CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

Board Order No. R6T-2011-0020
WDID 6A268512900

REVISED WASTE DISCHARGE REQUIREMENTS

For

CAMP PENDLETON & QUANTICO HOUSING LLC/LINCOLN MILITARY HOUSING AND UNITED STATES MARINE CORPS MOUNTAIN WARFARE TRAINING CENTER COLEVILLE HOUSING WASTEWATER TREATMENT AND DISPOSAL FACILITY

MONO COUNTY

The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

1. Discharger

   Camp Pendleton & Quantico Housing LLC./Lincoln Military Housing (Discharger) is the current owner and operator of a wastewater treatment and disposal facility that serves military personnel and their families at the Mountain Warfare Training Center (MWTC) housing area near Coleville and will be the owner and operator of the proposed wastewater treatment and disposal facility (Facility) described in Finding No. 5, below. The United States Department of the Navy, United States Marine Corps is the owner of the land where the Facility is located. For the purposes of this Order the Camp Pendleton & Quantico Housing LLC/Lincoln Military Housing is the "Discharger." As landowner, the US Department of the Navy, US Marine Corps is considered a legally-responsible person under this Order if the Discharger fails to comply with orders of the Water Board.

2. Location and Existing Wastewater System

   The wastewater treatment and disposal system is located in Antelope Valley on the west side of U.S. Highway 395, approximately one mile north of Coleville, within the NW ¼ of Section 36 T9N, R22E, MDB&M as shown on Attachment "A," which is made a part of this Order.

   The wastewater treatment and disposal system (existing Facility) is currently a large community septic system. The system consists of four 7600-gallon septic tanks with four 900-gallon dosing chambers and two leachfield areas. The two leachfield areas cover roughly 68,900 square feet and the flow is manually directed via opening gate valves to cycle the discharge to the two leachfields.

3. Reason for Action

The Discharger filed a Report of Waste Discharge dated July 2010 to upgrade the wastewater facilities to allow for the existing flows and to accommodate new flows from a child development center, a commissary, mini mart, and four existing unoccupied homes (currently used as the child development center). The child development center, commissary and mini mart will contribute to the total wastewater flow. The existing flow with the additional new flow will result in an amount of discharge that would exceed the requirements typically applied by the Water Board for disposal from septic systems, a standard rate of 500 gallons per acre per day. The entire development is approximately 68.5 acres so the average daily flow should be less than 34,250 gallons a day based on treatment in a septic system.

There are indications the existing system is approaching its capacity and needs upgrading (nitrate concentrations in down gradient wells have been higher than the up gradient well and could be attributed to the current disposal). The Discharger has proposed a new Facility to increase the treatment capabilities to discharge up to 50,000 gallons per day by improving the quality of the discharge and increasing the wastewater disposal area.

4. History of Previous Regulation by the Water Board

The Water Board previously established waste discharge requirements for domestic wastewater disposal from the MWTC housing area under Board Order No. 6-01-11, which was adopted on March 1, 2001. Board Order No. 6-01-11 was preceded by Board Order No. 6-85-129, adopted on November 14, 1985.

5. Proposed Facility and Discharge

The Discharger is proposing to use a pre-manufactured "package" activated-sludge wastewater treatment plant designed to remove 90% of the Biochemical Oxygen Demand (BOD) and achieve concentrations of 30 milligrams per liter (mg/l) for BOD and 30 mg/l for total suspended solids (TSS). For the purposes of this Order, this system will be termed the proposed Facility (in contrast to the existing Facility). The design also includes processing for enhanced removal of nitrogen. The proposed Facility treatment system includes bar screens for solids and grit removal, a flow equalization tank, an anoxic tank, and aeration tank, clarifier, sludge digester, filter pumps, pressure filters, and a clear well prior to discharge/disposal. The treatment plant flow diagram is shown in Attachment "B."

The proposed Facility's disposal areas will consist of two areas, the existing leachfield area, termed the low-pressure disposal area will be rehabilitated by having its piping replaced and drain rock inspected and replaced as needed. A second

disposal area consists of a below-grade infiltration chamber (the Discharger's Report of Waste Discharge nomenclature or term for this portion of the proposed Facility was "below-grade infiltration basin"), and subsurface irrigation areas located above the low-pressure disposal area and above the below-grade infiltration chamber.

The below-grade infiltration chamber is a new disposal area. The infiltration chamber will be constructed adjacent to the housing area's storm water retention basin. The infiltration chamber will consist of several 48-inch-diameter, high-density polyethylene perforated pipes, laid in rows with two feet of horizontal separation. The side of the below-grade infiltration chamber adjacent to the storm water retention basin will have a 30-mil impermeable synthetic liner that will be buried and installed between the edge of the infiltration chamber and the storm water retention basin. The synthetic liner will be installed to prevent lateral water migration of wastewater and surfacing effluent in the storm water retention basin. The pipes will be buried in drain rock and then covered with filter fabric and topsoil.

Subsurface irrigation areas will be installed in the soil 12-18 inches below grade above the infiltration basin and the low pressure disposal area.

6. Sludge Disposal

The proposed Facility will include an aerobic digester. Some of the sludge in the digester will be used as a biological seed in the flow equalization tank but the sludge digester will mainly be used to further reduce the sludge volume and mass. Sludge will need to be periodically removed and hauled away for disposal. The digester is not an authorized disposal location. The Discharger will maintain records on the sludge removed and where it was disposed of under the terms of this Order.

7. Water Supply System

In addition to the sewage wastewater disposal, this Order also regulates the disposal of rinse water from the drinking water treatment system. The drinking water treatment system is for arsenic removal from the ground water. There are three ground water wells that provide drinking water and all three wells must be treated for arsenic to meet the drinking water standards.

The drinking water treatment system consists of two filtration units operated in series. The filter contains an iron-based proprietary granular media, which has an affinity for arsenic, iron and other metals. Rinse water is generated during the initial rinse of new filter media to remove fine particles that are produced by abrasion when the media is transported and installed. The rinsing process produces an estimated total of 60,000 -70,000 gallons of rinse water when new media is installed in both filters. The installation of new filter media and rinsing occur four to six times every 12 months. The following is the expected quality range of the rinse water.

Parameter	Units	Range
pH	pH[1]	7-9
Total Dissolved Solids	mg/l [2]	500 -1000
Specific Conductance	µmho/cm [3]	700 -1400
Turbidity	NTU [4]	0.60 -75

1 pH is a measure of hydrogen ion concentration
2 mg/l -milligrams per liter
3 µmho/cm -micromhos per centimeter
4 NTU -Nephelometric turbidity unit

The Discharger will dispose of the rinse water from the drinking water treatment system into the soil within the site's storm water retention basin (Basin). The current Basin has ample storage for the discharge. The Basin will be reconfigured with the construction of the proposed Facility and will have the same volume capacity as the current Basin (237,000 cubic feet) after modifications. The Basin will still have the capability of handling large storm events, and as a management practice for the rinse water, discharge will not occur when standing water from storms is in the Basin. Rinse water may also be dispersed by way of infiltration systems for the proposed Facility, at the Discharger's discretion, without going through the Facility treatment processes.

8. Authorized Disposal Area

The authorized disposal area for treated wastewater is any area within the low-pressure infiltration area (this area includes the existing leach field), the buried infiltration chamber, and the two subsurface irrigation areas directly above these two disposal area that are shown in Attachment "C," which is made a part of this Order.

The authorized disposal area for rinse water from the new filter media from the drinking water treatment system is the existing or proposed-modified Basin, or the above described sewage wastewater disposal areas.

9. Schedule and Proposed Facility Start Up

The proposed Facility construction is planned to begin as early as March 2011 and the current plan is to complete the upgrades by the summer of 2012.

A new wastewater treatment plant may take several weeks to months after start up to get all of the operations working before effluent limits are attained regularly. Water Board staff will monitor any effluent limit violations and consider the seriousness of the violation, the ability of the Discharger to avoid the violation, and the threat to water quality, prior to making recommendations on formal enforcement during the several initial months of the proposed Facility operation.

10. Site Geology

The Facility is built on glacial deposits generally regarded as permeable. The underlying geology at the site consists of a relatively thin alluvial deposit underlain by weathered and fractured granitic and metamorphic bedrock material. The percolation rates recorded for the existing leachfields are approximately 3.3 inches per day (436 minutes per inch as reported in the wastewater study for the Marine Corps Mountain Warfare Training Center Coleville Housing Colville, MacDonald-Stephens Engineers, Inc., November 1996).

The Discharger conducted additional investigation on the soil percolation and provided the information in the Report of Waste Discharge dated July 2010. The test results showed that the percolation rates in the proposed new subsurface disposal area(s) are much higher, for example a percolation rate of 55 inches per day. For design purposes, the Discharger used a percolation rate of 3.3 inches per day.

11. Site Hydrology

Annual precipitation for the area is estimated at 10 inches. Surface runoff from offsite and onsite areas of the housing development is collected and transported by storm drains and concrete-lined drainage channels that flow into the Basin, located near the northeast corner of the Facility. Discharges from the basin in overflow conditions enter a culvert on the west side of U.S. Highway 395 and flow into Alkali Ditch. Alkali Ditch is a tributary to the West Walker River on the east side of U.S. Highway 395, as shown on Attachment "D."

The storm water retention basin will be altered in configuration with construction of the proposed Facility, but the overall capacity to handle runoff from a 100-year, 24-hour storm event will not be altered.

12. Site Hydrogeology

The Facility currently has three active drinking water wells on the site located up gradient of the disposal area. In addition to the drinking water wells, the Facility has three monitoring wells located around the Facility to monitor the existing discharge. The locations of the existing monitoring wells are shown in Attachment "C." This Order requires installation of ground water monitoring systems and sampling to adequately monitor the discharges.

Based on the ground water gradient determined by a 2011 survey, the depth to ground water is greater than 50 feet for the proposed disposal area and over 70 feet below the current disposal area. The ground water gradients were not as would be expected and this order will require additional ground water monitoring wells. Ground water is known to contain naturally-occurring arsenic and uranium, which

may be present above drinking water standards, which is why the water is treated prior to consumption.

13. Receiving Waters

The receiving waters are the ground waters of the Antelope Valley (Topaz Valley) Ground Water Basin (Department of Water Resources Basin No. 6-107).

14. Water Quality Control Plan

The Water Board adopted the *Water Quality Control Plan for the Lahontan Region* (Basin Plan), which took effect on March 31, 1995. This Order implements the Basin Plan.

15. Beneficial Uses of Ground Water

The beneficial uses of the ground waters of the Antelope Valley (Topaz Valley) Ground Water Basin, as set forth and defined in the Basin Plan are:

a. municipal and domestic supply
b. agricultural supply
c. freshwater replenishment

16. Regulations for Wastewater Treatment and Disposal

Water Code section 13172 directed the State Water Resources Control Board (State Water Board) to write regulations for waste disposal sites to protect water quality "except for sewage treatment plants..." Those regulations are now incorporated in the California Code of Regulations (CCR) title 27 for waste disposal sites and surface impoundments. The planned Facility has a package wastewater plant for the treatment of the sewage that is statutorily exempt from CCR title 27. Regulation is appropriate for the package wastewater plant under CCR title 23.

The existing Facility discharges primary treated wastewater that receives anaerobic treatment in the septic tanks and additional aerobic treatment occurs in the leachfield. Since the leachfields are part of the treatment the entire leachfield disposal area, as part of the treatment system, is exempt from title 27 requirements. The proposed Facility will use the existing leachfields and other subsurface disposal methods to dispose of secondary treated wastewater. The subsurface disposal will provide some additional treatment to the effluent, but the amount of additional treatment is small in comparison to the proposed treatment system. Thus, the proposed disposal of the treated wastewater is not covered by the exemption contained in the statute.

In addition to the treated wastewater disposal, the Discharger discharges rinse water as wastewater from the drinking water system to the storm water retention and percolation Basin. This discharge is not exempt from Water Code section 13172.

17. California Code of Regulations (CCR)

The discharge or disposal of treated sewage and drinking water treatment system effluent is subject to CCR title 27 regulations, as follows. Section 20090(b) states the following three conditions that must be met for the discharge to be exempt from title 27 prescriptive requirements for waste containment.

"(b) Wastewater -Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields if the following conditions are met:"

"(1)the applicable RWQCB has issued WDRs, reclamation requirements or waived such issuance;"

The Water Board has previously issued WDRs for the existing Facility and its discharges (wastewater and drinking water treatment system). The adoption of this Order will satisfy the condition for the proposed Facility and the continued water supply operations.

"(2) the discharge is in compliance with the applicable water quality control plan; and"

The applicable water quality control plan is the Basin Plan. The Order for the existing Facility includes a ground water monitoring program and associated data indicates the Facility has not impaired the water quality for designated beneficial uses. The proposed Facility will discharge effluent of much higher quality with only a small increase in the total flow. The water system discharges, on an ongoing intermittent basis, also meet conditions above for exemption from title 27 prescriptive requirements. The disposed effluent and method of disposal will be regulated in accordance with the Basin Plan. The Discharger is in compliance with the Basin Plan and will be required to continually demonstrate compliance with the Basin Plan by monitoring included in this Order.

"(3) the wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste."

The discharge does not meet the specified hazardous waste criteria.

In summary, the conditions for exemption to title 27 requirements will be met with the adoption of this order and WDRs that place ongoing requirements on the Discharger. The current discharge has not violated the Basin Plan, monitoring will continue to demonstrate that the discharge is in compliance with the Basin Plan, and the effluent is not a hazardous waste. Under these conditions, it is appropriate to regulate the disposal of wastewater solely under CCR title 23.

18. Policy for Maintaining High Quality Waters

State Water Board Resolution No. 68-16 requires the Lahontan Water Board, in regulating the discharge of waste, to *maintain existing high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial uses, and will not result in water quality less than that described in State or Regional Water Board policies; and require that any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters must meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that a pollution or nuisance will not occur and the highest water quality consistent with maximum benefit to the people of the State will be maintained.*

The Discharger will be increasing the total flow discharged to the subsurface. However, the water quality of the discharge will be improved by using the secondary and near-tertiary treatment technology to prevent a pollution or nuisance from occurring. The current discharge has an average biochemical oxygen demand (BOD) concentration of 262 mg/l and an average total suspended solids (TSS) concentration of 58 mg/l. The proposed treatment system should discharge BOD at less than 30 mg/l and TSS at less than 30 mg/l, and thus achieve over 80% reduction in current BOD loading and over 30% reduction in current TSS loading. The total net loading (pounds of materials) to the subsurface of BOD, TSS and other pollutants will be reduced by the improved treatment.

The discharge will also be over a larger area providing greater dispersal and disposal area cycling options for the Discharger. A portion of the time the discharge will be to a subsurface irrigation system. The discharge to the irrigation system will be in the root zone of plants that will take up nutrients such as nitrogen and phosphorus from the discharge.

In summary, the discharge will be of a better quality, actual subsurface loading of constituents will be reduced and the discharge area will be increased. Thus, the discharge will maintain the quality of existing high quality waters and will not unreasonably affect the current and future uses of the ground water for beneficial purposes.

19. Evaluation of Water Code Section 13241

Pursuant to Water Code section 13241 the requirements of this Order take into consideration:

(a) Past, present, and probable future beneficial uses of water.

The findings of this Order identify past, present and probable future beneficial uses of water, as described in the Basin Plan, that are potentially affected by the discharge. Present or probable future beneficial uses of the water, including municipal water supply, agricultural supply and freshwater replenishment will not be affected by the discharge, and will be maintained.

(b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.

The findings of this Order concerning geology, hydrogeology, and hydrology provide general information on the hydrographic unit potentially affected by the discharge. Water quality is generally suitable for beneficial uses, although the Discharger has to remove naturally-occurring arsenic from the ground water to meet drinking water standards to supply the community. The past ground water monitoring has shown some unusual nitrate concentrations at times in the ground water possibly attributable to ongoing discharges. However, the highest nitrate concentration detected since the Discharger has been monitoring has been 5.0 mg/l as N, and is below the drinking water Maximum Contaminant Level (MCL) standard of 10 mg/l for nitrate as N.

The proposed discharge will be a higher quality effluent with a lower total nitrogen level, and lower amounts of ammonia that could potentially convert to nitrate. The effluent sampled in March and April 2010 was found to have an average ammonia concentration of over 43mg/l as N which, in the air-rich subsurface, could quickly convert to nitrate. The proposed discharge will be aerated prior to disposal and is expected to have nitrate concentrations in the range of 5 mg/l, with low concentrations of ammonia that could convert to nitrate.

The Water Board has considered the environmental characteristics of the hydrographic unit, including the quality of water available.

(c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.

The ground water is assumed to be generally unaffected by waste discharges due to the isolated and remote location. All factors that could affect water quality in the area are being controlled in accordance with the Basin Plan policies. The nearest drinking water well has naturally-occurring arsenic above levels suitable for human consumption, and is controlled by treatment.

The Discharger currently monitors the ground water in the wastewater disposal area, which includes the area for drinking water treatment system discharges, and will be required to continue monitoring the ground water for pollutant increases associated with wastewater. In addition, the Discharger will begin monitoring the effluent from the proposed Facility treatment system

under this Order. Ground water quality will be maintained for its beneficial uses, consistent with coordinated controls for the area.

(d) Economic considerations

The proposed Facility is necessary to allow for the continued occupancy of the community and to allow for adequate water supply and sewage treatment with the proposed increase in flow rates associated with other proposed improvements. The Discharger has not indicated any economic hardship associated with the proposed Facility modifications.

(e) The need for developing housing within the region.

This project is in support of an existing housing facility for military personnel and their families, and is needed to support wastewater discharges from ancillary community services, including grocery shopping, and child care and development. The Discharger has determined the planned Facility modifications support existing and currently-planned service levels, and significant new housing is not anticipated. The Discharger provides a service to the US Marine Corps by managing the housing facility and the utility services for the housing. The existing Facility supports an existing housing development; the proposed Facility will provide support for placing four additional existing unoccupied houses into available housing. In addition, the current density of the development does not support allowing additional housing or support facilities that would increase the discharge based on existing treatment levels. This Order will support the existing and planned military housing and support facilities. This Order does not support developing new housing, but may prevent increased local demand in temporary housing in other locations than the existing housing area. Minimizing temporary housing demand assists in reducing the need to develop housing in the area.

(f) The need to develop and use recycled water

The proposed Facility will be using a portion of the discharge for subsurface irrigation above the two subsurface disposal fields. The subsurface irrigation system will be only 12 - 18 inches below the land surface. The subsurface irrigation will reduce the amount of potable water used to establish and maintain landscaping on top of the subsurface irrigation system. Based on available water supplies, there is not a demonstrated need at this time to develop the use of recycled water at the housing area beyond what is proposed.

20. California Environmental Quality Act Compliance

On January 24, 2011, the Water Board provided notice of intent to certify a negative declaration (SCH No. 2011012057) for the Coleville Military Family Housing Area Facility Improvements project. (Cal. Code Regs., tit. 14, § 15072.) The negative

declaration reflects the Water Board's independent judgment and analysis. After considering the document and comments received during the public review process, the Water Board hereby determines that the proposed project will not have a significant effect on the environment. The negative declaration is hereby certified together with a program for monitoring and reporting on conditions of approval. The documents or other material, which constitute the record, are located at the Water Board's office at 2501 Lake Tahoe Boulevard, South Lake Tahoe CA 96150. The Water Board will file a Notice of Determination with the Office of Planning and Research within five working days from the issuance of this order.

This Order includes a monitoring and reporting program for project elements needed to assure effects of the project analyzed under CEQA will not be significant.

21. Notification and Consideration of Comments

The Water Board has notified the Discharger and interested parties of its intent to issue revised WDRs for the discharge and Facility. A notice of the availability of a draft order, and that a public meeting would be held to consider adoption of the order, was published/advertised in the Sierra Scope on March 1, 2011. The Water Board, in a public meeting on April 13, 2011 heard and considered all comments pertaining to the discharge. The Water Board has considered comments provided in accordance with applicable time limits.

IT IS HEREBY ORDERED, pursuant to Water Code sections 13260, 13263, and 13267 the Discharger must comply with the following:

I. DISCHARGE FLOW LIMIT SPECIFICATIONS

A. Flow Limit for Existing Facility

The maximum flow into the existing Facility must not exceed 39,000 gallons in a single day.

B. Flow Limits for Proposed Facility

The proposed Facility must have the flow meter or other means to determine the flow that will be discharged to the disposal fields. The flow measurement must be located just past the last portion of the treatment after the tertiary filters.

1. The Discharger must monitor the discharging flow from the Facility to the disposal locations The discharge of treated wastewater must not exceed a monthly average flow rate of 50,000 gallons per day, where the monthly average flow rate is computed based on daily flow volumes.
2. The maximum flow into the Facility equalization tank must not exceed 90,000 gallons in a single 24-hour period.

C. Flow Limits for Filter Rinse

The maximum flow from the filter rinse water system to the authorized disposal areas during a 24-hour period must not exceed 100,000 gallons (0.100 million gallons).

II. DISCHARGE EFFLUENT LIMITS

A. Effluent Limits for the existing Facility – Not Applicable

B. Effluent Limits for the proposed Facility

1. The wastewater discharged from the proposed Facility to the authorized disposal area must not exceed the following limits.

Parameter	Units	Mean[1]	Maximum[2]
BOD[3]	mg/l	30	45
Suspended Solids	mg/l	30	45
Nitrate	mg/l as N	10	---

1. The mean is the monthly mean.
2. Maximum is the instantaneous maximum.
3. BOD means Biochemical Oxygen Demand.

2. The wastewater discharged to the authorized disposal areas must not have a pH lower than 6 or greater than 9. However, a pH over 9 resulting from a biological process and not due to a chemical addition may be allowed.

III. RECEIVING WATER LIMITS

The discharge of waste from the existing or proposed Facility and the drinking water treatment system must not cause the presence of the following substance or conditions in the ground waters of the Antelope Valley (Topaz Valley) Ground Water Basin or surface waters of the West Walker River Hydrologic Unit.

A. Any perceptible color, odor, taste or foaming.

B. Coliform organisms attributable to human wastes.

C. Chemical Constituents – Waters designated as MUN must not contain concentrations of chemical constituents in excess of the MCL or Secondary MCL (SMCL) based upon drinking water standards specified in the following provisions of CCR, title 22: Table 64431-A of Section 64431 (Inorganic Chemicals), Table 64431-B of Section 64431 (Fluoride), Table 64444-A of Section 64444 (Organic Chemicals), Table 64449-A of Section 64449 (SMCLs – Consumer Acceptance Limits), and Table 64449-B of Section 64449 (SMCLs – Consumer Acceptance Ranges). This incorporation-by-

A. reference is prospective including future changes to the incorporated provisions as the changes take effect.

   Waters designated as AGR must not contain concentrations of chemical constituents that adversely affect the water for beneficial uses (e.g., agricultural purposes).

   Waters must not contain concentrations of chemical constituents that adversely affect the water for beneficial uses.

B. Radioactivity – Waters designated as MUN must not contain concentrations of radio nuclides in excess of limits specified in CCR, title 22, section 64442, Table 64442, and section 64443, Table 64443, including future changes as the changes take effect.

C. Taste and Odors – Waters must not contain taste or odor-producing substances in concentrations that cause a nuisance or that adversely affect beneficial uses. For waters designated as MUN, at a minimum, concentrations must not exceed adopted SMCLs specified in Table 64449-A of section 64449 (SMCLs – Consumer Acceptance Limits) and Table 64449-B of section 64449 (SMCLs – Consumer Acceptance Ranges) of CCR, title 22, including future changes as the changes take effect.

D. Color – Waters must not contain color-producing substances from tracers in concentrations that cause a nuisance or that adversely affect beneficial uses.

E. Toxicity – All waters must be maintained free of toxic substances in concentrations that individually, collectively, or cumulatively cause a detrimental physiological response in human, plant, animal, or aquatic life is prohibited.

I. GENERAL REQUIREMENTS AND PROHIBITIONS

A. The discharge of wastewater, except to the authorized disposal areas, is prohibited.

B. The discharge, bypass, or diversion of raw or partially treated sewage, sewage sludge, grease, or oils from the collection, transport, treatment, or disposal facilities to adjacent land areas or surface waters is prohibited.

C. The discharge must not cause a pollution as defined in section 13050 of the Water Code, or a threatened pollution.

D. Neither the treatment nor the discharge must cause a nuisance as defined in section 13050 of the Water Code.

E. The discharge of waste to surface waters is prohibited.

F. Surfacing effluent or visible discharge of treated sewage from the authorized disposal area to adjacent land or surface waters is prohibited.

G. Sludge generated at the Facility may not be disposed of at the Facility, but must to be taken to a location authorized to receive and dispose of the sludge.

H. The Discharger must comply with the CEQA conditions of approval hereby incorporated into this Order as Attachment 5 of the Monitoring and Reporting Program No. 2011-0020.

II. PROVISIONS

A. Standard Provisions

The Discharger must comply with the "Standard Provisions for Waste Discharge Requirements," dated September 1, 1994, in Attachment “E” which is made part of this Order.

B. Special Provisions for Water Supply System Wastes

1. Discharge of wastewater to the storm water retention Basin is limited to storm water, runoff and drainage, and rinse water discharged from rinsing of new water treatment filter media (rinse water).
2. Discharge of co-mingled storm water runoff and rinse water from the Basin to surface waters is prohibited.
3. Rinse water must be applied to the Basin only when there is no standing water present prior to the discharge, and adequate time is allowed for the rinse water to percolate into the soil prior to storms or other runoff events tributary to the Basin.
4. Discharge of rinse water from the Basin is prohibited.
5. The Basin outlet must be constructed, maintained and or controlled to prevent the discharge of rinse water from the Basin.

C. Monitoring and Reporting Program

1. A monitoring and reporting program (MRP) is necessary to verify compliance with requirements. Pursuant to Water Code section 13267, subdivision (b), the Discharger must comply with MRP No. 2011-0020 as specified by the Water Board Executive Officer.
2. The Discharger must comply with the Sludge Management Plan required in the MRP upon acceptance by the Water Board Executive Officer.
3. By October 1, 2011, the Discharger must propose, install and maintain adequate monitoring systems for ground water monitoring as directed by the Executive Officer.

4. Special Provisions Construction Inspection: Upon acceptance by the Executive Officer, the Discharger must comply with the construction inspection program specified in the MRP.

D. Operator Certification

The Discharger's wastewater treatment plant must be supervised by personnel possessing wastewater treatment plant operation certificate of the appropriate grade pursuant to the California Code of Regulations, title 23, division 3, chapter 26.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on April 13, 2011.

HAROLD J. SINGER
EXECUTIVE OFFICER

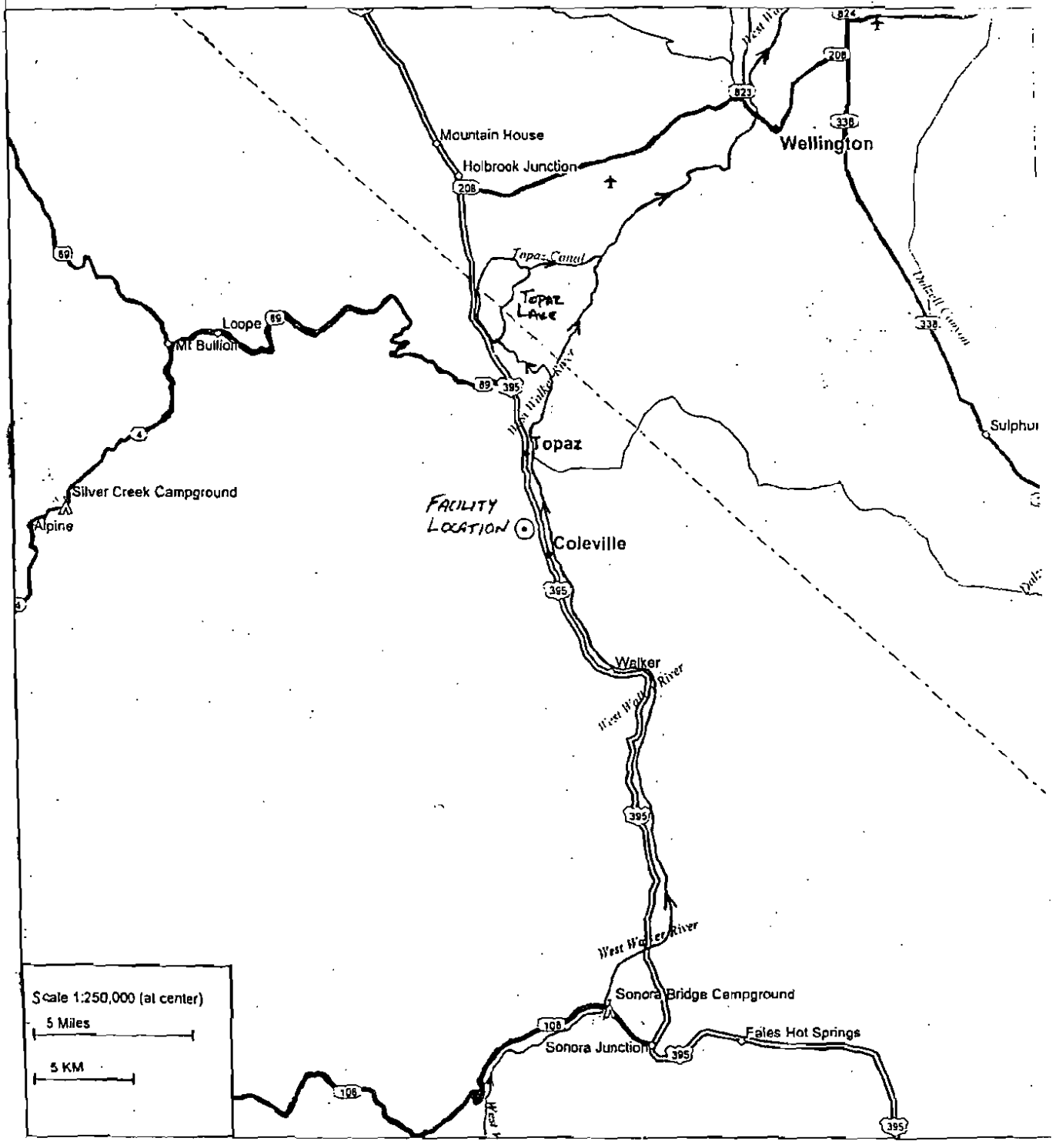
Attachments:

A. Location Map
B. Treatment Plant Flow Diagram
C. Facility Map
D. Vicinity Map
E. Standard Provisions

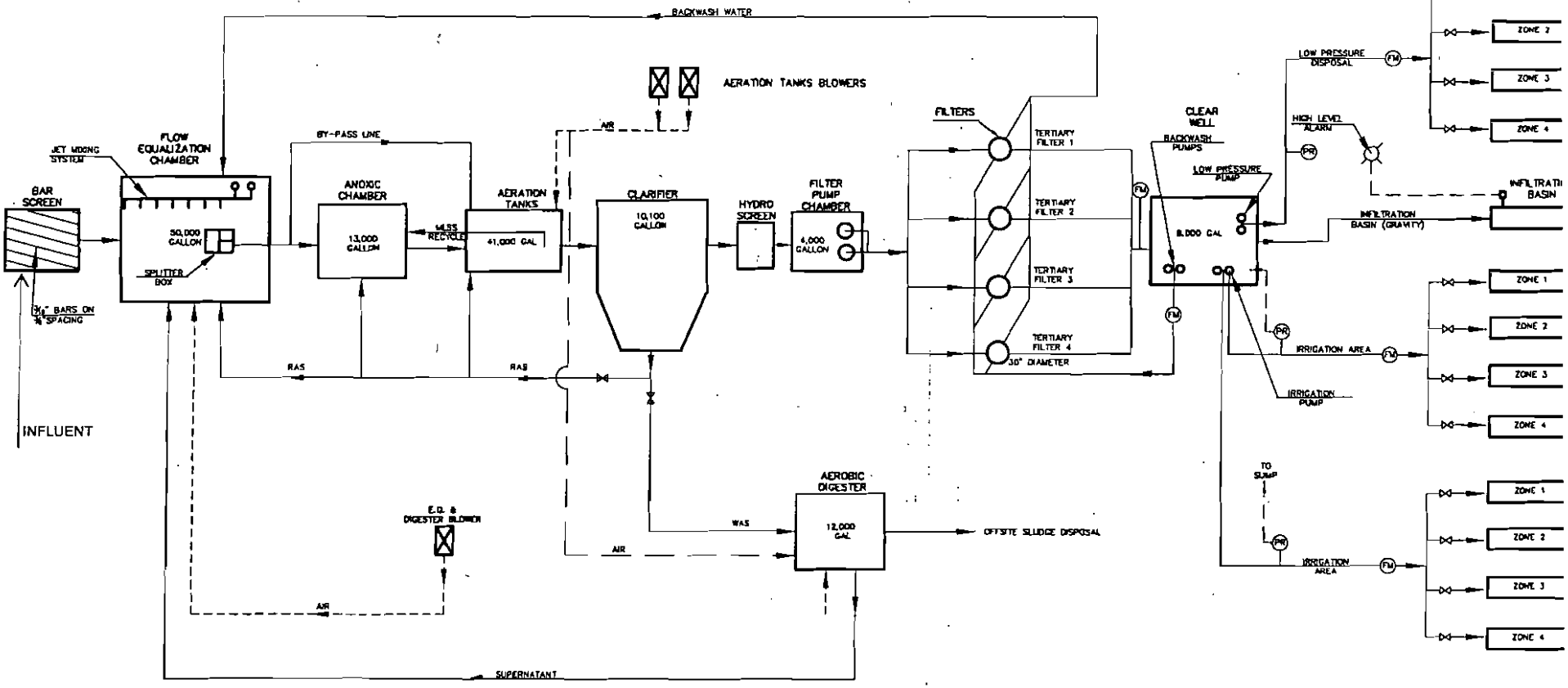
Attachment A

Location Map

U.S. Marine Corps Mountain Warfare
Training Center Housing Project
Located in Section 36, T9N, R22E, MDB&M



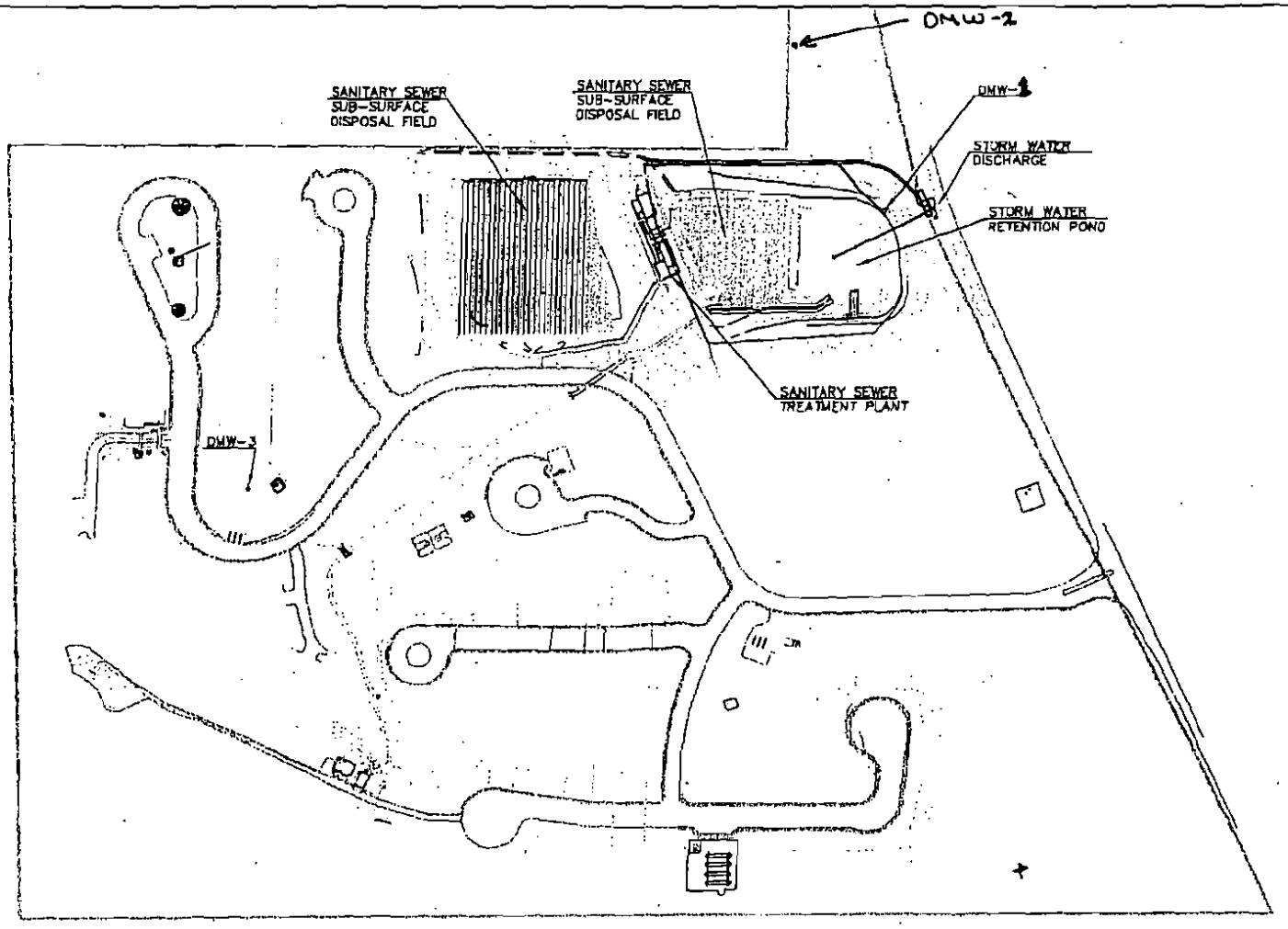
ATTACHMENT B



COLEVILLE HOUSING WASTEWATER TREATMENT FLOW DIAGRAM

LEGEND

PR - PRESSURE RELIEF VALVE
FM - FLOW METER

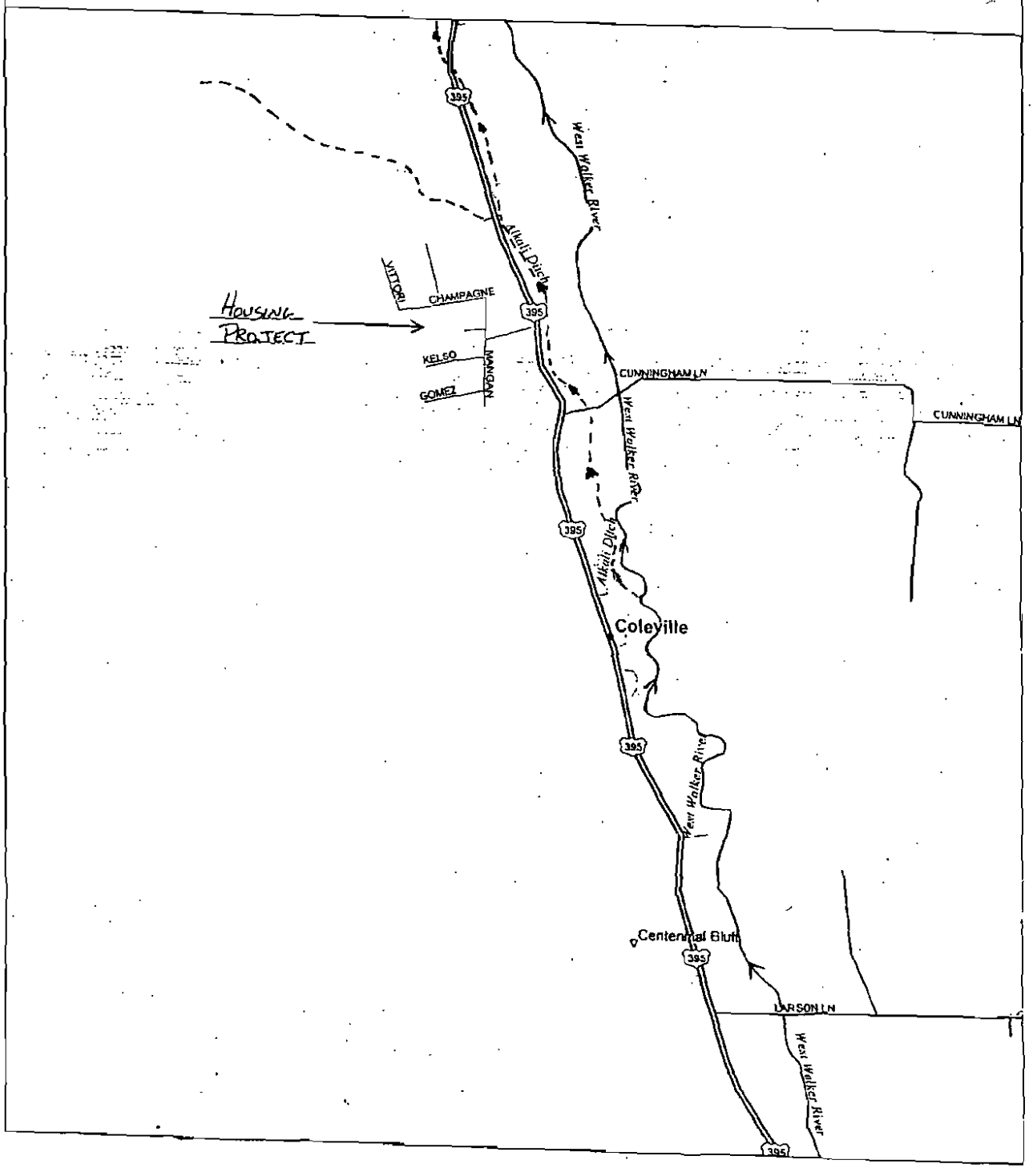


Not to scale

MARINE CORPS MOUNTAIN WARFARE TRAINING CENTER MILITARY HOUSING COMPLEX COLEVILLE, CALIFORNIA WET UTILITY IMPROVEMENT PLAN: SANITARY SEWER, DRINKING WATER AND STORM WATER	Attachment C Facility Map (Proposed Facility)	Apex Companies, LLC

Attachment D
Vicinity Map

U.S. Marine Corps Mountain Warefare
Training Center Housing Project



ATTACHMENT E

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

STANDARD PROVISIONS
FOR WASTE DISCHARGE REQUIREMENTS

1. Inspection and Entry

The Discharger shall permit Regional Board staff:

a. to enter upon premises in which an effluent source is located or in which any required records are kept;

b. to copy any records relating to the discharge or relating to compliance with the Waste Discharge Requirements (WDRs);

c. to inspect monitoring equipment or records; and

d. to sample any discharge.

2. Reporting Requirements

a. Pursuant to California Water Code 13267(b), the Discharger shall immediately notify the Regional Board by telephone whenever an adverse condition occurred as a result of this discharge; written confirmation shall follow within two weeks. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance.

b. Pursuant to California Water Code Section 13260 (c), any proposed material change in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Regional Board at least 120 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant soil disturbances.

c. The Owners/Discharger of property subject to WDRs shall be considered to have a continuing responsibility for ensuring compliance with applicable WDRs in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the WDRs shall be reported to the Regional Board. Notification of applicable WDRs shall be furnished in writing to the new owners and/or operators and a copy of such notification shall be sent to the Regional Board.

d. If a Discharger becomes aware that any information submitted to the Regional Board is incorrect, the Discharger shall immediately notify the Regional Board, in writing, and correct that information.

e. Reports required by the WDRs, and other information requested by the Regional Board, must be signed by a duly authorized representative of the Discharger. Under Section 13268 of the California Water Code, any person failing or

refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars ($1,000) for each day of violation.

f. If the Discharger becomes aware that their WDRs (or permit) are no longer needed (because the project will not be built or the discharge will cease) the Discharger shall notify the Regional Board in writing and request that their WDRs (or permit) be rescinded.

3. Right to Revise WDRs

The Regional Board reserves the privilege of changing all or any portion of the WDRs upon legal notice to and after opportunity to be heard is given to all concerned parties.

4. Duty to Comply

Failure to comply with the WDRs may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and re-issuance, or modification.

5. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the WDRs which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the WDRs. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the WDRs.

7. Waste Discharge Requirement Actions

The WDRs may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for waste discharge requirement modification, revocation and
re-issuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the WDRs conditions.

8. Property Rights

The WDRs do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the WDRs including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the WDRs shall be kept and maintained by the Discharger and be available at all times to operating personnel.

11. Severability

Provisions of the WDRs are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

12. Public Access

General public access shall be effectively excluded from treatment and disposal facilities.

13. Transfers

Providing there is no material change in the operation of the facility, this Order may be transferred to a new owner or operation. The owner/operator must request the transfer in writing and receive written approval from the Regional Board's Executive Officer.

14. Definitions

a. "Surface waters" as used in this Order, include, but are not limited to, live streams, either perennial or ephemeral, which flow in natural or artificial water courses and natural lakes and artificial impoundments of waters. "Surface waters" does not include artificial water courses or impoundments used exclusively for wastewater disposal.

b. "Ground waters" as used in this Order, include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.

15. Storm Protection

All facilities used for collection, transport, treatment, storage, or disposal of waste shall be adequately protected against overflow, washout, inundation, structural damage or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 100 years.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

MONITORING AND REPORTING PROGRAM NO. 2011-0020
WDID NO. 6A268512900

FOR
CAMP PENDLETON & QUANTICO HOUSING LLC/LINCOLN MILITARY HOUSING AND UNITED STATES MARINE CORPS MOUNTAIN WARFARE TRAINING CENTER COLEVILLE HOUSING WASTEWATER TREATMENT AND DISPOSAL FACILITY

Mono County

I. GENERAL REQUIREMENTS

A. Effective date

This monitoring and reporting program (MRP) is effective on the date of adoption, or as amended by the Executive Officer. This Monitoring and Reporting Program (MRP) covers the monitoring for the existing Facility, which is a community septic system, and the Proposed Facility, which will be a secondary treatment system (aerated tanks with activated sludge process and a polishing filter). The Discharger must comply with other monitoring and reporting requirements for the existing Facility, water supply operations, and the requirements of this MRP for the proposed Facility upon adoption of this Order, and as appropriate for the proposed Facility.

B. Overview of Reports Required

The Discharger each year must provide **four (4) *Quarterly Monitoring Reports* and one (1) *Annual Report.*** The monitoring period covered for each report and the dates the reports are due are listed below in each respective subsection. Each report must provide information on general operations, flow rates, effluent quality (where applicable), and ground water quality, as specified herein.

Reports must include applicable information to verify compliance with California Environmental Quality Act (CEQA) conditions of approval associated with this Order as specified herein.

C. Certified Cover Letter

The Discharger must use Attachment 1 as a cover letter, or a cover letter containing the same information, for all reports provided to the Water Board. All violations of requirements must be disclosed in the report cover letters.

D. General Provisions

The Discharger must comply with the "General Provisions for Monitoring and Reporting" dated September 1, 1994, which is made part of this Monitoring and Reporting Program as Attachment 2.

E. Monitoring for Existing and Proposed Facility

This MRP applies to the existing and proposed Facilities. Monitoring that is not possible or required on the existing system (community septic system) will be stated after the requirement, in parenthesis, "(Not required for the community septic system)."

F. Final Construction As-Built-Plans

The Discharger must provide a construction report signed and certified by a California licensed Civil engineer that certifies the disposal areas were constructed to the design specified in the Report of Waste Discharge received on July 26, 2010. The report may be segmented into portion of the overall subsurface work so areas completed may be put into use. The report(s) must included one or more scaled drawings on 8½" by 11" sheets of paper showing and labeling the proposed Facilities as completed.

II. MONITORING AND QUARTERLY REPORTING REQUIREMENTS

The Discharger must monitor the following and submit quarterly reports on the following reoccurring dates, covering the time periods stated. The information that must be submitted to complete the report is specified below in items II. A.- D.

Monitoring Period	**Report Due Date**
October 1 - December 31	**January 30**
January 1 - March 31	**April 30**
April 1 - June 30	**July 30**
July 1 - September 30	**October 30**

A. Facility Flow Monitoring

1. The total volume of wastewater discharging, in gallons, for each day of each month.
2. The average daily flow rate of the discharge. (Not required for the community septic system.)
3. The monthly average flow rate in gallons per day (gpd), of domestic treated wastewater discharged to the disposal field, calculated for each month in the quarter.

4. The date and volume of filter rinse water flow from drinking water treatment media rinsing to the storm water retention basin for each month in the quarter.

B. Effluent Monitoring (Proposed Facility)

When the proposed Facility is completed and operating the following effluent samples must be collected at the clear well and prior to being pumped into the disposal fields. The effluent must be tested for the following parameters and at the required frequency as specified below. The Discharger may collect additional samples, but must provide the data from all samples collected and analyzed. (Not required for the community septic system.)

Parameter	Units	Testing Method	Frequency	Minimum Detection limit
pH	pH units	Field[1]	Weekly	N/A[3]
Electrical conductivity	µmho/cm	Field[1]	Weekly	100µmho/cm
Biochemical Oxygen Demand (BOD)	mg/l	Lab[2]	Weekly	15
Total Suspended Solids	mg/l	Lab[2]	Weekly	10
Nitrate as Nitrogen	mg/l	Lab[2]	Weekly	0.5
Total Dissolved Solids	mg/l	Lab[2]	Monthly	75
Total Nitrogen	mg/l	Lab[2]	Monthly	0.5
Total Phosphorus	mg/l	Lab[2]	Monthly	0.5
Chloride	mg/l	Lab[2]	Monthly	2.5

1 - Field - Means a field test accomplished by site personnel with a direct read instrument calibrated per manufacturer specifications.
2 - Lab - Laboratory-means the testing will accomplished by a laboratory accredited by California Environmental Laboratory Accreditation Program and is following either an EPA method or a Standard Method for examining wastewater or drinking water.
3 - pH minimum detection values are not required but the method used to determine pH must be able determine the pH between 1.5 -12.5 and have a precision of 0.5.

C. Ground Water Monitoring

1. Ground Water Elevation Measurements

Prior to purging sampling wells or collecting samples from monitoring wells the static ground water elevations must be determined at all monitoring wells. Depths to ground water with respect to mean sea level may be used to determine elevations. The Discharger must determine and report the ground water gradient and flow direction based on the ground water elevations.

2. Ground Water Purging

Ground water monitoring wells must be purged prior to collecting samples. The following is the procedure that must be followed for groundwater purging.

a. Ground water samples must be collected after either of the following: 1) an amount of water equal to three times the amount of water within the well casing has been removed, or 2) the temperature, electrical conductivity, and pH measurements of the water in the well have stabilized to approximately ±10% for successive measurements after a minimum of one well volume has been removed.

   If a monitoring well is purged, and does not appear to be recovering to pre-purging elevations, the Discharger must document the water elevation and time the well goes dry and the volume of water removed. The Discharger may return the next day and attempt to collect the sample from the well without further purging and document all the information above with the amount of time allowed for the well to recover.

b. Measurements of temperature, electrical conductivity, and pH during purging must be reported with the results of ground water analyses.

c. Well casing diameter, well depth, depth to ground water, and total volume purged prior to sampling must also be reported with the ground water monitoring results.

3. Ground Water Sampling and Analyses

   Existing monitoring wells established by the Discharger for monitoring under this MRP are referred to by the following designations: Deep MW-1, Deep MW-2 and Deep MW-3. The approximate locations of the monitoring wells are shown in Attachment 3. The monitoring wells must be sampled for the following parameters and at the frequency provided below.

Parameter	Units	Frequency	Minimum Detection limit
pH[1]	pH units	Quarterly	N/A[5]
Electrical Conductivity[1]	µmho/cm	Quarterly	100
Total Dissolved Solids[2]	mg/l	Quarterly	10
Fecal Coliform[2]	MPN/100ml[3]	Quarterly	2
Total Nitrogen[2]	mg/l	Quarterly	0.5
Nitrate as Nitrogen[2]	mg/l	Quarterly	0.5
Chloride[2]	mg/l	Quarterly	2.5
Purgeable Organics[2]	µg/l	Every fifth year	per method
Acid Extractable Organics[4] (semi volatiles)	µg/l	Every fifth year	per method
Organochlorine pesticides[4] and PCBs	µg/l	Every fifth year	per method
Heavy metals[4]	mg/l	Every fifth year	per method

1 - Measurement by a field test accomplished by site personnel with a direct read instrument calibrated per manufacturers specifications.
2 -The parameter will accomplished by a laboratory accredited by California Environmental Laboratory Accreditation Program and is following either an EPA method or a Standard method for examining wastewater or drinking water.
3 - Units of MPN/100 ml, stands for Most Probable Number of bacteria colonies per 100 mililiters.
4 -The samples are to be analyzed for the priority pollutants listed in Attachment 4 of this MRP, according to the specified method or methods.
5 - pH minimum detection values are not required but the method used to determine pH must be able determine the pH between 1.5 -12.5 and have a precision of 0.25.

D. Monitoring General Operations and CEQA conditions

1 The Discharger must monitor and report on any operational problems and maintenance activities affecting effluent discharge or compliance with waste discharge requirements and proposed corrective measures, if needed, and a schedule for completion.

2. Monthly visual inspections must be conducted for surfacing effluent in the discharge areas.

3. The Discharger must monitor and report quarterly on compliance with conditions of approval (COA) to ensure that environmental effects of the project (SCH#2011012057) will be insignificant as approved in accordance with CEQA findings of this Order. Condition measures to be completed and/or monitored are stated in Attachment 5, which is made part of this MRP. These CEQA monitoring requirements are applicable until June 30, 2013, unless the monitoring period is extended beyond June 30, 2013, in writing by the Executive Officer as an amendment to the MRP. A COA report covering the monitoring period April – June 2013 must be provided by July 30, 2013.

III. ANNUAL MONITORING REPORT

The Discharger must submit an Annual report **by January 31** of each year covering the period from January 1 through December 31 of the previous calendar year. The information that must be submitted to complete the report is specified below in items A. - C.

A. Annual Report General Reporting

The Annual Report must include information specified below.

1. Graphical and tabular presentation of all effluent monitoring data obtained for the previous year.
2. Graphical and tabular presentation of all ground water monitoring data obtained for the previous 5 years.
3. The compliance record and corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements.
4. Any modification or additions to, or any major maintenance conducted on, the wastewater flow measuring equipment, treatment or disposal facilities during the past year.
5. The amount of sludge removed and the sludge disposal location(s).

B. Review of effluent and ground water sample results.

1. The Discharger is required to review the effluent data collected for violations with respect to effluent limits and self-report any violation in the monitoring and reporting report. (Not required for the community septic system.)
2. The Discharger must also review the ground water data collected and identify any violation of a receiving water quality objective.
3. The Discharger must indicate the last date when monitoring at 5-year intervals required in MRP section II.C.3., above was completed, and when the next sampling will be conducted to meet the requirements.

C. Data Analysis Review

1. By Oct 15, 2011, the Discharger must produce for acceptance by the Water Board's Executive Officer a procedure to analyze and review the ground water data annually. The review and analysis may be accomplished by comparing up gradient and down gradient monitoring well data, intrawell statistical analysis, interwell statistical analysis or other method. The analysis procedure must provide a method to determine if the ground water data indicates either an unusually increase of that a ground water quality objective has been exceeded.

If the Executive Officer does not provide a written confirmation in 45 day after receiving the procedure, the procedure may be used for the next annual report. Any comments issued after 45 days will require a response and may alter the analysis for the next annual report.

2. The Discharger must annually review all the ground water data collected in item II.C.3. and conduct an analysis on the data as proposed and accepted by the Water Boards Executive Officer
3. The Discharger must determine and certify that the ground water monitoring data has not shown a statistically significant increase for the monitored constituents. If the certification cannot be provided because an increase is detected, the Discharger is required to notify the Water Board within 5 days of identifying the conditions and implement procedures in section IV. of this MRP.

IV. CONTINGENCY RESPONSE

If the Discharger cannot provide the certification in section III.C. then the Discharger must take the following procedural steps to determine if the existing or proposed Facility is affecting the ground water.

A. Resample the affected monitoring well or wells for the constituent of concern, submit the data to the Water Board within 45 days of the discovery of the increase, and provide an analysis that evaluates whether the concentrations of monitored constituents are increasing.

B. If the constituent is considered to be increasing, produce and provide an investigation, evaluation and monitoring work plan within 120 days from the discovery of an increase in concentrations of monitored constituents. The work plan must describe how an investigation and evaluation will be conducted to determine if the Facility is causing or contributing to the increase in the concentrations of constituents in ground water, and provide a schedule for completing the evaluation.

C. If the results of the investigation work plan confirm the Facility is the source of the increases in the monitored ground water constituents, the Discharger must, within 120 days of the determination, propose corrective measures for acceptance by the Water Board's Executive Officer.

V. SLUDGE MANAGEMENT PLAN REPORT

The Discharger must provide a Sludge Management Plan report by **January 30, 2012**. The plan must describe the sludge management, handling, and treatment processes, including all areas expected to be used in sludge management prior to final disposal offsite; control measures to prevent spills; and measures to control odors. The Plan must also include the disposal location for off site sludge disposal.

VI. GROUND WATER MONITORING WELL REQUIREMENTS

A. The Discharger must submit by **October 1, 2011** a ground water monitoring system and a proposed time schedule for installation of additional ground water monitoring wells as described below. One or more additional wells are needed to account for observed shifts in groundwater directions and gradients. The monitoring system, at a minimum must, include the following:

1. A minimum of four monitoring wells, including existing wells, must be installed to determine the ground water gradient of the ground water.
2. Additional wells must be installed, if necessary, to insure that at least one (1) well is up gradient and two (2) wells are down gradient of the wastewater treatment facilities during all seasons and anticipated ground water pumping conditions. The Discharger must demonstrate that at least two down gradient wells are located such that ground water potentially impacted by the discharge will be monitored at all times.
3. The specific design and location of the wells must be submitted for review and acceptance by the Water Board's Executive Officer with analyses of well water surface elevations and gradients for the last three years of monitoring at existing wells.
4. The ground water monitoring wells must be installed at the disposal site in accordance with the approved plan and by the date specified by the Executive Officer.
5. As built design report shall be submitted within 60 days after any new ground water monitoring system is installed. This report shall include a statement of certification signed by a California registered civil engineer or geologist, regarding the placement, lithology and construction of the well or wells.

B. After the installation of the new wells as accepted by the Executive Officer grab water samples shall be collected from the monitoring wells, and analyzed to determine the magnitude of the parameters in the table in Section II.C.3.a. of this Monitoring and Reporting Program.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

MONITORING AND REPORTING PROGRAM NO. 2011-0020
WDID NO. 6A268512900

FOR
CAMP PENDLETON & QUANTICO HOUSING LLC/LINCOLN MILITARY HOUSING AND UNITED STATES MARINE CORPS MOUNTAIN WARFARE TRAINING CENTER COLEVILLE HOUSING WASTEWATER TREATMENT AND DISPOSAL FACILITY

Mono County

I. GENERAL REQUIREMENTS

A. Effective date

This monitoring and reporting program (MRP) is effective on the date of adoption, or as amended by the Executive Officer. This Monitoring and Reporting Program (MRP) covers the monitoring for the existing Facility, which is a community septic system, and the Proposed Facility, which will be a secondary treatment system (aerated tanks with activated sludge process and a polishing filter). The Discharger must comply with other monitoring and reporting requirements for the existing Facility, water supply operations, and the requirements of this MRP for the proposed Facility upon adoption of this Order, and as appropriate for the proposed Facility.

B. Overview of Reports Required

The Discharger each year must provide **four (4) *Quarterly Monitoring Reports* and one (1) *Annual Report.*** The monitoring period covered for each report and the dates the reports are due are listed below in each respective subsection. Each report must provide information on general operations, flow rates, effluent quality (where applicable), and ground water quality, as specified herein.

Reports must include applicable information to verify compliance with California Environmental Quality Act (CEQA) conditions of approval associated with this Order as specified herein.

C. Certified Cover Letter

The Discharger must use Attachment 1 as a cover letter, or a cover letter containing the same information, for all reports provided to the Water Board. All violations of requirements must be disclosed in the report cover letters.

D. General Provisions

The Discharger must comply with the "General Provisions for Monitoring and Reporting" dated September 1, 1994, which is made part of this Monitoring and Reporting Program as Attachment 2.

E. Monitoring for Existing and Proposed Facility

This MRP applies to the existing and proposed Facilities. Monitoring that is not possible or required on the existing system (community septic system) will be stated after the requirement, in parenthesis, "(Not required for the community septic system)."

F. Final Construction As-Built-Plans

The Discharger must provide a construction report signed and certified by a California licensed Civil engineer that certifies the disposal areas were constructed to the design specified in the Report of Waste Discharge received on July 26, 2010. The report may be segmented into portion of the overall subsurface work so areas completed may be put into use. The report(s) must included one or more scaled drawings on 8½" by 11" sheets of paper showing and labeling the proposed Facilities as completed.

II. MONITORING AND QUARTERLY REPORTING REQUIREMENTS

The Discharger must monitor the following and submit quarterly reports on the following reoccurring dates, covering the time periods stated. The information that must be submitted to complete the report is specified below in items II. A.- D.

Monitoring Period	**Report Due Date**
October 1 - December 31	**January 30**
January 1 - March 31	**April 30**
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July 1 - September 30	**October 30**

A. Facility Flow Monitoring

1. The total volume of wastewater discharging, in gallons, for each day of each month.
2. The average daily flow rate of the discharge. (Not required for the community septic system.)
3. The monthly average flow rate in gallons per day (gpd), of domestic treated wastewater discharged to the disposal field, calculated for each month in the quarter.

4. The date and volume of filter rinse water flow from drinking water treatment media rinsing to the storm water retention basin for each month in the quarter.

B. Effluent Monitoring (Proposed Facility)

When the proposed Facility is completed and operating the following effluent samples must be collected at the clear well and prior to being pumped into the disposal fields. The effluent must be tested for the following parameters and at the required frequency as specified below. The Discharger may collect additional samples, but must provide the data from all samples collected and analyzed. (Not required for the community septic system.)

Parameter	Units	Testing Method	Frequency	Minimum Detection limit
pH	pH units	Field[1]	Weekly	N/A[3]
Electrical conductivity	µmho/cm	Field[1]	Weekly	100µmho/cm
Biochemical Oxygen Demand (BOD)	mg/l	Lab[2]	Weekly	15
Total Suspended Solids	mg/l	Lab[2]	Weekly	10
Nitrate as Nitrogen	mg/l	Lab[2]	Weekly	0.5
Total Dissolved Solids	mg/l	Lab[2]	Monthly	75
Total Nitrogen	mg/l	Lab[2]	Monthly	0.5
Total Phosphorus	mg/l	Lab[2]	Monthly	0.5
Chloride	mg/l	Lab[2]	Monthly	2.5

1 - Field - Means a field test accomplished by site personnel with a direct read instrument calibrated per manufacturer specifications.
2 - Lab - Laboratory-means the testing will accomplished by a laboratory accredited by California Environmental Laboratory Accreditation Program and is following either an EPA method or a Standard Method for examining wastewater or drinking water.
3 - pH minimum detection values are not required but the method used to determine pH must be able determine the pH between 1.5 -12.5 and have a precision of 0.5.

C. Ground Water Monitoring

1. Ground Water Elevation Measurements

Prior to purging sampling wells or collecting samples from monitoring wells the static ground water elevations must be determined at all monitoring wells. Depths to ground water with respect to mean sea level may be used to determine elevations. The Discharger must determine and report the ground water gradient and flow direction based on the ground water elevations.

2. Ground Water Purging

Ground water monitoring wells must be purged prior to collecting samples. The following is the procedure that must be followed for groundwater purging.

a. Ground water samples must be collected after either of the following: 1) an amount of water equal to three times the amount of water within the well casing has been removed, or 2) the temperature, electrical conductivity, and pH measurements of the water in the well have stabilized to approximately ±10% for successive measurements after a minimum of one well volume has been removed.

   If a monitoring well is purged, and does not appear to be recovering to pre-purging elevations, the Discharger must document the water elevation and time the well goes dry and the volume of water removed. The Discharger may return the next day and attempt to collect the sample from the well without further purging and document all the information above with the amount of time allowed for the well to recover.

b. Measurements of temperature, electrical conductivity, and pH during purging must be reported with the results of ground water analyses.

c. Well casing diameter, well depth, depth to ground water, and total volume purged prior to sampling must also be reported with the ground water monitoring results.

3. Ground Water Sampling and Analyses

   Existing monitoring wells established by the Discharger for monitoring under this MRP are referred to by the following designations: Deep MW-1, Deep MW-2 and Deep MW-3. The approximate locations of the monitoring wells are shown in Attachment 3. The monitoring wells must be sampled for the following parameters and at the frequency provided below.

Parameter	Units	Frequency	Minimum Detection limit
pH[1]	pH units	Quarterly	N/A[5]
Electrical Conductivity[1]	µmho/cm	Quarterly	100
Total Dissolved Solids[2]	mg/l	Quarterly	10
Fecal Coliform[2]	MPN/100ml[3]	Quarterly	2
Total Nitrogen[2]	mg/l	Quarterly	0.5
Nitrate as Nitrogen[2]	mg/l	Quarterly	0.5
Chloride[2]	mg/l	Quarterly	2.5
Purgeable Organics[2]	µg/l	Every fifth year	per method
Acid Extractable Organics[4] (semi volatiles)	µg/l	Every fifth year	per method
Organochlorine pesticides[4] and PCBs	µg/l	Every fifth year	per method
Heavy metals[4]	mg/l	Every fifth year	per method

1 - Measurement by a field test accomplished by site personnel with a direct read instrument calibrated per manufacturers specifications.
2 - The parameter will accomplished by a laboratory accredited by California Environmental Laboratory Accreditation Program and is following either an EPA method or a Standard method for examining wastewater or drinking water.
3 - Units of MPN/100 ml, stands for Most Probable Number of bacteria colonies per 100 mililiters.
4 - The samples are to be analyzed for the priority pollutants listed in Attachment 4 of this MRP, according to the specified method or methods.
5 - pH minimum detection values are not required but the method used to determine pH must be able determine the pH between 1.5 -12.5 and have a precision of 0.25.

D. Monitoring General Operations and CEQA conditions

1 The Discharger must monitor and report on any operational problems and maintenance activities affecting effluent discharge or compliance with waste discharge requirements and proposed corrective measures, if needed, and a schedule for completion.

2. Monthly visual inspections must be conducted for surfacing effluent in the discharge areas.

3. The Discharger must monitor and report quarterly on compliance with conditions of approval (COA) to ensure that environmental effects of the project (SCH#2011012057) will be insignificant as approved in accordance with CEQA findings of this Order. Condition measures to be completed and/or monitored are stated in Attachment 5, which is made part of this MRP. These CEQA monitoring requirements are applicable until June 30, 2013, unless the monitoring period is extended beyond June 30, 2013, in writing by the Executive Officer as an amendment to the MRP. A COA report covering the monitoring period April – June 2013 must be provided by July 30, 2013.

III. ANNUAL MONITORING REPORT

The Discharger must submit an Annual report **by January 31** of each year covering the period from January 1 through December 31 of the previous calendar year. The information that must be submitted to complete the report is specified below in items A. - C.

A. Annual Report General Reporting

The Annual Report must include information specified below.

1. Graphical and tabular presentation of all effluent monitoring data obtained for the previous year.
2. Graphical and tabular presentation of all ground water monitoring data obtained for the previous 5 years.
3. The compliance record and corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements.
4. Any modification or additions to, or any major maintenance conducted on, the wastewater flow measuring equipment, treatment or disposal facilities during the past year.
5. The amount of sludge removed and the sludge disposal location(s).

B. Review of effluent and ground water sample results.

1. The Discharger is required to review the effluent data collected for violations with respect to effluent limits and self-report any violation in the monitoring and reporting report. (Not required for the community septic system.)
2. The Discharger must also review the ground water data collected and identify any violation of a receiving water quality objective.
3. The Discharger must indicate the last date when monitoring at 5-year intervals required in MRP section II.C.3., above was completed, and when the next sampling will be conducted to meet the requirements.

C. Data Analysis Review

1. By Oct 15, 2011, the Discharger must produce for acceptance by the Water Board's Executive Officer a procedure to analyze and review the ground water data annually. The review and analysis may be accomplished by comparing up gradient and down gradient monitoring well data, intrawell statistical analysis, interwell statistical analysis or other method. The analysis procedure must provide a method to determine if the ground water data indicates either an unusually increase of that a ground water quality objective has been exceeded.

If the Executive Officer does not provide a written confirmation in 45 day after receiving the procedure, the procedure may be used for the next annual report. Any comments issued after 45 days will require a response and may alter the analysis for the next annual report.

2. The Discharger must annually review all the ground water data collected in item II.C.3. and conduct an analysis on the data as proposed and accepted by the Water Boards Executive Officer
3. The Discharger must determine and certify that the ground water monitoring data has not shown a statistically significant increase for the monitored constituents. If the certification cannot be provided because an increase is detected, the Discharger is required to notify the Water Board within 5 days of identifying the conditions and implement procedures in section IV. of this MRP.

IV. CONTINGENCY RESPONSE

If the Discharger cannot provide the certification in section III.C. then the Discharger must take the following procedural steps to determine if the existing or proposed Facility is affecting the ground water.

A. Resample the affected monitoring well or wells for the constituent of concern, submit the data to the Water Board within 45 days of the discovery of the increase, and provide an analysis that evaluates whether the concentrations of monitored constituents are increasing.

B. If the constituent is considered to be increasing, produce and provide an investigation, evaluation and monitoring work plan within 120 days from the discovery of an increase in concentrations of monitored constituents. The work plan must describe how an investigation and evaluation will be conducted to determine if the Facility is causing or contributing to the increase in the concentrations of constituents in ground water, and provide a schedule for completing the evaluation.

C. If the results of the investigation work plan confirm the Facility is the source of the increases in the monitored ground water constituents, the Discharger must, within 120 days of the determination, propose corrective measures for acceptance by the Water Board's Executive Officer.

V. SLUDGE MANAGEMENT PLAN REPORT

The Discharger must provide a Sludge Management Plan report by **January 30, 2012**. The plan must describe the sludge management, handling, and treatment processes, including all areas expected to be used in sludge management prior to final disposal offsite; control measures to prevent spills; and measures to control odors. The Plan must also include the disposal location for off site sludge disposal.

VI. GROUND WATER MONITORING WELL REQUIREMENTS

A. The Discharger must submit by **October 1, 2011** a ground water monitoring system and a proposed time schedule for installation of additional ground water monitoring wells as described below. One or more additional wells are needed to account for observed shifts in groundwater directions and gradients. The monitoring system, at a minimum must, include the following:

1. A minimum of four monitoring wells, including existing wells, must be installed to determine the ground water gradient of the ground water.
2. Additional wells must be installed, if necessary, to insure that at least one (1) well is up gradient and two (2) wells are down gradient of the wastewater treatment facilities during all seasons and anticipated ground water pumping conditions. The Discharger must demonstrate that at least two down gradient wells are located such that ground water potentially impacted by the discharge will be monitored at all times.
3. The specific design and location of the wells must be submitted for review and acceptance by the Water Board's Executive Officer with analyses of well water surface elevations and gradients for the last three years of monitoring at existing wells.
4. The ground water monitoring wells must be installed at the disposal site in accordance with the approved plan and by the date specified by the Executive Officer.
5. As built design report shall be submitted within 60 days after any new ground water monitoring system is installed. This report shall include a statement of certification signed by a California registered civil engineer or geologist, regarding the placement, lithology and construction of the well or wells.

B. After the installation of the new wells as accepted by the Executive Officer grab water samples shall be collected from the monitoring wells, and analyzed to determine the magnitude of the parameters in the table in Section II.C.3.a. of this Monitoring and Reporting Program.

VII. CONSTRUCTION INSPECTION AND QUALITY ASSURANCE

Fourteen days or more before beginning construction the Discharger must provide a quality assurance plan. The plan must identify personnel who will conduct inspections, and their qualifications to do so, for all work on the subsurface disposal fields, and the repairs to the storm water retention Basin.

Ordered By Harold J. Singer Date April 13, 2011
HAROLD J. SINGER
EXECUTIVE OFFICER

Attachments:

1. Certified Cover Letter
2. General Provisions for Monitoring and Reporting
3. Site Map
4. List of Priority Pollutants
5. California Environmental Quality Act Monitoring – Conditions of Approval

ATTACHMENT 1

Date _____

California Regional Water Quality Control Board
Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Facility Name: _____

_____

Address: _____

_____

_____

_____

Contact Person: _____

Job Title: _____

Phone: _____

Email: _____

WDR/NPDES Order Number: _____

WDID Number: _____

Type of Report (circle one): **Monthly** **Quarterly** **Semi-Annual** **Annual** **Other**

Month(s) (circle applicable month(s)*: **JAN** **FEB** **MAR** **APR** **MAY** **JUN**

JUL **AUG** **SEP** **OCT** **NOV** **DEC**

***annual Reports** (circle the first month of the reporting period)

Year: _____

Violation(s)? (Please check one): _____ **NO** _____ **YES***

***If YES is marked complete a-g (Attach Additional information as necessary)**

a) Brief Description of Violation: _____

_____

_____

_____

b) Section(s) of WDRs/NPDES Permit Violated: _____

c) Reported Value(s) or Volume: _____

d) WDRs/NPDES Limit/Condition: _____

e) Date(s) and Duration of Violation(s): _____

f) Explanation of Cause(s): _____

g) Corrective Action(s)
(Specify actions taken and a schedule for actions to be taken) _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision following a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge of the person(s) who manage the system, or those directly responsible for data gathering, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

If you have any questions or require additional information, please contact _____ at the number provided above.

Signature: _____

Name: _____

Title: _____

ATTACHMENT 2

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

GENERAL PROVISIONS
FOR MONITORING AND REPORTING

1. SAMPLING AND ANALYSIS

a. All analyses shall be performed in accordance with the current edition(s) of the following documents:

i. Standard Methods for the Examination of Water and Wastewater

ii. Methods for Chemical Analysis of Water and Wastes, EPA

b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.

c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board prior to use.

d. The Discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.

e. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.

f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.

g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal

the discharge period, or 24 hours, whichever period is shorter.

2. OPERATIONAL REQUIREMENTS

a. Sample Results

Pursuant to California Water Code Section 13267(b), the Discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

3. REPORTING

a. For every item where the requirements are not met, the Discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.

b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.

d. Monitoring reports shall be signed by:

i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

ii. In the case of a partnership, by a general partner;

iii. In the case of a sole proprietorship, by the proprietor; or

iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

e. Monitoring reports are to include the following:

i. Name and telephone number of individual who can answer questions about the report.

ii. The Monitoring and Reporting Program Number.

iii. WDID Number.

f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

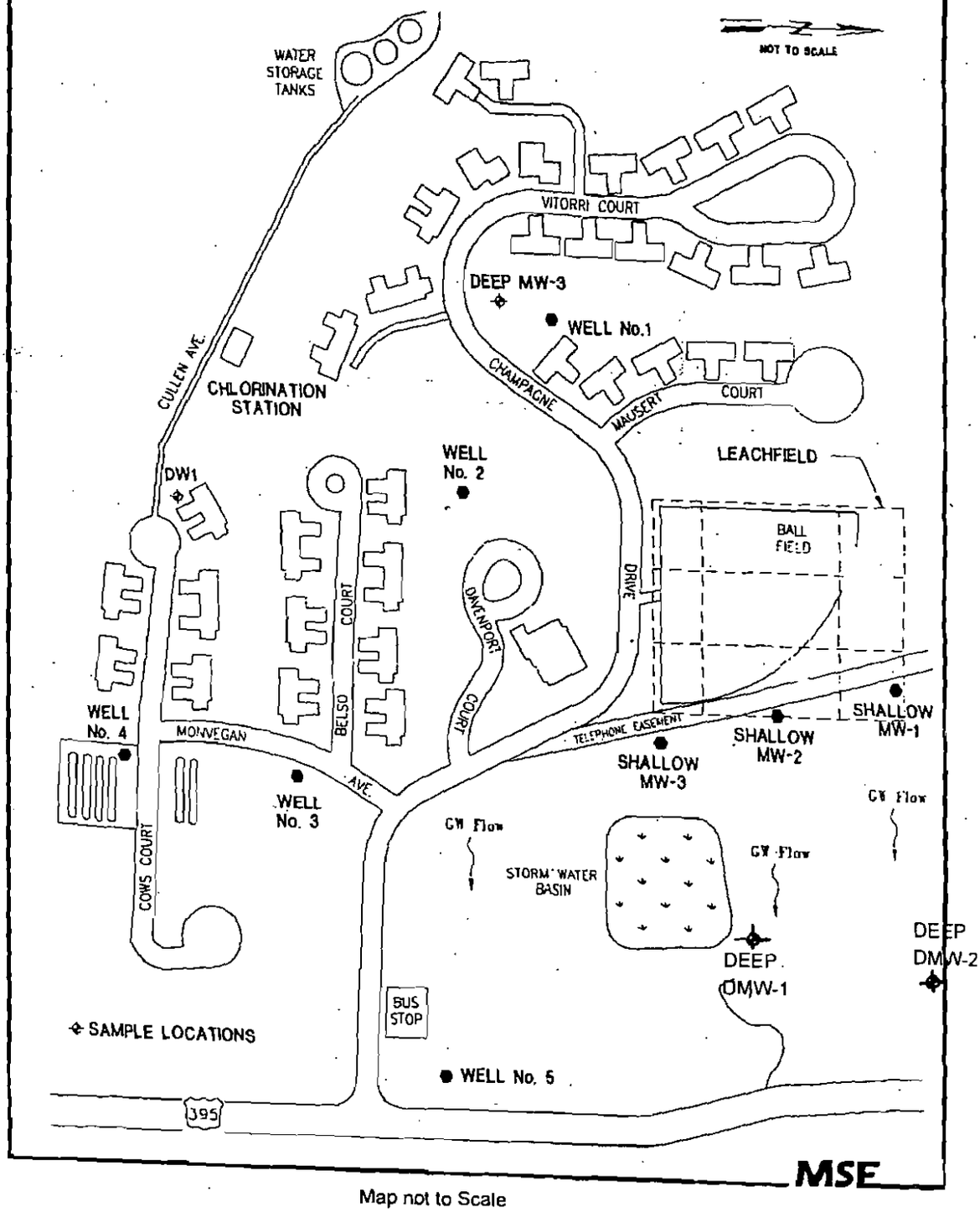
4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars ($1,000) for each day of violation under Section 13268 of the Water Code.

Attachment 3

Site Map

U.S. Marine Corps Mountain Warefare
Training Center Housing Project



Map not to Scale

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
1	Antimony	7440360	EPA 6020/200.8
2	Arsenic	7440382	EPA 1632
3	Beryllium	7440417	EPA 6020/200.8
4	Cadmium	7440439	EPA 1638/200.8
5a	Chromium (III)	16065831	EPA 6020/200.8
5a	Chromium (VI)	18540299	EPA 7199/1636
6	Copper	7440508	EPA 6020/200.8
7	Lead	7439921	EPA 1638
8	Mercury	7439976	EPA 1669/1631
9	Nickel	7440020	EPA 6020/200.8
10	Selenium	7782492	EPA 6020/200.8
11	Silver	7440224	EPA 6020/200.8
12	Thallium	7440280	EPA 6020/200.8
13	Zinc	7440666	EPA 6020/200.8
*14	Cyanide	57125	EPA 9012A
*15	Asbestos	1332214	EPA/600/R-93/116(PCM)
*16	2,3,7,8-TCDD	1746016	EPA 8290 (HRGC) MS
17	Acrolein	107028	EPA 8260B
18	Acrylonitrile	107131	EPA 8260B
19	Benzene	71432	EPA 8260B or 624
20	Bromoform	75252	EPA 8260B or 624
21	Carbon Tetrachloride	56235	EPA 8260B or 624
22	Chlorobenzene	108907	EPA 8260B or 624
23	Chlorodibromomethane	124481	EPA 8260B or 624
24	Chloroethane	75003	EPA 8260B or 624
25	2-Chloroethylvinyl Ether	110758	EPA 8260B or 624
26	Chloroform	67663	EPA 8260B or 624
27	Dichlorobromomethane	75274	EPA 8260B or 624
28	1,1-Dichloroethane	75343	EPA 8260B or 624
29	1,2-Dichloroethane	107062	EPA 8260B or 624
30	1,1-Dichloroethylene	75354	EPA 8260B or 624
31	1,2-Dichloropropane	78875	EPA 8260B or 624
32	1,3-Dichloropropylene	542756	EPA 8260B or 624
33	Ethylbenzene	100414	EPA 8260B or 624
34	Methyl Bromide	74839	EPA 8260B or 624
35	Methyl Chloride	74873	EPA 8260B or 624
36	Methylene Chloride	75092	EPA 8260B or 624
37	1,1,2,2-Tetrachloroethane	79345	EPA 8260B or 624
38	Tetrachloroethylene	127184	EPA 8260B or 624
39	Toluene	108883	EPA 8260B or 624
40	1,2-Trans-Dichloroethylene	156605	EPA 8260B or 624
41	1,1,1-Trichloroethane	71556	EPA 8260B or 624

* These constituents do not need to be analyzed for

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
42	1,12-Trichloroethane	79005	EPA 8260B or 624
43	Trichloroethylene	79016	EPA 8260B or 624
44	Vinyl Chloride	75014	EPA 8260B or 624
45	2-Chlorophenol	95578	EPA 8270C or 625
46	2,4-Dichlorophenol	120832	EPA 8270C or 625
47	2,4-Dimethylphenol	105679	EPA 8270C or 625
48	2-Methyl-4,6-Dinitrophenol	534521	EPA 8270C or 625
49	2,4-Dinitrophenol	51285	EPA 8270C or 625
50	2-Nitrophenol	88755	EPA 8270C or 625
51	4-Nitrophenol	100027	EPA 8270C or 625
52	3-Methyl-4-Chlorophenol	59507	EPA 8270C or 625
53	Pentachlorophenol	87865	EPA 8270C or 625
54	Phenol	108952	EPA 8270C or 625
55	2,4,6-Trichlorophenol	88062	EPA 8270C or 625
56	Acenaphthene	83329	EPA 8270C or 625
57	Acenaphthylene	208968	EPA 8270C or 625
58	Anthracene	120127	EPA 8270C or 625
59	Benzidine	92875	EPA 8270C or 625
60	Benzo(a)Anthracene	56553	EPA 8270C or 625
61	Benzo(a)Pyrene	50328	EPA 8270C or 625
62	Benzo(b)Fluoranthene	205992	EPA 8270C or 625
63	Benzo(ghi)Perylene	191242	EPA 8270C or 625
64	Benzo(k)Fluoranthene	207089	EPA 8270C or 625
65	Bis(2-Chloroethoxy)Methane	111911	EPA 8270C or 625
66	Bis(2-Chloroethyl)Ether	111444	EPA 8270C or 625
67	Bis(2-Chloroisopropyl)Ether	108601	EPA 8270C or 625
68	Bis(2-Ethylhexyl)Phthalate	117817	EPA 8270C or 625
69	4-Bromophenyl Phenyl Ether	101553	EPA 8270C or 625
70	Butylbenzyl Phthalate	85687	EPA 8270C or 625
71	2-Chloronaphthalene	91587	EPA 8270C or 625
72	4-Chlorophenyl Phenyl Ether	7005723*	EPA 8270C or 625
73	Chrysene	218019	EPA 8270C or 625
74	Dibenzo(a,h)Anthracene	53703	EPA 8270C or 625
75	1,2-Dichlorobenzene	95501	EPA 8270C or 625
76	1,3-Dichlorobenzene	541731	EPA 8270C or 625
77	1,4-Dichlorobenzene	106467	EPA 8270C or 625
78	3,3'-Dichlorobenzidine	91941	EPA 8270C or 625
79	Diethyl Phthalate	84662	EPA 8270C or 625
80	Dimethyl Phthalate	131113	EPA 8270C or 625
81	Di-n-Butyl Phthalate	84742	EPA 8270C or 625
82	2,4-Dinitrotoluene	121142	EPA 8270C or 625
83	2,6-Dinitrotoluene	606202	EPA 8270C or 625

* These constituents do not need to be analyzed for

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
84	Di-n-Octyl Phthalate	117840	EPA 8270C or 625
85	1,2-Diphenylhydrazine	122667	EPA 8270C or 625
86	Fluoranthene	206440	EPA 8270C or 625
87	Fluorene	86737	EPA 8270C or 625
88	Hexachlorobenzene	118741	EPA 8270C or 625
89	Hexachlorobutadiene	87863	EPA 8270C or 625
90	Hexachlorocyclopentadiene	77474	EPA 8270C or 625
91	Hexachloroethane	67721	EPA 8270C or 625
92	Indeno(1,2,3-cd)Pyrene	193395	EPA 8270C or 625
93	Isophorone	78591	EPA 8270C or 625
94	Naphthalene	91203	EPA 8270C or 625
95	Nitrobenzene	98953	EPA 8270C or 625
96	N-Nitrosodimethylamine	62759	EPA 8270C or 625
97	N-Nitrosodi-n-Propylamine	621647	EPA 8270C or 625
98	N-Nitrosodiphenylamine	86306	EPA 8270C or 625
99	Phenanthrene	85018	EPA 8270C or 625
100	Pyrene	129000	EPA 8270C or 625
101	1,2,4-Trichlorobenzene	120821	EPA 8270C or 625
102	Aldrin	309002	EPA 8081A or 608
103	alpha-BHC	319846	EPA 8081A or 608
104	beta-BHC	319857	EPA 8081A or 608
105	gamma-BHC	58899	EPA 8081A or 608
106	delta-BHC	319868	EPA 8081A or 608
107	Chlordane	57749	EPA 8081A or 608
108	4,4'-DDT	50293	EPA 8081A or 608
109	4,4'-DDE	72559	EPA 8081A or 608
110	4,4'-DDD	72548	EPA 8081A or 608
111	Dieldrin	60571	EPA 8081A or 608
112	alpha-Endosulfan	959988	EPA 8081A or 608
113	beta-Endosulfan	33213659	EPA 8081A or 608
114	Endosulfan Sulfate	1031078	EPA 8081A or 608
115	Endrin	72208	EPA 8081A or 608
116	Endrin Aldehyde	7421934	EPA 8081A or 608
117	Heptachlor	76448	EPA 8081A or 608
118	Heptachlor Epoxide	1024573	EPA 8081A or 608
119	PCB-1016	12674112	EPA 8081A or 608
120	PCB-1221	11104282	EPA 8081A or 608
121	PCB-1232	11141165	EPA 8081A or 608
122	PCB-1242	53469219	EPA 8081A or 608
123	PCB-1248	12672296	EPA 8081A or 608
124	PCB-1254	11097691	EPA 8081A or 608
125	PCB-1260	11096825	EPA 8081A or 608
126	Toxaphene	8001352	EPA 8081A or 608

* These constituents do not need to be analyzed for

Attachment 5 - Coleville MFHA Project IS-ND: CEQA Project Conditions of Approval

This Conditions of Approval list was compiled from the Coleville Military Family Housing Area Facilities Improvements Project Initial Study/Negative Declaration (IS-ND, January 2011). The Conditions of Approval are enforceable under waste discharge requirements and provide a means to verify completion of measures to avoid or reduce impacts, and/or validate compliance with the CEQA project description. This Conditions of Approval assumes the Discharger will comply with all laws and policies identified in the IS-ND, and the Waste Discharge Requirements for the facility and project site. As such, specific regulations and the necessary compliance are not included in this Conditions of Approval. The Discharger must monitor and report quarterly on the status of compliance, **including additional information satisfactory to fully demonstrate compliance,** with the following:

Issue Area of Concern	Condition Measure	Page in CEQA IS-ND	Date(s) Verified or Complete	Date Reported
1. Aesthetics	Native vegetation will be planted to enhance the appearance of and partially screen the wastewater treatment plant and adjacent above ground Project components.	20		
2. Aesthetics	The existing playfield will be replaced with native vegetation and returned to restricted open space with no public access. Any landscaping/vegetation that would be disturbed as a result of implementation of the Proposed Project will be replaced upon completion of construction and will be consistent with existing landscaping of the area in order to maintain the existing visual character of the CMFHA	22		
3. Air Quality	The Discharger will conduct activities such as seeding, planting and mulching with ground covers to revegetate and stabilize disturbed soils from erosion immediately following completion of construction.	28		
4. Air Quality	Particulate matter emissions from construction activities will be mitigated through dust reduction measures (e.g.; watering of exposed soils, soil stockpiling and soil stabilization).	28		
5. Biological Resources	Following the completion of construction, the Discharger will ensure construction contractors immediately stabilize all disturbed soils and re-plant with grass and shrub species consistent with pre-existing vegetation and in compliance with EO 13112, Invasive Species.	37		

Issue Area of Concern	Condition Measure	Page in CEQA IS-ND	Date(s) Verified or Complete	Date Reported
6. Biological Resources	The Discharger will implement the following measures to minimize potential impacts to migratory birds and raptors. If grading occurs during the breeding season for migratory birds and raptors (February 15 – August 31), a biologist will survey the Project site and adjacent areas for nests (in trees, shrubs, and on the ground). If the biologist finds an active nest, construction workers will not disturb the nest or adjacent areas (within 150 feet) until the biologist determines that the nest is no longer in use.	37		
7. Cultural Resources	To ensure that any previously unknown resources in other areas of the Project site that may be discovered during earthmoving activities are properly addressed, all Project related earthmoving activities will cease in the event of a discovery until an archaeologist could provide input regarding the significance of the resource.	42		
8. Geology and Soils	The Proposed Project will be designed in accordance with standard geotechnical elements to account for site specific conditions, including seismic considerations prior to construction.	44		
9. Geology and Soils	Proposed construction activities would require excavation, grading, fill, and drilling and will conform to the measures recommended in the Project's site-specific erosion control plan (ECP).	44		
10. Hazards and Hazardous Materials	In the event, workers encounter a large volume of effluent or other sewage during construction, a California-licensed sewage contractor will remove the effluent for onsite disposal at the treatment plant or for off-site disposal in accordance with all applicable regulations.	50		

Issue Area of Concern	Condition Measure	Page in CEQA IS-ND	Date(s) Verified or Complete	Date Reported
11. Hazards and Hazardous Materials	During construction, all inactive but exposed areas of the existing leach field system will be covered. The Discharger will provide and follow a Health and Safety Plan with provisions to warn, train and protect workers against exposure to sewage wastes. Workers will be required to wash in designated on-site wash facilities after having worked within the areas of the existing leach field system until all active disturbances have been completed.	50		
12. Hydrology/ Water Quality	In conducting drainage modifications during construction activities, the existing conveyance and basin capacity will be maintained at all times. Modifications to the drainage basin are planned to occur in the dry summer months and/or when there is less than a 30 percent chance of precipitation at the Project site over the next three days as forecasted by the National Weather Service internet website.	54, 60		
13. Hydrology/ Water Quality	Off site discharges will not occur during construction. Water discovered and extracted during construction along with well development water that cannot be added to the drinking water supply will be discharged into the storm water retention basin during dry conditions when the water can percolate.	7		
14. Hydrology/ Water Quality	Filter Media vessel rinse water will continue to be disposed of in the on-site storm water retention basin. The filter media rinsing process will only occur when standing water is not present in the storm water retention basin.	6		
15. Hydrology/ Water Quality	Visual and flow volume monitoring on the retention basin will occur during rinse water discharge to the retention basin.	6		
16. Hydrology/ Water Quality	Discharger will comply with Section 438 of the Energy Independence and Security Act of 2007 (established federal storm water runoff requirements to maintain or restore, to the maximum extent technically feasible, the pre-development hydrology with regard to the temperature, rate, volume, and duration of flow).	10, 55		

Issue Area of Concern	Condition Measure	Page in CEQA IS-ND	Date(s) Verified or Complete	Date Reported
17. Hydrology/ Water Quality	Storm water runoff will be rerouted to the reconfigured storm water retention basin, which will maintain the 237,000 ft^3 pre-project volume capacity.	10, 60		
18. Hydrology/ Water Quality	Vegetation will be planted over the underground effluent disposal system to aid consumption of water and nutrients.	56		
19. Noise	Construction will be conducted only during the daytime (between the hours of 7 a.m. and 5 p.m. Monday through Friday).	67, 70		
20. Noise	Construction equipment will be stored and maintained away from the existing sensitive receptors, to the extent feasible, and all equipment shall be equipped with properly operating and maintained muffling devices.	20, 67, 70		
21. Public Services	The existing CMFHA playfield, located to the west of the proposed wastewater treatment plant will be removed, regraded and revegetated with native grasses. The former playfield area will be replaced with an open space area that could continue to serve as a dog run area.	4, 73, 74		
22. Utilities/ Service Systems	The existing septic system contents will be pumped out of the treatment system and the septic tanks will be removed in accordance with Mono County code requirements.	4		

Source: Coleville Military Family Housing Area Facilities Improvements Project Initial Study/Negative Declaration, California Regional Water Quality Control Board, Lahontan Region, Region 6, January 2011.