary On-Scene Coordinators (emergency coordinators).

In cases where support is required from off-site, Orange County has entered into a Mutual Aid Agreement to provide police, fire, and ambulance assistance (see Attachment C). MCAS El Toro has authority to contract with spill control and hazardous waste disposal companies for additional assistance. In addition, in circumstances such as a hazardous waste spill associated with another type of emergency (i.e., earthquake), support from State and Federal agencies will be solicited. These agencies include the California Department of Toxic Substances Control, the National Response Center, and the U.S. Environmental Protection Agency.

Figures 3-1, 3-2, and 3-3 are organizational charts: Figure 3-1 depicts the Marine Corp's emergency response organization for oil spills, Figure 3-2 depicts the Marine Corp's emergency response organization for a hazardous substance spill, and Figure 3-3 depicts the suggested organization of a hazardous substance On-Scene Operations Team.

3.4 Emergency Response Equipment

Each unit is responsible for acquiring and maintaining its own spill control equipment as discussed in Section 2.0. A list of spill control equipment to be kept by each unit is provided as Attachment E. In addition, the MCAS El Toro's Fire Department/HazMat Team, Environmental Department, and the Facilities Management Department maintain equipment for the On-Scene Operations Team including an emergency van, heavy equipment, 55-gallon drums, sorbent material, pumps, lights, and personal protective equipment. This equipment is stored with the MCAS El Toro Fire Department/HazMat Team. Table 3-3 and Table 3-4 are lists of the

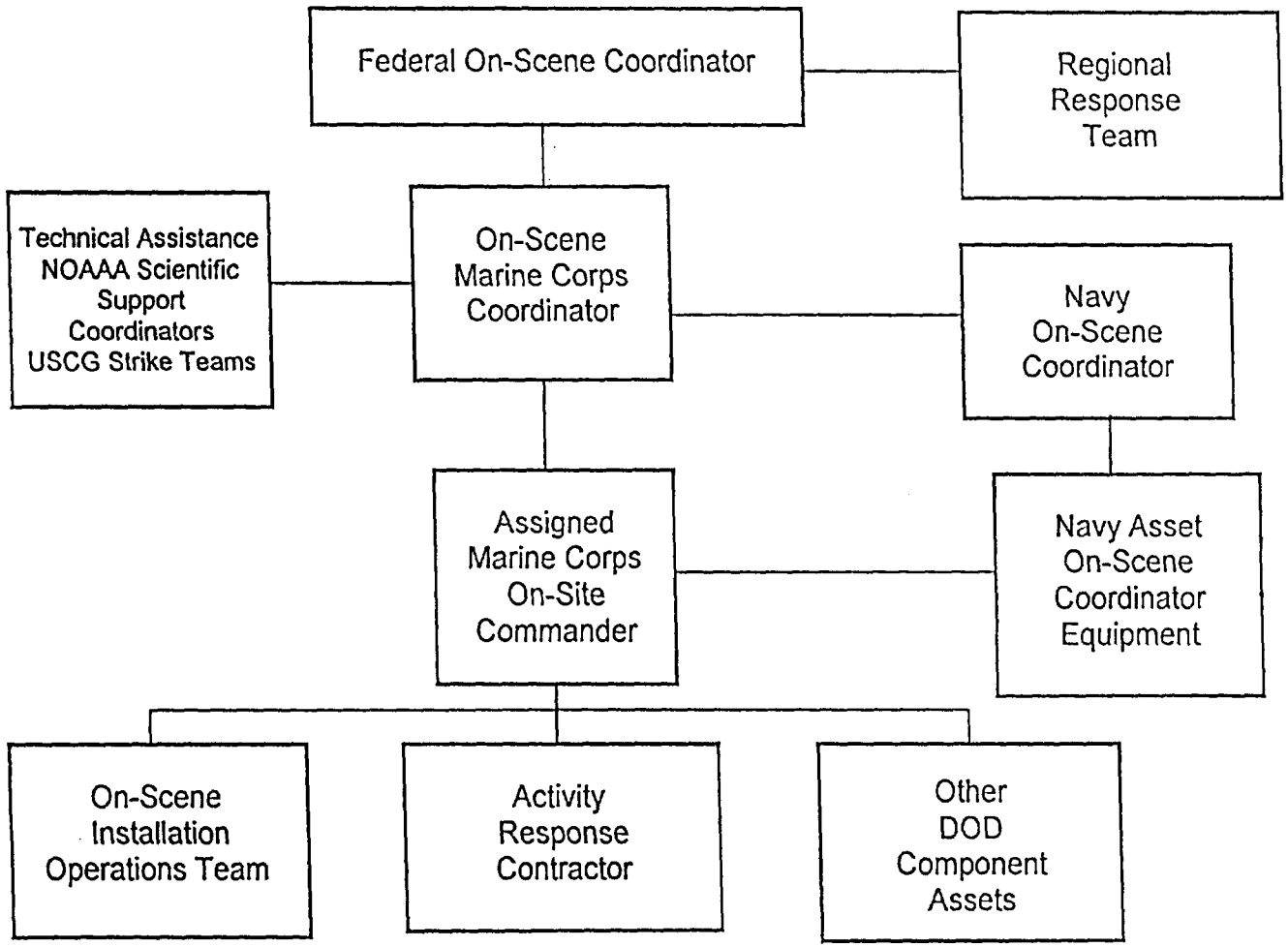


Figure 3-1: Marine Corps Emergency Response Organization for Oil Spills

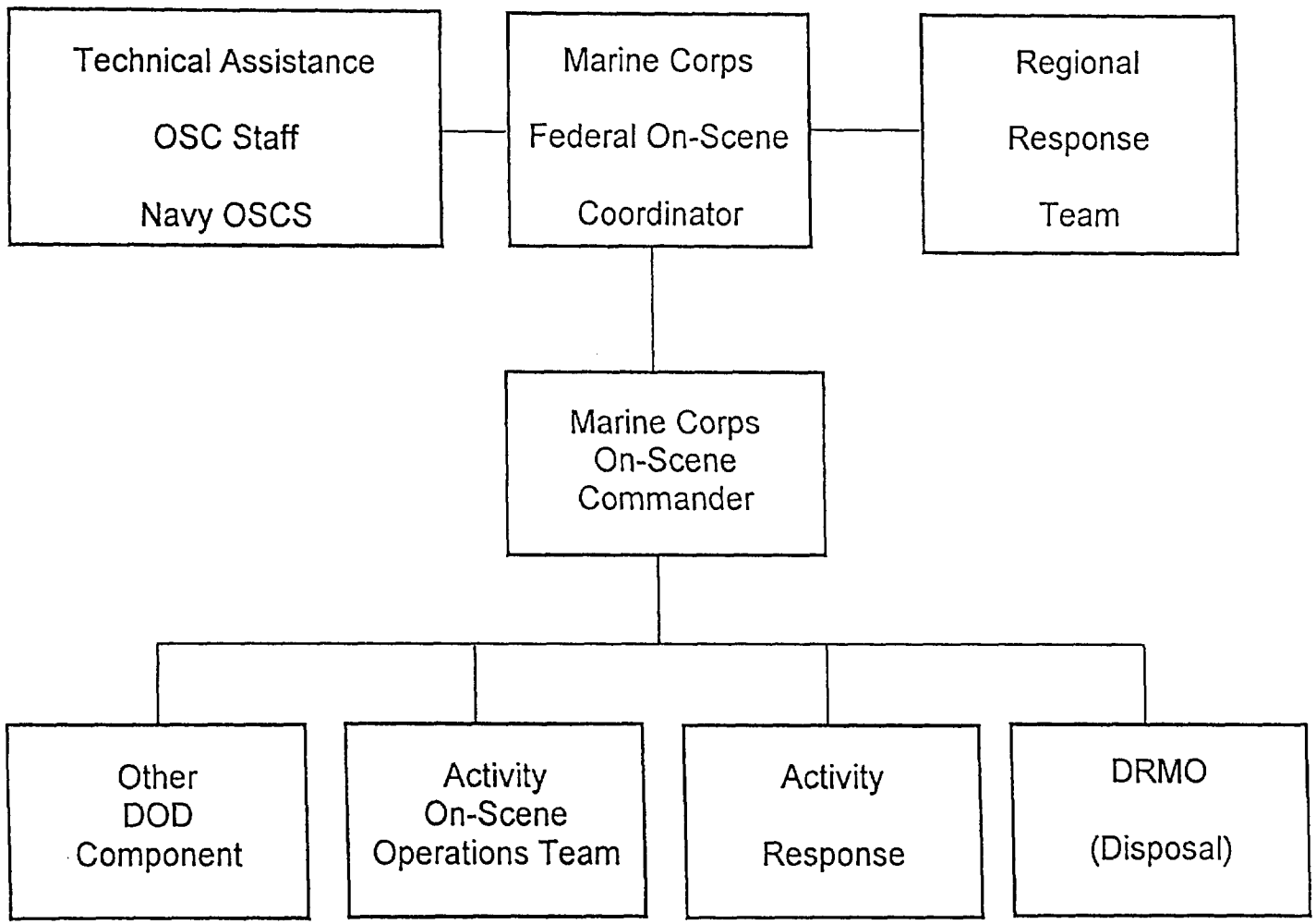


Figure 3-2: Marine Corps Emergency Response Organization for Hazardous Substance Releases

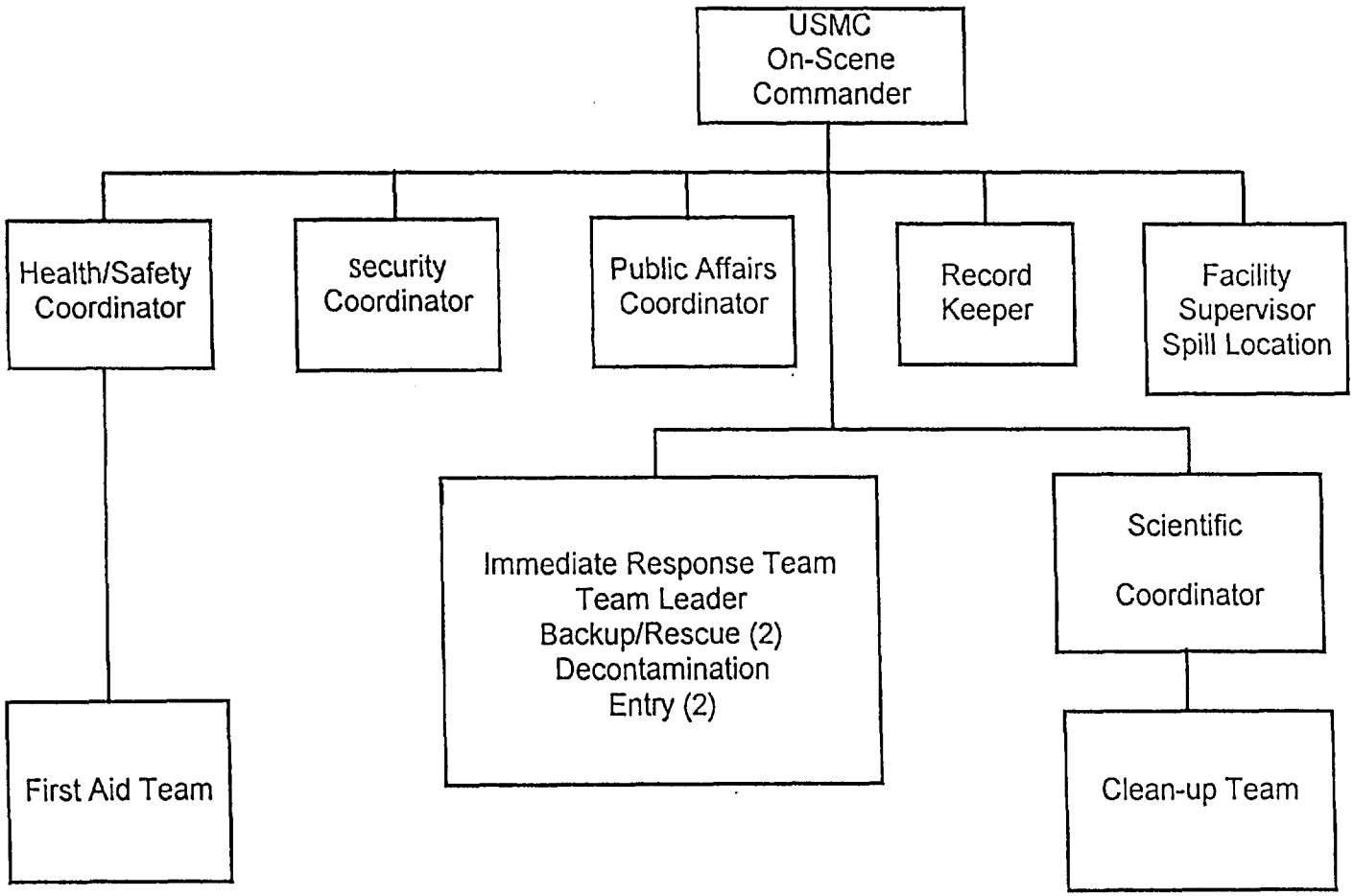


Figure 3-3: Marine Corps Suggested Organization of Hazardous Substance On-Scene Operations Team

Table 3-3: HazMat Equipment and Supplies

Quantity and Description	Capability
Personnel protective equipment including Level A suits, Tyvek, and gloves (Butyl, Viton, Nitrile, Silver Shield, cotton, and surgical)	Splash, absorption, and hand protection
Self-contained breathing apparatus with spare air bottles	Respiratory protection
Draëger detection kits: gas, petroleum hydrocarbon, chlorine, ammonia	Chemical identification
Gastech GX-86 multi-meter, Radiation detection meter, Hydrocarbon detection lamp	Chemical and radiation identification
Firefinder	Fire identification
"Dangerous Properties of Industrial Materials," Condensed Chemical Dictionary, "Chemical Substances in Workroom Air," "Merck Index," CHRIS manual, "Farm Chemicals Handbook," "Guide to Threshold Limit Values," " Guide to Protective Clothing," "DOT Emergency Guide Book," "NFPA Hazardous Materials Handbook"	Reference materials
Class A, Class B, Class C, Class D fire extinguishers	Fire suppression (combustible, chemical, and electric)
Speedy-dry	Spill cleanup
Sodium dihydrogen phosphate	Neutralizer
Assorted absorbent booms and pads	Spill cleanup
Tools including non-sparking bung wrench, socket set, hacksaw, non-sparking hammer, pocket knife, rubber and wood mallets, metal snips, non-sparking pliers, and pry bar	Various capabilities
High power binoculars	Emergency response observation
Portable weather station	Ambient weather conditions
Spark-proof hand lights	Visual aid
Communication radios (G.E. two-way, Motorola MX hand held, Motorola Spectra C9 with dual control heads [800 Hz], two-way 49 [Mhz], and two-way base station [49Mhz])	Communications
Decontamination solutions	Decontamination
Buckets, sponges, brushes, brooms, mops	Decontamination

Table 3-4: Facilities Management Department - Emergency Van Equipment List

Description	Capability
Emergency Spill Guide	Procedures
Building guides and street maps	Location reference
Bung wrench, bung hole covers, shower cap-type drum covers	Opening and closing drums
First aid kit, blanket	Injury and shock response
Emergency eye wash, and extra 1-gallon water bottle	Eye protection
Aural protector	Ear protection
Plastic bucket, broom, squeegees, shovels, miscellaneous tools, plastic sheeting, wire brushes	Cleanup and decontamination
Personal protective equipment (hard hats, gloves [fabric and rubber], coveralls, chemical suits, face shields, aprons, respirators [organic acid, dust & fume], and rain gear)	Personal protection
Absorbent (Safe-Step and vermiculite)	Spill cleanup
Plastic bags, wide-mouth glass jars, and test vials	Sample collection
Lanterns, flashlights	Visual aid
Test kits (colorimeter, pH paper)	Chemical identification
Hand cleaner	Decontamination
Hazardous waste labels and forms	Identification and disposal
HMIS	Identification

equipment, supplies, and their capabilities.

3.5 Emergency Response Notifications

Spills are discovered by casual observation, part of a routine investigation, or during handling or use. The primary responsibility of the discoverer of the spill is to notify the appropriate

personnel who are trained and equipped to deal with the emergency. The discoverer must notify either:

- **MCAS El Toro Crash Crew at x 3921 or 3922** if the spill occurred on or near the flight line, runways, taxiways, aircraft parking aprons, or on any other area associated with aircraft operations; or

- **MCAS El Toro Fire Department/HazMat Team at x 3917** if the spill occurred anywhere on the Station outside of the aircraft operations area.

Each of the above organizations have someone designated as the On-Scene Coordinator. It is the responsibility of the Crash Crew or Fire Department/HazMat Team to notify one of the following organizations depending upon the situation:

- Environmental Department x 2772 or 6607 during duty hours.

- Facilities Management Department Trouble Desk x 2165 during off-duty hours.

- Provost Marshall's Office x 9911.

The On-Scene Coordinator, in conjunction with the Environmental Department, will make a determination of the size and extent of the situation, and pursue further notifications, if necessary. At the same time, the MCAS El Toro Fire Department's HazMat Team will be activated if necessary, pursuant to the advice of the On-Scene Coordinator. Agencies to be notified, and the criteria for doing so, follow.

<u>MCAS El Toro On-Station Departments</u>

- Medical Department X 3172 if a threat to human health exists.

<u>Local Agencies</u>

- Orange County Sanitation District: (714) 962-2411 or 3301

- (A Slug Control Plan is included as Attachment I) if a spill enters the sewer system.

- South Coast Air Quality Management District: (909) 396-2000 or (800) 572-6306 if a spill could impact air quality.

- Orange County Health Care Agency: (714) 667-3700 if additional health care, beyond what can be provided by MCAS El Toro, is necessary, or if a risk to human health exists off-Station.

- Orange County Emergency Management Division: (714) 834-7255 if a spill affects areas outside MCAS El Toro boundaries.

State Agencies

- California Regional Water Quality Control Board, Santa Ana Region: (909) 782-4130 if a spill has affected, or may affect, surface water or groundwater.

- California Department of Toxic Substances Control: (818) 551-2800 if a spill threatens, or may threaten, human health or the environment, or if a reportable quantity (see Attachment F) of a hazardous substance has been released as discussed in the facility's hazardous waste facility permit and the appendix to 49 CFR 172.101 and 40 CFR 302.4.

- California Office of Emergency Services: (800) 852-7550 or (916) 262-1621 **must** be notified whenever any spill occurs that could threaten human health or welfare, or if a reportable quantity is released to the environment.

Federal Agencies

- National Response Center: (800) 424-8802 **whenever** a spill greater than 100 gallons occurs, regardless of location or hazard, or reportable quantity. The National Response Center will notify other agencies as required by the and implement the National Oil and Hazardous Substances Spill Contingency Plan.

- U.S. Environmental Protection Agency: (415) 744-2000 if a spill threatens, or may threaten, human health or the environment, or if a reportable quantity (see Attachment F) of a hazardous substance has been released as discussed in the facility's hazardous waste facility permit and the appendix to 49 CFR 172.101 and 40 CFR 302.4.

3.6 Emergency Response Procedures

The following steps will be taken when encountering a spill, uncontrolled discharge, or a fire.

Step 1. Initial Response Actions

- The discoverer of the spill or fire will immediately notify the MCAS El Toro Fire Department/HazMat Team or Crash Crew as discussed in Section 3.4. The nature and location of the incident, as well as any information regarding injuries or threat of injury to human health or environment will be reported.

- Individuals trained in spill response (including Unit Environmental Managers, Environmental Department, Fire Department/HazMat Team, Crash Crew, and On-Scene Operations Team) will attempt to contain the spill or extinguish the fire using spill kits, fire equipment, and other emergency equipment located in the immediate vicinity of the spill or fire.

- The Unit Environmental Manager or other personnel will inform the On-Scene Coordinator of the presence of hazardous substances and potential fire hazards at the site.

- The On-Scene Coordinator, with the assistance from the Environmental Department, will begin notifying the appropriate agencies and personnel as discussed in Section 3.4.

- Other personnel will evacuate to a prearranged location and await instructions from the On-Scene Coordinator, if necessary.

- The On-Scene Coordinator will initiate a preliminary assessment to evaluate the magnitude and severity of the discharge or threat to public health or the environment, assess the feasibility of removal, determine the potential responsible party's ability to perform a proper response, and determine if additional response actions are necessary. The assessment may include collection and review of data such as site management practices, photographs, and interviews.

Step 2: Response Team Activation

- The On-Scene Coordinator will determine if the emergency response can be handled by the On-Scene Operations Team. If emergency response actions are undertaken by the unit, then the On-Scene Coordinator will provide surveillance and any requested assistance. If not, then the On-Scene Coordinator will initiate action by the MCAS El Toro HazMat Team.

- Defensive actions will begin as soon as possible to prevent or minimize damage to public health or the environment. All sources of sparks or flames will be eliminated, floor drains will be closed, and physical barriers will be utilized to prevent a spill from entering drains, streams, and drainage ditches.

- Spills flowing into the drainage ditch shall be deterred by use of commercial absorbent booms stretched across the waterway, or by blocking drainage or runoff pipes. Stabilized

straw bales or chicken wire wrapped with absorbent material may be substituted when commercial booms are not available.

Step 3: On-Scene Operations Team Response

- If the emergency response cannot be handled by the unit, the On-Scene Coordinator will summon the Crash Crew or MCAS El Toro Fire Department/HazMat Team.
- The MCAS El Toro Fire Department/HazMat Team will respond to an emergency by:
  - Removing spill material by pumping into salvage tanks.
  - Controlling vapor clouds with a fine water spray.
  - Keeping tanks with flammable material cool with water.
  - Applying soil, blankets, foam, carbon dioxide, or dry chemical extinguishers to fight fires.

Step 4: Activities Following an Emergency Response

- The Environmental Department will ensure that contaminated equipment, soil, and water are disposed of at permitted disposal facilities.
- The Facility Management Department will determine if each unit's spill prevention and contingency plans need to be reviewed and revised to address future events.
- The Unit Environmental Manager will prepare a spill report and submit it to the Environmental Department.

During an emergency response, a site will be controlled to prevent or reduce the possibility of exposure to contaminants and the transport of hazardous substances from the site. Zones will be established in which prescribed activities will occur.

- Exclusion Zone: The innermost area where the contamination exists or could be expected to occur. Only authorized personnel will be permitted within this zone.
- Contamination Reduction Zone: Surrounding the Exclusion Zone, this zone provides a transition area between contaminated and clean areas. Decontamination of personnel will occur within this zone.

- Support Zone: The outermost area where no contamination exists. This zone is used for authorized observation of remediation activities, documentation of events, and oversight activities. Contaminated or potentially contaminated equipment and personnel are not permitted within this zone.

3.7 Evacuation Plan

Internal alarms, including horns, bells, and chimes, will be used to signal an evacuation. Personnel will leave the site quickly and safely as possible. The Fire Department/HazMat Team and the Provost Marshall's Office will be notified by an external alarm system and will respond to the scene. If appropriate, the emergency coordinator will order an area evacuation. The Provost Marshall's Office will be responsible for effecting an area evacuation. Figure 3-4 shows the evacuation routes for MCAS El Toro. Specific evacuation routes have been determined by each of the units when a unit evacuation is necessary. The personnel evacuation plan for MCAS El Toro is provided as Attachment G.

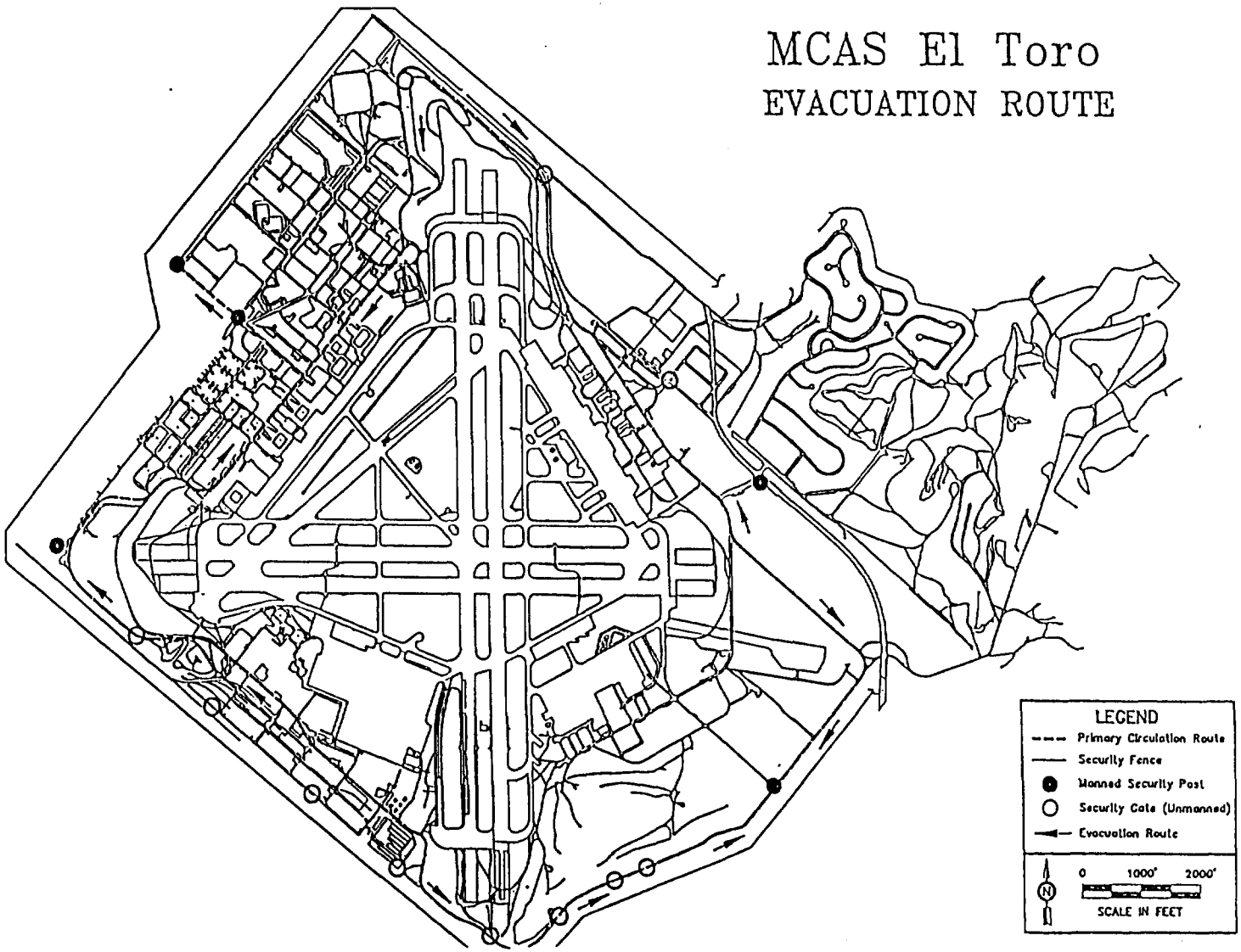
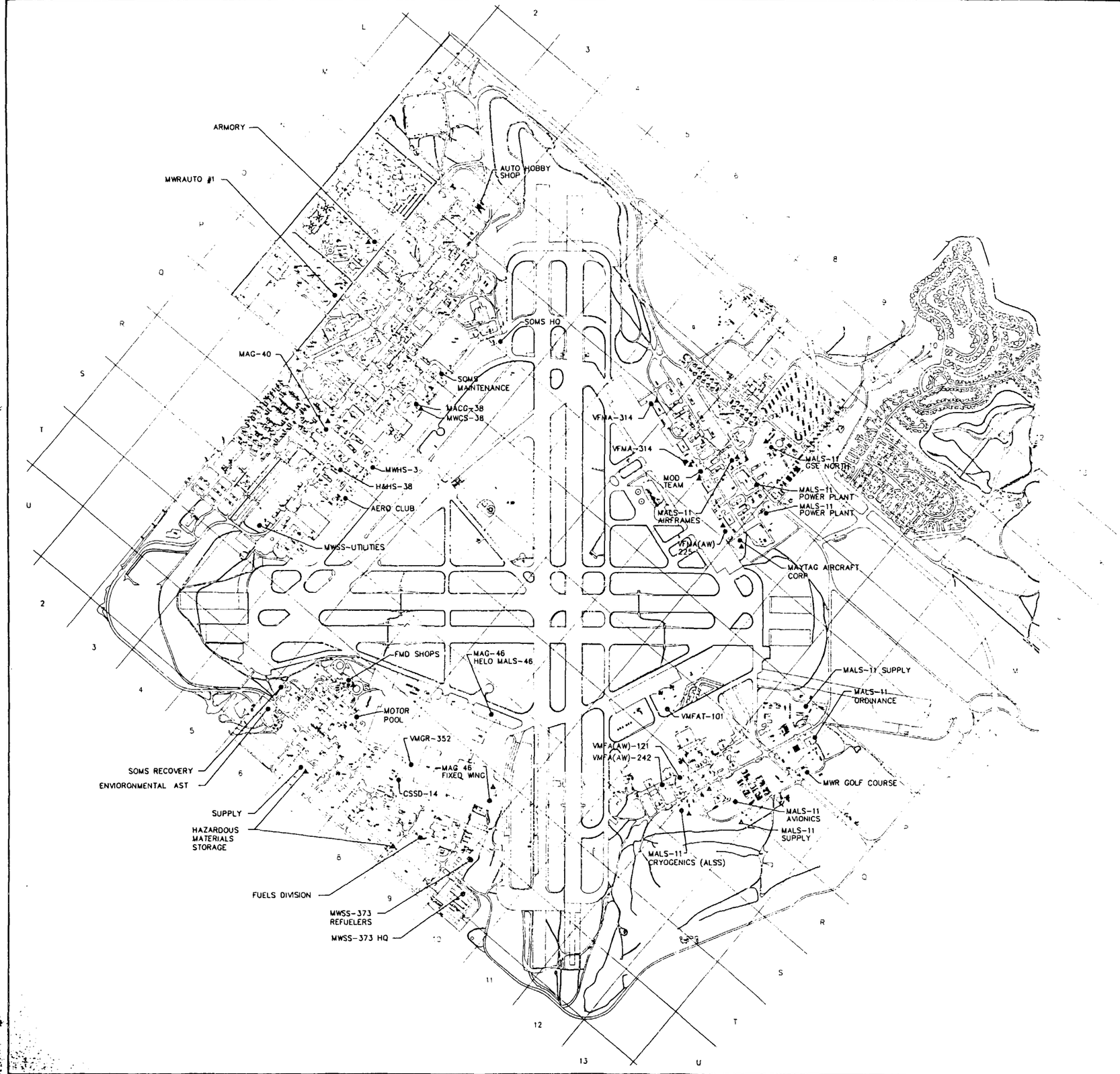


Figure 3-4: MCAS El Toro Evacuation Route

ATTACHMENT A:

ACCUMULATION POINTS AND HAZARDOUS MATERIAL STORAGE LOCATIONS



Hazardous Waste Accumulation Point Summary		
Unit	Bldg #	Coordinates
Aero Club	10	R8
Armory	714	Q8
Auto Hobby Shop	626	M3
CSSD-14	366	U6
Environmental Above Ground Storage Tank	10a	U6
MO Shops, Bldg 1661	379	T6
Paint Booth	314	U5
H&HS 38	12	R4
MACG 38 MWCS 38	HGR 3	R4
MAG 46	51	Q4
MAG 46 Fixed Wing	298	T3
MAG 46 Heli Mag 46	298	S4
MALS 11 Air Frames	139	M6
MALS 11 Avionics	384	O17
MALS 11 Cryogenics (ALSS)	630	R12
MALS 11 GSE North	392	M6
MALS 11 Ordnance	673	P13
MALS 11 Power Plant	684	N10
MALS 11 Power Plant	634	N9
MALS 11 Supply	441	P12
Maytag Aircraft Corp	775	N10
MOD Team	115	N9
Motor Pool (G-4), Bldg 779	398	T7
MWHS 3	7	Q8
MWR Auto #1	961	O9
MWR Golf Course	398	P13
MWSS-Utilities	31	S4
MWSS-373 HQ	808	U10
MWSS-373 Refuelers	671	U9
SOMS HQ	298	N6
SOMS Maintenance	HGR 3	O4
SOMS Recovery		
Supply	398	U7
VMFA (AW) 121	462	R11
VMFA (AW) 225	808	N9
VMFA (AW) 242	461	R11
VMFAT 101	371	Q10
VMFA 314	604	N9
VMGR 352	297	T4
VMGR 352	808	N7

One Year Permitted Hazardous Waste Storage Areas		
Unit	Bldg #	Coordinates
Building 673/73	673/73	C3

▲ HAZARDOUS MATERIALS STORAGE

● HAZARDOUS WASTE ACCUMULATION POINT

■ ONE YEAR PERMITTED HAZARDOUS WASTE STORAGE AREA

MCAS El Toro
Santa Ana, California

HAZARDOUS WASTE ACCUMULATION POINTS AND HAZARDOUS MATERIAL STORAGE LOCATIONS

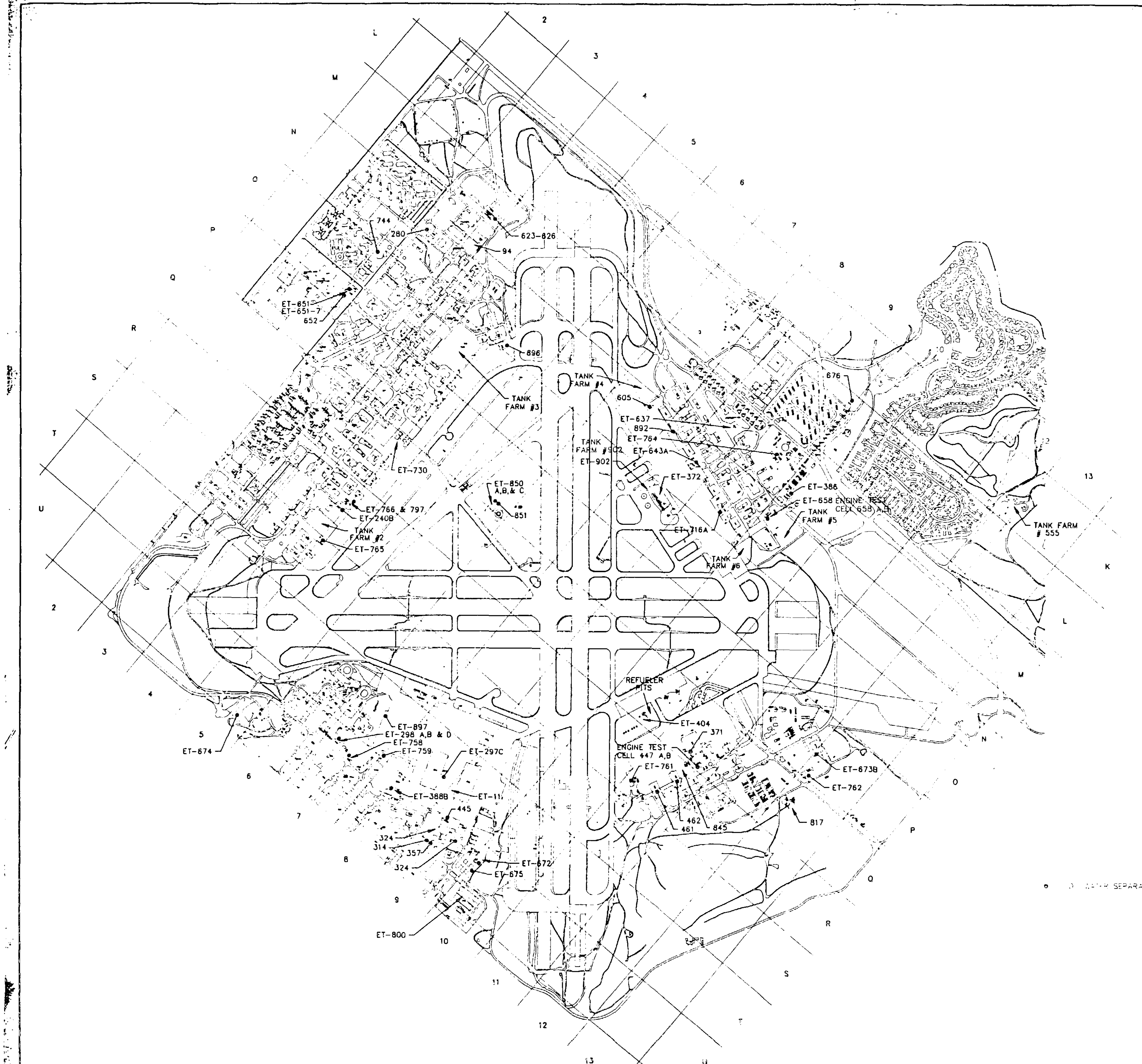
NOVEMBER 5, 1993

500' 250' 0 500' 1000'
1" = 500'

Science Applications International Corporation
An Employee-Owned Company

ATTACHMENT B:

UNDERGROUND STORAGE TANK LOCATIONS



UNDERGROUND STORAGE TANK SUMMARY

System ID	Facility Name	Coords	Bldg	Capacity	Contents	Material
ET-1	Tank Farm 555	K 12		2,000	JP-5	Steel, Fiberglass Coated
ET-2	Tank Farm 4	M/N 7		2,000	JP-5	Steel, Fiberglass Coated
ET-3	Tank Farm 4	M/N 7		2,000	JP-5	Steel, Fiberglass Coated
ET-4	Tank Farm 3	Q 4	188	2,000	JP-5	Steel, Fiberglass Coated
ET-5	Tank Farm 2	R 4		2,000	JP-5	Steel, Fiberglass Coated
ET-6	Tank Farm 5	N 10		2,000	JP-5	Steel, Fiberglass Coated
ET-7	Tank Farm 6	N 10		2,000	JP-5	Steel, Fiberglass Coated
ET-8	Refueler Hyd.	N 10		2,000	JP-5	Steel, Fiberglass Coated
ET-9	Refueler Hyd.	N 10	775	2,000	JP-5	Steel, Fiberglass Coated
ET-10	Tank Farm 4	M/N 7		1,000	JP-5	Steel, Fiberglass Coated
ET-11	Fuel Stop Tank KC-130	T 9	297	1,000	JP-5	Steel, Fiberglass Coated
ET-178	Tank Farm 2	R 4		50,000	Empty	Pre-stressed Concrete
ET-179	Tank Farm 2	R 4		25,000	Empty	Pre-stressed Concrete
ET-180	Tank Farm 2	R 4		25,000	Empty	Pre-stressed Concrete
ET-182	Tank Farm 2	R 4	242	50,000	Empty	Pre-stressed Concrete
ET-190	Tank Farm 3	Q4		50,000	Waste Oil	Tar coated Concrete
ET-191	Tank Farm 3	Q4		25,000	Waste Oil	Tar coated Concrete
ET-196	Tank Farm 4	M7	196	25,000	Diesel Fuel	Tar coated Concrete
ET-197	Tank Farm 4	M7	197	50,000	Diesel Fuel	Tar coated Concrete
ET-198	Tank Farm 4	M7	198	50,000	Diesel Fuel	Tar coated Concrete
ET-199	Tank Farm 4	M7	199	25,000	JP-5	Tar coated Concrete
ET-200	Tank Farm 4	M7	200	25,000	JP-4	Tar coated Concrete
ET-201	Tank Farm 4	M/N7	201	50,000	JP-4	Tar coated Concrete
ET-202	Tank Farm 4	M7	202	50,000	JP-4	Tar coated Concrete
ET-203	Tank Farm 4	M7	203	25,000	JP-4	Tar coated Concrete
ET-204	Tank Farm 6	N10	204	50,000	JP-5	Tar coated Concrete
ET-205	Tank Farm 6	N10	205	25,000	JP-5	Tar coated Concrete
ET-206	Tank Farm 6	N10	206	50,000	Premium	Tar coated Concrete
ET-207	Tank Farm 6	N10	207	50,000	Premium	Tar coated Concrete
ET-209	Tank Farm 5	N10		25,000	Avgas	Tar coated Concrete
ET-211	Tank Farm 5	N10		50,000	Avgas	Tar coated Concrete
ET-213	Tank Farm 5	N10		25,000	Avgas	Tar coated Concrete
ET-215	Tank Farm 5	N10		50,000	Avgas	Tar coated Concrete
ET-216	Tank Farm 4	M7	216	50,000	Diesel	Tar coated Concrete
ET-217	Tank Farm 4	M7	217	25,000	Diesel	Tar coated Concrete
ET-218	Tank Farm 4	M7	218	25,000	Diesel	Tar coated Concrete
ET-240B	Contract Refueling Fac.	R4	240	165	O/W Sep	Steel
280		N3	280	Oil/Water Separator		
ET-297C	Maintenance Hangar	T8	297	165	O/W Sep	Steel
ET-298A	Vehicle Maintenance Shop	U7	298	2,000	Unleaded	Steel
ET-298B	Vehicle Maintenance Shop	U7	298	2,000	Diesel	Steel
298	Vehicle Maintenance Shop	U7	298	Oil/Water Separator		
ET-298D	Vehicle Maintenance Shop	U7	298	165	Waste Oil	Steel
314		U8	314	Oil/Water Separator		
324		U8	324	Oil/Water Separator		
324		U8	324	Oil/Water Separator		
357		U8	324	Oil/Water Separator		
371		Q11	371	Oil/Water Separator		
ET-372A	Field Lighting Vault	O8	372	1,000	Diesel	Steel
ET-386C	Construction Equip Shop	M10	386	165	O/W Sep	Steel
388		U8	388	Oil/Water Separator		
ET-388B	Field Maintenance Shop	U8	388	2,000	Diesel	Steel
ET-404	Standby generator Facility	Q10	404	500	Diesel	Steel
ET-414A	Aircraft Refueler Pits	Q10	414	30,000	JP-5	Fiberglass Reinforced Plastic
ET-414B	Aircraft Refueler Pits	Q10	414	30,000	JP-5	Fiberglass Reinforced Plastic
ET-414C	Aircraft Refueler Pits	Q10	414	2,500	JP-5	Fiberglass Reinforced Plastic
445		U8		Oil/Water Separator		
447	Engine Test Cell	Q11	447	Oil/Water Separator		
ET-447A	Engine Test Cell	Q11	447	10,000	JP-5	Steel
ET-447B	Engine Test Cell	Q11	447	10,000	JP-5	Steel
ET-447C	Engine Test Cell	Q11	447	10,000	JP-5	Steel
461		R11		Oil/Water Separator		
462		R11		Oil/Water Separator		
ET-547	Aircraft Ready Fuel Stor	K12		567,000	JP-5	Concrete
ET-548	Aircraft Ready Fuel Stor	K12		567,000	JP-5	Concrete
ET-549	Aircraft Ready Fuel Stor	K13		567,000	JP-5	Concrete
ET-550	Aircraft Ready Fuel Stor	K13		567,000	JP-5	Concrete
ET-551	Aircraft Ready Fuel Stor	K13		567,000	JP-5	Concrete
605		N7		Oil/Water Separator		
ET-625	Hobby Shop	M3	625	500	Waste Oil	Steel
623	Hobby Shop	M3	625	Oil/Water Separator		
624	Hobby Shop	M3	625	Oil/Water Separator		
625	Hobby Shop	M3	625	Oil/Water Separator		
626	Hobby Shop	M3	625	Oil/Water Separator		
ET-637-1	Exchange Gas Station	M6	637	12,000	Unleaded	Steel
ET-637-2	Exchange Gas Station	M6	637	12,000	Supreme	Steel
ET-637-3	Exchange Gas Station	M6	637	12,000	Supreme	Steel
ET-643A	Fixed Aircraft Start System	N6	643	165	O/W Sep	Steel
ET-651-1	Exchange Auto Repair	Q2	651	12,000	Unleaded	Steel
ET-651-2	Exchange Auto Repair	Q2	651	12,000	Unleaded	Steel
ET-651-3	Exchange Auto Repair	Q2	651	12,000	Unleaded	Steel
ET-651-4	Exchange Auto Repair	Q2	651	12,000	Unleaded	Steel
ET-651-6	Exchange Auto Repair	Q2	651	500	New Oil	Coated Steel
652	Exchange Auto Repair	Q2	651	Oil/Water Separator		
ET-651-7	Exchange Auto Repair	Q2	651	500	O/W Sep	Coated Steel
658	Engine Test Cell	N10	658	Oil/Water Separator		
ET-658A	Engine Test Cell	N10	658	10,000	JP-5	Steel
ET-658B	Engine Test Cell	N10	658	10,000	JP-5	Steel
ET-672	Refueling Veh Maint Shop	U10	672	500	O/W Sep	Steel
ET-672B	Refueling Veh Maint Shop	U10	672	1,000	Waste Fuel	Steel
ET-673B	Aircraft Ground Sup. Eq	P12	673	300	O/W Sep	Concrete
ET-674	Oil Water Separator #2	U6	674	500	O/W Sep	Concrete
ET-675	Oil Water Separator #1	U10	675	500	O/W Sep	Concrete
676		L9		Oil/Water Separator		
ET-716A	Hush House	N8	716	3,000	O/W Sep	Steel, Sacrificial Anode
ET-730	Communication Center	Q4	730	1,000	Diesel Fuel	Fiberglass Reinforced Plastic
744		Q2		Oil/Water Separator		
ET-758A	Vehicle Washrack	U7	758	100	O/W Sep	Steel, Sacrificial Anode
ET-758B	Vehicle Washrack	U7	758	165	O/W Sep	Steel, Sacrificial Anode
ET-759B	Vehicle Washrack	T7	759	165	O/W Sep	Steel, Sacrificial Anode
ET-761B	Aircraft Washrack	R11	761	165	O/W Sep	Steel, Sacrificial Anode
ET-762B	Vehicle Washrack	P13	762	165	O/W Sep	Steel, Sacrificial Anode
ET-763B	Aircraft Washrack	N10	763	165	O/W Sep	Steel, Sacrificial Anode
ET-764A	Vehicle Washrack	M8	764	165	O/W Sep	Steel, Sacrificial Anode
ET-765A	Aircraft Washrack	S6	765	165	O/W Sep	Steel, Sacrificial Anode
ET-766B	Vehicle Washrack	R5	766	165	O/W Sep	Steel, Sacrificial Anode
ET-797	AV Gas Fueling Station	R5	797	10,000	Aviation Gas	Fiberglass Reinforced Plastic
ET-800A	Motor Pool Maint. HQ	U10	800	10,000	Diesel	Fiberglass Reinforced Plastic
ET-800B	Motor Pool Maint. HQ	U10	800	10,000	Unleaded	Fiberglass Reinforced Plastic
ET-800C	Motor Pool Maint. HQ	U10	800	10,000	Diesel	Fiberglass Reinforced Plastic
ET-800D	Motor Pool Maint. HQ	U10	800	1,000	Waste Oil	Fiberglass Reinforced Plastic
ET-800E	Motor Pool Maint. HQ	U10	800	1,000	Waste Oil	Fiberglass Reinforced Plastic
817		Q13		165	Waste Oil	
845		Q11		165	Waste Oil	
ET-850A	Crash Crew Training Pit	P6	850	5,000	JP FO	Fiberglass Reinforced Plastic
ET-850B	Crash Crew Training Pit	P6	850	5,000	JP FO	Fiberglass Reinforced Plastic
ET-850C	Crash Crew Training Pit	P6	850	5,200	JP FO	Fiberglass Reinforced Plastic
850	Crash Crew Training Pit	P6	850	Oil/Water Separator		
851	Crash Crew Training Pit	P6	850	Oil/Water Separator		
892		M8		Oil/Water Separator		
896		N8		Oil/Water Separator		
897		T7		Oil/Water Separator		
ET-902A	Aircraft Direct Fuel Branch	N/O8	372	50,000	JP-5	Fiberglass Reinforced Plastic
ET-902B	Aircraft Direct Fuel Branch	N/O8	372	50,000	JP-5	Fiberglass Reinforced Plastic

● OIL/WATER SEPARATOR

MCAS El Toro
Santa Ana, California

UNDERGROUND STORAGE TANK LOCATION

NOVEMBER 5, 1993

500' 250' 0 500' 1000'
1" = 500'

SAIC Science Applications International Corporation
An Employee-Owned Company

ATTACHMENT C:

MUTUAL AID AGREEMENT

ORIGINALS

ORIGINAL
CLERK OF THE BOARD
ORANGE COUNTY

LETTER OF AGREEMENT
Between The
COMMANDING GENERAL, MARINE CORPS AIR STATION
El Toro (Santa Ana), California
And
COUNTY OF ORANGE

THIS AGREEMENT, made this 2nd day of MAY 1989 between the U.S. Marine Corps Air Station, El Toro (Santa Ana), California, hereinafter referred to as the Air Station, and the County of Orange, hereinafter referred to as the County, replaces the agreement between these two parties dated 7 Dec 1982 for mutual aid fire and rescue assistance and any modifications thereto.

WHEREAS, it is the responsibility of the County to provide fire and rescue services for those areas and properties over which Orange County has jurisdiction and which are adjacent to the Marine Corps Air Station El Toro and

WHEREAS, it is the desire of the Air Station to protect those areas and properties adjacent to it from the ravages and destruction of fire and assist with rescue service, and

WHEREAS, it is possible for the fire department of the Air Station to respond to and assist in fire and rescue on such adjacent areas and properties with more facility and in a lesser period of time than fire companies of the County, and

WHEREAS, it is possible that a fire may break out within the confines of the Air Station which may exceed the capabilities of the Air Station fire department, and

WHEREAS, it is the desire of the Air Station and the County to assist each other in affording fire and rescue services for those areas and properties adjacent to and including the Air Station on a mutual assistance basis, and

WHEREAS, this Agreement is between a Federal agency and a local agency, to provide fire and rescue assistance to each other, and the fact that the available force is crash, structural, and aircraft should make no difference in the Agreement, as whatever assistance is requested and available is dispatched,

IT IS THEREFORE AGREED:

1. The Air Station, through its fire department, shall offer initial fire and rescue services within the capabilities of the Fire Department of the Air Station to the areas adjacent to the Air Station. However, during extreme emergency situations, this immediate area is waived to include all areas protected by the County.

2. The County shall retain the primary responsibility for affording fire and rescue services to those areas outside the Air Station to which the Air Station offers its services.

3. After the Air Station has provided initial fire protection services, the Air Station will assist the County Fire Department, upon their arrival at the fire, to continue to combat the fire until its extinguishment or release by the County Fire Department.

4. The County will furnish fire, rescue, hazardous material assistance to the Air Station in those instances where the County Fire Department is notified that assistance is required within the confines of the Air Station and will continue such assistance until release by the Air Station Fire Department.

5. The availability and the extent of the assistance to be provided at the time rests solely within the discretion of the respective parties to this Agreement who are providing assistance.

6. The area to which the Air Station has primary responsibility for emergency services that the County may be requested to assist is shown in Enclosure 1.

7. The technical head of the fire department of the requesting service shall assume full charge of the operations; but, if that individual specifically requests a senior officer of a fire department furnishing assistance to assume command, that individual shall not, by relinquishing command, be relieved of his/her responsibility for the operation, even though the apparatus, personnel, and equipment of the agency rendering assistance shall be under the immediate supervision of and shall be the immediate responsibility of the senior officer of the fire department rendering assistance.

8. The chief fire officers and personnel of both fire departments are invited and encouraged, on a reciprocal basis, to frequently visit each other's activities for guided familiarization tours consistent with local security requirements, and as feasible, to jointly conduct pre-fire planning inspections, drills, and fire investigations.

9. Neither the Air Station nor the county shall receive any compensation or reimbursement from the other for any services provided in performance of this Agreement, however, direct expenses and losses which are additional firefighting cost over and above normal operating costs incurred while fighting a fire on property which is under the jurisdiction of the United States may be reimbursed in accordance with the Federal Fire Prevention and control Act of 1974 (Public Law No. 93-498, 15 U.S.C. 2201 et seq.) and its implementing regulations 44, C.F.R. 151.

10. The Air Station and County agree to hold harmless and waive all claims against the other party for compensation for any loss, damage, personal injury, or death occurring in consequence of the performance of such Agreement. Any service performed under this Agreement by any officer or employee of the United States or any member of any armed force of the United States shall constitute service rendered in the line of duty in such office, employment, or force. Service performed by any other individual pursuant to this letter of Agreement shall not be deemed federal service or employment.

11. This Agreement will be reviewed biennially at least 120 days prior to the anniversary date. It may be revised at any time upon the mutual consent in writing of the parties concerned. A request for modification will be furnished by one party to the other by written notice at least 30 days prior to the desired effective date of such modification. This Agreement may be canceled/terminated at any time by mutual consent of the parties concerned. It may also be canceled by either party upon giving at least 180 days written notice to the other party.

In WITNESS WHEREOF, the parties hereto have caused the Agreement to be executed by the Commanding General, Marine Corps Air Station, El Toro (Santa Ana), California and by the County of Orange through its duly authorized officers as of the dates below their names.

Dated: 5-2, 1989

County of Orange

By Thomas F. Riley
Chairman, Board of Supervisors

Dated: 8-8-89

Approved as to Form:

, County Counsel
Orange County, California

By Carol D. Brown, Deputy
4/18/89

Marine Corps Air Station, El Toro
(Santa Ana), California

By J. E. Underwood
J. E. UNDERWOOD, Col, USMC
Chief of Staff

Dated: 5-2-89

Signed and certified that a copy of this document has been delivered to the Chairman of the Board.

Linda D. Lutz
Clerk of the Board of Supervisors,
County of Orange, California

ATTACHMENT D:

DAILY and WEEKLY INSPECTION CHECKLISTS

Drum And Small Container Storage And Handling Facility
Weekly Inspection Checklist

Facility:_____ Inspector:_____

Item To Inspect	Acceptable	Unacceptable	Corrective Action
Storage/work areas are free of spills/leaks	_____	_____	_____
Containers not leaking, rusted, deteriorated	_____	_____	_____
Containers have closed lids or bung holes	_____	_____	_____
Incompatible HS are not stored together	_____	_____	_____
Containers are stored off the floor/ground, in containment areas	_____	_____	_____
Drip pans are used under spigots and free of liquid	_____	_____	_____
Spigots, pumps, hoses, valves not leaking	_____	_____	_____
Containment areas are free of debris and liquid accumulations	_____	_____	_____
Containment/drainage structures are intact, no cracks, breaches	_____	_____	_____
Emergency equipment is operational, complete	_____	_____	_____
Storage/handling equipment is properly used, in good condition	_____	_____	_____
Clean/orderly areas, adequate aisle space	_____	_____	_____
Containers are labeled	_____	_____	_____

_____ ____/____/____
Inspector Signature Date

_____ ____/____/____
Supervisor Signature Date

Bulk Storage And Transfer Facility
Weekly Inspection Checklist

Facility:_____ Inspector:_____

Tank #:_____ Contents:_____

Item To Inspect	Acceptable	Unacceptable	Corrective Action
Roof vents clear	_____	_____	_____
Roof drains clear	_____	_____	_____
Liquid level gaging equipment operating properly	_____	_____	_____
Emergency shutoff valves operating properly	_____	_____	_____
Pressure relief devices unobstructed	_____	_____	_____
Grounding lines and connections not loose or corroded	_____	_____	_____
Fire extinguising equipment in place, operates properly	_____	_____	_____
Containment dike intact (no cracks, holes or breaches)	_____	_____	_____
Containment dike does not require draining	_____	_____	_____
Oil/water separator or equivalent does not require pumping	_____	_____	_____
Oil/water separator discharge is clear	_____	_____	_____

_____ ____/____/____
Inspector Signature Date

_____ ____/____/____
Supervisor Signature Date

Daily Facility Security Procedures

Facility: _____ Inspector: _____

Check the following items prior to leaving the facility at the end of each working day:

	Check (/)
o All entrance doors to the facility or building are closed and locked	_____
o Master flow control valve, draw valve, and any other flow control valves in tanks are locked in the closed position	_____
o Drainage valves from diked areas are locked in the closed position	_____
o Starter controls on all chemical pumps are locked in the "off" position	_____
o All access gates to fenced equipment and facilities are closed and locked (unless guarded continuously)	_____
o All security lighting is operating and in good condition	_____
o Warning signs are clearly visible and unobstructed	_____

Observations: _____

_____

_____

_____

_____

_____ ____/____/____
Inspector Signature Date

_____ ____/____/____
Supervisor Signature Date

ATTACHMENT E:

SPILL CONTROL EQUIPMENT TO BE MAINTAINED

BY EACH UNIT

Table XI

SPILL RESPONSE EQUIPMENT TO BE MAINTAINED ON-SITE BY EACH UNIT

Containment Equipment

1 - 85-gallon recovery (overpack) drum
2 - empty 55-gallon, open-head disposal drums
1 - 18" pushbroom, synthetic fibers
1 - 50-lb bag absorbent
2 - shovels
1 - 50-lb bag safe-stop (granular absorbent material)
1 - plastic drip pan
1 - dustpan

Personnel Protective Equipment

4 - full-face air purifying respirators
4 - hard hats
8 - pairs gloves (outer)
1 - box disposable surgical gloves
4 - pairs boots (steel toes)
4 - pairs boots (outer)

Safety Equipment

1 - internal alarm
1 - external alarm
1 - emergency shower-continuous flow
1 - eye wash - continuous flow
1 - fire extinguisher

ATTACHMENT F:

SPILL REPORTING

REPORTABLE QUANTITIES (RQS) 40 CFR 302.4

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Category	Pounds (l
Acenaphthene	83329		1*	2		B	100 (4
Acenaphthylene	208968		1*	2		D	5000 (2
Acetaldehyde	75070	Ethanal	1000	1,4	U001	C	1000 (
Acetaldehyde, chloro-	107200	Chloroacetaldehyde	1*	4	P023	C	1000 (
Acetaldehyde, trichloro-	75876	Chloral	1*	4	U034	D	5000 (2
Acetamide, N-(aminothioxomethyl)-	591082	1-Acetyl-2-thiourea	1*	4	P002	C	1000 (
Acetamide, N-(4-ethoxyphenyl)-	62442	Phenacetin	1*	4	U187	B	100 (4
Acetamide, 2-fluoro-	640197	Fluoroacetamide	1*	4	P057	B	100 (4
Acetamide, N-9H-fluoren-2-yl-	53963	2-Acetylaminofluorene	1*	4	U005	X	1 (0.4
Acetic acid	64197		1000	1		D	5000 (22
Acetic acid (2,4-dichlorophenoxy)-	94757	2,4-D Acid 2,4-D, salts and esters	100	1,4	U240	B	100 (4
Acetic acid, Lead(2+) salt	301042	Lead acetate	5000	1,4	U144	A	10 (4
Acetic acid, thallium (1+) salt	563688	Thallium(I) acetate	1*	4	U214	B	100 (4
Acetic acid, (2,4,5-trichlorophenoxy)	93765	2,4,5-T 2,4,5-T acid	100	1,4	U232	C	1000 (4
Acetic acid, ethyl ester	141786	Ethyl acetate	1*	4	U112	D	5000 (22
Acetic acid, fluoro-, sodium salt	62748	Fluoroacetic acid, sodium salt	1*	4	P058	A	10 (4.
Acetic anhydride	108247		1000	1		D	5000 (22
Acetone	67641	2-Propanone	1*	4	U002	D	5000 (22
Acetone cyanohydrin	75865	Propanenitrile, 2-hydroxy-2-methyl-2-Methyllactonitrile.	10	1,4	P069	A	10 (4.
Acetonitrile	75058		1*	4	U003	D	5000 (22
Acetophenone	98862	Ethanone, 1-phenyl-	1*	4	U004	D	5000 (22
2-Acetylaminofluorene	53963	Acetamide, N-9H-fluoren-2-yl-	1*	4	U005	X	1 (0.4
Acetyl bromide	506967		5000	1		D	5000 (22
Acetyl chloride	75365		5000	1,4	U006	D	5000 (22
1-Acetyl-2-thiourea	591082	Acetamide, N-(aminothioxomethyl)-	1*	4	P002	C	1000 (4
Acrolein	107028	2-Propenal	1	1,2,4	P003	X	1 (0.4
Acrylamide	79061	2-Propenamide	1*	4	U007	D	5000 (22
Acrylic acid	79107	2-Propenoic acid	1*	4	U008	D	5000 (22
Acrylonitrile	107131	2-Propenenitrile	100	1,2,4	U009	B	100 (45
Adipic acid	124049		5000	1		D	5000 (22
Aldicarb	116063	Propanal, 2-methyl-2-(methylthio)-,O-[(methylamino)carbonyl]oxime.	1*	4	P070	X	1 (0.4
Aldrin	309002	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-.	1	1,2,4	P004	X	1 (0.4
Allyl alcohol	107186	2-Propen-1-ol	100	1,4	P005	B	100 (45
Allyl chloride	107051		1000	1		C	1000 (4
Aluminum phosphide	20859738		1*	4	P006	B	100 (45
Aluminum sulfate	10043013		5000	1		D	5000 (22
5-(Aminomethyl)-3-isoxazolol	2763964	Muscimol 3(2H)-Isoxazolone, 5-(aminomethyl)-	1*	4	P007	C	1000 (4
4-Aminopyridine	504245	4-Pyridinamine	1*	4	P008	C	1000 (4
Amitrole	61825	1H-1,2,4-Triazol-3-amine	1*	4	U011	A	10 (4.
Ammonia	7664417		100	1		B	100 (45
Ammonium acetate	631618		5000	1		D	5000 (227
Ammonium benzoate	1863634		5000	1		D	5000 (227
Ammonium bicarbonate	1066337		5000	1		D	5000 (227
Ammonium bichromate	7789095		1000	1		A	10 (4.
Ammonium bifluoride	1341497		5000	1		B	100 (45
Ammonium bisulfite	10192300		5000	1		D	5000 (227
Ammonium carbamate	1111780		5000	1		D	5000 (227
Ammonium carbonate	506876		5000	1		D	5000 (227
Ammonium chloride	12125029		5000	1		D	5000 (227
Ammonium chromate	7788989		1000	1		A	10 (4.5
Ammonium citrate, dibasic	3012655		5000	1		D	5000 (2270
Ammonium fluoborate	13826830		5000	1		D	5000 (2270
Ammonium fluoride	12125018		5000	1		B	100 (45.4
Ammonium hydroxide	1336216		1000	1		C	1000 (454
Ammonium oxalate	6009707 5972736 14258492		5000	1		D	5000 (2270
Ammonium picrate	131748	Phenol, 2,4,6-trinitro-, ammonium salt	1*	4	P009	A	10 (4.54
Ammonium silicofluoride	16919190		1000	1		C	1000 (45
Ammonium sulfamate	7773060		5000	1		D	5000 (227
Ammonium sulfide	12135761		5000	1		B	100 (45.
Ammonium sulfite	10196040		5000	1		D	5000 (227
Ammonium tartrate	14307438 3164292		5000	1		D	5000 (227
Ammonium thiocyanate	1762954		5000	1		D	5000 (227
Ammonium vanadate	7803556	Vanadic acid, ammonium salt	1*	4	P119	C	1000 (45
Amyl acetate	628637		1000	1		D	5000 (227
iso-Amyl acetate	123922						
sec-Amyl acetate	626380						
tert-Amyl acetate	625161						
Aniline	62533	Benzenamine	1000	1,4	U012	D	5000 (227
Anthracene	120127		1*	2		D	5000 (227
Antimony ††	7440360		1*	2		D	5000 (227
ANTIMONY AND COMPOUNDS	N.A.		1*	2			
Antimony pentachloride	7647189		1000	1		C	1000 (45
Antimony potassium tartrate	28300745		1000	1		B	100 (45.
Antimony tribromide	7789619		1000	1		C	1000 (45
Antimony trichloride	10025919		1000	1		C	1000 (45
Antimony trifluoride	7783564		1000	1		C	1000 (45
Antimony trioxide	1309644		5000	1		C	1000 (45
Argentate(1-), bis(cyano-C)-, potassium	506616	Potassium silver cyanide	1*	4	P099	X	1 (0.45
Aroclor 1016	12674112	POLYCHLORINATED BIPHENYLS (PCBs)	10	1,2		X	1 (0.45
Aroclor 1221	11104282	POLYCHLORINATED BIPHENYLS (PCBs)	10	1,2		X	1 (0.45
Aroclor 1232	11141165	POLYCHLORINATED BIPHENYLS (PCBs)	10	1,2		X	1 (0.45
Aroclor 1242	53469219	POLYCHLORINATED BIPHENYLS (PCBs)	10	1,2		X	1 (0.45

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Category	Pounds
Aroclor 1248	12672296	POLYCHLORINATED BIPHENYLS (PCBs)	10	1,2		X	1 (0
Aroclor 1254	11097691	POLYCHLORINATED BIPHENYLS (PCBs)	10	1,2		X	1 (0
Aroclor 1260	11096825	POLYCHLORINATED BIPHENYLS (PCBs)	10	1,2		X	1 (0
Arsenic ††	7440382		1*	2,3		X	1 (0
Arsenic acid	1327522 7778394	Arsenic acid H3AsO4	1*	4	P010	X	1 (0
Arsenic acid H3AsO4	1327522 7778394	Arsenic acid	1*	4	P010	X	1 (0
ARSENIC AND COMPOUNDS	N.A.		1*	2			
Arsenic disulfide	1303328		5000	1		X	1 (0
Arsenic oxide As2O3	1327533	Arsenic trioxide	5000	1,4	P012	X	1 (0.
Arsenic oxide As2O5	1303282	Arsenic pentoxide	5000	1,4	P011	X	1 (0.
Arsenic pentoxide	1303282	Arsenic oxide As2O5	5000	1,4	P011	X	1 (0.
Arsenic trichloride	7784341		5000	1		X	1 (0.
Arsenic trioxide	1327533	Arsenic oxide As2O3	5000	1,4	P012	X	1 (0.
Arsenic trisulfide	1303339		5000	1		X	1 (0.
Arsine, diethyl-	692422	Diethylarsine	1*	4	P038	X	1 (0.
Arsinic acid, dimethyl-	75605	Cacodylic acid	1*	4	U136	X	1 (0.
Arsonous dichloride, phenyl-	696286	Dichlorophenylarsine	1*	4	P036	X	1 (0.
Asbestos †††	1332214		1*	2,3		X	1 (0.
Auramine	492808	Benzenamine, 4,4'-carbonimidoylbis (N,N-dimethyl-	1*	4	U014	B	100 (4
Azaserine	115026	L-Serine, diazoacetate (ester)	1*	4	U015	X	1 (0.
Aziridine	151564	Ethylenimine	1*	4	P054	X	1 (0.
Aziridine, 2-methyl-	75558	1,2-Propylenimine	1*	4	P067	X	1 (0.
Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione,6-amino-8-[[(aminocarbonyloxy)methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-,[1aS-(1aalpha,8beta,8aalpha,8balpha)]-.	50077	Mitomycin C	1*	4	U010	A	10 (4
Barium cyanide	542621		10	1,4	P013	A	10 (4
Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56495	3-Methylcholanthrene	1*	4	U157	A	10 (4
Benz[c]acridine	225514		1*	4	U016	B	100 (4
Benzal chloride	98873	Benzene, dichloromethyl-	1*	4	U017	D	5000 (22
Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950585	Pronamide	1*	4	U192	D	5000 (22
Benz[a]anthracene	56553	Benzo[a]anthracene 1,2-Benzanthracene	1*	2,4	U018	A	10 (4
1,2-Benzanthracene	56553	Benz[a]anthracene Benzo[a]anthracene	1*	2,4	U018	A	10 (4.
Benz[a]anthracene, 7,12-dimethyl-	57976	7,12-Dimethylbenz[a]anthracene	1*	4	U094	X	1 (0.4
Benzenamine	62533	Aniline	1000	1,4	U012	D	5000 (22
Benzenamine, 4,4'-carbonimidoylbis (N,N-dimethyl-	492808	Auramine	1*	4	U014	B	100 (4
Benzenamine, 4-chloro-	106478	p-Chloroaniline	1*	4	P024	C	1000 (4
Benzenamine, 4-chloro-2-methyl-, hydrochloride	3165933	4-Chloro-o-toluidine, hydrochloride	1*	4	U049	B	100 (4
Benzenamine, N,N-dimethyl-4-(phenylazo-)	60117	p-Dimethylaminoazobenzene	1*	4	U093	A	10 (4
Benzenamine, 2-methyl-	95534	o-Toluidine	1*	4	U328	B	100 (4
Benzenamine, 4-methyl-	106490	p-Toluidine	1*	4	U353	B	100 (4
Benzenamine, 4,4'-methylenebis(2-chloro-	101144	4,4'-Methylenebis(2-chloroaniline)	1*	4	U158	A	10 (4
Benzenamine, 2-methyl-, hydrochloride	636215	o-Toluidine hydrochloride	1*	4	U222	B	100 (4
Benzenamine, 2-methyl-5-nitro-	99558	5-Nitro-o-toluidine	1*	4	U181	B	100 (4
Benzenamine, 4-nitro-	100016	p-Nitroaniline	1*	4	P077	D	5000 (22
Benzene	71432		1000	1,2,3,4	U109	A	10 (4
Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	510156	Chlorobenzilate	1*	4	U038	A	10 (4
Benzene, 1-bromo-4-phenoxy-	101553	4-Bromophenyl phenyl ether	1*	2,4	U030	B	100 (4
Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-	305033	Chlorambucil	1*	4	U035	A	10 (4
Benzene, chloro-	108907	Chlorobenzene	100	1,2,4	U037	B	100 (4.
Benzene, chloromethyl-	100447	Benzyl chloride	100	1,4	P028	B	100 (45
Benzenediamin, ar-methyl-	95807 496720 823405	Toluenediamine	1*	4	U221	A	10 (4.5
1,2-Benzenedicarboxylic acid, dioctyl ester	117840	Di-n-octyl phthalate	1*	2,4	U107	D	5000 (227
1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)]-ester.	117817	Bis (2-ethylhexyl)phthalate Diethylhexyl phthalate	1*	2,4	U028	B	100 (45
1,2-Benzenedicarboxylic acid, dibutyl ester	84742	Di-n-butyl phthalate Dibutyl phthalate n-Butyl phthalate	100	1,2,4	U069	A	10 (4.
1,2-Benzenedicarboxylic acid, diethyl ester	84662	Diethyl phthalate	1*	2,4	U088	C	1000 (4
1,2-Benzenedicarboxylic acid, dimethyl ester	131113	Dimethyl phthalate	1*	2,4	U102	D	5000 (22
Benzene, 1,2-dichloro-	95501	o-Dichlorobenzene 1,2-Dichlorobenzene	100	1,2,4	U070	B	100 (4.
Benzene, 1,3-dichloro-	541731	m-Dichlorobenzene 1,3-Dichlorobenzene	1*	2,4	U071	B	100 (4.
Benzene, 1,4-dichloro-	106467	p-Dichlorobenzene 1,4-Dichlorobenzene	100	1,2,4	U072	B	100 (4.
Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-	72548	DDD TDE 4,4' DDD	1	1,2,4	U060	X	1 (0.4
Benzene, dichloromethyl-	98873	Benzal chloride	1*	4	U017	D	5000 (22
Benzene, 1,3-diisocyanatomethyl-	584849 91087 26471625	Toluene diisocyanate	1*	4	U223	B	100 (4
Benzene, dimethyl	1330207	Xylene (mixed)	1000	1,4	U239	C	1000 (4
m-Benzene, dimethyl	108383	m-Xylene.					
o-Benzene, dimethyl	95476	o-Xylene.					
p-Benzene, dimethyl	106423	p-Xylene.					
1,3-Benzenediol	108463	Resorcinol	1000	1,4	U201	D	5000 (22
1,2-Benzenediol,4-[1-hydroxy-2-(methylamino)ethyl]-	51434	Epinephrine	1*	4	P042	C	1000 (4
Benzeneethanamine, alpha,alpha-dimethyl-	122098	alpha,alpha-Dimethylphenethylamine	1*	4	P046	D	5000 (22
Benzene, hexachloro-	118741	Hexachlorobenzene	1*	2,4	U127	A	10 (4.
Benzene, hexahydro-	110827	Cyclohexane	1000	1,4	U056	C	1000 (4
Benzene, hydroxy-	108952	Phenol	1000	1,2,4	U188	C	1000 (4
Benzene, methyl-	108883	Toluene	1000	1,2,4	U220	C	1000 (4

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (K
Benzene, 2-methyl-1,3-dinitro-	606202	2,6-Dinitrotoluene	1000	1,2,4	U106	B	100 (45
Benzene, 1-methyl-2,4-dinitro-	121142	2,4-Dinitrotoluene	1000	1,2,4	U105	A	10 (4.
Benzene, 1-methylethyl-	98828	Cumene	1*	4	U055	D	5000 (227
Benzene, nitro-	98953	Nitrobenzene	1000	1,2,4	U169	C	1000 (4
Benzene, pentachloro-	608935	Pentachlorobenzene	1*	4	U183	A	10 (4.
Benzene, pentachloronitro-	82688	Pentachloronitrobenzene (PCNB)	1*	4	U185	B	100 (45
Benzenesulfonic acid chloride	98099	Benzenesulfonyl chloride	1*	4	U020	B	100 (45
Benzenesulfonyl chloride	98099	Benzenesulfonic acid chloride	1*	4	U020	B	100 (45
Benzene, 1,2,4,5-tetrachloro-	95943	1,2,4,5-Tetrachlorobenzene	1*	4	U207	D	5000 (227
Benzenethiol	108985	Thiophenol	1*	4	P014	B	100 (45
Benzene, 1,1'-(2,2,2-tri- chloroethylidene)bis[4-chloro-	50293	DDT 4,4'DDT	1	1,2,4	U061	X	1 (0.45
Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-methoxy-	72435	Methoxychlor	1	1,4	U247	X	1 (0.45
Benzene, (trichloromethyl)-	98077	Benzotrichloride	1*	4	U023	A	10 (4.5
Benzene, 1,3,5-trinitro-	99354	1,3,5-Trinitrobenzene	1*	4	U234	A	10 (4.5
Benzidine	92875	(1,1'-Biphenyl)-4,4'diamine	1*	2,4	U021	X	1 (0.45
1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	81072	Saccharin and salts	1*	4	U202	B	100 (45
Benzo[a]anthracene	56553	Benz[a]anthracene 1,2-Benzanthracene	1*	2,4	U018	A	10 (4.5
Benzo[b]fluoranthene	205992		1*	2		X	1 (0.45
Benzo(k)fluoranthene	207089		1*	2		D	5000 (227
Benzo[j,k]fluorene	206440	Fluoranthene	1*	2,4	U120	B	100 (45.
1,3-Benzodioxole, 5-)1-propenyl)-	120581	Isosafrole	1*	4	U141	B	100 (45.
1,3-Benzodioxole,5-(2-propenyl)-	94597	Safrole	1*	4	U203	B	100 (45.
1,3-Benzodioxole, 5-propyl-	94586	Dihydrosafrole	1*	4	U090	A	10 (4.5
Benzoic acid	65850		5000	1		D	5000 (227
Benzonitrile	100470		1000	1		D	5000 (227
Benzo [rst]pentaphene	189559	Dibenz[a,i]pyrene	1*	4	U064	A	10 (4.5
Benzo[ghi]perylene	191242		1*	2		D	5000 (227
2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations greater than 0.3%	81812	Warfarin, & salts, when present at concentrations greater than 0.3%.	1*	4	P001	B	100 (45.
Benzo[a]pyrene	50328	3,4-Benzopyrene	1*	2,4	U022	X	1 (0.45
3,4-Benzopyrene	50328	Benzo[a]pyrene	1*	2,4	U022	X	1 (0.45
p-Benzoquinone	106514	2,5-Cyclohexadiene-1,4-dione	1*	4	U197	A	10 (4.5
Benzotrichloride	98077	Benzene, (trichloromethyl)-	1*	4	U023	A	10 (4.5
Benzoyl chloride	98884		1000	1		C	1000 (45
1,2-Benzphenanthrene	218019	Chrysene	1*	2,4	U050	B	100 (45.
Benzyl chloride	100447	Benzene, chloromethyl-	100	1,4	P028	B	100 (45.
Beryllium ††	7440417	Beryllium dust ††	1*	2,3,4	P015	A	10 (4.5
BERYLLIUM AND COMPOUNDS	N.A.		1*	2			
Beryllium chloride	7787475		5000	1		X	1 (0.45
Beryllium dust ††	7440417	Beryllium ††	1*	2,3,4	P015	A	10 (4.5
Beryllium fluoride	7787497		5000	1		X	1 (0.45
Beryllium nitrate	13597994 7787555		5000	1		X	1 (0.45
alpha—BHC	319846		1*	2		A	10 (4.5
beta—BHC	319857		1*	2			1 (0.45
delta—BHC	319868		1*	2		X	1 (0.45
gamma—BHC	58899	Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1alpha, 2alpha,3beta,4alpha,5alpha,6beta)- Hexachlorocyclohexane (gamma isomer) Lindane.	1	1,2,4	U129	X	1 (0.45
2,2'-Bioxirane	1464535	1,2:3,4-Diepoxybutane	1*	4	U085	A	10 (4.5
(1,1'-Biphenyl)-4,4'diamine	92875	Benzidine	1*	2,4	U021	X	1 (0.454
[1,1'-Biphenyl]-4,4'diamine,3,3'dichloro-	91941	3,3'-Dichlorobenzidine	1*	2,4	U073	X	1 (0.454)
[1,1'-Biphenyl]-4,4'diamine,3,3'dimethoxy-	119904	3,3'-Dimethoxybenzidine	1*	4	U091	B	100 (45.4)
[1,1'Biphenyl]-4,4'-diamine,3,3'-dimethyl-	119937	3,3'-Dimethylbenzidine	1*	4	U095	A	10 (4.54)
Bis (2-chloroethyl) ether	111444	Dichloroethyl ether Ethane,1,1'-oxybis[2-chloro-	1*	2,4	U025	A	10 (4.54)
Bis(2-chloroethoxy) methane	111911	Dichloromethoxy ethane Ethane, 1,1'-[methylenebis(oxy)]bis(2-chloro-	1*	2,4	U024	C	1000 (454)
Bis (2-ethylhexyl)phthalate	117817	Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)] ester	1*	2,4	U028	B	100 (45.4
Bromoacetone	598312	2-Propanone, 1-bromo-	1*	4	P017	C	1000 (45
Bromoform	75252	Methane, tribromo-	1*	2,4	U225	B	100 (45.
4-Bromophenyl phenyl ether	101553	Benzene, 1-bromo-4-phenoxy-	1*	2,4	U030	B	100 (45.
Brucine	357573	Strychnidin-10-one, 2,3-dimethoxy-	1*	4	P018	B	100 (45.
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87683	Hexachlorobutadiene	1*	2,4	U128	X	1 (0.45
1-Butanamine, N-butyl-N-nitroso-	924163	N-Nitrosodi-n-butylamine	1*	4	U172	A	10 (4.5
1-Butanol	71363	n-Butyl alcohol	1*	4	U031	D	5000 (2270
2-Butanone	78933	Methyl ethyl ketone (MEK)	1*	4	U159	D	5000 (2270
2-Butanone peroxide	1338234	Methyl ethyl ketone peroxide	1*	4	U160	A	10 (4.5
2-Butanone, 3,3-dimethyl-1-(methylthio)-, O[(methylamino)carbonyl] oxime.	39196184	Thiofanox	1*	4	P045	B	100 (45.
2-Butenal	123739 4170303	Crotonaldehyde	100	1,4	U053	B	100 (45.
2-Butene, 1,4-dichloro-	764410	1,4-Dichloro-2-butene	1*	4	U074	X	1 (0.45
2-Butenoic acid, 2-methyl-, 7[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-	303344	Lasiocarpine	1*	4	U143	A	10 (4.5
Butyl acetate	123864		5000	1		D	5000 (2270
iso-Butyl acetate	110190						
sec-Butyl acetate	105464						
tert-Butyl acetate	540885						
n-Butyl alcohol	71363	1-Butanol	1*	4	U031	D	5000 (2270
Butylamine	109739		1000	1		C	1000 (454
iso-Butylamine	78819						

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
sec-Butylamine	513495						
	13952846						
tert-Butylamine	75649						
Butyl benzyl phthalate	85687		1*	2		B	100 (45.4
n-Butyl phthalate	84742	Di-n-butyl phthalate	100	1,2,4	U069	A	10 (4.54
		Dibutyl phthalate					
		1,2-Benzenedicarboxylic acid, dibutyl ester					
Butyric acid	107926		5000	1		D	5000 (2270
iso-Butyric acid	79312						
Cacodylic acid	75605	Arsinic acid, dimethyl-	1*	4	U136	X	1 (0.454
Cadmium ††	7440439		1*	2		A	10 (4.54
Cadmium acetate	543908		100	1		A	10 (4.54
CADMIUM AND COMPOUNDS	N.A.		1*	2			*
Cadmium bromide	7789426		100	1		A	10 (4.54
Cadmium chloride	10108642		100	1		A	10 (4.54
Calcium arsenate	7778441		1000	1		X	1 (0.454
Calcium arsenite	52740166		1000	1		X	1 (0.454
Calcium carbide	75207		5000	1		A	10 (4.54
Calcium chromate	13765190	Chromic acid H2CrO4, calcium salt	1000	1,4	U032	A	10 (4.54
Calcium cyanide	592018	Calcium cyanide Ca(CN)2	10	1,4	P021	A	10 (4.54
Calcium cyanide Ca(CN)2	592018	Calcium cyanide	10	1,4	P021	A	10 (4.54
Calcium dodecylbenzenesulfonate	26264062		1000	1		C	1000 (454)
Calcium hypochlorite	7778543		100	1		A	10 (4.54)
Camphene, octachloro-	8001352	Toxaphene	1	1,2,4	P123	X	1 (0.454)
Captan	133062		10	1		A	10 (4.54)
Carbamic acid, ethyl ester	51796	Ethyl carbamate (urethane)	1*	4	U238	B	100 (45.4)
Carbamic acid, methylnitroso-, ethyl ester	615532	N-Nitroso-N-methylurethane	1*	4	U178	X	1 (0.454)
Carbamic chloride, dimethyl-	79447	Dimethylcarbamoyl chloride	1*	4	U097	X	1 (0.454)
Carbamodithioic acid, 1,2-ethanediylbis, salts & esters	111546	Ethylenebisdithiocarbamic acid, salts & esters	1*	4	U114	D	5000 (2270)
Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	2303164	Diallate	1*	4	U062	B	100 (45.4)
Carbaryl	63252		100	1		B	100 (45.4)
Carbofuran	1563662		10	1		A	10 (4.54)
Carbon disulfide	75150		5000	1,4	P022	B	100 (45.4)
Carbon oxyfluoride	353504	Carbonic difluoride	1*	4	U033	C	1000 (454)
Carbon tetrachloride	56235	Methane, tetrachloro-	5000	1,2,4	U211	A	10 (4.54)
Carbonic acid, dithallium(1+) salt	6533739	Thallium(I) carbonate	1*	4	U215	B	100 (45.4)
Carbonic dichloride	75445	Phosgene	5000	1,4	P095	A	10 (4.54)
Carbonic difluoride	353504	Carbon oxyfluoride	1*	4	U033	C	1000 (454)
Carbonochloridic acid, methyl ester	79221	Methyl chlorocarbonate	1*	4	U156	C	1000 (454)
		Methyl chloroformate					
Chloral	75876	Acetaldehyde, trichloro-	1*	4	U034	D	5000 (2270)
Chlorambucil	305033	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-	1*	4	U035	A	10 (4.54)
Chlordane	57749	Chlordane, alpha & gamma isomers	1	1,2,4	U036	X	1 (0.454)
		Chlordane, technical					
		4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-					
CHLORDANE (TECHNICAL MIXTURE AND METABOLITES)	N.A.		1*	2			**
Chlordane, alpha & gamma isomers	57749	Chlordane	1	1,2,4	U036	X	1 (0.454)
		Chlordane, technical					
		4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-					
Chlordane, technical	57749	Chlordane	1	1,2,4	U036	X	1 (0.454)
		Chlordane, alpha & gamma isomers					
		4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-					
CHLORINATED BENZENES	N.A.		1*	2			**
CHLORINATED ETHANES	N.A.		1*	2			**
CHLORINATED NAPHTHALENE	N.A.		1*	2			**
CHLORINATED PHENOLS	N.A.		1*	2			**
Chlorine	7782505		10	1		A	10 (4.54)
Chlornaphazine	494031	Naphthalenamine, N,N'-bis(2-chloroethyl)-	1*	4	U026	B	100 (45.4)
Chloroacetaldehyde	107200	Acetaldehyde, chloro-	1*	4	P023	C	1000 (454)
CHLOROALKYL ETHERS	N.A.		1*	2			**
p-Chloroaniline	106478	Benzenamine, 4-chloro-	1*	4	P024	C	1000 (454)
Chlorobenzene	108907	Benzene, chloro-	100	1,2,4	U037	B	100 (45.4)
Chlorobenzilate	510156	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester.	1*	4	U038	A	10 (4.54)
4-Chloro-m-cresol	59507	p-Chloro-m-cresol	1*	2,4	U039	D	5000 (2270)
		Phenol, 4-chloro-3-methyl-					
p-Chloro-m-cresol	59507	Phenol, 4-chloro-3-methyl-	1*	2,4	U039	D	5000 (2270)
		4-Chloro-m-cresol					
Chlorodibromomethane	124481		1*	2		B	100 (45.4)
Chloroethane	75003		1*	2		B	100 (45.4)
2-Chloroethyl vinyl ether	110758	Ethene, 2-chloroethoxy-	1*	2,4	U042	C	1000 (454)
Chloroform	67663	Methane, trichloro-	5000	1,2,4	U044	A	10 (4.54)
Chloromethyl methyl ether	107302	Methane, chloromethoxy-	1*	4	U046	A	10 (4.54)
beta-Chloronaphthalene	91587	Naphthalene, 2-chloro-	1*	2,4	U047	D	5000 (2270)
		2-Chloronaphthalene					
2-Chloronaphthalene	91587	beta-Chloronaphthalene	1*	2,4	U047	D	5000 (2270)
		Naphthalene, 2-chloro-					
2-Chlorophenol	95578	o-Chlorophenol	1*	2,4	U048	B	100 (45.4)
		Phenol, 2-chloro-					
o-Chlorophenol	95578	Phenol, 2-chloro-	1*	2,4	U048	B	100 (45.4)
		2-Chlorophenol					
4-Chlorophenyl phenyl ether	7005723		1*	2		D	5000 (2270)
1-(o-Chlorophenyl)thiourea	5344821	Thiourea, (2-chlorophenyl)-	1*	4	P026	B	100 (45.4)
3-Chloropropionitrile	542767	Propanenitrile, 3-chloro-	1*	4	P027	C	1000 (454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (Kg)
Chlorosulfonic acid	7790945		1000	1		C	1000 (454)
4-Chloro-o-toluidine, hydrochloride	3165933	Benzenamine, 4-chloro-2-methyl-, hydrochloride	1*	4	U049	B	100 (45.4)
Chlorpyrifos	2921882		1	1		X	1 (0.454)
Chromic acetate	1066304		1000	1		C	1000 (454)
Chromic acid	11115745		1000	1		A	10 (4.54)
	7738945						
Chromic acid H2CrO4, calcium salt	13765190	Calcium chromate	1000	1,4	U032	A	10 (4.54)
Chromic sulfate	10101538		1000	1		C	1000 (454)
Chromium ††	7440473		1*	2		D	5000 (2270)
CHROMIUM AND COMPOUNDS	N.A.		1*	2			**
Chromous chloride	10049055		1000	1		C	1000 (454)
Chrysene	218019	1,2-Benzphenanthrene	1*	2,4	U050	B	100 (45.4)
Cobaltous bromide	7789437		1000	1		C	1000 (454)
Cobaltous formate	544183		1000	1		C	1000 (454)
Cobaltous sulfamate	14017415		1000	1		C	1000 (454)
Coke Oven Emissions	N.A.		1*	3		X	1 (0.454)
Copper cyanide CuCN	544923	Copper cyanide	1*	4	P029	A	10 (4.54)
Copper ††	7440508		1*	2		D	5000 (2270)
COPPER AND COMPOUNDS	N.A.		1*	2			**
Copper cyanide	544923	Copper cyanide CuCN	1*	4	P029	A	10 (4.54)
Coumaphos	56724		10	1		A	10 (4.54)
Creosote	8001589		1*	4	U051	X	1 (0.454)
Cresol(s)	1319773	Cresylic acid	1000	1,4	U052	C	1000 (454)
		Phenol, methyl-					
m-Cresol	108394	m-Cresylic acid					
o-Cresol	95487	o-Cresylic acid					
p-Cresol	106445	p-Cresylic acid					
Cresylic acid	1319773	Cresol(s)	1000	1,4	U052	C	1000 (454)
		Phenol, methyl-					
m-Cresol	108394	m-Cresylic acid					
o-Cresol	95487	o-Cresylic acid					
p-Cresol	106445	p-Cresylic acid					
Crotonaldehyde	123739	2-Butenal	100	1,4	U053	B	100 (45.4)
	4170303						
Cumene	98828	Benzene, 1-methylethyl-	1*	4	U055	D	5000 (2270)
Cupric acetate	142712		100	1		B	100 (45.4)
Cupric aceloarsenite	12002038		100	1		X	1 (0.454)
Cupric chloride	7447394		10	1		A	10 (4.54)
Cupric nitrate	3251238		100	1		B	100 (45.4)
Cupric oxalate	5893663		100	1		B	100 (45.4)
Cupric sulfate	7758987		10	1		A	10 (4.54)
Cupric sulfate, ammoniated	10380297		100	1		B	100 (45.4)
Cupric tartrate	815827		100	1		B	100 (45.4)
CYANIDES	N.A.		1*	2			**
Cyanides (soluble salts and complexes) not otherwise specified	57125		1*	4	P030	A	10 (4.54)
Cyanogen	460195	Ethanedinitrile	1*	4	P031	B	100 (45.4)
Cyanogen bromide	506683	Cyanogen bromide (CN)Br	1*	4	U246	C	1000 (454)
Cyanogen bromide (CN)Br	506683	Cyanogen bromide	1*	4	U246	C	1000 (454)
Cyanogen chloride	506774	Cyanogen chloride (CN)Cl	10	1,4	P033	A	10 (4.54)
Cyanogen chloride (CN)Cl	506774	Cyanogen chloride	10	1,4	P033	A	10 (4.54)
2,5-Cyclohexadiene-1,4-dione	106514	p-Benzoquinone	1*	4	U197	A	10 (4.54)
Cyclohexane	110827	Benzene, hexahydro-	1000	1,4	U056	C	1000 (454)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha, 6beta)-	58899	gamma—BHC		1	1,2,4 U129	X	1
		Hexachlorocyclohexane (gamma isomer)Lindane					
		Lindane					
Cyclohexanone	108941		1*	4	U057	D	5000 (2270)
2-Cyclohexyl-4,6-dinitrophenol	131895	Phenol, 2-cyclohexyl-4,6-dinitro-	1*	4	P034	B	100 (45.4)
1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77474	Hexachlorocyclopentadiene	1	1,2,4	U130	A	10 (4.54)
Cyclophosphamide	50180	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-,2-oxide	1*	4	U058	A	10 (4.54)
2,4-D Acid	94757	Acetic acid (2,4-dichlorophenoxy)-2,4-D, salts and esters.	100	1,4	U240	B	100 (45.4)
2,4-D Ester	94111		100	1		B	100 (45.4)
	94791						
	94804						
	1320189						
	1928387						
	1928616						
	1929733						
	2971382						
	25168267						
	53467111						
2,4-D, salts and esters	94757	Acetic acid (2,4-dichlorophenoxy)-2,4-D Acid	100	1,4	U240	B	100 (45.4)
Daunomycin	20830813	5,12-Naphthacenedione, 8-acetyl-10-[3-amino-2,3,6- trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10- tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-.	1*	4	U059	A	10 (4.54)
DDD	72548	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro- .	1	1,2,4	U060	X	1 (0.454)
		TDE					
		4,4' DDD					
4,4' DDD	72548	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-	1	1,2,4	U060	X	1 (0.454)
		DDD					
		TDE					
DDE	72559	4,4' DDE	1*	2		X	1 (0.454)
4,4' DDE	72559	DDE	1*	2		X	1 (0.454)
DDT	50293	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- 4,4'DDT	1	1,2,4	U061	X	1 (0.454)
4,4'DDT	50293	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-	1	1,2,4	U061	X	1 (0.454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (Kg)
DDT AND METABOLITES	N.A.		1*	2			
Diallate	2303164	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester.	1*	4	U062	B	100 (45.4
Diazinon	333415		1	1		X	1 (0.454
Dibenz[a,h]anthracene	53703	Dibenzo[a,h]anthracene 1,2:5,6-Dibenzanthracene	1*	2,4	U063	X	1 (0.454
1,2:5,6-Dibenzanthracene	53703	Dibenz[a,h]anthracene Dibenzo[a,h]anthracene	1*	2,4	U063	X	1 (0.454
Dibenzo[a,h]anthracene	53703	Dibenz[a,h]anthracene 1,2:5,6-Dibenzanthracene	1*	2,4	U063	X	1 (0.454
Dibenz[a,i]pyrene	189559	Benzo[rst]pentaphene	1*	4	U064	A	10 (4.54
1,2-Dibromo-3-chloropropane	96128	Propane, 1,2-dibromo-3-chloro-	1*	4	U066	X	1 (0.454
Dibutyl phthalate	84742	Di-n-butyl phthalate n-Butyl phthalate 1,2-Benzenedicarboxylic acid, dibutyl ester	100	1,2,4	U069	A	10 (4.54
Di-n-butyl phthalate	84742	Dibutyl phthalate n-Butyl phthalate 1,2-Benzenedicarboxylic acid, dibutyl ester	100	1,2,4	U069	A	10 (4.54
Dicamba	1918009		1000	1		C	1000 (454
Dichlobenil	1194656		1000	1		B	100 (45.4
Dichlone	117806		1	1		X	1 (0.454
Dichlorobenzene	25321226		100	1		B	100 (45.4
1,2-Dichlorobenzene	95501	Benzene, 1,2-dichloro- o-Dichlorobenzene	100	1,2,4	U070	B	100 (45.4
1,3-Dichlorobenzene	541731	Benzene, 1,3-dichloro m-Dichlorobenzene	1*	2,4	U071	B	100 (45.4
1,4-Dichlorobenzene	106467	Benzene, 1,4-dichloro p-Dichlorobenzene	100	1,2,4	U072	B	100 (45.4
m-Dichlorobenzene	541731	Benzene, 1,3-dichloro 1,3-Dichlorobenzene	1*	2,4	U071	B	100 (45.4
o-Dichlorobenzene	95501	Benzene, 1,2-dichloro 1,2-Dichlorobenzene	100	1,2,4	U070	B	100 (45.4
p-Dichlorobenzene	106467	Benzene, 1,4-dichloro 1,4-Dichlorobenzene	100	1,2,4	U072	B	100 (45.4
DICHLOROBENZIDINE	N.A.		1*	2			
3,3'-Dichlorobenzidine	91941	[1,1'-Biphenyl]-4,4'diamine,3,3'dichloro-	1*	2,4	U073	X	1 (0.454)
Dichlorobromomethane	75274		1*	2		D	5000 (2270)
1,4-Dichloro-2-butene	764410	2-Butene, 1,4-dichloro-	1*	4	U074	X	1 (0.454)
Dichlorodifluoromethane	75718	Methane, dichlorodifluoro-	1*	4	U075	D	5000 (2270)
1,1-Dichloroethane	75343	Ethane, 1,1-dichloro- Ethylidene dichloride	1*	2,4	U076	C	1000 (454)
1,2-Dichloroethane	107062	Ethane, 1,2-dichloro- Ethylene dichloride	5000	1,2,4	U077	B	100 (45.4)
1,1-Dichloroethylene	75354	Ethene, 1,1-dichloro- Vinylidene chloride	5000	1,2,4	U078	B	100 (45.4)
1,2-Dichloroethylene	156605	Ethene, 1,2-dichloro- (E)	1*	2,4	U079	C	1000 (454)
Dichloroethyl ether	111444	Bis (2-chloroethyl) ether Ethane, 1,1'-oxybis[2-chloro-	1*	2,4	U025	A	10 (4.54
Dichloroisopropyl ether	108601	Propane, 2,2'-oxybis[2-chloro-	1*	2,4	U027	C	1000 (454
Dichloromethoxy ethane	111911	Bis(2-chloroethoxy) methane Ethane, 1,1'-[methylenebis(oxy)]bis(2-chloro-	1*	2,4	U024	C	1000 (454
Dichloromethyl ether	542881	Methane, oxybis(chloro-	1*	4	P016	A	10 (4.54
2,4-Dichlorophenol	120832	Phenol, 2,4-dichloro-	1*	2,4	U081	B	100 (45.4
2,6-Dichlorophenol	87650	Phenol, 2,6-dichloro-	1*	4	U082	B	100 (45.4
Dichlorophenylarsine	696286	Arsonous dichloride, phenyl-	1*	4	P036	X	1 (0.454
Dichloropropane	26638197		5000	1		C	1000 (454
1,1-Dichloropropane	78999						
1,3-Dichloropropane	142289						
1,2-Dichloropropane	78875	Propane, 1,2-dichloro- Propylene dichloride	5000	1,2,4	U083	C	1000 (454
Dichloropropane—Dichloropropene (mixture)	8003198		5000	1		B	100 (45.4)
Dichloropropene	26952238		5000	1		B	100 (45.4)
2,3-Dichloropropene	78886						
1,3-Dichloropropene	542756	1-Propene, 1,3-dichloro-	5000	1,2,4	U084	B	100 (45.4)
2,2-Dichloropropionic acid	75990		5000	1		D	5000 (2270)
Dichlorvos	62737		10	1		A	10 (4.54)
Dicofol	115322		5000	1		A	10 (4.54)
Dieldrin	60571	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta, 6aalpha,7beta, 7aalpha)-.	1	1,2,4	P037	X	1 (0.454)
1,2:3,4-Diepoxybutane	1464535	2,2'-Bioxirane	1*	4	U085	A	10 (4.54
Diethylamine	109897		1000	1		B	100 (454.4
Diethylarsine	692422	Arsine, diethyl-	1*	4	P038	X	1 (0.454
1,4-Diethylenedioxide	123911	1,4-Dioxane	1*	4	U108	B	100 (45.4
Diethylhexyl phthalate	117817	Bis (2-ethylhexyl)phthalate 1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)] ester	1*	2,4	U028	B	100 (45.4
N,N'-Diethylhydrazine	1615801	Hydrazine, 1,2-diethyl-	1*	4	U086	A	10 (4.54
O,O-Diethyl S-methyl dithiophosphate	3288582	Phosphorodithioic acid, O,O-diethyl S-methyl ester	1*	4	U087	D	5000 (2270
Diethyl-p-nitrophenyl phosphate	311455	Phosphoric acid, diethyl 4-nitrophenyl ester	1*	4	P041	B	100 (45.4
Diethyl phthalate	84662	1,2-Benzenedicarboxylic acid, diethyl ester	1*	2,4	U088	C	1000 (454
O,O-Diethyl O-pyrazinyl phosphorothioate	297972	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	1*	4	P040	B	100 (45.4
Diethylstilbestrol	56531	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)	1*	4	U089	X	1 (0.454
Dihydrosafrole	94586	1,3-Benzodioxole, 5-propyl-	1*	4	U090	A	10 (4.54
Diisopropylfluorophosphate	55914	Phosphorofluoridic acid, bis(1-methylethyl) ester	1*	4	P043	B	100 (45.4
1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,	309002	Aldrin	1	1,2,4	P004	X	1 (0.454
8abeta)-1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro, (1alpha,4alpha,4abeta,5abeta,8beta,	465736	Isodrin	1*	4	P060	X	1 (0.454
8abeta)-2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,	60571	Dieldrin	1	1,2,4	P037	X	1 (0.454

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (Kg)
6aalpha,7beta,7aalpha)-2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,	72208	Endrin Endrin, & metabolites	1	1,2,4	P051	X	1 (0.454
6abeta,7beta,7aalpha)-Dimethoate	60515	Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester.	1*	4	P044	A	10 (4.54
3,3'-Dimethoxybenzidine	119904	[1,1'-Biphenyl]-4,4'diamine,3,3'dimethoxy-	1*	4	U091	B	100 (45.4
Dimethylamine	124403	Methanamine, N-methyl-	1000	1,4	U092	C	1000 (454
p-Dimethylaminoazobenzene	60117	Benzenamine, N,N-dimethyl-4-(phenylazo-)	1*	4	U093	A	10 (4.54
7,12-Dimethylbenz[a]anthracene	57976	Benz[a]anthracene, 7,12-dimethyl-	1*	4	U094	X	1 (0.454
3,3'-Dimethylbenzidine	119937	[1,1'Biphenyl]-4,4'-diamine,3,3'-dimethyl-	1*	4	U095	A	10 (4.54
alpha,alpha-Dimethylbenzylhydroperoxide	80159	Hydroperoxide, 1-methyl-1-phenylethyl-	1*	4	U096	A	10 (4.54
Dimethylcarbamoyl chloride	79447	Carbamic chloride, dimethyl-	1*	4	U097	X	1 (0.454
1,1-Dimethylhydrazine	57147	Hydrazine, 1,1-dimethyl-	1*	4	U098	A	10 (4.54
1,2-Dimethylhydrazine	540738	Hydrazine, 1,2-dimethyl-	1*	4	U099	X	1 (0.454
alpha,alpha-Dimethylphenethylamine	122098	Benzeneethanamine, alpha,alpha-dimethyl-	1*	4	P046	D	5000 (2270
2,4-Dimethylphenol	105679	Phenol, 2,4-dimethyl-	1*	2,4	U101	B	100 (45.4
Dimethyl phthalate	131113	1,2-Benzenedicarboxylic acid, dimethyl ester	1*	2,4	U102	D	5000 (2270
Dimethyl sulfate	77781	Sulfuric acid, dimethyl ester	1*	4	U103	B	100 (45.4
Dinitrobenzene (mixed)	25154545		1000	1		B	100 (45.4
m-Dinitrobenzene	99650						
o-Dinitrobenzene	528290						
p-Dinitrobenzene	100254						
4,6-Dinitro-o-cresol and salts	534521	Phenol, 2-methyl-4,6-dinitro-	1*	2,4	P047	A	10 (4.54
Dinitrophenol	25550587		1000	1		A	10 (4.54
2,5-Dinitrophenol	329715						
2,6-Dinitrophenol	573568						
2,4-Dinitrophenol	51285	Phenol, 2,4-dinitro-	1000	1,2,4	P048	A	10 (4.54
Dinitrotoluene	25321146		1000	1,2		A	10 (4.54
3,4-Dinitrotoluene	610399						
2,4-Dinitrotoluene	121142	Benzene, 1-methyl-2,4-dinitro-	1000	1,2,4	U105	A	10 (4.54
2,6-Dinitrotoluene	606202	Benzene, 2-methyl-1,3-dinitro-	1000	1,2,4	U106	B	100 (45.4
Dinoseb	88857	Phenol, 2-(1-methylpropyl)-4,6-dinitro	1*	4	P020	C	1000 (454
Di-n-octyl phthalate	117840	1,2-Benzenedicarboxylic acid, dioctyl ester	1*	2,4	U107	D	5000 (2270
1,4-Dioxane	123911	1,4-Diethylenedioxide	1*	4	U108	B	100 (45.4
DIPHENYLHYDRAZINE	N.A.		1*	2			
1,2-Diphenylhydrazine	122667	Hydrazine, 1,2-diphenyl-	1*	2,4	U109	A	10 (4.54
Diphosphoramide, octamethyl-	152169	Octamethylpyrophosphoramide	1*	4	P085	B	100 (45.4
Diphosphoric acid, tetraethyl ester	107493	Tetraethyl pyrophosphate	100	1,4	P111	A	10 (4.54
Dipropylamine	142847	1-Propanamine, N-propyl-	1*	4	U110	D	5000 (2270
Di-n-propylnitrosamine	621647	1-Propanamine, N-nitroso-N-propyl-	1*	2,4	U111	A	10 (4.54
Diquat	85007 2764729		1000	1		C	1000 (45
Disulfoton	298044	Phosphorodithioic acid, o,o-diethyl S-[2-(ethylthio)ethyl]ester.	1	1,4	P039	X	1 (0.45
Dithiobiuret	541537	Thioimidodicarbonic diamide [(H2N) C(S)]2NH	1*	4	P049	B	100 (45.
Diuron	330541		100	1		B	100 (45.
Dodecylbenzenesulfonic acid	27176870		1000	1		C	1000 (45
Endosulfan	115297	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide.	1	1,2,4	P050	X	1 (0.45
alpha - Endosulfan	959988		1*	2		X	1 (0.45
beta - Endosulfan	33213659		1*	2		X	1 (0.45
ENDOSALFAN AND METABOLITES	N.A.		1*	2			
Endosulfan sulfate	1031078		1*	2		X	1 (0.454)
Endothall	145733	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	1*	4	P088	C	1000 (454)
Endrin	72208	Endrin, & metabolites 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9 -hexachloro-1a,2,2a,3, 6,6a,7,7a-octa-hydro-, (1aalpha, 2beta,2abeta,3alpha,6alpha, 6abeta,7beta, 7aalpha)-	1	1,2,4	P051	X	1 (0.454)
Endrin aldehyde	7421934		1*	2		X	1 (0.454
ENDRIN AND METABOLITES	N.A.		1*	2			
Endrin, & metabolites	72208	Endrin 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3, 6,6a,7,7a-octa-hydro-, (1aalpha, 2beta,2abeta,3alpha,6alpha, 6abeta,7beta, 7aalpha)-	1	1,2,4	P051	X	1 (0.45
Epichlorohydrin	106898	Oxirane, (chloromethyl)-	1000	1,4	U041	B	100 (45.4
Epinephrine	51434	1,2-Benzenediol,4-[1-hydroxy-2-(methylamino)ethyl]-.	1*	4	P042	C	1000 (454
Ethanal	75070	Acetaldehyde	1000	1,4	U001	C	1000 (454
Ethanamine, N-ethyl-N-nitroso-	55185	N-Nitrosodiethylamine	1*	4	U174	X	1 (0.45
1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	91805	Methapyrilene	1*	4	U155	D	5000 (2270
Ethane, 1,2-dibromo-	106934	Ethylene dibromide	1000	1,4	U067	X	1 (0.454
Ethane, 1,1-dichloro-	75343	Ethylidene dichloride 1,1-Dichloroethane	1*	2,4	U076	C	1000 (454
Ethane, 1,2-dichloro-	107062	Ethylene dichloride 1,2-Dichloroethane	5000	1,2,4	U077	B	100 (45.4
Ethanedinitrile	460195	Cyanogen	1*	4	P031	B	100 (45.4
Ethane, hexachloro-	67721	Hexachloroethane	1*	2,4	U131	B	100 (45.4
Ethane, 1,1'-[methylenebis(oxy)]bis(2-chloro-	111911	Bis(2-chloroethoxy) methane Dichloromethoxy ethane	1*	2,4	U024	C	1000 (454
Ethane, 1,1'-oxybis-	60297	Ethyl ether	1*	4	U117	B	100 (45.4
Ethane, 1,1'-oxybis[2-chloro-	111444	Bis (2-chloroethyl) ether Dichloroethyl ether	1*	2,4	U025	A	10 (4.54
Ethane, pentachloro-	76017	Pentachloroethane	1*	4	U184	A	10 (4.54

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (K
Ethane, 1,1,1,2-tetrachloro-	630206	1,1,1,2-Tetrachloroethane	1*	4	U208	B	100 (45
Ethane, 1,1,2,2-tetrachloro-	79345	1,1,2,2-Tetrachloroethane	1*	2,4	U209	B	100 (45
Ethanethioamide	62555	Thioacetamide	1*	4	U218	A	10 (4.
Ethane, 1,1,1-trichloro-	71556	Methyl chloroform	1*	2,4	U226	C	1000 (4
		1,1,1-Trichloroethane					
Ethane, 1,1,2-trichloro-	79005	1,1,2-Trichloroethane	1*	2,4	U227	B	100 (45
Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester	16752775	Methomyl	1*	4	P066	B	100 (45
Ethanol, 2-ethoxy-	110805	Ethylene glycol monoethyl ether	1*	4	U359	C	1000 (4.
Ethanol, 2,2'-(nitrosoimino)bis-	1116547	N-Nitrosodiethanolamine	1*	4	U173	X	1 (0.4
Ethanone, 1-phenyl-	98862	Acetophenone	1*	4	U004	D	5000 (22
Ethene, chloro-	75014	Vinyl chloride	1*	2,3,4	U043	X	1 (0.45
Ethene, 2-chloroethoxy-	110758	2-Chloroethyl vinyl ether	1*	2,4	U042	C	1000 (45
Ethene, 1,1-dichloro-	75354	Vinylidene chloride	5000	1,2,4	U078	B	100 (45
		1,1-Dichloroethylene					
Ethene, 1,2-dichloro- (E)	156605	1,2-Dichloroethylene	1*	2,4	U079	C	1000 (45
Ethene, tetrachloro-	127184	Perchloroethylene	1*	2,4	U210	B	100 (45
		Tetrachloroethene					
		Tetrachloroethylene					
Ethene, trichloro-	79016	Trichloroethene	1000	1,2,4	U228	B	100 (45
		Trichloroethylene					
Ethion	563122		10	1		A	10 (4.5
Ethyl acetate	141786	Acetic acid, ethyl ester	1*	4	U112	D	5000 (227
Ethyl acrylate	140885	2-Propenoic acid, ethyl ester	1*	4	U113	C	1000 (45
Ethylbenzene	100414		1000	1,2		C	1000 (45
Ethyl carbamate (urethane)	51796	Carbamic acid, ethyl ester	1*	4	U238	B	100 (45.
Ethyl cyanide	107120	Propanenitrile	1*	4	P101	A	10 (4.5
Ethylenebisdithiocarbamic acid, salts & esters	111546	Carbamodithioic acid, 1,2-ethanediylbis, salts & esters.	1*	4	U114	D	5000 (227
Ethylenediamine	107153		1000	1		D	5000 (227
Ethylenediamine-tetraacetic acid (EDTA)	60004		5000	1		D	5000 (227
Ethylene dibromide	106934	Ethane, 1,2-dibromo-	1000	1,4	U067	X	1 (0.45
Ethylene dichloride	107062	Ethane, 1,2-dichloro-	5000	1,2,4	U077	B	100 (45.
		1,2-Dichloroethane					
Ethylene glycol monoethyl ether	110805	Ethanol, 2-ethoxy-	1*	4	U359	C	1000 (45
Ethylene oxide	75218	Oxirane	1*	4	U115	A	10 (4.5
Ethylenethiourea	96457	2-Imidazolidinethione	1*	4	U116	A	10 (4.5
Ethylenimine	151564	Aziridine	1*	4	P054	X	1 (0.45
Ethyl ether	60297	Ethane, 1,1'-oxybis-	1*	4	U117	B	100 (45.
Ethylidene dichloride	75343	Ethane, 1,1-dichloro-	1*	2,4	U076	C	1000 (45
		1,1-Dichloroethane					
Ethyl methacrylate	97632	2-Propenoic acid, 2-methyl-, ethyl ester	1*	4	U118	C	1000 (45
Ethyl methanesulfonate	62500	Methanesulfonic acid, ethyl ester	1*	4	U119	X	1 (0.45
Famphur	52857	Phosphorothioic acid, O,[4-[(di- methylamino) sulfonyl] phenyl] O,O-dimethyl ester.	1*	4	P097	C	1000 (45
Ferric ammonium citrate	1185575		1000	1		C	1000 (454
Ferric ammonium oxalate	2944674		1000	1		C	1000 (454
	55488874						
Ferric chloride	7705080		1000	1		C	1000 (454
Ferric fluoride	7783508		100	1		B	100 (45.4
Ferric nitrate	10421484		1000	1		C	1000 (454
Ferric sulfate	10028225		1000	1		C	1000 (454
Ferrous ammonium sulfate	10045893		1000	1		C	1000 (454)
Ferrous chloride	7758943		100	1		B	100 (45.4)
Ferrous sulfate	7720787		1000	1		C	1000 (454)
	7782630						
Fluoranthene	206440	Benzo[j,k]fluorene	1*	2,4	U120	B	100 (45.4)
Fluorene	86737		1*	2		D	5000 (2270)
Fluorine	7782414		1*	4	P056	A	10 (4.54)
Fluoroacetamide	640197	Acetamide, 2-fluoro-	1*	4	P057	B	100 (45.4)
Fluoroacetic acid, sodium salt	62748	Acetic acid, fluoro-, sodium salt	1*	4	P058	A	10 (4.54)
Formaldehyde	50000		1000	1,4	U122	B	100 (45.4)
Formic acid	64186		5000	1,4	U123	D	5000 (2270)
Fulminic acid, mercury(2+)salt	628864	Mercury fulminate	1*	4	P065	A	10 (4.54)
Fumaric acid	110178		5000	1		D	5000 (2270)
Furan	110009	Furfuran	1*	4	U124	B	100 (45.4)
Furan, tetrahydro-	109999	Tetrahydrofuran	1*	4	U213	C	1000 (454)
2-Furancarboxaldehyde	98011	Furfural	1000	1,4	U125	D	5000 (2270)
2,5-Furandione	108316	Maleic anhydride	5000	1,4	U147	D	5000 (2270)
Furfural	98011	2-Furancarboxaldehyde	1000	1,4	U125	D	5000 (2270)
Furfuran	110009	Furan	1*	4	U124	B	100 (45.4)
Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	18883664	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino] Streptozotocin.	1*	4	U206	X	1 (0.454)
D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino]-.	18883664	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-.	1*	4	U206	X	1 (0.454)
		Streptozotocin					
Glycidylaldehyde	765344	Oxiranecarboxyaldehyde	1*	4	U126	A	10 (4.54)
Guanidine, N-methyl-N'-nitro-N-nitroso-	70257	MNNG	1*	4	U163	A	10 (4.54)
Guthion	86500		1	1		X	1 (0.454)
HALOETHERS	N.A.		1*	2			**
HALOMETHANES	N.A.		1*	2			**
Heptachlor	76448	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-.	1	1,2,4	P059	X	1 (0.454)
HEPTACHLOR AND METABOLITES	N.A.		1*	2			**
Heptachlor epoxide	1024573		1*	2		X	1 (0.454)
Hexachlorobenzene	118741	Benzene, hexachloro-	1*	2,4	U127	A	10 (4.54)
Hexachlorobutadiene	87683	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	1*	2,4	U128	X	1 (0.454)
HEXACHLOROCYCLOHEXANE (all isomers)	608731		1*	2			**
Hexachlorocyclohexane (gamma isomer)	58899	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha, 6beta)-	1	1,2,4	U129	X	1 (0.454)
		gamma-BHC					
		Lindane					

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Hexachlorocyclopentadiene	77474	1,3-Cyclopentadiene,1,2,3,4,5,5-hexachloro-	1	1,2,4	U130	A	10 (4.54)
Hexachloroethane	67721	Ethane, hexachloro-	1*	2,4	U131	B	100 (45.4)
Hexachlorophene	70304	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	1*	4	U132	B	100 (45.4)
Hexachloropropene	1888717	1-Propene, 1,1,2,3,3,3-hexachloro-	1*	4	U243	C	1000 (454)
Hexaethyl tetraphosphate	757584	Tetraphosphoric acid, hexaethyl ester	1*	4	P062	B	100 (45.4)
Hydrazine	302012		1*	4	U133	X	1 (0.454)
Hydrazine, 1,2-diethyl-	1615801	N,N'-Diethylhydrazine	1*	4	U086	A	10 (4.54)
Hydrazine, 1,1-dimethyl-	57147	1,1-Dimethylhydrazine	1*	4	U098	A	10 (4.54)
Hydrazine, 1,2-dimethyl-	540738	1,2-Dimethylhydrazine	1*	4	U099	X	1 (0.454)
Hydrazine, 1,2-diphenyl-	122667	1,2-Diphenylhydrazine	1*	2,4	U109	A	10 (4.54)
Hydrazine, methyl-	60344	Methyl hydrazine	1*	4	P068	A	10 (4.54)
Hydrazinecarbothioamide	79196	Thiosemicarbazide	1*	4	P116	B	100 (45.4)
Hydrochloric acid	7647010	Hydrogen chloride	5000	1		D	5000 (2270)
Hydrocyanic acid	74908	Hydrogen cyanide	10	1,4	P063	A	10 (4.54)
Hydrofluoric acid	7664393	Hydrogen fluoride	5000	1,4	U134	B	100 (45.4)
Hydrogen chloride	7647010	Hydrochloric acid	5000	1		D	5000 (2270)
Hydrogen cyanide	74908	Hydrocyanic acid	10	1,4	P063	A	10 (4.54)
Hydrogen fluoride	7664393	Hydrofluoric acid	5000	1,4	U134	B	100 (45.4)
Hydrogen sulfide	7783064	Hydrogen sulfide H2S	100	1,4	U135	B	100 (45.4)
Hydrogen sulfide H2S	7783064	Hydrogen sulfide	100	1,4	U135	B	100 (45.4)
Hydroperoxide, 1-methyl-1-phenylethyl-	80159	alpha,alpha-Dimethylbenzylhydroperoxide	1*	4	U096	A	10 (4.54)
2-Imidazolidinethione	96457	Ethylenethiourea	1*	4	U116	A	10 (4.54)
Indeno(1,2,3-cd)pyrene	193395	1,10-(1,2-Phenylene)pyrene	1*	2,4	U137	B	100 (45.4)
1,3-Isobenzofurandione	85449	Phthalic anhydride	1*	4	U190	D	5000 (2270)
Isobutyl alcohol	78831	1-Propanol, 2-methyl-	1*	4	U140	D	5000 (2270)
Isodrin	465736	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro, (1alpha,4alpha,4abeta,5beta, 8beta,8abeta)-.	1*	4	P060	X	1 (0.454)
Isophorone	78591		1*	2		D	5000 (2270)
Isoprene	78795		1000	1		B	100 (45.4)
Isopropanolamine dodecylbenzenesulfonate	42504461		1000	1		C	1000 (454)
Isosafrole	120581	1,3-Benzodioxole, 5-)1-propenyl)-	1*	4	U141	B	100 (45.4)
3(2H)-Isoxazolone, 5-(aminomethyl)-	2763964	Muscimol 5-(Aminomethyl)-3-isoxazoiol	1*	4	P007	C	1000 (454)
Kepone	143500	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachloroctahydro-.	1	1,4	U142	X	1 (0.454)
Lasiocarpine	303344	2-Butenoic acid, 2-methyl-, 7[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z), 7(2S*,3R*),7aalpha]]-.	1*	4	U143	A	10 (4.54)
Lead††	7439921		1*	2		A	10 (4.54)
Lead acetate	301042	Acetic acid, lead(2+) salt	5000	1,4	U144	A	10 (4.54)
LEAD AND COMPOUNDS	N.A.		1*	2			**
Lead arsenate	7784409 7645252 10102484		5000	1		X	1 (0.454)
Lead, bis(acetatato-O)tetrahydroxytri-	1335326	Lead subacetate	1*	4	U146	A	10 (4.54)
Lead chloride	7758954		5000	1		A	10 (4.54)
Lead fluoborate	13814965		5000	1		A	10 (4.54)
Lead fluoride	7783462		1000	1		A	10 (4.54)
Lead iodide	10101630		5000	1		A	10 (4.54)
Lead nitrate	10099748		5000	1		A	10 (4.54)
Lead phosphate	7446277	Phosphoric acid, lead(2+) salt (2:3)	1*	4	U145	A	10 (4.54)
Lead stearate	1072351 7428480 52652592 55189094		5000	1		A	10 (4.54)
Lead subacetate	1335326	Lead, bis(acetato-O)tetrahydroxytri-	1*	4	U146	A	10 (4.54)
Lead sulfate	7446142 15739807		5000	1		A	10 (4.54)
Lead sulfide	1314870		5000	1		A	10 (4.54)
Lead thiocyanate	592870		5000	1		A	10 (4.54)
Lindane	58899	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- gamma-BHC. Hexachlorocyclohexane (gamma isomer)	1	1,2,4	U129	X	1 (0.454)
Lithium chromate	14307358		1000	1		A	10 (4.54)
Malathion	121755		10	1		B	100 (45.4)
Maleic acid	110167		5000	1		D	5000 (2270)
Maleic anhydride	108316	2,5-Furandione	5000	1,4	U147	D	5000 (2270)
Maleic hydrazide	123331	3,6-Pyridazinedione, 1,2-dihydro-	1*	4	U148	D	5000 (2270)
Malononitrile	109773	Propanedinitrile	1*	4	U149	C	1000 (454)
Melphalan	148823	L-Phenylalanine, 4-[bis(2-chloroethyl) amino]]	1*	4	U150	X	1 (0.454)
Mercaptodimethur	2032657		100	1		A	10 (4.54)
Mercuric cyanide	592041		1	1		X	1 (0.454)
Mercuric nitrate	10045940		10	1		A	10 (4.54)
Mercuric sulfate	7783359		10	1		A	10 (4.54)
Mercuric thiocyanate	592858		10	1		A	10 (4.54)
Mercurous nitrate	10415755 7782867		10	1		A	10 (4.54)
Mercury	7439976		1*	2,3,4	U151	X	1 (0.454)
MERCURY AND COMPOUNDS	N.A.		1*	2			**
Mercury, (acetato-O)phenyl-	62384	Phenylmercury acetate	1*	4	P092	B	100 (45.4)
Mercury fulminate	628864	Fulminic acid, mercury(2+)salt	1*	4	P065	A	10 (4.54)
Methacrylonitrile	126987	2-Propenenitrile, 2-methyl-	1*	4	U152	C	1000 (454)
Methanamine, N-methyl-	124403	Dimethylamine	1000	1,4	U092	C	1000 (454)
Methanamine, N-methyl-N-nitroso-	62759	N-Nitrosodimethylamine	1*	2,4	P082	A	10 (4.54)
Methane, bromo-	74839	Methyl bromide	1*	2,4	U029	C	1000 (454)
Methane, chloro-	74873	Methyl chloride	1*	2,4	U045	B	100 (45.4)
Methane, chloromethoxy-	107302	Chloromethyl methyl ether	1*	4	U046	A	10 (4.54)
Methane, dibromo-	74953	Methylene bromide	1*	4	U068	C	1000 (454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (Kg)
Ethane, 1,1,1,2-tetrachloro-	630206	1,1,1,2-Tetrachloroethane	1*	4	U208	B	100 (45.4)
Ethane, 1,1,2,2-tetrachloro-	79345	1,1,2,2-Tetrachloroethane	1*	2,4	U209	B	100 (45.4)
Ethanethioamide	62555	Thioacetamide	1*	4	U218	A	10 (4.54)
Ethane, 1,1,1-trichloro-	71556	Methyl chloroform	1*	2,4	U226	C	1000 (454)
		1,1,1-Trichloroethane					
Ethane, 1,1,2-trichloro-	79005	1,1,2-Trichloroethane	1*	2,4	U227	B	100 (45.4)
Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester	16752775	Methomyl	1*	4	P066	B	100 (45.4)
Ethanol, 2-ethoxy-	110805	Ethylene glycol monoethyl ether	1*	4	U359	C	1000 (454)
Ethanol, 2,2'-(nitrosoimino)bis-	1116547	N-Nitrosodiethanolamine	1*	4	U173	X	1 (0.454)
Ethanone, 1-phenyl-	98862	Acetophenone	1*	4	U004	D	5000 (2270)
Ethene, chloro-	75014	Vinyl chloride	1*	2,3,4	U043	X	1 (0.454)
Ethene, 2-chloroethoxy-	110758	2-Chloroethyl vinyl ether	1*	2,4	U042	C	1000 (454)
Ethene, 1,1-dichloro-	75354	Vinylidene chloride	5000	1,2,4	U078	B	100 (45.4)
		1,1-Dichloroethylene					
Ethene, 1,2-dichloro- (E)	156605	1,2-Dichloroethylene	1*	2,4	U079	C	1000 (454)
Ethene, tetrachloro-	127184	Perchloroethylene	1*	2,4	U210	B	100 (45.4)
		Tetrachloroethene					
		Tetrachloroethylene					
Ethene, trichloro-	79016	Trichloroethene	1000	1,2,4	U228	B	100 (45.4)
		Trichloroethylene					
Ethion	563122		10	1		A	10 (4.54)
Ethyl acetate	141786	Acetic acid, ethyl ester	1*	4	U112	D	5000 (2270)
Ethyl acrylate	140885	2-Propenoic acid, ethyl ester	1*	4	U113	C	1000 (454)
Ethylbenzene	100414		1000	1,2		C	1000 (454)
Ethyl carbamate (urethane)	51796	Carbamic acid, ethyl ester	1*	4	U238	B	100 (45.4)
Ethyl cyanide	107120	Propanenitrile	1*	4	P101	A	10 (4.54)
Ethylenebisdithiocarbamic acid, salts & esters	111546	Carbamodithioic acid, 1,2-ethanediylbis, salts & esters.	1*	4	U114	D	5000 (2270)
Ethylenediamine	107153		1000	1		D	5000 (2270)
Ethylenediamine-tetraacetic acid (EDTA)	60004		5000	1		D	5000 (2270)
Ethylene dibromide	106934	Ethane, 1,2-dibromo-	1000	1,4	U067	X	1 (0.454)
Ethylene dichloride	107062	Ethane, 1,2-dichloro-	5000	1,2,4	U077	B	100 (45.4)
		1,2-Dichloroethane					
Ethylene glycol monoethyl ether	110805	Ethanol, 2-ethoxy-	1*	4	U359	C	1000 (454)
Ethylene oxide	75218	Oxirane	1*	4	U115	A	10 (4.54)
Ethylenethiourea	96457	2-Imidazolidinethione	1*	4	U116	A	10 (4.54)
Ethylenimine	151564	Aziridine	1*	4	P054	X	1 (0.454)
Ethyl ether	60297	Ethane, 1,1'-oxybis-	1*	4	U117	B	100 (45.4)
Ethylidene dichloride	75343	Ethane, 1,1-dichloro-	1*	2,4	U076	C	1000 (454)
		1,1-Dichloroethane					
Ethyl methacrylate	97632	2-Propenoic acid, 2-methyl-, ethyl ester	1*	4	U118	C	1000 (454)
Ethyl methanesulfonate	62500	Methanesulfonic acid, ethyl ester	1*	4	U119	X	1 (0.454)
Famphur	52857	Phosphorothioic acid, O,[4-[(di- methylamino) sulfonyl] phenyl] O,O-dimethyl ester.	1*	4	P097	C	1000 (454)
Ferric ammonium citrate	1185575		1000	1		C	1000 (454)
Ferric ammonium oxalate	2944674		1000	1		C	1000 (454)
	55488874						
Ferric chloride	7705080		1000	1		C	1000 (454)
Ferric fluoride	7783508		100	1		B	100 (45.4)
Ferric nitrate	10421484		1000	1		C	1000 (454)
Ferric sulfate	10028225		1000	1		C	1000 (454)
Ferrous ammonium sulfate	10045893		1000	1		C	1000 (454)
Ferrous chloride	7758943		100	1		B	100 (45.4)
Ferrous sulfate	7720787		1000	1		C	1000 (454)
	7782630						
Fluoranthene	206440	Benzo[j,k]fluorene	1*	2,4	U120	B	100 (45.4)
Fluorene	86737		1*	2		D	5000 (2270)
Fluorine	7782414		1*	4	P056	A	10 (4.54)
Fluoroacetamide	640197	Acetamide, 2-fluoro-	1*	4	P057	B	100 (45.4)
Fluoroacetic acid, sodium salt	62748	Acetic acid, fluoro-, sodium salt	1*	4	P058	A	10 (4.54)
Formaldehyde	50000		1000	1,4	U122	B	100 (45.4)
Formic acid	64186		5000	1,4	U123	D	5000 (2270)
Fulminic acid, mercury(2+)salt	628864	Mercury fulminate	1*	4	P065	A	10 (4.54)
Fumaric acid	110178		5000	1		D	5000 (2270)
Furan	110009	Furfuran	1*	4	U124	B	100 (45.4)
Furan, tetrahydro-	109999	Tetrahydrofuran	1*	4	U213	C	1000 (454)
2-Furancarboxaldehyde	98011	Furfural	1000	1,4	U125	D	5000 (2270)
2,5-Furandione	108316	Maleic anhydride	5000	1,4	U147	D	5000 (2270)
Furfural	98011	2-Furancarboxaldehyde	1000	1,4	U125	D	5000 (2270)
Furfuran	110009	Furan	1*	4	U124	B	100 (45.4)
Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	18883664	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino] Streptozotocin.	1*	4	U206	X	1 (0.454)
D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino]-.	18883664	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-.	1*	4	U206	X	1 (0.454)
		Streptozotocin					
Glycidylaldehyde	765344	Oxiranecarboxyaldehyde	1*	4	U126	A	10 (4.54)
Guanidine, N-methyl-N'-nitro-N-nitroso-	70257	MNNG	1*	4	U163	A	10 (4.54)
Guthion	86500		1	1		X	1 (0.454)
HALOETHERS	N.A.		1*	2			**
HALOMETHANES	N.A.		1*	2			**
Heptachlor	76448	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-.	1	1,2,4	P059	X	1 (0.454)
HEPTACHLOR AND METABOLITES	N.A.		1*	2			**
Heptachlor epoxide	1024573		1*	2		X	1 (0.454)
Hexachlorobenzene	118741	Benzene, hexachloro-	1*	2,4	U127	A	10 (4.54)
Hexachlorobutadiene	87683	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	1*	2,4	U128	X	1 (0.454)
HEXACHLOROCYCLOHEXANE (all isomers)	608731		1*	2			**
Hexachlorocyclohexane (gamma isomer)	58899	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha, 6beta)- gamma-BHC	1	1,2,4	U129	X	1 (0.454)
		Lindane					

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (Kg)
Hexachlorocyclopentadiene	77474	1,3-Cyclopentadiene,1,2,3,4,5,5-hexachloro-	1	1,2,4	U130	A	10 (4.54
Hexachloroethane	67721	Ethane, hexachloro-	1*	2,4	U131	B	100 (45.4
Hexachlorophene	70304	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	1*	4	U132	B	100 (45.4
Hexachloropropene	1888717	1-Propene, 1,1,2,3,3,3-hexachloro-	1*	4	U243	C	1000 (454
Hexaethyl tetraphosphate	757584	Tetraphosphoric acid, hexaethyl ester	1*	4	P062	B	100 (45.4
Hydrazine	302012		1*	4	U133	X	1 (0.454
Hydrazine, 1,2-diethyl-	1615801	N,N'-Diethylhydrazine	1*	4	U086	A	10 (4.54
Hydrazine, 1,1-dimethyl-	57147	1,1-Dimethylhydrazine	1*	4	U098	A	10 (4.54
Hydrazine, 1,2-dimethyl-	540738	1,2-Dimethylhydrazine	1*	4	U099	X	1 (0.454
Hydrazine, 1,2-diphenyl-	122667	1,2-Diphenylhydrazine	1*	2,4	U109	A	10 (4.54
Hydrazine, methyl-	60344	Methyl hydrazine	1*	4	P068	A	10 (4.54)
Hydrazinecarbothicamide	79196	Thiosemicarbazide	1*	4	P116	B	100 (45.4)
Hydrochloric acid	7647010	Hydrogen chloride	5000	1		D	5000 (2270)
Hydrocyanic acid	74908	Hydrogen cyanide	10	1,4	P063	A	10 (4.54)
Hydrofluoric acid	7664393	Hydrogen fluoride	5000	1,4	U134	B	100 (45.4)
Hydrogen chloride	7647010	Hydrochloric acid	5000	1		D	5000 (2270)
Hydrogen cyanide	74908	Hydrocyanic acid	10	1,4	P063	A	10 (4.54)
Hydrogen fluoride	7664393	Hydrofluoric acid	5000	1,4	U134	B	100 (45.4)
Hydrogen sulfide	7783064	Hydrogen sulfide H2S	100	1,4	U135	B	100 (45.4)
Hydrogen sulfide H2S	7783064	Hydrogen sulfide	100	1,4	U135	B	100 (45.4)
Hydroperoxide, 1-methyl-1-phenylethyl-	80159	alpha,alpha-Dimethylbenzylhydroperoxide	1*	4	U096	A	10 (4.54)
2-Imidazolidinethione	96457	Ethylenethiourea	1*	4	U116	A	10 (4.54)
Indeno(1,2,3-cd)pyrene	193395	1,10-(1,2-Phenylene)pyrene	1*	2,4	U137	B	100 (45.4)
1,3-Isobenzofurandione	85449	Phthalic anhydride	1*	4	U190	D	5000 (2270)
Isobutyl alcohol	78831	1-Propanol, 2-methyl-	1*	4	U140	D	5000 (2270)
Isodrin	465736	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro, (1alpha,4alpha,4abeta,5beta, 8beta,8abeta)-.	1*	4	P060	X	1 (0.454)
Isophorone	78591		1*	2		D	5000 (2270)
Isoprene	78795		1000	1		B	100 (45.4)
Isopropanolamine dodecylbenzenesulfonate	42504461		1000	1		C	1000 (454)
Isosafrole	120581	1,3-Benzodioxole, 5-)1-propenyl)-	1*	4	U141	B	100 (45.4)
3(2H)-Isoxazolone, 5-(aminomethyl)-	2763964	Muscimol 5-(Aminomethyl)-3-isoxazolol	1*	4	P007	C	1000 (454)
Kepone	143500	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachloroctahydro-.	1	1,4	U142	X	1 (0.454)
Lasiocarpine	303344	2-Butenoic acid, 2-methyl-, 7[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z), 7(2S*,3R*),7aalpha]]-.	1*	4	U143	A	10 (4.54)
Lead††	7439921		1*	2		A	10 (4.54)
Lead acetate	301042	Acetic acid, lead(2+) salt	5000	1,4	U144	A	10 (4.54)
LEAD AND COMPOUNDS	N.A.		1*	2			**
Lead arsenate	7784409 7645252 10102484		5000	1		X	1 (0.454)
Lead, bis(acetatato-O)tetrahydroxytri-	1335326	Lead subacetate	1*	4	U146	A	10 (4.54)
Lead chloride	7758954		5000	1		A	10 (4.54)
Lead fluoborate	13814965		5000	1		A	10 (4.54)
Lead fluoride	7783462		1000	1		A	10 (4.54)
Lead iodide	10101630		5000	1		A	10 (4.54)
Lead nitrate	10099748		5000	1		A	10 (4.54)
Lead phosphate	7446277	Phosphoric acid, lead(2+) salt (2:3)	1*	4	U145	A	10 (4.54)
Lead stearate	1072351 7428480 52652592 56189094		5000	1		A	10 (4.54)
Lead subacetate	1335326	Lead, bis(acetato-O)tetrahydroxytri-	1*	4	U146	A	10 (4.54)
Lead sulfate	7446142 15739807		5000	1		A	10 (4.54)
Lead sulfide	1314870		5000	1		A	10 (4.54)
Lead thiocyanate	592870		5000	1		A	10 (4.54)
Lindane	58899	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- gamma-BHC. Hexachlorocyclohexane (gamma isomer)	1	1,2,4	U129	X	1 (0.454)
Lithium chromate	14307358		1000	1		A	10 (4.54)
Malathion	121755		10	1		B	100 (45.4)
Maleic acid	110167		5000	1		D	5000 (2270)
Maleic anhydride	108316	2,5-Furandione	5000	1,4	U147	D	5000 (2270)
Maleic hydrazide	123331	3,6-Pyridazinedione, 1,2-dihydro-	1*	4	U148	D	5000 (2270)
Malononitrile	109773	Propanedinitrile	1*	4	U149	C	1000 (454)
Melphalan	148823	L-Phenylalanine, 4-[bis(2-chloroethyl) amino]-	1*	4	U150	X	1 (0.454)
Mercaptodimethur	2032657		100	1		A	10 (4.54)
Mercuric cyanide	592041		1	1		X	1 (0.454)
Mercuric nitrate	10045940		10	1		A	10 (4.54)
Mercuric sulfate	7783359		10	1		A	10 (4.54)
Mercuric thiocyanate	592858		10	1		A	10 (4.54)
Mercurous nitrate	10415755 7782867		10	1		A	10 (4.54)
Mercury	7439976		1*	2,3,4	U151	X	1 (0.454)
MERCURY AND COMPOUNDS	N.A.		1*	2			**
Mercury, (acetate-O)phenyl-	62384	Phenylmercury acetate	1*	4	P092	B	100 (45.4)
Mercury fulminate	628864	Fulminic acid, mercury(2+)salt	1*	4	P065	A	10 (4.54)
Methacrylonitrile	126987	2-Propenenitrile, 2-methyl-	1*	4	U152	C	1000 (454)
Methanamine, N-methyl-	124403	Dimethylamine	1000	1,4	U092	C	1000 (454)
Methanamine, N-methyl-N-nitroso-	62759	N-Nitrosodimethylamine	1*	2,4	P082	A	10 (4.54)
Methane, bromo-	74839	Methyl bromide	1*	2,4	U029	C	1000 (454)
Methane, chloro-	74873	Methyl chloride	1*	2,4	U045	B	100 (45.4)
Methane, chloromethoxy-	107302	Chloromethyl methyl ether	1*	4	U046	A	10 (4.54)
Methane, dibromo-	74953	Methylene bromide	1*	4	U068	C	1000 (454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (Kg)
Methane, dichloro-	75092	Methylene chloride	1*	2,4	U080	C	1000 (454)
Methane, dichlorodifluoro-	75718	Dichlorodifluoromethane	1*	4	U075	D	5000 (2270)
Methane, iodo-	74884	Methyl iodide	1*	4	U138	B	100 (45.4)
Methane, isocyanato-	624839	Methyl isocyanate	1*	3,4	P064	A	10 (4.54)
Methane, oxybis(chloro-	542881	Dichloromethyl ether	1*	4	P016	A	10 (4.54)
Methanesulfenyl chloride, trichloro-	594423	Trichloromethanesulfenyl chloride	1*	4	P118	B	100 (45.4)
Methanesulfonic acid, ethyl ester	62500	Ethyl methanesulfonate	1*	4	U119	X	1 (0.454)
Methane, tetrachloro-	56235	Carbon tetrachloride	5000	1,2,4	U211	A	10 (4.54)
Methane, tetranitro-	509148	Tetranitromethane	1*	4	P112	A	10 (4.54)
Methane, tribromo-	75252	Bromoform	1*	2,4	U225	B	100 (45.4)
Methane, trichloro-	67663	Chloroform	5000	1,2,4	U044	A	10 (4.54)
Methane, trichlorofluoro-	75694	Trichloromonofluoromethane	1*	4	U121	D	5000 (2270)
Methanethiol	74931	Methylmercaptan	100	1,4	U153	B	100 (45.4)
		Thiomethanol					
6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a- hexahydro-, 3-oxide	115297	Endosulfan	1	1,2,4	P050	X	1 (0.454)
1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachloroctahydro-	143500	Kepone	1	1,4	U142	X	1 (0.454)
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76448	Heptachlor	1	1,2,4	P059	X	1 (0.454)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	57749	Chlordane	1	1,2,4	U036	X	1 (0.454)
		Chlordane, alpha & gamma isomers					
		Chlordane, technical					
Methanol	67561	Methyl alcohol	1*	4	U154	D	5000 (2270)
Methapyrilene	91805	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-.	1*	4	U155	D	5000 (2270)
Methomyl	16752775	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester.	1*	4	P066	B	100 (45.4)
Methoxychlor	72435	Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-methoxy-.	1	1,4	U247	X	1 (0.454)
Methyl alcohol	67561	Methanol	1*	4	U154	D	5000 (2270)
Methyl bromide	74839	Methane, bromo-	1*	2,4	U029	C	1000 (454)
1-Methylbutadiene	504609	1,3-Pentadiene	1*	4	U186	B	100 (45.4)
Methyl chloride	74873	Methane, chloro-	1*	2,4	U045	B	100 (45.4)
Methyl chlorocarbonate	79221	Carbonochloridic acid, methyl ester	1*	4	U156	C	1000 (454)
		Methyl chloroformate					
Methyl chloroform	71556	Ethane, 1,1,1-trichloro-	1*	2,4	U226	C	1000 (454)
		1,1,1-Trichloroethane					
Methyl chloroformate	79221	Carbonochloridic acid, methyl ester	1*	4	U156	C	1000 (454)
		Methyl chlorocarbonate					
3-Methylcholanthrene	56495	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	1*	4	U157	A	10 (4.54)
4,4'-Methylenebis(2-chloroaniline)	101144	Benzenamine, 4,4'-methylenebis(2-chloro-	1*	4	U158	A	10 (4.54)
Methylene bromide	74953	Methane, dibromo-	1*	4	U068	C	1000 (454)
Methylene chloride	75092	Methane, dichloro-	1*	2,4	U080	C	1000 (454)
Methyl ethyl ketone (MEK)	78933	2-Butanone	1*	4	U159	D	5000 (2270)
Methyl ethyl ketone peroxide	1338234	2-Butanone peroxide	1*	4	U160	A	10 (4.54)
Methyl hydrazine	60344	Hydrazine, methyl-	1*	4	P068	A	10 (4.54)
Methyl iodide	74884	Methane, iodo-	1*	4	U138	B	100 (45.4)
Methyl isobutyl ketone	108101	4-Methyl-2-pentanone	1*	4	U161	D	5000 (2270)
Methyl isocyanate	624839	Methane, isocyanato-	1*	3,4	P064	A	10 (4.54)
2-Methyllactonitrile	75865	Acetone cyanohydrin	10	1,4	P069	A	10 (4.54)
		Propanenitrile, 2-hydroxy-2-methyl-					
Methylmercaptan	74931	Methanethiol	100	1,4	U153	B	100 (45.4)
		Thiomethanol					
Methyl methacrylate	80626	2-Propenoic acid, 2-methyl-, methyl ester	5000	1,4	U162	C	1000 (454)
Methyl parathion	298000	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester.	100	1,4	P071	B	100 (45.4)
4-Methyl-2-pentanone	108101	Methyl isobutyl ketone	1*	4	U161	D	5000 (2270)
Methylthiouracil	56042	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	1*	4	U164	A	10 (4.54)
Mevinphos	7786347		1	1		A	10 (4.54)
Mexacarbate	315184		1000	1		C	1000 (454)
Mitomycin C	50077	Azirino[2',3':3,4]pyrrolo(1,2-a)indole-4,7-dione,6-amino-8-[[(aminocarbonyl)oxy] methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta, 8aalpha, 8balpha)]-.	1*	4	U010	A	10 (4.54)
MNNG	70257	Guanidine, N-methyl-N'-nitro-N-nitroso-	1*	4	U163	A	10 (4.54)
Monoethylamine	75047		1000	1		B	100 (45.4)
Monomethylamine	74895		1000	1		B	100 (45.4)
Multi Source Leachate			1*	4	F039	X	1 (0.454)
Muscimol	2763964	3(2H)-Isoxazolone, 5-(aminomethyl)- 5-(Aminomethyl)-3-isoxazolol.	1*	4	P007	C	1000 (454)
Naled	300765		10	1		A	10 (4.54)
5,12-Naphthacenedione, 8-acetyl-10-[3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	20830813	Daunomycin	1*	4	U059	A	10 (4.54)
1-Naphthalenamine	134327	alpha-Naphthylamine	1*	4	U167	B	100 (45.4)
2-Naphthalenamine	91598	beta-Naphthylamine	1*	4	U168	A	10 (4.54)
Naphthalenamine, N,N'-bis(2-chloroethyl)-	494031	Chlornaphazine	1*	4	U026	B	100 (45.4)
Naphthalene	91203		5000	1,2,4	U165	B	100 (45.4)
Naphthalene, 2-chloro-	91587	beta-Chloronaphthalene 2-Chloronaphthalene	1*	2,4	U047	D	5000 (2270)
1,4-Naphthalenedione	130154	1,4-Naphthoquinone	1*	4	U166	D	5000 (2270)
2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt.	72571	Trypan blue	1*	4	U236	A	10 (4.54)
Naphthenic acid	1338245		100	1		B	100 (45.4)
1,4-Naphthoquinone	130154	1,4-Naphthalenedione	1*	4	U166	D	5000 (2270)
alpha-Naphthylamine	134327	1-Naphthalenamine	1*	4	U167	B	100 (45.4)
beta-Naphthylamine	91598	2-Naphthalenamine	1*	4	U168	A	10 (4.54)
alpha-Naphthylthiourea	86884	Thiourea, 1-naphthalenyl-	1*	4	P072	B	100 (45.4)
Nickel††	7440020		1*	2		B	100 (45.4)
Nickel ammonium sulfate	15699180		5000	1		B	100 (45.4)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (Kg)
NICKEL AND COMPOUNDS	N.A.		1*	2			**
Nickel carbonyl	13463393	Nickel carbonyl Ni(CO)4, (T-4)-	1*	4	P073	A	10 (4.54)
Nickel carbonyl Ni(CO)4, (T-4)-	13463393	Nickel carbonyl	1*	4	P073	A	10 (4.54)
Nickel chloride	7718549		5000	1		B	100 (45.4)
	37211055						
Nickel cyanide	557197	Nickel cyanide Ni(CN)2	1*	4	P074	A	10 (4.54)
Nickel cyanide Ni(CN)2	557197	Nickel cyanide	1*	4	P074	A	10 (4.54)
Nickel hydroxide	12054487		1000	1		A	10 (4.54)
Nickel nitrate	14216752		5000	1		B	100 (45.4)
Nickel sulfate	7786814		5000	1		B	100 (45.4)
Nicotine, & salts	54115	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	1*	4	P075	B	100 (45.4)
Nitric acid	7697372		1000	1		C	1000 (454)
Nitric acid, thallium (1+) salt	10102451	Thallium (I) nitrate	1*	4	U217	B	100 (45.4)
Nitric oxide	10102439	Nitrogen oxide NO	1*	4	P076	A	10 (4.54)
p-Nitroaniline	100016	Benzenamine, 4-nitro-	1*	4	P077	D	5000 (2270)
Nitrobenzene	98953	Benzene, nitro-	1000	1,2,4	U169	C	1000 (454)
Nitrogen dioxide	10102440	Nitrogen oxide NO2	1000	1,4	P078	A	10 (4.54)
	10544726						
Nitrogen oxide NO	10102439	Nitric oxide	1*	4	P076	A	10 (4.54)
Nitrogen oxide NO2	10102440	Nitrogen dioxide	1000	1,4	P078	A	10 (4.54)
	10544726						
Nitroglycerine	55630	1,2,3-Propanetriol, trinitrate-	1*	4	P081	A	10 (4.54)
Nitrophenol (mixed)	25154556		1000	1		B	100 (45.4)
m-Nitrophenol	554847					B	100 (45.4)
o-Nitrophenol	88755	2-Nitrophenol					
p-Nitrophenol	100027	Phenol, 4-nitro-					
		4-Nitrophenol					
o-Nitrophenol	88755	2-Nitrophenol	1000	1,2		B	100 (45.4)
p-Nitrophenol	100027	Phenol, 4-nitro- 4-Nitrophenol	1000	1,2,4	U170	B	100 (45.4)
2-Nitrophenol	88755	o-Nitrophenol	1000	1,2		B	100 (45.4)
4-Nitrophenol	100027	p-Nitrophenol Phenol, 4-nitro-	1000	1,2,4	U170	B	100 (45.4)
NITROPHENOLS	N.A.		1*	2			**
2-Nitropropane	79469	Propane, 2-nitro-	1*	4	U171	A	10 (4.54)
NITROSAMINES	N.A.		1*	2			**
N-Nitrosodi-n-butylamine	924163	1-Butanamine, N-butyl-N-nitroso-	1*	4	U172	A	10 (4.54)
N-Nitrosodiethanolamine	1116547	Ethanol, 2,2'-(nitrosoimino)bis-	1*	4	U173	X	1 (0.454)
N-Nitrosodiethylamine	55185	Ethanamine, N-ethyl-N-nitroso-	1*	4	U174	X	1 (0.454)
N-Nitrosodimethylamine	62759	Methanamine, N-methyl-N-nitroso-	1*	2,4	P082	A	10 (4.54)
N-Nitrosodiphenylamine	86306		1*	2		B	100 (45.4)
N-Nitroso-N-ethylurea	759739	Urea, N-ethyl-N-nitroso-	1*	4	U176	X	1 (0.454)
N-Nitroso-N-methylurea	684935	Urea, N-methyl-N-nitroso-	1*	4	U177	X	1 (0.454)
N-Nitroso-N-methylurethane	615532	Carbamic acid, methylnitroso-, ethyl ester	1*	4	U178	X	1 (0.454)
N-Nitrosomethylvinylamine	4549400	Vinylamine, N-methyl-N-nitroso-	1*	4	P084	A	10 (4.54)
N-Nitrosopiperidine	100754	Piperidine, 1-nitroso-	1*	4	U179	A	10 (4.54)
N-Nitrosopyrrolidine	930552	Pyrrolidine, 1-nitroso-	1*	4	U180	X	1 (0.454)
Nitrotoluene	1321126		1000	1		C	1000 (454)
m-Nitrotoluene	99081						
o-Nitrotoluene	88722						
p-Nitrotoluene	99990						
5-Nitro-o-toluidine	99558	Benzenamine, 2-methyl-5-nitro-	1*	4	U181	B	100 (45.4)
Octamethylpyrophosphoramide	152169	Diphosphoramide, octamethyl-	1*	4	P085	B	100 (45.4)
Osmium oxide OsO4 (T-4)-	20816120	Osmium tetroxide	1*	4	P087	C	1000 (454)
Osmium tetroxide	20816120	Osmium oxide OsO4 (T-4)-	1*	4	P087	C	1000 (454)
7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	145733	Endothall	1*	4	P088	C	1000 (454)
1,2-Oxathiolane, 2,2-dioxide	1120714	1,3-Propane sultone	1*	4	U193	A	10 (4.54)
2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide	50180	Cyclophosphamide	1*	4	U058	A	10 (4.54)
Oxirane	75218	Ethylene oxide	1*	4	U115	A	10 (4.54)
Oxiranecarboxyaldehyde	765344	Glycidylaldehyde	1*	4	U126	A	10 (4.54)
Oxirane, (chloromethyl)-	106898	Epichlorohydrin	1000	1,4	U041	B	100 (45.4)
Paraformaldehyde	30525894		1000	1		C	1000 (454)
Paraldehyde	123637	1,3,5-Trioxane, 2,4,6-trimethyl-	1*	4	U182	C	1000 (454)
Parathion	56382	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester.	1	1,4	P089	A	10 (4.54)
Pentachlorobenzene	608935	Benzene, pentachloro-	1*	4	U183	A	10 (4.54)
Pentachloroethane	76017	Ethane, pentachloro-	1*	4	U184	A	10 (4.54)
Pentachloronitrobenzene (PCNB)	82688	Benzene, pentachloronitro-	1*	4	U185	B	100 (45.4)
Pentachlorophenol	87865	Phenol, pentachloro-	10	1,2,4	U242	A	10 (4.54)
1,3-Pentadiene	504609	1-Methylbutadiene	1*	4	U186	B	100 (45.4)
Perchloroethylene	127184	Ethene, tetrachloro- Tetrachloro- ethene Tetrachloroethylene.	1*	2,4	U210	B	100 (45.4)
Phenacetin	62442	Acetamide, N-(4-ethoxyphenyl)-	1*	4	U187	B	100 (45.4)
Phenanthrene	85018		1*	2		D	5000 (2270)
Phenol	108952	Benzene, hydroxy-	1000	1,2,4	U188	C	1000(454)
Phenol, 2-chloro-	95578	o-Chlorophenol 2-Chlorophenol	1*	2,4	U048	B	100 (45.4)
Phenol, 4-chloro-3-methyl-	59507	p-Chloro-m-cresol	1*	2,4	U039	D	5000 (2270)
		4-Chloro-m-cresol					
Phenol, 2-cyclohexyl-4,6-dinitro-	131895	2-Cyclohexyl-4,6-dinitrophenol	1*	4	P034	B	100 (45.4)
Phenol, 2,4-dichloro-	120832	2,4-Dichlorophenol	1*	2,4	U081	B	100 (45.4)
Phenol, 2,6-dichloro-	87650	2,6-Dichlorophenol	1*	4	U082	B	100 (45.4)
Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)	56531	Diethylstilbestrol	1*	4	U089	X	1 (0.454)
Phenol, 2,4-dimethyl-	105679	2,4-Dimethylphenol	1*	2,4	U101	B	100(45.4)
Phenol, 2,4-dinitro-	51285	2,4-Dinitrophenol	1000	1,2,4	P048	A	10 (4.54)
Phenol, methyl-	1319773	Cresol(s) Cresylic acid	1000	1,4	U052	C	1000 (454)
m-Cresol	108394	m-Cresylic acid					
o-Cresol	95487	o-Cresylic acid					
p-Cresol	106445	p-Cresylic acid					
Phenol, 2-methyl-4,6-dinitro-	534521	4,6-Dinitro-o-cresol and salts	1*	2,4	P047	A	10 (4.54)
Phenol, 2,2'-methylenebis[3,4,6-trichloro-	70304	Hexachlorophene	1*	4	U132	B	100 (45.4)
Phenol, 2-(1-methylpropyl)-4,6-dinitro	88857	Dinoseb	1*	4	P020	C	1000 (454)
Phenol, 4-nitro-	100027	p-Nitrophenol	1000	1,2,4	U170	B	100 (45.4)
		4-Nitrophenol					

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Phenol, pentachloro-	87865	Pentachlorophenol	10	1,2,4	U242	A	10 (4.54)
Phenol, 2,3,4,6-tetrachloro-	58902	2,3,4,6-Tetrachlorophenol	1*	4	U212	A	10 (4.54)
Phenol, 2,4,5-trichloro-	95954	2,4,5-Trichlorophenol	10	1,4	U230	A	10 (4.54)
Phenol, 2,4,6-trichloro-	88062	2,4,6-Trichlorophenol	10	1,2,4	U231	A	10 (4.54)
Phenol, 2,4,6-trinitro-, ammonium salt	131748	Ammonium picrate	1*	4	P009	A	10 (4.54)
L-Phenylalanine, 4-[bis(2-chloroethyl) amino]	148823	Melphalan	1*	4	U150	X	1 (0.454)
1,10-(1,2-Phenylene)pyrene	193395	Indeno(1,2,3-cd)pyrene	1*	2,4	U137	B	100 (45.4)
Phenylmercury acetate	62384	Mercury, (acetato-O)phenyl-	1*	4	P092	B	100 (45.4)
Phenylthiourea	103855	Thiourea, phenyl-	1*	4	P093	B	100 (45.4)
Phorate	298022	Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methyl ester.	1*	4	P094	A	10 (4.54)
Phosgene	75445	Carbonic dichloride	5000	1,4	P095	A	10 (4.54)
Phosphine	7803512		1*	4	P096	B	100 (45.4)
Phosphoric acid	7664382		5000	1		D	5000 (2270)
Phosphoric acid, diethyl 4-nitrophenyl ester	311455	Diethyl-p-nitrophenyl phosphate	1*	4	P041	B	100 (45.4)
Phosphoric acid, lead(2+) salt (2:3)	7446277	Lead phosphate	1*	4	U145	A	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]ester	298044	Disulfoton	1	1,4	P039	X	1 (0.454)
Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methyl ester	298022	Phorate	1*	4	P094	A	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288582	O,O-Diethyl S-methyl dithiophosphate	1*	4	U087	D	5000 (2270)
Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester	60515	Dimethoate	1*	4	P044	A	10 (4.54)
Phosphorofluoridic acid, bis(1-methylethyl) ester	55914	Diisopropylfluorophosphate	1*	4	P043	B	100 (45.4)
Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56382	Parathion	1	1,4	P089	A	10 (4.54)
Phosphorothioic acid, O,[4-[(dimethylamino) sulfonyl]phenyl]O,O-dimethyl ester	52857	Famphur	1*	4	P097	C	1000 (454)
Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298000	Methyl parathion	100	1,4	P071	B	100 (45.4)
Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297972	O,O-Diethyl O-pyrazinyl phosphorothioate	1*	4	P040	B	100 (45.4)
Phosphorus	7723140		1	1		X	1 (0.454)
Phosphorus oxycloride	10025873		5000	1		C	1000 (454)
Phosphorus pentasulfide	1314803	Phosphorus sulfide Sulfur phosphide	100	1,4	U189	B	100 (45.4)
Phosphorus sulfide	1314803	Phosphorus pentasulfide Sulfur phosphide	100	1,4	U189	B	100 (45.4)
Phosphorus trichloride	7719122		5000	1		C	1000 (454)
PHTHALATE ESTERS	N.A.		1*	2			**
Phthalic anhydride	85449	1,3-Isobenzofurandione	1*	4	U190	D	5000 (2270)
2-Picoline	109068	Pyridine, 2-methyl-	1*	4	U191	D	5000 (2270)
Piperidine, 1-nitroso-	100754	N-Nitrosopiperidine	1*	4	U179	A	10 (4.54)
Plumbane, tetraethyl-	78002	Tetraethyl lead	100	1,4	P110	A	10 (4.54)
POLYCHLORINATED BIPHENYLS (PCBs)	1336363		10	1,2		X	1 (0.454)
Aroclor 1016	12674112	POLYCHLORINATED BIPHENYLS (PCBs)					
Aroclor 1221	11104282	POLYCHLORINATED BIPHENYLS (PCBs)					
Aroclor 1232	11141165	POLYCHLORINATED BIPHENYLS (PCBs)					
Aroclor 1242	53469219	POLYCHLORINATED BIPHENYLS (PCBs)					
Aroclor 1248	12672296	POLYCHLORINATED BIPHENYLS (PCBs)					
Aroclor 1254	11097691	POLYCHLORINATED BIPHENYLS (PCBs)					
Aroclor 1260	11096825	POLYCHLORINATED BIPHENYLS (PCBs)					
POLYNUCLEAR AROMATIC HYDROCARBONS	N.A.		1*	2			**
Potassium arsenate	7784410		1000	1		X	1 (0.454)
Potassium arsenite	10124502		1000	1		X	1 (0.454)
Potassium bichromate	7778509		1000	1		A	10 (4.54)
Potassium chromate	7789006		1000	1		A	10 (4.54)
Potassium cyanide	151508	Potassium cyanide K (CN)	10	1,4	P098	A	10 (4.54)
Potassium cyanide K(CN)	151508	Potassium cyanide	10	1,4	P098	A	10 (4.54)
Potassium hydroxide	1310583		1000	1		C	1000 (454)
Potassium permanganate	7722647		100	1		B	100 (45.4)
Potassium silver cyanide	506616	Argentate (1-), bis(cyano-C)-, potassium	1*	4	P099	X	1 (0.454)
Pronamide	23950585	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-.	1*	4	U192	D	5000 (2270)
Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime	116063	Aldicarb	1*	4	P070	X	1 (0.454)
1-Propanamine	107108	n-Propylamine	1*	4	U194	D	5000 (2270)
1-Propanamine, N-propyl-	142847	Dipropylamine	1*	4	U110	D	5000 (2270)
1-Propanamine, N-nitroso-N-propyl-	621647	Di-n-propylnitrosamine	1*	2,4	U111	A	10 (4.54)
Propane, 1,2-dibromo-3-chloro-	96128	1,2-Dibromo-3-chloropropane	1*	4	U066	X	1 (0.454)
Propane, 2-nitro-	79469	2-Nitropropane	1*	4	U171	A	10 (4.54)
1,3-Propane sultone	1120714	1,2-Oxathiolane, 2,2-dioxide	1*	4	U193	A	10 (4.54)
Propane, 1,2-dichloro-	78875	Propylene dichloride 1,2-Dichloropropane	5000	1,2,4	U083	C	1000 (454)
Propanedinitrile	109773	Malononitrile	1*	4	U149	C	1000 (454)
Propanenitrile	107120	Ethyl cyanide	1*	4	P101	A	10 (4.54)
Propanenitrile, 3-chloro-	542767	3-Chloropropionitrile	1*	4	P027	C	1000 (454)
Propanenitrile, 2-hydroxy-2-methyl-	75865	Acetone cyanohydrin 2-Methyllactonitrile	10	1,4	P069	A	10 (4.54)
Propane, 2,2'-oxybis[2-chloro-	108601	Dichloroisopropyl ether	1*	2,4	U027	C	1000 (454)
1,2,3-Propanetriol, trinitrate-	55630	Nitroglycerine	1*	4	P081	A	10 (4.54)
1-Propanol, 2,3-dibromo-, phosphate (3:1)	126727	Tris(2,3-dibromopropyl) phosphate	1*	4	U235	A	10 (4.54)
1-Propanol, 2-methyl-	78831	Isobutyl alcohol	1*	4	U140	D	5000 (2270)
2-Propanone	67641	Acetone	1*	4	U002	D	5000 (2270)
2-Propanone, 1-bromo-	598312	Bromoacetone	1*	4	P017	C	1000 (454)
Propargite	2312358		10	1		A	10 (4.54)
Propargyl alcohol	107197	2-Propyn-1-ol	1*	4	P102	C	1000 (454)
2-Propenal	107028	Acrolein	1	1,2,4	P003	X	1 (0.454)
2-Propenamide	79061	Acrylamide	1*	4	U007	D	5000 (2270)
1-Propene, 1,1,2,3,3,3-hexachloro-	1888717	Hexachloropropene	1*	4	U243	C	1000 (454)
1-Propene, 1,3-dichloro-	542756	1,3-Dichloropropene	5000	1,2,4	U084	B	100 (45.4)
2-Propenenitrile	107131	Acrylonitrile	100	1,2,4	U009	B	100 (45.4)
2-Propenenitrile, 2-methyl-	126987	Methacrylonitrile	1*	4	U152	C	1000 (454)
2-Propenoic acid	79107	Acrylic acid	1*	4	U008	D	5000 (2270)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (Kg)
2-Propenoic acid, ethyl ester	140885	Ethyl acrylate	1*	4	U113	C	1000 (454)
2-Propenoic acid, 2-methyl-, ethyl ester	97632	Ethyl methacrylate	1*	4	U118	C	1000 (454)
2-Propenoic acid, 2-methyl-, methyl ester	80626	Methyl methacrylate	5000	1,4	U162	C	1000 (454)
2-Propen-1-ol	107186	Allyl alcohol	100	1,4	P005	B	100 (45.4)
Propionic acid	79094		5000	1		D	5000 (2270)
Propionic acid, 2-(2,4,5-trichlorophenoxy)-	93721	Silvex (2,4,5-TP)	100	1,4	U233	B	100 (45.4)
		2,4,5-TP acid					
Propionic anhydride	123626		5000	1		D	5000 (2270)
n-Propylamine	107108	1-Propanamine	1*	4	U194	D	5000 (2270)
Propylene dichloride	78875	Propane, 1,2-dichloro-	5000	1,2,4	U083	C	1000 (454)
		1,2-Dichloropropane					
Propylene oxide	75569		5000	1		B	100 (45.4)
1,2-Propylenimine	75558	Aziridine, 2-methyl-	1*	4	P067	X	1 (0.454)
2-Propyn-1-ol	107197	Propargyl alcohol	1*	4	P102	C	1000 (454)
Pyrene	129000		1*	2		D	5000 (2270)
Pyrethrins	121299		1000	1		X	1 (0.545)
	121211						
	8003347						
3,6-Pyridazinedione, 1,2-dihydro-	123331	Maleic hydrazide	1*	4	U148	D	5000 (2270)
4-Pyridinamine	504245	4-Aminopyridine	1*	4	P008	C	1000 (454)
Pyridine	110861		1*	4	U196	C	1000 (454)
Pyridine, 2-methyl-	109068	2-Picoline	1*	4	U191	D	5000 (2270)
Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	54115	Nicotine, & salts	1*	4	P075	B	100 (45.4)
2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	66751	Uracil mustard	1*	4	U237	A	10 (4.54)
4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56042	Methylthiouracil	1*	4	U164	A	10 (4.54)
Pyrrolidine, 1-nitroso-	930552	N-Nitrosopyrrolidine	1*	4	U180	X	1 (0.454)
Quinoline	91225		1000	1		D	5000 (2270)
RADIONUCLIDES	N.A.		1*	3			§
Reserpine	50555	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy-, methyl ester (3beta,16beta,17alpha,18beta,20alpha)-.	1*	4	U200	D	5000 (2270)
Resorcinol	108463	1,3-Benzenediol	1000	1,4	U201	D	5000 (2270)
Saccharin and salts	81072	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	1*	4	U202	B	100 (45.4)
Safrole	94597	1,3-Benzodioxole, 5-(2-propenyl)-	1*	4	U203	B	100 (45.4)
Selenious acid	7783008		1*	4	U204	A	10 (4.54)
Selenious acid, dithallium (1+) salt	12039520	Thallium selenite	1*	4	P114	C	1000 (454)
Selenium ††	7782492		1*	2		B	100 (45.4)
SELENIUM AND COMPOUNDS	N.A.		1*	2			**
Selenium dioxide	7446084	Selenium oxide	1000	1,4	U204	A	10 (4.54)
Selenium oxide	7446084	Selenium dioxide	1000	1,4	U204	A	10 (4.54)
Selenium sulfide	7488564	Selenium sulfide SeS2	1*	4	U205	A	10 (4.54)
Selenium sulfide SeS2	7488564	Selenium sulfide	1*	4	U205	A	10 (4.54)
Selenourea	630104		1*	4	P103	C	1000 (454)
L-Serine, diazoacetate (ester)	115026	Azaserine	1*	4	U015	X	1 (0.454)
Silver ††	7440224		1*	2		C	1000 (454)
SILVER AND COMPOUNDS	N.A.		1*	2			**
Silver cyanide	506649	Silver cyanide Ag (CN)	1*	4	P104	X	1 (0.454)
Silver cyanide Ag (CN)	506649	Silver cyanide	1*	4	P104	X	1 (0.454)
Silver nitrate	7761888		1	1		X	1 (0.454)
Silvex (2,4,5-TP)	93721	Propionic acid, 2-(2,4,5-trichlorophenoxy)-	100	1,4	U233	B	100 (45.4)
		2,4,5-TP acid					
Sodium	7440235		1000	1		A	10 (4.54)
Sodium arsenate	7631892		1000	1		X	1 (0.454)
Sodium arsenite	7784465		1000	1		X	1 (0.454)
Sodium azide	26628228		1*	4	P105	C	1000 (454)
Sodium bichromate	10588019		1000	1		A	10 (4.54)
Sodium bifluoride	1333831		5000	1		B	100 (45.4)
Sodium bisulfite	7631905		5000	1		D	5000 (2270)
Sodium chromate	7775113		1000	1		A	10 (4.54)
Sodium cyanide	143339	Sodium cyanide Na (CN)	10	1,4	P106	A	10 (4.54)
Sodium cyanide Na (CN)	143339	Sodium cyanide	10	1,4	P106	A	10 (4.54)
Sodium dodecylbenzenesulfonate	25155300		1000	1		C	1000 (454)
Sodium fluoride	7681494		5000	1		C	1000 (454)
Sodium hydrosulfide	16721805		5000	1		D	5000 (2270)
Sodium hydroxide	1310732		1000	1		C	1000 (454)
Sodium hypochlorite	7681529		100	1		B	100 (45.4)
	10022705						
Sodium methylate	124414		1000	1		C	1000 (454)
Sodium nitrite	7632000		100	1		B	100 (45.4)
Sodium phosphate, dibasic	7558794		5000	1		D	5000 (2270)
	10039324						
	10140655						
Sodium phosphate, tribasic	7601549		5000	1		D	5000 (2270)
	7758294						
	7785844						
	10101890						
	10124568						
	10361894						
Sodium selenite	10102188		1000	1		B	100 (45.4)
	7782823						
Streptozotocin	18883664	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino]-.	1*	4	U206	X	1 (0.454)
		Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-					
Strontium chromate	7789062		1000	1		A	10 (4.54)
Strychnidin-10-one	57249	Strychnine, & salts	10	1,4	P108	A	10 (4.54)
Strychnidin-10-one, 2,3-dimethoxy-	357573	Brucine	1*	4	P018	B	100 (45.4)
Strychnine, & salts	57249	Strychnidin-10-one	10	1,4	P108	A	10 (4.54)
Styrene	100425		1000	1		C	1000 (454)
Sulfur monochloride	12771083		1000	1		C	1000 (454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (Kg)
Sulfur phosphide	1314803	Phosphorus pentasulfide	100	1,4	U189	B	100 (45.4)
		Phosphorus sulfide					
Sulfuric acid	7664939		1000	1		C	1000 (454)
	8014957						
Sulfuric acid, dithallium (1+) salt	7446186	Thallium (I) sulfate	1000	1,4	P115	B	100 (45.4)
	10031591						
Sulfuric acid, dimethyl ester	77781	Dimethyl sulfate	1*	4	U103	B	100 (45.4)
2,4,5-T acid	93765	Acetic acid, (2,4,5-trichlorophenoxy)	100	1,4	U232	C	1000 (454)
		2,4,5-T					
2,4,5-T amines	2008460		100	1		D	5000 (2270)
	1319728						
	3813147						
	6369966						
	6369977						
2,4,5-T esters	93798		100	1		C	1000 (454)
	1928478						
	2545597						
	25168154						
	61792072						
2,4,5-T salts	13560991		100	1		C	1000 (454)
2,4,5-T	93765	Acetic acid, (2,4,5-trichlorophenoxy)	100	1,4	U232	C	1000 (454)
		2,4,5-T acid					
TDE	72548	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-	1	1,2,4	U060	X	1 (0.454)
		DDD 4,4' DDD.					
1,2,4,5-Tetrachlorobenzene	95943	Benzene, 1,2,4,5-tetrachloro-	1*	4	U207	D	5000 (2270)
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1746016		1*	2		X	1 (0.454)
1,1,1,2-Tetrachloroethane	630206	Ethane, 1,1,1,2-tetrachloro-	1*	4	U208	B	100 (45.4)
1,1,2,2-Tetrachloroethane	79345	Ethane, 1,1,2,2-tetrachloro-	1*	2,4	U209	B	100 (45.4)
Tetrachloroethene	127184	Ethene, tetrachloro-	1*	2,4	U210	B	100 (45.4)
		Perchloroethylene					
		Tetrachloroethylene					
Tetrachloroethylene	127184	Ethene, tetrachloro-	1*	2,4	U210	B	100 (45.4)
		Perchloroethylene Tetrachloroethene					
2,3,4,6-Tetrachlorophenol	58902	Phenol, 2,3,4,6-tetrachloro-	1*	4	U212	A	10 (4.54)
Tetraethyl lead	78002	Plumbane, tetraethyl-	100	1,4	P110	A	10 (4.54)
Tetraethyl pyrophosphate	107493	Diphosphoric acid, tetraethyl ester	100	1,4	P111	A	10 (4.54)
Tetraethyldithiopyrophosphate	3689245	Thiodiphosphoric acid, tetraethyl ester	1*	4	P109	B	100 (45.4)
Tetrahydrofuran	109999	Furan, tetrahydro-	1*	4	U213	C	1000 (454)
Tetranitromethane	509148	Methane, tetranitro-	1*	4	P112	A	10 (4.54)
Tetraphosphoric acid, hexaethyl ester	757584	Hexaethyl tetraphosphoate	1*	4	P062	B	100 (45.4)
Thallic oxide	1314325	Thallium oxide Tl203	1*	4	P113	B	100 (45.4)
Thallium ††	7440280		1*	2	[illegible]	C	1000 (454)
Thallium and compounds	N.A.		1*	2			
Thallium (I) acetate	563688	Acetic acid, thallium(1+) salt	1*	4	U214	B	100 (45.4)
Thallium (I) carbonate	6533739	Carbonic acid, dithallium(1+) salt	1*	4	U215	B	100 (45.4)
Thallium (I) chloride	7791120	Thallium chloride TlCl	1*	4	U216	B	100 (45.4)
Thallium chloride TlCl	7791120	Thallium(I) chloride	1*	4	U216	B	100 (45.4)
Thallium (I) nitrate	10102451	Nitric acid, thallium (1+) salt	1*	4	U217	B	100 (45.4)
Thallium oxide Tl203	1314325	Thallic oxide	1*	4	P113	B	100 (45.4)
Thallium selenite	12039520	Selenious acid, dithallium(1+) salt	1*	4	P114	C	1000 (454)
Thallium (I) sulfate	7446186	Sulfuric acid, dithallium(1+) salt	1000	1,4	P115	B	100 (45.4)
	10031591						
Thioacetamide	62555	Ethanethioamide	1*	4	U218	A	10 (4.54)
Thiodiphosphoric acid, tetraethyl ester	3689245	Tetraethyldithiopyrophosphate	1*	4	P109	B	100 (45.4)
Thiofanox	39196184	2-Butanone, 3,3-dimethyl-1-(methylthio)-,	1*	4	P045	B	100 (45.4)
		O[(methylamino)carbonyl] oxime.					
Thioimidodicarbonic diamide [(H2N)C(S)] 2NH	541537	Dithiobiuret	1*	4	P049	B	100 (45.4)
Thiomethanol	74931	Methanethiol	100	1,4	U153	B	100 (45.4)
		Methylmercaptan					
Thioperoxydicarbonic diamide [(H2N)C(S)] 2S2, tetramethyl-.	137268	Thiram	1*	4	U244	A	10 (4.54)
Thiophenol	108985	Benzenethiol	1*	4	P014	B	100 (45.4)
Thiosemicarbazide	79196	Hydrazinecarbothioamide	1*	4	P116	B	100 (45.4)
Thiourea	62566		1*	4	U219	A	10 (4.54)
Thiourea, (2-chlorophenyl)-	5344821	1-(o-Chlorophenyl)thiourea	1*	4	P026	B	100 (45.4)
Thiourea, 1-naphthalenyl-	86884	alpha-Naphthylthiourea	1*	4	P072	B	100 (45.4)
Thiourea, phenyl-	103855	Phenylthiourea	1*	4	P093	B	100 (45.4)
Thiram	137268	Thioperoxydicarbonic diamide	1*	4	U244	A	10 (4.54)
		[(H2N)C(S)] 2S2, tetramethyl-					
Toluene	108883	Benzene, methyl-	1000	1,2,4	U220	C	1000 (454)
Toluenediamine	95807	Benzenediamine, ar-methyl-	1*	4	U221	A	10 (4.54)
	496720						
	823405						
	25376458						
Toluene diisocyanate	584849	Benzene, 1,3-diisocyanatomethyl-	1*	4	U223	B	100 (45.4)
	91087						
	26471625						
o-Toluidine	95534	Benzenamine, 2-methyl-	1*	4	U328	B	100 (45.4)
p-Toluidine	106490	Benzenamine, 4-methyl-	1*	4	U353	B	100 (45.4)
o-Toluidine hydrochloride	636215	Benzenamine, 2-methyl-, hydrochloride	1*	4	U222	B	100 (45.4)
Toxaphene	8001352	Camphene, octachloro-	1*	1,2,4,	P123	X	1 (0.454)
2,4,5-TP acid	93721	Propionic acid, 2-(2,4,5-trichlorophenoxy)-	100	1,4	U233	B	100 (45.4)
		Silvex (2,4,5-TP)					
2,4,5-TP esters	32534955		100	1		B	100 (45.4)
1H-1,2,4-Triazol-3-amine	61825	Amitrole	1*	4	U011	A	10 (4.54)
Trichlorfon	52686		1000	1		B	100 (45.4)
1,2,4-Trichlorobenzene	120821		1*	2		B	100 (45.4)
1,1,1-Trichloroethane	71556	Ethane, 1,1,1-trichloro-	1*	2,4	U226	C	1000 (454)
		Methyl chloroform					
1,1,2-Trichloroethane	79005	Ethane, 1,1,2-trichloro-	1*	2,4	U227	B	100 (45.4)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (Kg)
Trichloroethene	79016	Ethene, trichloro- Trichloroethylene	1000	1,2,4	U228	B	100 (45.4)
Trichloroethylene	79016	Ethene, trichloro- Trichloroethene	1000	1,2,4	U228	B	100 (45.4)
Trichloromethanesulfenyl chloride	594423	Methanesulfenyl chloride, trichloro-	1*	4	P118	B	100 (45.4)
Trichloromonofluoromethane	75694	Methane, trichlorofluoro-	1*	4	U121	D	5000 (2270)
Trichlorophenol	25167822		10	1		A	10 (4.54)
2,3,4-Trichlorophenol	15950660						
2,3,5-Trichlorophenol	933788						
2,3,6-Trichlorophenol	933755						
2,4,5-Trichlorophenol	95954	Phenol, 2,4,5-trichloro-	10*	1,4	U230	A	10 (4.54)
2,4,6-Trichlorophenol	88062	Phenol, 2,4,6-trichloro-	10*	1,2,4	U231	A	10 (4.54)
3,4,5-Trichlorophenol	609198						
2,4,5-Trichlorophenol	95954	Phenol, 2,4,5-trichloro-	10*	1,4	U230	A	10 (4.54)
2,4,6-Trichlorophenol	88062	Phenol, 2,4,6-trichloro-	10	1,2,4	U231	A	10 (4.54)
Triethanolamine dodecylbenzenesulfonate	27323417		1000	1		C	1000 (454)
Triethylamine	121448		5000	1		D	5000 (2270)
Trimethylamine	75503		1000	1		B	100 (45.4)
1,3,5-Trinitrobenzene	99354	Benzene, 1,3,5-trinitro-	1*	4	U234	A	10 (4.54)
1,3,5-Trioxane, 2,4,6-trimethyl-	123637	Paraldehyde	1*	4	U182	C	1000 (454)
Tris(2,3-dibromopropyl) phosphate	126727	1-Propanol, 2,3-dibromo-, phosphate](3:1)	1*	4	U235	A	10 (4.54)
Trypan blue	72571	2,7-Naphthalenedisulfonic acid, 3,3'-3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt.	1*	4	U236	A	10 (4.54)
Unlisted Hazardous Wastes Characteristic of Corrosivity.	N.A.		1*	4	D002	B	100 (45.4)
Unlisted Hazardous Wastes Characteristics:	N.A.		1*	4			
Characteristic of Toxicity:							
Arsenic (D004)	N.A.		*1	4	D004	X	1 (0.454)
Barium (D005)	N.A.		*1	4	D005	C	1,000 (454)
Benzene (D018)	N.A.		1000	1, 2, 3, 4	D018	A	10 (4.54)
Cadmium (D006)	N.A.		*1	4	D006	A	10 (4.54)
Carbon tetrachloride (D019)	N.A.		5,000	1, 2, 4	D019	A	10 (4.54)
Chlordane (D020)	N.A.		1	1, 2, 4	D020	X	1 (0.454)
Chlorobenzene (D021)	N.A.		100	1, 2, 4	D021	B	100 (45.4)
Chloroform (D022)	N.A.		5,000	1, 2, 4	D022	A	10 (4.54)
Chromium (D007)	N.A.		*1	4	D007	A	10 (4.54)
o-Cresol (D023)	N.A.		1,000	1, 4	D023	C	1,000 (454)
m-Cresol (D024)	N.A.		1,000	1, 4	D024	C	1,000 (454)
p-Cresol (D025)	N.A.		1,000	1, 4	D025	C	1,000 (454)
Cresol (D026)	N.A.		1,000	1, 4	D026	C	1,000 (454)
2,4-D (D016)	N.A.		100	1, 4	D016	B	100 (45.4)
1,4-Dichlorobenzene (D027)	N.A.		100	1, 2, 4	D027	B	100 (45.4)
1,2-Dichloroethane (D028)	N.A.		5,000	1, 2, 4	D028	B	100 (45.4)
1,1-Dichloroethylene (D029)	N.A.		5,000	1, 2, 4	D029	B	100 (45.4)
2,4-Dinitrotoluene (D030)	N.A.		1,000	1, 2, 4	D030	A	10 (4.54)
Endrin (D012)	N.A.		1	1, 4	D012	X	1 (0.454)
Heptachlor (and epoxide) (D031)	N.A.		1	1, 2, 4	D031	X	1 (0.454)
Hexachlorobenzene (D032)	N.A.		*1	2, 4	D032	A	10 (4.54)
Hexachlorobutadiene (D033)	N.A.		*1	2, 4	D033	X	1 (0.454)
Hexachloroethane (D034)	N.A.		*1	2, 4	D034	B	100 (45.4)
Lead (D008)	N.A.		1*	4	D008	A	10 (4.54)
Lindane (D013)	N.A.		1	1, 4	D013	X	1 (0.454)
Mercury (D009)	N.A.		*1	4	D009	X	1 (0.454)
Methoxychlor (D014)	N.A.		1	1, 4	D014	X	1 (0.454)
Methyl ethyl ketone (D035)	N.A.		*1	4	D035	D	5,000 (2270)
Nitrobenzene (D036)	N.A.		1,000	1, 2, 4	D036	C	1,000 (454)
Pentachlorophenol (D037)	N.A.		10	1, 2, 4	D037	A	10 (4.54)
Pyridine (D038)	N.A.		*1	4	D038	C	1,000 (454)
Selenium (D010)	N.A.		*1	4	D010	A	10 (4.54)
Silver (D011)	N.A.		*1	4	D011	X	1 (0.454)
Tetrachloroethylene (D039)	N.A.		*1	2, 4	D039	B	100 (45.4)
Toxaphene (D015)	N.A.		1	1, 4	D015	X	1 (0.454)
Trichloroethylene (D040)	N.A.		1000	1, 2, 4	D040	B	100 (45.4)
2,4,5-Trichlorophenol (D041)	N.A.		10	1, 4	D041	A	10 (4.54)
2,4,6-Trichlorophenol (D042)	N.A.		10	1, 2, 4	D042	A	10 (4.54)
2,4,5-TP (D017)	N.A.		100	1, 4	D017	B	100 (45.4)
Vinyl chloride (D043)	N.A.		*1	2, 3, 4	D043	X	1 (0.454)
Unlisted Hazardous Wastes Characteristic of Ignitability.	N.A.		1*	4	D001	B	100 (45.4)
Unlisted Hazardous Wastes Characteristic of Reactivity.	N.A.		1*	4	D003	B	100 (45.4)
Uracil mustard	66751	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-.	1*	4	U237	A	10 (4.54)
Uranyl acetate	541093		5000	1		B	100 (45.4)
Uranyl nitrate	10102064 36478769		5000	1		B	100 (45.4)
Urea, N-ethyl-N-nitroso-	759739	N-Nitroso-N-ethylurea	1*	4	U176	X	1 (0.454)
Urea, N-methyl-N-nitroso	684935	N-Nitroso-N-methylurea	1*	4	U177	X	1 (0.454)
Vanadic acid, ammonium salt	7803556	Ammonium vanadate	1*	4	P119	C	1000 (454)
Vanadium oxide V205	1314621	Vanadium pentoxide	1000	1,4	P120	C	1000 (454)
Vanadium pentoxide	1314621	Vanadium oxide V205	1000	1,4	P120	C	1000 (454)
Vanadyl sulfate	27774136		1000	1		C	1000 (454)
Vinyl chloride	75014	Ethene, chloro-	1*	2,3,4	U043	X	1 (0.454)
Vinyl acetate	108054	Vinyl acetate monomer	1000	1		D	5000 (2270)
Vinyl acetate monomer	108054	Vinyl acetate	1000	1		D	5000 (2270)
Vinylamine, N-methyl-N-nitroso-	4549400	N-Nitrosomethylvinylamine	1*	4	P084	A	10 (4.54)
Vinylidene chloride	75354	Ethene, 1,1-dichloro- 1,1-Dichloroethylene	5000	1,2,4	U078	B	100 (45.4)
Warfarin, & salts, when present at concentrations greater than 0.3%.	81812	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations greater than 0.3%.	1*	4	P001	B	100 (45.4)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste number	Final RQ Category	Final RQ Pounds (Kg)
Xylene (mixed)	1330207	Benzene, dimethyl	1000	1,4	U239	C	1000 (454)
m-Benzene, dimethyl	108383	m-Xylene					
o-Benzene, dimethyl	95476	o-Xylene					
p-Benzene, dimethyl	106423	p-Xylene					
Xylenol	1300716		1000	1		C	1000 (454)
Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester (3beta,16beta,17alpha, 18beta, 20alpha)-	50555	Reserpine	1*	4	U200	D	5000 (2270)
Zinc ††	7440666		1*	2		C	1000 (454)
ZINC AND COMPOUNDS	N.A.		1*	2			**
Zinc acetate	557346		1000	1		C	1000 (454)
Zinc ammonium chloride	52628258 14639975 14639986		5000	1		C	1000 (454)
Zinc borate	1332076		1000	1		C	1000 (454)
Zinc bromide	7699458		5000	1		C	1000 (454)
Zinc carbonate	3486359		1000	1		C	1000 (454)
Zinc chloride	7646857		5000	1		C	1000 (454)
Zinc cyanide	557211	Zinc cyanide Zn(CN)2	10	1,4	P121	A	10 (4.54)
Zinc cyanide Zn(CN)2	557211	Zinc cyanide	10	1,4	P121	A	10 (4.54)
Zinc fluoride	7783495		1000	1		C	1000 (454)
Zinc formate	557415		1000	1		C	1000 (454)
Zinc hydrosulfite	7779864		1000	1		C	1000 (454)
Zinc nitrate	7779886		5000	1		C	1000 (454)
Zinc phenosulfonate	127822		5000	1		D	5000 (2270)
Zinc phosphide	1314847	Zinc phosphide Zn3P2, when present at concentrations greater than 10%.	1000	1,4	P122	B	100 (45.4)
Zinc phosphide Zn3P2, when present at concentrations greater than 10%.	1314847	Zinc phosphide	1000	1,4	P122	B	100 (45.4)
Zinc silicofluoride	16871719		5000	1		D	5000 (2270)
Zinc sulfate	7733020		1000	1		C	1000 (454)
Zirconium nitrate	13746899		5000	1		D	5000 (2270)
Zirconium potassium fluoride	16923958		5000	1		C	1000 (454)
Zirconium sulfate	14644612		5000	1		D	5000 (2270)
Zirconium tetrachloride	10026116		5000	1		D	5000 (2270)
F001			1*	4	F001	A	10 (4.54)
The following spent halogenated solvents used in degreasing; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.							
(a) Tetrachloroethylene	127184		1*	2,4	U210	B	100 (45.4)
(b) Trichloroethylene	79016		1000	1,2,4	U228	B	100 (45.4)
(c) Methylene chloride	75092		1*	2,4	U080	C	1000 (454)
(d) 1,1,1-Trichloroethane	71556		1*	2,4	U226	C	1000 (454)
(e) Carbon tetrachloride	56235		5000	1,2,4	U211	A	10 (4.54)
(f) Chlorinated fluorocarbons	N.A.					D	5000 (2270)
F002			1*	4	F002	A	10 (4.54)
The following spent halogenated solvents; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.							
(a) Tetrachloroethylene	127184		1*	2,4	U210	B	100 (45.4)
(b) Methylene chloride	75092		1*	2,4	U080	C	1000 (454)
(c) Trichloroethylene	79016		1000	1,2,4	U228	B	100 (45.4)
(d) 1,1,1-Trichloroethane	71556		1*	2,4	U226	C	1000 (454)
(e) Chlorobenzene	108907		100	1,2,4	U037	B	100 (45.4)
(f) 1,1,2-Trichloro-1,2,2-trifluoroethane	76131					D	5000 (2270)
(g) o-Dischlorobenzene	95501		100	1,2,4	U070	B	100 (45.4)
(h) Trichlorofluoromethane	75694		1*	4	U121	D	5000 (2270)
(i) 1,1,2-Trichloroethane	79005		1*	2,4	U227	B	100 (45.4)
F003			1*	4	F003	B	100 (45.4)
The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents:							
(a) Xylene	1330207					C	1000 (454)
(b) Acetone	67641					D	5000 (2270)
(c) Ethyl acetate	141786					D	5000 (2270)
(d) Ethylbenzene	100414					C	1000 (454)
(e) Ethyl ether	60297					B	100 (45.4)
(f) Methyl isobutyl ketone	108101					D	5000 (2270)
(g) n-Butyl alcohol	71363					D	5000 (2270)
(h) Cyclohexanone	108941					D	5000 (2270)
(i) Methanol	67561					D	5000 (2270)
F004			1*	4	F004	C	1000 (454)
The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents:							
(a) Cresols/Cresylic acid	1319773		1000	1,4	U052	C	1000 (454)
(b) Nitrobenzene	98953		1000	1,2,4	U169	C	1000 (454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
F005			1*	4	F005	B	100 (45.4)
The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents:							
(a) Toluene	108883		1000	1,2,4	U220	C	1000 (454)
(b) Methyl ethyl ketone	78933		1*	4	U159	D	5000 (2270)
(c) Carbon disulfide	75150		5000	1,4	P022	B	100 (45.4)
(d) Isobutanol	78831		1*	4	U140	D	5000 (2270)
(e) Pyridine	110861		1*	4	U196	C	1000 (454)
F006			1*	4	F006	A	10 (4.54)
Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum, (2) tin plating on carbon steel, (3) zinc plating (segregated basis) on carbon steel, (4) aluminum or zinc-aluminum plating on carbon steel, (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel, and (6) chemical etching and milling of aluminum.							
F007			1*	4	F007	A	10 (4.54)
Spent cyanide plating bath solutions from electroplating operations.							
F008			1*	4	F008	A	10 (4.54)
Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.							
F009			1*	4	F009	A	10 (4.54)
Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.							
F010			1*	4	F010	A	10 (4.54)
Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.							
F011			1*	4	F011	A	10 (4.54)
Spent cyanide solution from salt bath pot cleaning from metal heat treating operations.							
F012			1*	4	F012	A	10 (4.54)
Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.							
F019			1	4	F019	A	10 (4.54)
Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process							
F020			1*	4	F020	X	1 (0.454)
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri-or-tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.)							
F021			1*	4	F021	X	1 (0.454)
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.							
F022			1*	4	F022	X	1 (0.454)
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.							
F023			1*	4	F023	X	1 (0.454)
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.)							
F024			1*	4	F024	X	1 (0.454)

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Wastes, including but not limited to distillation residues, heavy ends, tars, and reactor cleanout wastes, from the production of chlorinated aliphatic hydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes. (This listing does not include light ends, spent filters and filter aids, spent dessicants(sic), wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in Section 261.32.)							
F025	.....	.....	1*	4	F025	X	##1 (0.454)
Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution..							
F026	.....	.....	1*	4	F026	X	1 (0.454)
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.							
F027	.....	.....	1*	4	F027	X	1 (0.454)
Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-tri-chlorophenol as the sole component.)							
F028	.....	.....	1*	4	F028	X	1 (0.454)
Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.							
F032	.....	.....	1*	4	F032	X	1(0.454)
Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with §261.35 of this chapter or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.							
F034	.....	.....	1*	4	F034	X	1(0.454)
Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use cresote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.							
F035	.....	.....	1*	4	F035	X	1(0.454)
Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.							
F037	.....	.....	1*	4	F037	X	1 (0.454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Petroleum refinery primary oil/water/solids separation sludge—Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in §261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.							
F038	.....	.....	1*	4	F038	X	1 (0.454)
Petroleum refinery secondary (emulsified) oil/water/solids separation sludge—Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from once-through non-contact cooling waters segregated for treatment from other process or oil cooling wastes, sludges and floats generated in aggressive biological treatment units as defined in §261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing.							
K001	.....	.....	1*	4	K001	X	1 (0.454)
Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.							
K002	.....	.....	1*	4	K002	A	10 (4.54)
Wastewater treatment sludge from the production of chrome yellow and orange pigments.							
K003	.....	.....	1*	4	K003	A	10 (4.54)
Wastewater treatment sludge from the production of molybdate orange pigments.							
K004	.....	.....	1*	4	K004	A	10 (4.54)
Wastewater treatment sludge from the production of zinc yellow pigments.							
K005	.....	.....	1*	4	K005	A	10 (4.54)
Wastewater treatment sludge from the production of chrome green pigments.							
K006	.....	.....	1*	4	K006	A	10 (4.54)
Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).							
K007	.....	.....	1*	4	K007	A	10 (4.54)
Wastewater treatment sludge from the production of iron blue pigments.							
K008	.....	.....	1*	4	K008	A	10 (4.54)

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory RQ	Statutory Code †	Statutory RCRA waste Number	Final RQ Category	Final RQ Pounds (Kg)
Oven residue from the production of chrome oxide green pigments. K009			1*	4	K009	A	10 (4.54)
Distillation bottoms from the production of acetaldehyde from ethylene. K010			1*	4	K010	A	10 (4.54)
Distillation side cuts from the production of acetaldehyde from ethylene. K011			1*	4	K011	A	10 (4.54)
Bottom stream from the wastewater stripper in the production of acrylonitrile. K013			1*	4	K013	A	10 (4.54)
Bottom stream from the acetonitrile column in the production of acrylonitrile. K014			1*	4	K014	D	5000 (2270)
Bottoms from the acetonitrile purification column in the production of acrylonitrile. K015			1*	4	K015	A	10 (4.54)
Still bottoms from the distillation of benzyl chloride. K016			1*	4	K016	X	1 (0.454)
Heavy ends or distillation residues from the production of carbon tetrachloride. K017			1*	4	K017	A	10 (4.54)
Heavy ends (still bottoms) from the purification column in the production of epi-chlorohydrin. K018			1*	4	K018	X	1 (0.454)
Heavy ends from the fractionation column in ethyl chloride production. K019			1*	4	K019	X	1 (0.454)
Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production. K020			1*	4	K020	X	1 (0.454)
Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production. K021			1*	4	K021	A	10 (4.54)
Aqueous spent antimony catalyst waste from fluoromethanes production. K022			1*	4	K022	X	1 (0.454
Distillation bottom tars from the production of phenol/acetone from cumene. K023			1*	4	K023	D	5000 (2270
Distillation light ends from the production of phthalic anhydride from naphthalene. K024			1*	4	K024	D	5000 (2270
Distillation bottoms from the production of phthalic anhydride from naphthalene. K025			1*	4	K025	A	10 (4.54
Distillation bottoms from the production of nitrobenzene by the nitration of benzene. K026			1*	4	K026	C	1000 (454)
Stripping still tails from the production of methyl ethyl pyridines. K027			1*	4	K027	A	10 (4.54)
Centrifuge and distillation residues from toluene diisocyanate production. K028			1*	4	K028	X	1 (0.454)
Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane. K029			1*	4	K029	X	1 (0.454
Waste from the product steam stripper in the production of 1,1,1-trichloroethane. K030			1*	4	K030	X	1 (0.454
Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene. K031			1*	4	K031	X	1 (0.454
By-product salts generated in the production of MSMA and cacodylic acid. K032			1*	4	K032	A	10 (4.54
Wastewater treatment sludge from the production of chlordane. K033			1*	4	K033	A	10 (4.54
Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. K034			1*	4	K034	A	10 (4.54

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—CONTINUED

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.							
K035			1*	4	K035	X	1 (0.454)
Wastewater treatment sludges generated in the production of creosote.							
K036			1*	4	K036	X	1 (0.454)
Still bottoms from toluene reclamation distillation in the production of disulfoton.							
K037			1*	4	K037	X	1 (0.454)
Wastewater treatment sludges from the production of disulfoton.							
K038			1*	4	K038	A	10 (4.54)
Wastewater from the washing and stripping of phorate production.							
K039			1*	4	K039	A	10 (4.54
Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.							
K040			1*	4	K040	A	10 (4.54
Wastewater treatment sludge from the production of phorate.							
K041			1*	4	K041	X	1 (0.454
Wastewater treatment sludge from the production of toxaphene.							
K042			1*	4	K042	A	10 (4.54
Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.							
K043			1*	4	K043	A	10 (4.54
2,6-Dichlorophenol waste from the production of 2,4-D.							
K044			1*	4	K044	A	10 (4.54
Wastewater treatment sludges from the manufacturing and processing of explosives.							
K045			1*	4	K045	A	10 (4.54
Spent carbon from the treatment of wastewater containing explosives.							
K046			1*	4	K046	A	10 (4.54
Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.							
K047			1*	4	K047	A	10 (4.54
Pink/red water from TNT operations.							
K048			1*	4	K048	A	10 (4.54
Dissolved air flotation (DAF) float from the petroleum refining industry.							
K049			1*	4	K049	A	10 (4.54)
Slop oil emulsion solids from the petroleum refining industry.							
K050			1*	4	K050	A	10 (4.54)
Heat exchanger bundle cleaning sludge from the petroleum refining industry.							
K051			1*	4	K051	A	10 (4.54
API separator sludge from the petroleum refining industry.							
K052			1*	4	K052	A	10 (4.54
Tank bottoms (leaded) from the petroleum refining industry.							
K060			1*	4	K060	X	1 (0.454
Ammonia still lime sludge from coking operations.							
K061			1*	4	K061	A	10 (4.54
Emission control dust/sludge from the primary production of steel in electric furnaces.							
K062			1*	4	K062	A	10 (4.54
Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).							
K064			1*	4	K064	A	10 (4.54
Acid plant blowdown slurry/sludge resulting from thickening of blowdown slurry from primary copper production.							
K065			1*	4	K065	A	10 (4.5-

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.							
K066			1*	4	K066	A	10 (4.54)
Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production.							
K069			1*	4	K069	A	10 (4.54)
Emission control dust/sludge from secondary lead smelting.							
K071			1*	4	K071	X	1 (0.454)
Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.							
K073			1*	4	K073	A	10 (4.54)
Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.							
K083			1*	4	K083	B	100 (45.4)
Distillation bottoms from aniline extraction.							
K084			1*	4	K084	X	1 (0.454)
Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.							
K085			1*	4	K085	A	10 (4.54)
Distillation or fractionation column bottoms from the production of chlorobenzenes.							
K086			1*	4	K086	A	10 (4.54)
Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.							
K087			1*	4	K087	B	100 (45.4)
Decanter tank tar sludge from coking operations.							
K088			1*	4	K088		
Spent potliners from primary aluminum reduction.							
K090			1*	4	K090		
Emission control dust or sludge from ferrochromiumsilicon production.							
K091			1	4	K091		
Emission control dust or sludge from ferrochromium production.							
K093			1*	4	K093	D	5000 (2270)
Distillation light ends from the production of phthalic anhydride from ortho-xylene.							
K094			1*	4	K094	D	5000 (2270)
Distillation bottoms from the production of phthalic anhydride from ortho-xylene.							
K095			1*	4	K095	B	100 (45.4)
Distillation bottoms from the production of 1,1,1-trichloroethane.							
K096			1*	4	K096	B	100 (45.4)
Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.							
K097			1*	4	K097	X	1 (0.454)
Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.							
K098			1*	4	K098	X	1 (0.454
Untreated process wastewater from the production of toxaphene.							
K099			1*	4	K099	A	10 (4.54
Untreated wastewater from the production of 2,4-D.							
K100			1*	4	K100	A	10 (4.54
Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.							
K101			1*	4	K101	X	1 (0.454
Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.							
K102			1*	4	K102	X	1 (0.454
Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.							
K103			1*	4	K103	B	100 (45.4

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Process residues from aniline extraction from the production of aniline.							
K104			1*	4	K104	A	10 (4.54)
Combined wastewater streams generated from nitrobenzene/aniline production.							
K105			1*	4	K105	A	10 (4.54)
Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.							
K106			1*	4	K106	X	1 (0.454)
Wastewater treatment sludge from the mercury cell process in chlorine production.							
K107			10	4	K107	X	10 (4.54)
Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazines.							
K108			10	4	K108	X	10 (4.54)
Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.							
K109			10	4	K109	X	10 (4.54)
Spent filter cartridges from product purification from the production of 1,1- dimethylhydrazine (UDMH) from carboxylic acid hydrazides.							
K110			10	4	K110	X	10 (4.54)
Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.							
K111			1*	4	K111	A	10 (4.54)
Product washwaters from the production of dinitrotoluene via nitration of toluene.							
K112			1*	4	K112	A	10 (4.54)
Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.							
K113			1*	4	K113	A	10 (4.54)
Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.							
K114			1*	4	K114	A	10 (4.54)
Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.							
K115			1*	4	K115	A	10 (4.54)
Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.							
K116			1*	4	K116	A	10 (4.54)
Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.							
K117			1*	4	K117	X	1 (0.454)
Wastewater from the reaction vent gas scrubber in the production of ethylene bromide via bromination of ethene.							
K118			1*	4	K118	X	1 (0.454)
Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide.							
K123			1*	4	K123	A	10 (4.54)
Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.							
K124			1*	4	K124	A	10 (4.54)
Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.							
K125			1*	4	K125	A	10 (4.54)
Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.							
K126			1*	4	K126	A	10 (4.54)
Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.							
K131			100	4	K131	X	100 (45.4)
Wastewater from the reactor and spent sulfuric acid from the acid dryer in the production of methyl bromide.							
K132			1000	4	K132	X	1000 (454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Spent absorbent and wastewater solids from the production of methyl bromide.							
K136			1*	4	K136	X	1 (0.45-
Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.							
K141			1*	4	K141	X	1 (0.45-
Process related from the recovery of coal tar, including, but not limited to, tar collecting sump residues from the production of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludge from coking operations.)							
K142			1*	4	K142	X	1 (0.45-
Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.							
K143			1*	4	K143	X	1 (0.45-
Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.							
K144			1*	4	K144	X	1 (0.45-
Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.							
K145			1*	4	K145	X	1 (0.45-
Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.							
K147			1*	4	K147	X	1 (0.45-
Tar storage tank residues from coal tar refining.							
K148			1*	4	K148	X	1 (0.45-
Residues from coal tar distillation, including, but not limited to, still bottoms.							
K149			1*	4	K149	A	10 (4.54
Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. [This waste does not include still bottoms from the distillation of benzyl chloride.]							
K150			1*	4	K150	A	10 (4.54
Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.							
K151			1*	4	K151	A	10 (4.54)
Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.							

† Indicates the statutory source as defined by 1, 2, 3, and 4 below.

†† No reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is equal to or exceeds 100 micrometers (0.004 inches).

††† The RQ for asbestos is limited to friable forms only.

1—indicates that the statutory source for designation of this hazardous substance under CERCLA is CWA Section 311(b)(4).

2—indicates that the statutory source for designation of this hazardous substance under CERCLA is CWA Section 307(a).

3—indicates that the statutory source for designation of this hazardous substance under CERCLA is CAA Section 112.

4—Indicates that the statutory source for designation of this hazardous substance under CERCLA is RCRA Section 3001.

1*—indicates that the 1-pound RQ is a CERCLA statutory RQ.

#BBB Indicates that the RQ is subject to change when the assessment of potential carcinogenicity is completed.

#BBB# The Agency may adjust the statutory RQ for this hazardous substance in a future rulemaking; until then the statutory RQ applies.

§—The adjusted RQs for radionuclides may be found in appendix B to this table.

**—indicates that no RQ is being assigned to the generic or broad class.

ATTACHMENT G:

PERSONNEL EVACUATION PLAN

~~FILE: WHITE~~
MSGT NELSON

UNITED STATES MARINE CORPS
HEADQUARTERS MARINE CORPS AIR STATION EL TORO
PO BOX 95000
SANTA ANA CA 92709-5000

IN REPLY REFER TO:

6280
1AU

17 OCT 1995

From: Assistant Chief of Staff, Environment and Safety
To: Distribution

Subj: HAZARDOUS MATERIAL SPILL NOTIFICATION UPDATE NUMBER FOUR

Ref: (a) MCAS El Toro SPCC/SCP dtd July 1992
(b) MCAS Tustin SPCC/SCP dtd July 1992
(c) AC/S Environment and Safety ltr 6280/1AU of 4 May 95 (update #2)
(d) AC\S Environment and Safety ltr 6280/1AU of 10 July 95 (update #3)

1. The following information is provided to update the references. ALL APPROPRIATE DUTY PERSONNEL BINDERS, DESKTOP PROCEDURES, AND UNIT IMMEDIATE ACTION PLANS SHOULD INCORPORATE THIS UPDATE. ADDITIONALLY, A COPY OF THIS UPDATE SHOULD BE PLACED IN FRONT OF THE FIRST PAGE OF EACH REFERENCE DOCUMENT HELD BY USERS.

2. The appropriate action/notification chain for hazardous material incidents aboard MCAS El Toro is:

First Notification/Response = Unit.
Second Notification/Response = Fire Department at 9911 (If on Airfield surfaces, ALSO call Aircraft Rescue and Fire Fighting at El Toro 3921; at Tustin 7871).
Third Notification/Response = As set forth par. 3, below.

3. Environmental Department technical assistance/packaged hazardous material removal may be obtained by MCAS El Toro customers during normal working hours by calling extension 3035/2164/3705/6610 and by MCAS Tustin customers during normal working hours by calling extension 7716/7629. AFTER WORKING HOURS CALL:

FOR MCAS EL TORO

Primary:	Cpl R. S. Pashalian	Pager:		286-8225
		Home:	(714)	733-2088
Alternate:	MSgt R. Nelson	Pager:		286-8229
		Home:	(619)	722-4794
Alternate:	Cpl E. A. Ibarra	Pager:		286-8226
		Home:	(714)	733-3044

Encl:(2)

Marine Corps Air Station
El TORO (Santa Ana), California 92709-5010

5090
1EM
18 Jun 1993

MEMORANDUM

From: Transportation Chief, Garrison Mobile Equipment
To: Environmental Department

Subj: SITE SPECIFIC CONTINGENCY PLAN AND EMERGANCY PROCEDURES

Ref: ABO 5090.1B

This site is owned by the U. S. Marine Corps and is operated by the personnel of Garrison Mobile Equipement Department (GME).

A. DESIGN AND OPERATION OF THE SITE #770

1. Emergency Minimization Features

The site is designed , constructed , maintained , and operated to minimize the possibility of fire , explosion or any unplanned releases of hazardous waste constituents that would endanger human health or thwe environment.

B. REQUIRED EQUIPMENT

1. The fire exstinguisher is located on the front of site #770.

2. The spill control equipment is located in the cage on site and is labeled "SPILL CONTROL".

3. All personnel working on site will have with him the appropriate Personal Protective Equipment.

4. The MCAS EL TORO FIRE DEPARTMENT HAZ/MAT TEAM will respond to any emergency at site and will provide all safety equipment necessary for their protection . Ext. 9911

5. The Internal Alaem System is located in front of site and is labeled properly.

6. The external Alarm is located inside of building #386.

7. An Emergency eyewash & shower is located on the site , just outside of cage.

8. All required equipment will be tested and kept in proper operating condition .

C. REQUIRED AISLE SPACE

1. A minimum of 3 feet will be maimtained to allow unobstructed movement within tha accumilation site .

D. NOTIFICATION PROCEDURES

1. In an emergency the El Toro Fire Department Haz/Mat Team will be notified at Ext. 9911. Immediately after notifying the Envirnmental Department the Envirnmantal Division must be notified at Ext. 2772.

E PERSONNEL ON SITE

1. Only those personnel who have received the necessary training are allowed on site.

F. PERSONNEL EVACUATION PLAN

1. In the event of an evacuation the following procedures are to be followed.

Signal the evacuation by use of the internal alarm and/or voice .

After evacuation of personnel notify the Fier Department and the Provost Marshall's office via the external alarm.

Personnel who called for the evacuation must make sure there is no entry of visitors , contractors or, trucks. All traffic within the area must cease.

No one may re-enter the area or remain in the area unless specifically authorized by the personnel calling for the evacuation . the person in charge will assume responsibility for all personnel who re-enter.

The Emergency Coordinator , Fire Department will determine if any additional personnel must evacuate. No re-enter can occur until the Emergency Coordinator gives clearance.

All personnel assinged to the site will be trained in the evacuation procedures and drills will be held regularly.

The Emergency Coordinater will make all necessary notifications, prevent spreading or recurrance of emergency,monitor leaks , and provide for appropriate cleanup.

G. CONTAINER SPILLS AND LEAKAGE

JF a container is not in good condition or is leaking the operater of the site will transfer the hazardous waste into another container that is appropriate and in good condition.

H. <u>EMERGENCY EQUIPMENT ON SITE</u>

Eye wash - Continuous flow
Fire Exstinguisher
Emergency Shower - Continuous Flow
Overpack drums - (0) 85 gallon
Safe step - (0) 50 lb. bags
Shovels (1)
Broom (5)
Absorbent (0) 50 lb. bag
55 gallon drums (0) open top
Internal Alarm
External alarm

ATTACHMENT H:

EPA EVALUATION LETTER FOR FACILITY RESPONSE PLAN AND RELATED CORRESPONDENCE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

January 18, 1995

MCAS EL TORO
ASST. CHIEF OF STAFF
ENVIRONMENT AND SAFETY (1AU)
HEADQUARTERS MCAS EL TORO, P.O. BOX 95001
SANTA ANA, CA 92709-5001

RE: FRP ID: FRP09A0122
Submitted pursuant to OPA Sec 4202(a)(5).

Dear Sirs:

After an initial review of July, 1992, response plans received by Region IX, EPA has determined that, at this time, your facility does not meet the current criteria of having the potential to cause significant and substantial harm to the environment by the discharge of oil. This determination is based on information provided to EPA by the facility owner/operator identified in the facility response plan. EPA RESERVES THE RIGHT TO RECONSIDER THIS DETERMINATION IF ADDITIONAL INFORMATION WARRANTING RECONSIDERATION BECOMES AVAILABLE. Based on this criteria, your facility response plan does not need approval from EPA for you to continue current operations. However, the Oil Pollution Act requires that the plan remain updated, fully implemented, and that each substantial change to the plan be submitted to EPA.

If you have any questions about this letter, please contact Steve Calanog, of my staff, at (415) 744-2296.

Sincerely,

Donald C. White, Chief
Field Operations Branch

Encl (1)

Printed on Recycled Paper

UNITED STATES MARINE CORPS
HEADQUARTERS MARINE CORPS AIR STATION EL TORO
PO BOX 95001
SANTA ANA CA 92709-5001

IN REPLY REFER TO:

6288L
1AU
07 FEB 1995

Commanding Officer
United States Coast Guard
MSO LA/LB
165 N. Pico Ave.
Long Beach, CA 90802
Attn: Port Safety Division

Re: Oil Pollution Act 1990 Facility Response Plan Requirements For Marine Corps Air Station El Toro, California

Sir:

By this letter a negative response is submitted for Marine Corps Air Station El Toro, California regarding requirements to forward a Facility Response Plan to the United States Coast Guard for approval under the provisions of the Oil Pollution Act of 1990.

As you may know, MCAS El Toro is a non-transportation related onshore facility. As such, MCAS El Toro does not conduct operations that involve over-water transfers of oil (nor has it ever done so). As stated by EPA Region IX in their letter of 18 January 1995, MCAS El Toro does not meet the criteria for identification as a "Significant and Substantial Harm" facility as specified in 40 CFR, Part 112 (Federal Register/Vol. 59, No. 126/Friday, July 1 1994).

A copy of this letter will be maintained in the MCAS El Toro Environment Department under file number 6288L and included as an attachment to appropriate MCAS El Toro Oil Spill Plans.

The Marine Corps Air Station El Toro Point of Contact is Lieutenant Colonel Dennis M. Bevis, Deputy Assistant Chief of Staff Environment and Safety at (714) 726-6610/6614/ 3705.

Wayne D. Lee

WAYNE D. LEE
Assistant Chief of Staff
Environment and Safety
by direction of
the Commanding General

Encl:(1)

ATTACHMENT I:

SLUG CONTROL PLAN

FORM D
COUNTY SANITATION DISTRICTS OF ORANGE COUNTY
SLUG CONTROL PLAN

Facility Name: Marine Corps Air Station, El Toro, California
Address: AC/S Environment and Safety (Code 1AU), Headquarters MCAS El Toro
P.O. Box 95001, Santa Ana, Ca. 92709-5001

Wastewater Discharge Permit No: 14-1-135
Issued Date: 01 MAY 95
Expiration Date: 30 APR 97

Responsible Company Contact:	Mr. Wayne D. Lee
Title:	Assistant Chief of Staff, Environment and Safety
Work Phone Number:	(714) 726-6614
After Hours Phone Number:	(714) 726-3901 (Station Duty Officer)
Emergency Company Contact:	LT Hope Katcharian
Title:	Director, Environmental Engineering Division Environment and Safety Department
Work Phone Number:	(714)726-6607/3386
After Hours Phone Number:	(714) 726-3901(Station Duty Officer)
Alternate Company Contact:	Mr. Upinder Singh
Title:	Environmental Engineer
Work Phone Number:	(714) 726-3355
After Hours Phone Number:	(714) 726-3901 (Station Duty Officer)

NOTIFICATION OF RESPONSE AGENCIES

AGENCY	DEPARTMENT/NAME	24-HOUR EMERGENCY NUMBER
County Sanitation Districts of Orange County	Control Center	(714) 962-2411
Orange County Health Care Agency (OCHCA)	OCHCA	(714) 667-3710
Orange County City Fire Department	MCAS El Toro Fire Dept.	911
Orange County Environmental Management Agency	Env Resources	(714)567-6363
Regional Water Quality Control Board	Regional Water Bd.	(909) 782-4130 (800) 852-7550 (State Emer Svcs)
South Coast Air Quality Management District	N/A	N/A
Others: N/A	N/A	N/A

List locations where the above information is posted./located
1. Marine Corps Air Station El Toro Environmental Offices
2. MCAS El Toro Spill Contingency Plan

Ref: OCSD ltr dtd 15 Dec 1995 (Slug Discharge Plan) (OCSD Ref # 491397.LTR)