UNITED STATES MARINE CORPS
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StaO 6280.1C

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STATION ORDER 6280.1C

From: Commanding Officer, Marine Corps Air Station Miramar
To: Distribution List

Subj: INTEGRATED SOLID WASTE MANAGEMENT PLAN

Ref: (a) Solid Waste Disposal Act
(b) Resource Conservation and Recovery Act of 1976
(c) Pollution Prevention Act of 1990
(d) Executive Order 13693
(e) DoD Instruction 4715.4
(f) DoD Strategic Sustainability Performance Plan
(g) Marine Corps Order P5090.2A Ch.3

Encl: (1) Integrated Solid Waste Management Plan

1. Situation. Station activities, tenant commands, visiting military units, contractors, barracks and housing residents, and other station visitors shall manage solid waste (SW) and recyclables per this Integrated Solid Waste Management Plan (ISWMP).

2. Cancellation. StaO 6280.1B

3. Mission. To implement an integrated solid waste management program for Marine Corps Air Station (MCAS) Miramar that maintains compliance with references (a) through (g).

4. Execution

a. Commander's Intent and Concept of Operations

(1) Commander's Intent

(a) All personnel shall actively support, implement, and manage their SW per the policies, procedures, and guidance set forth in this Order.

(b) The Environmental Management Officer shall:

1. Act as the focal point for the SW management program.

2. Budget for SW disposal.

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3. Develop SW disposal and recycling guidance.

4. Provide technical assistance and support to commands/units and tenants as needed.

5. Establish and implement written procedures to ensure compliance with SW management requirements.

(2) Concept of Operations

(a) Comply with applicable Federal, State, and local SW management regulations.

(b) Establish procedures to effectively, efficiently, and economically increase solid waste diversion.

(c) Implement waste minimization and source reduction techniques.

(d) Establish procedures for inspecting SW management and compliance.

(e) Adequately train personnel involved in SW management.

b. Subordinate Element Missions. Department Heads, and Officers in Charge shall ensure program participation to its fullest.

5. Administration and Logistics. This Order is issued under Distribution Statement A and is published electronically. It can be accessed online via the MCAS Miramar web page at https://www.mciwest.usmc.mil/inst/mcasm/Adj/SitePages/Home.aspx.

6. Command and Signal

a. Command. This Order is applicable to personnel assigned to and working aboard Marine Corps Air Station Miramar.

b. Signal. This Order is effective the date signed.

J. G. WOODWORTH

DISTRIBUTION: A

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List of Acronyms and Abbreviations

AB	Assembly Bill
BMP	Best Management Practice
BRAC	Base Realignment and Closure
C&D	Construction and Demolition
CalRecycle	California Department of Resources Recycling and Recovery
CBQ	Consolidated Bachelors Quarters
CCR	California Code of Regulations
CFR	Code of Federal Regulations
DOD	Department of Defense
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EPR Portal	Environmental Portal
FY	Fiscal Year
GHG	Greenhouse Gas
HW	Hazardous Waste
I&L	Installations and Logistics
ISWM	Integrated Solid Waste Management
ISWMP	Integrated Solid Waste Management Plan
MAW	Marine Aircraft Wing
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MCCS	Marine Corps Community Services
MCO	Marine Corps Order
NAS	Naval Air Station
OPNAVINST	Operational Navy Instruction
P2	Pollution Prevention
QRP	Qualified Recycling Program
RCRA	Resource Conservation and Recovery Act
S2P2	Strategic Sustainability Performance Plan
SB	Senate Bill
Station	MCAS Miramar
SW	Solid Waste
U.S.	United States
U.S.C.	United States Code

CHAPTER 1

Integrated Solid Waste Management Plan

1. Purpose. To establish guidelines, responsibilities, and procedures for operating, managing and enhancing Marine Corps Air Station Miramar's (MCAS) Integrated Solid Waste Management (ISWM) Program in accordance with the references. Marine Corps Air Station (MCAS) Miramar (Station) has prepared this ISWM Plan as required by MCO P5090.2A and other relevant regulations as described in Section 3.0. The purpose of this ISWM Plan is to accomplish the following:

a. Define and document the installation's current ISWM program;

b. Establish goals for improving solid waste (SW) management through ISWM;

c. Identify specific actions required to achieve diversion goals;

d. Promote compliance with applicable federal, state, local, and DOD SW management regulations and policies.

2. Applicability. This ISWMP applies to all military, civilian and contractor personnel working, residing, or visiting aboard MCAS Miramar.

3. Background. The DOD will implement measures to achieve solid waste and construction and demolition (C&D) debris diversion goals in accordance with the DOD Strategic Sustainability Performance Plan pursuant to E.O. 13693. Per DOD guidance, there is a requirement to reduce 50 percent of solid waste sent to a landfill by the end of 2015 and each year thereafter. SW is a waste type consisting of everyday items we consume and discard; it predominantly includes food wastes, yard wastes, containers and product packaging, and other miscellaneous wastes (i.e., newspapers, clothing, disposable tableware, office and classroom paper, furniture, wood pallets, rubber tires, and cafeteria wastes) from residential, commercial, institutional, and industrial sources. Therefore all personnel who either work or visit the Air Station and generate solid waste will participate in the authorized Station recycling program to the maximum extent practical.

a. MCAS Miramar operates a single, qualified recycling program designed to support the reduction of trash sent to the

landfill. Deputy Secretary of Defense Memo, Sales of Recyclable Materials (10 U.S.C.), provides guidance to the military services to implement their respective recycling programs. Marine Corps Order (MCO) P5090.2A provides further guidance for establishing a Marine Corps installation QRP and specifies the types of materials to be recycled. It provides the requirements for segregation, collection, accounting and how funds generated from the sale of recycled material will be obligated. Revenues generated from the recycling program are used to cover operation, maintenance and overhead costs incurred in the operation of the station's recycling program. Funds may also be used for pollution abatement, energy, and safety programs. After all operation and environmental costs are paid, funds may be utilized for non-appropriated morale, welfare and recreation purposes per the provisions of MCO 7300.21, appendix L. MCO 7300.21 gives procedures to provide unfunded obligation authority to installations and designates a Reimbursable Order Number (RON) for unfunded reimbursable obligation authority for Non-Appropriated Funds, MCCS.

b. The Department of the Navy, Environmental Readiness Program Manual (Operational Navy Instruction [OPNAVINST] 5090.1C), requires:

(1) All Navy installations worldwide that generate one ton or more of SW per day shall develop and implement an ISWM Plan and a Qualified Recycling Program (QRP);

(2) All Navy installations worldwide that generate one or more tons of SW per day must follow the SW reporting, SW management planning, recycling requirements, and affirmative procurement requirements;

(3) Installations shall design these programs as total systems that consider relative economic advantages of the latest technology as well as the potential for resource recovery. Installations shall develop ISWM Plans using the following priority basis: source reduction; reuse; recycling; and disposal via landfill or incineration.

4. Regulatory Framework. Installations must make every effort to maximize non-hazardous SW diversion to reduce the volume of waste disposal and minimize the overall cost of disposal. This section provides a summary of the major requirements that govern the content of this plan and the operation of the ISWM program aboard MCAS Miramar.

5. Federal Regulations and Guidelines

a. Solid Waste Disposal Act. The Solid Waste Disposal Act requires that federal installations comply with all federal, state, and local requirements concerning the disposal and management of SW. These requirements include permitting, licensing, and reporting. The Act encourages the beneficial reuse of waste through recycling and burning for energy recovery. Additionally it requires the procurement, to the maximum extent possible, of EPA guideline products that contain recycled materials. This is outlined in the Comprehensive Procurement Guide VI issued in August 2004 and authorized under the Resource Conservation and Recovery Act (RCRA) 6002.

b. Resource Conservation and Recovery Act of 1976. RCRA defines SW and identifies what type of SW is considered hazardous waste (HW), and sets strict requirements for the handling of HW. RCRA Subtitle C regulates HW, while Subtitle D focuses primarily on managing municipal and SW. The goals of Subtitle D encourage state and local governments to plan, permit, regulate, implement, and enforce agencies to manage and dispose of household and industrial or commercial non-hazardous SWs in an environmentally sound manner. This includes the recycling of waste material and resource conservation. Subtitle D has mandatory technical standards for non-hazardous SW disposal facilities.

c. Pollution Prevention Act of 1990. The Pollution Prevention Act of 1990 was enacted on 5 November 1990. This act established pollution prevention (P2) as national policy in the U.S. This act was pivotal because it instituted a paradigm shift that emphasized source reduction rather than to control, reduce, or eliminate the generation of pollutants. This is the basis for constructing an ISWM Plan.

d. Executive Order 13693. This EO was signed by the President on 19 March 2015. The goal of EO 13693 is to maintain Federal leadership in sustainability and greenhouse gas emission reductions. Section 16 of this EO revokes the following:

- Executive Order 13423 of January 24, 2007;
- Executive Order 13514 of October 5, 2009;
- Presidential Memorandum of December 2, 2011 (Implementation of Energy Savings Projects and Performance-Based Contracting for Energy Savings);
- Section 1 of Presidential Memorandum of February 21, 2012 (Driving Innovation and Creating Jobs in Rural America through Bio based and Sustainable Product Procurement);

- Presidential Memorandum of December 5, 2013 (Federal Leadership on Energy Management); and
- Presidential Memorandum of May 24, 2011 (Federal Fleet Performance).

g. DOD Instruction 4715.23. DOD Instruction 4715.23 establishes policy, assigns responsibility, and prescribes procedures to implement integrated solid waste management (ISWM) through waste prevention and recycling. These programs will reduce the generation or volume of solid waste for disposal and the impact of DOD activities on the environment in accordance with Section 2577 of Title 10, United States Code (U.S.C.); Part 172 of Title 32, Code of Federal Regulations (CFR); the goals and objectives of Section 6941a of Title 42, U.S.C.; and Executive Order (E.O.) 13693.

h. DOD Strategic Sustainability Performance Plan. It is DOD policy to address sustainability concepts in their acquisition and procurement processes, and in planning and managing their installations. The DOD has established a Strategic Sustainability Performance Plan (S2P2) that applies a systematic framework for improving environmental performance. One of the established goals is to have sustainability practices become the norm. Specifically, the S2P2 identifies a metric to have 95% of procurements be conducted sustainably. The percent of contract actions (new and modifications) that adhere to the principles of sustainability by containing requirements for: energy-efficient (Energy Star or FEMP designated), water-efficient, bio-based, environmentally preferable (e.g., certified by the Electronic Product Environmental Assessment Tool), non-ozone depleting, containing recycled content, and/or are non-toxic or less-toxic alternatives. A further sub-goal applies to products and services, including task and delivery orders, but excluding the acquisition of weapon systems and their components and spare parts. The Federal Procurement Data System will be used as the source of data on contracts meeting these requirements.

6. Other Applicable Federal Legislation. In addition to the above, SW regulations can be found in Title 40 of the Code of Federal Regulations (CFR), as well as in other legal resources. Below is a list of such regulations and acts.

a. 10 U.S. Code (U.S.C.) 2577, "Disposal of Recyclable Materials," 1982: includes the provisions that form the basis of the QRP and requirements for the distribution of proceeds generated from the sale of recyclables;

b. Military Construction Authorization Act of 1975: allows installations to retain net proceeds from the sale of QRP recyclables to be used for certain purposes (e.g., paying for energy conservation/P2 projects);

c. Federal Property and Administrative Services Act of 1949: regulates the distribution of proceeds from the sale of recyclable materials on federal facilities;

d. Military Construction Codification Act of 1982: amends 10 U.S.C. 2577 to allow the use of recycling proceeds for morale, welfare, and recreation activities;

e. 40 CFR Part 240: Guidelines for the Thermal Processing of Solid Wastes;

f. 40 CFR Part 243: Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste;

g. 40 CFR Part 246: Source Separation for Materials Recovery Guidelines;

h. 40 CFR Part 247: Comprehensive Procurement Guideline for Products Containing Recycled Material;

i. 40 CFR Part 255: Identification of Regions and Agencies for Solid Waste Management;

j. 40 CFR Part 256: Guidelines for Development and Implementation of State Solid Waste Management Plans;

k. 40 CFR Part 257: Criteria for Classification of Solid Waste Disposal Facilities and Practices;

7. State and Local Requirements. California regulations pertaining to SW management are found primarily in titles 14, 23, and 27 of the California Code of Regulations (CCR). CCR titles 14 and 27 are administered by the California Department of Resources Recycling and Recovery (CalRecycle). It should be noted that CCR title 14, Division 2 is administered by CalRecycle, and deals primarily with beverage container recycling. CCR title 23, Chapter 15, is administered by the State Water Resources Control Board.

8. MCO P5090.2A, Environmental Compliance and Protection Manual

a. General Requirements. The Secretary of Defense has made

the commitment that the DOD will take the lead in federal agency environmental compliance and protection. Military leaders are expected to conform to a national ethic and to consider a set of priorities that have been superimposed on our traditional defense mission. Consistent with this objective, the *Environmental Compliance and Protection Manual* was prepared to provide guidance and instruction to installations to enable them to meet stringent environmental legislation and increasing pressure by regulatory agencies at the federal, state, and local level. The Manual was prepared to accomplish the following:

(1) Implement the substantive requirements of DOD environmental policy.

(2) Outline the requirements for compliance with federal environmental regulations.

(3) Establish Marine Corps policy for funding, evaluating, and continually improving environmental compliance and protection programs, with emphasis on P2, training, and education.

b. The MCO identifies and establishes requirements for 18 environmental program areas. These areas are:

- Environmental Compliance Evaluation Program
- Environmental Training and Education
- Air Quality Management
- Emergency Planning and Response
- Cultural Resources Management
- HW Management
- Installation Restoration Program
- Natural Resources Management
- Noise Management
- Pesticide Pollution Prevention
- Pollution Prevention (P2)
- Drinking Water Systems and Water Conservation
- SW Management and Resource Recovery
- Aboveground/Underground Storage Tanks
- Polychlorinated Biphenyls Management
- Water Quality Management
- Waste Military Munitions
- National Environmental Policy Act

The SW chapter in MCO P5090.2A primarily governs the content of this plan and the operation of the ISWM program.

Chapter 2

Solid Waste Management and Resource Recovery

1. Purpose. This section establishes Marine Corps policy and responsibilities for compliance with statutory and procedural requirements for SW disposal, waste minimization, recycling, and resource recovery requirements. Federal, state, and local requirements concerning collection, storage, and disposal apply to Marine Corps installations that:

- Generate SW, whether it is collected by the Marine Corps or by a nonmilitary collector.
- Dispose of SW on Marine Corps property, regardless of whether the waste is originated by the Marine Corps or other sources.
- Dispose of SW off of Marine Corps property if the waste is generated by a Marine Corps installation and if the installation has direct management control over the disposal operation.

2. Background. Marine Corps SW Policy is that SW disposal programs be designed as total systems that consider the relative economic advantages of the latest technology as well as the potential for resource recovery. Installation SW programs should also explore shredding, compacting, energy recovery, and similar processes, and develop an installation ISWM plan according to the following hierarchy:

- Source reduction;
- Reuse;
- Donation;
- Recycling;
- Composting/mulching
- Incineration for volume reduction with energy recovery
- Other forms of volume reduction
- Landfilling

3. Solid Waste Disposal Procedures. Disposal activities, such as incineration, waste-to-energy, and landfilling, are used to manage remaining waste that cannot be prevented, reused, or recycled. Waste Management is contracted via a Navy Regional contract to collect and transport SW to the Miramar Landfill for disposal. SW is primarily collected in plastic bags. Janitorial staff empty SW containers from office areas into rolling containers and deposit the collected waste in dumpsters located outside of the buildings. Dumpster locations are currently determined by S-7. See Appendix A.

b. Storage of bulky wastes shall include, but is not limited to; removing all doors from large household appliances and covering the item(s) to reduce the problems of an attractive nuisance, and the accumulation of solid waste and water in and around the bulky items.

c. No waste is to be placed beside any SW collection point and any waste spilled during collection or transportation needs to be cleaned up immediately. Additionally, items that may damage the compactor truck (i.e., large wooden parts or furniture) should be disposed using one of the many 40 cubic yard roll-off dumpsters located throughout the Installation. See Appendix A.

d. Each unit, organization, and agency operating aboard MCAS Miramar will recycle solid waste to the greatest extent practical. This is applicable to all tenant units, organizations, and residents of the consolidated bachelor quarters. Procedures for management of particular waste streams are identified in Table 4-1.

4. Storage, Collection, and Disposal of Wastes

a. All solid wastes (or materials which have been separated for the purpose of recycling) shall be stored in such a manner that they do not constitute a fire, health, or safety hazard or provide food or harborage for vectors, and shall be contained or bundled so as not to result in spillage. All refuse containing food wastes shall be securely stored in covered or closed containers which are nonabsorbent, leak proof, durable, easily cleanable (if reusable), and designed for safe handling. Containers shall be of adequate size and in sufficient numbers to contain all food wastes, rubbish, and ashes that an establishment generates in the period of time between collections. Containers shall be maintained in a clean condition so that they do not constitute a nuisance, and to retard the harborage, feeding, and breeding of vectors. When serviced, storage containers should be emptied completely of all solid waste.

b. Refuse and recyclables are collected from the Station through a local waste disposal contractor. Dumpsters are owned and maintained by the contractor and are for **"Official Use"** by Installation tenants only and are marked as shown in Appendix B. Personnel residing in Lincoln Military Housing or residing off Station are not to use dumpsters for disposal of personal property.

c. All recycling collection containers are considered property of MCAS and any item placed into a recycling container becomes the property of MCAS Miramar and may not be pilfered.

d. Dumpster locations, volume, and frequency of collection are presented in Appendix A. Requests for immediate service, repair, additional containers, or any modifications to frequency of service must be requested via S-7.

5. Source Reduction. Marine Corps source reduction programs must incorporate the following, where feasible:

a. Composting to facilitate yard and food waste reduction.

b. Reducing excessive packaging, especially where packaging is used for attractive merchandising or convenience functions.

c. Procuring materials that generate less waste.

d. Reducing waste generation in an office by reusing materials (e.g., file folders, paper clips, and interoffice routing envelopes), employing double-sided copying, using electronic mail instead of paper memos, and reducing mail and distribution lists.

6. SW Resource Recovery. The philosophy underlying resource recovery is that material or energy recovery from waste is possible at a point downstream from the point of generation, and is an alternative to landfilling, incinerating, or otherwise disposing of the waste in a manner harmful to the environment or wasteful of natural resources. The elements of a SW Resource Recovery Program as listed in MCO P5090.2A are:

a. Recycling Programs. DOD policy requires all installations and commands to establish recycling programs and procedures that ensure, where cost-effective, that all installations and activities have, or participate in, QRP, and that these recycling programs are available to serve all host and tenant organizations occupying space on the installation, including leased space. Installations should also operate a composting program or participate in a regional composting program, if it is practicable to do so.

b. High-Grade Paper. Waste high-grade paper must be separated at the source of generation, separately collected, and sold for the purpose of recycling. Exceptions may be made only if analysis by the managing installation determines that a market for recovered products is not available, or that compliance is not economical.

c. Used Newspaper. Installations should separate used newspapers generated in Marine Corps residential areas at the source of generation, and sell them for recycling. Exceptions are appropriate only if the managing installation determines through analysis that markets are not available or that compliance is not economical.

d. Corrugated Container Waste. Installations should collect and sell waste-corrugated containers for the purpose of recycling. Exceptions are appropriate only if the managing installation determines through analysis that markets are not available or that compliance is not economical.

e. Resource Recovery Facilities. Marine Corps installations with resource recovery programs must follow requirements outlined in 40 CFR 243 and 245. Marine Corps installations that dispose of, or are responsible for the disposal of, residential, commercial, or institutional SW in amounts of 100 tons per day or more (equivalent to 26,000 tons or more annually), after the implementation of source separation and other waste reduction procedures, must establish and/or use resource recovery facilities to separate and recover materials and/or energy from such SW. Such resource recovery facilities may be owned by the Marine Corps, federal agencies, or local/regional governmental or commercial interests. Marine Corps installations must not compete with a locally available commercial recycling industry that offers a total SW resource recovery system as directed by SECNAVINST 4860.44. Installations should make every effort to use an established commercial industry and should only consider constructing resource recovery facilities after a thorough study has been made of alternative methods for processing SW.

f. Returnable Beverage Containers. Marine Corps installations must comply with state laws regarding beverage containers. They should bring to the attention of the Commandant of the Marine Corps, Facilities and Services Division any conflicts between federal (40 CFR 244) and state requirements, as well as any situations that preclude compliance.

Chapter 3

ISWM Resource Structure

1. Purpose. To establish policy and procedures for an effective ISWM program aboard MCAS Miramar.

2. Background

a. An effective ISWP program revolves around clear and unambiguous lines of authority and responsibility. All Marine Corps personnel must know and comply with the environmental rules and regulations that apply to their duties, maintain a general awareness of all applicable Marine Corps environmental policies and goals, and promote P2 as the primary means of achieving and maintaining compliance with environmental requirements.

b. At MCAS Miramar, S-7/Environmental Management (EMD) currently implements the ISWM program and, with support from S-4 Installation and Logistics (I&L), is responsible for compliance, education, and coordinating plan updates associated with SW and recycling.

3. Roles and Responsibilities

a. Commanding Officer

(1) Commander's Intent. To ensure that every unit, organization, contractors, and agency operation under MCAS Miramar's U.S. EPA identification number (CA9170024740) will, along with every Air Station household, participate to the fullest extent practicable in the Air Station's integrated solid waste management and recycling program. The Commanding Officer has overall responsibility for the ISWM program. Specific responsibilities include:

(a) Ensure installation-wide compliance with applicable federal and state laws, regulations, EOs, Marine Corps instructions/ policies, and local requirements pertaining to recycling and SW management.

(b) Ensure implementation and sustainment of the ISWM program.

(c) Establish a QRP program.

(d) Assign in writing, an ISW Manager and a QRP Manager.

b. Integrated Solid Waste and QRP Manager(s). The following subsections identify the responsibilities of an ISW Manager and QRP Manager. These roles may be combined into one billet.

(1) ISW Manager Responsibilities

(a) Review and monitor compliance with all relevant environmental regulations pertaining to SW management and recycling. Ensure compliance of tenant commands.

(b) Act as the installation point of contact for all issues regarding SW management and recycling (e.g., source reduction, recycling, and affirmative procurement).

(c) Advise and monitor activities of SW management personnel (i.e., contractors and/or installation personnel) to ensure compliance with SW and recycling regulations.

(d) Identify new recyclable materials markets, and discuss end use technologies (e.g., composting and incineration).

(e) Coordinate with major commands on SW and recycling issues (i.e., reporting and recordkeeping).

(f) Release ISWM guidelines (i.e., relating to P2, recycling, and source reduction strategies) to installation residents, civilian employees, and active duty installation personnel.

(g) Coordinate Installation-wide education and awareness initiatives.

(h) Notify the Environmental Management Division of any unauthorized wastes found in recycling bins and dumpsters.

(i) Ensure that the collection, storage, transportation, and disposal of SW are conducted in accordance with regulations.

(2) QRP Manager Responsibilities

(a) Supervise recycling personnel and facilities. Ensuring the Recycling Center storage lot is kept clean of loose trash and all material is segregated into commodity bins.

(b) Oversee daily operation of the recycling facility

and all recycling operations and monitor program participation.

(c) Ensure that all personal protective equipment for the QRP is being worn correctly and personnel are adhering to safety regulations.

(d) Establish a safety program within the Recycling Center for the proper handling and use of equipment (i.e., balers, forklifts, etc.). Establish comprehensive equipment maintenance and a vehicle operator-licensing plan.

(e) Conduct local sales and award sales agreements and manage the agreements in support of the QRP.

(f) Act as the liaison between contractors conducting recycling operations in support of MCAS Miramar.

(g) Maintain detailed records regarding receipt of revenues generated from the recycling program. Develop and submit potential recycling projects.

(h) Ensure all applicable environmental laws and regulations are followed per Marine Corps, State and local directives.

(i) Provide on-site assistance, as necessary, to all units, departments and activities for the implementation of recycling policies and ensuring sufficient recycling containers are provided to all organizations. Coordinate and establish collection sites that are in accordance with applicable fire safety codes. Determine the type and quantity of materials at the Station suitable for recycling.

(j) Identify locations where recyclable materials can be picked up, and notify program coordinators and contractors.

(k) Maintain detailed records pertaining to the direct sale of recyclables.

(l) Provide monthly status reports to the Director, Waste Management Division (WMD), S-7, and ISWM Manager pertaining to materials recycled by type and amounts as well as a monthly financial status of the recycling operations.

(m) Develop future budget requirements.

c. Tenant Units and Organizations

(1) Actively promote and engage in the Station Solid Waste Management and Recycling Program.

(2) Designate a recycling representative to be the point of contact for recycling matters. Personnel assigned will coordinate all recycling matters with the Station's Qualified Recycling Program (QRP) Manager.

(3) Provide garbage cans and recycling containers for inside of buildings and office spaces.

(4) All recyclable materials (metals, paper, etc.) will be turned into the Station Recycling Center. Items that are not collected by the Recycling Center are each individual unit's responsibility to manage properly. The Station recycling representative and command representative will determine whether material can be transferred to Defense Logistics Agency (DLA) Disposition Services.

(5) Each command and activity may commingle all recyclables in the blue 85 gallon tote bins or the white recycling dumpster provided for the collection of commingled recyclables. In addition, unit recycling and Hazmat coordinators will ensure all Marines and civilians understand which items should not be deposited in refuse or recycling dumpsters, i.e. cardboard should be placed in cardboard trailers.

(6) The Station recycling personnel will only pick up those recyclable items at the sites so designated by the QRP Manager. Large volumes of recyclable materials that rapidly accumulate may require the tenant unit to request collection and coordination by the Recycling Center personnel as well as unit logistical support.

(7) Conduct daily inspections of assigned dumpsters to ensure all materials are collected and organized, all trash in and around the recycling center is picked up, and that all solid waste dumpsters are closed at all times.

(8) Remove improperly disposed items from assigned refuse or recycling dumpsters and manage properly.

(9) Notify the ISW and QRP Manager when dumpsters require servicing or repair.

(10) Garbage can maintenance and or replacement is the responsibility of the organization.

(11) The use of clear plastic trash bags is preferred over black or green trash bags, and should be used by all tenants. Clear bags allow for easy identification of improperly disposed items.

d. S-7 Environmental Management

(1) Advise the Commanding Officer on all matters relevant to the management of the ISWM Program and QRP.

(2) Supervise the implementation of this Order.

(3) Chair the Recycling Advisory Board as required.

(4) Develop all budget data for proposed use of recyclable funds to be submitted to the MCAS Miramar Commanding Officer, Comptroller, and HQMC QRP Manager when requested.

(5) Provide staffing, directing and supervising of MCAS Miramar's Recycling program.

(6) Conduct internal financial review of funds provided or mailed to the QRP, which are then turned in to the Budget Analyst.

(7) Provide promotion/publicity for the recycling program through the Station newspaper, website, periodicals, and other methods as required.

(8) Ensure adequate and appropriate equipment is provided for a successful recycling program.

e. S-7 Finance. In accordance with applicable laws and regulation and this Order, promote MCAS Miramar's recycling program by:

(1) Managing the receipt, maintenance and disbursement of revenues generated from the recycling program per all applicable regulations and guidance.

(2) Supervising and monitoring the development and submission of a written recycling revenue monthly METRIC report. This monthly metric is to account for all revenues received, maintained and disbursed within the month, quarter, and within the fiscal year.

(3) Allocating funds for approved projects and authorized expenditures through the budget process.

f. S-7 Waste Management Division

(1) Assign a point of contact for solid waste contracting oversight.

(2) Coordinate solid waste collection container requirements with ISW Manager.

(3) Provide monthly solid waste disposal statistics to the Environmental Management Officer (EMO).

(4) Ensure solid waste dumpsters are repaired in a timely manner, and that all necessary signage is present.

(5) Provide recommendations to the EMO concerning the requirement to meet with the Recycling Advisory Board to discuss recycling matters.

g. Solid Waste Working Group. The Solid Waste Working Group (SWWG) is administered by the Director, Waste Management Division. The primary focus of the group is successful management of solid waste and implementation of the QRP. Other group responsibilities include:

(1) Identify additional potentially recyclable materials generated on Station.

(2) Ensure improvement of existing programs, including collection procedures, storage practices, and marketing efforts through the Environmental Management System (EMS) used aboard MCAS Miramar.

(3) Participate in promotional and educational efforts regarding solid waste management and support such efforts made by other units aboard MCAS Miramar.

(4) Monitor progress towards meeting solid waste and recycling goals implemented as objectives and targets within the EMS.

The Solid Waste Working Group meets annually to address solid waste management issues and is composed of representatives from the following organizations:

- Environmental Management Division

- Public Works Division (PWD)
- Marine Corps Community Services (MCCS)
- QRP Manager
- Facilities Engineering and Acquisition Division (FEAD)

g. Director, Public Works Division (PWD)

(1) Incorporate provisions in contracts requiring contractors to meet executive orders for diversion of solid waste and construction and demolition products and/or debris to the maximum extent practical.

(2) Provide solid waste diversion and recycling data to the Solid Waste Manager for all construction, demolition and renovation projects. Data shall include, but is not limited to, the type of waste, recycled material and amount diverted. Appendix C applies.

h. Marine Corps Community Services (MCCS)

(1) Provide a MCCS representative to coordinate with MCAS Miramar's QRP Manager to supervise the implementation of the recycling program by ensuring, where practicable, that MCCS activities participate in MCAS Miramar's recycling program.

(2) Act as a member of the QRP Fund Advisory Board.

(3) Participate as member of the SWWG.

i. Director, Consolidated Bachelor Housing

(1) Make occupants of bachelor quarters, including transient personnel, aware of the contents of this Order and ensure that the policies and procedures governing recycling in the consolidated bachelor quarters are followed.

(2) Promote & support a barracks recycling plan through:

(a) Ensuring each room has serviceable recycling bins.

(b) Ensuring any community recycling bins are emptied into the parking lot recycling containers as required.

(c) Monitoring the parking lot recycling collection bins and dumpsters to ensure that they are being emptied in a timely and supportive manner by the contractor or Station Recycling Center personnel, and that recyclables are not entering the dumpsters.

(d) As required, addressing the barracks recycling plan & procedures at CBQ meetings or with the QRP Manager as necessary.

j. Facilities Engineering and Acquisition Division (FEAD)

(1) The FEAD reviews materials maintained by the contractor to ensure ordering and disposal practices are conducted in a manner that is compliant with Federal and State regulations, and assists in contractor LEED accreditation.

(2) FEAD will provide solid waste diversion data to the Solid Waste/QRP Manager for all construction demolition and renovation projects.

(3) FEAD will ensure contractors properly sort materials and utilize the Station Recycling Center as the first in line to receive recyclable commodities.

k. Group Environmental Compliance Coordinators (ECC)

(1) Serve as the point of contact for matters involving recycling issues and compliance with this Order. Ensure all subordinate commands adhere to procedures provided in this Order and requests disposal guidance as needed and/or required.

(2) Conduct inspections of all environmental areas, including recycling storage areas. Ensure all unit/department required inspections are conducted and ensures that un-shredded PII information is not placed in recycling containers.

(3) Ensure that proper MCAS Miramar recycling account number is entered on each scrap turn-in document (DD Form 1348-1A) by including the following statement "Proceeds for the sale of recyclable material are to be credited to the installation's Recyclable Materials Account- 17F3875.27RM 00567865 067443 3C 000000 67865CV27RMD."

Chapter 4

Waste Characterization

1. Purpose. In order to establish procedures for management of the various waste streams generated on Miramar, a formal waste characterization study was conducted during 2014. A follow up study will be conducted in 2019 in order to determine progress and target further waste streams. This basic survey is the simplest type of survey that focuses on classifying larger categories as percentages of the total SW stream. The waste characterization methodology used for this ISWM Plan was visual observations of SW collected over a week's period, observations of waste-generating areas and their processes, interviews with personnel, and data reviews of SW reports. Interviews were conducted with management personnel and others, as appropriate, to identify existing SW management practices and to collect information on types and quantities of wastes generated and the costs associated with existing and potential ISWM activities. Available contract, waste disposal, and recycling/reuse records were reviewed, in addition to SW annual reports describing quantities and costs of various SW streams, reduction measures, and success stories.

2. Background. SW is generated by residential, commercial and institutional, industrial, construction and demolition (C&D), and landscaping activities at the installation. Table 4-1 below summarizes the waste generation and handling of SW streams.

Table 4-1. SW Generation and Handling

Waste Type	Generation	Collection	Disposal
Aluminum cans	Empty beverage containers from various locations at the installation.	Collected in separate aluminum recycling containers at point of generation and commingled in recycling dumpsters/bins.	Aluminum cans at the Recycling Center are managed through the QRP.
Bulk goods	CBQ, equipment and furniture upgrades, MCCS, equipment supply, and shops.	MCAS Miramar Recycling Center currently accepts only metal furniture or racks.	Bulk metal furniture is managed through the QRP. Station Property also manages some used furniture.

Waste Type	Generation	Collection	Disposal
Cardboard	Delivery of equipment and supplies to the installation.	Collected at point of generation in outside recycling containers throughout the installation.	Cardboard is managed through the QRP.
C&D debris	C&D activities on the installation.	Managed by contractor at project site.	Contractors are responsible under terms of their contracts for proper recycling or disposal.
Cooking Oil and Grease	Food preparation at the Dining Facility, and installation restaurants.	Collected in drums at waste storage area near points of generation at the Dining Facility, and installation restaurants.	Grease and cooking oil are collected by a vendor.
Electronic Waste (e-Waste)	Outdated and expendable equipment from various locations installation-wide.	E-Waste is collected at the Recycling Center. Organizations may also dispose via DLA.	A local recycling vendor collects the E-Waste from the Recycling Center.
Ferrous Metal Cans	Steel cans from dining facilities.	Cans at the Dining Facility are segregated for recycling and stored in outdoor bins near the kitchen.	Cans are managed through recycling contractor and the QRP.
Food waste (other than cooking oil)	Housing, Commissary, restaurant, and food service locations	Discarded in SW containers nearest point of generation.	All food, aboard the installation, is currently disposed of as SW.
Glass	Empty beverage and food containers from various locations at the installation.	Glass is segregated and sent to the Recycling Center where it is stored prior to recycling.	Glass is managed through recycling contractor and the QRP.
Green waste	Primarily from golf course maintenance.	Green waste bin is located near at the golf course.	Grass clippings are mulched at the time of cutting; tree trimming waste is collected in bins and sent to the Miramar Landfill for compost.

Waste Type	Generation	Collection	Disposal
Metals	Generated by maintenance activities at the various shops, construction and demolition activity, and MCCS.	Metal recycling bins are located at the recycling center and may be supplied to any point of generation at the organization's request.	All metal generated aboard the installation is managed through the QRP.
Paper	Primarily from administrative functions across the installation.	High grade white paper should be segregated at the point of generation. Colored paper may be commingled in recycling dumpsters.	Paper is managed through recycling contractor and the QRP.
Plastic Containers	Empty beverage containers from dining facilities, CBQ, and other locations at the installation where beverages are consumed.	Plastic beverage containers can be segregated at the point of generation or commingled.	Plastics number 1-7 are managed through recycling contractor and/or the QRP.
Plastic Packaging/Film	Delivery of equipment and supplies to installation. Pallet wrap.	Collected at the point of generation and placed in white recycling bins.	Plastic wrap is managed through recycling contractor.
Tires	Maintenance of government-owned vehicles and privately-owned vehicles.	Tires are collected at satellite accumulation areas. Additionally, tires are stored at the 90-Day Accumulation Site.	Commercial tires recovered by MCCS are recycled off Station through a private vender. Military tires are managed at each unit for DLA disposal.
Wood and Plastic Pallets	Delivery of equipment and supplies to installation.	Plastic pallets from the dining facilities are sent back to the vendor for reuse. Wood pallets are collected and stored at the MCAS Miramar Recycling Center.	Pallets are managed through the QRP. Broken pallets are sent to Miramar Landfill for wood chipping.

Waste Type	Generation	Collection	Disposal
Wood scrap	Renovations, carpentry, received shipments of large aircraft components, and small projects at the Installation.	Collected in shops, hangar, or stored at project sites.	Unpainted or untreated wood scrap is currently recycled via QRP. Painted wood is managed as garbage, and treated wood is managed as Special Waste.

3. Residential. Most residential waste from the bachelor quarters and Lincoln family housing units consists of food and food packaging materials. Food packaging materials include plastic, paper and glass beverage containers, metal cans, paperboard boxes, and plastic/aluminum wrapping materials. Waste generated from Lincoln housing (i.e., food and recyclables) is collected and managed by Lincoln's contracted waste transporter.

4. Commercial and Institutional. MCAS Miramar institutionally generates white and mixed paper, toner cartridges, e-waste, cardboard, and beverage containers. Personnel support services include the dining facility, MCCS, private food vendors, and recreational facilities. These services generate food and food packaging wastes, aluminum cans, glass and plastic bottles, and steel cans. Medical and dental support activities typically generate paper products (i.e., computer paper, photocopy paper, towels, robes, etc.), packaging material, and plastic containers.

5. Industrial. MCAS Miramar industrial departments and tenant commands include support activities such as fueling, communications, vehicle maintenance, pest control, and facilities maintenance shops. Typical waste streams for industrial activities are varied. Material handling and storage facilities primarily generate wood, plastic, and packaging materials. System support activities generate scrap electrical and mechanical equipment and metals. Maintenance facilities generate wood, metal, plastic, and packaging materials.

6. Construction and Demolition. C&D debris is generated by construction projects at the installation. C&D debris of structures generally results in a waste stream composition of rubble (i.e., concrete mixed with rebar and wire mesh, cinder blocks, and dirt), painted wood, asphalt roofing, brick, metal, and reusable items such as utility fixtures, windows, and doors. Management and reporting of the types and amounts generated and recycled are the responsibility of the contractor under the terms of the contract.

7. Landscaping. Green/yard waste is generated by landscaping activities at the Station. The majority of the landscaping activities are conducted at the on-site golf course. Lawn clippings are mulched and left on the ground. The majority of the shrub and tree clippings are disposed of at the Miramar Landfill. Some landscape waste is collected by the Installation's landscape contractor in the lot adjacent to building 6687, for disposal via the Miramar Greenery.

Chapter 5

Qualified Recycling Program

1. Purpose. This section establishes MCAS Miramar policy and procedures associated with the Air Station's QRP.

2. Background. DOD policy requires all installations and commands to establish recycling programs and procedures that ensure, where cost-effective, that all installations and activities have, or participate in, QRP, and that these recycling programs serve all host and tenant organizations occupying space on the installation, including leased space. DOD has further established a goal of diverting 50% of all solid waste from the landfill by end of 2015 and thereafter. The QRP Business Plan is included as Appendix E.

3. Management of Proceeds from QRP. The Station is entitled to reimbursement of proceeds from sales of recyclable materials by DLA only when the designated account number appears on the Disposal Turn-In Document (DTID). Proceeds shall be deposited into Budget Clearing Account (Suspense) 17F3875.27RM 005 67865 067443 3C 000000 67865CV27RMD.

a. Distribution of Proceeds. Proceeds must first cover the QRP's annual operating budget. Excess proceeds may be used to fund specific projects considered for funding by the Fund Advisory Board and approved by the Installation Commander. All projects recommended for funding will be reviewed by the Commandant of the Marine Corps (HQMC) prior to distribution of funds.

(1) If a balance remains, not more than 50 percent of that balance may be used at this Air Station for projects for pollution abatement, energy conservation, and occupational safety and health activities.

(2) Any remaining balance may be transferred to Marine Corps Community Services (MCCS) as directed by the Fund Advisory Board, and approved by the Installation Commander.

4. Commingled Recyclables. In order to raise diversion rates, a new program was instituted to alleviate the requirement for segregation of recyclables. Recycling bins, or dumpsters, have been placed throughout the Installation for the collection of commingled recyclables. All common recyclables can now be commingled in any recycling container in accordance with Appendix E.

APPENDIX A
SOLID WASTE CONTAINER LOCATION

Appendix A

Marine Corps Air Station (MCAS), Miramar												
ELIN	**Location By Building**	**Activity / Customer**	**No. and Size of Containers**	**Service Frequency**	**Collection Days**							**Annual Services**
					SUN	**MON**	**TUE**	**WED**	**THUR**	**FRI**	**SAT**	
	STATION FACILITIES											
050AA	MAC1-DET B	MCAS Miramar	2 -5 CY	W			X					104
050AA	EOD/B-21020	MCAS Miramar	2 -5 CY	W		X						104
050AA	NBC/B-21021	MCAS Miramar	1 -5 CY	2W			X			X		104
050AA	CAMP ELLIOT B-21132B	MCAS Miramar	1 -5 CY	W			X					52
050AA	CAMP ELLIOT/B-21138	MCAS Miramar	2 -5 CY	2M	Twice Monthly Tuesdays							48
050AA	WAREHOUSE 21139	MCAS Miramar	1 -40 CY	1M	Monthly Mondays							12
050AA	PISTOL RANGE/B-21302	MCAS Miramar	2 -5 CY	W								104
050AA	FIELD MAINT. SHOP/ B-22101	MCAS Miramar	1 -5 CY	W			X					52
050AA	INERT WHSE/B-22102	MCAS Miramar	1 -5 CY	W			X					52
050AA	WEAPONS ASSEMBLY/ B-22103	MCAS Miramar	1 -5 CY	2W			X			X		104
050AA	WEAPONS ASSEMBLY-REG. LUMBER/B-	MCAS Miramar	1-40 CY	3M	Three Times Monthly							36
050AA	WEAPONS ASSEMBLY/ B-22103	MCAS Miramar	1 - 40 CY	M	Monthly							12
050AA	MAINT. SHOP/B-22595	MCAS Miramar	1 -5 CY	W			X					52
050AA	RIFLERANGE-E MIR/B-23030	MCAS Miramar	2 -5 CY	W			X					104
050AA	LEGAL/B-2244	MCAS Miramar	1 -5 CY	2W		X					X	104
050AA	MITSCHER & ELROD PARK	MCAS Miramar	1 -5 CY	2W		X				X		104
050AA	JRC/TMO/B-2258	MCAS Miramar	1 -5 CY	2W		X			X			104
050AA	ELECTRONICS/COM M/ B-3322	MCAS Miramar	1 -5 CY	2M	Twice Monthly							24
050AA	3RD MAW BAND/B-3379	MCAS Miramar	1 -5 CY	3W		X		X		X		156
050AA	MESS HALL/B-5500	MCAS Miramar	5-5 CY	5W		X	X	X	X	X		1,300
050AA	CHAPEL/B-5632	MCAS Miramar	1 -5 CY	2W		X				X		104
050AA	MWSS-373 WHSE/B-6001	MCAS Miramar	2 -5 CY	W						X		104
050AA	MWSS-373/B-6003	MCAS Miramar	1 -5 CY	4W			X	X	X	X		208
050AA	MWSS-374/B-6004	MCAS Miramar	1 -5 CY	3W			X		X	X		156
050AA	GENERAL STORE/B-6006	MCAS Miramar	1 -5 CY	3W			X		X	X		156
050AA	MWSS-374/B-6008	MCAS Miramar	1 -5 CY	4W			X	X	X	X		208
050AA	NMC1/B-6012	MCAS Miramar	1 -5 CY	2W		X			X			104

ELIN	Location By Building	Activity / Customer	No. and Size of Containers	Service Frequency	Collection Days							Annual Services
					SUN	MON	TUE	WED	THUR	FRI	SAT	
050AA	MAG-46-MTCE/B-6014	MCAS Miramar	1 -5 CY	2W		X			X			104
050AA	GENERAL STORAGE/ B-6016	MCAS Miramar	1 -5 CY	3W			X		X	X		156
050AA	MWSS-373/B-6018	MCAS Miramar	1 -5 CY	3W			X		X	X		156
050AA	MWSS-373/B-6022	MCAS Miramar	1 -5 CY	W		X						52
050AA	HEAVY EQUIPMENT (ADCSSD)/B-	MCAS Miramar	1 -5 CY	3W			X	X		X		156
050AA	CSSD-14/B-6217	MCAS Miramar	2 -5 CY	5W	X		X	X		X	X	520
050AA	WAREHOUSE/B-6237	MCAS Miramar	1 -5 CY	3W		X	X		X			156
050AA	WAREHOUSE/B-6238	MCAS Miramar	2 -5 CY	3W		X			X		X	312
050AA	THRIFT STORE/B-6275	MCAS Miramar	1 -5 CY	3W		X	X		X			156
050AA	RECYCLING/B-6310	MCAS Miramar	4-5 CY	3W		X			X		X	624
050AA	RECYCLING/B-6310	MCAS Miramar	2-40 CY	3M	Three Times Monthly							72
050AA	RECYCLING (TREATED LUMBER)/B-	MCAS Miramar	1-40 CY	2M	Twice Monthly							24
050AA	PWD/B-6311	MCAS Miramar	2 -5 CY	2W		X			X			208
050AA	FOOD LOCKER/B-6316	MCAS Miramar	1 -5 CY	2W		X				X		104
050AA	ENVIRONMENTAL/B-6317	MCAS Miramar	1 -5 CY	W		X						52
050AA	TRANSPORTATION/ B-6317	MCAS Miramar	1 -5 CY	3W			X		X		X	156
050AA	TRANSPORTATION/ B-6318	MCAS Miramar	1 -5 CY	3W			X		X		X	156
050AA	SECURITY KENNEL ADMIN/B-6644	MCAS Miramar	1 -5 CY	W		X						52
050AA	HAZMAT											
050AA	STORAGE/TRANSFER/ B-6687	MCAS Miramar	1 -5 CY	2W		X			X			104
050AA	MALS-16/B-7116	MCAS Miramar	2 -5 CY	2W			X			X		208
050AA	MACG-38 STORAGE/ B-7133	MCAS Miramar	2 -5 CY	3W		X		X		X		312
050AA	MACG-38 STORAGE/ B-7133	MCAS Miramar	1-40 CY	W			X					52
050AA	ARMORY/B-7134	MCAS Miramar	1 -5 CY	2W			X		X			104
050AA	MALS-11 VAN PAD/B-7136	MCAS Miramar	1-40 CY	W				X				52
050AA	AV SUPPLY/B-7208	MCAS Miramar	1 -5 CY	3W		X		X	X			156
050AA	WAREHOUSE-REAR/ B-7209	MCAS Miramar	2-40 CY	W				X				104
050AA	WAREHOUSE-FRONT/ B-7209	MCAS Miramar	4-5 CY	4W		X		X	X		X	832
050AA	MACG-38/B-7515	MCAS Miramar	1 -5 CY	5W		X	X	X	X	X		260

ELIN	Location By Building	Activity / Customer	No. and Size of Containers	Service Frequency	Collection Days							Annual Services
					SUN	MON	TUE	WED	THUR	FRI	SAT	
050AA	FUEL FARM/B-7229	MCAS Miramar	1 -5 CY	2W			X			X		104
050AA	AVIONICS/B-7490	MCAS Miramar	2 -5 CY	5W		X	X	X		X	X	520
050AA	G6/B-7494	MCAS Miramar	1 -5 CY	3W		X		X		X		156
050AA	ADMINISTRATION											
050AA	OFFICE (AVIATION SUPPLY)/B-7550	MCAS Miramar	2 -5 CY	5W		X	X	X		X	X	520
050AA	AVIONICS SHOP/B-7690	MCAS Miramar	2 -5 CY	5W		X	X	X	X	X		520
050AA	CRYOG/B-8113	MCAS Miramar	1-40 CY	2M	Twice Monthly							24
050AA	VMGR-352/B-8116	MCAS Miramar	1 -5 CY	5W		X	X	X	X	X		260
050AA	GSE SHOP/B-8119	MCAS Miramar	1 -5 CY	2W			X		X			104
050AA	PARKING LOT/B-8219	MCAS Miramar	3-5 CY	5W		X	X	X	X	X		780
050AA	PARKING LOT/B-8219	MCAS Miramar	2-40 CY	3W		X		X		X		312
050AA	H&HS/B-8380	MCAS Miramar	1 -5 CY	2W			X			X		104
050AA	3RD MAW	MCAS Miramar	4-5 CY	3W		X		X		X		624
050AA	ENGINEERING MAINT. SHOP/B-	MCAS Miramar	2 -5 CY	6W		X	X	X	X	X	X	624
050AA	MAG-11/B-8477	MCAS Miramar	2 -5 CY	2W			X		X			208
050AA	GSE/B-8478	MCAS Miramar	2 -5 CY	2W				X		X		208
050AA	COMCAB-WEST/B-8630	MCAS Miramar	2 -5 CY	3W		X		X		X		312
050AA	APPLD INST											
050AA	TRAINING/ B-8656	MCAS Miramar	1 -5 CY	3W		X		X		X		156
050AA	STORAGE/B-8669	MCAS Miramar	1 -5 CY	2M	Twice Monthly							24
050AA	COMPTROLLER/B-8671	MCAS Miramar	1 -5 CY	3W		X		X		X		156
050AA	FISC/H2/B-8672	MCAS Miramar	1 -5 CY	W				X				52
050AA	HGR O PARKING LOT	MCAS Miramar	1 -5 CY	5W		X	X	X	X	X		260
050AA	HQ MAG-46/B-9175	MCAS Miramar	2 -5 CY	5W		X	X	X	X	X		520
050AA	ELEC/COMM/B-9176	MCAS Miramar	1 -5 CY	W		X						52
050AA	OUTBLDG CALA AREA/ B-9184	MCAS Miramar	1 -5 CY	M	Monthly							12
050AA	A/C OPS/B-9211	MCAS Miramar	2 -5 CY	2W		X			X			104
050AA	A/C FIRE STATION/B-9227	MCAS Miramar	1 -5 CY	5W		X	X	X	X	X		260
050AA	ANTENNA STATION/B-9265	MCAS Miramar	1 -5 CY	2M	Twice Monthly Tuesdays							24
050AA	RECEIVING STATION/ B-9267	MCAS Miramar	1 -5 CY	M	Monthly Tuesdays							12
050AA	HANGER 4/B-9470	MCAS Miramar	4-5 CY	5W		X	X	X	X	X		1040

ELIN	Location By Building	Activity / Customer	No. and Size of Containers	Service Frequency	Collection Days							Annual Services
					SUN	MON	TUE	WED	THUR	FRI	SAT	
050AA	HANGER 3/B-9500	MCAS Miramar	3-5 CY	5W		X	X	X	X	X		780
050AA	HANGER 5/B-9570	MCAS Miramar	5-5 CY	5W		X	X	X	X	X		1300
050AA	MISSILE MAINT/B-9648	MCAS Miramar	2 -5 CY	6Y	Six Times Yearly							12
050AA	HANGER 6/B-9670	MCAS Miramar	1-40 CY	2W			X		X			104
050AA	CONSOLIDATED											
050AA	THEATER/B-2242	MCAS Miramar	3-6 CY	3W		X			X		X	468
050AA	WAREHOUSE (PWC CODE 800)/B-6240	MCAS Miramar	3-5 CY	2W		X			X			
	CAT A FACILITIES											
050AB	POND	MCCS CAT A	1 -5 CY	M	Monthly							12
050AB	FITNESS CENTER/B-2002	MCCS CAT A	2 -5 CY	3W		X		X		X		312
050AB	MUSEUM/B-2264	MCCS CAT A	1 -5 CY	2W		X					X	104
050AB	MCCS/B-2273	MCCS CAT A	1 -5 CY	3W		X		X		X		156
050AB	FAMILY SERVICES/B-2274	MCCS CAT A	1 -5 CY	2W		X			X			104
050AB	GYM/B-2471	MCCS CAT A	2 -5 CY	2W		X				X		208
050AB	SOFTBALL FIELD/B-2626	MCCS CAT A	1 -5 CY	2W		X			X			104
050AB	LIBRARY/B-5305	MCCS CAT A	1 -5 CY	W				X				52
050AB	THE BARN/B-7115	MCCS CAT A	1 -5 CY	2W		X			X			104
050AB	FAMILY SERVICES B-2525	MCCS CAT A	2 -5 CY	5W		X	X	X	X	X		520
050AB	MCCS RECEIVING/B-6011	MCCS CAT A	1 -5 CY	2W		X			X			104
	CAT C FACILITIES											
050AC	OFFICER'S CLUB/B-	MCCS CAT C	3-6 CY	3W		X		X		X		468
050AC	HORSE STABLES/B-19547	MCCS CAT C	1 -5 CY	W			X					52
050AC	MIRAMAR LODGE/B-2516-18	MCCS CAT C	4-5 CY	2W		X			X			416
050AC	(MAINT.)/ B-3426	MCCS CAT C	1 -5 CY	W				X				52
050AC	GOLF COURSE (SAND TRAP REST.)/B-	MCCS CAT C	2 -5 CY	W					X			104
050AD	COMMISSARY / B-2661	MCAS Miramar	15-6 CY	D7	X	X	X	X	X	X	X	5460
050AE	MEDICAL CLINIC / B-2496	MCAS Miramar	5-5 CY	4W		X		X		X	X	1040
050AE	DENTAL CLINIC / B-	MCAS Miramar	1 -5 CY	4W		X		X		X	X	208
050AE	DENTAL CLINIC / B-	MCAS Miramar	1 -5 CY	W			X					52
	Reserve Center/B-20300											
050AF	RESERVE CENTER/B-20300	MCAS Miramar	2 -5 CY	2W			X			X		208

ELIN	Location By Building	Activity / Customer	No. and Size of Containers	Service Frequency	Collection Days							Annual Services
					SUN	MON	TUE	WED	THUR	FRI	SAT	
050AF	B-7684/85 BRIG	MCAS Miramar	6-6 CY	3W		X		X		X		936
050AG	VET CLINIC/B-6360	MCAS Miramar	1 -5 CY	2W		X			X			104
	BEQ/BOQs MCAS Miramar											
050AH	BOQ/B-4312	MCAS Miramar	1-5 CY	5W		X	X	X	X	X		260
050AH	BOQ/B-4325	MCAS Miramar	1-5 CY	5W		X	X	X	X	X		260
050AH	BEQ/B-5105	MCAS Miramar	2-4 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5110	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5111	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5207	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5210	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5302	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5307	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5401	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5403	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5401	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5406	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5414	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5416	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5509	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5533	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5535	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5640	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5699	MCAS Miramar	4-5 CY	5W		X	X	X	X	X		1040
050AH	BEQ/B-5703	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5704	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AH	BEQ/B-5712	MCAS Miramar	2-5 CY	5W		X	X	X	X	X		520
050AJ	FIRE STATION #62, E. MIRAMAR/B-	MCAS Miramar	2-5CY	W			X					104
050AJ	FIRE STATION #62,	MCAS Miramar	1-40 CY	M	Monthly							12
050AJ	FIRE STATIONS/B-	MCAS Miramar	2-5 CY	2W		X		X				208

ELIN	Location By Building	Activity / Customer	No. and Size of Containers	Service Frequency	Collection Days							Annual Services
					SUN	MON	TUE	WED	THUR	FRI	SAT	
	Child Care MCAS Miramar											
050AK	CHILD CARE CENTER/B-2740	MCAS Miramar	2-5 CY	2W		X			X			208
	MCAS Miramar PWD – CAT B Facilities											
050AL	YOUTH CENTER/B-2247	MCCS CAT B	1-5 CY	2W				X			X	104
0505AL	SWIMMING POOL/B-2396	MCCS CAT B	1-5 CY	2W		X			X			104
050AL	YOUTH CENTER/B-2247	MCCS CAT B	1-5 CY	2W				X			X	104
050AL	YOUTH CENTER/B-2247	MCCS CAT B	1-5 CY	2W				X			X	104
050AL	AUTO HOBBY SHOP/B-6673	MCCS CAT B	2-5 CY	W			X					104
	MCAS Miramar Leather Neck Museum											
050AM	T-4203 LEATHER NECK MUSEUM	MCAS Miramar	1-5 CY	W		X						44
050AN	MCX FOOD COURT/B-2261	MCCS CAT C	1 -5 CY	5W		X	X	X	X	X		260
050AN	MCX WAREHOUSE/B-6239	MCCS CAT C	1 -5 CY	2W		X			X			104
050AN	MCX FLEET CAFETERIA/B-	MCCS CAT C	2 -5 CY	5W		X	X	X	X	X		520
050AN	MCX WAREHOUSE/ B-	MCCS CAT C	2 -5 CY	2W		X		X				208
050AN	MCX JET MART/B-2499	MCCS CAT C	2 -5 CY	2W		X		X				208
050AN	MARINE CORPS EXCHANGE/B-2660	MCCS CAT C	10-6 CY	D7	X	X	X	X	X	X	X	3640
050AN	MCX CAR WASH B-	MCCS CAT C	1 -5 CY	3W		X			X		X	156
050AN	MCX GAS STATION (MAIN)/B-	MCCS CAT C	3-5 CY	3W		X		X			X	468
050AN	MCX GAS STATION (ANNEX)/B-	MCCS CAT C	1 -5 CY	3W		X		X			X	156
050AP	HRSC Bldg. 6300	Miramar	1-5 cy	1W					X			156
050AQ	BRIG Bldg. 7683	Miramar	3-6cy	1W	X							52

APPENDIX B-
OFFICIAL USE MARKING

WARNING

OFFICIAL USE ONLY

Per MCAS Miramar Integrated Solid Waste Management Plan

Personal use is prohibited.

Violators are subject to prosecution under Title 18 U.S. Code Section 1382 and/or the Uniform Code of Military Justice

Contact the MCAS Miramar Environmental Management Department at 577-1108 or the Recycling Center at 577-6366 for proper waste disposal.

APPENDIX C -
CONSTRUCTION AND DEMOLITION DEBRIS DATA COLLECTION FORM

Marine Corps Air Station Miramar

C&D Recordkeeping Form

Contractor:

Contract Number:

Project Description:

Date	Type of Material	ACM[1] (YF, YN, N)	ACM Source	Bulk load (m^3 or yd^3)	Weight (lb.)	Weight (ton)	Recycled or Disposed	Cost	Revenue	Final Disposition Location

1. ACM (Asbestos Containing Material): Yes, friable YF; Yes, non-friable, YN; or No, N.

Step-by-step approach to reducing, reusing, and recycling construction and demolition (C&D) waste:

1. Inspect the Site: Perform a thorough visual assessment of the structure and surrounding area. Determine what types of materials will be available, anticipated volume of material, and level of contamination.
2. Assess Markets: Contact local materials processors/end markets to acquire specification requirements for material preparation, acceptable level of contamination and delivery instructions. Determine whether items should be source-separated or can be commingled.
3. Pre-Demolition Audit and Removal: Match up potential end-users with the materials that can be salvaged before demolition begins. Materials such as doors, sinks, toilets, light fixtures and windows can all be salvaged through skilled removal.
4. Develop Contract Documents: Specify which materials shall be salvaged and how they will be prepared. Specify required use of recordkeeping form.
5. Site Setup: Identify locations for separation of materials at the job site in the early stages of planning. Estimate the quantities of materials to be generated and size of containers that will be required. Clearly designate recycling bins by color and/or large identification signs. Bins may need to be located in a fenced area to prevent contamination by those who are not familiar with the project.
6. Provide Education: Develop an education program to teach MCAS Miramar staff and contractors about waste reduction, source separation and recycling of C&D materials.
7. Provide Onsite Management: The most successful programs will be those that have close onsite management. Assign staff to monitor the recycling containers for contamination and to answer material preparation questions the contactor may have.
8. Monitor Disposal and Diversion: Use scale, if available, or volume-based conversions to determine level of diversion.

APPENDIX D
RECYCLING POSTER

Recycle

Acceptable Items

Glass Jars and Bottles

Paper and Junk Mail

Clean Plastic Food Packaging

No compostable plastics or PLA, polystyrene foam, plastic film, bags or utensils

Plastic Bottles, Plastics #1 - #7

Milk and Juice Cartons

Newspapers, Magazines, and Telephone Directories

Metal Cans and Aluminum Foil

Plastic Buckets, Tubs, Pots and Toys

Cardboard, Paper Bags, and Food Packaging

APPENDIX E
QUALIFIED RECYCLING PROGRAM
BUSINESS PLAN

Appendix E to the Integrated Solid Waste Management Plan

QUALIFIED RECYCLING PROGRAM BUSINESS PLAN

Marine Corps Air Station Miramar

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1.0 EXECUTIVE SUMMARY

The *Marine Corps Environmental Compliance and Protection Manual, Marine Corps Order (MCO) P5090.2A*, states that the preferred method of environmental protection is to eliminate or control the pollutant source. While pollution prevention and source reduction remain the first considerations, integrated solid waste management (ISWM) is based on a more refined environmental management hierarchy that employs a hierarchy of approaches and technologies for managing solid waste (SW) to maximize resource conservation and protect the environment.
The ISWM philosophy optimizes the design and operation of an installation's non-hazardous SW program through an integrated analysis of all comprehensive, cost-effective alternatives. ISWM includes the following concepts:

- Source Reduction and Reuse: minimizes the initial waste stream input.
- Recycling and Composting: reduces the volume of the waste stream requiring disposal.
- Disposal (Landfilling and Incineration): activities used to manage waste that cannot be prevented through source reduction and reuse, or recycled or composted.

The Department of Defense (DOD) requires installations to develop and implement an ISWM strategy to reduce SW disposal. ISWM varies from the older SW management plans in that they adopt the pollution prevention hierarchy as the model for SW management decision making. This strategy begins with source reduction as a first priority, and then continues with recycling, composting, incineration, and finally disposal as the last option for waste management.
As part of our IWSM strategy, the installation operates its recycling efforts as a Qualified Recycling Program (QRP) in accordance with 10 U.S.C. §2577, *Disposal of Recyclables Materials*, 32 CFR §172 (b), *Disposition of Proceeds from DOD Sales of Surplus Personal Property* and DOD QRP policies. The information provided in this Plan is intended to allow program managers to make informed decisions regarding QRP operations and to support the installation's waste diversion efforts. This Plan is included as an appendix to the installation's Integrated Solid Waste Management (ISWM) Plan.

2.0 INSTALLATION PROFILE

2.1 Background

During World War I, the U.S. Army acquired 12,721 acres of land in the Miramar Ranch area. Camp Kearny was opened on 18 January 1917 and was primarily used to train infantrymen on their way to the battlefields of Europe. Following the Armistice, the base was used to demobilize servicemen and was closed on 20 October 1920.

During the 1930s, the Navy briefly used the air base for helium dirigibles. In 1932 a mooring mast and hangar were built at the camp for the dirigibles. In the early 1940s Camp Elliott was built on part of old Camp Kearny, to be used for Marine artillery and machine gun training. Camp Elliott became home to Fleet Marine Force Training Center, West Coast and the 2nd Marine Division, charged with defending the California coast. Runways were constructed in 1940, and the 1st Marine Air Wing arrived on 21 December 1940. The Navy commissioned Naval Auxiliary Air Station Camp Kearny in February 1943 and in March 1943 the Marines established Marine Corps Air Installation Miramar.

During the 1940s, both the Navy and the Marine Corps occupied Miramar. East Miramar (Camp Elliott) was used to train Marine artillery and armored personnel, while Navy and Marine Corps pilots trained on the western side. The bases were combined and designated Marine Corps Air Station Miramar in 1946.
In 1947, the Marines moved to MCAS El Toro in Orange County, California, and Miramar was re-designated as a Naval Auxiliary Air Station.

In 1993, the Base Realignment and Closure Commission (BRAC) recommended that MCAS El Toro and MCAS Tustin be closed down and that Naval Air Station (NAS) Miramar be transferred to the Marine Corps. On 1 October 1997, Miramar officially became MCAS Miramar.

2.2 Mission

The primary mission of MCAS Miramar is to maintain and operate facilities and provide services and materials to support operations of the 3rd Marine Aircraft Wing (3rd MAW) and other tenants of the base. The mission of 3rd MAW is to provide combat ready expeditionary aviation forces capable of short notice worldwide deployment to Marine Air Ground Task Force, fleet and unified commanders. MCAS Miramar supports the military aviation training and maintenance operations for the squadrons of 3rd MAW, including CH-53, F/A-18, KC-130, and MV-22 aircraft.

The Commanding Officer's Environmental Policy Statement requires that all personnel commit to continuous improvement of MCAS Miramar's environmental programs. MCAS Miramar is committed to the conservation of natural and cultural resources to ensure preservation of resources over the entire air station and to promote more ground training opportunities in East Miramar.

2.3 MCAS Miramar Operations and Activities

MCAS Miramar's main function is to support the operations of the 3rd MAW and other tenant organizations aboard the base by maintaining and operating facilities and providing required services and materials. The greatest priority of the base is providing and equipping well trained and organized combat ready forces. MCAS Miramar averages 250 aircraft at any given day, with about 200,000 flight operations per year. The Station provides operational support, maintenance, and unit and individual training for tactical deployment and combat for eight F/A-18C and F/A-18D jet squadrons, four CH-53E helicopter squadrons, five MV-22 squadrons, one KC-130 transport and refueling squadron, and nine station support aircraft. MCAS Miramar controls and supports the training areas and buildings within its boundaries, and provides housing, law enforcement, training facilities, facilities maintenance, and logistical support to its tenant commands and organizations. MCAS Miramar has a population of approximately 11,000; consisting of military personnel, their dependents, and civilian employees.

3.0 GENERAL ROLES AND RESPONSIBILITIES

Roles and Responsibilities

a. Commanding Officer

(1) Commander's Intent. To ensure that every unit, organization, contractors, and agency operation under MCAS Miramar's U.S. EPA identification number (CA9170024740) will, along with every Air Station household, participate to the fullest extent practicable in the Air Station's integrated solid waste management and recycling program. The Commanding Officer has overall responsibility for the ISWM program. Specific responsibilities include:

(a) Ensure installation-wide compliance with applicable federal and state laws, regulations, EOs, Marine Corps instructions/ policies, and local requirements pertaining to recycling and SW management.

(b) Ensure implementation and sustainment of the ISWM program.

(c) Establish a QRP program.

(d) Assign in writing, an ISW Manager and a QRP Manager.

b. Integrated Solid Waste and QRP Manager(s). The following subsections identify the responsibilities of an ISW Manager and QRP Manager. These roles may be combined into one billet.

(1) ISW Manager Responsibilities

(a) Review and monitor compliance with all relevant environmental regulations pertaining to SW management and recycling. Ensure compliance of tenant commands.

(b) Act as the installation point of contact for all issues regarding SW management and recycling (e.g., source reduction, recycling, and affirmative procurement).

(c) Advise and monitor activities of SW management personnel (i.e., contractors and/or installation personnel) to ensure compliance with SW and recycling regulations.

(d) Identify new recyclable materials markets, and discuss end use technologies (e.g., composting and incineration).

(e) Coordinate with major commands on SW and recycling issues (i.e., reporting and recordkeeping).

(f) Release ISWM guidelines (i.e., relating to P2, recycling, and source reduction strategies) to installation residents, civilian employees, and active duty installation personnel.

(g) Coordinate Installation-wide education and awareness initiatives.

(h) Notify the Environmental Management Division of any unauthorized wastes found in recycling bins and dumpsters.

(i) Ensure that the collection, storage, transportation, and disposal of SW are conducted in accordance with regulations.

(2) QRP Manager Responsibilities

(a) Supervise recycling personnel and facilities. Ensuring the Recycling Center storage lot is kept clean of loose trash and all material is segregated into commodity bins.

(b) Oversee daily operation of the recycling facility and all recycling operations and monitor program participation.

(c) Ensure that all personal protective equipment for the QRP is being worn correctly and personnel are adhering to safety regulations.

(d) Establish a safety program within the Recycling Center for the proper handling and use of equipment (i.e., balers, forklifts, etc.). Establish comprehensive equipment maintenance and a vehicle operator-licensing plan.

(e) Conduct local sales and award sales agreements and manage the agreements in support of the QRP.

(f) Act as the liaison between contractors conducting recycling operations in support of MCAS Miramar.

(g) Maintain detailed records regarding receipt of revenues generated from the recycling program. Develop and submit potential recycling projects.

(h) Ensure all applicable Environment laws and regulations are followed per Marine Corps, State and local directives.

(i) Provide on-site assistance, as necessary, to all units, departments and activities for the implementation of recycling policies and ensuring sufficient recycling containers are provided to all organizations. Coordinate and establish collection sites that are in accordance with applicable fire safety codes. Determine the type and quantity of materials at the Station suitable for recycling.

(j) Identify locations where recyclable materials can be picked up, and notify program coordinators and contractors.

(k) Maintain detailed records pertaining to the direct sale of recyclables.

(l) Provide monthly status reports to the Director, Waste Management Division (WMD), S-7, and ISWM Manager pertaining to materials recycled by type and amounts as well as a monthly financial status of the recycling operations.

(m) Develop future budget requirements.

c. Tenant Units and Organizations

(1) Actively promote and engage in the Station Solid Waste Management and Recycling Program.

(2) Designate a recycling representative to be the point of contact for recycling matters. Personnel assigned will coordinate all recycling matters with the Station's QRP Manager.

(3) All recyclable materials (metals, paper, etc.) will be turned into the Station Recycling Center. Items that are not collected by the Recycling Center are each individual unit's responsibility to manage properly. The Station recycling representative and command representative will determine whether material can be transferred to DLA Disposition Services.

(4) Each command and activity may commingle all recyclables in the blue 85 gallon tote bins or the white recycling dumpster provided for the collection of commingled recyclables. In addition, unit Recycling and Hazmat coordinators will ensure all Marines and civilians understand which items should not be deposited in refuse or recycling dumpsters, i.e. cardboard should be placed in cardboard trailers.

(5) The Station Recycling personnel will only pick up those recyclable items at the sites so designated by the QRP Manager. Large volumes of recyclable materials that rapidly accumulate may require the tenant unit to request collection and coordination by the Recycling Center personnel as well as unit logistical support. A list of items that are currently recyclable is provided in Section 5.7.

(6) Conduct daily inspections of assigned dumpsters to ensure all materials are collected and organized, all trash in and around the recycling center is picked up, and that all solid waste dumpsters are closed at all times.

(7) Remove improperly disposed items from assigned refuse or recycling dumpsters and manage properly.

(8) Notify the ISW and QRP Manager when dumpsters require servicing or repair.

(9) The use of clear plastic trash bags is preferred over black or green trash bags, and should be used by all tenants. Clear bags allow for easy identification of improperly disposed items.

d. S-7 Environmental Management

(1) Advise the Commanding Officer on all matters relevant to the management of the ISWM Program and QRP.

(2) Supervise the implementation of this Order.

(3) Chair the Recycling Advisory Board as required.

(4) Develop all budget data for proposed use of recyclable funds to be submitted to the MCAS Miramar Commanding Officer, Comptroller, and HQMC QRP Manager when requested.

(5) Provide staffing, directing and supervising of MCAS Miramar's recycling program.

(6) Conduct internal financial review of funds provided or mailed to the QRP, which are then turned in to the Budget Analyst.

(7) Provide promotion/publicity for the recycling program through the Station newspaper, website, periodicals, and other methods as required.

(8) Ensure adequate and appropriate equipment is provided for a successful Recycling Program.

e. S-7 Finance. In accordance with applicable laws and regulation and this Order, promote MCAS Miramar's recycling program by:

(1) Managing the receipt, maintenance and disbursement of revenues generated from the recycling program per all applicable regulations and guidance.

(2) Supervising and monitoring the development and submission of a written recycling revenue monthly METRIC report. This monthly metric is to account for all revenues received, maintained and disbursed within the month, quarter, and within the fiscal year.

(3) Allocating funds for approved projects and authorized expenditures through the budget process.

f. S-7 Waste Management Division

(1) Assign a point of contact for solid waste contracting oversight.

(2) Coordinate solid waste collection container requirements with ISW Manager.

(3) Provide monthly solid waste disposal statistics to the Environmental Management Officer (EMO).

(4) Ensure solid waste dumpsters are repaired in a timely manner, and that all necessary signage is present.

(5) Provide recommendations to the EMO concerning the requirement to meet with the Recycling Advisory Board to discuss recycling matters.

g. Solid Waste Working Group. The primary focus of the group is successful management of solid waste and implementation of the QRP. Other group responsibilities follow:

(1) Identify additional potentially recyclable materials generated on Station.

(2) Ensure improvement of existing programs, including collection procedures, storage practices, and marketing efforts through the United States Marine Corps (USMC) EMS used aboard MCAS Miramar.

(3) Participate in promotional and educational efforts regarding solid waste management and support such efforts made by other units aboard MCAS Miramar.

(4) Monitor progress towards meeting solid waste and recycling goals implemented as objectives and targets within the EMS.

The Solid Waste Working Group meets as required to address solid waste management issues and is composed of representatives from the following organizations:

- Environmental Management Division
- Public Works Division (PWD)
- DLADS-San Diego Property Disposal Specialist
- Facilities Engineering and Acquisition Division (FEAD)

h. Director, Public Works Division (PWD)

(1) Incorporate provisions in contracts requiring contractors to meet executive orders for diversion of solid waste and construction and demolition products and/or debris to the maximum extent practicable.

(2) Provide solid waste diversion and recycling data to the Solid Waste Manager for all construction, demolition and renovation projects. Data shall include, but is not limited to,

the type of waste, recycled material and amount diverted. Appendix A applies.

i. Marine Corps Community Services (MCCS)

(1) Provide a MCCS representative to coordinate with MCAS Miramar's QRP Manager to supervise the implementation of the recycling program by ensuring, where practicable, that MCCS activities participate in MCAS Miramar's recycling program.

(2) Act as a member of the QRP Fund Advisory Board.

j. Director, Consolidated Bachelor Housing

(1) Make occupants of bachelor quarters, including transient personnel, aware of the contents of this Order and ensure that the policies and procedures governing recycling in the consolidated bachelor quarters are followed.

(2) Promote & support a barracks recycling plan through:

(a) Ensuring each room has serviceable recycling bins.

(b) Ensuring any community recycling bin is emptied into the parking lot recycling containers as required.

(c) Monitoring the parking lot recycling collection bins and dumpsters to ensure that they are being emptied in a timely and supportive manner by the contractor or Station Recycling Center personnel and that recyclables are not entering the dumpsters.

(d) As required, addressing the barracks recycling plan & procedures at CBQ meetings or with the QRP Manager as necessary.

k. Facility Engineering and Acquisition Division (FEAD)

(1) The FEAD reviews materials maintained by the contractor to ensure ordering and disposal practices are conducted in a manner that is compliant with Federal and State regulations, and assists in contractor LEED accreditation.

(2) FEAD will provide solid waste diversion data to the Solid Waste Manager for all construction demolition and renovation projects.

(3) FEAD will ensure contractors properly sort materials and utilize the Station Recycling Center as the first in line to receive recyclable commodities.

l. Group Environmental Compliance Coordinators (ECC)

(1) Serve as the point of contact for matters involving recycling issues and compliance. Ensure all subordinate commands adhere to procedures provided in station Order and requests disposal guidance as needed and/or required.

(2) Conduct inspections of all environmental areas, including recycling storage areas. Ensure all unit/department required inspections are conducted and ensures that un-shredded PII information is not placed in recycling containers.

(3) Ensure that proper MCAS Miramar recycling account number is entered on each scrap turn-in document (DD Form 1348-1A) by including the following statement "Proceeds for the sale of recyclable material are to be credited to the installation's Recyclable Materials Account- 17F3875.27RM 00567865 067443 3C 000000 67865CV27RMD."

4.0 QRP PLANNING

4.1 Waste Stream Characterization and Analysis

- Appendix C, Waste Stream Analysis and Solid Waste Diversion table.

4.2 Commodity Market and Economic Feasibility Analysis

The QRP Manager conducts a commodity market and economic feasibility analysis at least annually to determine the viability of recycling of specific materials and to ensure that optimum pricing is obtained for QRP eligible commodities. The results of the evaluation are documented in the installation's Commodity Market Analysis (CMA). The CMA is maintained in Appendix D.

4.3 Diversion Required by Regulatory Requirement

The Waste Stream Analysis identifies the QRP eligibility status for most waste streams generated at the installation. This table is consulted when evaluating inclusion of specific waste streams by the QRP. All DOD installations are required to recycle materials listed in the Diversion Required by Regulatory Requirement Table, if certain thresholds are met. Justification should be provided in the following table if any of these waste streams are not diverted.

Diversion Required by Regulatory Requirement

Waste Stream	Currently Diverted? (Yes or No)	Description of Diversion Efforts/Justification
High-grade paper (from facilities with more than 100 office workers)	Yes	HG paper is separated at unit level and collected by recycling center personnel.
Newspaper (non-privatized military family housing with 500 or more families)	No	Housing is privatized.
Corrugated cardboard (10 or more tons per month)	Yes	Several collection trailers are staged throughout facility.

5.0 QRP OPERATIONS

5.1 Installation Material Recovery Facility Description

The recycling center is located at building 6310 in the south eastern portion of the installation. The building is scheduled for demolition in FY18, and a newer smaller facility will be erected.

5.2 QRP Commodity Collection, Handling and Processing

- Appendix E, *QRP Commodity List*, identifies QRP eligible recyclable commodities that are managed and sold through the QRP and buyer requirements for packaging, storage, processing and transportation
- Appendix F, *Collection Schedule*, describes collection routes and schedules that have been established to ensure that recyclables are routinely collected
- Appendix G, *Equipment Inventory*, a comprehensive list of equipment related to QRP operations

5.3 QRP Prohibited Commodities

The following commodities **MAY NOT** be recycled or directly sold by a QRP. This list is not all encompassing. Contact listed departments for additional information.

- HAZMAT (used oil, paint, batteries) — HAZMIN Ctr 858-577-6771
- Tires — Environmental 858-577-1108

- Fluorescent Lamps — Environmental 858-577-1108
- Furniture — Thrift Store 858-271-4633
- Mattresses — Green Trash Bins (Govt. Property stored at East Miramar)
- Clothing — Thrift Store 858-271-4633

5.4 Commodity Buyer/Broker/Bidder List

A list of current commodity buyers, brokers and bidders is maintained in Appendix H.

6.0 FINANCIAL MANAGEMENT

The following tools are used to plan and track QRP finances:

- Appendix I, QRP Budget (for current fiscal year) – Planning tool to project operational cost and sales proceeds.
- Appendix J, QRP Costs – Cost tracking tool to record actual QRP costs and expenditures.
- Appendix K, QRP Sales Proceeds – Sales tracking tool to record actual proceeds from QRP sales.

6.1 Sales Management

For each commodity sale conducted by the QRP, the QRP Manager performs market research to determine a fair market value for the commodity and determine the type of commodity sale that will be the most beneficial to MCAS Miramar. The QRP Manager ensures that the following requirements are met for each type of sale:

- Direct Sales more than $15,000 (Competitive Sales) – The QRP Manager will:
  - Create a bid invitation for the commodity and transmits to at least three buyers/brokers.
  - Publically advertise the invitation to increase number of respondents.
  - Coordinate a commodity viewing for potential bidders.
  - Choose the bid that is determined to be most advantageous to MCAS Miramar, execute a sales agreement, arrange for pick-up, and the document sale.

- Direct Sales less than $15,000 (Negotiated Sales) – The QRP Manager should:
  - Contact no less than three buyers/brokers determine interest in sales negotiations.
  - Enter into negotiations with interested buyers/brokers to determine final commodity sale price.
  - Choose the price that is determined to be most advantageous to MCAS Miramar, execute a sales agreement, arrange for pick-up and document sale.

6.2 Sales Payment Management and Tracking

Payment Management	QRP manager receives payment checks for accuracies and fills out a check receipt makes copies of the checks and supporting documents. Then turns the checks over to the environmental finance office.
QRP F3875 Budget Clearing Account	All funds are held in the F3875 suspense account which is managed by installation's S-8.
Payment Forms Accepted	The only accepted payment option is by check or money order made out to the U.S. Treasury.

6.3 QRP Proceeds Management

QRP Budget/Operation Costs	The QRP Budget for current FY, maintained in Appendix I, identifies QRP budget, operational cost estimates and sales proceeds projections.
QRP Cost Recovery	Refer to Appendix J, QRP Costs
Proceeds Allocation	Refer to Appendix K, QRP Proceeds
Financial Performance Calculation	The Environmental Department budget analyst maintains record of all QRP transactions, both input and output.

7.0 RECORDKEEPING AND REPORTING

The QRP Records Disposition Table is maintained in Appendix L. The following table summarizes key reporting requirements.

Reporting

Reporting Requirement	**Installation Plan** (Describe how requirement is met)

Report SW diversion and required QRP-related information (e.g., actual/potential disposal costs, cost avoidance, gross recyclable sales, QRP sales revenues, etc.) to HQMC using EDR/EMR online reporting system as required for each FY.	At the end of the FY year all diversion data is uploaded into the EDR/EMR online reporting system.

8.0 AUDITS

Internal self-audits, external audits and solid waste opportunity assessments are performed, as described in the table below, to verify compliance and identify opportunities for improvement.

8.1 Audit Plan

Internal Self-Audits	Internal Audits are conducted annually in conjunction with annual EMS.
External Audits	Headquarters Marine Corps has established Audit. The Last audit was conducted in May 2017.
Solid Waste Opportunity Assessments	Solid Waste Assessment was conducted in 2014 and will be conducted every 5 years.

9.0 EDUCATION, AWARENESS AND OUTREACH

Training records are maintained IAW the Recordkeeping and Reporting section of this plan. The following tools are used to identify, communicate and track QRP education, awareness and outreach efforts:

- LMS identifies solid waste and recycling training requirements and training courses
- Appendix M, QRP Training Plan, identifies personnel that receive QRP training and a description of training provided
- Appendix N, Education, Awareness and Outreach Methods, identifies methods that are used to communicate solid waste minimization, waste diversion, recycling and proper waste disposal to installation personnel and the public.

Appendix A
Listing of QRP Recycling Fund Advisory Board Members

The Recycling Fund Advisory Board (RFAB) was established to make recommendations to the Commanding Officer regarding the disposition of revenue generated from the recycling program. Recycling Fund Advisory Board membership will initially be composed of the following individuals, units, or organizations or their designated representatives:

(1) Chair: S-7, Environmental Management Department, MCAS Miramar

(2) Member: Director, Waste Management Division, MCAS Miramar

(3) Member: Marine Corps Community Services (MCCS)

(4) Member: 3d Marine Air Wing (MAW), G-4

(5) Member: Director, Station Safety, MCAS Miramar

(6) Member: ISW/QRP Manager

Appendix B
QRP Manager Appointment Letter

UNITED STATES MARINE CORPS
MARINE CORPS AIR STATION MIRAMAR
P.O. BOX 452001
SAN DIEGO CA 92145-2001

In reply refer to
5090

From: Commanding Officer
To: Mr. Brad Thomas

Subj: APPOINTMENT LETTER

Ref: (a) MCO P5090.2A
(b) StaO 6280.1B
(c) Integrated Solid Waste Management Plan
(d) NAVFAC QRP Guide July 2000

1. Per the references, you are hereby appointed as the Qualified Recycling Program (QRP) Manager for MCAS Miramar.

2. You are responsible for effective operation of the QRP and ensuring compliance with federal, State and Marine Corps regulations. You are further guided in your responsibilities by your position description, and the enclosure.

S. M. VAN WINKLE
Assistant Environmental
Management Officer
By direction of the
Commanding Officer

Appendix C

Waste Stream Analysis and Solid Waste Diversion Tables

Waste Characterization

1. Purpose. In order to establish procedures for management of the various waste streams generated on Miramar, a formal waste characterization study was conducted during 2014. This basic survey is the simplest type of survey that focuses on classifying larger categories as percentages of the total SW stream. The waste characterization methodology used for this ISWM Plan was visual observations of SW collected over a week's period, observations of waste-generating areas and their processes, interviews with personnel, and data reviews of SW reports. Interviews were conducted with management personnel and others, as appropriate, to identify existing SW management practices and to collect information on types and quantities of wastes generated and the costs associated with existing and potential ISWM activities. Available contract, waste disposal, and recycling/reuse records were reviewed, in addition to SW annual reports describing quantities and costs of various SW streams, reduction measures, and success stories.

2. Background. SW is generated by residential, commercial and institutional, industrial, construction and demolition (C&D), and landscaping activities at the installation. Table 4-1 below summarizes the waste generation and handling of SW stream.

Table 4-1. SW Generation and Handling

Waste Type	Generation	Collection	Disposal
Aluminum cans	Empty beverage containers from various locations at the installation.	Collected in separate aluminum recycling containers at point of generation and commingled in recycling dumpsters/bins.	Aluminum cans at the Recycling Center are managed through the QRP.
Bulk goods	CBQ, equipment and furniture upgrades, MCCS, equipment supply, and shops.	MCAS Miramar Recycling Center currently accepts only metal furniture or racks.	Bulk metal furniture is managed through the QRP. Station Property also manages some used furniture.
Waste Type	**Generation**	**Collection**	**Disposal**
Cardboard	Delivery of equipment and supplies to the installation.	Collected at point of generation in outside recycling containers throughout the installation.	Cardboard is managed through the QRP.
C&D debris	C&D activities on the installation.	Managed by contractor at project site.	Contractors are responsible under terms of their contracts for proper recycling or disposal.
Cooking Oil and Grease	Food preparation at the Dining Facility, and installation restaurants.	Collected in drums at waste storage area near points of generation at the Dining Facility, and installation restaurants.	Grease and cooking oil are collected by a vendor.
Electronic Waste (e-Waste)	Outdated and expendable equipment from various locations installation-wide.	E-Waste is collected at the Recycling Center. Organizations may also dispose via DLA.	A local recycling vendor collects the e-waste from the Recycling Center.
Ferrous Metal Cans	Steel cans from dining facilities.	Cans at the Dining Facility are segregated for recycling and stored in outdoor bins near the kitchen.	Cans are managed through recycling contractor and the QRP.
Food waste (other than cooking oil)	Housing, Commissary, restaurant, and food service locations	Discarded in SW containers nearest point of generation.	All food, aboard the installation, is currently disposed of as SW.

Glass	Empty beverage and food containers from various locations at the installation.	Glass is segregated and sent to the Recycling Center where it is stored prior to recycling.	Glass is managed through recycling contractor and the QRP.
Green waste	Primarily from golf course maintenance.	Green waste bin is located near at the golf course.	Grass clippings are mulched at the time of cutting; tree trimming waste is collected in bins and sent to the Miramar Landfill for compost.

Waste Type	Generation	Collection	Disposal
Metals	Generated by maintenance activities at the various shops, construction and demolition activity, and MCCS.	Metal recycling bins are located near all points of generation at the installation.	All metal generated aboard the installation is managed through the QRP.
Paper	Primarily from administrative functions across the installation.	High grade white paper should be segregated at the point of generation. Colored paper may be commingled in recycling dumpsters.	Paper is managed through recycling contractor and the QRP.
Plastic Containers	Empty beverage containers from dining facilities, CBQ, and other locations at the installation where beverages are consumed.	Plastic beverage containers are segregated at the point of generation or commingled.	Plastics number 1-7 are managed through recycling contractor and the QRP.
Plastic Packaging/Film	Delivery of equipment and supplies to installation. Pallet wrap.	Collected at the point of generation and placed in white recycling bins.	Plastic wrap is Managed through recycling contractor.
Tires	Maintenance of government-owned vehicles and privately-owned vehicles.	Tires are collected at satellite accumulation areas. Additionally, tires are stored at the 90-Day Accumulation Site.	Commercial tires recovered by MCCS and recycled off Station through a private vender. Military tires are managed at each unit for DLA disposal.
Wood and Plastic Pallets	Delivery of equipment and supplies to installation.	Plastic pallets from the dining facilities are sent back to the vendor for reuse. Wood pallets are collected and stored at the MCAS Miramar Recycling Center.	Pallets are managed through the QRP. Broken pallets are sent to Miramar Landfill for wood chipping.

Waste Type	Generation	Collection	Disposal
Wood scrap	Renovations, carpentry, received shipments of large aircraft components, and small projects at the Installation.	Collected in shops, hangar, or stored at project sites.	Currently, unpainted or untreated wood scrap is recycled via QRP. Painted and treated wood is managed as SW.

Appendix D
Commodity Market Analysis

Metals Pricing Example.

rmg One-Source Report®

Recyclables and Waste Diversion

Detail By Service Location

2/1/2017 - 2/28/2017

MIRAMAR AIR STATION
BLDG 6310
SAN DIEGO, CA 92145

Acct No: 1817
Since: 7/12/2013
Contact: GSGT THOMAS

Diverted Materials

MIXED RECYCLING

Reference#	Material Code	Date	Quantity	Weight (Lbs)	Tons	Price	Cost
462228z	MIXED RECYCLING	02/02/17	60	6,300	3.15	$0.00	$0.00
462229z	MIXED RECYCLING	02/07/17	51	5,356	2.68	$0.00	$0.00
462230z	MIXED RECYCLING	02/09/17	49	5,144	2.57	$0.00	$0.00
462277z	MIXED RECYCLING	02/14/17	50	5,250	2.63	$0.00	$0.00
462278z	MIXED RECYCLING	02/16/17	51	5,356	2.68	$0.00	$0.00
462279z	MIXED RECYCLING	02/21/17	52	5,460	2.73	$0.00	$0.00
462280z	MIXED RECYCLING	02/23/17	52	5,460	2.73	$0.00	$0.00
462281z	MIXED RECYCLING	02/28/17	52	5,460	2.73	$0.00	$0.00
		Sub Total	**417**	**43,786**	**21.89**		**$0.00**

Services, Fees, And Materials

EQUIPMENT

Scrap metal Prices updated on 07, July 2017

Top of Form

Bottom of Form

NORTH AMERICA ($US/Lb)Subscribe to Premium The prices displayed are three months old. For live prices

ITEM	NORTH AMERICA	USA EAST COAST	USA MIDWEST	USA WEST COAST
6063 Extrusions	0.680	0.680	0.660	0.690
#1 Copper Bare Bright	2.520	2.52-0.02	2.49-0.02	2.53-0.02
#1 Copper Wire and Tubing	2.420	2.42-0.02	2.39-0.02	2.43-0.02
#2 Copper Wire and Tubing	2.320	2.32-0.02	2.31-0.02	2.33-0.02
Yellow Brass	1.390	1.390	1.380	1.400
Scrap Electric Motors	0.250	0.250	0.250	0.250
Old Sheet	0.550	0.550	0.540	0.560
Al/Cu Radiators	1.100	1.100	1.080	1.100
Old Cast	0.580	0.580	0.570	0.580
Alternator	0.410	0.410	0.400	0.410
Zorba 90% NF	0.600	0.600	0.590	0.610
304 SS Solid	0.490	0.490	0.490	0.490
6061 Extrusions	-	0.610	0.600	0.620

Appendix E
QRP Commodity List

Commodity Type	Collection Method and Frequency	Buyer's Requirements for Packing, Storage and Processing	Buyer's Transportation Specifications
Ledger paper	Weekly	Baled and shrink wrapped	Flat Bed
Card board	Twice a week and as needed	Baled	Flat Bed
Scrap Metal	Daily	40 cubic yard roll off containers	Roll off containers
Pallets	Daily	Separated by size.	N/A
Battier s	As needed	Stored at the 90 site inside building	Palletized
Used Oil	As needed	Storing in 50 gallon drums at the units 60 day site.	Pumped out by contractor.
Plastic	Weekly	Baled and shrink wrapped	Flat bed
Used Toner	As needed	Stored in Gaylord containers under a covered location	N/A

Appendix F
Collection Schedule

Paper Route locations Once a Week on Thursday

#	LOCATION	BLDG#	DESCRIPTION	# OF BINS HERE	
1	MILLS PARK GYM	2002	INSIDE GYM	3	
2	BASE THEATRE	2242	INSIDE THEATRE	1	
3	PUBLIC AFFAIRS	2257	OUTSIDE BLDG	3	
4	JOINT RECEPTION CENTER	2258	BEHIND BLDG	4	
5	NAVY MARINE CORPS	2273	OUT IN FRONT BESIDE DOORS	3	
6	COUNSELING CENTER	2274	TO THE RIGHT OF THE DOORS	3	
7	SPORTS COMPLEX	2471	INSIDE	2	
8	DENTAL/MEDICAL	2495	BEHIND BUILDING BY SMOKE PIT	4	
9	7 DAY	2499	INSIDE	3	
#	TICKETING OFFICE	2524	BESIDE BLDG	4	
#	FAMILY READINESS	2525	INSIDE	3	
#	MAIN EX WILL CALL	2660	INSIDE	3	
#	COMMISSARY OFFICE	2661	INSIDE	3	
#	YOUTH CENTER	2700	INSIDE	3	
#	CHILD DEVELOPMENT	2740	INSIDE	3	
#	O CLUB	4472	IN FRONT BY FRONT DOORS	4	
#	LIBRARY	5305	TO THE LEFT OF THE FRONT DOOR	3	
#	THE HUB	5305	BEHIND BUILDING BY LEGENDS	3	
#	CHOW HALL	5500	BEHIND BLDG	4	
#	ENVIRONMENTAL	6022	IN GREEN BELT IN FRONT OF BLDG	5	
#	VET CLINIC	6248	JUST BESIDE OF BLDG	4	
#	S-4 I&L	6311	INSIDE	4	
#	INDUSTRIAL HEYGIENIST	6317	INSIDE	3	
#	SWRFT	6317	INSIDE	3	
#	MALS 16 V PAD	7177	CURBSIDE	3	
#	MALS 11 V PAD	7125	CURBSIDE	3	
#	MACG 38 MOTORPOOL	7515	BY EACH DUMPSTER	7	
#	NCIS/ FOOD SERVICE OP	7208	INSIDE	3	
#	MALS 16 SUPPLY	7209	CURBSIDE	3	

#	MALS 11 SUPPLY	7209	CURBSIDE	3	
#	GRAPHICS	7240	CURBSIDE	3	
#	G-6	7494	CURBSIDE	2	
#	MALS 11	7550	CURBSIDE	2	
#	CG BLDG	8402	BEHIND BUILDING	4	
#	COMBAT CAMERA	8456	BETWEEN COMBAT CAM & SWIM TANK	4	
#	POWER PLANTS	8461	INSIDE FENCED AREA BY CARDBOARD	4	
#	MAG-11/MAG-16	8477	INSIDE/CURBSIDE	4	
#	AIR STATION CDC	8630	INSIDE	4	
#	REPRO	8656	INSIDE	4	
#	CASTLE GRAY SKULL	8671	INSIDE MULTIPLE OFFICES	9	
#	PAX TERMINAL	9100	CURBSIDE	6	
#	HANGAR 0	9170	CURBSIDE	4	
#	H&HS	9175	BEHIND BUILDING BY SMOKE PIT	4	
#	CRASH FIRE RESCUE	9182	CURBSIDE	3	
#	BASE OPS	9211	CURBSIDE	3	
#	HANGAR 1	9277	CURBSIDE	5	
#	SAFETY	9442	CURBSIDE	3	
#	HANGAR 3	9500	CURBSIDE	5	
#	HANGAR 4	9470	CURBSIDE	5	
#	MACS 1	9648	CURBSIDE	3	
#	HANGAR 6	9670	CURBSIDE	5	
#	MALS 11 SMD	7690	CURBSIDE	3	
#	BEHIND CASTLE GRAY	8672	BEHIND BULDING TOWARDS HAZMAT	3	
#	RIFLE RANGE	E MIRAMAR	OUTSIDE BY FRONT DOOR	4	
#	MWSS 373		BY EA DUMPSTER	8	
#	HUMAN RESOURCES	6754	BY FENCE BEHIND BLDG	3	
	TOTAL # OF STOPS	**55**		**TOTAL OF BINS**	**207**

Cardboard Trailers Twice a Week Monday and Friday

#	LOCATION	BLDG #	DESCRIPTION	# OF TRAILERS HERE	
1	MAG 11 SUPPLY	6001	LOADING DOCK	1	
2	CIF	6001	LOADING DOCK	1	
3	NBC	6001	LOADING DOCK	1	
4	PAINTBALL FIELD	NONE	NEXT TO CONNEX BOX	1	
5	GARDEN CENTER	2660	NEXT TO WM DUMPSTER	1	
6	WILL CALL	2660	BEHIND MCX NEXT TO BAY DOOR	2	
7	CAR WASH (MANUAL)	2130	NEXT TO SHELTER HOUSE	1	
8	FOOD LOCKER	6013	LOADING DOCK	1	
9	MCCS	6012	LOADING DOCK	1	
10	THRIFT STORE	6275	LOADING DOCK NEXT TO WM DUMPSTER	1	
11	VET CLINIC	6360	BEHIND BLDG	1	
12	YOUTH CENTER	2247	NEXT TO PARKING EAST SIDE OF BLDG	1	
13	DENTAL	2496	BEHIND DENTAL	1	
14	NAVY MC RELIEF SOCIETY	2264	BACKED UP TO FENCE IN PARKING LOT	1	
15	7 DAY	2499	LOADING DOCK	3	
16	O CLUB	4472	BEHIND O CLUB INSIDE FENCING	1	
17	CHOW HALL	5500	LOADING DOCK WALL CLOSEST TO ST	1	
18	SWRFT	6317	NEXT TO FENCE BY PARKING LOT	1	
19	HUB/LIBRARY	5305	NEXT TO WM DUMPSTER	1	
20	ROCKERS BAR	3756	BEHIND BLDG NEXT TO 64 GL DEUMS	1	
21	BRIG	7685	INSIDE FENCING BEHIND BRIG	2	
22	HAZMAT	8672	BEHIND BUILDING	1	
23	HANGAR 4	8672	IN GRASS BEHIND WM DUMPSTERS	1	
24	HANGAR 5	9570	NEXT TO F/L GATE # 22 BY DUMPSTERS	1	
25	HANGAR 6	9670	IN DIRT NEXT TO WM DUMPSTERS	1	
26	CRASH FIRE RESCUE	9227	NEXT TO PAX TERMINAL	1	

27	IPAC	8380	BEHIND IPAC	1	
28	5 DAY	8600	BEHIND BLDG INSIDE CONCRETE WALL	1	
29	REPRO	8461	NEXT TO COOMBAT CAMERA	1	
30	POWER PLANTS	8402	INSIDE FENCE WEST SIDE OF BLDG	1	
31	MACG 38 MOTOR POOL	7515	BEHIND BARN INSIDE FENCED AREA	1	
32	MACG38 WAREHOUSE	7133	LOADING DOCK	1	
33	AVI SUPPLY	7209	LOADING DOCK	2	
34	MAG 16 SUPPLY	7209	LOADING DOCK	1	
35	COMM S-6	6306	BEHIND BUILDING	1	
36	MCX WAREHOUSE	E MIRAMAR	LOADING DOCK	1	
37	SHERIFF RANGE	E MIRAMAR	NEXT TO AWNING IN DIRT	1	
38	RANGE	E MIRAMAR	IN DIRT BEHIND YELLOW GATE	1	
39	MOMS WAREHOUSE	E MIRAMAR	IN FRONT OF WAREHOUSE	1	
40	MAIN GAS STATION	6214	BEHIND GAS STATION	1	
41	RESERVE UNIT	ACROSS I-15	INSIDE FENCED AREA BEHIND BLDGS	1	
42	NEW GAS STATION		BEHIND GAS STATION	2	
43	YOUTH TEEN CENTER	2700	WEST SIDE OF PARKING LOT	1	
44	CHILD DELOPMENT CNT	2742	WEST SIDE OF PARKING LOT	1	
45	HANGAR 2 F/L CHALLET	9410	ACROSS FROM 5 DAY	1	
46	MALS 11 GSE	8119	BACK OF COMPOUND	1	
47	HANGAR 4 F/L CHALLET		NEXT TO BLDG	1	
48	C-130 HANGAR 0	HANGAR 0	BY METAL SHOP LOOKS LIKE GARAGE	1	
49	SATELLITE SITE	6216	IN FRONT OF OUR SHOP	1	
	TOTAL NUMBER OF STOPS	**49**		**TOTAL OF TRAILERS**	**55**

Woodies once a week picked up on Tues.

WOODY'S					
#	LOCATION	BLDG #	DESCRIPTION	# OF BINS HERE	
1	MILLS PARK		ALL AROUND PARK	11	
2	PAID CAR WASH		NEXT TO CAR WASH	1	
3	FREE CAR WASH		NEXT TO CAR WASH	1	
4	5 DAY		IN FRONT OF BLDG	1	
5	7 DAY		IN FRONT AND IN FIELD	1	
6	SEMPER FIT ENTRANCE		IN FRONT OF BLDG	1	
7	SPORTS COMPLEX		IN FRONT OF BLDG	1	
8	THE BARN		IN FRONT OF BLDG	1	
9	BALL FIELD # 3		ALL AROUND PARK	1	
10	BALL FIELD ON TRACK		ALL AROUND PARK	1	
11	COMM FOOD COURT		ALL AROUND COURT YARD	4	
12	PFT COURSE		BY PULL UP BARS	1	
13	PARADE DECK		IN PARKING LOT	1	
14	PICNIC TABLES ON TRACK		ALL AROUND PARK	1	
15	BASE THEATRE		IN FRONT	2	
16	MAIN GAS STATION		IN FRONT	1	
17	ANNEX GAS STATION		IN FRONT	1	
18	HUB/LIBRARY		IN FRONT	5	
	TOTAL STOPS	**18**		**TOTAL BINS**	**36**

Appendix G
Equipment Inventory

Item and Manufacturer	Location	Status (In-use or out-of-service & date)	Purchase Funding Type (O&M, QRP Proceeds, Services)	Projected Service Life	Estimated Replacement Cost	Date Purchased or Acquired
Baler Horizontal	Bldg. 6310 Lot	10/2010	5,000 QRP Purchased		9K	10/2010
International Bailer	Bldg. 6310 Lot	10/2010	80,000.00QRP Purchased		100K	10/2010
Baler Vertical	Bldg. 6310 Lot	06/2006	6,000.00 QRP Purchased		10,K	06/2006
Baler Vertical	Bldg. 6310 Lot	06/2006	6,000.00 QRP Purchased		10K	06/2006
Brass Deformer	Bldg. 6310 Lot	06/2012	20,000.00 QRP Purchased		25K	06/2012
Drum Compactor	Bldg. 6310 Lot	06/2006	4,000.00 QRP Purchased		N/A	06/2006
4K Forklift	Bldg. 6310	2008	SWRFT Owned			
4K Forklift	Bldg. 6310	2012	SWRFT Owned			
Chevy Silverado 1500	Bldg. 6310	2010	SWRFT Owned		30K	2010
Ford F150	Bldg. 6310	2014	SWRFT Owned		30k	2014
3 Ton Stake bed	Bldg. 6310	2007	SWRFT Owned		45k	2007
Electric Golf Cart	Bldg. 6310	2007	SWRFT Owned		10K	2007

Appendix H
Commodity Buyer/Broker/Bidder List

Buyer/Broker Name	Commodities	Contact Information	Notes/Comments
Juan Hernandez	Scrap metal	951-258-9574	Primary Scrap buyer
G. Harris International	High Temp Metals	714 -412-4142	Primary
Ecology	White gear/Tin	619-661-1148	Primary
Quality Recycling	Scrap Metal	760-724-3623	
A-1 Alloys	Scrap Metal	619-474-1727	
California Metal –X	Scrap Metal	323-234-9281	
Simba International	Scrap Metal	760-940-2775	
Arrow Metal Recycling	E-waste/Tonner	619-710-2777	
California Metals Recycling	E-waste	619-444-3111	
Cardboard Buyers			
RMG	Cardboard/Fibers	858-677-0884	Primary
Allan Company	Cardboard/Fibers	858-578-9300	Bidder
Dalton Enterprises	Cardboard/Fibers	714-635-2181	Bidder
Jempco Industries	Cardboard/Fibers	619-709-5690	Black Listed (rip off)
Pan Pacific Fibers	Cardboard/Fibers	562-926-0666	Bidder
Main Street Fibers	Cardboard/Fibers	909-238-3372	Bidder
Quality Recycling	Cardboard/Fibers	760-724-3623	Bidder
San Diego Fibers	Cardboard/Fibers	619-262-8090	Bidder
CRV			
RMG	Cans/ bottles	858-677-0884	Primary
Juan Hernandez	Cans/bottles	951-258-9574	Bidder
IMS	Cans/Bottles	619-231-2521	Bidder
Allan Company	Cans/Bottles	858-578-9300	Bidder
San Diego Fibers	Cans/ Bottles	619-262-8090	Bidder
E-Waste/ Tonner			
Veterans Green	E-waste/tonner/wire	760-815-4734	Primary
IMS	E-waste/ tonner	619-231-2521	Past Primary
Arrow Metal Recycling	E-waste/Tonner	619-710-2777	
California Metals Recycling	E-waste	619-444-3111	

Appendix I
QRP Budget for Current FY 17

Complete the worksheet by inserting data/information only in white blocks. Totals will auto-populate.

Installation Name/BCN: MCAS Miramar - M67865

			EOY FY2015 Balance
1. Available Balance as of:	9/28/2016 (date)	*Enter figure from TAB B - EOY FY2015 Balance (last column)*	**$565,086**
2. Estimated FY2016 QRP Revenues:			**$110,000**
3. Proposed QRP Operating Costs (RON-RMD):			
a. Labor	$70,000		
b. Materials & Supplies	$12,000		
c. Investment Equipment	$4,000		
d. Other	$10,000		
Total		Total	**$96,000**
4. Net Recycling Proceeds Available for Project Accomplishment		$579,086	
Amount available to fund projects for pollution abatement, composting, alternative fueled vehicle infrastructure support and vehicle conversion, energy conservation, and occupational safety and health activities (cumulative).		*$289,543*	
Amount available to be transferred to the nonappropriated MCCS account of the installation to be used for any morale or welfare activity.		*$579,086*	
5. Projects Recommended for Accomplishment (IncludeTitle, Estimated Cost, In-House vs Contract):		Total	**$0**
a. Pollution Abatement/Prevention (RON-RM1):		$0	
(1)			
(2)			
(3)			
b. Energy Conservation (RON-RM2):		$0	
(1)			
(2)			
(3)			
c. Occupational Safety & Health (RON-RM3:		$0	
(1)			
(2)			
(3)			
6. Amount Recommended for Transfer to MCCS for MWR Activities (RON-RMS):			$0
(1)			
(2)			
(3)			
7. Total Requirement for Unfunded Reimbursable Authority:		Total	**$96,000**

Appendix J
QRP Costs

Date	Cost Item/Description	Amount
1 Oct	Maintenance contract	$4000
1 Oct	Labor	$85000
1 Oct	Supplies	$8000
06/17	Conveyor	$40000
12/16	Fuel	$90.87
2/17	Tying Wire	$2,100.68

Appendix K
QRP Sales Proceeds

Sales Proceed Transaction/Description

FY17 RECYCLING RECONCILIATION				
As of : 17 Apr 17				
SUSPENSE ACCT BALANCE FORWARD FROM FY16:			($174,556.65)	
RON: M4786517WA00RMD				
FY17 COLLECTIONS/DEPOSITS (M0220317CV27RM)	VCHR NO.	COLL-DEPOSIT AMOUNT	Reflected on CHOOSE Report	Reflected on CHOOSE REPORT
28-Sep-16	00006	($14,432.20)	($14,432.20)	Collection voucher retrieved from CHOOSE Report
1-Oct-16	XXXX	$0.00	$0.00	No collection
22-Nov-16	00300	($2,655.27)	($2,655.27)	Collection voucher retrieved from CHOOSE Report
31-Jan-17	00567	($3,359.30)	($3,359.30)	Collection voucher retrieved from CHOOSE Report
22-Mar-17	00799	($10,427.90)	($10,427.90)	Collection voucher retrieved from CHOOSE Report
10-Apr-17	00858	($5,807.29)	($5,807.29)	Collection voucher retrieved from CHOOSE Report
TOTAL CURRENT YEAR DEPOSITS/COLLECTIONS:		($36,681.96)	($36,681.96)	
GRAND TOTAL DEPOSITED TO SUSPENSE ACCT:			($211,238.61)	
ANNUAL REIMBURSABLE (RON RMD) AUTHORIZATION as of		17-Apr-17	$106,000.00	
REIMBURSABLE (RON RMD) COMMITMENTS as of		17-Apr-17	$47,600.93	
REIMBURSABLE (RON RMD) OBLIGATIONS as of		17-Apr-17	$47,600.93	
Balance in Suspense Account (Grand Total Deposited minus Reimbursable Obligations)			($163,637.68)	

Appendix L
QRP Records Disposition Table

Recordkeeping Requirement	Installation Plan (Describe how requirement is met and where records are maintained)
DLA Disposition Services Sales Records – Collect and maintain auditable records and documents to support sales	DLA is not used for sales.
Direct Sales Records – Collect and maintain auditable records and documents to support sales (e.g., material descriptions, sale price, sale date, weights, list of buyers/bidders/brokers, awarded bid agreement, payment/funds transfers)	Direct sales are maintained as a complete sales packet consisting of copies of offering, winning bid, weight tickets, and payment. Long term sales agreements will not contain winning bid.
Operating and Overhead Costs/Expense Records – Collect and maintain auditable records and documents to support QRP costs and expenses (e.g., program operation, equipment operation/maintenance, labor, training, awareness/outreach, etc.)	Operational costs will be maintained on site, and can be audited using Budget Analyst data for collections and costs.
Income and Expenditures Records – Collect and maintain auditable records necessary to document annual profit or loss for the QRP	Records will be maintained by QRP Manager and Budget Analyst.
Appropriated Funding Income – Direct Sales	
Appropriated Funding Income – DLA	NA
Expenditures – Labor	See Appendix J
Expenditures – Collection & Transportation	NA
Expenditures – Equipment Lease	NA
Expenditures – Equipment Maintenance	See Appendix J
Expenditures – Installation Education and Training	See Appendix J
Expenditures – Staff Travel	See Appendix J
Expenditures – Staff Training	See Appendix J
Expenditures – Capital Improvements	See Appendix J
Cost Avoidance Records – Collect and maintain auditable records necessary to demonstrate cost avoidance that result from operation of the QRP	Any records will be maintained by QRP Manager.
Records of Profit Distribution – Collect and maintain auditable records necessary to demonstrate distribution of QRP-related profits used to fund environmental, health or safety projects and/or MWR projects	Records will be maintained by QRP Manager and Budget Analyst.

Appendix M
QRP Training Plan

Training Topic	Target Audience	Certifications	Training Timing/Frequency	Records Maintained	Results/Comments
Annual Training	QRP Manager	Stored on Training Website	Yearly	In Marines training binder.	
QRP Course	QRP Manager	On file	Every 3 Years	In SOP Binder	
	Recycling Center Workers				
New Join Brief	Marines		Once When first Joined	In Marines training binder.	
Safety	Marines		Daily	In Marines training binder.	
Lock out Tag out	Marines		Once When first Joined or as needed	In Marines training binder.	
Fork Lift	Marines	Permit		In Marines training binder.	
PPE Requirements.	Marines		Daily	N/A	
Annual Training	Marines	MOL /Marine Net	Yearly		

Appendix N
Education, Awareness and Outreach Methods

Education, Awareness or Outreach Event/Method	Frequency	Target Group	Records Maintained	Results/Comments
Electronic notifications including base-wide email, signs, etc.	Monthly	All personnel	Email records	
Publication and distribution of brochures	As required	All personnel	NA	
Community events, (e.g., Annual Earth Day, Annual America Recycles Day, etc.)	As required	All personnel	NA	
Briefings	As required	As required	NA	