

# Oahu Storm Water Management Program Public Education and Training Plan

State of Hawaii Department of Transportation  
Highways Division



PROTECT  
**OUR**  
WATER

MĀLAMA I KA WAI  
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

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## **GLOSSARY OF ACRONYMS**

BMP	<b>Best Management Practice</b>
CFR	<b>Code of Federal Regulations</b>
City ENV	<b>City &amp; County of Honolulu Department of Environmental Services</b>
DOE	<b>State of Hawaii Department of Education</b>
DOH	<b>State of Hawaii Department of Health</b>
EPA	<b>National Environmental Protection Agency</b>
HAR	<b>Hawaii Administrative Rules</b>
HDOT	<b>State of Hawaii Department of Transportation</b>
HDOT Highways	<b>HDOT Highways Division</b>
HRS	<b>Hawaii Revised Statutes</b>
MS4	<b>Municipal Separate Storm Sewer System</b>
MS4 Permit	<b>HDOT Highways MS4 NPDES Permit (No. HIS000001)</b>
NPDES	<b>National Pollutant Discharge Elimination System</b>
Oahu SWMP	<b>Oahu District Storm Water Management Program Plan</b>
PSA	<b>Public Service Announcement</b>
SWPCP	<b>Storm Water Pollution Control Plan</b>

# INTRODUCTION

The State of Hawaii Department of Transportation Highways Division (HDOT Highways) has a Municipal Separate Storm Sewer System (MS4) that must be in compliance with the provisions of the Clean Water Act (23 United States Code 1251), Hawaii Revised Statutes (HRS Chapter 342D), and Hawaii Administrative Rules (HAR Chapters 11-54 and 11-55).

In accordance with MS4 NPDES Permit Number HIS000001 (MS4 Permit), the HDOT Highways is required to update its Oahu District Storm Water Management Program Plan (Oahu SWMP) to comply with terms and conditions outlined in the MS4 Permit and therefore meet all of the above stated requirements, including those of the Consent Decree.

One of these conditions is the development of a plan for public education and training that addresses the components in Parts D.1.a – D.1.f of the MS4 Permit. This plan was developed to meet the MS4 Permit requirements and is consistent with the following:

- State of Hawaii HDOT Highways MS4 NPDES Permit Number HIS000001
- Clean Water Act (33 United States Code 1251-1387)
- Hawaii Administrative Rules, Department of Health, State of Hawaii, Chapters 11-54 and 11-55
- Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) regulations (40 CFR 9, 122, 123, and 124)

The purpose of this Public Education and Training Plan is two-fold:

1. To educate and train HDOT Highways employees and contractors on the various aspects of the Oahu SWMP and the impacts of storm water pollution on the quality of Hawaii's stream and near shore waters.
2. To educate Oahu residents and visitors on the impacts of storm water pollution on the quality of Hawaii's streams and near shore ocean waters.

In Section 1, the Public Education and Outreach Plan is described. This section specifies when each program element will be implemented during the MS4 Permit Term.

In Section 2, the Training Plan is described. This plan goes into more detail about each program's training element. Background information on each program is available in the Oahu SWMP.

# AUDIENCES

This plan focuses on several audiences described in this section.

## **1.1 HDOT Highways Employees**

Employees of HDOT Highways who have a role in the implementation of the SWMPP and/or who conduct any of the activities outlined in the SWMPP within HDOT Highways rights-of-way and baseyard facilities.

## **1.2 HDOT Highways Contractors and Consultants**

Contractors or consultants doing construction and/or maintenance work for HDOT Highways outside of the HDOT Highways baseyards.

## **1.3 General Public**

The general public includes residents, tourists, and other visitors to the State of Hawaii. Special emphasis will be given to people applying for HDOT Highways permits, to people purchasing fertilizers, insecticides and other hazardous materials as well as to children in State Schools. Outreach programs will be designed to reach as broad an audience as possible, from young people who have no knowledge of pollution's effect on Hawaii's waters, to environmental engineers who work with pollution prevention.

In this plan, this category has been broken down further into four groups:

- **School Children**  
School-age children are the best subjects to influence long-term change in the way people think about storm water. They are also able to influence their parents' behavior.
- **Environmentalists**  
Environmentalists are already concerned about the environment, but may not be aware of the role that storm water plays in affecting our streams and oceans. This is a good group to reinforce messages with, and they often carry messages and information to broader groups.
- **Native Hawaiian Groups**  
Native Hawaiian groups tend to be concerned about the environment from the perspective of its use as a natural resource, which is slightly different from environmental concerns. For example, Native Hawaiians are concerned about clean water because water temperature is affected by turbidity, which in turn affects taro growth. Dirty streams run into the ocean and affect coral reefs and

fisheries, thereby impacting Hawaiian fishing practices. Because clean water is central to Hawaiians' spiritual beliefs, they make natural allies for the storm water program.

- Other Residents  
Other residents include short-term residents, such as tourists, as well as residents who live on Oahu. Many of the events will attract residents from all over the island, who will then be able to bring storm water messages back home to a broader audience.

#### **1.4 Other Target Groups**

Other specific groups of people that will be targeted through the various components of the Plan include:

- People who work in industrial facilities covered by the NPDES permit program.
- Workers in the construction industry.
- Workers at other facilities or sources that may contribute a significant pollutant load to the HDOT Highways' MS4, including employees and contractors working for other HDOT divisions.

# **SECTION 1**

## **PUBLIC EDUCATION AND OUTREACH**

The public outreach component of the Public Education Program is essential in gaining public support for the objectives of the SWMPP. The Public Education Program elements are described in each chapter of this section:

- Chapter 1 Implementation Schedule
- Chapter 2 Media Outreach
- Chapter 3 Program Outreach
- Chapter 4 Educational Outreach
- Chapter 5 Public Involvement in the SSWMP

These elements combine a mix of strategies, techniques, and informational campaigns that target the general public as well as specific target audiences. The central message to the public is how pollutants carried by storm water can cause the environmental degradation of State waters, which includes streams, beaches and ocean, and how the public can help to prevent or reduce this source pollution.

The topics of this central message begin first by explaining the current situation of Hawaii's waters to show the public that there is a problem by posing questions such as "What is storm water runoff?" and "Why does it matter if the storm water runoff is clean or not?"

Second, a suggestion that they might be contributing to the problem will be made by posing questions such as "How am I polluting the ocean if I never throw trash into the ocean?", "What about the pesticides, fertilizers, and herbicides I use in my garden?", and "What are the effects of my trash/pollutants when it goes into the ocean?"

And third, suggesting ways that they can help prevent storm water pollution by changing their behavior and helping others to understand how their behavior affects the quality of our water.

HDOT Highways' goals are to do the following, described in Chapters 1-4:

- Continue expanding and partnering with successful public volunteer programs that not only directly reduce pollution and clean-up the environment, but also educate the public;
- Work with major retailers to educate the public on the proper use and disposal of household toxins, such as motor oil, pesticides, herbicides, and fertilizers;
- Develop public service announcements that use commercial radio, television and print media;

- Establish a program website that may be used to provide useful storm water and water pollution information to the general public, and provide the means for the public to report potential illicit discharges or illegal connections;
- Reach out to Oahu schools through clean water curriculum and special educational workbooks;
- Take advantage of special events to convey the clean water message to the general public and partner with agencies and neighborhood, civic and environmental organizations that are interested in clean water issues; and
- Conduct a survey of Oahu residents to measure both behavior and knowledge relating to storm water.

This plan is not exhaustive of all outreach that will occur during the MS4 Permit term. As the program matures, additional opportunities may arise and be integrated into the program. While not part of this plan, they will become part of the overall program and considered for inclusion in future plans.

Most of the outreach techniques will be geared toward the general public, however, HDOT employees will have the added benefit of educational background provided in each of the training sessions described in *Section 2 Oahu SWMP Training*.

# CHAPTER 1

## IMPLEMENTATION SCHEDULE

This chapter summarizes the general schedule of each program element. Additionally, annual surveys and on-going partnerships are described, as they are part of the overall program and not specific to any program element.

### 1.1 Public Involvement Activities

Table 1.1 shows the breakdown of public involvement activities targeted for each year. Although Year 1 is shown as July 1, 2005 - June 30, 2006 to be consistent with the State Fiscal Year, it should be noted that the MS4 Permit became effective on March 31, 2006. Additionally, this plan includes activities that were implemented individually prior to the approval of the plan as a whole.

In Year 1, an assessment of HDOT Highways' and other agencies' existing public education activities and programs was conducted. This assessment helped to determine what other programs HDOT Highways could develop to compliment what is already being done.

This plan is designed to maintain existing programs while implementing new programs in a systematic way that maximizes the impact of HDOT Highways' overall program. A logo was developed and a theme was established. Since there were no existing programs specifically targeted towards Storm Water Awareness, HDOT Highways pursued partnerships with the City & County of Honolulu Department of Environmental Services. Some of the partnerships included the development, printing, and distribution of a Backyard Conservation Booklet (see Chapter 2.3), donation of supplies for the City's Adopt-A-Stream Program, and co-sponsorship of movie trailer PSAs.

In Year 2, this plan was finalized and components began to be implemented. Concurrently, HDOT Highways began developing informational brochures and a children's workbook to distribute to schools and at special events. HDOT Highways also developed a public storm water website keeping with the overall theme. Other activities included partnering with the City ENV for Adopt-A-Stream events and a Storm Water Conference.

In Year 3, HDOT Highways' own PSA campaign will be implemented. HDOT Highways will continue to attend special events and coordinate various opportunities to distribute brochures and other collateral material.

By Year 4, all of the program elements will have been implemented and this plan will be reviewed and updated according to current needs.

More detail for each program element is given in the following chapters.

**Table 1.1  
Public Involvement Activity Schedule**

<b>Program Year</b>	<b>Targeted Activities</b>
<p align="center"><b>Year 1 (July 2005 - June 2006)</b></p>	<ul style="list-style-type: none"> <li>• Assess HDOT Highways' existing programs and identify other programs to be included in the revised Oahu SWMP based on MS4 Permit and Consent Decree.</li> <li>• Begin development of <u>Public Education and Training Plan</u>.</li> <li>• Develop a program logo and theme.</li> <li>• Coordinate with the City ENV's public education program (e.g., Adopt-A-Stream, PSAs).</li> </ul>
<p align="center"><b>Year 2 (July 2006 - June 2007)</b></p>	<ul style="list-style-type: none"> <li>• Finalize <u>Public Education and Training Plan</u>.</li> <li>• Develop public education and outreach brochures and identify opportunities to distribute.</li> <li>• Develop a storm water website.</li> <li>• Develop an educational storm water booklet for children and distribute to schools and at special events.</li> <li>• Conduct an annual residential survey.</li> <li>• Attend special events and/or informational meetings.</li> <li>• Continue to coordinate with the City ENV's public education program.</li> </ul>
<p align="center"><b>Year 3 (July 2007 - June 2008)</b></p>	<ul style="list-style-type: none"> <li>• Continue to attend special events and/or informational meetings.</li> <li>• Continue to identify opportunities to develop and/or distribute brochures.</li> <li>• Start a PSA campaign.</li> <li>• Conduct an annual residential survey.</li> <li>• Continue to coordinate with the City ENV's public education program.</li> <li>• Refine the individual components of the Oahu SWMP Public Education and Outreach Plan as necessary.</li> </ul>

<b>Program Year</b>	<b>Targeted Activities</b>
<p style="text-align: center;"><b>Year 4 (July 2008 - June 2009)</b></p>	<ul style="list-style-type: none"> <li>• Continue to attend special events and/or informational meetings.</li> <li>• Continue to identify opportunities to develop and/or distribute brochures.</li> <li>• Conduct an annual residential survey.</li> <li>• Continue to coordinate with the City ENV's public education program.</li> <li>• Refine the individual components of the Oahu SWMP Public Education and Outreach Plan as necessary.</li> </ul>

### **1.2 Annual Survey**

An annual survey will be conducted each year to evaluate the progress of the public education program. Behavior and storm water knowledge will be measured and documented, and comparisons with previous surveys will be made to assess the effectiveness of the each activity where applicable.

HDOT Highways is currently working with the City ENV to develop a partnership whereby a comprehensive survey that addresses both the City ENV's and HDOT Highways' public education activities will be developed.

### **1.3 Partnerships**

HDOT Highways is committed to its partnerships with the City ENV and to the pursuit of future partnerships with other agencies. Meetings have already been held with the Army Directorate of Public Works, the Ala Wai Watershed Association, Board of Water Supply, and Honolulu Fire Department to build relationships and discover partnering opportunities.

These partnerships are especially important during the first few years of plan implementation, as HDOT Highways' own Education and Outreach Program develops and matures. Long-term partnerships are key for all agencies working together as the need for Storm Water and Clean Water awareness grows.

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## **CHAPTER 2 MEDIA OUTREACH**

Use of media is effective to reach the general public. By combining various media types, populations can be reached all over the island regardless of language, social status, or age.

### **2.1 Radio & Television Public Service Announcements**

Public Service Announcements (PSAs) broadcast via radio and television can reach a large segment of the population; most Oahu residents have access to a radio or television. The City ENV has developed many successful PSA's and movie trailers as part of their education and outreach efforts. HDOT Highways will explore partnerships with the City ENV as new PSAs are developed, extending the reach of the message wherever possible.

By Year 3, HDOT Highways will develop its own PSAs. HDOT Highways desires to partner with the City ENV and develop PSAs that reinforce the City ENV's messages. Strategically launching a flight of HDOT Highways' PSAs will allow a message to be spread over a longer period of time. Using a combination of paid and free time on both radio and television ensures the best possible rates and times for HDOT Highways' PSAs.

### **2.2 Print Advertisements**

Printed advertisements attract a different and more specific population than radio and television. HDOT Highways will develop print ads to announce special events (e.g., Earth Day) or to recognize people who have made a significant effort to help HDOT Highways reduce pollution in Oahu's waters.

Print PSAs would be used to announce special events (e.g., Earth Day) or to recognize people who have made a significant effort to reduce pollutants in our streams and ocean waters. For example, the PSAs may be used to recognize Hawaii State Science Fair Award winners. In general, the two major dailies, the Honolulu Advertiser and the Honolulu Star Bulletin, may be used for those print PSAs that are targeted to a more general audience.

Community or alternative newspapers or publications would be used for printed PSAs that target specific populations, such as those living in certain neighborhoods. They include, but not necessarily are limited to:

- Mid-Week;
- Na Nupepa;
- Leeward Current;
- North Shore News;
- Na Lono Kula (News for Schools);

- Ka Wai Ola (Office of Hawaiian Affairs);
- Hawaii Army Weekly (Schofield Barracks);
- Hawaii Navy News (Pearl Harbor Naval Base);
- Hickam Kukini (Hickam Air Force Base);
- The Honolulu Weekly; and
- The Downtown Planet.

In addition, PSAs would be placed in foreign language newspapers or publications in order to reach those who do not have access to major radio, television or printed media due to language barriers.

Other forms of printed media that may be good outlets for PSAs include:

- TheBus advertisement placards, which could be used for specific messages, such as asking riders not to litter or leave cigarette butts at bus stops;
- Large (i.e., 30"x40") posters that can be placed in private places, such as in offices, workplaces, construction sites, and retail stores where large numbers people may be able see them; and
- Movie trailers, which the City ENV uses for its PSAs. In the past, HDOT Highways has co-sponsored these types of ads with the City.

In Year 2, HDOT Highways will begin a program to recognize Hawaii State Science Fair Award winners who have projects relating to storm water. Advertisements will be placed in at least one of the two major dailies, the Honolulu Advertiser and the Honolulu Star Bulletin.

Printed advertisements in alternative newspapers target very specific populations. For example, publications in foreign language newspapers target foreign language speakers who may not have access to radio or television messages that they can easily understand.

Local alternative papers include: Mid-Week, Na Nupepa, Leeward Current, North Shore News, Na Lono Kula (News for Schools), Ka Wai Ola (Office of Hawaiian Affairs), Hawaii Army Weekly (Schofield Barracks), Hawaii Navy News (Pearl Harbor Naval Base), Hickam Kukini (Hickam AFB), The Honolulu Weekly, The Downtown Planet, as well as other ethnic papers.

By Year 2, HDOT Highways will coordinate efforts with other agencies. The following types of print advertisements will be integrated into the HDOT Highways program:

- Bus cards – large cards with information on them that are advertised on the inside of TheBus. These messages target those who ride TheBus regularly and can be very effective. The City ENV has developed a series of cards that include HDOT as a sponsor. These cards will be displayed on buses throughout the island.
- Posters – large advertisements (usually 30"x40") that can be posted in offices, workplaces, construction sites, windows of businesses, and other privately owned areas where people can see them. Posters have been developed by

other agencies and coordination with these agencies is underway to use these posters.

### **2.3 Brochures**

Brochures can be used in conjunction with other outreach activities and are usually handed out during special events (see Section 3.3). Consistency and branding (use of a distinctive name, phrase, or logo identifying the Oahu SWMP) is especially important when developing brochures. When used with PSAs, brochures can augment the PSA message. The following brochures will be developed for various audiences, beginning in Year 2:

- HDOT Highways Permit Holders  
This brochure will include general information on Construction BMPs, including the selection, design, installation, operation and maintenance of storm water treatment controls. Primarily for HDOT Highways permittees, these brochures will be available at the HDOT Highways permit counter.
- Household Toxins  
This brochure will be based on EPA information and localized for the Hawai'i audience. Brochures will be available in stores where household toxins (such as paint, fertilizers, pesticides and herbicides) are available, targeting household users of these potentially harmful products. Brochures will be available at large home improvement stores such as Home Depot and City Mill. These brochures will be part of the Household Toxins Awareness Program (see Section 4.1)
- Farming and Landscaping  
This brochure will include information about the effects of agricultural land use on storm water. Brochures will be distributed along with the Household Toxins brochure. Additional distribution will be made at special events and retail stores that sell landscaping and agricultural supplies.
- Commercial Businesses  
This brochure will include information on storm water specific to commercial business activities. Similar to the Household Toxins brochure, this brochure will be based on EPA information and localized for the Hawai'i audience. Brochures will be available at large home improvement stores such as Home Depot and City Mill, as well as wholesalers, such as Costco and Sam's Club.
- Storm Water Pollution Prevention for Students Workbook  
This workbook entitled "Stick it to Storm Water" will target school children in grades one through four, and will be distributed to schools on Oahu where permitted. The booklet features a mascot and a contest will be held to select a name for the mascot. The contest judges will include a local celebrity who will also be used for other educational outreach activities.

This workbook includes an interactive activity to show how kids can help prevent storm water pollution.

HDOT Highways has already coordinated efforts with other agencies. The following brochure has been integrated into the HDOT Highways program:

- Backyard Conservation Brochure – a brochure on residential conservation techniques and recommendations was developed by the City ENV. HDOT Highways co-sponsored this brochure and has been coordinating with other involved agencies in the distribution of the brochure. Home Depot and City Mill have agreed to distribute the brochures. HDOT Highways will ensure that supplies are restocked when the initial batches run out until there are no more brochures left. The brochure is also being distributed at special events (see Section 3.3) and is part of the Household Toxins Awareness Program (see Section 4.1)

## **2.4 Collateral Materials**

Collateral materials (such as stickers, crayons, coloring sheets, refrigerator magnets, key chains, and zipper pulls) will be used as leave behinds at events and meetings. These items have been shown to have success in maintaining awareness of various types of programs. These items will feature the SWMP Logo as well as other symbols, pictures, and/or phrases that represent HDOT Highways' storm water awareness program.

## **2.5 Webpage**

The Internet is a tool that can be used to disseminate information. In Year 2 the HDOT Clean Water Website will be developed. The domain name "StormWaterHawaii.com" was selected by the Director of HDOT. This website will include, at a minimum:

- General information for the public, including hotline number for reporting illicit discharges;
- Training information for HDOT Highways employees and contractors;
- Links to organizations that have adopted watersheds; and
- Links to agencies with information on clean water (e.g., DOH).

Once the website is developed, it will be updated as additional information becomes available to the public such as:

- Storm Water Regulatory Documents
- HDOT Highways Manuals
- HDOT Highways Permits and checklists
- Activities for children
- Activities for teachers

- A map of water bodies around the island
- Water quality information
- Storm drain maps

External links to websites that have information on storm water awareness in Honolulu and nationally will be pursued. The following websites have been initially selected:

- City & County of Honolulu Department of Environmental Services (<http://www.cleanwaterhonolulu.com/>);
- State of Hawaii Department of Health (<http://www.state.hi.us/health/>);
- Malama Hawaii (<http://www.malahawaii.org/>);
- Hawai'i Water Environment Association (<http://www.hwea.org/>);
- Sierra Club (<http://www.hi.sierraclub.org/>);
- University of Hawai'i Youth for Environmental Service ([http://heea.edgateway.net/pub/heea\\_org/124](http://heea.edgateway.net/pub/heea_org/124));
- Ala Wai Watershed Association; and
- Malama Manoa.

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## **CHAPTER 3**

# **EDUCATIONAL OUTREACH**

Educational outreach efforts will include the face-to-face meetings between HDOT Highways and children. Preliminary outreach efforts to elementary schools have been successful.

### **3.1 School Visitations**

In Years 1 and 2, HDOT Highways has been developing relationships with schools on Oahu where teachers have shown an interest in storm water.

Contact will be made with Oahu public schools to determine which schools would like to participate in HDOT Highways storm water activities including the “Name Our Mascot” contest and the “Stick it to Storm Water” workbook. HDOT Highways will also pursue being listed as resource speakers with the State Department of Education (DOE).

HDOT Highways is exploring the possibility of “adopting” a celebrity for this program and have that person visit at least one school in each district. This person would be featured as a judge in the “Name Our Mascot” contest for the “Stick it to Storm Water” workbook.

### **3.2 Science Fair Awards**

Science Fairs are held in schools throughout Hawaii. In Year 2, HDOT Highways will develop science fair awards for students with outstanding science fair projects focusing on clean water. Award categories will include such topics as:

- Water testing and measurement
- Storm water management
- Ahupua'a management
- Effects of clean versus dirty water

Understanding that not all categories will have entries, HDOT Highways will seek to promote storm water awareness to encourage more students to include storm water in their projects. These award winners would receive a prize and their names will be published in the local newspaper.

### **3.3 Special Event Participation**

Events pertaining to storm water are held throughout the year. By Year 2, HDOT Highways will target participation in at least two special events per year. At these events, HDOT Highways will provide a presentation or display and hand out program

materials. HDOT Highways keeps a current list of all upcoming storm water and clean water related events and participates in as many as possible. However, certain events occur annually and HDOT Highways will attend as many of these annual events as possible to build relationships with the sponsoring organization or agency:

Children and Youth Day (Target: School Children)

Children and Youth Day is a one-day fair for children held on the lawn of the state Capitol. This event is held in October.

Keiki Fest (Target: School Children)

Keiki Fest is organized by Straub Clinic and held on the grounds of the Bishop Museum. It is primarily a children's health fair, but since environmental issues affect children's health, most of the clean water programs also attend. The HDOT Highways has partnered with the Board of Water Supply and the DOH Clean Water Branch to participate in this event, which attracts about 3,000 people.

Malama i ke Kai (Target: School Children & Native Hawaiian Groups)

Malama i ke Kai is hosted by Punana Leo o Kawaiaha'o and is a festival that encourages people to care for the ocean. It targets two of the HDOT Highways' target audiences — children and Native Hawaiians — and is well aligned with the storm water program. This event attracts about 10,000 people.

Kokua Concert (Target: Environmentalists)

The Kokua Concert is held annually by the friends of Jack Johnson. It is held in April and aligned with Earth Day activities, attracting about 30,000 people. Most of the other state environmental agencies participate.

Discover Moiliili Day (Target: General Public)

Discover Moiliili Day provides an excellent opportunity to partner with the Ala Wai Watershed Association. It would be an important partner to help meet HDOT Highway's goal of reducing storm water pollution flowing into the Ala Wai Canal.

Schofield Fourth of July (Target: General Public)

This is a very large event (~65,000) held at Schofield Barracks. Although it targets a general audience, it will allow the storm water program to reach members of the armed forces who might otherwise be overlooked at other venues.

Made in Hawai'i Show (Target: General Public)

The "Made in Hawaii" show attracts more than 10,000 people. Because it focuses on products made in Hawaii, it's appropriate that messages about caring for Hawaii be part of the show.

In addition to these large public events, HDOT Highways is committed to attending smaller speaking venues when invited, such as:

- Hahaione Elementary School Science and Technology Exploring Possibilities by Students (S.T.E.P.S) Fair.

- Annual Hawaiian Civic Club Convention.
- Pulama i Ke Kai — a gathering of teachers to talk about fishing practices. The storm water program was invited to talk about how land-based activities affect the ocean.

HDOT has already participated in the following events in partnership with the City ENV:

- Discover Moiliili Day
- Windward Ahupua'a Make A Difference Day
- Makiki Stream Make A Difference Day
- Pouhala Marsh Make A Difference Day
- Nanakuli Make A Difference Day

### **3.4 Informational Meetings**

The HDOT Director or his staff should take advantage of opportunities to speak at neighborhood board meetings on O'ahu about the SWMP program. In addition to taking advantage of existing group meetings, however, HDOT Highways is also actively pursuing partnerships with organizations that have a stake in keeping Hawaii's waters clean. Informational meetings have been held with:

- City and County of Honolulu Department of Environmental Services
- Honolulu Board of Water Supply
- University of Hawaii
- Ala Wai Watershed Association
- Bishop Museum

In Years 3 and 4, meetings will be pursued with other community groups to educate them on storm water issues and the Oahu SWMP. Groups could include:

- Hawai'i Water Environment Association
- Malama Hawaii
- Sierra Club
- The Outdoor Circle
- Waikiki Rotary, Environmental Committee
- Waikiki Business Association
- Hawaii Chamber of Commerce Environmental Committee

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## **CHAPTER 4**

### **PROGRAM OUTREACH**

Programs are essential in maintaining public outreach over time. While special events and media are effective, programs provide an opportunity for constant outreach and public involvement. Several programs will be developed and/or implemented in Year 2. Many of these programs are specified as part of the MS4 Permit requirements.

#### **4.1 Household Toxins Awareness Program**

The Household Toxins Awareness Program is meant to provide information for the proper management, disposal and recycling of used oil, vehicle fluids, toxic materials, and other household hazardous wastes, such as fertilizers, herbicides and pesticides. The program may develop or use existing brochures on the safe use and disposal of household toxins, including identifying how and where people may dispose of hazardous wastes (e.g., the location of collection sites).

Once brochures are developed, HDOT Highways will work with stores, such as Home Depot and City Mill, to have them carry brochures regarding the safe use of household toxins (See Section 2.3) and to pass out the brochures whenever someone purchases the following household toxins:

- Paints;
- Pesticides;
- Fertilizers;
- Herbicides;
- Motor oil and materials used for changing motor oil; and
- Car washing detergents or polishes.

If successful, the program may be expanded to other retailers who sell one or more of the above products, such as automotive parts and supply stores. Currently, HDOT is handing out the Backyard Conservation Brochure at various special events (see Section 2.3 and 3.3).

#### **4.2 Adopt-A-Stream Program**

HDOT Highways will continue to support the City's Adopt-A-Stream program. In the past, this support involved providing supplies for clean-up events (such as gloves and trash bags) as well as manpower. HDOT Highways is further pursuing this partnership with the City and other organizations interested in cleaning Oahu's streams, such as the Ala Wai Watershed Association who has been actively cleaning and re-planting streams in the Ala Wai Watershed for the past eight years.

HDOT Highways does not plan to "re-invent the wheel" in its partnership with the City's Adopt-A-Stream program. Instead, HDOT Highways will use the same or similar

approaches as the City and the Ala Wai Watershed Association in targeting efforts on the following watersheds:

- Ala Wai Canal, which includes tributary Makiki, Manoa and Palolo streams;
- Kawa Stream in Kaneohe;
- Kaelepulu Stream in Kailua; and
- Waimanalo Stream in Waimanalo.

The Adopt-A-Stream program uses volunteers to clean stream banks, replant stream banks and maintain a particular stream or section of a stream. Volunteers also restock streams with native fish species or help to eradicate alien species in a stream. School children are often a significant component of Adopt-A-Stream programs because water quality studies are a part of the stream maintenance program. The City ENV's program coordinator assists the volunteers by coordinating the activities until the volunteers are established. For example, the Ala Wai Watershed Association rarely needs the coordinator to do more than drop off supplies. On the other hand, newer groups, such as those who have adopted Ulehawa Stream in Nanakuli, require more active coordination. The coordinator is responsible for maintaining an on-line data bank of stream cleaning activities.

The Adopt-A-Stream program may eventually be supported by the AMS, and by a program website. The website would provide a status of the Adopt-a-Stream program, such as providing information on upcoming events and how to volunteer to the program, or donate needed supplies and materials. This issue will be discussed in Year 3 or 4.

### **4.3 Adopt-A-Highway**

The ongoing Adopt-A-Highway program, which is administered by HDOT Highways, has been successful in reducing littering and illegal dumping on State highways. The program solicits businesses and other organizations to volunteer to help clean debris and materials from highway rights-of-way that they "adopt." Currently on Oahu, approximately 50 active groups are participating in the program. Not only do those who volunteer become more aware about the detrimental effects of highway littering and debris, but the general public may also become more aware of the same effects by observing the signage and the volunteers.

Currently, an HDOT Highways engineer is maintaining the database. However, a coordinator for this project is needed if HDOT Highways is to pursue a more proactive program that will include:

- Coordinating clean-up events through communication with adoptive organizations
- Incentives for participation
- Promotional material

## **SECTION 2**

### **OAHU SWMP TRAINING**

Training is integrated within the 2006 Oahu SWMP in that each program includes a training component. This section targets the following groups who are involved in various Oahu SWMP or other storm water activities:

- HDOT Highways employees;
- Consultants involved in the design of HDOT Highways projects; and
- Contractors seeking to work on HDOT Highways projects;

The subject matter in most of the training sessions would focus on the area of responsibility of the particular group. Consultants and contractors required for implementing any Oahu SWMP activities are responsible to receive training equivalent to that provided to HDOT Highways personnel in all applicable areas.

Each of the training programs is described in the following chapters include the following information as specified in Consent Decree Injunctive Relief Item 10.c(1):

- Training Audience
- Training Methods
- Trainer Qualifications
- Topic Areas (including, where appropriate, review of applicable measurable goals, selection and implementation of appropriate BMPs, review of appropriate storm water regulations and permits, and the terms of the Consent Decree)
- Schedule for training (including reporting requirements)

The following chapters are included in this section:

- Chapter 5 Illicit Discharge Detection and Elimination Training  
This training provides instruction to field inspectors and others involved in this program on the methods used to detect and report illicit discharges and illegal connections from properties adjacent to or near HDOT Highways right-of-way
- Chapter 6 Construction Activities Training  
This training provides instruction to parties involved in HDOT Highways construction activities (e.g., HDOT Highways personnel, consultants, contractors) regarding the information contained in the Construction BMP Field Manual (Construction BMP Field Manual).
- Chapter 7 Permanent BMP Training  
This training provides instruction to those planning, designing and reviewing projects regarding the information provided in the Permanent BMP Manual .

- Chapter 8 Erosion Control Training  
This training provides instruction to HDOT Highways maintenance personnel on the installation and implementation of temporary erosion control BMPs
- Chapter 9 Debris Removal Training  
This training provides instruction to those responsible for inspecting and conducting the sweeping of roadways and cleaning of drainage structures.
- Chapter 10 Chemical Application Training  
This training provides instruction to those responsible for applying chemicals (e.g., pesticides and herbicides) on HDOT Highways right-of-way.
- Chapter 11 Maintenance Facilities Training  
This training provides instruction to those who operate and maintain Oahu District baseyards and other maintenance facilities on pollution prevention and good housekeeping practices.
- Chapter 12 Pump Station Flood Control Training  
This training provides instruction on the proper maintenance of the pump station.
- Chapter 13 Industrial and Commercial Activities Discharge Management Training  
This training provides instruction to field inspectors on the methods to detect and report illicit discharges from industrial and commercial properties subject to storm water runoff that discharge into the Oahu MS4.

# **CHAPTER 5**

## **ILLICIT DISCHARGE DETECTION AND ELIMINATION TRAINING**

Illicit discharges and illegal connections to the Oahu MS4 are detected, prevented, and corrected through periodic inspections and follow-up investigations of parcels with permits granted by HDOT Highways to connect or discharge into the Oahu MS4, as well as parcels suspected of connecting or discharging into the Oahu MS4 without permits.

Illicit Discharge Detection and Elimination BMP training focuses on the methods used to detect and report illicit discharges.

### **5.1 Training Audience**

The State MS4 Task Force has been working on this program since 2000. Training on the Illicit Discharge Detection and Elimination BMP Program Plan will be made available to any new member of the MS4 task force or any additional staff (contracted by the State or through the master consultant contract) working under the Illicit Discharge Detection and Elimination BMP Program.

### **5.2 Training Method**

The Illicit Discharge Detection and Elimination Training will be conducted through a formalized “on-the-job” method by existing MS4 staff members.

### **5.3 Trainer Qualifications**

The illicit discharge and illegal connection trainer must meet the following qualifications:

- Awareness of HDOT Highways activities, policies and procedures.
- Knowledgeable in identifying and eliminating illicit connection, illegal discharges and spills to the State’s MS4.

### **5.4 Topics**

Topics include:

- Information and awareness of the Oahu MS4 NPDES permit, and the overall Oahu SWMP;
- Informing staff that they serve an important role in protecting the water quality in the State;
- Environmental background and regulatory requirements;

- Highway responsibilities for storm water management;
- Identifying and eliminating illegal connection, illicit discharges and spills to the Oahu MS4; and
- Inspection and enforcement techniques.

## **5.5 Training Schedule**

Training will be held on as-needed basis (e.g., when new employees are hired or contracted) and refresher courses will be held at a minimum once per year for inspection staff involved in the program.

Each training session will be recorded and entered into this program's training database described in Section 3.2.2. The trainer and training recipient will be recorded in the database. The Mid-Year and End-of-Year reports will contain information on the number and dates of trainings, types of training, and recipients of the training.

# **CHAPTER 6**

## **CONSTRUCTION SITE RUNOFF CONTROL TRAINING**

The objective of the Construction Site Runoff Control Program is to ensure that no construction would be allowed to commence on any contract, in-house, maintenance or encroachment by a third party permit project until it has been verified that the project has received from HDOH a Notice of General Permit Coverage (NGPC) under HAR, Chapter 11-55, Appendix C, NPDES General Permit Authorizing the Discharge of Storm Water Associated with Construction Activity, or other applicable NPDES permit (i.e., individual NPDES permit or NGPC authorizing discharges associated with dewatering or hydrotesting).

Construction Activities BMP training focuses on storm water best management practices specific to HDOT Highways activities, including the proper installation and maintenance of approved Construction BMPs and Erosion and Sediment Control BMPs, policies, and procedures. A video tape of this training has been made. The video can be provided to staff that missed the annual training sessions and new employees.

The Construction Program's training component focuses on providing instructions on the proper installation and maintenance of approved construction BMPs, and on the NPDES program administered by the HDOT Highways for storm water discharges at construction sites, and discharges resulting from dewatering and hydrotesting. The Construction Program training was implemented in December 2005. A video of the Construction Program training will be made and could be shown to staff who were not able to attend the annual training sessions, and to new employees.

### **6.1 Training Audience**

Training on the Construction BMP Program Plan will be made available to all personnel responsible for implementing the construction site runoff control program, including:

- Designers and project managers of construction projects;
- Construction engineers and construction inspectors;
- Maintenance staff;
- Plan reviewers;
- Inspectors; and
- HDOT Highways personnel with responsibilities for activities that could impact construction site runoff such as: Erosion and Sediment Control; Material Delivery and Storage; Waste Management; Spill Prevention and Control; Vehicle Equipment Maintenance; Paving Operations; Structure Construction and Painting; and BMP installation.

- HDOT Highways personnel, contractors, others doing work within a HDOT Highways' right-of-way.

## **6.2 Training Method**

The Construction Activities BMP training would use a combination of a PowerPoint presentation and handout material. Handouts could include a copy of the following documents:

- PowerPoint Slides with notes section
- Construction BMP Manual
- Sample Construction BMPs and Erosion and Sediment Control BMPs

## **6.3 Trainer Qualifications**

The Construction Activities BMP trainer must meet the following qualifications:

- Professional experience in designing, installing, and/or inspecting erosion and sediment control BMPs.
- Knowledge of the effectiveness of various construction BMPs in local weather conditions.
- Knowledge of MS4 NPDES Permit requirements and related regulatory requirements

## **6.4 Topics**

Topics may include all or a combination of the following:

- Environmental background and regulatory requirements, particularly the Clean Water Act and the NPDES permit program;
- Information and awareness of the Oahu MS4 NPDES permit, and the overall Oahu SWMP;
- The role people have in protecting the water quality in the State;
- Responsibilities of HDOT Highways regarding storm water management and erosion and sediment control at construction sites;
- Preferred BMPs related to:
  - HDOT Highways operation and maintenance activities , and
  - HDOT Highways or third-party construction activities;
- Erosion and sediment control practices; and
- Inspection and monitoring requirements, procedures and methods.

## **6.5 Training Schedule**

Training will be held at a minimum once per year. The Mid-Year and End-of-Year Reports will contain information on the number and dates of trainings, types of training, and recipients of the training.

Additionally, it should be noted that prior to the issuance of a Notice to Proceed for any contract construction project, a meeting with the project's prime contractor will be held during which the requirements of the NGPC or other NPDES permit, if any, will be discussed, as well as discussion of the 2005 Specifications, Pollution Notes and NPDES Notes.

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# **CHAPTER 7**

## **POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND SIGNIFICANT REDEVELOPMENT BMP TRAINING**

The purpose of the New Development and Significant Redevelopment program is to reduce the discharge of pollutants in storm water runoff discharged into the Oahu MS4. The program institutes procedures that would ensure that the installation of appropriate permanent BMPs is made to be a normal part of all new development and significant redevelopment projects that HDOT Highways undertakes, as well as for similar encroachment permit projects located within HDOT Highways rights-of-way.

Permanent BMP Criteria and a checklist were developed by HDOT Highways to assist plan reviewers and contractors in evaluating projects for Permanent BMP requirements. Training will focus on the new criteria and checklist and their application to HDOT Highways Contract, In-House, and Encroachment projects.

The training element of the New Development and Significant Redevelopment Program will cover the Permanent BMP Manual and Specifications. Instruction will include application of the BMP criteria, how to select appropriate Permanent BMPs, and general understanding of the Permanent BMP Manual.

### **7.1 Training Audience**

Training for Permanent BMPs will be made available to:

- Consultants who perform design work for the HDOT Highways; and
- HDOT Highways personnel with project design and construction storm water responsibilities, including design engineers, construction engineers, and plan review staff.

### **7.2 Training Method**

The Permanent BMP training would use a combination of a PowerPoint presentation and handout material, which include the following documents:

- Presentation's PowerPoint slides that allow for the taking of notes;
- Permanent BMP Manual; and/or
- Descriptions of sample permanent BMPs.

### **7.3 Trainer Qualifications**

The Permanent BMP trainer must meet the following qualifications:

- Professional experience in designing, installing, and/or inspecting permanent BMPs; and
- Knowledge of the effectiveness of various permanent BMPs in local climate and geological conditions.

#### **7.4 Topics**

Topics will include the following:

- Environmental background and regulatory requirements, particularly the Clean Water Act and the NPDES permit program;
- Information and awareness of the Oahu MS4 NPDES, and the overall Oahu SWMP;
- The role of the staff in protecting the water quality in the State;
- Responsibilities of HDOT Highways regarding storm water management and erosion and sediment control at construction sites;
- Permanent BMP Criteria;
- Instructions on how to fill out the Permanent BMP Checklist; and
- All types of permanent BMPs covered in the Permanent BMP Manual.

#### **7.5 Training Schedule**

Training will be held at a minimum once per year. The Mid-Year and End-of-Year Reports will contain information on the number and dates of trainings, types of training, and recipients of the training.

## **CHAPTER 8**

# **DEBRIS CONTROL BMP TRAINING**

HDOT Highways Oahu District is responsible for removing any litter, debris, sediment or other matter that is within or may enter the Oahu MS4 to ensure that storm water drainage is unimpeded and that potential pollutants to receiving waters are reduced to the maximum extent practicable. Polluting material typically found on roadways, which could enter the Oahu MS4 include:

- Illegal dumping of material;
- Runoff from construction activities within and adjacent to Highways rights-of-way;
- Litter from motorists and pedestrians;
- Debris from vehicles;
- Loose paving materials and aggregate from cracked pavements and potholes;
- Vegetative debris; and
- Sediment accumulation.

The Oahu District employs a number of measures to prevent pollutants from entering the Oahu MS4 and receiving waters, which include street sweeping and litter removal using industry-standard sweeping vehicles, and clearing debris and other materials that accumulate in drainage structures using hand tools. Timely removal of debris from storm drainage structures reduces the amount of material that can enter receiving waters.

The training element for the Debris Program will include instruction on the BMPs used for the sweeping of roadways and cleaning of drainage structures, covering such subjects as inspection methods, criteria for sweeping and cleaning of roadways and storm drain structures, and how to record the pertinent observations.

### **8.1 Training Audience**

Training will be made available to any person responsible for carrying out any element of the Debris Program, including all staff contracted by the State or through the master consultant contract. These persons include, but are not necessarily limited to, inspectors responsible for duties specified in Sections 9.1.1, and clerks or managers responsible for maintaining databases and records and coordinating with service contractors.

## **8.2 Training Method**

The method of training will involve both PowerPoint presentations and handout materials, which include the following documents:

- Presentation's PowerPoint slides that allow for the taking of notes; and
- Descriptions of Debris Program BMPs.

Training on the operation of equipment specific to the Debris Program will be conducted by the supervisor responsible for the specific function to which the training applies. Such training includes situations where a new employee begins work or when new equipment is acquired.

## **8.3 Trainer Qualifications**

The Debris Removal BMP trainer must meet the following qualifications:

- Experienced in the operation of sweeping and debris removal equipment; and
- Understanding of various sweeping and debris removal BMPs specific to HDOT Highways requirements.

## **8.4 Topics**

Topics will include the following:

- Environmental background and regulatory requirements, particularly the Clean Water Act and the NPDES permit program;
- Information and awareness of the Oahu MS4 NPDES permit, and the overall Oahu SWMP;
- The role of staff in protecting the water quality in the State;
- Responsibilities of HDOT Highways regarding storm water management;
- Operation of sweeping and debris removal equipment; and
- Proper collection and disposal techniques for street sweeping and drain cleaning.

## **8.5 Training Schedule**

Training will be held on an as-needed basis. Formal "classroom" type of training may be combined with other training conducted under other programs of the Pollution Prevention Program and the Construction Programs.

The Mid-Year and End-of-Year Reports (See Chapter Thirteen) will contain information on the number and dates of trainings, types of training, and recipients of the training.

# **CHAPTER 9**

## **CHEMICAL APPLICATIONS BMP TRAINING**

The maintenance of landscaped areas within HDOT Highways rights-of-way requires physical care, such as mowing and pruning, along with application of chemicals to provide nutrients and control pests. As such, a Chemical Application Training Plan has been prepared for HDOT Highways.

HDOT Highways personnel that use, apply, and manage herbicides, pesticides, and other landscape chemicals will be trained on their proper use and handling.

Training in the use of landscape chemicals will cover the following categories of BMPs:

1. General Vegetation Management
2. Herbicide and Pesticide Management

General vegetation management is a BMP that applies to routine landscape maintenance. The training will consist of instructing landscape maintenance personnel that handle or have responsibility for using herbicides on good housekeeping procedures, such as cleaning and maintaining equipment, and properly storing and disposing of chemicals, and general procedures for applying herbicides.

Training for the herbicide and pesticide management BMP was implemented in February 2006. Training includes the proper handling and application procedures to prevent contamination of storm water runoff. Also, the training for this BMP includes instruction on how to adjust irrigation systems to suit site conditions and avoid conveying chemical contaminated runoff to down-slope areas where it can enter the Oahu MS4 or directly into receiving waters.

### **9.1 Training Audience**

Chemical Applications Training will be made available to all personnel, including supervisors, employed by HDOT Highways staff or service contractors (e.g., landscaping, construction, and maintenance contractors) involved in the use, storage, management, and application of herbicides and pesticides. No person will be allowed to apply herbicides or pesticides within HDOT Highways rights-of-way or its other properties unless the applier has first received the training.

### **9.2 Training Method**

Unit and service contractor supervisors will undergo classroom training. A video of the training is available to be used in lieu of live training for new employees, or for those employees who missed previous training sessions or who want a refresher. The following training materials will be provided to training recipients:

- A copy of the Chemical Applications Training Plan;

- Hands-on training materials; and
- Training outline and documentation materials/forms.

Both HDOT Highways and service contractor landscape personnel will be trained by supervisors who underwent the classroom training (toolbox training).

### **9.3 Trainer Qualifications**

The Chemical Applications Trainer must have professional experience in the handling and application of landscaping chemicals.

HDOT Highways Maintenance Supervisors who have attended a training session held by a qualified trainer are considered qualified to hold on-the-job training sessions for new employees or employees who were not able to attend a formal training session.

### **9.4 Topics**

Topics will include the following:

- Information and awareness of the Oahu MS4 NPDES permit, and the overall Oahu SWMP;
- The role of staff in protecting the water quality in the State;
- Providing an awareness and understanding how landscaping chemicals can harm water quality;
- General vegetation management BMP;
- Chemical management BMPs (which includes logging herbicide and pesticide usage, and disposal of expired chemicals);
- Conducting training of others; and
- Conducting site inspections.

### **9.5 Training Schedule**

Training of unit and service contract supervisors will be held at least once per year. HDOT Highways maintenance landscape and service contract personnel will be trained by supervisors at least once per year. The Mid-Year and End-of-Year Reports will contain information on the number and dates of trainings, types of training, and recipients of the training.

# **CHAPTER 10**

## **EROSION CONTROL BMP TRAINING**

HDOT Highways seeks to maintain as much native vegetation on roadsides so that it is compatible with the surrounding environment, provides a pleasant aesthetic experience for motorists and other highway users, to control dust emissions, and to prevent erosion. The need to remove roadside vegetation must be balanced with the need to minimize soil erosion.

The function of the Erosion Control BMP Program is to identify and implement erosion control projects based on water quality concerns while continuing to address high profile public safety projects.

The training element of the Erosion Program will cover the installation and maintenance of erosion control BMPs for non-construction HDOT Highways projects. Instruction will include implementation of erosion control BMPs, as well as providing instruction on the selection of appropriate erosion control BMPs. The erosion control training program is intended to be provided on a periodic basis, but will be coordinated with other training programs described in this plan.

### **10.1 Training Audience**

Training for Erosion Control BMPs will be made available to the following personnel:

- HDOT Highways personnel responsible for managing and conducting the installation and maintenance of erosion control BMPs;
- Consultants who perform design work for the HDOT;
- Contractors who install erosion control BMPs, and
- HDOT Highways plan reviewers, designers, and project managers.

### **10.2 Training Method**

The Erosion Control BMP training would use a combination of a PowerPoint presentation and handout material, which include the following documents:

- Presentation's PowerPoint slides that allow for the taking of notes;
- Construction BMP Field Manual (note: the Construction BMP Field Manual contains erosion and sediment control BMPs) ;and/or
- Descriptions of sample BMPs similar to those presented in the SEP training sessions.

### **10.3 Trainer Qualifications**

The Erosion Control BMP trainer must meet the following qualifications:

- Professional experience in designing, installing, and/or inspecting erosion control BMPs; and
- Knowledge of the effectiveness of various erosion control BMPs in local climate and geological conditions.

### **10.4 Topics**

Topics will include the following:

- Environmental background and regulatory requirements, particularly the Clean Water Act and the MS4 NPDES permit program;
- Information and awareness of the Oahu MS4 NPDES, and the overall Oahu SWMP;
- The role of staff in protecting the water quality in the State;
- Responsibilities of HDOT Highways regarding storm water management and erosion and sediment control at non-construction sites;
- Erosion control BMPs; and
- Overview of erosion control program including the implementation of erosion control BMPs, for high priority erosional areas, maintenance of erosion control BMPs; and the islandwide assessment of storm drain outfalls.

### **10.5 Training Schedule**

Training will be held at least once per year, or on an as-needed basis. The Mid-Year and End-of-Year Reports will contain information on the number and dates of trainings, types of training, and recipients of the training.

# **CHAPTER 11**

## **MAINTENANCE FACILITIES BMP TRAINING**

HDOT Highways OM operates the following maintenance facilities on Oahu:

- Kakoi Street
- Keehi Viaduct
- Pearl City
- Wahiawa
- Waianae
- Hauula
- Windward

The Kakoi Street baseyard is on the only facility where routine vehicle and equipment maintenance and repairs are conducted, and is only baseyard with permanent fueling facilities, which include two gasoline and diesel fuel pumps. The other baseyards perform emergency repairs, and fueling at these facilities is done by one of six trucks equipped with 50-gallon tanks which are filled with diesel fuel. These fueling vehicles are also used in off-site situations where it would be impractical for vehicles to return to the baseyard.

Vehicle and equipment washing is done at all baseyards, except the Kakoi Street and Hauula baseyards. The Keehi viaduct baseyard has a “no-discharge” vehicle wash rack, and vehicles are washed at the Keehi Viaduct baseyard when practicable. The Windward baseyard has a paved designated wash area. Vehicle washing at the Pearl City, Wahiawa, and Waianae baseyards is conducted in unpaved areas where wash water infiltrates into the ground and does not enter storm drains or State waters.

The training element of the Maintenance Facilities BMP Program focuses on the BMPs that prevent pollution and maintain good housekeeping practices used within baseyards and other maintenance facilities. The instructions will include how to use the SWPCPs and how to control storm water pollution at the baseyard by using appropriate BMPs.

Site-Specific Storm Water Pollution Control Plans (SWPCP) have been prepared for each baseyard. Personnel will be educated on their role in protecting water quality through the implementation of the Site-Specific SWPCP for their baseyard and applicable Best Management Practices (BMPs).

### **11.1 Training Audience**

Training will be required of all HDOT Highways maintenance personnel stationed at the baseyards, which includes supervisors and clerical personnel as appropriate.

## **11.2 Training Method**

Training will be held on-site at each maintenance facility, and involve “hands-on” demonstrations. A SWPCP Users Guide has been developed for each maintenance facility and will be provided to employees of each facility. The User Guides are similar to the SWPCPs, but more field-friendly. New employees will undergo the training regimen described herein as part of their orientation. Hands-on training materials will be provided to training recipients.

## **11.3 Trainer Qualifications**

The storm water pollution control awareness trainer must meet the following qualifications:

- Thorough understanding of BMPs; and
- Professional experience on the operation and functions of maintenance facilities or similar types of maintenance and storage facilities;

## **11.4 Topics**

Topics will include the following:

- Information and awareness of the Oahu MS4 NPDES permit, which also applies to maintenance facilities, and the overall Oahu SWMP;
- The role of staff in protecting the water quality in the State;
- Identifying potential sources of pollution within maintenance facilities, including the difference between routine and non-routine runoff and their sources;
- Various BMPs such as Housekeeping practices; Vehicle and equipment washing, maintenance, and repair; Vehicle and equipment fueling; Material Storage; Spill prevention and response plan; and Hazardous waste management;
- The site-specific SWPCPs including potential pollutants present at the maintenance facility;
- Conducting site inspections;
- Spill reporting and documentation; and
- How to conduct site inspections within maintenance facilities.

## **11.5 Training Schedule**

Training will be held at least once per year. The Mid-Year and End-of-Year Reports will contain information on the number and dates of trainings, types of training, and recipients of the training.

# **CHAPTER 12**

## **STORM WATER POLLUTION CONTROL FOR FLOOD CONTROL PROJECTS TRAINING**

The storm water pump station located on the H-1 freeway near the Punahou Street overpass is the only flood control facility on Oahu owned and operated by HDOT Highways. The pump station services a low point in the freeway where gravity drainage from a section of the roadway is not possible. Periodic inspection and cleaning will reduce the discharge of pollutants into the MS4.

Training will ensure that the pump is adequately maintained, inspected, and cleaned.

### **12.1 Training Audience**

Training will be made available to HDOT Highways maintenance personnel responsible for the inspection and/or cleaning of the pumps and maintaining records of such cleaning and inspection. This is currently under the purview of the Highways Division's Tunnel Maintenance Section. Contractors performing this work should also be made aware of this training.

### **12.2 Training Method**

Training could be held on-the-job.

### **12.3 Trainer Qualifications**

The trainer must meet the following qualifications:

- Experience in pump maintenance and cleaning.

### **12.4 Topics**

Topics may include all or a combination of the following:

- SSWMP Background
- Environmental Background and Regulatory Requirements
- Highway Responsibilities for Storm Water Management
- Proper maintenance of pumping equipment
- Proper cleaning of the sump

## **12.5 Training Schedule**

Training is scheduled on an as-needed basis. Currently, the contractor performing the maintenance and inspection of the pump station is already trained.

The number and dates of trainings, types of training, and attendees participating will be included in the required quarterly and semi-annual reports as required by the Consent Decree and MS4 Permit.

# **CHAPTER 13**

## **INDUSTRIAL AND COMMERCIAL ACTIVITIES DISCHARGE MANAGEMENT TRAINING**

The Industrial and Commercial Activities Discharge Management Training is to be specific to HDOT Highways Division activities, policies and procedures. This chapter contains information taken from the *Statewide Storm Water Management Program Industrial and Commercial Facilities Inspection Training Plan* dated June 20, 2006.

### **13.1 Training Audience**

Training shall be required of any new person responsible for carrying out any element of the Industrial Discharge Program, including any additional staff contracted by the State or through the master consultant contract. This includes, but is not necessarily limited to, inspectors responsible for duties specified under this program and clerks or managers responsible for maintaining databases and records, scheduling inspections, arranging follow-up activities and coordinating with HDOH.

### **13.2 Training Method**

Training shall be conducted through a formalized “on-the-job” method by experienced staff, such as managers and supervisors.

### **13.3 Trainer Qualifications**

The managers and supervisors conducting the training, shall have the following qualifications:

- Awareness of HDOT Highways activities, policies and procedures;
- Understanding of federal and State laws pertaining to industrial and commercial storm water discharges; and
- Knowledgeable in identifying and eliminating illicit connections, illegal discharges and spills to the Oahu MS4.

### **13.4 Topics**

Under the revisions and requirements of the Oahu MS4 NPDES permit (Permit), which became effective on March 31, 2006, HDOT Highways is tasked with developing and providing training to staff on:

- How to conduct industrial and commercial inspections, including how to identify deficiencies and assess potential impacts to receiving waters;
- Types of facilities covered by the General Industrial Storm Water permit coverage or any other applicable NPDES permit;

- Components in a Storm Water Pollution Control Plan (SWPCP) for industrial facilities, including how to evaluate the appropriateness and effectiveness of deployed BMP's and SWPCP's, if applicable;
- BMP's and source control measures for industrial and commercial facilities; and
- Other inspection and enforcement techniques, including how to document site conditions and BMP conditions.

### **13.5 Training Schedule**

The *Statewide Storm Water Management Program Industrial and Commercial Facilities Inspection Training Plan* was submitted for DOH review and training was held per MS4 Permit Part D.1.g.(6). Per MS4 Permit Part D.1.g.(6), inspectors will also receive annual training.

Each training session shall be recorded and entered into this program's training database. The trainer and training recipient shall be recorded in the database. The number and dates of trainings, types of training, and attendees participating will be included in the required quarterly and semi-annual reports as required by the Consent Decree and MS4 Permit.