



STATE OF HAWAII  
DEPARTMENT OF HEALTH

P.O. Box 3378  
HONOLULU, HAWAII 96801-3378

June 21, 2010

In reply, please refer to:

File: 10-457M&A CAB

Matthew Lakin, Ph.D.  
Manager  
Air Quality Analysis Office (AIR-7)  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne Street  
San Francisco, California 94105

Dear Dr. Lakin:

SUBJECT: 2010-2011 Air Monitoring Network Plan and 2010 Ambient Air Monitoring  
Network 5-Year Assessment

Pursuant to 40 CFR Part 58, Subpart B, we are submitting the 2010-2011 Air  
Monitoring Network Plan and 2010 Ambient Air Monitoring Network 5-Year  
Assessment. As required, the annual network plan was made available for public  
inspection from May 17 to June 15, 2010, during which time no comments were  
received.

If there are any questions concerning these documents, please contact Ms. Lisa Young  
of my staff at (808) 586-4200.

Sincerely,

A handwritten signature in black ink, appearing to read "Wilfred K. Nagamine".

WILFRED K. NAGAMINE  
Manager, Clean Air Branch

SK:rk/b  
Attachments

c: Gwen M. Yoshimura, U.S. Environmental Protection Agency, Air Quality Analysis  
Office (AIR-7)

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JUN 25 2010

AIR DIVISION  
U.S. EPA, REGION 9





**State of Hawaii**  
**2010-2011**  
**Air Monitoring**  
**Network Plan**

*Submitted to the U.S. EPA Region 9*  
**July 1, 2010**

*Prepared by:*  
State of Hawaii  
Department of Health

Environmental Management Division  
Clean Air Branch  
and  
State Laboratories Division  
Air Surveillance and Analysis Section

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## Acronyms and Definitions

AQI	Air Quality Index
ASAS	State of Hawaii Department of Health Air Surveillance and Analysis Section
BAM	Beta-Attenuation Mass Monitor
CAB	State of Hawaii Department of Health Clean Air Branch
CBSA	Core-Based Statistical Areas
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DOH	Hawaii State Department of Health
EPA	United States Environmental Protection Agency
FRM	Federal Reference Method
H <sub>2</sub> S	Hydrogen Sulfide gas
IMPROVE	Integrated Monitoring of Protected Visual Environments
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NCORE	National Core Multi-pollutant Monitoring Stations
NO <sub>2</sub>	Nitrogen Dioxide
O <sub>3</sub>	Ozone
Pb	Lead
PM <sub>2.5</sub>	Particulate matter less than or equal to 2.5 microns in aerodynamic diameter
PM <sub>10</sub>	Particulate matter less than or equal to 10 microns in aerodynamic diameter
PPM	Parts per million
SLAMS	State and Local Air Monitoring Stations
SO <sub>2</sub>	Sulfur dioxide
SPM	Special Purpose Monitors
TSP	Total suspended particulates
VOG	Haze due to volcanic emissions
WD	Wind direction
WS	Wind speed
µg/m <sup>3</sup>	micrograms per cubic meter of air

## Introduction

The State of Hawaii Department of Health (DOH) plans, operates and maintains the statewide ambient air quality monitoring network. Monitoring data is used for a variety of reasons including determining compliance with National Ambient Air Quality Standards (NAAQS), timely reporting of the U.S. Environmental Protection Agency's (EPA) Air Quality Index (AQI), tracking and characterizing air quality trends, evaluating emission control strategies, and supporting health studies.

The DOH manages all of the State and Local Air Monitoring Stations (SLAMS), Special Purpose Monitoring Stations (SPM), and National Core Monitoring Station (NCORE). Additionally, Hawaii has two Interagency Monitoring of Protected Visual Environments stations (IMPROVE) located at Haleakala National Park on Maui and Volcanoes National Park on the island of Hawaii. The IMPROVE stations are operated and maintained by the National Park Service through their federal land management agency.

This annual review evaluates the state's existing ambient air monitoring network to determine adequacy in meeting monitoring objectives, optimizing the network by closing, moving or adding stations, and ensuring that air quality issues important to the state are being addressed. This plan is being submitted to the EPA according to 40 CFR Part 58, Subpart B.

Notification of the plan availability for public inspection was provided through public notices published on May 17, 2010 in the daily newspapers of all counties. The plan was available for review at all county District Health offices as well as on the Clean Air Branch website (<http://hawaii.gov/health/environmental/air/cab/index.html>) for 30 days from May 17, 2010 to June 15, 2010. Documentation of public notification is provided in **Appendix A**.

# 1.0 Network Purpose and Design

## 1.1 Overview

Hawaii's air quality surveillance network consists of stations monitoring for criteria pollutants, speciated  $PM_{2.5}$ , hazardous air pollutants, and pollutants with state standards.

- SLAMS: State and Local Air Monitoring Stations are established primarily to demonstrate compliance with the NAAQS and to meet minimum monitoring requirements as required in 40 CFR 58 Appendix D. All SLAMS must meet quality assurance, methodology, and siting requirements of 40 CFR 58 Appendix A, C and E respectively;
- SPM: Special Purpose Monitoring Stations are operated for specific areas of interest to the state and do not count in meeting minimum monitoring requirements. Hawaii's SPM network is primarily to monitor air quality impacts of emissions from the ongoing Kilauea volcano eruption as well as  $H_2S$  emissions from geothermal energy production;
- NCore: The state is required to establish one NCore station for the Honolulu MSA. The location for this station has been approved by EPA and will be operational by January 1, 2011;
- $PM_{2.5}$  Speciation: The state operates one speciation site at the NCore station;
- Air Toxics: The air toxics SPM station provides ambient hazardous air pollution data for characterizing impacts on public health, trends analysis, and developing control strategies. The air toxics program is not part of the national air toxics trends network.

The annual network review ensures that the state continues to meet monitoring, quality and siting requirements, as well as address the six basic objectives in 40 CFR 58 Appendix D and non-regulatory state data goals. The six objectives in Appendix D are:

- Determine the highest pollutant concentrations expected in the network
- Measure typical concentrations in areas of high population density
- Determine the impact of significant sources or source categories on air quality
- Determine general background concentrations
- Determine the extent of regional pollutant transport between populated areas
- Measure pollution impacts on visibility, vegetation, crops, animals and buildings

## 1.2 Network Design and Review Process

The review determines what network modifications are necessary to reduce or eliminate redundancy and low value monitoring; add stations to meet new NAAQS monitoring requirements or programs; determine if sufficient data is being collected using the best technology and schedule that resources allow; and initiate corrective actions to ensure compliance with all siting and quality assurance requirements.

Modification decisions are made using a variety of tools including: data trend analyses; performance and technical systems audit results; regular site inspections; cost and value analyses; assessment of unfavorable site changes such as loss of lease or construction that adversely affect data collection; and, the need to address special

studies or non-regulatory monitoring objectives. DOH currently operates 12 stations on three islands (Table 1-1).

**Table 1-1. Description of the Current State of Hawaii Air Monitoring Network**

#	ID	LOCATION	MET	POLLUTANT	TYPE	SITE	SPATIAL SCALE/ OBJECTIVE	START
<b>OAHU (Honolulu MSA)</b>			NOTE: Met equipment on a 10 meter tower are capitalized					
1	DH1 150031001	Honolulu 1250 Punchbowl St. Honolulu, HI	WS wd	CO SO <sub>2</sub> PM <sub>10</sub> PM <sub>2.5</sub>	Continuous Continuous Continuous Continuous	SLAMS SLAMS SLAMS SLAMS	Middle: max Neighborhood: pop Neighborhood: pop Neighborhood: pop	1/72 1/72 2/92 1/99
2	KA5 150030010 NCORE	Kapolei TMK (1) 9-1-75:39 2052 Lauwililili St Kapolei, HI	WS WD °F	CO SO <sub>2</sub> NO <sub>2</sub> PM <sub>10</sub> PM <sub>2.5</sub> PM <sub>2.5</sub> Spec.	Continuous Continuous Continuous Continuous Continuous 1 in 6 days	SLAMS SLAMS SLAMS SLAMS SLAMS SPM	Neighborhood: pop. Neighborhood: pop. Neighborhood: pop. Neighborhood: pop Neighborhood: pop Neighborhood: pop	7/29/02 7/29/02 7/29/02 7/29/02 7/29/02 10/1/09
3	PC3 150032004	Pearl City 860 4 <sup>th</sup> St. Pearl City, HI	WS wd	PM <sub>10</sub> PM <sub>2.5</sub> *PM <sub>2.5</sub> (Co-10c) *PM <sub>2.5</sub> (Co-10c) Air Toxics Pb	Continuous Continuous 1 in 6 days 1 in 12 days 1 in 6 days 1 in 6 days	SLAMS SLAMS SLAMS SLAMS SPM SPM	Neighborhood: pop. Neighborhood: pop Co-located monitor Co-located monitor Neighborhood: pop. Neighborhood: pop.	2/94 1/99 1/99 4/1/09 1/102 1/02
4	SI2 150031004	Sand Island Anuene Fisheries 1039 Sand Island Pkwy	WS wd °f	O <sub>3</sub> PM <sub>2.5</sub>	Continuous Continuous	SLAMS SLAMS	Urban: maximum Urban: transport	2/81 10/1/99
5	WB6 150030011	West Beach Ko'Olina Golf Course TMK (1) 9-1-14:27	WS WD °F	SO <sub>2</sub> NO <sub>2</sub> PM <sub>10</sub>	Continuous Continuous Continuous	SLAMS SLAMS SLAMS	Neighborhood: source Neighborhood: source Neighborhood: bkgnd	2/91 11/92 2/91
<b>MAUI County</b>								
6	KH19 150090006	Kihai Hale Piliiani Park TMK (2)-3-9-4-28	WS WD	PM <sub>2.5</sub>	Continuous	SLAMS	Neighborhood: source	2/99
<b>HAWAII County</b>								
7	HL11 150011006	Hilo 1099 Waiuanuenu Ave. Hilo, HI	WS WD °F	SO <sub>2</sub> (0-1; 0-10) PM <sub>2.5</sub>	Continuous Continuous	SLAMS SPM	Neighborhood: pop. Neighborhood: pop.	1/97 5/1/08
8	KN12 150011012	Kona Konawaena High School 81-1043 Konawaena School Rd.	WS WD °F	SO <sub>2</sub> (0-1; 0-10) PM <sub>2.5</sub> (BAM)	Continuous Continuous	SLAMS SPM	Neighborhood: pop Neighborhood: pop	9/05 3/15/08
9	MV17 150012017	Mountain View 17-860 Volcano Rd. Mt. View, HI 96771	WS WD	SO <sub>2</sub> (0-1; 0-10) PM <sub>2.5</sub> (BAM)	Continuous Continuous	SPM SPM	Neighborhood: other Neighborhood: pop	12/4/07 4/11/08
10	PA16 150012016	Pahala Ka'u High/Pahala Elem. 96-3150 Pikake St., Pahala, HI 96777	WS WD	SO <sub>2</sub> (0-1; 0-10) PM <sub>2.5</sub> (BAM)	Continuous Continuous	SPM SPM	Neighborhood: pop Neighborhood: pop	8/10/07 4/11/08
11	PE10 150012010	Puna E 13-763 Leilani Ave. Pahoa, HI	WS WD °F	H <sub>2</sub> S (0-1ppm) SO <sub>2</sub> (0-1)	Continuous Continuous	SPM SPM	Neighborhood: source Neighborhood: source	3/91 2/16/05
12	PH15 None	Puna H TMK (3)-1-3-46-75 (Lanipuna)	WS WD °F	H <sub>2</sub> S (0-1ppm)	Continuous	SPM	Neighborhood: source	11/02

**Table 1-2. Pollutant Sampling Method and Operating Schedule**

ID	PM <sub>10</sub> Continuous Sampler BAM <sup>1</sup>	PM <sub>2.5</sub> Continuous BAM <sup>1</sup>	Pb <sup>2</sup> Hi-Vol TSP 1 in 6 day	CO Continuous Gas Filter Correlation	NO <sub>2</sub> Continuous Chemil- luminescence	SO <sub>2</sub> Continuous Pulsed Fluorescence	O <sub>3</sub> Continuous UV Photometric	H <sub>2</sub> S <sup>3</sup> Continuous Pulsed Fluorescence
DH1	•	•		•		•		
KAS	•	•			•	•		
PC3	•	•	•					
SI2		•					• Jan-Dec monitoring season	
WB6	•				•	•		
KH19		•						
HL11		•				•		
KN12		•				•		
MV17		•				•		
PA16		•				•		
PE10						•		•
PH15								•

<sup>1</sup> Beta-Attenuation Mass Monitor; federal equivalent method

<sup>2</sup> Pb monitoring is part of the Air Toxics SPM program

<sup>3</sup> State standard of 25 ppb 1-hour average

### 1.3 Pollutant Monitoring Requirements

Appendix D of 40 CFR 58 requires minimum monitoring for PM<sub>10</sub>, PM<sub>2.5</sub>, O<sub>3</sub>, and Pb for each MSA in the state. The U.S. Census Bureau has designated Honolulu as the only MSA in the state with a 2000 population of 876,156.

**Table 1-3. PM<sub>10</sub> Minimum Monitoring Requirements for the MSA**

MSA Population Category (40 CFR 58 Appendix D Table D-4)	High Concentration ≥120% of NAAQS (≥180 µg/m <sup>3</sup> )	Medium Concentration >80% of NAAQS (>120 µg/m <sup>3</sup> )	Low Concentration <80% of NAAQS (<120 µg/m <sup>3</sup> )	MSA Population Category		
				>1,000,000	500,000-1,000,000	250,000-500,000
	6-10	4-8	2-4			
	4-8	2-4	1-2			
	3-4	1-2	0-1			
	1-2	0-1	0	100,000-250,000		
<b>MSA</b>	<b>2000 Census Population</b>	<b>Maximum Design Value 2007 – 2009</b>	<b>Minimum No. of Monitors Required</b>	<b>Number of Active Monitors in the MSA</b>	<b>Number of Monitors Needed</b>	
Honolulu	876,156	134 µg/m <sup>3</sup>	2-4	4	0	

**Table 1-4. PM<sub>2.5</sub> Minimum Monitoring Requirements for the MSA**

MSA Population Category (40 CFR 58 Appendix D Table D-5)	Most recent 3-year Design Value ≥85% of any PM <sub>2.5</sub> NAAQS (≥29.8 µg/m <sup>3</sup> for 24-hr standard; ≥12.8 µg/m <sup>3</sup> for annual standard)	Most recent 3-year Design Value <85% of any PM <sub>2.5</sub> NAAQS (<29.8 µg/m <sup>3</sup> for 24-hour standard; <12.8 µg/m <sup>3</sup> for annual standard)	MSA Population Category								
			>1,000,000	500,000-1,000,000	250,000-500,000	2000 Census Population	Maximum Annual Design Value 2007 – 2009	Maximum Daily Design Value 2007-2009	Minimum No. of Monitors Required	Number of Active Monitors in the MSA	Number of Monitors Needed
			3								
			2								
			1								
<b>MSA</b>	<b>2000 Census Population</b>	<b>Maximum Annual Design Value 2007 – 2009</b>	<b>Maximum Daily Design Value 2007-2009</b>	<b>Minimum No. of Monitors Required</b>	<b>Number of Active Monitors in the MSA</b>	<b>Number of Monitors Needed</b>					
Honolulu	876,156	5.7 µg/m <sup>3</sup>	12.7 µg/m <sup>3</sup>	1	4	0					

**Table 1-5. O<sub>3</sub> Minimum Monitoring Requirements for the MSA**

MSA Population Category (40 CFR 58 Appendix D Table D-2)		Most recent 3-year design value ≥85% of any O <sub>3</sub> NAAQS (≥0.064 ppm, 8-hr standard)		Most recent 3-year design value <85% of any O <sub>3</sub> NAAQS (<0.064 ppm, 8-hr standard)	
>10 million		4		2	
4-10 million		3		1	
350,000-~4 million		2		1	
50,000-~350,000		1		0	
<b>MSA</b>	<b>2000 Census Population</b>	<b>Maximum Design Value 2007 – 2009</b>	<b>Minimum No. of Monitors Required</b>	<b>Number of Active Monitors in the MSA</b>	<b>Number of Monitors Needed</b>
Honolulu	876,156	0.041 ppm	1	1	0

Notes: The O<sub>3</sub> monitoring season for the state of Hawaii is 12-months from January to December. EPA revoked the 1-hour standard for the state effective 6/15/2005

The requirement to operate Pb monitors in CBSAs of 500,000 or more is currently under EPA review and DOH will work to meet the final promulgated Pb monitoring requirements. Currently, DOH operates one Pb monitoring site as part of the Air Toxics program in the Honolulu MSA.

There are no minimum monitoring requirements for CO, SO<sub>2</sub>, and NO<sub>2</sub>.

**Table 1-6. Summary of Stations by Pollutant or Program**

Pollutant or Program	No. of SLAMS Stations	No. of SPM Stations	Total No. in MSA	Total No. in State
CO	2	-	2	2
NO <sub>2</sub>	2	-	2	2
SO <sub>2</sub>	5	3	3	8
O <sub>3</sub>	1	-	1	1
PM <sub>10</sub>	4	-	4	4
PM <sub>2.5</sub>	5	4	4	9
Pb	-	1 <sup>1</sup>	1	1
Air Toxics	-	1	1	1
PM <sub>2.5</sub> Speciation	-	1	1	1
H <sub>2</sub> S	-	2 <sup>2</sup>	0	2

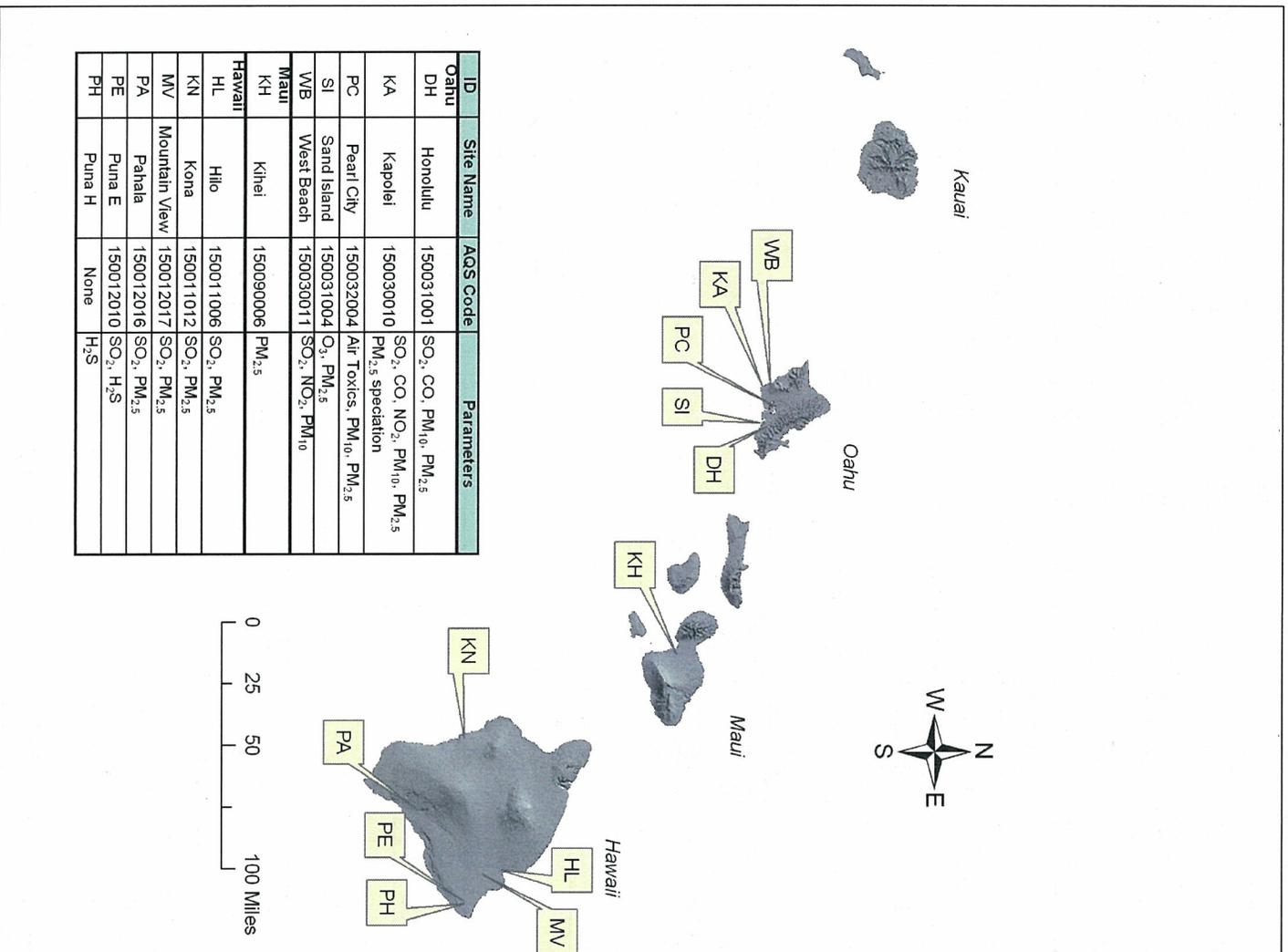
<sup>1</sup> Pb is being monitored as part of the Air Toxics program

<sup>2</sup> H<sub>2</sub>S is not a federal criteria pollutant, however the state has a 1-hour standard of 25 ppb. H<sub>2</sub>S is being monitored because of geothermal energy production on the Island of Hawaii

#### 1.4 Organizational Structure and Responsibilities

The Department of Health's Clean Air Branch (CAB) and Air Surveillance and Analysis Section (ASAS) are organizationally under different Division managements. The CAB is responsible for the network planning, program oversight, and data reporting. ASAS provides support in operating and maintaining the stations and providing quality assured data to AQS and the CAB.

**Figure 1-1**  
**2010-2011 State of Hawaii Ambient Air Monitoring Network**



## 2.0 2010-2011 Network Modifications

### 2.1 Station Additions

#### 2.1.1 Monitoring of volcanic emissions

The Kilauea volcano on the island of Hawaii is the single largest emission source in the state, usually producing more than 2,000 tons of SO<sub>2</sub> per day. Since a second vent at Halema'uma'u opened in early 2008, the SO<sub>2</sub> emissions from the park have been as high as 9,000 tons per day. Because of the potential health and welfare impacts, monitoring of volcanic emissions continues to be a priority. The criteria pollutants of concern are SO<sub>2</sub> and PM<sub>2.5</sub> depending on the wind direction and distance from the vents.

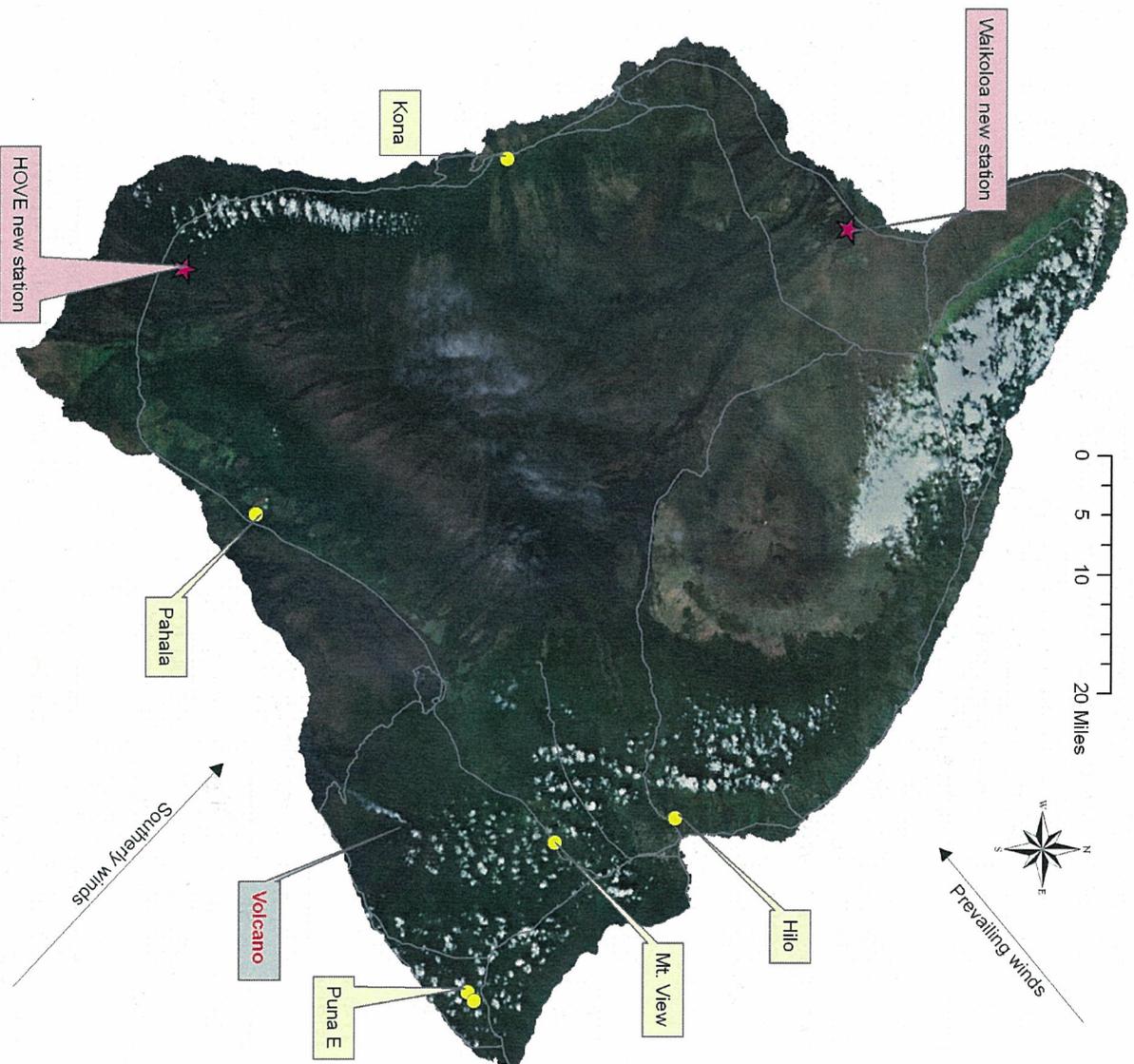
Two new SPM stations monitoring for volcanic emissions were expected to be operating by the end of 2009 or early 2010, however due to unexpected delays with site preparations, the stations have not been established. Most of these siting issues have since been resolved and the DOH is moving forward with establishing these stations to monitor for SO<sub>2</sub> and PM<sub>2.5</sub> in communities affected by the volcanic emissions and vog.

One station is being established at the Orchid Parkway fire station in Hawaiian Ocean View Estates (HOVE). HOVE is a residential and agricultural community with a population of approximately 9,000 and is downwind of the Pu'u O'o and Halema'uma'u volcanic vents during prevailing wind conditions. This site was selected in part because preliminary monitoring using Area Rae instruments showed occasional periods of very high SO<sub>2</sub> concentrations. The site is expected to be collecting valid data before June 2010.

The second new station will be in Waikoloa on the northwestern side of the island. Although there are several stations monitoring volcanic emissions during prevailing wind conditions, there are no stations to monitor the impact on the northern side of the island when the winds shift to the southerly direction. Wind direction shifts will often bring the vog, or volcanic haze up the island chain. Although SO<sub>2</sub> is not expected to be elevated in this community, initially, both PM<sub>2.5</sub> and SO<sub>2</sub> will be monitored.

**Figure 2-1** is a map showing the current stations, the location of the HOVE station, and the probable location of the second new station in Waikoloa on the northwestern side of the island.

Figure 2-1  
New Stations on the Island of Hawaii



## 2.1.2 Monitoring of cruise ship emissions on the island of Kauai

The state is proceeding with establishing one SPM station on the island of Kauai to monitor the impact of cruise ship emissions in a community downwind of the harbor. Cruise ships dock in Nawiliwili Harbor and prevailing winds carry emissions on-shore into nearby communities.

A site has been selected in the residential community of Niumalu, which is less than one mile downwind of the harbor. This station was expected to be operating by the end of 2009 but there were numerous problems with acquiring the necessary permits, lease, and utilities which precluded installation. It is anticipated that the site will be operating within the next 12 months.

The pollutants of interest are CO, SO<sub>2</sub>, and PM<sub>2.5</sub>, as well as wind speed and direction.

**Figure 2-2**  
**New station on the Island of Kauai**



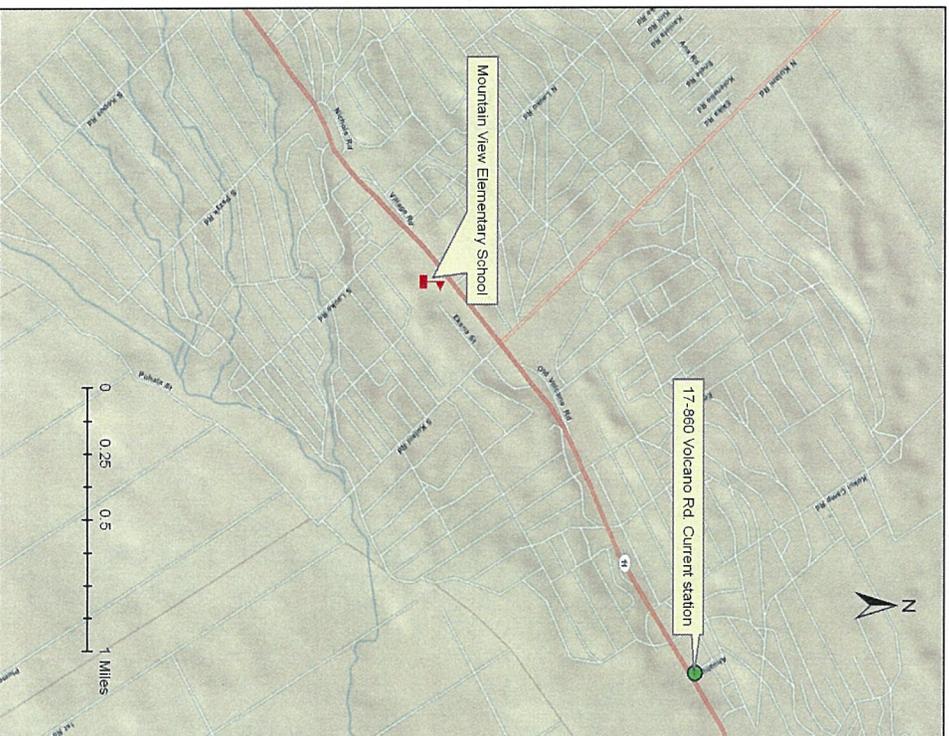
## 2.2 Station Relocation

Relocation of the SPM Mountain View station MV17 (150012017) to Mountain View Elementary School

The lease for the Mt. View station at its current location expired in February 2010. Since the second volcano vent opened in early 2008, there is increased concern for schools in the area to have timely access to SO<sub>2</sub> data so that decisions can be made to ensure the safety of students, faculty and employees.

During southerly wind conditions, Mountain View can be affected by high levels of SO<sub>2</sub> and PM<sub>2.5</sub>. Mt. View Elementary school has agreed to allow an air monitoring station to be placed on the school grounds. Preparations have begun to move the station to the school during the summer of 2010 when school is not in session. As shown in **Figure 2-3**, the school is approximately 1.8 miles southwest of the current station location.

**Figure 2-3. Relocation of the Mountain View Monitoring Station (150012017)**



## 2.3 Monitoring for Revised Pb and NO<sub>2</sub> NAAQS

### 2.3.1 Pb Monitoring

In October 2008, EPA revised the level and form of the Pb NAAQS from 1.5 µg/m<sup>3</sup> in a calendar quarter to 0.15 µg/m<sup>3</sup> in a rolling 3-month period.

Additionally, the rule requires that states establish source-oriented monitoring for facilities which emit 1.0 or more tons per year (TPY) of Pb, based on the most recent (2005) National Emissions Inventory. More recently, EPA has proposed to lower required source-oriented monitoring to facilities emitting 0.5 or more TPY of Pb.

Based on the 2005 Emissions Inventory, there were no sources in the state which emitted 1.0 or more TPY of Pb and source-oriented monitoring is not currently planned to be conducted in Hawaii.

The state operates one air toxics Pb TSP monitor at the Pearl City station in the Honolulu MSA on a 1 in 6 day schedule. The Pb monitoring requirement for CBSAS of 500,000 or more and at NCore stations is currently under EPA review. DOH will re-evaluate the Pb monitoring network after final promulgation of the revised monitoring requirements.

### 2.3.2 NO<sub>2</sub> Monitoring

Hawaii will be required to operate a minimum of one near roadway NO<sub>2</sub> monitor in the Honolulu MSA. Additionally, DOH will determine whether there are road segments with annual average daily traffic counts greater than or equal to 250,000 vehicles that would require additional near roadway monitoring.

There are currently two stations in the Honolulu MSA monitoring for NO<sub>2</sub>. Calculations of the 3-year average 98<sup>th</sup> percentile distribution of daily maximum 1-hour average concentrations at both stations were well below the new standard of 100 ppb.

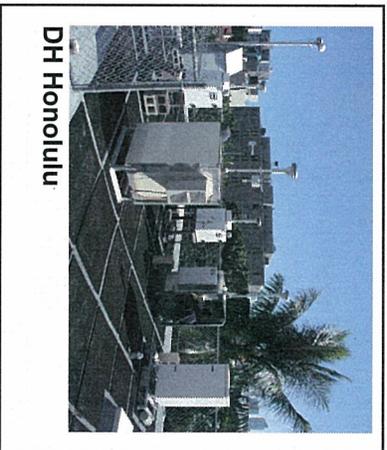
**Table 2-1. 2007-2009 NO<sub>2</sub> Data**

3-year Average of 98 <sup>th</sup> Percentile Daily Maximum 1-hour Average (ppb)				
<b>Kapolei (NCore) Station (150030010)</b>				
2007	2008	2009	3-year Ave.	
15	15	15	15	
<b>West Beach Station (150030011)</b>				
2007	2008	2009	3-year Ave.	
12	11	14	12	

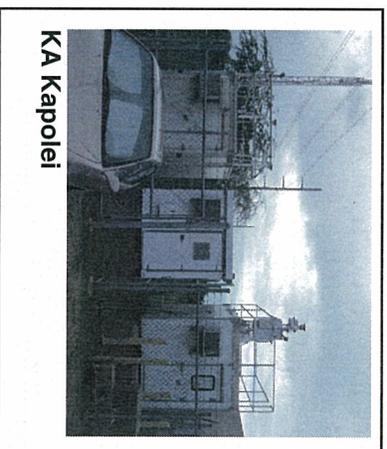
## 2.4 National Core (NCore) Multi-pollutant Monitoring Station

EPA approved Kapolei (150030010) as the state's NCore station. In October 2009, the PM<sub>2.5</sub> speciation monitor previously located at the Pearl City station began operating at Kapolei. Final site preparations, electrical upgrades, and equipment bids have been completed. September 2010 is the target date for all equipment to begin the testing phase in order to be fully operational and collecting data by January 1, 2011.

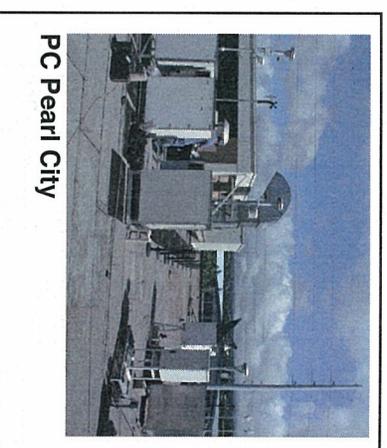
### 3.0 Detailed Site Descriptions State of Hawaii Ambient Air Monitoring Network



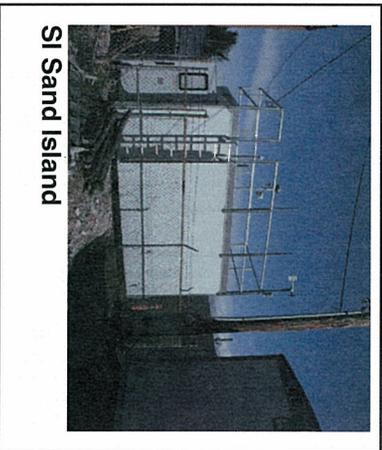
**DH Honolulu**



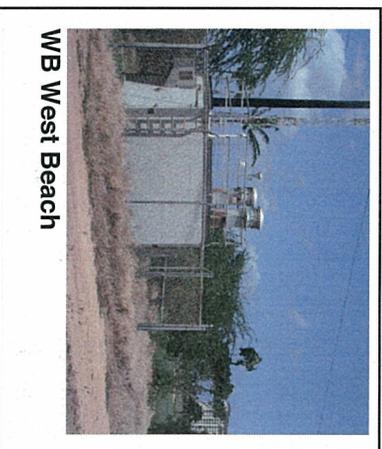
**KA Kapolei**



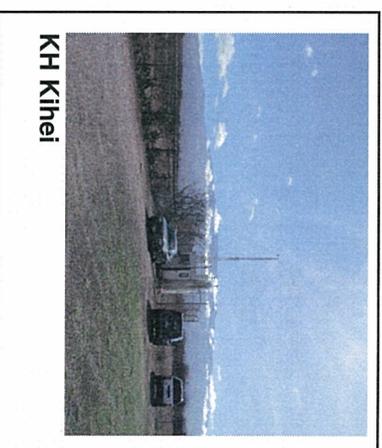
**PC Pearl City**



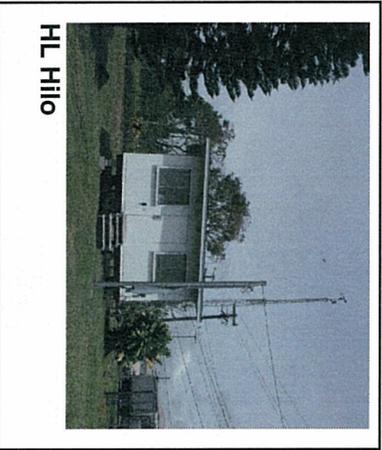
**SI Sand Island**



**WB West Beach**



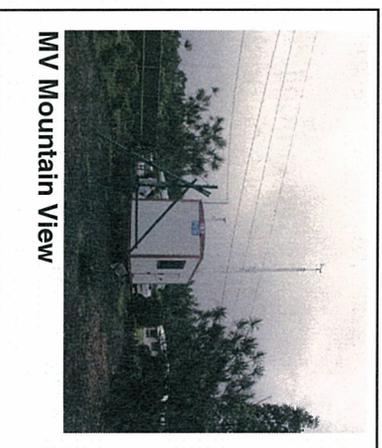
**KH Kihnei**



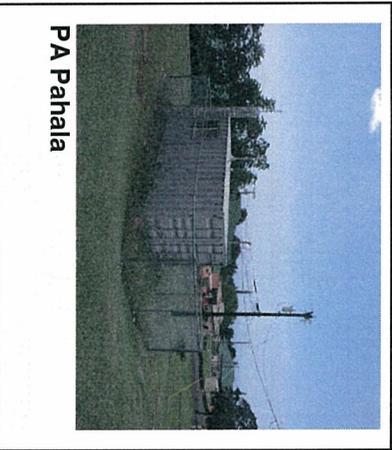
**HL Hilo**



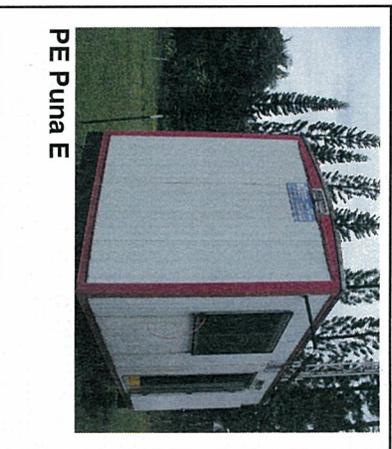
**KN Kona**



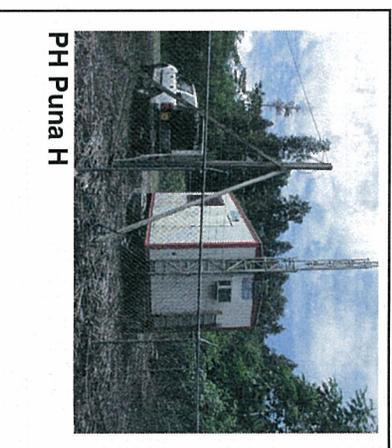
**MV Mountain View**



**PA Pahala**



**PE Puna E**



**PH Puna H**

**SITE REPORT: DH                      Honolulu (SLAMS)**

**SITE INFORMATION**

<b>City:</b> Honolulu	<b>CDP:</b> Honolulu	<b>Census Tract:</b> 41	<b>AIRS ID:</b> 150031001
<b>Address:</b> 1250 Punchbowl St., Honolulu (Oahu)			
<b>UTM (NAD 83):</b> 4N North 236619.4 m	<b>Latitude (NAD 83):</b> 21° 18' 27.3" N	<b>Longitude:</b> 157° 51' 19.5" W	<b>Elevation (MSL):</b> 20 m
<b>Pollutants Monitored:</b> CO, SO <sub>2</sub> , PM <sub>10</sub> , PM <sub>2.5</sub>			
<b>Name(s) of nearest intersecting street(s):</b> Punchbowl St. (east); Beretania St. (south); Vineyard Blvd. (north)			
<b>Brief description of site location and landmarks:</b> Located in the downtown Honolulu business and government district, the station is located on the roof of the Department of Health building. Queen's Medical Center is to the east, Punchbowl Memorial Cemetery to the north, the State Capitol building as well as other state and county government buildings to the south.			
<b>Agency preparing this report:</b> Department of Health, Environmental Management Division, Clean Air Branch (CAB), Monitoring and Analysis Section			
<b>Agency responsible for data collection and site maintenance:</b> Department of Health, State Laboratories Division, Environmental Health Analytical Service Branch, Air Surveillance and Analysis Section			

**GENERAL SITE DESCRIPTION**

<b>Mobile Source</b>				
Type	Punchbowl St.	Beretania St.	Vineyard Blvd.	H-1 Freeway
Freeway				X
Major Street or Highway	X	X	X	
<b>Traffic Activity</b>				
Distance of roadway from air intake (m)	30	122	610	914
Direction of roadway from air inlet	E	S	N	N/NE
Composition of roadway	asphalt	asphalt	asphalt	asphalt
Number of traffic lanes	5	6	6	6
Average daily traffic (estimate)	35,844 (2006) <sup>1</sup>	53,046 (2006) <sup>1</sup>	48,445 (2006) <sup>1</sup>	No data
Average vehicle speed (estimate, mph)	20	25	25	45
Traffic one way or two	2	1	2	2
Number of parking lanes	0	0	0	0
Roadway paved?	Y	Y	Y	Y
<b>Obstructions</b>				
Type	Size (m)	Direction from Site	Distance from Site (m)	
None				

<sup>1</sup>Source: State of Hawaii, Department of Transportation

**DATA QUALITY**

<b>Audits</b>	<b>Result</b>
Last PEP Audit: 3/17/09	Result: Unknown
Last Independent Audit (CAB): 12/9/09	No problems noted.
Flow Audit Frequency: Quarterly	
Precision/Accuracy reports submitted to AQS:	Yes
Frequency of 1-pt. QC check for gases:	1-pt. QC checks conducted daily
Annual data certification submitted to EPA:	2009 Data Certification submitted 4/29/10

**SITE AND MONITOR INFORMATION (DH continued)**

		Probe Siting		Gases (CO, SO <sub>2</sub> )		PM	
Location of probe:		Top of 4-story building		Top of 4-story building		Top of 4-story building	
Building or shelter dimensions (if applicable):							
height (m)	12					12	
width (m)	61					61	
depth (m)	15					15	
Horizontal distance from supporting structure (m)	9					8	
Vertical distance above supporting structure (m)	1.2					1.8	
Height of probe above ground (m)	12.8					13.4	
Distance (m) & direction from tree(s)	27 E					24 E	
Horizontal distance from edge of nearest traffic lane (m)	23					20	
Horizontal distance from nearest parking lot (m)	24					24	
Horizontal distance from walls, parapets, penthouses (m)	9					PM <sub>10</sub> : 9m PM <sub>2.5</sub> : 11m	
Distance (m) & direction from obstacles or buildings	no obstacles					no obstacles	
Distance from furnace or incineration flues (m)	238 downwind					234 downwind	
Unrestricted air flow	360°					360°	
Located in paved area or vegetative ground cover	Paved roof-top					Paved roof-top	
<b>Monitor Information</b>							
	SO <sub>2</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	WS	WD	
Instrument Manufacturer	TECO	TECO	Met-One	Met-One	RM Young	RM Young	
Model No.	43i	48	BAM 1020	BAM 1020	05103VP	05103VP	
AQS Method Code	060	054	122	170	Not entered into AQS		
Date sampling began	1/72	1/72	2/92	4/1/09	11/12/03	11/12/03	
Frequency	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	
Probe material	Teflon	Teflon	--	--	--	--	
Residence Time (seconds)	<10	<10	--	--	--	--	
Distance between co-located monitors	--	--	--	--	--	--	
<b>5-Year Site and Data History</b>							
<b>Date of Occurrence</b>		<b>Reasons for Invalid or Missing Data; Other site changes</b>					
7/18/05 – 7/19/06		No PM <sub>2.5</sub> data collected. Site shut-down due to re-roofing					
7/18/05 – 8/2/06		No CO and SO <sub>2</sub> data collected. Site shut-down due to re-roofing					
7/18/05 – 8/5/06		No PM <sub>10</sub> data collected. Site shut-down due to re-roofing					
1/99 to 12/05		PM <sub>2.5</sub> collected daily. Since 1/1/06, sampling reduced (with EPA approval) to 1 in 3 days					
8/2/06		PM <sub>2.5</sub> sampler changed from Anderson to R & P					
4/1/09		PM <sub>2.5</sub> FRM shut-down on 3/31/09; FEM continuous PM <sub>2.5</sub> began operating on 4/1/09					
6/30/09		Co-located FRM moved to the PC station					
3/9/10		PM <sub>10</sub> TEOM discontinued and replaced with Met-One BAMS					
		Probe moved from side to top of building to reduce residence time of gas pollutants					

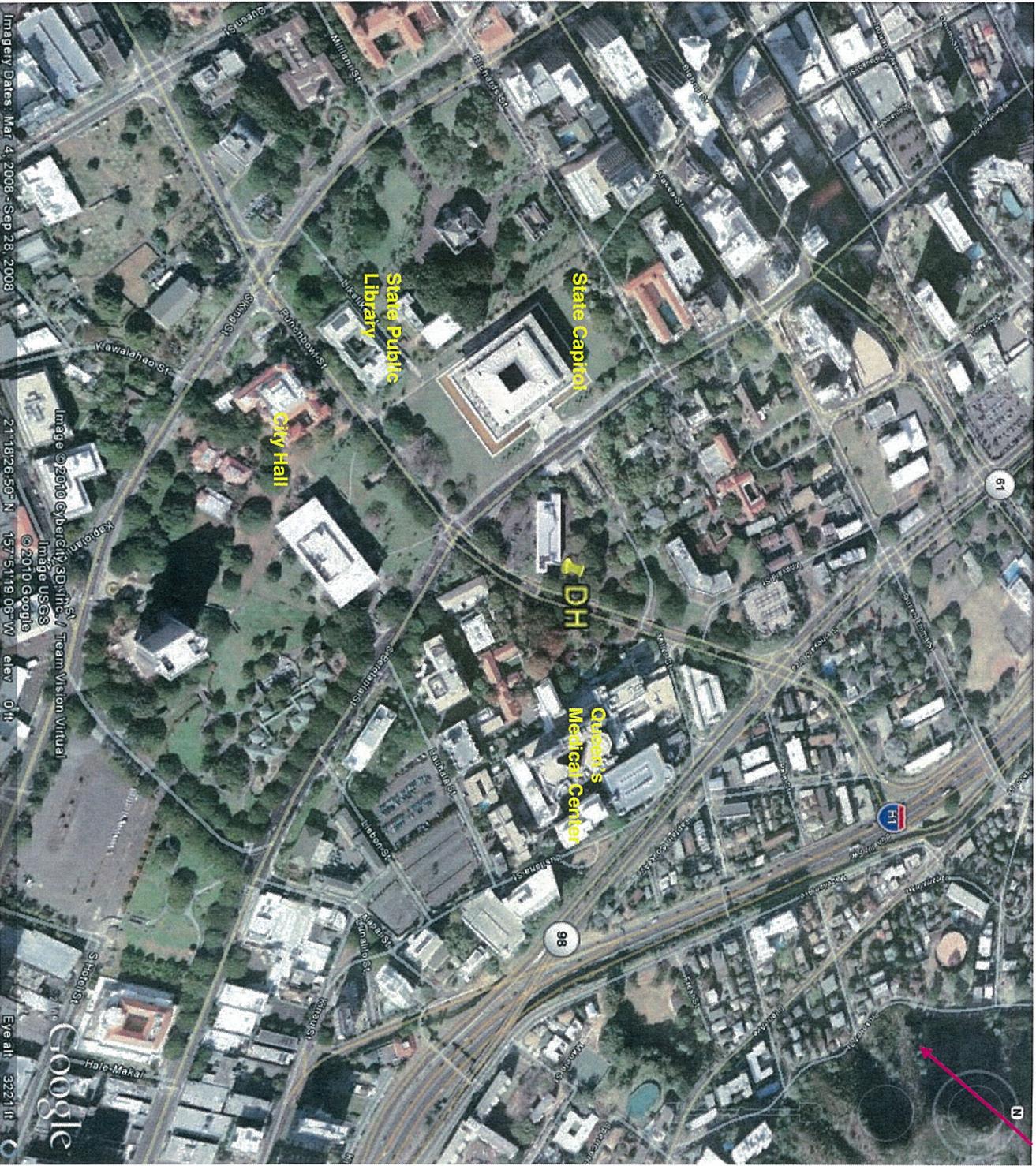
**SITE REPRESENTATIVENESS**

	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Spatial Scale	Middle	Neighborhood	Neighborhood	Neighborhood
Averaging Times	1-hr; 8-hr	3-hr; 24-hr; Annual	24-hr; Annual	24-hr; Annual
Monitoring Objective	Maximum	Population Exposure	Population Exposure	Population Exposure
Suitable for comparison against annual PM <sub>2.5</sub> NAAQS?				Yes

**Station modifications within the next 18 months:**

- No additions or modifications are planned for this station.

Figure 3-1 (DH) Honolulu Monitoring Station



**SITE REPORT: KA Kapolei (SLAMS; NCORE)**

**SITE INFORMATION**

<b>City:</b> Kapolei	<b>CDP:</b> Honolulu	<b>Census Tract:</b> 85	<b>AIRS ID:</b> 150030010
<b>Address:</b> 2052 Lauwililili St., Kapolei (Oahu)			
<b>UTM (NAD 83):</b> 4N North 2358251.4 m East 594516.6 m	<b>Latitude (NAD 83):</b> 21° 19' 25.5" N <b>Longitude:</b> 158° 05' 19.0" W	<b>Elevation (MSL):</b> 18 m	
<b>Pollutants:</b> CO, SO <sub>2</sub> , NO <sub>2</sub> , PM <sub>10-5</sub> , PM <sub>2.5</sub> , PM <sub>2.5</sub> speciation			
<b>Name(s) of nearest intersecting street(s):</b> Kalaela Blvd.; Lauwililili St.			
<b>Brief description of site location and landmarks:</b> Located in the Kapolei Business Park, the station is about 220 meters east of the Kapolei fire station, approximately 1.25 km northeast (upwind) of Campbell Industrial Park, and approximately 325 meters south (downwind) of the rapidly growing city of Kapolei.			
<b>Agency preparing this report:</b> Department of Health, Environmental Management Division, Clean Air Branch, Monitoring and Analysis Section			
<b>Agency responsible for data collection and site maintenance:</b> Department of Health, State Laboratories Division, Environmental Health Analytical Service Branch, Air Surveillance and Analysis Section			

**GENERAL SITE DESCRIPTION**

Mobile Source			
Type	Kalaela Blvd.	Lauwililili St.	H-1 Freeway
Freeway			X
Major Street or Highway	X		
Local Street or Road		X	
Traffic Activity			
Distance of roadway from air intake (m)	379	167	686
Direction of roadway from air inlet	NW	W	N
Composition of roadway	asphalt	asphalt	asphalt
Number of traffic lanes	4	2	6
Average daily traffic (estimate)	18,255 (2006) <sup>1</sup>	No data	8,447 (2006) <sup>1</sup>
Average vehicle speed (estimate, mph)	35	30	55
Traffic one way or two	2	2	2
Number of parking lanes	0	0	0
Roadway paved?	Y	Y	Y
Obstructions			
Type	Size (m)	Direction from Site	Distance from Site (m)
None			

**Meteorology and Climatology:** Source of met data is site WS, WD, ambient temperature on a 10m tower  
Source: State of Hawaii, Department of Transportation

**DATA QUALITY**

Audits	Result
Last PEP Audit: 3/16/10	Result: Unknown
Last Independent Audit (CAB): 6/25/09	Span gas was expired Date corrected: 7/1/09
Flow Audit Frequency: Quarterly	
Precision/Accuracy reports submitted to AQS:	Yes
Frequency of 1-pt. QC check for gases:	1-pt QC checks conducted daily
Annual data certification submitted to EPA:	2009 Data Certification submitted 4/29/10

**SITE AND MONITOR INFORMATION (KA continued)**

		Probe Siting		Gases (CO, SO <sub>2</sub> , NO <sub>2</sub> )		PM <sub>10</sub> , PM <sub>2.5</sub>	
Location		Top of trailer shelter		Top of trailer shelter			
Building or shelter dimensions (if applicable): height (m) width (m) depth (m)		4 2.4 5		4 2.4 5		4 2.4 5	
Horizontal distance from supporting structure (m)		Not Applicable (N/A)		N/A		N/A	
Vertical distance above supporting structure (m)		1		1		1	
Height of probe above ground (m)		2.7		2.7		2.7	
Distance (m) & direction from tree(s)		19 N		17 N		17 N	
Horizontal distance from edge of nearest traffic lane (m)		167		167		167	
Horizontal distance from nearest parking lot (m)		87		87		87	
Horizontal distance from walls, parapets, penthouses (m)		N/A		N/A		N/A	
Distance (m) & direction from obstacles or buildings		67 NE		67 NE		67 NE	
Distance from furnace or incineration flues (m)		N/A		N/A		N/A	
Unrestricted air flow		360°		360°		360°	
Located in paved area or vegetative ground cover		Vegetative/Barren		Vegetative/Barren		Vegetative/Barren	

**Monitor Information**

	CO	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>2.5</sub> specification	URG	WS	WD
Instrument Manufacturer	TECO	TECO	TECO	Met-One	Met-One	Met-One	URG	RM Young	RM Young
Model No.	481	43A	42C	BAM1020	BAM1020	SASS	300N	05103VP	05103VP
AQS Method Code	054	060	074	122	170	170		Not entered into AQS	
Date sampling began	7/29/02	7/29/02	7/29/02	12/18/08	1/1/09	10/1/09	10/1/09		
Frequency	Cont.	Cont.	Cont.	Cont.	Cont.	1 in 6	1 in 6	Cont.	Cont.
Probe material	Glass	Glass	Glass	--	--	--	--	--	--
Residence Time (seconds)	<10	<10	<10	--	--	--	--	--	--
Distance between co-located monitors	--	--	--	--	--	--	--	--	--

**Site and Data History**

Date of Occurrence	Reasons for Invalid or Missing Data; Other site changes
July 2002	Site moved approximately 250 yards south from original location. The original location was established in 1991 but siting audits concluded that the Desalination plant was an obstacle when the winds were from the southerly direction (from the Industrial Park).
3/20/08 - 4/15/08	Site shut down for repairs. PM <sub>10</sub> BAM and PM <sub>2.5</sub> BAM installed.
12/17/08	TEOM PM <sub>10</sub> monitor discontinued and replaced with a BAMS 1020
10/1/09	The PM <sub>2.5</sub> speciation (SASS and URG) monitors began operation

**SITE REPRESENTATIVENESS**

	CO	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Spatial Scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Averaging Times	1-hr; 8-hr	3-hr; 24-hr; annual	annual	24-hr; annual	24-hr; annual
Monitoring Objective	Population	Population	Population	Population	Population
Suitable for comparison against annual PM <sub>2.5</sub> NAAQS?					Yes

**Station modifications within the next 18 months:**

New NCore equipment to be installed by September 2010, operating and collecting valid data by January 1, 2011:

PM <sub>2.5</sub> speciation	currently 1 in 6; will be 1 in 3	CO	currently operating; trace level ordered
PM <sub>2.5</sub> continuous	currently operating	SO <sub>2</sub>	currently operating; trace level ordered
PM <sub>2.5</sub> FRM	to be installed; 1 in 3 day	NO <sub>2</sub>	currently operating
PM <sub>10-2.5</sub> continuous	PM <sub>10</sub> installed	NO	trace level instrument ordered
TSP for Pb	to be installed; 1 in 6 day	NO <sub>y</sub>	trace level instrument ordered
		O <sub>3</sub>	instrument ordered

Figure 3-2 (KA) Kapolei Monitoring Station



Imagery Date: Mar 4, 2008

21°19'35.65" N

Image USGS  
© 2010 Google

158°05'10.69" W elev. 0 ft

© 2008 Google  
Eye alt: 5182 ft

**SITE REPORT: PC Pearl City (SLAMS;SPM)**

**SITE INFORMATION**

<b>City:</b> Pearl City	<b>CDP:</b> Honolulu	<b>Census Tract:</b> 80.01	<b>AIRS ID:</b> 150032004
<b>Address:</b> 860 4 <sup>th</sup> St., Pearl City (Oahu)			
<b>UTM (NAD 83):</b> 4N North	2365975.2 m	<b>Latitude (NAD 83):</b> 21° 23' 34.2" N	<b>Elevation (MSL):</b> 23 m
	East 6066858.9 m	<b>Longitude:</b> 157° 58' 08.9" W	
<b>Pollutants:</b> PM <sub>10s</sub> , PM <sub>2.5s</sub> (SLAMS); Air Toxics (SPM)			
<b>Name(s) of nearest intersecting street(s):</b> 4th St., Kamehameha Hwy., Lehua Avenue, H-1 Freeway			
<b>Brief description of site location and landmarks:</b> Located on the roof of the Department of Health building, S (downwind) of the Pearl City Shopping Center and busy Kamehameha Hwy., N (upwind) of the H-1 freeway, 1 mile west of the Hawaiian Electric Co. Waiiau Generating station and 3 miles NW of the Pearl Harbor Naval Complex.			
<b>Agency preparing this report:</b> Department of Health, Environmental Management Division, Clean Air Branch, Monitoring and Analysis Section			
<b>Agency responsible for data collection and site maintenance:</b> Department of Health, State laboratories Division, Environmental Health Analytical Service Branch, Air Surveillance and Analysis Section			

**GENERAL SITE DESCRIPTION**

Mobile Source				
Type	4 <sup>th</sup> St.	Lehua Ave.	Kam. Hwy.	H-1
Freeway				X
Major Street or Highway			X	
Local Street or Road	X			
Through Street or Highway		X		
Traffic Activity				
Distance of roadway from air intake (m)	50	138	58	320
Direction of roadway from air inlet	S	W	N	S
Composition of roadway	asphalt	asphalt	asphalt	concrete
Number of traffic lanes	2	4	6	10
Average daily traffic (estimate)	No Data	15,692 (2002) <sup>1</sup>	57,948 (2007) <sup>1</sup>	No Data
Average vehicle speed (estimate, mph)	20	30	35	55
Traffic one way or two	2	2	2	2
Number of parking lanes	0	2	0	0
Roadway paved?	Y	Y	Y	Y
Obstructions				
Type	Size (m)	Direction from Site	Distance from Site (m)	
Air conditioning vent and mechanical room (upwind from instruments)	Ht. of A/C vent: 4 m Ht. of room: 3 m	N (upwind)		14
<b>Meteorology and Climatology:</b> Source of met data is site WS, WD on a pole				
Source: State of Hawaii, Department of Transportation				

**DATA QUALITY**

Audits	Result
Last PEP Audit: 3/18/10	Result: Unknown
Last Independent Audit (CAB): 9/29/09	No problems noted.
Flow Audit Frequency: Quarterly	
Precision/Accuracy reports submitted to AQS: Frequency of 1-pt. QC check for gases:	No gas monitors at this station
Annual data certification submitted to EPA:	2009 Data Certification submitted 4/29/10

**SITE AND MONITOR INFORMATION (PC continued)**

		Probe Siting						
		PM	Toxics (metals)	Toxics (Gas)				
Location		Top of building	Top of building	Top of building				
Building or shelter dimensions (if applicable): height (m) width (m) depth (m)		12	12	12				
Horizontal distance from supporting structure (m)		14	19	12				
Vertical distance above supporting structure (m)		2	1	2				
Height of probe above ground (m)		14	13	14				
Distance from tree(s) (m)		>20	>20	>20				
Horizontal distance from edge of nearest traffic lane (m)		58	53	60				
Horizontal distance from nearest parking lot (m)		-	-	-				
Horizontal distance from walls, parapets, penthouses (m)		14	19	12				
Distance (m) & direction from obstacles or buildings		14 S	19 S	12 SE				
Distance from furnace or incineration flues (m)		Not Applicable (N/A)	N/A	N/A				
Unrestricted air flow		360°	360°	360°				
Located in paved area or vegetative ground cover		rooftop	rooftop	rooftop				

**Monitor Information**

Instrument Manufacturer	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>2.5</sub> co-10	PM <sub>2.5</sub> co-10	Air Toxics	WS	WD
Model No.	Met One BAM 1020	Met One BAM 1020	Andersen RAAS 2.5	Andersen RAAS 2.5	-	RM Young 05103VP	RM Young 05103VP
AQS Method Code	122	170	120	120			Not entered into AQS
Date sampling began	9/29/07	1/10/09	4/1/09	4/1/09	1/02		
Frequency	continuous	Continuous	1 in 6	1 in 12	1 in 6		
Probe material	--	--	--	--	--		
Residence Time (seconds)	--	--	--	--	--		
Distance between co-located monitors	--	4 m	2.1 m	2.1 m	--		

**Site and Data History**

Date of Occurrence	Reasons for Invalid or Missing Data; Other site changes
8/5/02 – 11/27/02	Building renovations and installation of AC vent
9/29/07	Met One BAM continuous PM <sub>10</sub> began operation. R & P TEOM operated from 2/94 to 9/28/07
1/10/09	Met One BAM continuous PM <sub>2.5</sub> began operation. Anderson RAAS FRM PM <sub>2.5</sub> was the primary sampler from 1/99 to 1/9/09.
4/1/09	Andersen PM <sub>2.5</sub> FRM 1 in 6 and 1 in 12 day samplers co-located
9/30/09	Discontinued the PM <sub>2.5</sub> speciation monitor and moved it to the Kapolei station

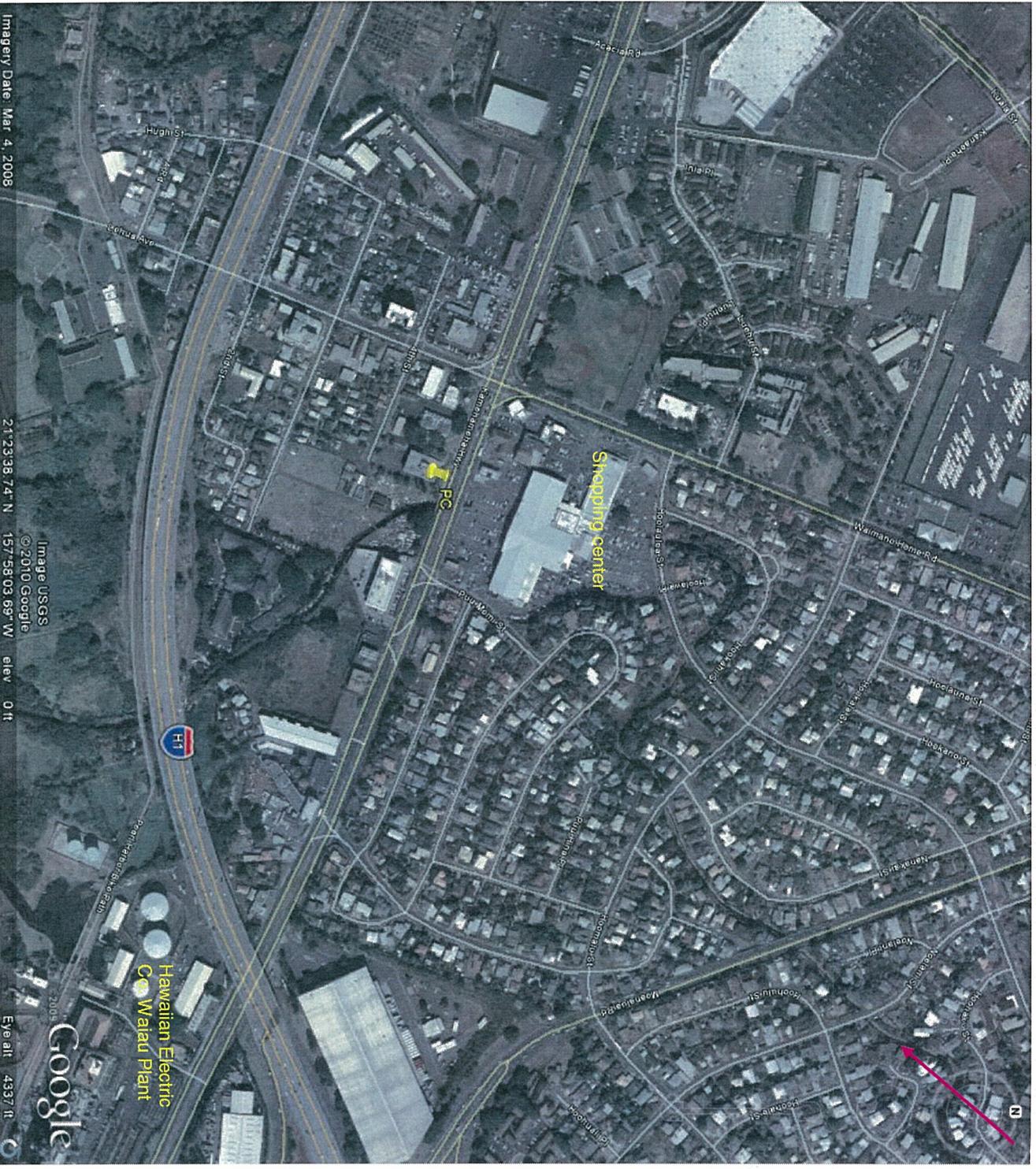
**SITE REPRESENTATIVENESS**

	PM <sub>10</sub>	PM <sub>2.5</sub>	Air Toxics	
Spatial Scale	Neighborhood	Neighborhood	Neighborhood	
Averaging Times	24-hr; annual	24-hr; annual	24-hr	
Monitoring Objective	Population exposure	Population exposure	Population exposure	
Suitable for comparison against annual PM <sub>2.5</sub> NAAQS?		Yes		

**Station modifications within the next 18 months:**

No modifications are planned for this station.

Figure 3-3 (PC) Pearl City Monitoring Station



**SITE REPORT: SI**

**Sand Island (SLAMS)**

**SITE INFORMATION**

<b>City:</b> Honolulu	<b>CDP:</b> Honolulu	<b>Census Tract:</b> 57	<b>AIRSI ID:</b> 150031004
<b>Address:</b> Anuenuue Fisheries, Honolulu (Oahu)			
<b>UTM (NAD 83):</b> 4N North 2356193.9 m East 617084.4 m	<b>Latitude (NAD 83):</b> 21° 18' 13.8" N	<b>Longitude:</b> 157° 52' 16.2" W	<b>Elevation (MSL):</b> 5 m
<b>Pollutants:</b> O <sub>3</sub> (January to December monitoring season), PM <sub>2.5</sub>			
<b>Name(s) of nearest intersecting street(s):</b> Sand Island Parkway			
<b>Brief description of site location and landmarks:</b> Located in the University of Hawaii's Anuenuue Fisheries near the entrance to the Sand Island State Recreation Area. Sand Island is south (downwind) of downtown Honolulu, across from Honolulu Harbor and Aloha Tower Marketplace, and approximately 0.5 mile SW (downwind) of Hawaiian Electric Co. Honolulu Generating Station.			
<b>Agency preparing this report:</b> Department of Health, Environmental Management Division, Clean Air Branch, Monitoring and Analysis Section			
<b>Agency responsible for data collection and site maintenance:</b> Department of Health, State Laboratories Division, Environmental Health Analytical Service Branch, Air Surveillance and Analysis Section			

**GENERAL SITE DESCRIPTION**

<b>Mobile Source</b>			
Type	SI Parkway		
Freeway			
Major Street or Highway			
Local Street or Road	X		
Through Street or Highway			
<b>Traffic Activity</b>			
Distance of roadway from air intake (m)	37		
Direction of roadway from air inlet	W		
Composition of roadway	asphalt		
Number of traffic lanes	2		
Average daily traffic (estimate)	1610 (2007) <sup>1</sup>		
Average vehicle speed (estimate, mph)	30		
Traffic one way or two	2		
Number of parking lanes	2		
Roadway paved?	Y		
<b>Obstructions</b>			
Type	Size (m) Height:	Direction from Site (downwind)	Distance from Site (m)
Tent shelter	6	S	14

**Meteorology and Climatology:** Source of met data is site WS, WD on a pole

Source: State of Hawaii, Department of Transportation

**DATA QUALITY**

<b>Audits</b>	<b>Result</b>
Last PEP Audit: 3/16/10	Result: Unknown
Last Independent Audit (CAB): 10/20/09	No problems noted.
Flow Audit Frequency: Quarterly	
Precision/Accuracy reports submitted to AQS:	Yes
Frequency of 1-pt. QC check for gases:	1-pt. QC checks conducted daily
Annual data certification submitted to EPA:	2009 Data Certification submitted 4/29/10

**SITE AND MONITOR INFORMATION (SI continued)**

		Probe Siting		Gases (O <sub>3</sub> )		PM	
Location		Top of trailer shelter		Top of trailer shelter		Top of trailer shelter	
Building or shelter dimensions (if applicable):							
height (m)		3		3		3	
width (m)		2		2		2	
depth (m)		5		5		5	
Horizontal distance from supporting structure (m)		Not Applicable (N/A)		N/A		N/A	
Vertical distance above supporting structure (m)		1		1		2	
Height of probe above ground (m)		4		4		5	
Distance from trees(s) (m)		>20		>20		>20	
Horizontal distance from edge of nearest traffic lane (m)		37		37		37	
Horizontal distance from nearest parking lot (m)		40		40		40	
Horizontal distance from walls, parapets, penthouses (m)		N/A		N/A		N/A	
Distance (m) & direction from obstacles or buildings		14 N		14 N		14 N	
Distance from furnace or incineration flues (m)		N/A		N/A		N/A	
Unrestricted air flow		360°		360°		360°	
Located in paved area or vegetative ground cover		vegetative		vegetative		vegetative	
Monitor Information							
	O <sub>3</sub>	PM <sub>2.5</sub>	WS	WD			
Instrument Manufacturer	TECO	Met One	RM Young	RM Young			
Model No.	49C	BAM 1020	05103VP	05103VP			
AQS Method Code	047	170	Not entered into AQS				
Date sampling began	2/81	1/1/09	-	-			
Frequency	Continuous	Continuous	Continuous	Continuous			
Probe material	Glass	--	--	--			
Resistance Time (seconds)	<10	--	--	--			
Distance between co-located monitors							
Site and Data History							
Date of Occurrence							
4/7/06	Replaced Dasibi O <sub>3</sub> analyzer with TECO analyzer						
1/23/08 – 3/14/08	<75% quarterly data completeness. Data invalidated during this period due to faulty design of a new inlet system installed on 1/23/08.						
1/1/09	Met One BAM 1020 continuous PM <sub>2.5</sub> began operating. Anderson FRM 1 in 6 day was shut-down on 12/31/08.						

**SITE REPRESENTATIVENESS**

	O <sub>3</sub>	PM <sub>2.5</sub>			
Spatial Scale	Urban	Urban			
Averaging Times	1-hr; 8-hr	24-hr; annual			
Monitoring Objective	Maximum	Transport			
Suitable for comparison against annual PM <sub>2.5</sub> NAAQS?		Yes			

**Station modifications within the next 18 months:**

- No additions or modifications are planned for this station.

Figure 3-4 (SI) Sand Island Monitoring Station



**SITE REPORT: WB West Beach (SLAMS)**

**SITE INFORMATION**

<b>City:</b> Kapolei	<b>CDP:</b> Honolulu	<b>Census Tract:</b> 86.10	<b>AIRRS ID:</b> 150030011
<b>Address:</b> Ko'Olina Golf Course, Kapolei (Oahu)			
<b>UTM (NAD 83):</b> 4N North 2359232.3 m East 591864.6 m	<b>Latitude (NAD 83):</b> 21° 19' 57.9" N	<b>Longitude:</b> 158° 06' 50.9" W	<b>Elevation (MSL):</b> 15 m
<b>Pollutants:</b> SO <sub>2</sub> , NO <sub>2</sub> , PM <sub>10</sub> (SLAMS)			
<b>Name(s) of nearest intersecting street(s):</b> Aliinui Drive			
<b>Brief description of site location and landmarks:</b> Located within the Ko'Olina Resort and residential community, approximately 1.5 miles NW (upwind) of Campbell Industrial Park, 0.5 mile NW of Barber's Point Deep Draft Harbor and 2 miles SE (downwind) from Hawaiian Electric Co. Kahe Power Plant.			
<b>Agency preparing this report:</b> Department of Health, Environmental Management Division, Clean Air Branch, Monitoring and Analysis Section			
<b>Agency responsible for data collection and site maintenance:</b> Department of Health, State Laboratories Division, Environmental Health Analytical Service Branch, Air Surveillance and Analysis Section			

**GENERAL SITE DESCRIPTION**

<b>Mobile Source</b>			
Type	Aliinui Dr.		
Freeway			
Major Street or Highway			
Local Street or Road	X		
Through Street or Highway			
<b>Traffic Activity</b>			
Distance of roadway from air intake (m)	315		
Direction of roadway from air inlet	NW		
Composition of roadway	asphalt		
Number of traffic lanes	4		
Average daily traffic (estimate)	No data		
Average vehicle speed (estimate, mph)	30		
Traffic one way or two	2		
Number of parking lanes	0		
Roadway paved?	Y		
<b>Obstructions</b>			
Type	Size	Direction from Site	Distance from Site
Tree	5 (H) x 8 (W) x 8 (D)	S (downwind)	3.4
<b>Meteorology and Climatology:</b> Source of met data is site WS, WD on a 10m tower			

**DATA QUALITY**

<b>Audits</b>	<b>Result</b>
Last PEP Audit: Not applicable	
Last Independent Audit (CAB): 6/23/09	No problems noted.
Flow Audit Frequency: Quarterly	
Precision/Accuracy reports submitted to AQS:	Yes
Frequency of 1-pt. QC check for gases:	1-pt. QC checks conducted daily
Annual data certification submitted to EPA:	2009 Data Certification submitted 4/29/10

**SITE AND MONITOR INFORMATION (WB continued)**

		Probe Sting		Gases (SO <sub>2</sub> , NO <sub>2</sub> )		PM <sub>10</sub>	
Location		Top of trailer shelter		Top of trailer shelter		Top of trailer shelter	
Building or shelter dimensions (if applicable): height (m) width (m) depth (m)		4 2 5		4 2 5		4 2 5	
Horizontal distance from supporting structure (m)		Not Applicable (N/A)		N/A		N/A	
Vertical distance above supporting structure (m)		1		1		1	
Height of probe above ground (m)		5		5		5	
Distance from tree(s) (m)		3		3		3	
Horizontal distance from edge of nearest traffic lane (m)		315		313		313	
Horizontal distance from nearest parking lot (m)		N/A		N/A		N/A	
Horizontal distance from walls, parapets, penthouses (m)		N/A		N/A		N/A	
Distance (m) & direction from obstacles or buildings		no buildings		no buildings		no buildings	
Distance from furnace or incineration flues (m)		N/A		N/A		N/A	
Unrestricted air flow		360°		360°		360°	
Located in paved area or vegetative ground cover		vegetative		vegetative		vegetative	
Monitor Information							
	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	WS	WD		
Instrument Manufacturer	TECO	TECO	Met One	RM Young	RM Young		
Model No.	43A	42C	BAM1020	05103VP	05103VP		
AQS Method Code	060	074	122	Not entered into AQS			
Date sampling began	2/91	11/92	1/1/09	-	-		
Frequency	continuous	continuous	continuous	continuous	continuous		
Probe material	Glass	Glass	--	--	--		
Resistance Time (seconds)	<10	<10	--	--	--		
Distance between co-located monitors							
Site and Data History							
<b>Date of Occurrence</b>	<b>Reasons for Invalid or Missing Data: Other site changes</b>						
1/1/09	Met One BAM continuous PM <sub>10</sub> began operating; 1 in 6 day Anderson manual PM <sub>10</sub> samplers discontinued. No co-location at this site. Anderson sampler operated at this site from 2/91-3/16/08						

**SITE REPRESENTATIVENESS**

	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	
Scale	Neighborhood	Neighborhood	Neighborhood	
Averaging Times	3-hr; 24-hr; annual	annual	24-hr; annual	
Monitoring Objective	Source impact	Source impact	Background	
Suitable for comparison against annual PM <sub>2.5</sub> NAAQS?				

**Station modifications within the next 18 months:**

- The tree on the southeast side of the station is an obstacle and will be trimmed

Figure 3-5 (WB) West Beach Monitoring Station



**SITE REPORT: KH**

**Kihei (SLAMS)**

**SITE INFORMATION**

<b>City:</b> Kihei	<b>CDP:</b> Maui	<b>Census Tract:</b> 307.01	<b>AIRS ID:</b> 150090006
<b>Address:</b> Hale Piliani Park (2) 3-8-4:31			
<b>UTM (NAD 83):</b> 4N North 2300013.2 m East 765846.9 m	<b>Latitude (NAD 83):</b> 20° 46' 51.6 N <b>Longitude:</b> 156° 26' 46.9 W	<b>Elevation (MSL):</b> 47 m	
<b>Pollutants:</b> PM <sub>2.5</sub>			
<b>Name(s) of nearest intersecting street(s):</b> Kaioloha, Kaiwahine			
<b>Brief description of site location and landmarks:</b> Located in Hale Piliani Park in the Hale Piliani subdivision of upper Kihei and surrounded to the north (upwind) by agricultural land, primarily sugarcane.			
<b>Agency preparing this report:</b> Department of Health, Environmental Management Division, Clean Air Branch, Monitoring and Analysis Section			
<b>Agency responsible for data collection and site maintenance:</b> Department of Health, State Laboratories Division, Environmental Health Analytical Service Branch, Air Surveillance and Analysis Section			

**GENERAL SITE DESCRIPTION**

<b>Mobile Source</b>			
Type	Kaioloha	Kaiwahine	
Freeway			
Major Street or Highway			
Local Street or Road	X	X	
Through Street or Highway			
<b>Traffic Activity</b>			
Distance of roadway from air intake (m)	114	118	
Direction of roadway from air inlet	NW	S	
Composition of roadway	asphalt	asphalt	
Number of traffic lanes	2	2	
Average daily traffic (estimate)	No data	No data	
Average vehicle speed (estimate, mph)	25	25	
Traffic one way or two	2	2	
Number of parking lanes	0	0	
Roadway paved?	Y	Y	
<b>Obstructions</b>			
Type	Size	Direction from Site	Distance from Site
None			
<b>Meteorology and Climatology:</b> Source of met data is site WS, WD on a 10m tower			

**DATA QUALITY**

<b>Audits</b>	<b>Result</b>
Last PEP Audit: Unknown	
Last Independent Audit (CAB): 11/6/09	No problems noted.
Flow Audit Frequency: Quarterly	
Precision/Accuracy reports submitted to AQS:	No gases monitored at this station
Frequency of 1-pt. QC check for gases:	
Annual data certification submitted to EPA:	2009 Data Certification submitted 4/29/10

**SITE AND MONITOR INFORMATION (KH continued)**

		<b>Probe Siting</b>		<b>PM</b>	
Location		Top of trailer shelter			
Building or shelter dimensions (if applicable):					
height (m)				4	
width (m)				2	
depth (m)				5	
Horizontal distance from supporting structure (m)				Not Applicable (N/A)	
Vertical distance above supporting structure (m)				1	
Height of probe above ground (m)				5	
Distance from tree(s) (m)				no data	
Horizontal distance from edge of nearest traffic lane (m)				no data	
Horizontal distance from nearest parking lot (m)				no data	
Horizontal distance from walls, parapets, penthouses (m)				N/A	
Distance (m) & direction from obstacles or buildings				N/A	
Distance from furnace or incineration flues (m)				N/A	
Unrestricted air flow				360°	
Located in paved area or vegetative ground cover				vegetative	
<b>Monitor Information</b>					
	<b>PM<sub>2.5</sub></b>	<b>WS</b>	<b>WD</b>		
Instrument Manufacturer	Met One	RM Young	RM Young		
Model No.	BAM1020	05103VP	05103VP		
AQS Method Code	170	Not entered into AQS			
Date sampling began	12/1/08	-	-		
Frequency	Continuous	Continuous	Continuous		
Probe material	N/A	N/A	N/A		
Residence Time (seconds)	N/A	N/A	N/A		
Distance between co-located monitors	N/A	N/A	N/A		
<b>Site and Data History</b>					
<b>Reasons for Invalid or Missing Data; Other site changes</b>					
6/1/07	The PM <sub>2.5</sub> sampling frequency was changed from 1 in 3 to 1 in 6 days with EPA approval				
3/26/08	Met One BAM continuous PM <sub>2.5</sub> began operating; 1 in 6 day Anderson manual PM <sub>2.5</sub> sampler operated and was data of record until 11/30/08. FEMS BAMS became data of record as of 12/1/08.				
12/31/08	SPM Rupprecht & Patashnick TEOM 1400B continuous PM <sub>10</sub> discontinued				

**SITE REPRESENTATIVENESS**

	<b>PM<sub>2.5</sub></b>				
Scale	Neighborhood				
Averaging Times	24-hr; annual				
Monitoring Objective	Source impact				
Suitable for comparison against annual PM <sub>2.5</sub> NAAQS?	Yes				

**Station modifications within the next 18 months:**

- No additions or modifications are planned for this station
- Missing probe siting information will be acquired during the 2010 DOH audit

Figure 3-6 (KH) Kihai Monitoring Station



**SITE REPORT: HL**

**Hilo (SLAMS; SPM)**

**SITE INFORMATION**

<b>City:</b> Hilo	<b>CDP:</b> Hilo	<b>Census Tract:</b> 208	<b>AIRS ID:</b> 150011006
<b>Address:</b> 1099 Waiianuenu Ave., Hilo (Hawaii)			
<b>UTM (NAD 83):</b> 4N North 2181602.2 m East 278797.6 m	<b>Latitude (NAD 83):</b> 19° 43' 03.3" N	<b>Longitude:</b> 155° 06' 37.9" W	<b>Elevation (MSL):</b> 137 m
<b>Pollutants:</b> SO <sub>2</sub> (SLAMS); PM <sub>2.5</sub> (SPM)			
<b>Name(s) of nearest intersecting street(s):</b> Waiianuenu Ave.			
<b>Brief description of site location and landmarks:</b> Located on the grounds of the Adult Rehabilitation Center of Hilo near the Hilo Medical Center.			
<b>Agency preparing this report:</b> Department of Health, Environmental Management Division, Clean Air Branch, Monitoring and Analysis Section			
<b>Agency responsible for data collection and site maintenance:</b> Department of Health, State Laboratories Division, Environmental Health Analytical Service Branch, Air Surveillance and Analysis Section			

**GENERAL SITE DESCRIPTION**

<b>Mobile Source</b>			
Type	Waiianuenu		
Freeway			
Major Street or Highway	X		
Local Street or Road			
Through Street or Highway			
<b>Traffic Activity</b>			
Distance of roadway from air intake (m)	20		
Direction of roadway from air inlet	N		
Composition of roadway	Asphalt		
Number of traffic lanes	2		
Average daily traffic (estimate)	No data		
Average vehicle speed (estimate, mph)	30		
Traffic one way or two	2		
Number of parking lanes	0		
Roadway paved?	Y		
<b>Obstructions</b>			
Type	Size	Direction from Site	Distance from Site
None			
<b>Meteorology and Climatology:</b> Source of met data is site W/S, WD on a 10m tower			

**DATA QUALITY**

<b>Audits</b>	<b>Result</b>
Last PEP Audit: 3/23/10	Result: Unknown
Last Independent Audit (CAB): 7/6/09	No problems noted.
Flow Audit Frequency: Quarterly	
Precision/Accuracy reports submitted to AQS:	Yes
Frequency of 1-pt. QC check for gases:	1-pt. QC checks conducted daily
Annual data certification submitted to EPA:	2009 Data Certification submitted 4/29/10

**SITE AND MONITOR INFORMATION (HL continued)**

		Probe Siting		Gases (SO <sub>2</sub> )		PM	
Location		Top of trailer shelter		Top of trailer shelter		Top of trailer shelter	
Building or shelter dimensions (if applicable): height (m) width (m) depth (m)				3 2.4 5			3 2.4 5
Horizontal distance from supporting structure (m)		Not Applicable (N/A)		N/A		N/A	
Vertical distance above supporting structure (m)				1			1
Height of probe above ground (m)				4			4
Distance from trees (m)				4.6			4.6
Horizontal distance from edge of nearest traffic lane (m)				20			20
Horizontal distance from nearest parking lot (m)				25			25
Horizontal distance from walls, parapets, penthouses (m)				N/A			N/A
Distance (m) & direction from obstacles or buildings				28			28
Distance from furnace or incineration flues (m)				29			29
Unrestricted air flow				360°			360°
Located in paved area or vegetative ground cover				Vegetative			Vegetative
Monitor Information							
	SO <sub>2</sub>	PM <sub>2.5</sub>	WS	WD			
Instrument Manufacturer	TECO	Met-One	RM Young	RM Young			
Model No.	43i	BAM1020	05103VP	05103VP			
AQS Method Code	060	170	Not entered into AQS				
Date sampling began	3/95	5/1/08	-	-			
Frequency	Continuous	Continuous	Continuous	Continuous			
Probe material	Glass	N/A	N/A	N/A			
Resistance Time (seconds)	<10	N/A	N/A	N/A			
Distance between co-located monitors	N/A	N/A	N/A	N/A			
Site and Data History							
Date of Occurrence		Reasons for Invalid or Missing Data; Other site changes					
5/1/08	Met One BAM continuous PM <sub>2.5</sub> began operating						

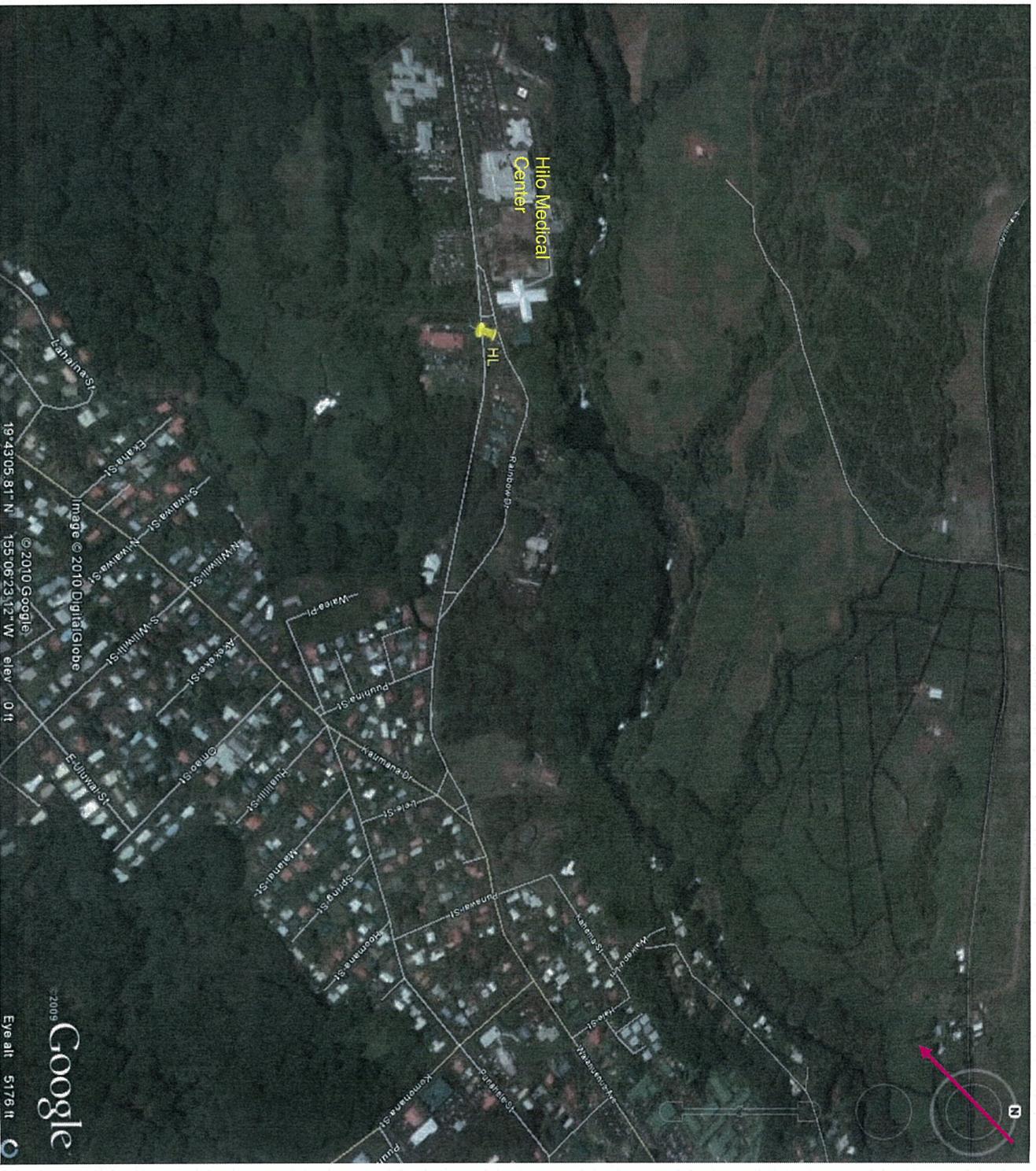
**SITE REPRESENTATIVENESS**

	SO <sub>2</sub>	PM <sub>2.5</sub>				
Scale	Neighborhood	Neighborhood				
Averaging Times	3-hr; 24-hr; annual	24-hr; annual				
Monitoring Objective	Population exposure	Population exposure				
Suitable for comparison against annual PM <sub>2.5</sub> NAAQS?		Yes as of 5/1/10				

**Station modifications within the next 18 months:**

- Station trailer is in poor condition and will be replaced by June 2010
- Although the tree is <10m from the probe inlet, it does not act as an obstruction for the wind direction of interest (winds from SE or SW); DOH does not have permission to trim or remove the tree.

Figure 3-7 (HL) Hilo Monitoring Station



**SITE REPORT: KN Kona (SLAMS; SPM)**

**SITE INFORMATION**

<b>City:</b> Kailua-Kona	<b>CDP:</b> Kealahakua	<b>Census Tract:</b> 214	<b>AIRRS ID:</b> 150011012
<b>Address:</b> 81-1043 Konawaena School Rd., Kealahakua (Hawaii)			
<b>UTM (NAD 83):</b>	North 2160151.2 m East 823983.1 m	<b>Latitude (NAD 83):</b> 19° 30' 35.2" N	<b>Elevation (MSL):</b> 517 m
<b>Pollutants:</b> SO <sub>2</sub> (SLAMS); PM <sub>2.5</sub> (SPM)		<b>Longitude:</b> 155° 54' 48.3" W	
<b>Name(s) of nearest intersecting street(s):</b> Konawaena School Road			
<b>Brief description of site location and landmarks:</b> Located on the upper campus of Konawaena High School in Kealahakua, Hawaii.			
<b>Agency preparing this report:</b> Department of Health, Environmental Management Division, Clean Air Branch, Monitoring and Analysis Section			
<b>Agency responsible for data collection and site maintenance:</b> Department of Health, State Laboratories Division, Environmental Health Analytical Service Branch, Air Surveillance and Analysis Section			

**GENERAL SITE DESCRIPTION**

Mobile Source			
Type	Konawaena School Road	Mamalahoa Hwy.	
Freeway			
Major Street or Highway		X	
Local Street or Road			
Through Street	X		
Traffic Activity			
Distance of roadway from air intake (m)	17	702	
Direction of roadway from air inlet	N	W	
Composition of roadway	asphalt	asphalt	
Number of traffic lanes	1	2	
Average daily traffic (estimate)	No data	15,503 (2006) <sup>1</sup>	
Average vehicle speed (estimate, mph)	10	55	
Traffic one way or two	2	2	
Number of parking lanes	0	0	
Roadway paved?	Y	Y	
Obstructions			
Type	Size	Direction from Site	Distance from Site
None			

**Meteorology and Climatology:** Source of met data is site WS, WD on a 10m tower  
Source: State of Hawaii, Department of Transportation

**DATA QUALITY**

Audits	Result
Last PEP Audit: 9/15/09	Result: Unknown
Last Independent Audit (CAB): 7/9/09	No problems noted.
Flow Audit Frequency: Quarterly	
Precision/Accuracy reports submitted to AQS:	Yes
Frequency of 1-pt. QC check for gases:	1-pt. QC checks conducted daily
Annual data certification submitted to EPA:	2009 Data Certification submitted 4/29/10

**SITE AND MONITOR INFORMATION (KN continued)**

		<b>Probe Siting</b>		<b>Gases (SO<sub>2</sub>)</b>		<b>PM</b>	
Location			Top of trailer shelter	Top of trailer shelter		Top of trailer shelter	
Building or shelter dimensions (if applicable): height (m) width (m) depth (m)			3 2.4 5	3 2.4 5		3 2.4 5	
Horizontal distance from supporting structure (m)			Not Applicable (N/A)			N/A	
Vertical distance above supporting structure (m)			1			1	
Height of probe above ground (m)			4			4	
Distance from tree(s) (m)			no data			no data	
Horizontal distance from edge of nearest traffic lane (m)			17			17	
Horizontal distance from nearest parking lot (m)			N/A			N/A	
Horizontal distance from walls, parapets, penthouses (m)			N/A			N/A	
Distance (m) & direction from obstacles or buildings			N/A			N/A	
Distance from furnace or incineration flues (m)			N/A			N/A	
Unrestricted air flow			360°			360°	
Located in paved area or vegetative ground cover			Vegetative			Vegetative	
<b>Monitor Information</b>							
	<b>SO<sub>2</sub></b>	<b>PM<sub>2.5</sub></b>	<b>WS</b>	<b>WD</b>	<b>PM<sub>2.5</sub></b>		
Instrument Manufacturer	TECO	Met-One	RM Young	RM Young	Anderson co-located		
Model No.	43C	BAM1020	05103VP	05103VP	RAAS 2.5		
AQS Method Code	060	170	Not entered into AQS		120		
Date sampling began	9/05	3/15/08	-		2/6/09		
Frequency	continuous	continuous	continuous	continuous	1 in 12		
Probe material	Glass	-	N/A	N/A	-		
Response Time (seconds)	<10	N/A	N/A	N/A	N/A		
Distance between co-located monitors	N/A	N/A	N/A	N/A	7'		
<b>Site and Data History</b>							
<b>Date of Occurrence</b>	<b>Reasons for Invalid or Missing Data; Other site changes</b>						
7/27/05 – 9/12/05	Station was originally established in 1997 and was located on the bottom campus in the baseball field at a lower elevation level of 480m. Station was moved to its present location because the school was planning an expansion of the field.						
3/15/08	Met One BAM continuous PM <sub>2.5</sub> (FEM) began operating.						
2/6/09	Filters from the Anderson manual PM <sub>2.5</sub> to be sent to CDC for speciation analysis. Used as information gathering on the constitution of vog.						

**SITE REPRESENTATIVENESS**

	<b>SO<sub>2</sub></b>	<b>PM<sub>2.5</sub></b>				
Scale	Neighborhood	Neighborhood				
Averaging Times	3-hr; 24-hr; annual	24-hr; annual				
Monitoring Objective	Population exposure	Population exposure				
Suitable for comparison against annual PM <sub>2.5</sub> NAAQS?		Yes as of 3/15/10				

**Station modifications within the next 18 months:**

- No additions or modifications are planned for this station
- Missing probe siting information (distance of trees) will be acquired during the 2010 DOH audit

Figure 3-8 (KN) Kona Monitoring Station



Image © 2010 DigitalGlobe  
© 2010 Google  
18°30'20.17" N 155°54'51.13" W elev. 0 ft

Google  
2010  
Eye alt: 5099 ft

**SITE REPORT: MV Mountain View (SLAMS)**

**SITE INFORMATION**

<b>City:</b> Kurtistown	<b>CDP:</b> Kurtistown	<b>Census Tract:</b> 210.02	<b>AIRRS ID:</b> 150012017
<b>Address:</b> 17-860 Volcano Rd., Kurtistown, HI			
<b>UTM (NAD 83):</b> N 2165229 m E 281751 m	<b>Latitude (NAD 83):</b> 19° 34' 12.07 N	<b>Longitude:</b> 155° 04' 49.64 W	<b>Elevation (MSL):</b> 354
<b>Pollutants:</b> SO <sub>2</sub> , PM <sub>2.5</sub>			
<b>Name(s) of nearest intersecting street(s):</b> Volcano Rd.			
<b>Brief description of site location and landmarks:</b> Located in the front yard of a private residence in a residential community south of Hilo.			
<b>Agency preparing this report:</b> Department of Health, Environmental Management Division, Clean Air Branch, Monitoring Section			
<b>Agency responsible for data collection and site maintenance:</b> Department of Health, State Laboratories Division, Environmental Health Analytical Service Branch, Air Surveillance and Analysis Section			

**GENERAL SITE DESCRIPTION**

Mobile Source			
Type	Volcano Rd.		
Freeway			
Major Street or Highway	X		
Local Street or Road			
Through Street or Highway			
Traffic Activity			
Distance of roadway from air intake (m)	30		
Direction of roadway from air inlet	NW		
Composition of roadway	Asphalt		
Number of traffic lanes	2		
Average daily traffic (estimate)	5,207 (2006) <sup>1</sup>		
Average vehicle speed (estimate, mph)	40 mph		
Traffic one way or two	2		
Number of parking lanes	none		
Roadway paved?	yes		
Obstructions			
Type	Size	Direction from Site	Distance from Site
Trees	no data	N and E	2 m

<sup>1</sup> **Meteorology and Climatology:** Source of met data is site WS, WD on a 10m tower  
 Source: State of Hawaii, Department of Transportation

**DATA QUALITY**

Audits	Result
Last PEP Audit: 3/23/10	Result: Unknown
Last Independent Audit (CAB): 7/7/09	No problems noted.
Flow Audit Frequency: Quarterly	
Precision/Accuracy reports submitted to AQS:	Yes
Frequency of 1-pt. QC check for gases:	1 pt. QC checks are conducted daily
Annual data certification submitted to EPA:	2009 Data Certification submitted 4/29/10

**SITE AND MONITOR INFORMATION (MV continued)**

		Probe Siting		Gases (SO <sub>2</sub> )		PM	
Location		Top of trailer shelter		Top of trailer shelter		Top of trailer shelter	
Building or shelter dimensions (if applicable): height (m) width (m) depth (m)				3 2.4 5			3 2.4 5
Horizontal distance from supporting structure (m)		Not Applicable (N/A)		1			N/A
Vertical distance above supporting structure (m)				1			1
Height of probe above ground (m)				4.4			4.4
Distance from trees (m)				2.4			2.4
Horizontal distance from edge of nearest traffic lane (m)				30			30
Horizontal distance from nearest parking lot (m)				N/A			N/A
Horizontal distance from walls, parapets, penthouses (m)				N/A			N/A
Distance (m) & direction from obstacles or buildings				17			17
Distance (m) & direction from fireplace				44 SE			44 SE
Unrestricted air flow				360°			360°
Located in paved area or vegetative ground cover				Gravel			Gravel
Monitor Information							
	SO <sub>2</sub>	PM <sub>2.5</sub>	WS	WD			
Instrument Manufacturer	TECO	Met One	RM Young	RM Young			
Model No.	43i	BAM1020	05103VP	05103VP			
AQS Method Code	060	170	Not submitted to AQS				
Date sampling began	12/4/07	4/11/08	12/4/07	12/4/07			
Frequency	Continuous	Continuous	Continuous	Continuous			
Probe material	Glass	--	--	--			
Residence Time (seconds)	<10	--	--	--			
Distance between co-located monitors	--	--	--	--			
Site and Data History							
<b>Date of Occurrence</b>		<b>Reasons for Invalid or Missing Data; Other site changes</b>					

**SITE REPRESENTATIVENESS**

	SO <sub>2</sub>	PM <sub>2.5</sub>		
Scale	Neighborhood	Neighborhood		
Averaging Times	3-hr;24-hr, annual	24-hr, annual		
Monitoring Objective	Population exposure	Population exposure		
Suitable for comparison against annual PM <sub>2.5</sub> NAAQS?		Yes as of 4/11/10		

**Planned station modifications within the next 18 months:**

- The lease for this station expired in February 2010. The station will be moved to Mt. View Elementary School, approximately 1.8 miles to the south. See Section 2.2 for details.
- Although the trees are not the required minimum distance from the probe, they are not an obstacle when winds are from the direction of interest (SE/SW). Additionally, since this station will be shutdown and moved to a new location, the trees will not be trimmed or removed.



**SITE REPORT: PA      Pahala (SPM)**

**SITE INFORMATION**

<b>City:</b> Pahala	<b>CDP:</b> Pahala	<b>Census Tract:</b> 212	<b>AIRS ID:</b> 150012016
<b>Address:</b> 96-3150 Pikake St., Pahala, HI 96777			
<b>UTM (NAD 83):</b> Zone 5 281730.63 E	<b>Latitude (NAD 83):</b> 19° 12' 14.04" N	<b>Longitude:</b> 155° 28' 48.66" W	<b>Elevation (MSL):</b> 320 m
<b>Pollutants:</b> SO <sub>2</sub> , PM <sub>2.5</sub>			
<b>Name(s) of nearest intersecting street(s):</b> Puhala, Pumeli			
<b>Brief description of site location and landmarks:</b> This station is located on the grounds of the Ka'u High and Pahala Elementary School.			
<b>Agency preparing this report:</b> Department of Health, Environmental Management Division, Clean Air Branch, Monitoring Section			
<b>Agency responsible for data collection and site maintenance:</b> Department of Health, State Laboratories Division, Environmental Health Analytical Service Branch, Air Surveillance and Analysis Section			

**GENERAL SITE DESCRIPTION**

		<b>Mobile Source</b>	
Type	Puhala	Pumeli	
Freeway			
Major Street or Highway			
Local Street or Road	X	X	
Through Street or Highway			
Traffic Activity			
Distance of roadway from air intake (m)	226	61	
Direction of roadway from air inlet	E	N	
Composition of roadway	Asphalt	Asphalt	
Number of traffic lanes	2	2	
Average daily traffic (estimate)	No data	No data	
Average vehicle speed (estimate, mph)	25 mph	25 mph	
Traffic one way or two	2	2	
Number of parking lanes	none	none	
Roadway paved?	yes	yes	
Obstructions			
Type	Size	Direction from Site	Distance from Site
None			
<b>Meteorology and Climatology:</b> Source of met data is site WS, WID on a 10m tower			

**DATA QUALITY**

Audits	Result
Last PEP Audit: 9/17/09	Result: Unknown
Last Independent Audit (CAB): 7/8/09	No problems noted.
Flow Audit Frequency: Quarterly	
Precision/Accuracy reports submitted to AQS:	Yes
Frequency of 1-pt. QC check for gases:	1-pt. QC check is conducted daily
Annual data certification submitted to EPA:	2009 Data Certification submitted 4/29/10

**SITE AND MONITOR INFORMATION (PA continued)**

		Probe Siting		Gases (SO <sub>2</sub> )		PM	
Location		Top of trailer shelter		Top of trailer shelter		Top of trailer shelter	
Building or shelter dimensions (if applicable):							
height (m)		2.4		2.4		2.4	
width (m)		2.4		2.4		2.4	
depth (m)		6		6		6	
Horizontal distance from supporting structure (m)		Not Applicable (N/A)		N/A		N/A	
Vertical distance above supporting structure (m)		1		1		1	
Height of probe above ground (m)		3.4		3.4		3.4	
Distance from tree(s) (m)		11		11		11	
Horizontal distance from edge of nearest traffic lane (m)		48 S		48 S		48 S	
Horizontal distance from nearest parking lot (m)		73 S		73 S		73 S	
Horizontal distance from walls, parapets, penthouses (m)		N/A		N/A		N/A	
Distance (m) & direction from obstacles or buildings		24 W		24 W		24 W	
Distance from furnace or incineration flues (m)		N/A		N/A		N/A	
Unrestricted air flow		360°		360°		360°	
Located in paved area or vegetative ground cover		Vegetative		Vegetative		Vegetative	
Monitor Information							
	SO <sub>2</sub>	PM <sub>2.5</sub>	WS	WD			
Instrument Manufacturer	TECO	Met One	RM Young	RM Young			
Model No.	43i	BAM1020	05103VP	05103VP			
AQS Method Code	060	170	Not entered into AQS				
Date sampling began	8/10/07	4/11/08	8/10/07	8/10/07			
Frequency	Continuous	Continuous	Continuous	Continuous			
Probe material	Glass	--	--	--			
Resistance Time (seconds)	<10	--	--	--			
Distance between co-located monitors							
Site and Data History							
<b>Date of Occurrence</b>	<b>Reasons for Invalid or Missing Data; Other site changes</b>						
5/2/08 - 5/6/08	Station down; computer crashed						

**SITE REPRESENTATIVENESS**

	SO <sub>2</sub>	PM <sub>2.5</sub>				
Scale	Neighborhood	Neighborhood				
Averaging Times	3-hr;24-hr; annual	24-hr; annual				
Monitoring Objective	Population exposure	Population exposure				
Suitable for comparison against annual PM <sub>2.5</sub> NAAQS?	N/A	Yes as of 4/11/10				

**Planned station modifications within the next 18 months:**

- No additions or modifications are planned for this station.

Figure 3-10 (PA) Pahala Monitoring Station



**SITE REPORT: PE      Puna E (SPM Non-Regulatory)**

**SITE INFORMATION**

<b>City:</b> Pahoia	<b>CDP:</b> Leliani Estates	<b>Census Tract:</b> 211	<b>AIRRS ID:</b> 150012010
<b>Address:</b> TMK (3) 1-3-28:37, Puna (Hawaii)			
<b>UTM (NAD 83):</b>	North 2153268.8m East 300693.3 m	<b>Latitude (NAD 83):</b> 19° 27' 50.4" N <b>Longitude:</b> 154° 53' 55.3" W	<b>Elevation (MSL):</b> 208 m
<b>Pollutants:</b> SO <sub>2</sub> ; H <sub>2</sub> S			
<b>Name(s) of nearest intersecting street(s):</b> Leliani Blvd.			
<b>Brief description of site location and landmarks:</b> Located in the Leliani Estates residential subdivision in Puna approximately 1.5 miles southwest of the Puna Geothermal Venture power plant.			
<b>Agency preparing this report:</b> Department of Health, Environmental Management Division, Clean Air Branch, Monitoring and Analysis Section			
<b>Agency responsible for data collection and site maintenance:</b> Department of Health, State Laboratories Division, Environmental Health Analytical Service Branch, Air Surveillance and Analysis Section			

**GENERAL SITE DESCRIPTION**

<b>Mobile Source</b>			
Type	Leliani Blvd.		
Freeway			
Major Street or Highway			
Local Street or Road	X		
Through Street or Highway			
<b>Traffic Activity</b>			
Distance of roadway from air intake (m)	25.6		
Direction of roadway from air inlet	65°		
Composition of roadway	asphalt		
Number of traffic lanes	2		
Average daily traffic (estimate)	No data		
Average vehicle speed (estimate, mph)	25		
Traffic one way or two	2		
Number of parking lanes	0		
Roadway paved?	Yes		
<b>Obstructions</b>			
Type	Size	Direction from Site	Distance from Site
None			

**Meteorology and Climatology:** Source of met data is site WS, WD on a 10m tower

**DATA QUALITY**

<b>Audits</b>	<b>Result</b>
Last PEP Audit: Not applicable	
Last Independent Audit (CAB): 7/7/09	No problems noted.
Flow Audit Frequency: Not applicable	
Precision/Accuracy reports submitted to AQS:	Yes
Frequency of 1-pt. QC check for gases:	1-pt. QC checks are conducted daily
Annual data certification submitted to EPA:	2009 Data Certification submitted 4/29/10

**SITE AND MONITOR INFORMATION (PE continued)**

		Probe Siting		Gases (SO <sub>2</sub> , H <sub>2</sub> S)	
Location		Side of trailer shelter < 6 ft. above ground			
Building or shelter dimensions (if applicable): height (m) width (m) depth (m)				3 2.4 5	
Horizontal distance from supporting structure (m)				1.2	
Vertical distance above supporting structure (m)			probe at breathing height		
Height of probe above ground (m)				1.8	
Distance from tree(s) (m)				17	
Horizontal distance from edge of nearest traffic lane (m)				26	
Horizontal distance from nearest parking lot (m)			Not Applicable (N/A)		
Horizontal distance from walls, parapets, penthouses (m)			1.2 (from side of trailer)		
Distance (m) & direction from obstacles or buildings			1.2 (from side of trailer) W		
Distance from furnace or incineration flues (m)			N/A		
Unrestricted air flow			180°		
Located in paved area or vegetative ground cover			Vegetative		
Monitor Information					
Instrument Manufacturer	SO <sub>2</sub>	H <sub>2</sub> S	WS	WD	
Model No.	TECO 43C	TECO 43C	RM Young 05103VP	RM Young 05103VP	
AQS Method Code	060	008	Not entered into AQS		
Date sampling began	2/05	3/91	-	-	
Frequency	Continuous	Continuous	Continuous	Continuous	
Probe material	Teflon	Teflon	--	--	
Residence Time (seconds)	<10	--	--	--	
Distance between co-located monitors					
Site and Data History					
Date of Occurrence	Reasons for Invalid or Missing Data; Other site changes				
	None				

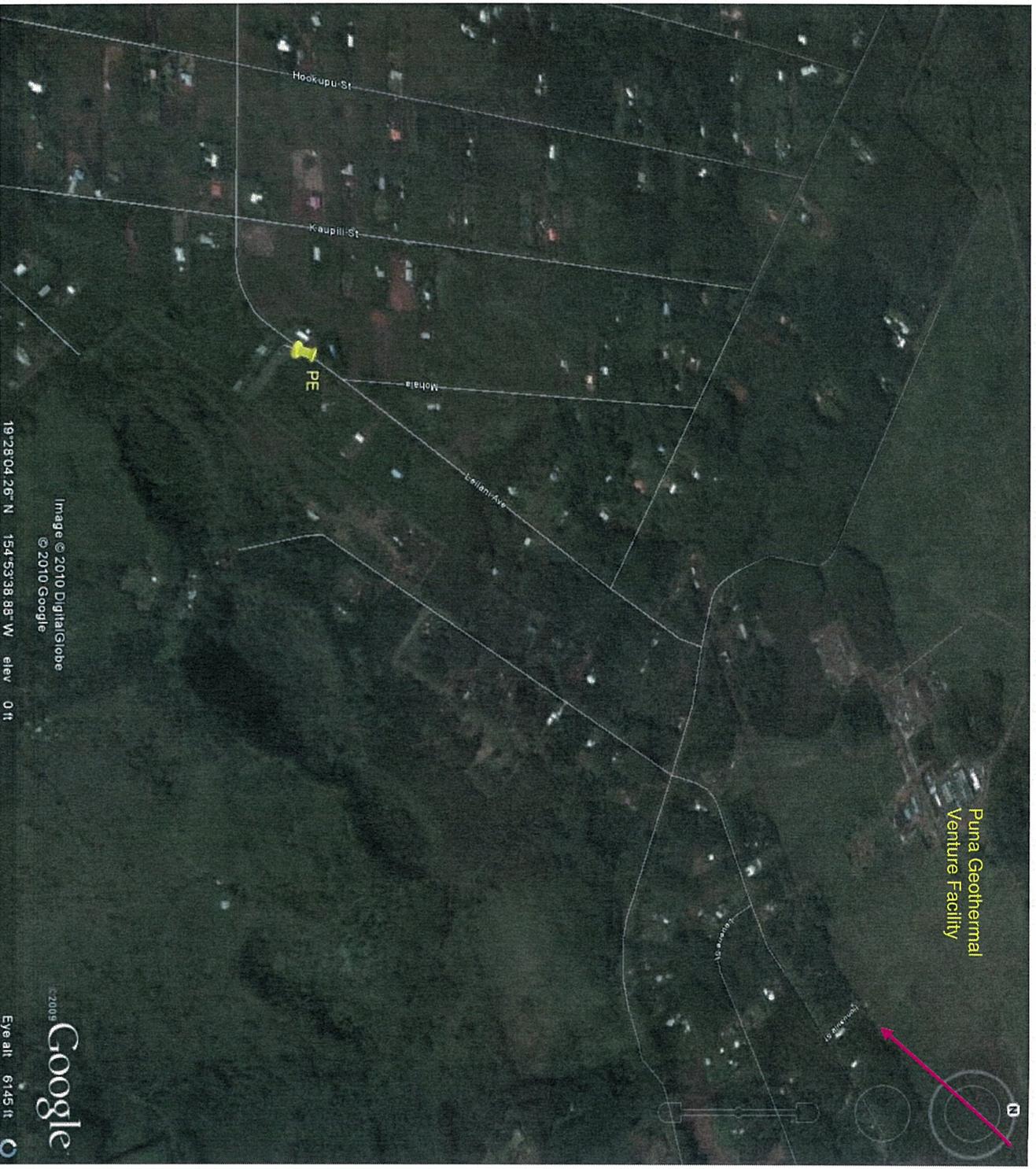
**SITE REPRESENTATIVENESS**

	SO <sub>2</sub>	H <sub>2</sub> S			
Scale	Neighborhood	Neighborhood			
Averaging Times	3-hr; 24-hr; annual	1-hr			
Monitoring Objective	Other	Source Impact			
NOTE	Not comparable to NAAQS, probe height does not meet siting guidance. Site was established primarily for H <sub>2</sub> S impacts from the geothermal energy facility				

**Station modifications within the next 18 months:**

- No additions or modifications are planned for this station.

Figure 3-11 (PE) Puna E Monitoring Station



**SITE REPORT: PH**

**Puna H (SPM Non-Regulatory)**

**SITE INFORMATION**

<b>City:</b> Pahoa	<b>CDP:</b>	<b>Census Tract:</b> 211	<b>AIRSI ID:</b> None
<b>Address:</b> TMK (3) 1-3-46:75 Puna (Hawaii)			
<b>UTM (NAD 83):</b>	North 2154122 m East 3001714 m	<b>Latitude (NAD 83):</b> 19° 28' 18.6" N <b>Longitude:</b> 154° 53' 20.5" W	<b>Elevation (MSL):</b> 200
<b>Pollutants:</b> H <sub>2</sub> S (State ambient air quality standard)			
<b>Name(s) of nearest intersecting street(s):</b> Hinalo St., Pahoiki Rd.			
<b>Brief description of site location and landmarks:</b> Located in the Lanipuna Gardens residential subdivision, less than 1 mile south of the Puna Geothermal Venture plant.			
<b>Agency preparing this report:</b> Department of Health, Environmental Management Division, Clean Air Branch, Monitoring and Analysis Section			
<b>Agency responsible for data collection and site maintenance:</b> Department of Health, State Laboratories Division, Environmental Health Analytical Service Branch, Air Surveillance and Analysis Section			

**GENERAL SITE DESCRIPTION**

<b>Mobile Source</b>			
Type	Hinalo St.	Pahoiki Rd.	
Freeway			
Major Street or Highway			
Local Street or Road	X	X	
Through Street or Highway			
<b>Traffic Activity</b>			
Distance of roadway from air intake (m)	13		
Direction of roadway from air inlet	10°	SW	
Composition of roadway	asphalt	asphalt	
Number of traffic lanes	2	2	
Average daily traffic (estimate)	No data	No data	
Average vehicle speed (estimate, mph)	25	25	
Traffic one way or two	2	2	
Number of parking lanes	0	0	
Roadway paved?	Yes	Yes	
<b>Obstructions</b>			
Type	Size	Direction from Site	Distance from Site
None			

**Meteorology and Climatology:** Source of met data is site WS, WD on a 10m tower

**DATA QUALITY**

<b>Audits</b>	<b>Result</b>
Last PEP Audit: Not applicable	
Last Independent Audit (CAB): 7/7/09	No problems noted.
Flow Audit Frequency: Not applicable	
Precision/Accuracy reports submitted to AQS:	Not submitted to AQS
Frequency of 1-pt. QC check for gases:	1-pt. QC check conducted daily
Annual data certification submitted to EPA:	Not applicable

**SITE AND MONITOR INFORMATION (PH continued)**

		<b>Probe Siting</b>			<b>Gases (H<sub>2</sub>S)</b>		
Location					Side of trailer shelter < 6 ft. above ground		
Building or shelter dimensions (if applicable): height (m) width (m) depth (m)					2.7 2.4 5		
Horizontal distance from supporting structure (m)					2.4		
Vertical distance above supporting structure (m)					probe at breathing height		
Height of probe above ground (m)					1.8		
Distance from tree(s) (m)					9		
Horizontal distance from edge of nearest traffic lane (m)					13		
Horizontal distance from nearest parking lot (m)					N/A		
Horizontal distance from walls, parapets, penthouses (m)					1.2 (from side of trailer)		
Distance (m) & direction from obstacles or buildings					1.2 (from side of trailer) N		
Distance from furnace or incineration flues (m)					N/A		
Unrestricted air flow					180°		
Located in paved area or vegetative ground cover					Vegetative		
<b>Monitor Information</b>							
	<b>H<sub>2</sub>S</b>	<b>WS</b>	<b>WD</b>				
Instrument Manufacturer	TECO	RM Young	RM Young				
Model No.	43C	05103VP	05103VP				
AQS Method Code	008	Not entered into AQS					
Date sampling began	11/02	-	-				
Frequency	Continuous	Continuous	Continuous				
Probe material	Teflon	--	--				
Residence Time (seconds)	<10	--	--				
Distance between co-located monitors							
<b>Site and Data History</b>							
<b>Date of Occurrence</b>	<b>Reasons for Invalid or Missing Data; Other site changes</b>						
	None						

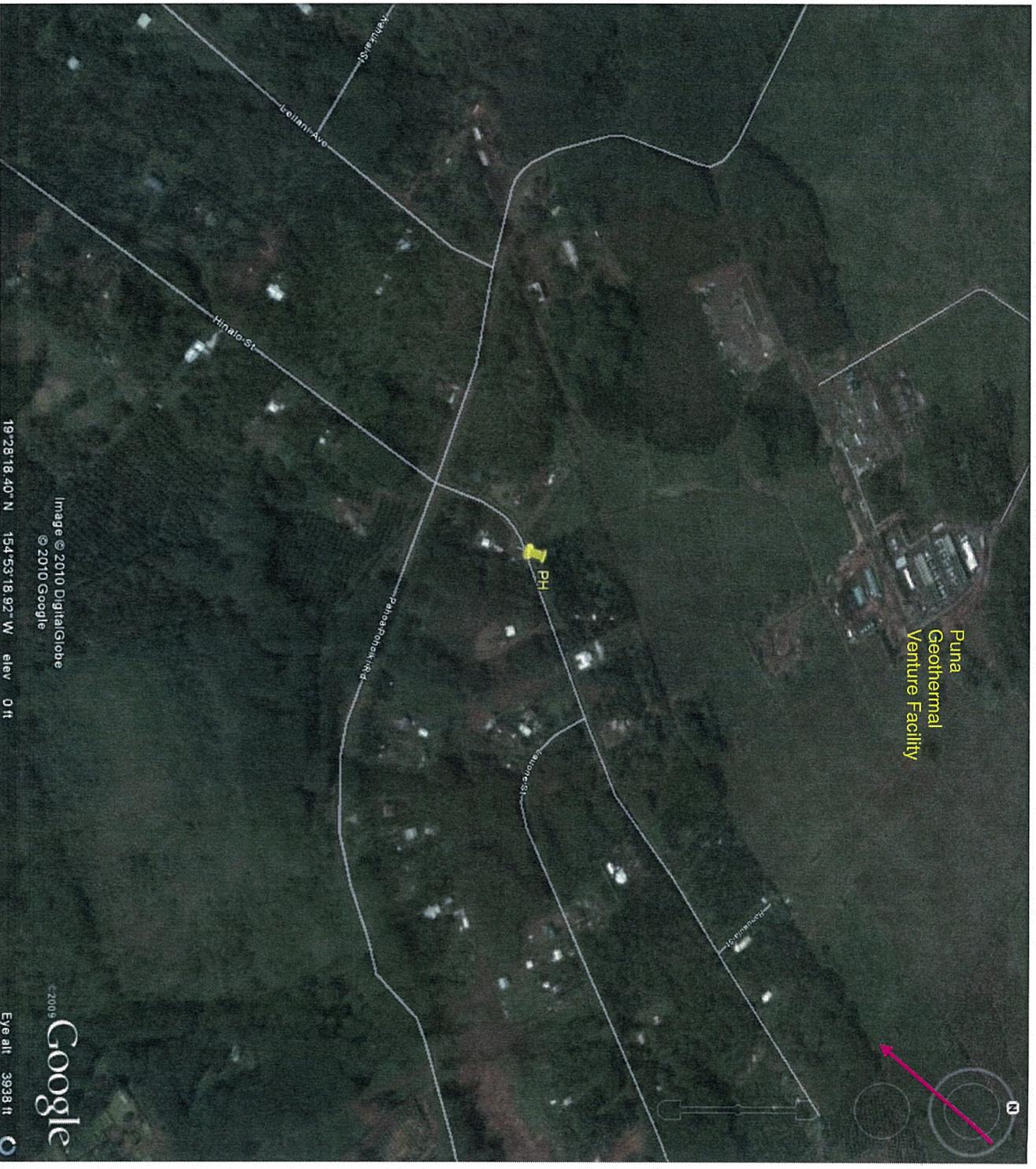
**SITE REPRESENTATIVENESS**

	<b>H<sub>2</sub>S</b>					
Scale	Neighborhood					
Averaging Times	1-hr					
Monitoring Objective	Source Impact					

**Station modifications within the next 18 months:**

- No additions or modifications are planned for this station.

Figure 3-12 (PH) Puna H Monitoring Station



## **Appendix A**

The 2010-2011 Air Monitoring Network Plan was made available for public inspection for 30 days from May 17 to June 15, 2010. The public notice was printed in the major newspapers and the plan was made available for viewing at the Health Offices on Kauai, Oahu, Maui, East Hawaii, and West Hawaii. Additionally, the plan was placed on the Clean Air Branch web page.

Attached are the affidavits from the five newspapers confirming publication of the public notice.

No comments on the plan were received.





## Clean Air Branch

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- [Monitoring Section](#)
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- [Online Air Quality Data](#)
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- [Hawaii Short Term SO<sub>2</sub> Alert Index](#)
- [Hawaii Air Quality Data Books](#)
- [Air Quality Monitoring Site Maps](#)
- [Federal and State Ambient Air Quality Standards \(PDF\)](#)
- [2010 New Year's Data \(PDF\)](#)
- [2010-2011 Air Monitoring Network Plan \(PDF\)](#)
- [2009 Annual Report on Campbell Industrial Park \(PDF, 14mb\)](#)
- [Open Burning Brochure \(PDF, 1mb\)](#)

### Mission Statement

At most times and in most places in Hawaii, we enjoy some of the best air quality in the nation. However, we do have air pollution as does any metropolitan area, so the Department of Health (DOH) works diligently to regulate and monitor air pollution sources.

The Clean Air Branch (CAB) is responsible for air pollution control in the state. The primary services of the branch are provided by its three sections: Engineering, Monitoring, and Enforcement. These sections conduct engineering analysis and permitting, perform monitoring and investigations, and enforce the federal and state air pollution control laws and regulations.

### Engineering Section

Reviews air applications and issues air permits of potential air pollution stationary sources. Evaluates, through application of dispersion modeling, the potential impact of an air pollution source on ambient air quality. Evaluates the control technology, operations, and fuels consumed to assess the types and potential air emissions from the various sources. Compiles and maintains a statewide air emissions inventory for the air pollution sources.

### Monitoring Section

Monitors the activities of the stationary sources for compliance with the applicable rules and permit conditions. Recommends enforcement action where violations have occurred. Conducts annual inspections of major sources and investigates incidents and complaints. In conjunction with the Air Laboratory, establishes and maintains the ambient air monitoring network and conducts special air monitoring studies as necessary. Compiles, assesses, and manages the data retrieved from the monitoring stations producing applicable graphs and reports.

### Enforcement Section

Initiates case development of alleged violations, determines the penalty, drafts and issues the notice of violation, and assists and participates in the conference, hearing, and legal process. Assesses, proposes, or comments on corrective measures, settlement agreements, penalties, and administrative or court actions. Conducts "smoke reading" training classes to provide continuing certification of inspectors in the technique of evaluating visible smoke.

### Regulatory Basis

The following are the federal and state laws and regulations that are associated with the control of air pollution and which authorize and direct the Clean Air Branch:



# SALES AND PUBLIC NOTICES

assessments which may arise under this 3-23-94-90 et seq.; (9) The availability of title or other insurance shall not be a condition of the sale, and the Purchaser shall be responsible for obtaining a certificate of title and title insurance, if so desired; (7) The obligation for taxes, lease/ground rent, common expenses and similar charges shall be the responsibility of the purchaser; (8) The Purchaser shall not take occupancy prior to recording of the conveyance instrument, and responsibility of securing possession of the property shall be with the Purchaser; (9) Time is of the essence in this transaction and any delay in performance by Purchaser which prevents the closing from occurring within 30 days after the auction shall cause Mortgagee to sustain damages in amounts which will be difficult to ascertain. In the event the sale does not close because of any delay in performance by the Purchaser as herein stated, the 10% down payment shall be retained by Mortgagee as liquidation damages and not as a penalty; (10) By submitting the Bid, Purchaser acknowledges reading the terms and conditions set forth in this notice and agrees to be bound thereby and sign a written acceptance of all terms herein; (11) This sale may be postponed from time to time by public announcement made by Mortgagee or someone acting for any reason, other than Purchaser's failure to perform as specified herein, the sole responsibility of Mortgagee, its agents and attorneys shall be to return the Bid funds tendered by Purchaser, and Purchaser shall have no further recourse; NOTICE IS HEREBY GIVEN THAT THIS FIRM IS ATTEMPTING TO COLLECT A DEBT. ANY INFORMATION OBTAINED WILL BE USED FOR THAT PURPOSE, AND THAT THE DEBT MAY BE DISCLOSED. INQUIRIES SHOULD BE DIRECTED TO David E. Rosen, Esq., at 808-523-9494, 3200 Richards St., Ste 380, Honolulu, HI 96813. Rosenlaw- (813)924711 5/17, 5/24, 5/31/10)

**NOTICE OF MORTGAGEE'S INTENTION TO FORECLOSE UNDER POWER OF SALE TS No. 7314,20811 TMK No. (1) 8-4-016-059-0001 Property Address: 84-7364 FARRINGTON HWY, WAILAIE, HI, 96792, GMAC Mortgage, LLC, a Pennsylvania Limited Liability Company whose address is GMAC Mortgage, LLC 1100 Virginia Drive, Ft Washington, PA 19034 ("Mortgagee"), a mortgagee pursuant to Hawaii Revised Statutes 667-5 through 667-10 as amended, under that mortgage ("Mortgage") dated 10/26/07 and recorded on 11/07/07, in the Bureau of Conveyances in the State of Hawaii, Land Court System document number 36795870 on Transfer Certificate Title Number 589,899 give notice that Mortgagee will hold a sale by public auction of the real property described in the Mortgage on June 24, 2010 at 12:00 PM at the front entrance of the First Circuit Court, 777 Punchbowl Street, Honolulu, HI 96813, and "WHERE IS" without consent or warranty, either express or implied, as to title, possession, condition of the property, encumbrances or any latent or patent defects hereon; (3) At the close of the auction, Purchaser shall pay at least 10% of the highest successful bid price ("Bid") by cashier's or certified check delivered to the closing escrow, and the company designated by Mortgagee, prior to the auction, that Mortgagee may submit a credit bid to the auction, and the amount of the secured indebtedness; (4) All bidders must be prequalified and accept in writing all sale terms prior to bidding; (5) This sale is subject to additional terms and conditions set forth by Mortgagee which are posted at <http://www.usa-foreclosure.com/cstatede/hi/roi> and incorporated by reference; (6) If title is not conveyed to Purchaser for any reason, other than Purchaser's own failure to perform, the Mortgagee shall return the Bid to Purchaser without interest, and Purchaser shall have no further recourse against Mortgagee and its agents; (7) Time is of the essence. Any delay in Purchaser's performance that prevents closing within 30 days after the auction shall cause Mortgagee to sustain damages which are difficult to measure. If the sale does not close solely due to Purchaser's failure to perform, the 10% down payment shall be retained by Mortgagee as liquidation damages, not as a penalty; and (8) This sale may be postponed by Mortgagee or its agent by public announcement. THIS FIRM IS ATTEMPTING TO COLLECT A DEBT. ANY INFORMATION OBTAINED WILL BE USED FOR THAT PURPOSE. Inquiries should be directed to: GMAC Mortgage, LLC, a Pennsylvania Limited Liability Company, 1100 Virginia Drive, Ft Washington, PA 19034 800-766-4622 Derek Wong, attorney for Mortgagee [Hiltsinquiry@colegal.com](mailto:Hiltsinquiry@colegal.com) (808) 532-0090 (SB190144 5/3, 5/10, 5/17/10)**

CALL USA: 529-4344  
CALL ROSE: 529-4825  
Fax: 529-4826  
[legals@clerkhawaii.com](mailto:legals@clerkhawaii.com)

## Public Notice

## Public Notice

## Public Notice

The Department of Health, State of Hawaii, is notifying all interested persons on the availability of the report, "2010 Air Monitoring Network Plan." This report, based on 40 CFR 58.10, describes Hawaii's ambient air monitoring network.

The report is available for public review during regular office hours, Monday through Friday, 7:45 a.m. to 4:15 p.m., at the following locations:

- Oahu:
  - Clean Air Branch, Department of Health
  - 919 Ala Moana Blvd, Room 203, Honolulu, Oahu 96814
- Hawaii:
  - Hawaii District Health Office, Department of Health
  - 1582 Kamehameha Ave., Hilo, Hawaii
  - Clean Air Branch - Kona, Keakealani Building, Department of Health
  - 79-1020 Haulkapia Street, Room 113, Kealahouka, Hawaii
- Kauai:
  - Kauai District Health Office, Department of Health
  - 3040 Umi St., Lihue, Kauai
- Maui:
  - Maui District Health Office, Department of Health
  - 54 High St., Room 300, Wailuku, Maui

The report is also available on the Clean Air Branch, Department of Health website at <http://www.hawaii.gov/health/environmental/air/cab/index.html>. Interested persons may submit written comments addressed to the Department of Health at the above address on Oahu, and must be postmarked or received by June 17, 2010. For additional information, contact Ms. Lisa Young of the Clean Air Branch in Honolulu at (808) 586-4200. (SB192025 5/17/10)

check to escrow designated by Mortgagee. Bid; (6) Purchaser shall pay all closing costs limited to costs of document drafting, not a escrow fees, company tax, recording tax, not a together with any other assessments which rents shall be paid by Purchaser, and a Purchaser shall provide the "warranty" with (vesting) and tenancy for title to the property; insurance; if so desired, however, the availability insurance shall not be a condition of sale; responsible for securing possession of the property of the essence in this transaction and any delay in performance by Purchaser which prevents the closing from occurring within 30 days after the auction shall cause Mortgagee to sustain damages in amounts which will be difficult to ascertain. In the event the sale does not close because of any delay in performance by the Purchaser as herein stated, the 10% down payment shall be retained by Mortgagee as liquidation damages and not as a penalty; (11) If title is not conveyed to Purchaser other than Purchaser's failure to perform as specified herein, the sole responsibility of Mortgagee, its agents and attorneys shall be to return the Bid funds tendered by Purchaser. The Purchaser's recourse against the Mortgagee or its agent and attorneys; (12) Mortgagee may file Conveyances, the Affidavit of Sale on or after the auction; (13) The sale may be postponed by public announcement by Mortgagee, reading the terms and conditions set forth herein; (14) By submitting the Bid, Purchaser agrees to be bound thereby and sign a written acceptance of all terms herein.

**NOTICE IS HEREBY GIVEN THAT THIS IS AN / A DEBT THAT ANY INFORMATION OBTAINED THAT PURPOSE, AND THAT THE DEBT MAY BE I**

Direct inquiries to Clay Chapman, Hawaii Attorneys for Mortgagee, at 700 Bishop Honolulu, HI 96813; (telephone: 808-535-94- (813)89087, 5/3, 5/10, 5/17/10)

**NOTICE OF MORTGAGEE'S INTENTION TO FORECLOSE UNDER POWER OF SALE TS No. 7283,26227 TMK No. 0000 Property Address: 91-432 PUPU STRE 96706, PHH Mortgage Corporation, a Nevada whose address is C/O PHH Mortgage Corp Gate Blvd, Mount Laurel, NJ 08054 ("Mortgagee") pursuant to Hawaii Revised Statutes 667-5 amended, under that mortgage ("Mortgage") dated and recorded on 04/22/98, in the Bureau of Conveyances in the State of Hawaii, Land Court System document number 34965 Mortgagee will hold a sale by public auction front entrance of the First Circuit Court, 777 Honolulu, HI 96813, and "WHERE IS" without c either express or implied, as to title, possession property, encumbrances or any latent whatsoever; (3) At the close of the auction, Purchaser shall pay at least 10% of the highest successful bid price or certified check and deliver it to the closing company designated by Mortgagee, prior to the auction, that Mortgagee may submit a credit bid up to secured indebtedness; (4) All bidders must accept in writing all sale terms prior to bid subject to additional terms and conditions which are posted at [http://www.usa-fo](http://www.usa-fo h/roi) and incorporated by reference; (6) If to Purchaser for any reason, other than Purch performance, the Mortgagee shall return the Bid interest, and Purchaser shall have no further recourse against Mortgagee and its agents; (7) Time is of the essence. Any delay in Purchaser's performance that prevents closing within 30 days after the auction shall cause Mortgagee to sustain damages which are difficult to measure. If the sale does not close solely due to Purchaser's failure to perform, the 10% down payment shall be retained by Mortgagee as liquidation damages, not as a penalty; and (8) This sale may be postponed by Mortgagee or its agent by public announcement. THIS FIRM IS ATTEMPTING TO COLLECT A DEBT. ANY INFORMATION OBTAINED WILL BE USED FOR THAT PURPOSE. Inquiries should be directed to: GMAC Mortgage, LLC, a Pennsylvania Limited Liability Company, 1100 Virginia Drive, Ft Washington, PA 19034 800-766-4622 Derek Wong, attorney for Mortgagee [Hiltsinquiry@colegal.com](mailto:Hiltsinquiry@colegal.com) (808) 532-0090 (SB190139 5/3, 5/10, 5/17/10)**

## Notices To Creditors

**Notice to Creditors**

Estate of Alberto Nevarro Paragoso, Decedent Alberto Paragoso Living Trust, dated January Alberto Paragoso Revocable Trust, dated January Pursuant to HRS §5603-801, all persons against the above-named decedent, estate hereby notified to present their claims with duly authenticated copies thereof, even if by mortgage upon real estate, to Aaron L of the above-named Trusts, whose address Tucker, 820 Milliani Street, 4th Floor, 96813, within four months from the publication of this notice, or they will be for

Carlos DiPonio, c/o Sterling & Tucker, 8, Ft. Honolulu, HI 96813 (SB192547 5/17, 5/24, 5/31/10)

IN THE MATTER OF  
Public Notice

AFFIDAVIT OF PUBLICATION

STATE OF HAWAII }  
City and County of Honolulu } SS.

Doc. Date: MAY 17 2010 # Pages: 1

Notary Name: Patricia K. Reese First Judicial Circuit

Doc. Description: Affidavit of Publication

Notary Signature: *Patricia K. Reese* Date: MAY 17 2010



Rose Mae Rosales being duly sworn, deposes and says that she is a clerk, duly authorized to execute this affidavit of Midweek Printing, Inc. publisher of Midweek and the Honolulu Star-Bulletin, that said newspapers are newspapers of general circulation in the State of Hawaii, and that the attached notice is true notice as was published in the aforementioned newspapers as follows:

Honolulu Star-Bulletin 1 times on: 05/17/2010

Midweek Wed. 0 times on:

Midweek Fri. 0 times on:

\_\_\_\_\_ times on:

And that affiant is not a party to or in any way interested in the above entitled matter.

Rose Mae Rosales

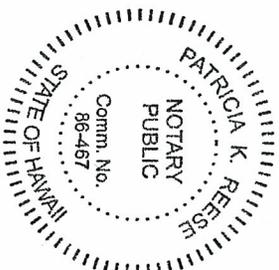
Subscribed to and sworn before me this 17th day

of May A.D. 20 10

Patricia K. Reese, Notary Public of the First Judicial Circuit, State of Hawaii

My commission expires: October 01, 2010

Ad # 0000192025



LN: \_\_\_\_\_

**PUBLIC NOTICE**

The Department of Health, State of Hawaii, is notifying all interested persons on availability of the report, "2010 Air Monitoring Network Plan". This report, based on 40 C 58.10, describes Hawaii's ambient air monitoring network.

The report is available for public review during regular office hours, Monday through Friday 7:45 a.m. to 4:15 p.m., at the following locations:

**Oahu:**

- Clean Air Branch, Department of Health, 919 Ala Moana Blvd., Room 203, Honolulu, Oahu 96814

**Hawaii:**

- Clean Air Branch, Department of Health, 1592 Kamehameha Ave., Hilo, Hawaii
- Clean Air Branch - Kona, Keakealani Building, Department of Health, 79-1020 Haukapila Street, Room 113, Kealahou, Hawaii

**Kaui:**

- Kaui District Health Office, Department of Health, 3040 Unihi St., Lihue, Kauai

**Maui:**

- Maui District Health Office, Department of Health, 54 High St., Room 300, Wailuku, Maui

The report is also available on the Clean Air Branch, Department of Health website at <http://www.hawaii.gov/health/environmental/air/cab/index.html>. Interested persons may submit written comments addressed to the Department of Health at the above address, on Oahu, and must be postmarked or received by June 17, 2010. For additional information, contact the Lisa Young of the Clean Air Branch in Honolulu at (808) 586-4200. (5/19/2010 5/17/10)

CLEAN AIR BRANCH  
919 ALA MOANA BLVD Rm 203  
HONOLULU HI 96814

REFERENCE : 105854  
722712  
2010 AIR MONITORING  
NETWORK PLAN

Carol Resinto, being duly sworn, deposes and says, that she is an employee of "The Garden Island," a newspaper published in Lihue, County of Kauai, State of Hawaii; that the NOTICE in the above entitled matter of which the annexed is a true and correct copy, was published \_\_\_\_\_ time(s) in "The Garden Island" aforesaid and that this affiant is not a party to or in any way interested in the above entitled matter.

Subscribed and sworn to me this 29<sup>th</sup> day of May 2010.

*[Signature]*  
CARMENCITA P. CRISTINO **Kristine K. Frey**  
Notary Public, Fifth Judicial Circuit  
State of Hawaii  
My Commission Expires: July 25, 2012 *S/306/2011*

Document Description: Affidavit of Publication  
No. of Pages: 1 Document Date: 5/29/10  
PUBLISHED ON: 05/29/2010



FILED *25/07/10*

PUBLIC NOTICE

The Department of Health, State of Hawaii, is notifying all interested persons on the availability of the report, "2010 Air Monitoring Network Plan." This report, based on 40 CFR 58.10, describes Hawaii's ambient air monitoring network.

The report is available for public review during regular office hours, Monday through Friday, 7:45 a.m. to 4:15 p.m., at the following locations:

- Oahu:  
Clean Air Branch, Department of Health  
919 Ala Moana Blvd., Room 203, Honolulu, Oahu 96814
- Hawaii:  
Hawaii District Health Office, Department of Health  
1682 Kanehameha Ave., Hilo, Hawaii  
Clean Air Branch - Kona, Kealahouani Building,  
Department of Health  
79-1020 Haukapala Street, Room 113,  
Kealahouani, Hawaii

- Kauai:  
Kauai District Health Office, Department of Health  
3040 Umu St., Lihue, Kauai
- Maui:  
Maui District Health Office, Department of Health  
54 High St., Room 800, Wailuku, Maui

The report is also available on the Clean Air Branch, Department of Health website at <http://www.hawaii.gov/health/environmental/air/cab/index.html>. Interested persons may submit written comments addressed to the Department of Health at the above address on Oahu, and must be postmarked or received by June 17, 2010. For additional information, contact Ms. Lisa Young of the Clean Air Branch in Honolulu at (808) 586-4200.

(May 17, 2010)



**AFFIDAVIT OF PUBLICATION**

STATE OF HAWAII, }  
County of Maui. } ss.

Rhonda M. Kurohara \_\_\_\_\_ being duly sworn  
deposes and says, that she is in \_\_\_\_\_ Advertising Sales \_\_\_\_\_ of  
the Maui Publishing Co., Ltd., publishers of THE MAUI NEWS, a  
newspaper published in Wailuku, County of Maui, State of Hawaii;  
that the ordered publication as to \_\_\_\_\_

**PUBLIC NOTICE**

of which the annexed is a true and correct printed notice, was  
published 1 times in THE MAUI NEWS, aforesaid, commencing  
on the 17th day of May, 2010, and ending  
on the 17th day of May, 2010, (both days  
inclusive), to-wit: on \_\_\_\_\_  
May 17, 2010

and that affiant is not a party to or in any way interested in the above  
entitled matter.

*Rhonda M. Kurohara*

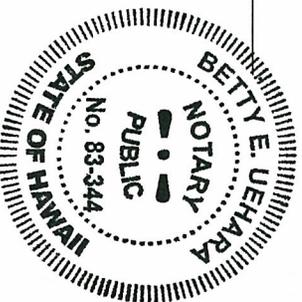
This 1 page \_\_\_\_\_ Public Notice \_\_\_\_\_, dated  
May 17, \_\_\_\_\_ 2010,

was subscribed and sworn to before me this 17th day of  
May, 2010, in the Second Circuit of the State of Hawaii,

by \_\_\_\_\_ Rhonda M. Kurohara

*Betty E. Uehara*

Notary Public, Second Judicial  
Circuit, State of Hawaii



**BETTY E. UEHARA**  
My commission expires 09-26-11

**PUBLIC NOTICE**

The Department of Health, State of Hawaii, is notifying all interested persons on the availability of the report, "2010 Air Monitoring Network Plan." This report, based on 40 CHR 38.100, describes Hawaii's ambient air monitoring network.

The report is available for public review during regular office hours, Monday through Friday, 7:45 a.m. to 4:15 p.m., at the following locations:

•Oahu:

- Clean Air Branch, Department of Health, 919 Ala Moana Blvd., Room 203, Honolulu, Oahu 96814

•Hawaii:

- Hawaii District Health Office, Department of Health, 1582 Kamehameha Ave., Hilo, Hawaii
- Clean Air Branch - Kona, Keekaula Building, Department of Health, 79-1020 Haukapua Street, Room 113, Kealahou, Hawaii

•Kauai:

- Kauai District Health Office, Department of Health, 3040 Umi St., Lihue, Kauai

•Maui:

- Maui District Health Office, Department of Health, 54 High St., Room 300, Wailuku, Maui

The report is also available on the Clean Air Branch, Department of Health website at <http://www.hawaii.gov/health/environmental/air/cab/index.shtml>. Interested persons may submit written comments addressed to the Department of Health at the above address on Oahu, and must be postmarked or received by June 17, 2010. For additional information, contact Ms. Lisa Yonig of the Clean Air Branch in Honolulu at (808) 586-4200 (M-F, May 17, 2010).

**AFFIDAVIT OF PUBLICATION**

State of Hawaii )  
 ) SS:  
County of Hawaii )

LEILANI K. R. HIGAKI

, being first

duly sworn, deposes and says:

1. That she is the BUSINESS MANAGER of  
HAWAII TRIBUNE-HERALD, a  
newspaper published in the City of HILO,  
State of Hawaii.

2. That the "PUBLIC NOTICE...availability of the report,  
"2010 Air Monitoring Network Plan. "...etc.,

of which a clipping from the newspaper as published is attached hereto, was pub-  
lished in said newspaper on the following date(s) \_\_\_\_\_

May 17, 2010, (etc.).

18376r1

*Leilani KR Higaki*

Subscribed and sworn to before me

this 27th day of May, 2010.

*SHARON H. P. OGATA*

SHARON H. P. OGATA

Notary Public, Third Circuit, State of Hawaii

My commission expires October 1, 2012

AFFIDAVIT OF PUBLICATION

State of Hawaii )  
 ) SS:  
County of Hawaii )

Lorelei Logan, being first duly sworn, deposes and says:

1. That she is the Major Accounts Manager of WEST HAWAII TODAY, a newspaper published in the City of Kailua Kona, State of Hawaii.

2. That "PUBLIC NOTICE The Department of Health, State of Hawaii, is notifying all interested persons on the availability of the report "2010 Air" of which a clipping from the newspaper is attached hereto, was published in said newspaper on the following date(s) May 17, 2010 (etc.)

*Lorelei Logan*  
-----

Subscribed and sworn to before me  
This 17th day of May, 2010

*Lana L. Taira*  
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Notary Public, Third Circuit,  
State of Hawaii



My Commission expires: August 4, 2013  
# Page(s): 1

**PUBLIC NOTICE**

The Department of Health, State of Hawaii, is notifying all interested persons on the availability of the report, "2010 Air Monitoring Network Plan." This report, based on 40 CFR 58.10, describes Hawaii's ambient air monitoring network.

The report is available for public review during regular office hours, Monday through Friday, 7:45 a.m. to 4:15 p.m., at the following locations:

**Oahu:**

- Clean Air Branch, Department of Health  
919 Ala Moana Blvd., Room 208, Honolulu, Oahu 96814

**Hawaii:**

- Hawaii District Health Office, Department of Health  
1582 Kamehameha Ave., Hilo, Hawaii
- Clean Air Branch - Kona, Keakealani Building,  
Department of Health  
79-1020 Haukapia Street, Room 113, Kealahou, Hawaii

**Kauai:**

- Kauai District Health Office, Department of Health  
3040 Umi St., Lihue, Kauai

**Mau:**

- Maui District Health Office, Department of Health  
54 High St., Room 300, Wailuku, Maui

The report is also available on the Clean Air Branch, Department of Health website at <http://www.hawaii.gov/health/environmental/air/cab/index.html>. Interested persons may submit written comments addressed to the Department of Health at the above address on Oahu, and must be postmarked or received by June 17, 2010. For additional information, contact Ms. Lisa Young of the Clean Air Branch in Honolulu at (808) 586-4200.  
(No. 2361-West Hawaii Today, May 17, 2010)