# GENERAL SERVICES BRANCH Base Maintenance Department Marine Corps Base Camp Lejeune, North Carolina 28542

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From: Ground Structures General Foreman

To: Assistant Chief of Staff, Facilities (ATTN: Cleans Community

Coordinator)

Subj: Solid Waste Analysis

Ref:

a) B011014.8

(b) B011350.1F

(c) BO4100.8

(d) B04570.1B (e) B0P11101.32E

(f) B011100.5I

(g) BOP11014.1F

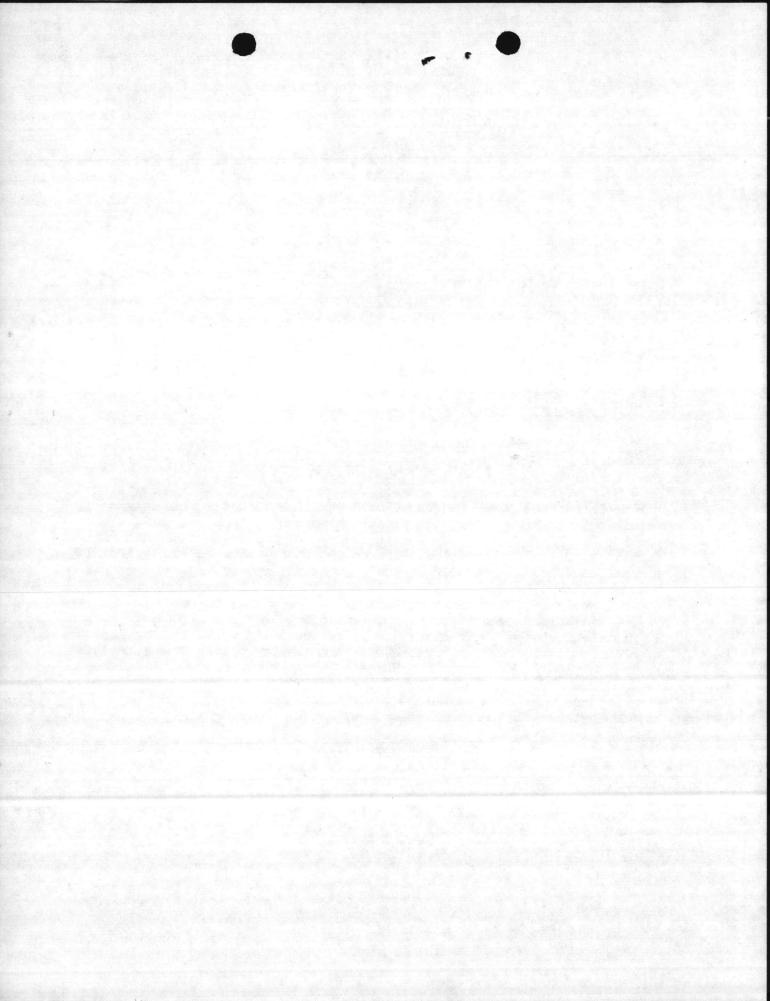
# SECTION A: ORDINANCES RELATING TO LITTER CONTROL

#### INTRODUCTION

Marine Corps Base, Camp Lejeune, North Carolina is the worlds longest amphibious training base. The primary missions of Camp Lejeune are to provide training facilities, logistic support, housing and certain administrative support for Fleet Marine Force and other units; conduct specialized schools; and conduct individual combat training. Camp Lejeune includes approximately 170 square miles of land and water. Its population is approximately 40,000 military personnel, 4,000 civilian employees, and 32,000 military dependants living on and off base. The directives that regulate and govern the control of litter and solid waste at Camp Lejeune are Marine Corps Orders and Bulletins, promulgated by the Commandant of Marine Corps, Marine Corps Headquarters, Washington, D. C., Base Orders and Bulletins promulgated by the Commanding General, Marine Corps Base, Camp Lejeune, North Carolina and regulations promulgated by the United States Environmental Protection Agency.

# SOURCES OF LITTER

These orders, bulletins and regulations properly identify the sources of litter aboard the base. This list includes motorists, pedestrians, uncovered trucks, improper household refuse putouts, improper commercial refuse putouts, construction and demolition sites, loading and unloading sites, training sites and recreation areas. These sources of litter are depicted in references (a) through (e).



# RESPONSIBILITY OF OWNERS/MANAGERS OF LITTER SOURCES

The base Commanding General is fully responsible for the litter sources of the entire base. This responsibility is delegated to his staff, designated area commanders and tenants of housing quarters, who are held responsible for the litter generated by poor waste management in their designated areas.

## MAINTENANCE RESPONSIBILITY

The Commanding General's staff, area commanders and tenants are responsible for maintaining their designated areas in a litter free condition as specified in references (e) and (f).

#### ENFORCEMENT

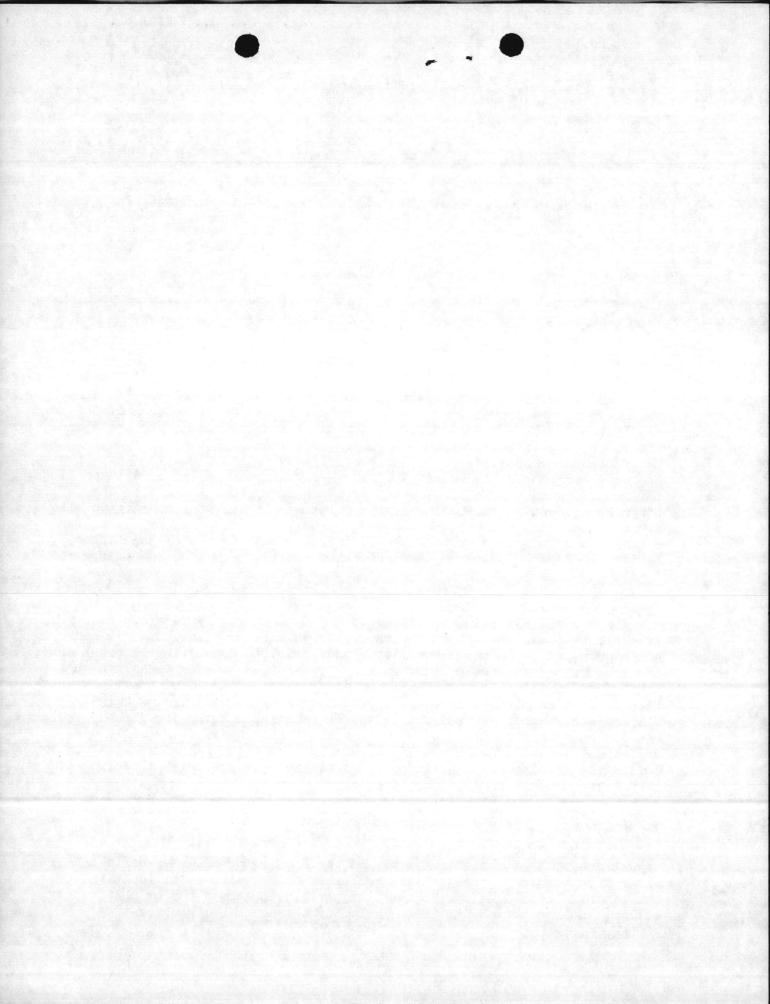
Authority for enforcing the various orders and bulletins are specified and delegated to proper personnel. The fire department and the Occupational and Preventive Medicine Service makes regular inspections of all areas and issues reports to ensure the problems are corrected. The Base Provost Marshall and his staff are responsible for issuing citations for any misconduct, etc aboard the base. The Base Maintenance Department is responsible for reporting and correcting litter problems throughout the base. The Public Works Department is responsible for controlling litter in construction site areas. The average contractor does not usually clean up his area until the completion of his long term contract, thereby creating one of the largest litter problems encountered throughout the base.

## PRE-COLLECTION PRACTICES

Base Orders and Bulletins specifies what pre-packaging is required such as: wrap all wet, odorus garbage or waste materials in wrapping paper or old newspapers, place in paper or plastic bags prior to depositing in trash cans. The base uses the dumpster container system and the housing areas use the individual container system. All containers are emptied from their present site by dumpmaster or contractors. In the new townhouse area, Watkins Village, the tenant is required to set containers on curbs for pick-up service on specified dates, and replace them in the garage for daily use. Yard trash is stored by curbs in the housing areas and picked up weekly. Throughout base areas, individual units are responsible for the hauling of yard trash to the landfill for disposal.

## COLLECTION PRACTICES

Reference (e) specifies the garbage will be collected twice weekly and yard trash will be collected weekly in the housing areas. Messhalls and other food handling areas will be collected daily, with other locations two or three times weekly. Special or emergency pickups may be obtained by calling the Sanitation Section of Base Maintenance Department or the Housing Director.



#### POST-COLLECTION PRACTICES

All containers are stationary except the ones in Watkins Village, there have been no problems encountered in this area.

## RECEPTACLE REQUIREMENTS

Reference (e) requires all quarters have a minimum of two containers. Reference (g) designates the Base Maintenance Department's responsibility for determining the location and amount of dumpster containers as required by units throughout the base. All containers must meet safety standards and are repaired, painted or replaced as needed.

# PRIVATE AND MUNICIPAL/COUNTY RESPONSIBILITY

The base is totally government owned and has no problems in this area, except for the housing areas. The housing director is authorized to have the tenants clean yards or charges them for cleaning services when necessary.

## FINES

Reference (a) set specific fines for littering which range from lost driving privileges or fines to court-martials.

# SPECIAL REFUSE DISPOSAL PROBLEMS

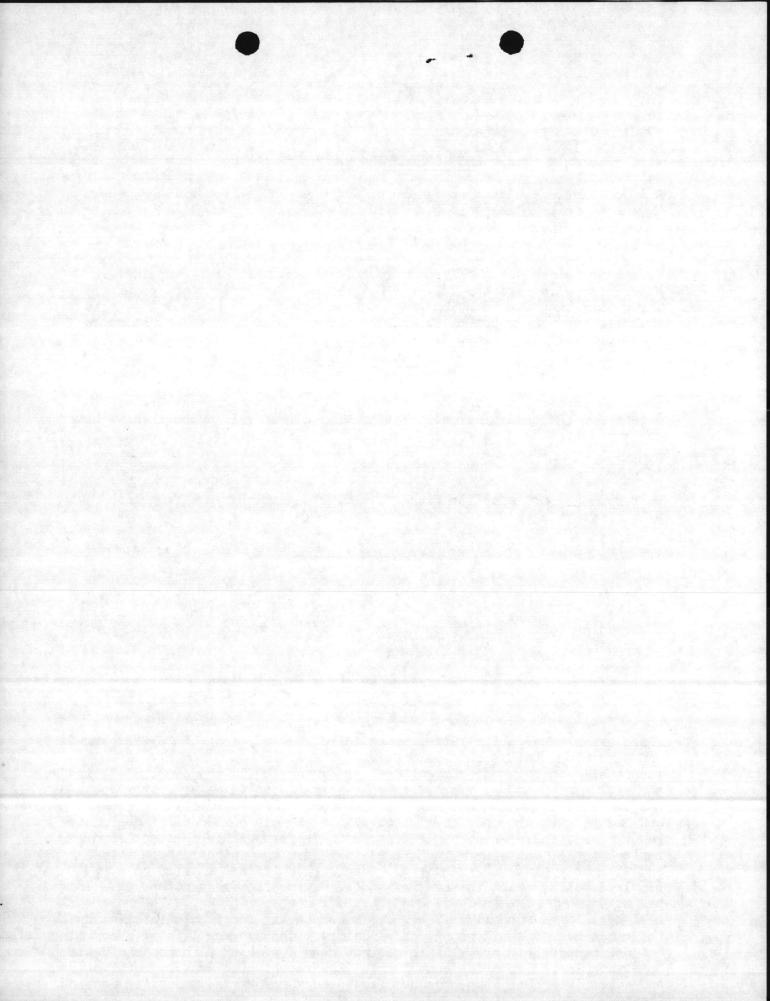
Reference (b) contain sections dealing with disposal of refuse from the Naval Hospital and the disposal of hypodermic instruments. Cardboard and newspapers are separated and recycled through the recycling center located at building 738. The base does not have a abandoned or junked car problem at this time.

# SECTION B: LITTER-CONTROL TECHNOLOGY

## RECEPTACLES

There are eleven public litter receptacles located along the primary roadways and nine along the secondary roadways. There are approximately 150 receptacles in parks or recreational areas and 100 in the commercial, industrial, and residential areas. The receptacles are placed in major litter sources and their size is adequate for the location. Responsibility for cleaning and emptying these containers belongs to area unit commander or designated individuals. Base Maintenance Department is responsible for repairs or replacement of containers. The containers are the standard open market type and will be replaced as required. The receptacles are emptied on a as required basis, which in some instances, may not be frequent enough. There has not been a cost analysis conducted for cost-per-pickup. The receptacles will be cleaned manually. There has not been any receptacles stolen, but there has been a small amount of vandalism. The average life of a container has not been determined. There has not been a problem with household trash appearing in the roadside containers. The receptacles are very attractive

and advertise "Keep Camp Lejeune Clean" and "Keep Marine Corps Air Station



## OTHER LITTER CONTAINERS

Some litter bags are being distributed by the Clean Community Coordinator, with area commanders providing the rest. The percentage of privately owned motor vehicles containing litter receptacles is unknown and none are used in government owned vehicles. There are sufficient bulk disposal sites, pitch—in containers, dumpster containers, etc., to accommodate all motorists for disposal of litter bags. The containers are of adequate capacity for all commercial refuse putouts.

## SANITATION DEPARTMENT AND REFUSE COLLECTION EQUIPMENT

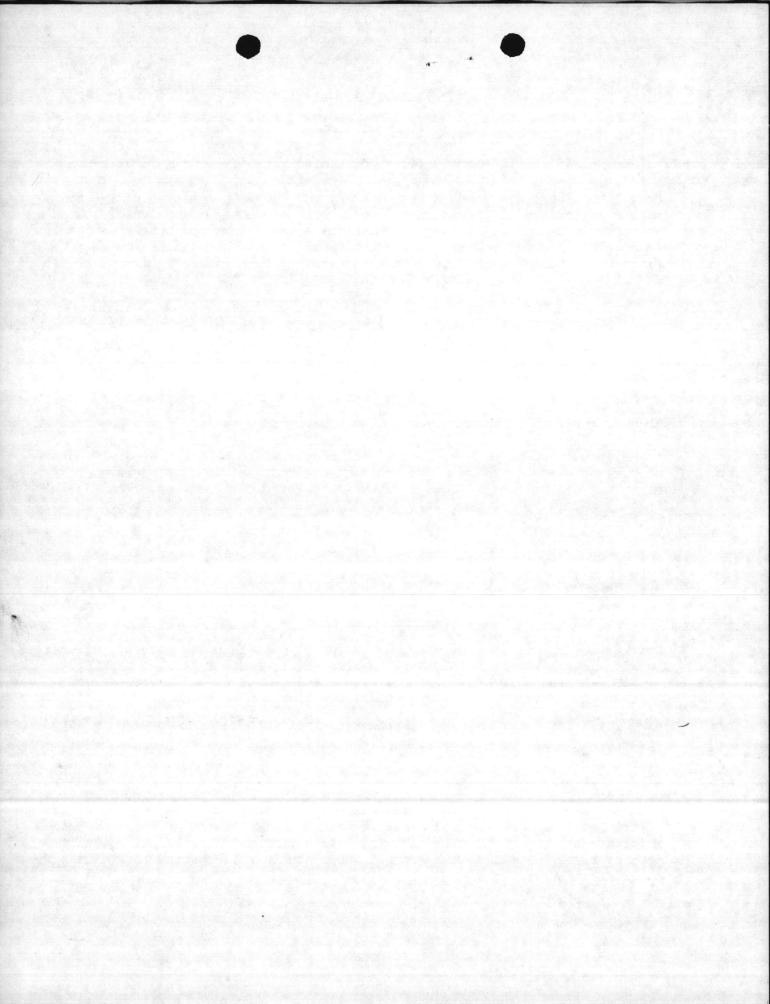
A study was made in 1976 and 1977 that indicated some fine tuning should be done, but with minimum results, insofar as manpower and equipment are concerned. The Sanitation Section of Base Maintenance Department has one twenty cubic yard rear loading packer, eight dumpmaster trucks, three dinosour trucks, three Lugger dempster dumpster trucks, three scooters for road policing. The contracted housing trash collector uses two rear loading packers and three scooters. All vehicles are water tight and securely covered to prevent trash spillage. The vehicles are designed to keep odors at a minimum. Weather conditions do not alter collection schedules, rescheduling is only necessary for vehicle repair. Our vehicles have a high priority with Motor Transport for repairs.

## TRAPPED LITTER

The base does not have a problem with trapped litter.

## STREET CLEANING

Street sweeping is done by sweeping equipment on main paved streets, circles, parking lots throughout the base, housing areas, and flight line parking areas of Marine Corps Air Station. The frequency of cleaning varies from twice daily on aircraft parking and flight line areas, twice weekly for high use parking areas, monthly on streets and semi-annual on the rest. Some areas are swept with vacuum type sweepers between 0800 to 1630, weather permitting, on a year round basis. The collected litter is disposed of in the sanitary landfill. Base personnel does all of the sweeping of roadways. The base has two Wayne model 1800 vacuum sweepers, one Wayne model 964 broom type street sweeper, one Wayne model 1-973 three-wheeled broom type sweeper and two tractor mounted broom type sweepers. The street cleaning unit is assigned to the Groundskeeping and Heavy Equipment sections of Base Maintenance Department. The base is responsible for cleaning all routes passing through the base and assists the state in policing the base side of all perimeter roads.



## OTHER CLEANING TECHNOLOGY

Sidewalks are cleaned on a as required basis and cleaned by hand or field tractor equipment. There is no problem with vacant lots aboard the base. Planted areas are cleaned twice a year with tractor equipment. Abandoned vehicles are removed through the Base Provost Marshall's office. Owners are given a 24 hour impound notice. If vehicle is not removed in that period, a privately owned towing company is called at the owner's expense. Catch basins are cleaned as needed by the Base Maintenance personnel with waste disposed of at the sanitary landfill.

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