Annual Monitoring Plan

National Pollutant Discharge Elimination System

Permit HI S000052

June 1, 2017

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Acronyms

AASF 1	Army Aviation Support Facility 1
BMP	Best Management Practice
BOD	Biological Oxygen Demand
C	Celsius
CFS	Cubic Feet per Second
COC	Chain of Custody
COD	Chemical Oxygen Demand
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
DOH	Department of Health
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency
EQCC	Environmental Quality Control Committee
HIARNG	Hawaii Army National Guard
IDDE	Illicit Discharge Detection Elimination
LID	Low Impact Design
MCM	Minimum Control measures
MS4	Municipal Separate Storm Sewer System
N	Nitrogen
ND	Non Detect
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
O&M	Operation and Maintenance
P	Phosphorus
pH	Potential Hydrogen
PPM	Part Per Million
PPT	Part Per Thousand
QA/QC	Quality Assurance/Quality Control
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWPCP	Stormwater Pollution Control Plan
TSS	Total Suspended Solids
USAG-HI	United States Army Garrison – Hawaii
WAAF	Wheeler Army Airfield

Permit Cross Reference Table

Permit Requirement	Section in Plan
Part F.1.a. (1) Assess Compliance with Permit	Section 2.0
Part F.1.a.(2) Measure effectiveness of the Storm Water Management Plan	Section 3.0
Part F.1.a.(3) Assess Overall Health of Receiving Water	Section 4.0
Part F.1.a.(4) Characterize Stormwater Discharges	Section 5.0
Part F.1.a.(5) Pollutant Sources	Section 6.0
Part F.1.a.(6) Illicit Discharges	Section 7.0
Part F.1.a.(7) Watershed Quality	Section 8.0
Part F.1.b.(1) Monitoring Plan Objectives	Section 9.0
Part F.1.b.(2) Monitoring Data Analysis	Section 10.0
Part F.1.b.(3) Stormwater Management Practices	Section 11.0
Part F.1.b.(4) Stormwater Sampling	Section 12.0
Part F.1.b.(5) Sample Analysis	Section 13.0
Part F.1.b.(6) Quality Assurance/Quality Control	Section 14.0
Part F.1.b.(7) Stormwater Budget	Section 15.0

1.0 Introduction

The Hawaii Army National Guard (HIARNG) has prepared this Annual Monitoring Plan (The Plan) in accordance with part F.1 of National Pollutant Discharge Elimination System (NPDES) permit HI S000052 (herein referred to as The Permit). The Plan describes HIARNG's water quality monitoring program that has been established for the Army Aviation Support Facility 1 (AASF 1), located at U.S. Army Garrison Hawaii (USAG-HI) Wheeler Army Airfield (WAAF). Figure 1 shows the AASF 1 and vicinity.

2.0 Permit Compliance

HIARNG maintains compliance with The Permit by preventing non-stormwater discharges from the AASF 1 to the (USAG-HI WAAF Municipal Separate Storm Sewer System (MS4), by implementing Minimum Control Measures (MCMs), and submitting the required reporting documents within the deadlines established in The Permit. Table 2.1 provides a description of how each MCM is being implemented. Table 2.2 provides a reference and status of all Permit required submittals.

In accordance with Part A.1, A.2, and A.3 of The Permit, HIARNG maintains compliance with a Stormwater Management Plan (SWMP) dated February 2016. Copies of the SWMP, The Plan, and The Permit are retained at the AASF 1 and at the HIARNG Environmental Office.

Table 2.1 Minimum Control Measures

MCM	Implementation
Public Education & Outreach	Training, Websites, Posters, Logo, Slogan, Mascot, Storm Drain Placards
Public Involvement & Participation	Environmental Quality Control Committee (EQCC) Meetings, Environmental Emergency Hotline
Illicit Discharge Detection Elimination (IDDE)	MS4 connection permits, quarterly water quality facility assessments, complaint investigation, tracking the status and condition of the MS4, facilitating an enforcement policy, spill prevention and response, used oil and toxic material handling and disposal policies.
Construction Site Runoff Control	Construction Best Management Practices (BMP) Manual, Inventory of construction sites, Storm Water Pollution Prevention Plan (SWPPP) Review, Construction Inspections, Enforcement Response Plan, Training, Education
Post-Construction Stormwater Management in New Development and Redevelopment	Requirement for Low Impact Development (LID) and Post Construction BMPs, Design Review for LID per standard, Post construction BMP inspection and Operation and Maintenance (O&M) tracking in Asset Management Database, Education & Training on LID and post construction BMPs
Pollution Prevention/Good Housekeeping	Debris Control Program, Asset Management system and mapping, Inspection and maintenance schedule tracking, Storm Drain Placards, Action Plan for retrofitting BMPs, Trash Reduction Plan, Trash Control Measures, Trash Control Monitoring, Chemical Application Program Plan, Pesticide management, Fertilizer management, Erosion Control Program Plan, Identification of Erosion, Prioritization of sites, Temporary erosion control, Vegetation management plan, Maintenance Activities Program Plan
Industrial and Commercial Activities Discharge Management	Implement Storm Water Pollution Control Plan (SWPCP), Annual Water Quality Sampling and Discharge Monitoring Report (DMR) Submittal

Table 2.2 Permit Submittal Status

Permit Reference	Description	Submittal Due Date	Status
D.1.g.(4)	Prioritized areas for industrial and commercial facility and activity inspection status report.	10/16/2014	Submitted
D.1.d.(4)(iv)	SWPPP Review checklist.	11/15/2014	Submitted
D.1.d.(5)(iv)	Inspection form(s), inspection checklist, and reporting and corrective procedures.	11/15/2014	Submitted
D.1.e.(1)	Plan for requiring LID in its Standards.	2/17/2015	Submitted
F.1.a.	Annual Monitoring Plan	6/1/2015	Submitted
D.1.e.(1)	Draft of the revised Standards.	8/17/2015	Submitted
D.1.e.(1)	Final of the revised Standards.	8/17/2016	Submitted
D.1.f.(1)(iv)	Action Plan for Retrofitting Structural BMPs	8/17/2015	Submitted
D.1.f.(1)(v)	Trash Reduction Plan	8/17/2015	Submitted
D.1.f.(3)(iv)	Action Plan to address erosion at its storm drain system outlets.	8/17/2015	Submitted
D.1.f.(3)(v)	List of projects and implementation schedule for permanent erosion control improvements.	8/17/2015	Submitted
G.1.d.	Written strategy for determining effectiveness of its SWMP	8/17/2015	Submitted
G.2.	Annual Monitoring Report with Discharge Monitoring Reports	1/1/2015	Submitted
D.1.	Revised SWMP Plan.	2/17/2016	Submitted
D.1.d.(1)	Develop BMP Manuals: Construction BMP Field Manual, Maintenance Activities BMP Field Manual and Storm Water Permanent BMP Manual	8/17/2016	Submitted

3.0 Effectiveness of Stormwater Management Plan

HIARNG's goal for the SWMP is to provide AASF 1 owners and operators with a guidance manual on how to comply with permit requirements and prevent non-stormwater discharges which can negatively impact the quality of stormwater. HIARNG assesses the effectiveness of the SWMP by monitoring compliance through regular inspections and implementation of the seven (7) MCMs.

4.0 Health of Receiving Water WAAF

Stormwater discharges from AASF 1 enters into the USAG-HI MS4 at WAAF as overland flow and discharges into the subsurface stormwater sewer. Stormwater is conveyed from WAAF to multiple points of compliance at the upper Waikele Stream approximately 1 mile west of the AASF 1. According to studies conducted by the Environmental Protection Agency (EPA), Waikele Stream and downstream receiving waters are considered impaired water bodies, although no Total Maximum Daily Load (TMDL) has been established for the watershed.

The HIARNG continually assesses the quality of the stormwater leaving the AASF 1. At the time of this plan development, the overall health of the upper Waikele watershed is good. Stormwater quality leaving the AASF 1 is also good, although currently, there are several pollutants recognized in the waste stream. These pollutants include:

- Metals (Copper, Zinc, Nickel)
- Nitrates and Total Nitrogen
- Total Phosphorus
- Turbidity

5.0 Characterize Stormwater Discharges

HIARNG's stormwater discharges from the AASF 1 industrial facility are characterized by comparing current stormwater analytical results from monitoring events with the temporal distribution of the types of target pollutants in the Permit. The Permit includes Sampling Location 1 as the initial point of compliance where monitoring has been chosen. Stormwater samples were collected from two qualifying events in February and July 2016.

Analytical data collected from the February 2016 event showed an increase in Biological Oxygen Demand (BOD), Total Suspended Solids (TSS), Nitrate/Nitrite, Oil and Grease, and Salinity from the previous year. Although the concentrations of these pollutants remain low, they are persistent and found site-wide. The suspected cause for the increase is fewer rain events resulting in more concentrated pollutant loads. These pollutants are not common to the facility industrial activities.

Stormwater discharge from the AASF 1 was further characterized for the first time in February and July 2016 for presence and concentrations of total recoverable metals. Three additional Sampling Locations were established to assess the metals exceedances found in stormwater in 2016 sampling events. Total metal results from these sampling events indicated the presence of six metals (barium, chromium, copper, lead, nickel, and zinc). Of these, copper, nickel, and zinc were detected at concentrations exceeding the acceptable levels (Freshwater Acute HAR 11-54-4).

The HIARNG is currently investigating the occurrence and transport of metals found In the stormwater at the AASF 1. Suspected sources of the metals are building structures at the AASF 1, and roadways and parking lots immediately up gradient of the AASF 1. Figure 5.1 lists the stormwater analytical results collected to date at the AASF 1.

Table 5.1 Water Quality Sampling Results

Parameter	HIARNG 2013	HIARNG 2014	HIARNG 2016
Flow	0.229 cfs	0.085 cfs	0.49 csf
BOD	3.8 mg/L	<1 mg/L	5.1 mg/L
Chemical Oxygen Demand (COD)	32.3 mg/L	45.5 mg/L	38 mg/L
TSS	6.5 mg/L	119 mg/L	152 mg/L
Total Phosphorus (P)	0.027 mg/L	0.304 mg/L	0.30 mg/L
Total Nitrogen (N)	0.76 mg/L	2.62 mg/L	2.53 mg/L
Nitrate/Nitrite	0.093 mg/L	0.113 mg/L	0.175 mg/L
Oil and Grease	<5.1 mg/L	2.3 mg/L	11.7 mg/L
pH	7.40 pH unit	7.35 pH unit	6.0 pH unit
Ammonia as Nitrogen	<1 mg/l	0.03 mg/l	ND
Turbidity	13.7 NTU	13.3 NTU	7.85 NTU
Dissolved Oxygen (DO)	7.8 mg/L	6.2 mg/L	10.92 mg/L
Oxygen Saturation	100.13%	68.8%	100.3%
Salinity	0.03 ppt	0.03 ppt	1 ppt
Temperature	25.8 °C	20.4 °C	11.9 °C
Antimony	NA	NA	ND
Arsenic	NA	NA	ND
Barium	NA	NA	11 ug/L
Beryllium	NA	NA	ND
Cadmium	NA	NA	ND
Chromium	NA	NA	4 ug/L
Cobalt	NA	NA	ND
Copper	NA	NA	***111** ug/L
Lead	NA	NA	27 ug/L
Nickel	NA	NA	***8** ug/L
Selenium	NA	NA	ND
Silver	NA	NA	ND
Thallium	NA	NA	ND
Vanadium	NA	NA	ND
Zinc	NA	NA	***340** ug/L

Celsius (°C)/Cubic feet per second (cfs)/pH denotes pH unit/parts per thousand (PPT)/Nephelometric Turbidity Unit (NTU)
Not Analyzes (NA)/Non Detect (ND)/*Values indicate concentrations above allowable regulatory level (Freshwater Acute HAR 11-54-4)
milligrams per liter (mg/L)/ micrograms per liter (ug/L)

6.0 Pollutant Sources

Specific sources of pollutants attributed the industrial aviation activity at the AASF 1 include:

- Fuel and oil storage and transfers
- Hazardous waste storage
- Solvent parts washers
- Aircraft parts containing cadmium and chromium
- Paint use during aircraft repairs and maintenance
- Grease trap
- Oil water separators
- Aircraft washing
- Sediment transport
- Trash and vegetative debris
- Galvanized metal siding and roofing
- Chain link fences
- Copper gutters and downspouts
- Motor vehicle roadways and parking areas

7.0 Illicit Discharges

There are no known illicit connections at the AASF 1 that contribute pollutants to the MS4. Illicit discharges from the AASF 1, although possible, have not been reported since the existence of The Permit. This is largely attributable to regular training conducted for facility personnel on spill prevention, reporting, and response and the need to protect pathways to the sewer system. In addition, the staff at the facility have been provided the SWMP and a Spill Prevention, Control, and Countermeasures (SPCC) Plan which documents and provides guidance on HIARNG policies and procedures.

8.0 Watershed Quality

The Waikele watershed receives stormwater from HIARNG's industrial facility AASF 1 via USAG-HI's MS4. The stormwater in the upper Waikele Stream area can be impacted negatively by, but not limited to, industrial activity at WAAF, agricultural, and urban runoff. The Waikele Stream discharges into West Loch of Pearl Harbor. These receiving waters are listed as impaired by the State of Hawaii Department of Health (DOH). Watershed assessment studies by EPA for Waikele Stream (EPA ID HI3-4-10)

in 2002, 2004, 2006, 2010, and 2014 identify causes of impairment to be attributed to the presence of Nitrate, Nitrite, Total Nitrogen, and Turbidity. Probable sources of excess nutrients and turbidity in the Waikele Stream are not reported by EPA, however are suspected to be non-point source runoff. There is no Total Maximum Daily Load established by the State of Hawaii at this time for the Waikele watershed.

9.0 Monitoring Plan Objectives

The main objective of the SWMP is to address all requirements of The Permit pertaining to stormwater monitoring at the AASF 1. Key objectives include reduction of pollutants to the maximum extent practical (MEP), to protect water quality, and to satisfy the regulatory requirements in accordance with The Permit. The objectives in the SWMP were met during the prior performance period. This is a result of the AASF 1 staff having the appropriate training and the HIARNG's implementation of the MCMs.

HIARNG monitors the MS4 at the AASF 1 for potential releases of chemicals to the environment through regular visual inspection, and by collecting representative samples of stormwater for analytical testing of target analytes as required in The Permit. Stormwater monitoring is primarily performed to include only the potential pollutants typical to the aviation industrial activity at AASF 1. This has been expanded to include additional assessment of target metals known to be present in the MS4 at the AASF 1. The objective of the additional metals assessment is to identify potential sources of the metals exceeding allowable levels. Overall, stormwater lab analyses will help identify those pollutants found in the MS4 which will need additional monitoring so that appropriate BMP's may be placed in areas that will have the largest impact on improving the stormwater quality discharges.

10.0 Monitoring Data Analysis

Comparison of the lab data results from past stormwater sampling events allow the HIARNG to determine the level of compliance required by The Permit. Effluent pollutant concentrations are compared to HAR 11-54 *Water Quality Standards* to determine the level of compliance. HDOH was notified in a timely manner in 2016 when water quality criteria were not met. The HIARNG identified pollutants in the stormwater at the AASF 1 and possible sources. Some of the pollutants found are not common to the aviation

industrial activities at the AASF 1. HIARNG and USAG-HI are working together to establish appropriate working BMPs to mitigate negative impacts to the surface water quality at WAAF as it relates to the AASF 1industrial activities. Sample data will also be compared annually with previous sampling events to establish temporal and spatial relationships of pollutant transported in MS4 at WAAF, and to track the effectiveness of BMPs employed.

11.0 Stormwater Management Practices

The HIARNG has developed the SWMP as an important resource for performing stormwater monitoring at the AASF 1, as specified in The Permit. The SWMP provides the appropriate level of guidance useful in the identification of potential pollutants and implementation of best stormwater management practices to achieve measurable results. The HIARNG continues to monitor the MCMs as a tool to ensure compliance and monitors the effectiveness of all aspects of the SWMP.

Subsequent to the exceedance of copper, nickel, and zinc identified in 2016 sampling events, metals-absorbing filter socks were strategically deployed around catch basins and in trenches to mitigate metal particulates entering the MS4 (see Figure 3). Additional sampling will be conducted to determine effectiveness of this BMP.

Stormwater management measures which have proven to be effective at controlling non-stormwater discharges at AASF 1 include: use of secondary containment when storing fuels, hazardous chemicals, and wastes, sweeping up dirt and debris, performing aircraft maintenance under cover, using drip pans under leaking vehicles, keeping spill kits stocked and nearby fuel storage areas, cleaning up spills immediately, general good housekeeping, and washing aircraft only in the designated wash rack which is connected to an oil water separator. Employees at AASF 1 are trained annually on the requirements of their stormwater permit, BMPs, detecting illicit discharges, and spill response. Additionally, stormwater flows are reduced through the use of vegetated swales prior to entering catch basins.

12.0 Stormwater Sampling

There were two stormwater sampling events in 2016 conducted by the HIARNG contractor Brown & Caldwell. The first event occurred in February 2016 and included a single sample collected at the Stormwater Location 1, as specified in the June 2016 Annual Monitoring Plan. A second event occurred at Stormwater Locations 1, 2, 3, and

4 on July 18 to investigate exceedance of copper, nickel, and zinc identified in the February laboratory results. Figure 12.1 shows the stormwater sampling locations.

Laboratory results from the February 2016 event indicated various pollutants were detected at concentrations exceeding regulatory levels (Freshwater Acute HAR 11-54-4). Table 5.1 in this Plan lists the analytical parameters and metal exceedances from the February 2016 event. Table 12.1 lists the entire data set for samples collected and analyzed in 2016. The analytical results were compared with applicable regulatory criteria (Freshwater Acute HAR 11-54-4).

Due to the exceedance of copper, nickel, and zinc in the February results, additional sample Location 2, 3, and 4 were selected to investigate the possible source areas for those metals. Samples at those locations, along with Location 1, were collected and analyzed for those metals. Comparison of the analytical results showed a wide variety in the distribution of metal concentrations between the two events, which in general, were significantly lower than the February 2016 results. With the subsequent deployment of strategically placed metals-absorbent booms, it is anticipated the metals levels will be further reduced.

The stormwater samples obtained at Location 1 were obtained using an auto sampler, and all others by grab techniques. As a standard, containers for dissolved oxygen and oil and grease were collected immediately, and the remaining containers were collected in quarterly aliquots each 15 minutes apart. Samples were collected using an approved clean sampler and transferred directly into labeled sampling containers. The sampling containers were placed in a clean cooler on ice and delivered to FQ Labs in Honolulu the day of sample collection.

Table 12.1 Total Metals Results AASF 1

Parameter	HAR 11-54 Limits*	2/16/16 Plan Sample	2/16/16 Duplicate QC	7/18/16 Additional Investigative Samples			
Sample Location No.		**1**	**1**	**1**	**2**	**3**	**4**
Copper	**6 µg/L**	110 µg/L	46 µg/L	37 µg/L	2 µg/L	9 µg/L	40 µg/l
Nickel	**5 µg/L**	8 µg/L	2 µg/L	ND	ND	3 µg/L	ND
Zinc	**22 µg/L**	340 µg/L	110 µg/L	48 µg/L	5 µg/L	17 µg/l	50 µg/l

* Freshwater Acute

Table 12.2 Parameters for Pollutant Loads

Analyte	Pollutant Source
BOD/COD	Organic compounds, oxidizing chemicals
TSS	Erosion and fine Sediments
Total Phosphorus	Waste water, fertilizers, detergents
Total Nitrogen	Waste water, fertilizers, vegetative debris
Nitrate - Nitrite	Waste water, fertilizers, vegetative debris
Ammonia Nitrogen	Waste water, fertilizers, vegetative debris
Oil and Grease	Aircraft Maintenance
Turbidity	Erosion of vegetated areas
Barium	Aircraft parts – All maintenance under cover
Cadmium	Aircraft parts – All maintenance under cover
Chromium	Aircraft parts – All maintenance under cover
Zinc	Galvanized Steel, Sheet metal Siding and roofing
Lead	Weapons cleaning, misc.
Copper	Downspouts

13.0 Sample Analysis

The sample analyses methods used by FQ Labs were consistent with the requirements specified by Part F of The Permit. Table 13.1 provides a list of effluent parameters and the analytical method to be used.

Table 13.1 Analytical Methods

Effluent Parameter	Analytical Method
Flow	Time Weighted Calculation
BOD	EPA 405.1
COD	EPA 410.4
TSS	EPA 160.2
Total Phosphorus	SM 4500-P E
Total Nitrogen	Calculation
Nitrate - Nitrite	EPA 300.1
Ammonia Nitrogen	EPA 350.1
Oil and Grease	EPA Method 1664, Revision A
Turbidity	EPA 180.1 & Oakton T-100 Turbidity Meter
Cadmium	EPA 3015/6020A
Chromium	EPA 3015/6020A
Zinc	EPA 3015/6020A
Lead	EPA 3015/6020A
pH	Hanna 929828 Multi-Parameter Sonde
DO	Hanna 929828 Multi-Parameter Sonde
Oxygen Saturation	Hanna 929828 Multi-Parameter Sonde
Temperature	Hanna 929828 Multi-Parameter Sonde
Salinity	SM2520B and Hanna 929828 Multi-Parameter Sonde

14.0 Quality Assurance/Quality Control

HIARNG's Quality Assurance and Quality Control (QA/QC) for water quality monitoring consists of following specific steps to ensure representative sample collection The QA/QC techniques listed below were followed during the 2016 sampling events.

- Decontamination of the sampling equipment before use and between locations: wash with phosphate free detergent, rinse with potable water, and then rinse again with deionized water. When sampling for trace metals, after washing perform an acid rinse of the equipment and rinse again with potable water.
- Wear powder free nitrile gloves throughout the sampling activity.
- Use of appropriate sampling apparatus and samplers in accordance with the industry standard protocols for collecting representative environmental samples.
- Store all clean sampling equipment in new plastic bags until use.
- Perform appropriate calibration of field instruments and record in field notebook.
- Label all bottles with indelible ink and include a unique sample ID, sampler's initials, parameters to be analyzed, preservation method, collection date, and time. Perform all field instrument calibrations according to manufacturer's specifications and confirm the calibration results are within an acceptable range prior to use.
- Decontaminate grab collection bucket with sample water between sampling locations.
- Place environmental samples immediately in a cooler on ice.
- Perform a post-sampling calibration.
- Perform a post-sampling calibration check of the field instruments and record in field notebook.
- Perform a post sampling calibration check with at least two conductivity standards to bracket the effluent sample results; readings should be within 5% of the standard.

- Record all calibration and post-calibration check results in the project field notebook.
- Complete chain of custody and Stormwater Monitoring Event Record form prior to relinquishing samples to the laboratory.

15.0 Stormwater Budget

The HIARNG does not have a predictable stormwater budget for water quality monitoring or stormwater compliance. Each year a project specific request is made to the National Guard Bureau for stormwater compliance project funding, however approval for federal funding is not guaranteed but, generally provided.

APPENDIX A

FIGURES

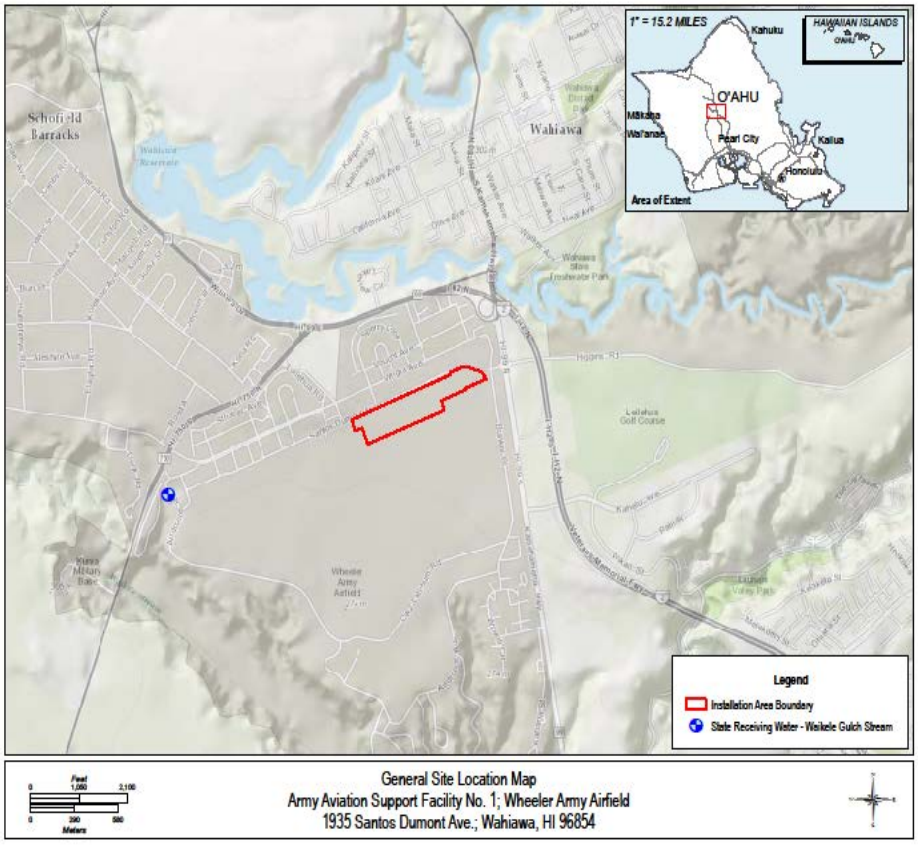

1" = 15.2 MILES
HAWAIIAN ISLANDS
Kahuku
O'AHU
Mākaha
Wai'anae
Pearl City
Kailua
Honolulu
Area of Extent
Schofield Barracks
Wahiawa
Wheeler Army Airfield
Legend
Installation Area Boundary
State Receiving Water - Waikele Gulch Stream
General Site Location Map
Army Aviation Support Facility No. 1; Wheeler Army Airfield
1935 Santos Dumont Ave.; Wahiawa, HI 96854

FIGURE 1

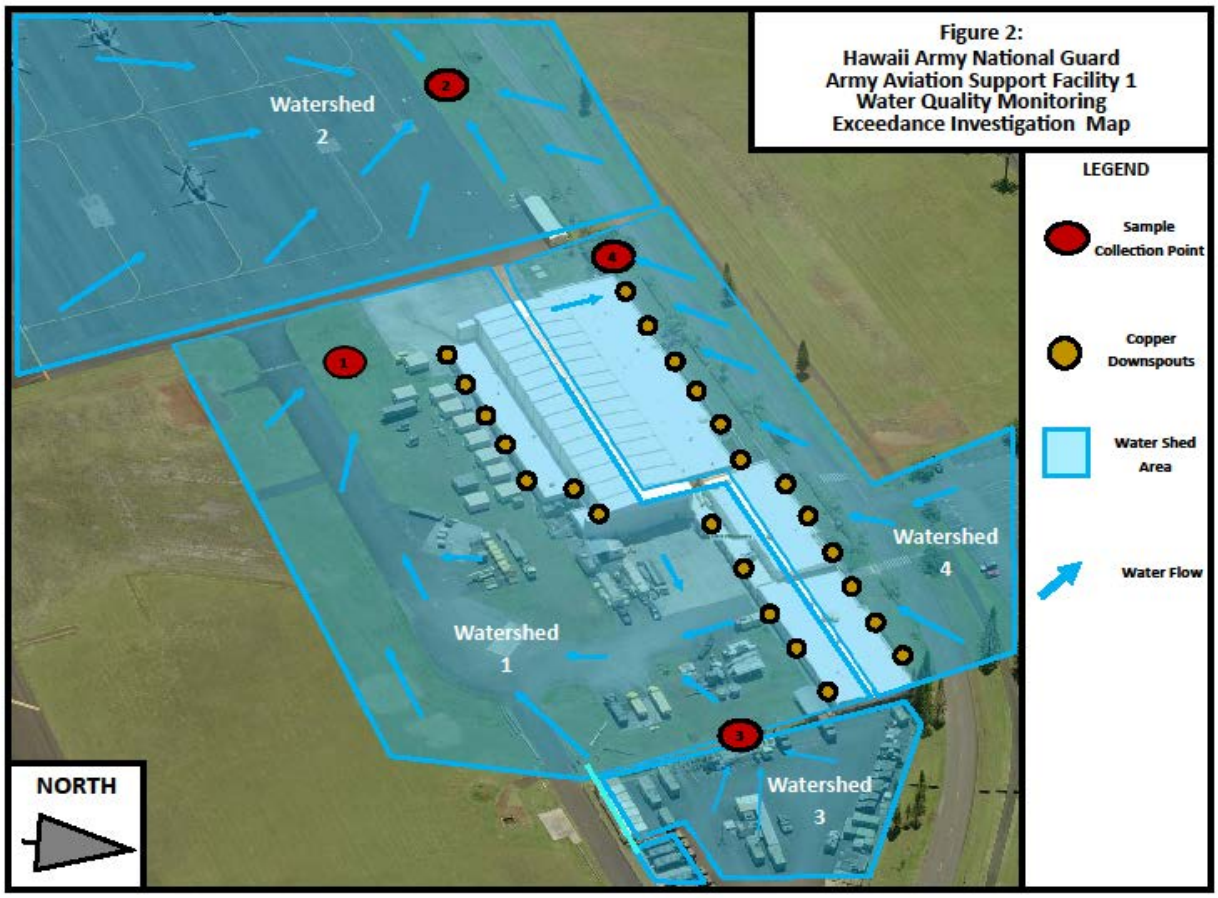
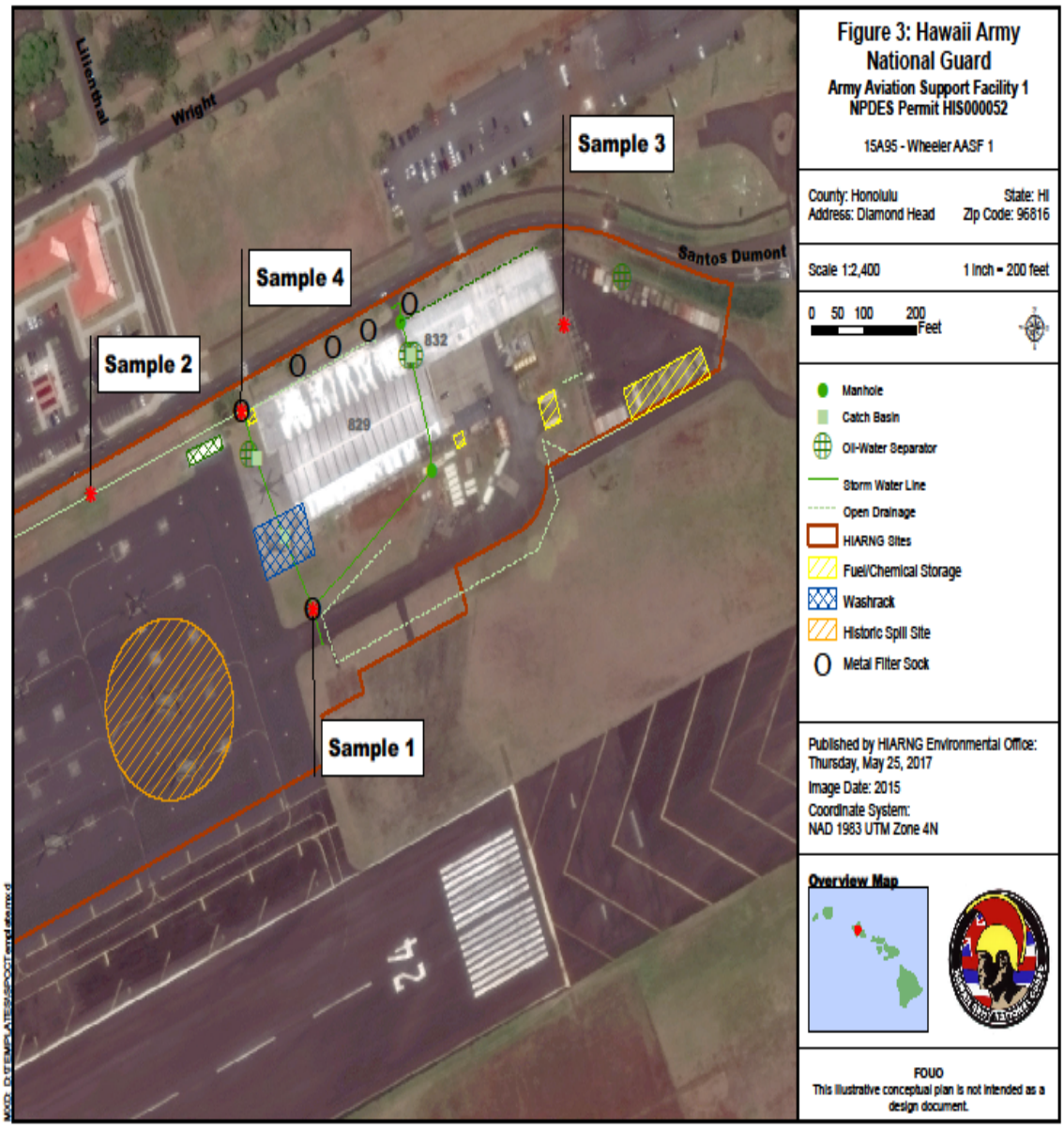


Figure 2:
Hawaii Army National Guard
Army Aviation Support Facility 1
Water Quality Monitoring
Exceedance Investigation Map
LEGEND
Sample Collection Point
Copper Downspouts
Water Shed Area
Water Flow
Watershed 2
Watershed 1
Watershed 3
Watershed 4
NORTH


Lilienthal
Wright
Santos Dumont
Sample 1
Sample 2
Sample 3
Sample 4
832
829
42
Figure 3: Hawaii Army National Guard
Army Aviation Support Facility 1
NPDES Permit HIS000052
15A95 - Wheeler AASF 1
County: Honolulu
State: HI
Address: Diamond Head
Zip Code: 96816
Scale 1:2,400
1 Inch = 200 feet
0 50 100 200
Feet
Manhole
Catch Basin
Oil-Water Separator
Storm Water Line
Open Drainage
HIARNG Sites
Fuel/Chemical Storage
Washrack
Historic Spill Site
Metal Filter Sock
Published by HIARNG Environmental Office:
Thursday, May 25, 2017
Image Date: 2015
Coordinate System:
NAD 1983 UTM Zone 4N
Overview Map
FOUO
This illustrative conceptual plan is not intended as a design document.