

3 | Illicit Discharge Detection and Elimination Program



State of Hawaii, Department of Transportation
Highways Division, Oahu District
SWMPP, February 2022



Inspectors monitor outfalls for illicit discharge and pollutants.

The Illicit Discharge Detection and Elimination Program (IDDE Program) is designed to detect and eliminate illegal connections and illicit discharges into the MS4 to the MEP. The IDDE Program is administered in conjunction with the Industrial and Commercial Activities Discharge Management Program (Industrial and Commercial Program), with which it shares common objectives, policies, and personnel.

The IDDE Program includes the following control measures:

1. Require, issue, and track permits for private drain connections.
2. Implement an *Outfall Field Screening Plan* to screen for illicit discharges.
3. Track illegal connections, illicit discharges, spills, and follow-up actions.
4. Investigate complaints of illicit discharges.
5. Pursue enforcement actions for illegal connections and illicit discharges to the MS4 to the MEP.
6. Prevent, respond to, contain, and clean up all wastewater and other spills that may enter into the MS4 to the MEP.
7. Facilitate the proper management and disposal or recycling of used oil and toxic material.
8. Train IDDE Program staff to identify and eliminate illegal connections, illicit discharges, and spills into the MS4.

The IDDE Program is administered in accordance with the MS4 NPDES Permit requirements referenced in Table 3-1.

Table 3-1. MS4 NPDES Permit Requirements for the IDDE Program.

MS4 NPDES Permit Reference	SWMPP Section
<i>Part D.1.c</i> – The Permittee shall implement the ongoing SWMP to detect and eliminate illegal connections and illicit discharges into the MS4 and shall include an improved program in the revised SWMP Plan. The program shall include:	
<p><i>Part D.1.c.(1)</i> Connection Permits for private drain connections – The Permittee shall continue to implement its requirements for issuing connection permits and require obtaining the permit prior to allowing the drain connections. A database shall be maintained of all permitted connections to the MS4. Prior to issuing a connection permit, including for projects in construction, the Permittee shall ensure the following are met:</p> <ul style="list-style-type: none"> the project has provided proof of filing a Notice of Intent (NOI) or NPDES application, if applicable; and control measures comply with its requirements to minimize pollutant discharge into the MS4. 	Section 3.1
<i>Part D.1.c.(2)</i> Field Screening – The Permittee shall implement its Outfall Field Screening Plan for observing major and minor outfalls to screen for illicit discharges. The plan shall designate priority areas for screening, specify the frequency for screening, and identify the procedures to be followed if an illicit discharge is observed. At a minimum, outfalls in priority areas shall be screened once per permit term.	Section 3.2
<i>Part D.1.c.(3)</i> Tracking – The Permittee shall maintain a database of illegal connections, illicit discharges, and spills that tracks the type of discharge, responsible party, DOT-HWYS response, follow-up activities, and resolution of the discharge to the MS4. The illicit discharge activities shall be identified by Tax Map Key (TMK), as applicable.	Section 3.3
<i>Part D.1.c.(4)</i> Investigate complaints – The Permittee shall promptly investigate observed, suspected, or reported illicit flows and pursue enforcement actions, as appropriate. Complaints made to the CWB, which discharge to the MS4 will be forwarded to the Permittee for their action. The Permittee shall:	Section 3.4
<i>Part D.1.c.(4)(i)</i> – Implement a program to facilitate public reporting of illicit discharges (i.e., environmental hotline and/or website for reporting), including providing at least one contact that the public can reach (including phone number and/or email address) be clearly posted on its website; and	Section 3.4
<i>Part D.1.c.(4)(ii)</i> – Continue to implement, and update as necessary, a response plan for the investigation of illicit discharges to be consistent with the requirements of this permit.	Section 3.4

MS4 NPDES Permit Reference	SWMPP Section
<p>Part D.1.c.(5) Enforcement – Pursue enforcement actions in accordance with established policies against property owners in non-compliance with its requirements, those with illegal drain connections, and persons without direct connections whom illicitly discharge pollutants to the MS4.</p>	Section 3.5
<p>Part D.1.c.(6) Prevent and Respond to Spills to the MS4 – The Permittee shall implement its ongoing SWMP to prevent, respond to, contain, and clean up all wastewater and other spills that may enter into the MS4 from any source (including private laterals and failing cesspools). Spill response teams, which may consist of local, state, and/or federal agencies, shall prevent entry of spills into the MS4 and contamination of surface water, ground water, and soil to the MEP.</p> <p>The Permittee shall coordinate spill prevention, containment, and response activities throughout all appropriate departments, programs, and agencies to ensure maximum water quality protection at all times.</p> <p>The Permittee shall notify DOH of all wastewater spills or overflows from private laterals and failing septic systems into the MS4. The Permittee shall implement its ongoing SWMP to prevent, respond to, contain, and clean up wastewater from any such notification.</p>	Section 3.6
<p>Part D.1.c.(7) Facilitate Disposal of Used Oil and Toxic Materials – The Permittee shall implement its ongoing SWMP to facilitate the proper management and disposal or recycling of used oil, vehicle fluids, toxic materials, and other household hazardous wastes. Such a program shall include educational activities, public information activities, and identification of collection sites or methods.</p>	Section 3.7
<p>Part D.1.h.(1) Illicit Discharge Detection and Elimination – The Permittee shall provide annual training to all DOT-HWYS staff responsible for illicit discharge detection and elimination inspections on identifying and eliminating illegal connections, illicit discharges, and spills to the MS4. This training shall be specific to DOT-HWYS activities, policies, rules, and procedures.</p>	Section 3.8

3.0 Program Organization

To fulfill the MS4 NPDES Permit requirements of the IDDE Program, the following organizational structure has been established, as shown in Figure 3-1.

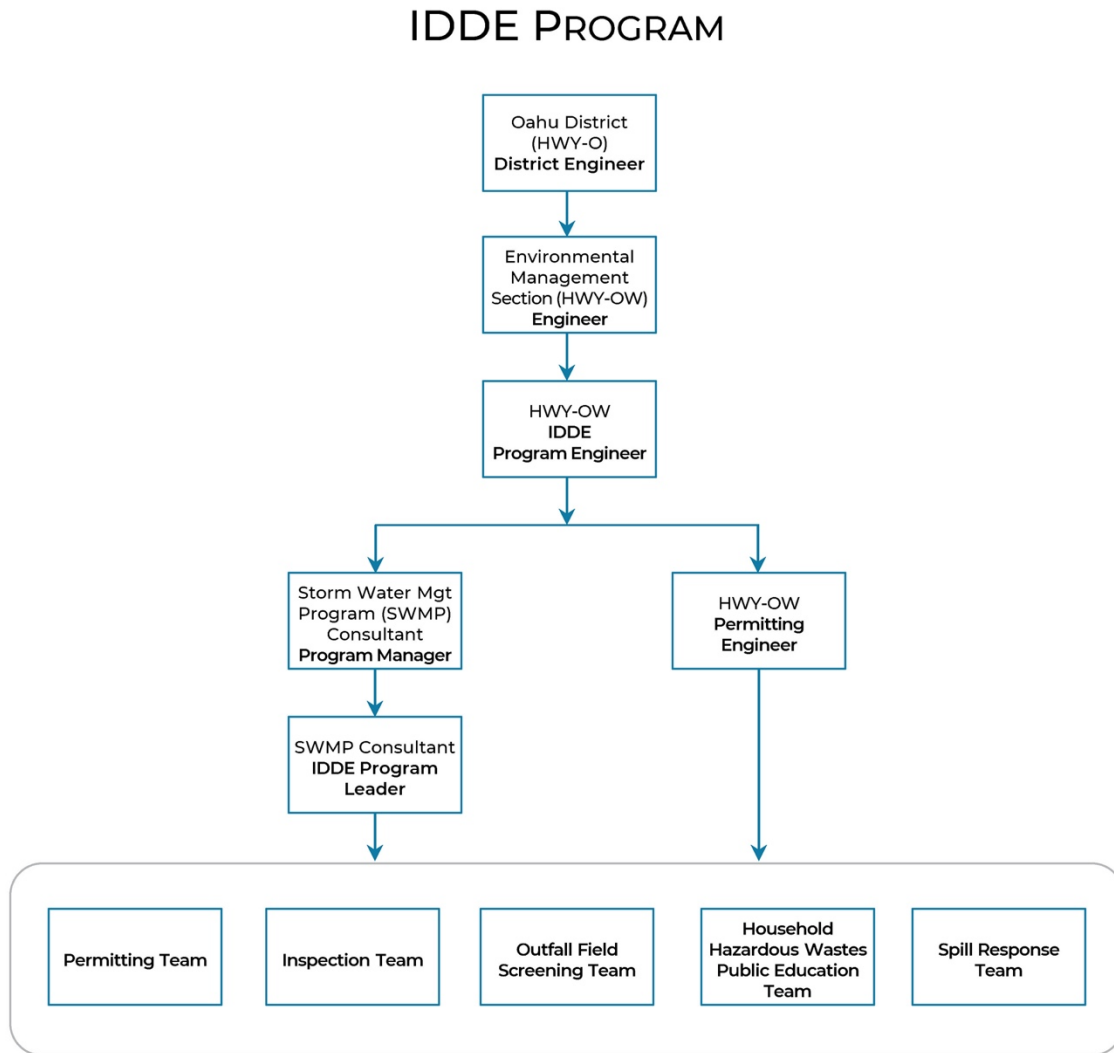


Figure 3-1. IDDE Program Organizational Chart.

3.1 Connection Permits | MS4 NPDES Permit Part D.1.c.(1)

DOT-HWYS administers a permitting program for any facility that establishes a private connection to the MS4. The AMS Maximo Permit Module contains the database of all permitted connections to the MS4.

3.1.1 Permitting New Connections

A permit must be obtained prior to constructing a physical drain connection to the MS4. A connection permit for the establishment of a new, private drain connection will not be issued until:

- The applicant has provided proof of filing a Notice of Intent (NOI) or an Industrial NPDES Permit application with the DOH, as applicable.
- The applicant has control measures that comply with the requirements of DOT-HWYS to minimize pollutant discharge into the MS4.

A request for a connection permit is made by submitting two separate forms. The first form that must be completed is the *Application for a Private Storm Drain Connection and/or Discharge Permit to the State of Hawaii Highways Division Storm Drain System* (Appendix C.1). In this form, the applicant is instructed to submit information on the property's location, tax map key (TMK), and bordering state route. The applicant must include a brief description of each connection, including the size, type of discharge, and flow rate, along with a facility drainage report. In addition, the applicant is required to indicate whether their facility or activities generate storm water associated with "industrial activity", as defined by 40 CFR Part 122.26(b)(14), and whether their facility requires NPDES Permit coverage.

The second form that must be completed and submitted to DOT-HWYS is the *Permit for Connection to the State Highways Drainage System* (connection permit) (Appendix C.2), which states that the applicant agrees to the terms and conditions of the connection permit.

3.1.2 Permitting Existing Connections

Existing connections to the MS4 are considered illegal if they have not been permitted by DOT-HWYS. When an illegal connection is identified, DOT-HWYS first determines if the connection is from an allowable source. If the connection is not from an allowable source or is conveying an illicit discharge, the case is treated as an illicit discharge violation and is subject to enforcement actions (Section 10.7.2) in accordance with the Enforcement Policy.

If the connection is from an allowable source and there is no evidence of an illicit discharge, the case is treated as a deficiency and the appropriate corrective action is to apply for a connection permit. Written documentation, which includes an inspection report, the connection permit forms described in Section 3.1.1, an Allowable Non-Storm Water Discharge Letter, and a Letter of Warning, is emailed to the property owner or facility representative within 30 calendar days of the inspection date. The property owner



A dye test verifies the connectivity of a private drainage structure to the DOT-HWYS MS4.

or facility representative has 30 days from the date of the Letter of Warning to submit the completed connection permit forms to DOT-HWYS. The illegal connection is considered resolved upon approval by DOT-HWYS of the completed connection permit forms. If the property owner does not submit the completed connection permit forms within the allotted 30-day timeframe, DOT-HWYS pursues enforcement actions (Section 10.7.1) in accordance with the Enforcement Policy.

DOT-HWYS has an existing Memorandum of Understanding with the CCH (Appendix A.5) that establishes that interconnections between the DOT-HWYS MS4 and the CCH MS4 are not considered private drain connections, and therefore do not require private drain connection permits. DOT-HWYS extends this determination to other facilities which have MS4 NPDES Permit coverage. Therefore, the requirement to apply for and obtain a connection permit does not apply to those facilities which have MS4 NPDES Permit coverage.

The individual and teams highlighted in Figure 3-2 are responsible for implementing the control measures described in this section.

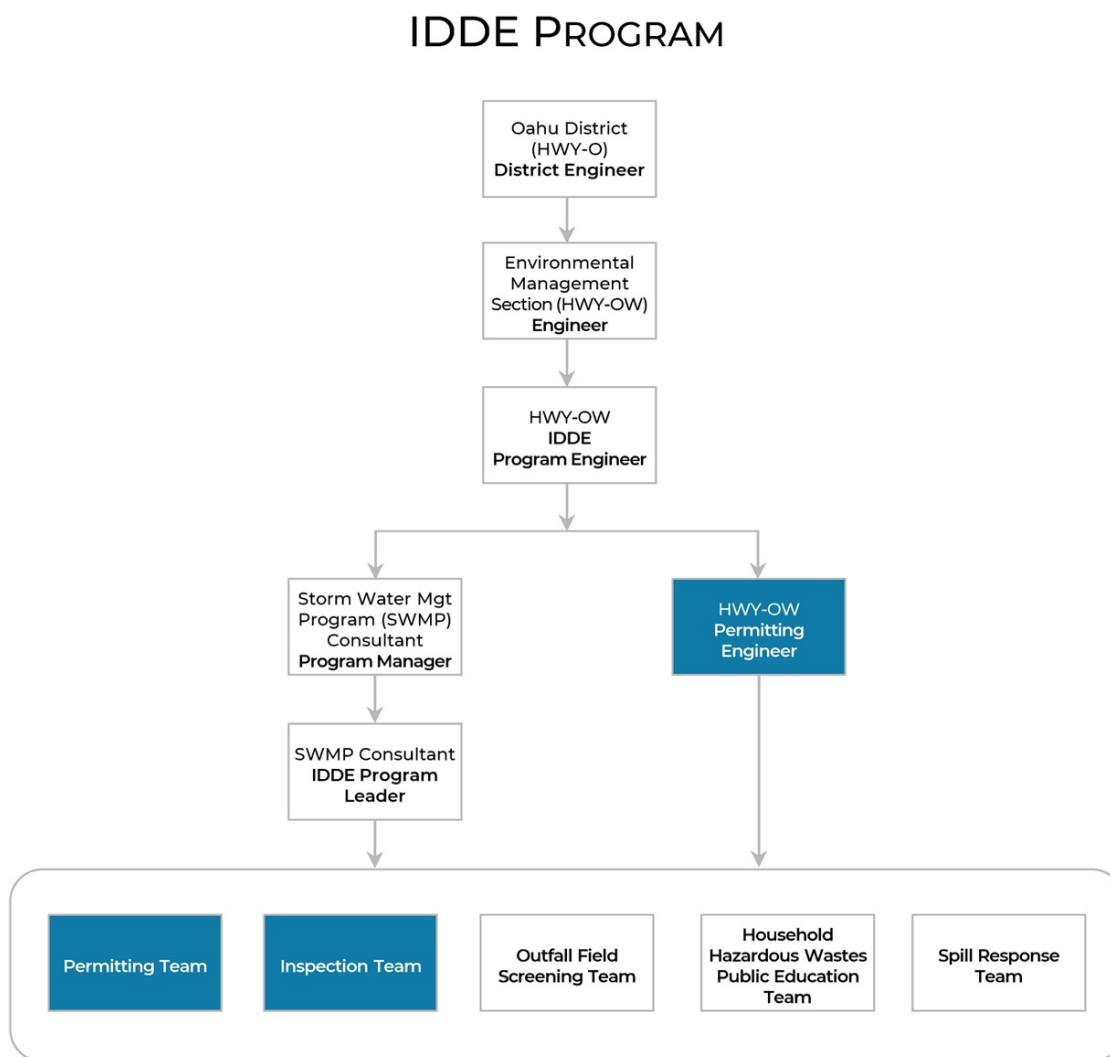


Figure 3-2. IDDE Program Organizational Chart for Roles and Responsibilities Related to Connection Permits.

3.2 Outfall Field Screening | MS4 NPDES Permit Part D.1.c.(2)

DOT-HWYS screens major and minor outfalls for the purpose of detecting and eliminating illicit discharges. Priority areas for inspection and corresponding screening frequencies are designated in the *Outfall Field Screening Plan* (Appendix C.3). At a minimum, outfalls in priority areas shall be screened once per permit term. In addition to conducting screening in accordance with the *Outfall Field Screening Plan*, DOT-HWYS also investigates observed, suspected, or reported illicit discharges at outfalls. The *Outfall Field Screening Plan* describes the response procedures for observed or suspected illicit discharges.

The AMS Maximo Outfall Module, as shown in Figure 3-3, captures outfall inspection information, including weather conditions, cleaning requirements, and the observation of any illicit discharge. The notification function within the module emails the Inspection Team if a potential illicit discharge is observed at an outfall. Inspection records in the AMS Maximo Outfall Module integrate with its corresponding work order in the AMS Maximo IC/IDDE Module to document the resolution of the suspected illicit discharge.

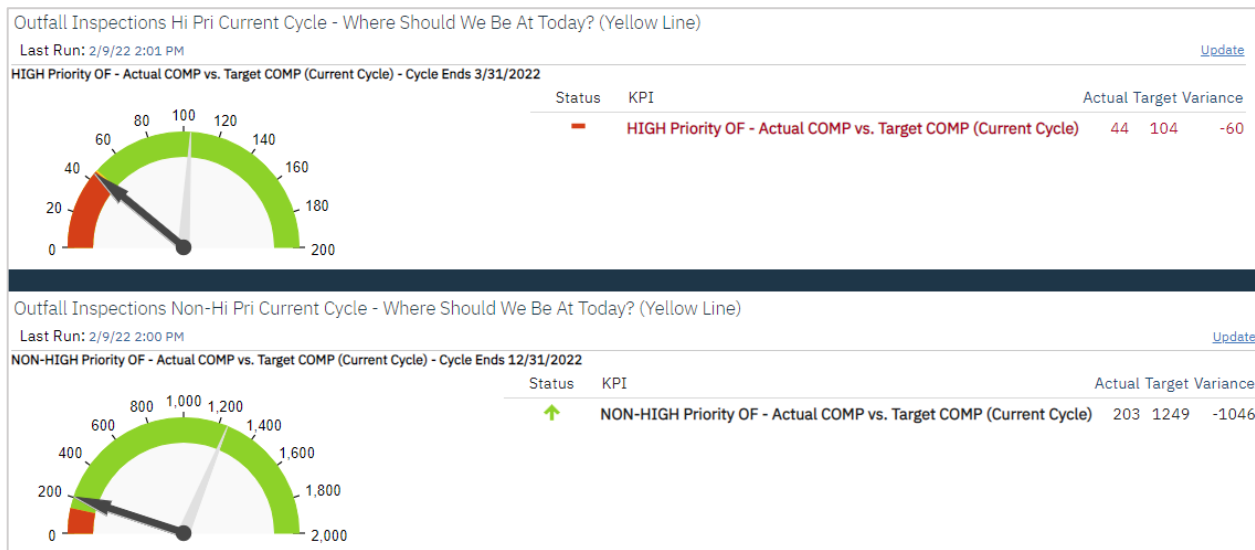


Figure 3-3. AMS Maximo Outfall Module.

The individual and team highlighted in Figure 3-4 are responsible for implementing the control measures described in this section.

IDDE PROGRAM

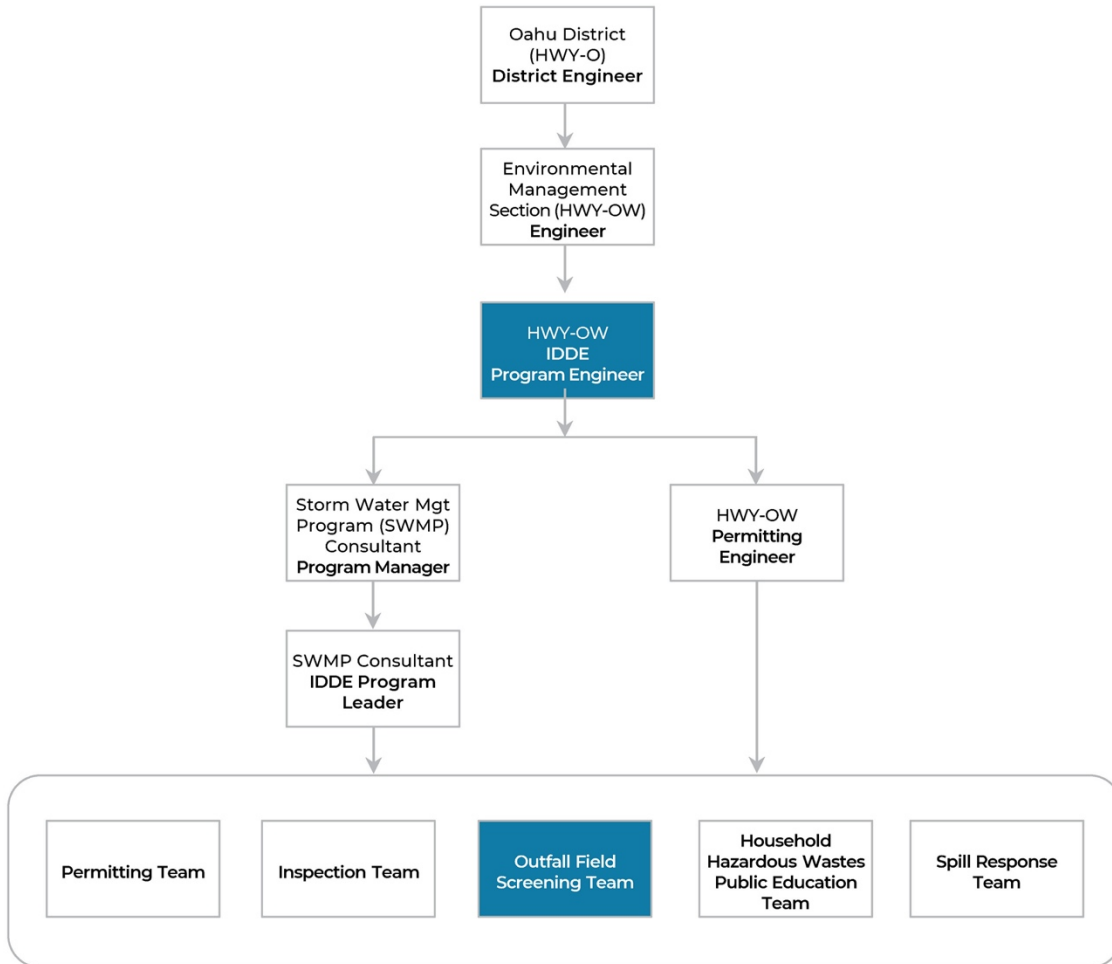


Figure 3-4. IDDE Program Organizational Chart for Roles and Responsibilities Related to Outfall Field Screening.

3.3 Tracking Illegal Connections, Illicit Discharges, and Spills | MS4 NPDES Permit Part D.1.c.(3)

The AMS Maximo IC/IDDE Module is used to document information about illegal connections, illicit discharges, and spills to the MS4. For each case, the database tracks the type of discharge, the responsible party, the DOT-HWYS response and follow-up activities, and the resolution. Illegal connections and illicit discharge activities can be queried by TMK, as applicable.

The individuals and teams highlighted in Figure 3-5 are responsible for implementing the control measures described in this section.

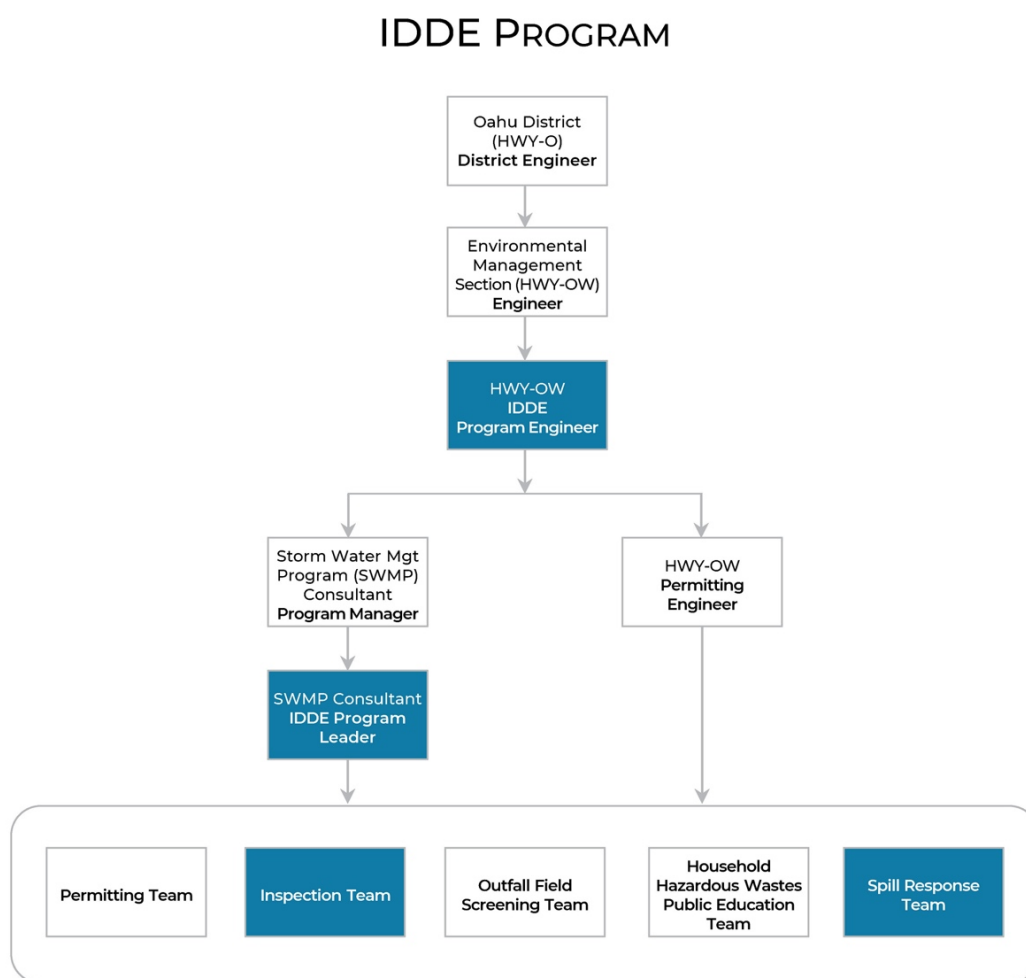


Figure 3-5. IDDE Program Organizational Chart for Roles and Responsibilities Related to Tracking Illegal Connections, Illicit Discharges, and Spills.

3.4 Investigation of Illegal Connections and Illicit Discharges | MS4 NPDES Permit Part D.1.c.(4)

Potential illegal connections and illicit discharges to the MS4 are typically detected through the following methods:

- Scheduled inspections of industrial and commercial facilities and activities conducted as part of the Industrial and Commercial Program (Chapter 10)
- Water quality monitoring (Chapter 12)
- Storm drain inspections and cleaning (Chapter 6)
- Outfall field screening (Section 3.2)
- Public complaints
- Complaints received from the DOH and other MS4 permittees

Public complaints about suspected illicit discharges are a valuable source of information because they magnify the oversight capacity of the IDDE Program. The public is encouraged to report suspected illicit discharges by filling out online reporting forms on the DOT-HWYS website, www.stormwaterhawaii.com, or by calling the Oahu reporting hotline at (808) 831-6714.

The IDDE Program, in conjunction with the Public Education Program, facilitates public reporting of illicit discharges through educational media and outreach activities. The reporting hotline phone number and online reporting form are advertised on informational magnets, stickers, and educational brochures that are distributed at storm water public outreach events and provided to industrial and commercial facility representatives during routine inspections.

The IDDE Program's complaint response plan for investigating observed, suspected, or reported illegal connections and illicit discharges is initiated within 24 hours of the next business day from receipt of the complaint report. DOT-HWYS initiates investigation of a complaint response with information gathering and, as applicable, conducts subsequent investigative actions. A complaint response may involve information gathering, basic site research, and/or field investigation, as shown in Figure 3-6.

Field sampling is conducted as necessary to identify the source of a potential illicit discharge.



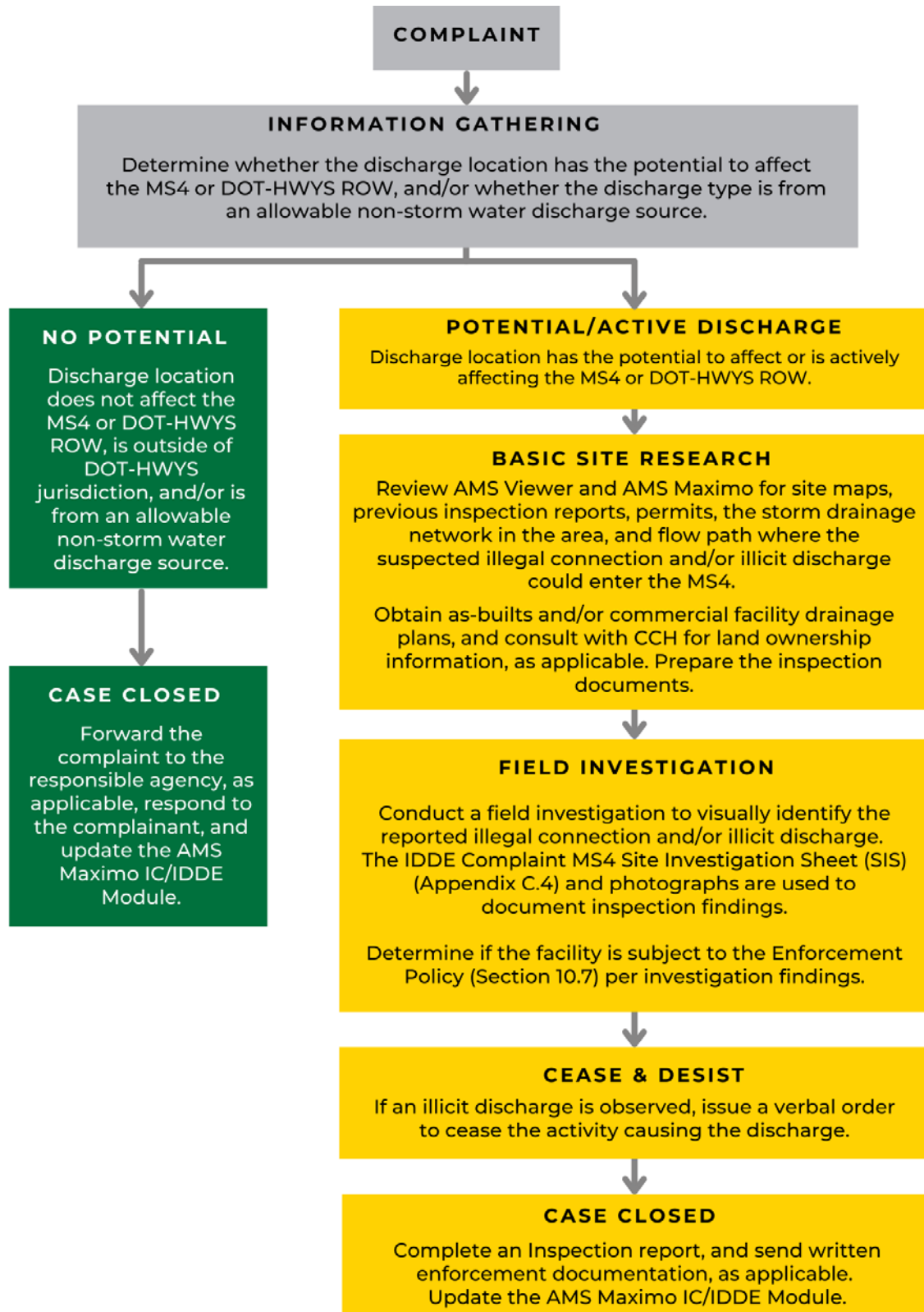


Figure 3-6. IDDE Complaint Response Workflow.

The individual and teams highlighted in Figure 3-7 are responsible for implementing the control measures described in this section.

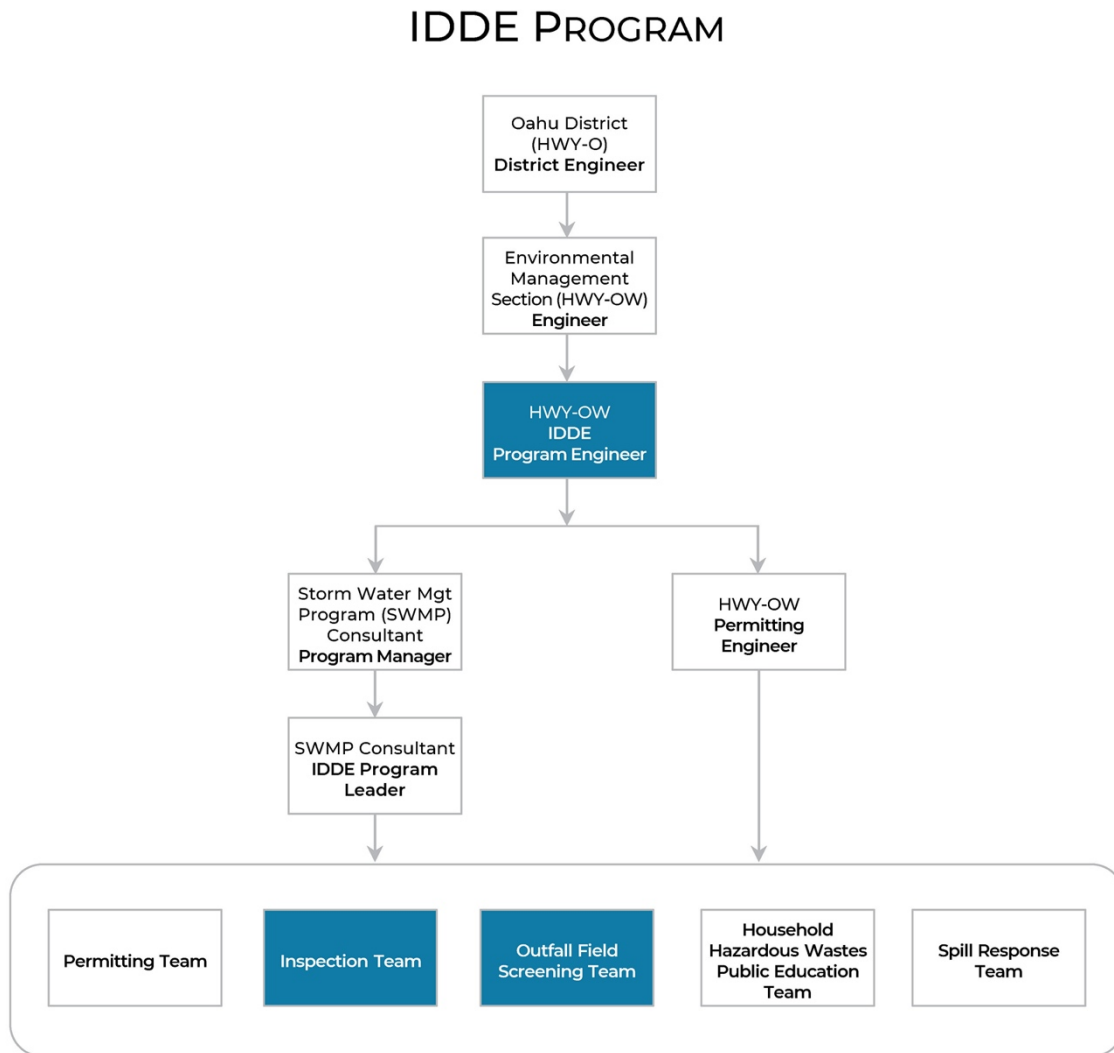


Figure 3-7. IDDE Program Organizational Chart for Roles and Responsibilities Related to the Investigation of Illegal Connections and Illicit Discharges.

3.5 Enforcement Policy | MS4 NPDES Permit Part D.1.c.(5)

DOT-HWYS pursues enforcement actions in accordance with established policies against property owners in noncompliance with its requirements, those with illegal drain connections, and persons without direct connections whom illicitly discharge pollutants to the MS4. The Enforcement Policy for illegal connections and illicit discharges into the MS4 is administered by the Industrial and Commercial Program and described in Section 10.7.

The individuals and team highlighted in Figure 3-8 are responsible for implementing the control measures described in this section.

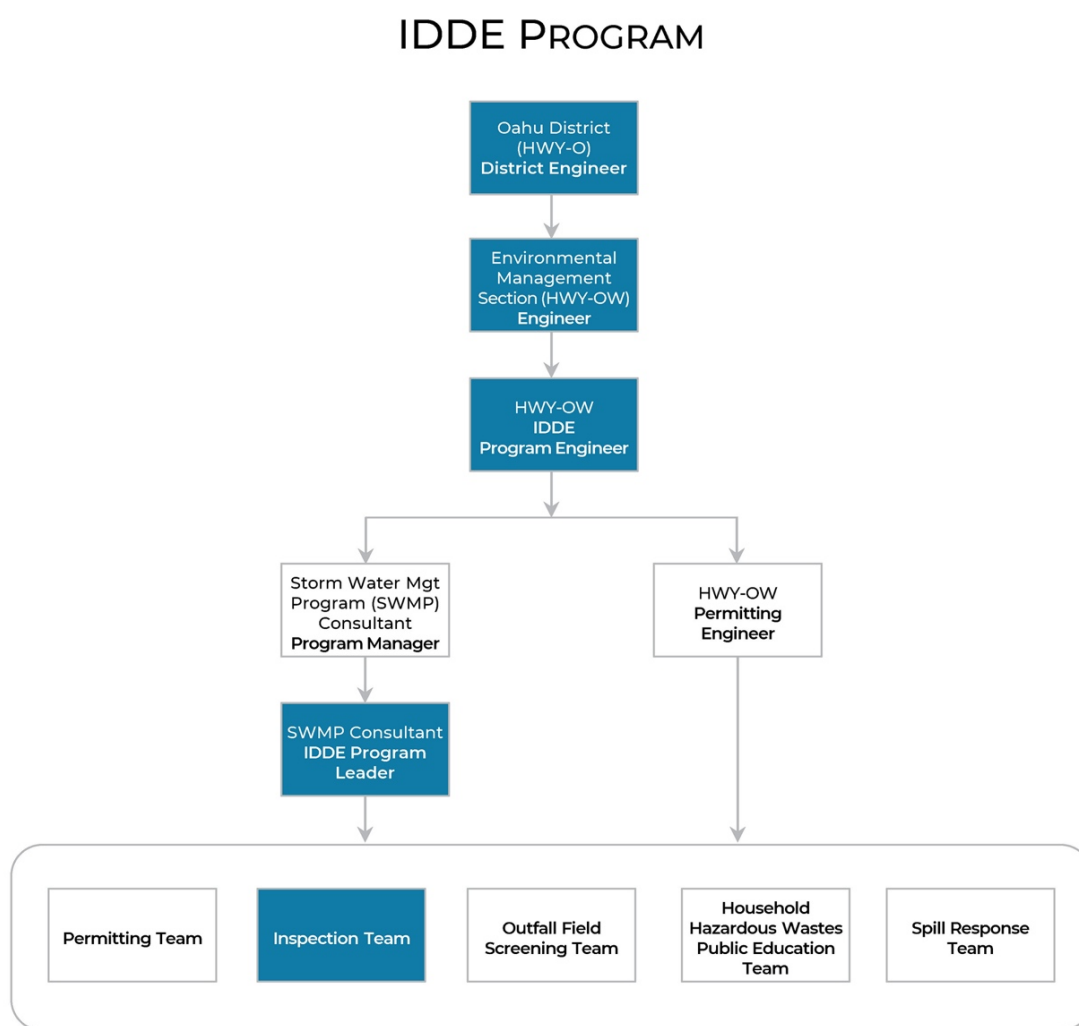


Figure 3-8. IDDE Program Organizational Chart for Roles and Responsibilities Related to Enforcement Policy.

3.6 Spill Prevention and Response | MS4 NPDES Permit Part D.1.c.(6)

DOT-HWYS prevents, responds to, contains, and cleans up all wastewater and other spills that may enter the MS4. Figure 3-9 illustrates the spill prevention and response workflow to prevent the entry of spills into the MS4 and contamination of surface water, ground water, and soil to the MEP.

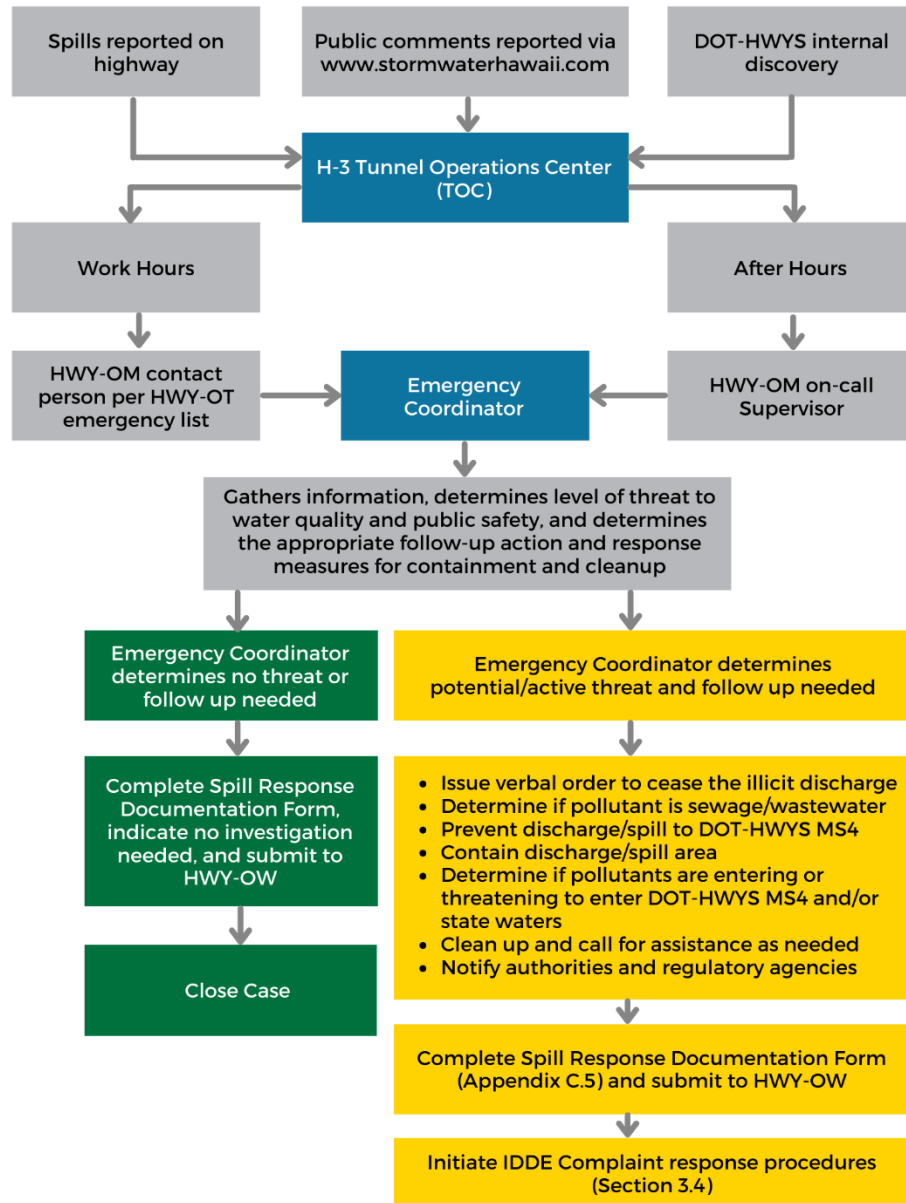


Figure 3-9. Spill Prevention and Response Workflow.

The Emergency Coordinator utilizes a “tool box” of HWY-OM resources to coordinate spill prevention, containment, and response activities throughout all appropriate departments, programs, and agencies to ensure maximum water quality protection.

The HWY-OM tool box includes HWY-OM personnel, materials, equipment, and service contractors.

HWY-OM Personnel: HWY-OM is comprised of crews and baseyards located throughout Oahu. As determined by the Emergency Coordinator, crews and subunits may be requested to provide support and resources for the spill response process.

- The Special Services Subunit can provide sweepers and vacuum trucks to clean up nonhazardous spills/discharges and labor to support cleanup efforts and protect drainage structures.
- The Structures Subunit can respond to a spill/discharge incident occurring on a bridge and can perform preventative measures on storm drains, including repairs for catch basins, plugging drain pipes, and installing BMPs around drain and inlets.
- The Landscape Subunit can respond to major spills in their work areas and can provide labor to support cleanup efforts and protect drainage structures.

Materials and Equipment: Warehouse inventory is maintained with the necessary materials for containment and cleanup of oil, solvent, coolants, water, and hazardous/chemical spills. Vehicles and baseyards are equipped with spill kits and spill equipment.

Service Contractors: A Spill Response Contractor is available for response to hazardous/chemical spills. The contractor is available 24/7 to provide spill response services for cleanup and removal of accumulated product resulting from the release.

The illicit discharge and spill response notification procedures and contact information are provided in Table 3-2.

Table 3-2. Illicit Discharge and Spill Response Notification Procedures.

Illicit Discharge and Spill Response Notification and Contact Information	Telephone Number
<p>H-3 Tunnel Operations Center (TOC) 24/7 The H-3 TOC should be notified immediately about illicit discharges and spills so they can contact the Emergency Coordinator who will initiate the illicit discharge and spill response procedures.</p>	(808) 485-6200
<p>Honolulu Fire Department (HFD) or Honolulu Police Department If there is an emergency or life-threatening situation, 911 should be called first. The HFD is normally the lead agency for emergency response to spills on all non-military lands of Oahu. If requested, DOT-HWYS will assist the HFD with spill response for spills within the DOT-HWYS ROW.</p>	911
<p>City and County of Honolulu, Department of Environmental Services (ENV) In the event of a spill or overflow from a municipal wastewater facility, DOT-HWYS will immediately notify ENV of any reported wastewater discharges into the MS4.</p>	(808) 768-7272 or (808) 768-3300
<p>State of Hawaii, Department of Transportation, Highways Division, Oahu District, Environmental Management Section (HWY-OW) The Emergency Coordinator should notify the HWY-OW Engineer of any illicit discharges/spills entering into the MS4.</p>	(808) 483-2543 or (808) 489-0917
<p>Spill Response Contractor 24/7 The spill response contractor should be notified for assistance when a spill is beyond the Emergency Coordinator's capacity for removal or to dispose of spent absorbents. (Current contractor is Pacific Commercial Services, Inc.)</p>	(808) 206-9989

Illicit Discharge and Spill Response Notification and Contact Information	Telephone Number
<p>Department of Health (DOH), Clean Water Branch (CWB) The Emergency Coordinator should immediately notify the DOH CWB of pollutants entering or threatening to enter state waters. The Emergency Coordinator should immediately notify DOH CWB of any municipal wastewater spills or overflows from private laterals and failing septic systems that discharges into the MS4. The Emergency Coordinator should immediately notify the DOH CWB of any spills of any chemical of a reportable quantity; and a written notification must also be submitted no later than 30 days after the initial release.</p> <p>The reportable quantity for oil and fuel products is a spill of 25 gallons or more, a spill not cleaned within 72 hours, or a spill that threatens ground or surface waters.</p>	(808) 586-4309
<p>Department of Health (DOH), Hazard Evaluation and Emergency Response (HEER) Office The Emergency Coordinator should notify the DOH HEER Office of any discharge/spill that enters state waters after work hours. The Emergency Coordinator should notify the DOH HEER Office of any chemical spill of a reportable quantity, and a written notification must also be submitted no later than 30 days after the initial release.</p> <p>The reportable quantity for oil and fuel products is a spill of 25 gallons or more, a spill not cleaned within 72 hours, or a spill that threatens ground or surface waters.</p>	(808) 586-4249 or (808) 236-8200 <i>After hours</i>
<p>U.S. Coast Guard, District 14, Oahu The U.S. Coast Guard should be notified of any quantity spill that reaches the ocean.</p>	(808) 842-2600 or 1-800-331-6176

The individual and team highlighted in Figure 3-10 are responsible for implementing the control measures described in this section.

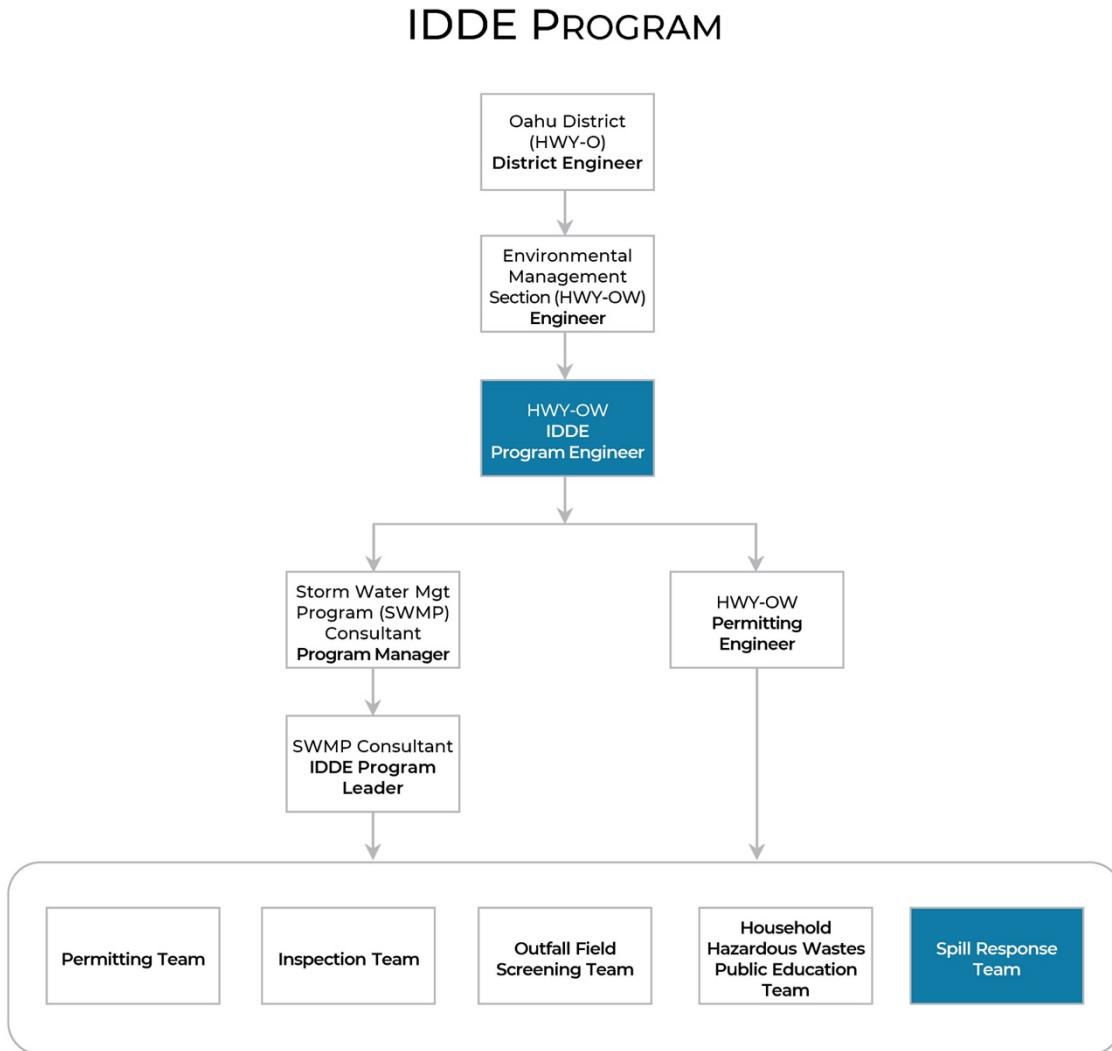


Figure 3-10. IDDE Program Organizational Chart for Roles and Responsibilities Related to Spill Prevention and Response.

3.7 Household Hazardous Waste Disposal | MS4 NPDES Permit Part D.1.c.(7)

DOT-HWYS facilitates the proper management and disposal or recycling of toxic materials and household hazardous wastes by advertising information about the CCH collection program.

The CCH provides a collection service for household hazardous waste products that require special handling. Oahu residents who want to drop off household hazardous wastes can call the CCH at (808) 768-3201 to make an appointment during a scheduled collection event. Further information about household hazardous wastes, including waste prevention tips, is provided at www.honolulu.gov/opala/quick-links/hhw.html.

The following information is available on the DOT-HWYS website, www.stormwaterhawaii.com, and provided in the household hazardous waste informational brochures:

- A list of materials that require special handling and should be disposed of at a household hazardous waste collection event
- Dates of household hazardous waste collection events
- CCH contact information to schedule appointments
- CCH website address for further information about household hazardous waste

Certain materials, such as used oil and vehicle fluids, can be disposed of in the trash at home. DOT-HWYS facilitates the proper disposal of used oil and vehicle fluids by distributing educational brochures at applicable public outreach events.

The individual and team highlighted in Figure 3-11 are responsible for implementing the control measures described in this section.

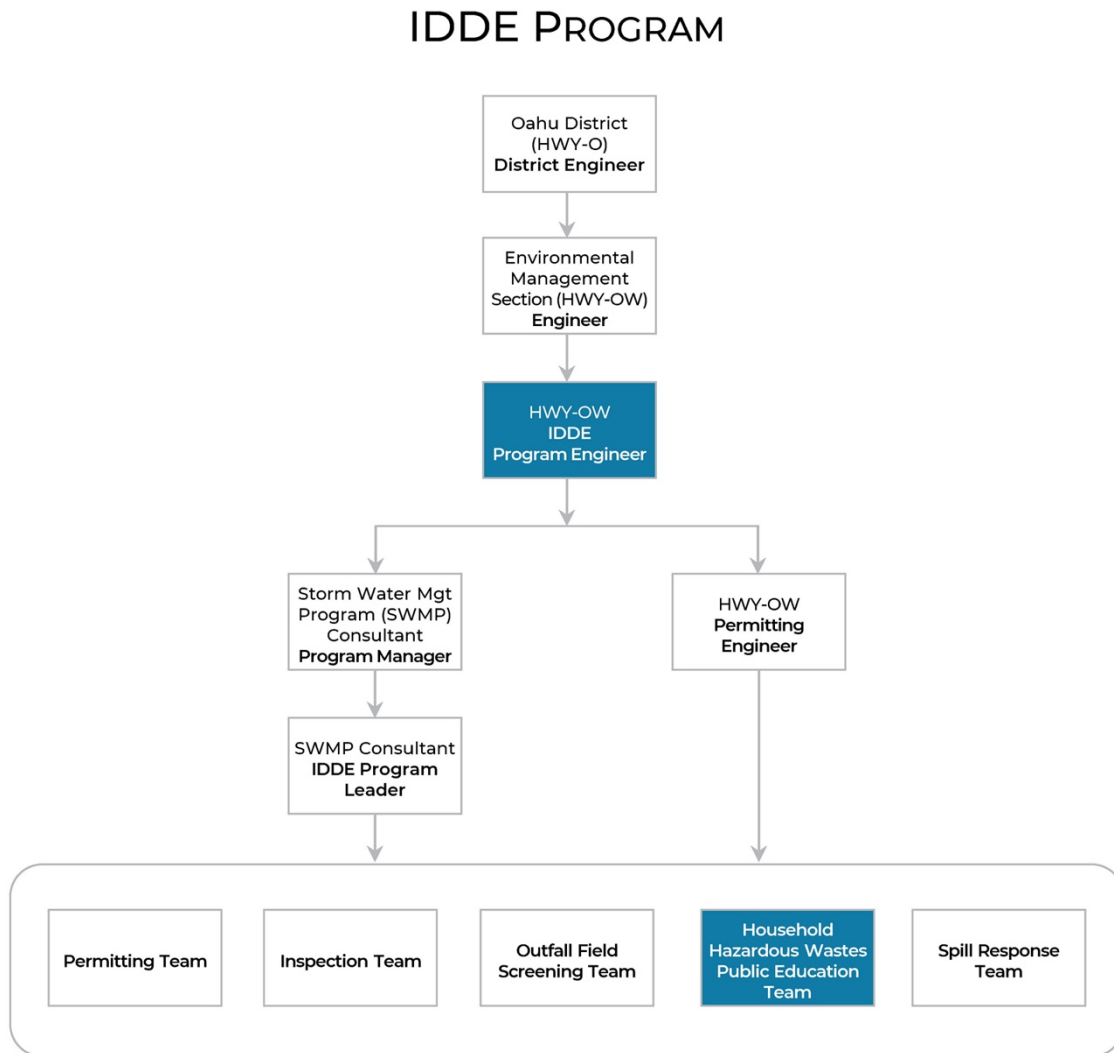


Figure 3-11. IDDE Program Organizational Chart for Roles and Responsibilities Related to Household Hazardous Waste Disposal.

3.8 Training | MS4 NPDES Permit Part D.1.h.(1)

Training on how to identify and eliminate illegal connections, illicit discharges, and spills to the MS4 is provided to staff in the IDDE Program annually or more frequently, as needed. The IDDE Program Training is conducted in conjunction with the Industrial and Commercial Program Training (Section 10.8) and is provided to any DOT-HWYS staff whose responsibilities include detecting, investigating, eliminating, and reporting illegal connections and illicit discharges. Training content is specific to the IDDE Program's policies, rules, procedures, and activities.

Periodic "on-the-job" training instructs field inspectors on the methods to detect, investigate, eliminate, and report illegal connections and illicit discharges.



The individuals highlighted in Figure 3-12 are responsible for implementing the control measures described in this section.

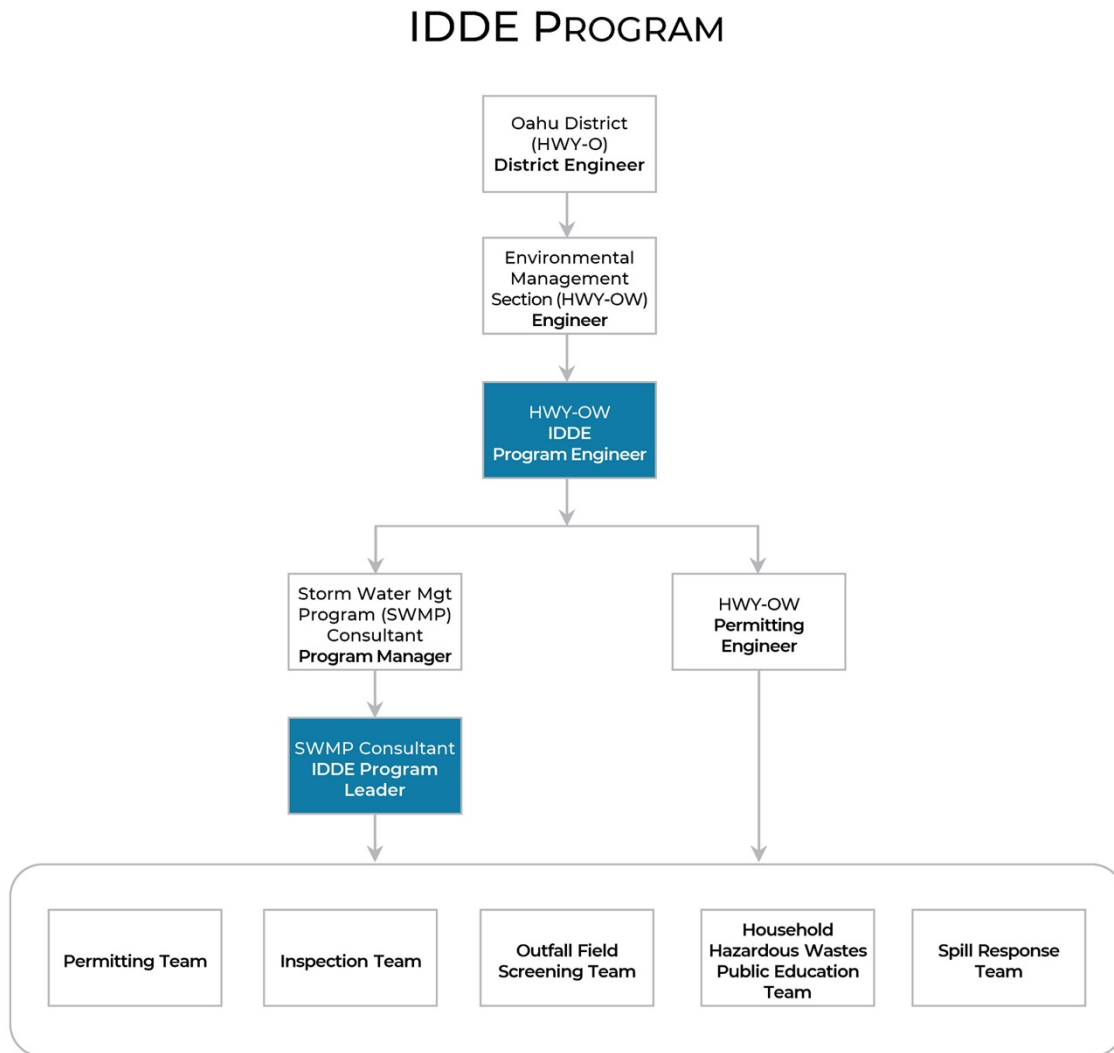


Figure 3-12. IDDE Program Organizational Chart for Roles and Responsibilities Related to Training.

3.9 Monitoring Program Effectiveness

The *Program Effectiveness Strategy* (Appendix A.3, Table 6) provides the measurable standards and/or milestones for each Program BMP, including the outcome level, data collection method, and assessment parameter.