National Pollutant Discharge Elimination System (NPDES) Permit Program
National Pollutant Discharge Elimination System (NPDES)

- Hawaii is one of the EPA delegated States to administer NPDES permit program
- Clean Water Branch is responsible to implement the program
NPDES
Federal Law and Regulation

- Section 402 of Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (Commonly referred to as Clean Water Act)
- 40 Code of Federal Regulations (CFR)
NPDES
State Law and Regulation

• Hawaii Revised Statutes, Chapter 342D, Water Pollution
• Hawaii Administrative Rules, Title 11, Chapter 54, Water Quality Standards
• Hawaii Administrative Rules, Title 11, Chapter 55, Water Pollution Control
• http://www.hawaii.gov/health/about/rules/admrules.html
Summary of November 2002
Amendments to
HAR, Chapter 11-55

- Adopted Phase II of the Storm Water Regulations
- Re-adopted eight (8) general permits
- Adopted three (3) new general permits
- Modified Appendix C to include Discharges of Storm Water from Small Construction Activities (1 to 5 Acres)
- Added HAR, Section §11-55-38
- Added HAR, Section §11-55-39
HAR, Section 11-55-38
(Effective November 7, 2002)

• Clarify procedures per HRS, Section 6E-42(a) requirements under the State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources (DLNR)
HRS, Section 6E-42(a) “before any agency or officer of the State or its political subdivisions approves any project involving a permit, license, certificates, land use change, subdivision, or other entitlement for use, which may affect historic property, aviation artifacts, or a burial site, the agency or office shall advise the department and prior to any approval allow the department an opportunity for review and comment on the effect of the proposed project on historic properties, aviation artifacts, or burial sites, consistent with section 6E-43, including those listed in the Hawaii register of historic places.”
HAR, Section 11-55-39
(Effective November 7, 2002)

• Clarify public interest procedures per HRS, Section 342D-6(g)
NPDES Permit
Goals and Missions

• To ensure that Hawaii’s coastal waters are safe and healthy for people, plants and animals

• To protect and restore the quality of Hawaii’s streams, wetlands, estuaries and other inland waters for fish and wildlife, recreation, aesthetic enjoyment and other beneficial uses
When an NPDES permit is required?

- An NPDES permit is required when:
  - a discharge of pollutant;
  - from a point source;
  - into State Waters.
Beginning of the NPDES Permit Program

- Regulates the discharges of wastewaters from municipal, industrial and federal facilities, such as:
  > Wastewater treatment plant effluent
  > Power plant process wastewater
  > Concentrated animal feeding operation
  > Sugar mill operation
  > Mineral mining
Storm Water Regulations

• In 1987, Congress added 402(p) of the CWA which requires EPA to develop storm water regulations in phases
• To regulate storm water discharges from industrial activities
• On November 16, 1990, EPA adopted Phase I rules to regulate storm water discharges
• On December 8, 1999 EPA adopted Phase II storm water rules
December 8, 1999 EPA Adopted Phase II Storm Water Rules

February 7, 2000
- Conditional “No Exposure” exclusion

March 10, 2003
- Small Municipal Separate Storm Sewer Systems (Small MS4)
- Construction activities 1 to 5 acres
- Municipally-Operated industrial activities
Conditional “No Exposure” Exclusion

• Effective January 6, 2001.

• “No exposure” means that all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff.

• Submit certification to DOH.

• NO filing fee.
What is a Municipal Separate Storm Sewer System (MS4)?

• An MS4 is a conveyance or system of conveyances....owned by a state, city, town or other public entity that discharges to waters of the U.S. and is:
  -- designed or used for collecting or conveying storm water
  -- not a combined sewer
  -- not part of a Publicly Owned Treatment Works (POTW)
Small Municipal Separate Storm Sewer System (Small MS4)

- A small MS4 is any MS4 that is not already designated and regulated as a medium or large MS$, and includes Federally-operated systems.
Regulated Small MS4

• A regulated small MS4 is any small MS4:
  -- Located in an “urbanized area” (automatic” nationwide designation) and not waived by the permitting agency; or
  -- Designated by the permitting agency
Urbanized Area

• A central place (or places) and the adjacent densely settled surrounding territory that together have a minimum residential population of 50,000 people and a minimum average density of 1,000 people per square mile.

• A compilation of the population densities for the latest Decennial Census in Hawaii, Maui, and Kauai Counties is located in the “Resident Population, Land Area and Density for Islands and Census Tracts in the State of Hawaii: 2000 (Revised 2/22/02)” at http://www.hawaii.gov/dbedt/census2k/ctd-00r.pdf
County of Maui
Areas Over 1,000 People Per Square Mile

- South Wailuku
- West Kahului
- Northeast Kahului
- South Kihei
- North Kihei
- Lahaina Town
- Southeast Kahului
- East Central Wailuku
- North Wailuku
- West Central Wailuku
- Central Kahului
Intermodal Surface Transportation Efficiency Act (ISTEA)

• March 10, 2003 is the deadline for municipally operated-industrial activities which were temporarily exempted under Phase I rule (with populations less than 100,000 people) to obtain a storm water discharge permit.
Industrial Activities Require Storm Water Permits

1. Facilities subject to EPA’s National Effluent Guidelines
2. Manufacturing facilities
3. Mining and oil and gas operations
4. Hazardous waste treatment, storage, or disposal facilities
5. Landfills that receive industrial wastes
Industrial Activities Require Storm Water Permits (Continued)

6. Steam electric power generating facilities
7. Transportation facilities
8. Sewage treatment plant
9. Construction activities 1 acres or more
10. Facilities where materials are exposed to storm water
11. Recycling facilities
Business Classification Codes

• Standard Industrial Classification Codes (SIC)
• North American Industry Classification System (NAICS) by the end of September 2002
• http://www.census.gov/epcd/www/naics.html
Types of NPDES Permit

- General permit
- Individual permit
General Permit

- Adopted as rules (Chapter 11-55)
- Similar nature of discharge
- Minor and Non-controversial
- 30 days to process (with complete Notice of Intent)
- $500 filing fee
- Good up to five (5) years
NPDES General Permit Processing Flowchart

1. DOH receives NOI

2. Can the discharge be covered under the general permit?
   - NO: NPDES individual permit required
   - YES: DOH reviews NOI

3. DOH reviews NOI

4. Is the NOI complete?
   - NO: DOH requests additional information
   - YES: DOH issues Notice of General Permit Coverage (NGPC)*

*Coverage may be issued within 30 days of receipt of complete NOI or automatic coverage may be assumed as specified in Hawaii Administrative Rules (HAR) Section 11-55-34.09.
Individual NPDES Permit

- Discharge does not qualify for general permit coverage
- Custom made
- 180 days or more to process (with complete application)
- $1000 filing fee
- Applicant responsible for publication fee
- Good up to five (5) years
NPDES Individual Permit Processing Flowchart

DOH receives application

Is the discharge cause any adverse impact to the recipient state water?  

YES

NO

DOH/EPA reviews application

Is the application complete?  

YES

DOH/EPA requests additional information from owner

NO

DOH prepares/revises draft permit for owner/EPA review

Are there any comments?  

YES

DOH evaluates comments

NO

Owner publishes public notice of draft permit

Is there significant public interest?  

YES

Owner publishes public notice of public hearing

DOH holds public hearing

NO

DOH revises draft permit, if applicable

Can public concerns be addressed?  

YES

DOH denies NPDES individual permit application

NO

DOH issues NPDES individual permit

06-17-97
To streamline NPDES permit process

• Hawaii adopted 11 general permits, three (3) of the general permits are related to storm water discharges.
NPDES General Permit

Appendix B - Storm water associated with industrial activities
Appendix C - Storm water associated with construction activities
Appendix D - Treated effluent from leaking Underground Storage Tank remedial activities
Appendix E - Once through cooling water less than one (1) million gallons per day
NPDES General Permit (continued)

Appendix F - Hydrotesting water
Appendix G - Construction dewatering
Appendix H - Treated effluent from petroleum bulk stations and terminals
Appendix I - Treated effluent from well drilling activities
NPDES General Permit (continued)

Appendix J – Occasional or Unintentional Discharges from Recycled Water Systems

Appendix K – Discharges of Storm Water from Small Municipal Separate Storm Sewer Systems

Appendix L – Discharges of Circulation Water from Decorative Ponds or Tanks
After the Storm

A Video Co-produced by EPA and The Weather Channel
Notice of Intent

• Is a form used to apply for a coverage under a general permit
• Each general permit has its own Notice of Intent form (e.g. CWB-NOI Form B, CWB-NOI Form C, and CWB-NOI Form G)
Notice of Intent
Form B
for
General Permit Coverage
Authorizing Discharges of Storm Water Associated With Industrial Activities
Notice of Intent Form B
Common Errors

• Item 5.c. – Receiving State Water Information
  – If there is more than one discharge point, provide a list of the discharge point coordinates on a separate sheet
  – If the storm water discharges into a separate storm sewer system, a permit, license or approval is required from the owner of the system
Notice of Intent Form B
Common Errors (Continued)

• Item 7. – Non-Storm Water Information
  – List all sources of non-storm water that may be generated at the site/facility (e.g. vehicle/equipment/pavement wash water, water used for dust control and irrigation, process water, etc.). Need to provide all possible sources of the non-storm water and their control measures to prevent its discharge.
  – If structural control measures are used to prevent non-storm water from being discharged, show their location(s) on the site map and provide a description with details showing the control measures.
Notice of Intent Form B
Common Errors (Continued)

• Item 8. – Location Map
  – Label the locations of the discharge point as provided in Item 5.a. (receiving water) and 5.c. (drainage system) on the location map
Notice of Intent Form B
Common Errors (Continued)

• Item 14. – Site Map
  – Show the site’s drainage pattern with flow arrows within the site, including along the property lines/boundaries.
  – Show the drainage areas (highlighted/hatched and labeled) corresponding to each discharge point.
Figure 3. Drainage Area Boundaries at the University of Hawaii Marine Center, Honolulu Harbor, Hawaii.
• **Items 18 and 19 – Water Quality Parameters and Toxic Parameters**
  
  – The test methods shall be in accordance with the Code of Federal Regulations (CFR), Title 40, Part 136 and the Method Detection Limits (MDL) should be below the State’s numeric limitations or be the lowest achievable MDL closest to the State’s numeric limitations.
  
  – When the facility is applying for renewal, the facility will have to submit test results for all parameters as listed in Item 18, not just the parameters as required in the existing permit.
Notice of Intent Form B
Common Errors (Continued)

• Others
  – Only the person certifying the NOI or the owner’s authorized representative shall submit information. Any correspondence shall include the certification statement and original signature.
Notice of Intent
Form C
For
General Permit Coverage
Authorizing Discharges of Storm Water Associated With Construction Activities
When is an NPDES permit required for construction activities?

• An NPDES permit is required for any construction activities, including clearing, grading, and excavation, that result in the disturbance of one acre or more of total land area under a larger common plan of development or sale, and

• Prior to commencement of construction activities.
Construction Activities
Larger Common Plan of Development or Sale

• A "larger common plan of development or sale" is a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.
The “Plan” in a Common Plan of Development or Sale

- The “plan” is broadly defined as any announcement or piece of document (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot.
County-Approved Erosion and Sediment Control Plan

• A county-approved erosion and sediment control plan as appropriate for the activity and a schedule for implementing each control shall be submitted to the director with the notice of intent or 30 days before the start of construction activities.

• Construction may start before the end of the 30 days period as soon as the department accepts the county-approved erosion and sediment control plan.
Site-Specific Construction Best Management Practices Plan

- A site-specific construction Best Management Practices (BMP) plan shall be submitted to the director with the notice of intent or 30 days before the start of construction activities.

- Construction may start before the end of the 30 days period as soon as the department accepts the plan.
Notice of Intent Form C
Common Errors

• Item 5 – Receiving State Waters Information
  – Indicate “and Estuary” or ”and Embayment” if an estuary or embayment condition exists.
  – Written approval allowing discharges into the separate storm drainage, even if the applicant is the owner.
PERMIT TO DISCHARGE INTO THE STATE HIGHWAYS DRAINAGE SYSTEM

Application Date 2-9-2002

Pursuant to Hawaii Administrative Rules, Chapter 11-55, application is hereby made to discharge into the State Highway drainage system at the location(s) specified below and at no other place.

1. Name of Highway/Route No: Kuhio Highway/Route 56 and Kaumualii Highway/Route 50

2. Tax Map Key: No TMK number assigned to Kuhio Highway and Kaumualii Highway. Highways located along the following Plats: 1-2-05, 06, 13; 1-3-01, 03, 04, 05; 01, 11; 1-6-05, 06, 07, 08, 09, 10; 1-7-05, 06, 07, 08, 09, 10; 1-8-05, 06, 07, 08, 09, 10; 2-1-01, 03, 04, 05, 06, 07, 08, 09, 10; 2-2-01, 02; 2-3-01, 02, 03, 04, 12; 2-4-01, 07, 11, 12, 13; 2-5-01, 03, 04, 06, 07, 09, 11; 3-2-01, 02, 03, 05, 06, 07, 08, 09, 10, 11; 3-4-01, 05, 06, 07; 3-6-05, 06; 3-7-01, 04, 07; 3-8-05, 06, 07, 08, 09, 14.

3. Location: Kuhio Highway (from Maalo Road to Rice Street) and Kaumualii Highway (from Rice Street to Alakoa Road) Note: Attached drawings show drainage outlets highlighted in blue.

(Project name: SIC Fiber Optic Project-Hanamaulu to Keahu)

4. Type of Discharge (check one):

[ ] Storm water associated with industrial activities  [ ] Construction activity dewatering

[X] Storm water associated with construction activities  [ ] Hydrotesting

[ ] Others (Describe)

Licensee, the undersigned, hereby agree to the following:

1. That Licensee shall indemnify and hold the State free and harmless from all suits and actions resulting from the licensee's discharge operations.

2. That Licensee shall provide appropriate best management practices and/or treatment devices for the removal of solid particles, and/or other pollutant(s) in the discharge, and such discharge shall meet the basic water quality criteria applicable to all waters, as identified in Section 11-54-4, and/or any other applicable sections in Chapter 11-54, Hawaii Administrative Rules, at the point of discharge into State waters.

3. That Licensee shall obtain a National Pollutant Discharge Elimination System (NPDES) permit as required by the State Department of Health and submit a copy to the State Department of Transportation Highways Division.

4. That a copy of effluent monitoring required by the NPDES permit shall be furnished to the State Department of Transportation Highways Division.
5. That Licensee shall make all restorations to any State Highway property damaged during the Licensee’s discharge operations in accordance with the State Department of Transportation Highways Division requirements.

6. That Licensee shall discontinue the discharge should the State Department of Health determine that the receiving waters are being polluted, or the discharge does not meet the effluent requirements of the NPDES permit, or the Licensee’s operations are not in the best interest of the general public. In addition, the Licensee shall be liable for any and all penalties as a result of discharges from the Licensee’s system.

7. That if the State Department of Transportation Highways Division determines that any materials or substances from the Licensee’s discharge operations have settled into any storm sewer, Licensee shall immediately remove and clear any material and substance to the satisfaction of the State Department of Transportation Highways Division.

8. That Licensee shall inspect and clean the State Highway drainage system prior to discharging.

9. That Licensee shall notify the District Engineer at least 24 hours before commencing discharge and at the conclusion of the discharge operation to arrange for necessary inspectional services at telephone number 274-3111.

10. The Licensee shall require this permit to be a part of the contract with the contractor.

Signature of Licensee

Naked Keliiai
Print Name and Title

Sandwich Isles Communications, Inc.
Company Name

1001 Bishop Street, Pacabi Tower, 27th Floor
Company Address

Honolulu, Hawaii 96813
City, State, Zip Code

(808) 524-8400
Telephone No.

*Licensee shall be the owner or authorized representative of the owner applying for the permit.

Attach: Drain Connection Plans (3 sets)
Notice of Intent Form C
Common Errors (Continued)

• Item 7 – Non-Storm Water Information
  – Identify all the sources of non-storm water (e.g. hydrotesting, dewatering, dust control water, irrigation water, equipment/vehicle wash water, concrete truck drum wash water, concrete curing water, left over or rejected concrete, high pressure wash water.
  – Provide the handling/disposal method(s) so that the non-storm waters will not be discharged directly or indirectly (commingle with storm water) into State waters.
Notice of Intent Form C
Common Errors (Continued)

• Item 8 – Location maps
  – Provide a map showing at least one (1) mile beyond the project boundaries and location of the project site in relation to the island.
  – Provide a site map identifying and numbering each storm drainage inlet (w/ coordinates) that may receive discharge from the project.
Notice of Intent Form C
Common Errors (Continued)

• Item 9 – Flow Chart
  – Provide a flow chart indicating how the storm water flows flow the project site and include the approximate amount of flow at each stage. Indicate any treatment or erosion control used.
  – See Guidelines for CWB-NOI Form C for an example of the flow chart.
• Item 10 – Existing or Pending Permits, Licenses, or Approvals
  – Provide a copy of the acknowledgement from the Department of Land and Natural Resources (DLNR), State Historic Preservation Division (SHPD) indicating that a copy of NOI has been submitted to them. If an acknowledgement from DLNR is not received when the NOI was submitted, provide a copy of the transmittal letter to DLNR SHPD.
HAWAII HISTORIC PRESERVATION DIVISION REVIEW
NPDES PERMIT APPLICATION
MAY 21 2004

Log #: 2004.1447
Doc #: 0405EJ06

Applicant/Agency: [Redacted]
Address: [Redacted]

Honolulu, Hawaii 96826

S-chain: Chapter 6E-42 Historic Preservation Review Notice of Intent to Be Covered
Under NPDES General Permit for Best Buy Company at Iwilei

Ahuapa‘a: Iwilei
District, Island: Kona, Oahu
TMK: (1) 1-5-012-012 and 014

1. ____ This project has undergone state or federal historic preservation review.
   a. mitigation has been completed
   b. other

2. ___ We have not been consulted on this undertaking, however we believe there are no
   historic properties present, because:
   a) intensive cultivation has altered the land
   b) residential development/urbanization has altered the land
   c) previous grubbing/grading has altered the land
   d) an acceptable archaeological assessment or inventory survey found no historic
   properties
   e) other: The area is comprised of fill soils. No historic properties have been identified
   during the recent re-development of the Ala Kawaihae commercial area (Home Depot, Costco
   etc)

   ___. Thus, this letter serves as our "no historic properties affected" determination since we
   believe this undertaking will have no effect on significant historic properties.

   Aloha,

   P. Holly McElroy, Acting Administrator
   State Historic Preservation Division

In the unlikely event that historic sites, including human burials, are uncovered during routine construction activities, all
work in the vicinity must stop and the State Historic Preservation Division must
be contacted at 692-8015.
Notice of Intent Form C
Common Errors (Continued)

• Item 15 – Construction Best Management Practices (BMP) Plan
  – Show the drainage patterns from the project site (including offsite areas adjacent to the project boundaries) to the State receiving water with flow arrows.
  – Show the locations and descriptions of all structural controls including those that will be used to divert the offsite storm water from flowing into the construction site.
Notice of Intent Form C
Common Errors (Continued)

• Item 15 – Construction Best Management Practices (BMP) Plan (continued)
  – Provide details and typical sections (with dimensions) for all BMPs, including the drain/catch basin inlet protection, silt fencing, concrete chute wash basin, etc.
  – Provide a plan/drawing showing and calling out the locations for the storage areas, concrete drum washouts, vehicle/equipment wash, and any other locations that may generate pollutants. Provide details of the containment area, including capacity, for the concrete drum washout and vehicle/equipment wash area.
ADDITIONAL INFORMATION: STABILIZED CONSTRUCTION ENTRANCE

DITCH TO CARRY WASH WATER TO SEDIMENT BASIN OR TRAP

VEHICLE LENGTH

WASH RACK

DRAIN SPACE

REINFORCED CONCRETE

CHANNEL/DITCH BOTTOM

WASH RACK (SCHEMATIC)

FILTER FABRIC

1" TO 3" COARSE AGGREGATE

STABILIZED CONSTRUCTION ENTRANCE

ESC24
ADDITIONAL INFORMATION: STORM DRAIN INLET PROTECTION

GRAVEL AND WIRE MESH FILTER FOR CURB INLET
BLOCK AND GRAVEL FILTER © DRYWELL DETAIL

NOT TO SCALE
Notice of Intent Form C
Common Errors (Continued)

• Item 15 – Construction Best Management Practices (BMP) Plan (continued)
  – Provide BMPs for any overflow from sediment basin and identify where overflow from the sediment basin will discharge to.
Notice of Intent Form C
Common Errors (Continued)

• Construction Entrance
  – Show the location on the site map.
  – Provide details of the entrance BMPs with dimensions
  – Properly size the entrance BMPs
  – Make sure that the construction entrance does not get buried in or with soil.
Notice of Intent Form C  
Common Errors (Continued)

• Use of Underground Injection Well or Drywell for Disposal
  – Inform the State of Hawaii, Department of Health, Safe Drinking Water Branch at (808) 586-4258
Notice of Intent Form C
Common Errors (Continued)

• Miscellaneous
  – Indicate “N/A” for any items that are not applicable.
  – Notice of Intent
    • One (1) copy for projects located on the island of Oahu with owner's original signature
    • Two (2) copies for projects located on islands other than Oahu and Hawaii (one with owner's original signature)
    • Three (3) copies for projects located on island of Hawaii (one with owner’s original signature)
Notice of Intent Form C
Common Errors (Continued)

- Item 18 – Authorization of Representative
  - Item 18.a. -- authorized to process the NOI and authorization ends upon issuance of NGPC
  - Item 18.b. -- authorized to process the NOI and further to fulfill all the NGPC conditions except submittal of Notice of Cessation.
  - Item 18.c. -- only authorized to fulfill all the NGPC conditions except submittal of Notice of Cessation.
Notice of Intent
Form D
For
General Permit Coverage
Authorizing Discharges of
Treated Effluent From Leaking
Underground Storage Tank
Remedial Activities
Notice of Intent
Form E
For
General Permit Coverage
Authorizing Discharges of Once through Cooling Water Less than One (1) Million Gallons Per Day
Notice of Intent
Form F
For
General Permit Coverage
Authorizing Discharges of Hydrotesting Waters
Notice of Intent Form F
Common Errors

• Item 11.e. Potential Pollutants and Its Sources
  – Silt from installation
  – Chlorine from disinfection
  – Petroleum hydrocarbons from existing fuel tank

• Item 15 Hydrotesting Best Management Practices (BMP) Plan
July 12, 2004

c. Date(s) on which the hydrotesting activities are expected to occur:
   i. Begin hydrotesting activities
      ____________________________
      June 17, 2004
   ii. End hydrotesting activities
      ____________________________
      June 21, 2004

d. Rates of Effluent Discharge
   i. Estimated average daily flow rates
      ____________________________
      8,400 (efs/gpd)
   ii. Estimated maximum daily flow rates
      ____________________________
      8,400 (efs/gpd)
   iii. Total Quantity of Discharge
      ____________________________
      16,800 (gallons)

e. List the pollutants that may be present in the hydrotesting water before any treatment and provide an explanation of its origins.

   New Water Lines
   Sediment, debris, chlorine and other suspended particles may be present in the hydrotest effluent during the initial pipe flushing procedure. No other pollutants are expected in the hydrotesting effluent.

12. Physical Hydrotesting Water Quality (see Guidelines for CWB-NOI Form F - Note 12)

   a. Source of Hydrotesting Water

      New Water Lines: Potable water used for pipe pressure tests and chlorination process.
      See Attachment 2 ~ Mineral Analysis for Wahiawa Well
The filter fabric used in this sediment settling box will be Mirofil 140H.
Notice of Intent
Form G
For
General Permit Coverage
Authorizing Discharges
Associated With Construction
Dewatering
Notice of Intent Form G
Common Errors

- Item 5. – Receiving State Water Information
  - Unlike for storm water, this coverage is for discharges of construction dewatering effluent. Therefore, you need to provide a receiving State water.