

Comments on October 11, 2011 Draft Permit

PERMIT NO. HI S000001

The State of Hawaii (State) Department of Transportation Highways Division (DOT-HWYS) received a draft MS4 Permit from The State of Hawaii Department of Health (HDOH) Clean Water Branch (CWB) on August 31, 2010. DOT-HWYS submitted comments in response via email on September 13, 2010 and via mail on October 25, 2010. On October 11, 2011, DOT-HWYS received CWB's responses to our MS4 Permit comments and a new draft MS4 Permit. Please find below DOT-HWYS comments regarding the new draft MS4 Permit.

1. **Cover Page, First Paragraph** – *State of Hawaii Department of Transportation (DOT) Highways Division (DOT-HWY) is authorized to discharge storm water runoff and certain non-storm water discharges as identified in Part B.2 of this permit from the DOT-HWY's Municipal Separate Storm Sewer System (MS4); Keehi, Kakoi, Pearl City, Waianae, H-3, Wahiawa, Hauula, and Windward Boneyards...*

Comment: DOT-HWYS requests to remove the H-3, Wahiawa, and Hauula Boneyards from this list as they are not industrial facilities as defined in 40 CFR 122.26(b)(14). The boneyards to remain in the MS4 NPDES Permit as industrial facilities are: Keehi, Kakoi, Pearl City, Waianae, and Windward Boneyards.

Please also see Response #1 in our "DOT-HWYS Comments to CWB Responses on Draft Permit"

CWB Response: Acknowledged.

2. **Cover Page:** *This permit will become effective on _____, 2010.*

Signed this ____ day of ____, 2010.

Comment: DOT-HWYS would like to remind CWB to update the year.

CWB Response: Acknowledged.

3. **Authorization:** *This permit and the authorization to discharge will expire at midnight, September 8, 2014.*

Comment: DOT-HWYS request to change this section to read, "...midnight, September 8, 2016."

The 40 CFR 122.46 allows NPDES permit terms of up to 5 years. DOT-HWYS incurs significant expense in the process of applying for, negotiating and

implementing a new permit. After the draft permit is finalized, DOT-HWYS has the added expense of revising its SWMP and related documents. Based on the new permit being issued within 60 days of this draft permit and the expiration date of September 8, 2014, DOT-HWYS revised SWMP will be in effect less than one year prior to DOT-HWYS submitting an application for a new permit.

CWB Response: Revised to allow a full five (5) years permit term.

4. **Part C.5** - *After the deadline, as identified in the Permittee's TMDL compliance schedule required in Part F.3.b., compliance with the WLAs are required. The Permittee shall comply with any future WLAs adopted by DOH and approved by the EPA within two (2) years of the TMDL approval date.*

Comment: DOT-HWYS requests to delete the last sentence. The two year time frame for compliance with any and all future TMDLs is arbitrary and will be in many cases impossible. For example, compliance with a new TMDL that would require construction of a significant number of structural BMPs or other capital construction projects within two years is not possible. See *Figure 1. DOT-HWYS Typical Construction Project Life-Cycle*. For most projects, site selection, procurement of a designer, design, permitting, procurement of a contractor, construction, commissioning, and performance monitoring to verify pollutant removal cannot be completed within two years.

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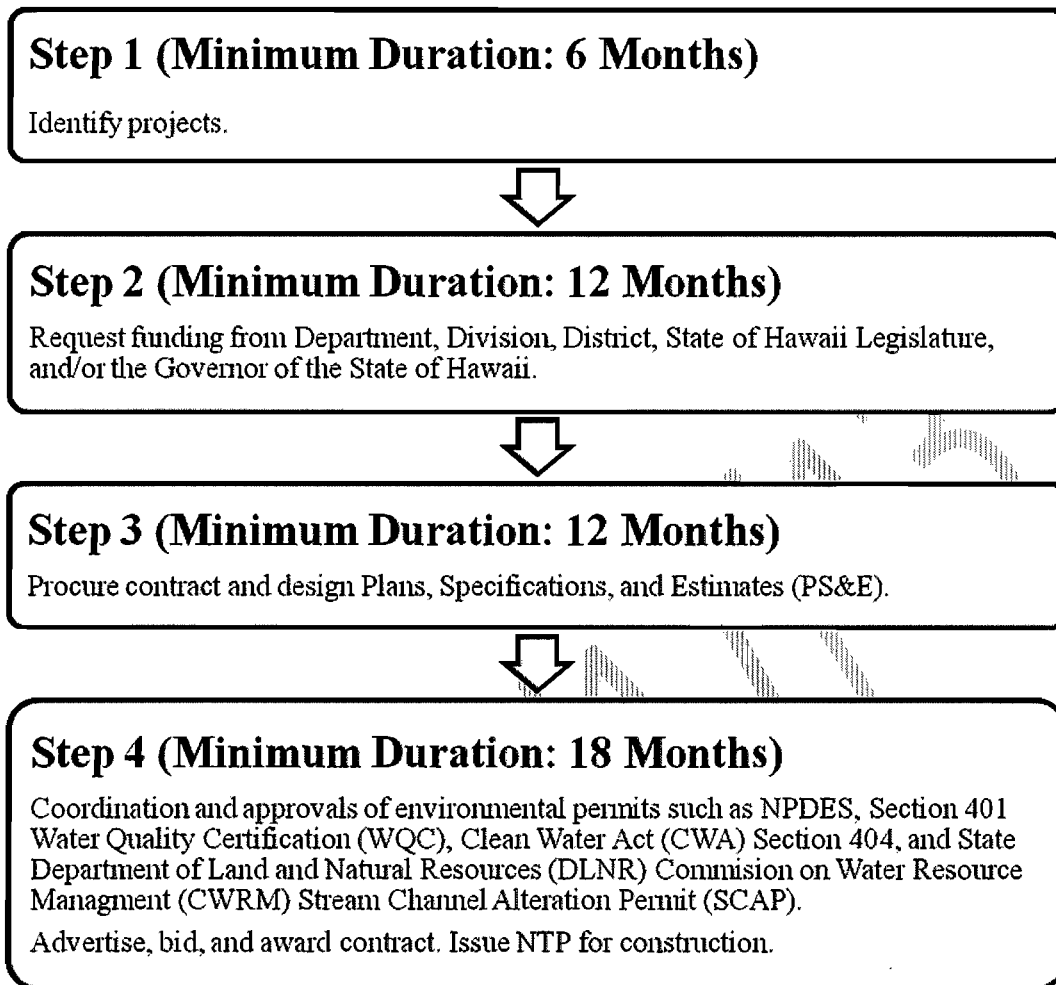


Figure 1. DOT-HWYS Typical Construction Project Life-Cycle

Additionally, watersheds vary in many ways: size, rainfall, pollutants of concern, TMDL development methodology, and the WLAs assigned. With so many variables, DOT-HWYS believes applying a standard two year compliance timeline to all watersheds is unreasonable considering each watershed and associated TMDL are different from the other. For example, it is unreasonable to expect to achieve compliance with the Pearl Harbor WLA (approximate watershed size 6864 acres) and the Kapaa Stream WLA (approximate watershed size 825 acres) in the same timeframe.

DOH and EPA have the authority and means to establish a schedule for compliance within each approved TMDL as part of the Implementation Plan prepared with the TMDL. These schedules should reflect compliance by all stakeholders and have timelines established to achieve compliance with the LAs and WLAs as soon as possible, but with realistic assumptions of the activities required by each stakeholder, and the duration required for each activity.

Because of the above mentioned constraints, DOT-HWYS requests DOH CWB to reconsider a standard two-year compliance period for all future adopted WLAs.

CWB Response: Acknowledged. Revised to "Part C.5. After the deadline, as identified in the Permittee's TMDL compliance schedule required in Part F.3.b., compliance with the WLAs are required. The Permittee shall comply with any future WLAs adopted by DOH and approved by the EPA within the timeframe as specified in its Implementation and Monitoring (I&M) Plan."

5. **Part D.1 – Submittal Date.** *The SWMP shall be updated and modified per the requirements of this permit, be consistent with the format of this permit, shall be submitted to DOH within one (1) year from the effective date of this permit, or as otherwise specified, and shall be fully implemented upon submittal. The Permittee shall implement the existing SWMP until submittal of the revision. The SWMP and any of its revisions, additions, or modifications are enforceable components of this permit.*

Comment: It is DOT-HWYS' understanding that the public comment period (30 days) is not included in the one (1) year SWMP submittal timeframe. The SWMP will be fully implemented upon submittal to CWB acknowledging that revisions may be made based on public comments received. Please also see Response #6 in our "DOT-HWYS Comments to CWB Responses on Draft Permit".

CWB Response: Revised to 18 months which shall include the public comment period.

6. **Part D.1.a.(1) - The Permittee shall address the following targeted groups in the public education plan with appropriate messages, and shall describe outreach activities and anticipated frequencies that each activity will be conducted over the permit term:**

- *DOT-HWYS employees*
- *DOT-HWYS consultants*
- *Construction industry*
- *Industrial facilities covered by the NPDES permit program*
- *Commercial businesses such as landscape service and maintenance (e.g., to prevent the use of leaf blowers from blowing material into the drainage structures), automobile detailing, automobile repair and maintenance, retail gasoline outlets, and restaurants, including those types of businesses highly ranked, according to relative risk of discharge of contaminated runoff to the DOT-HWYS MS4. Refer to Part D.1.g.(4).*
- *Department of Agriculture*
- *Department of Education*
- *Department of Hawaiian Home Lands*
- *Department of Land and Natural Resources*
- *National Resources Conservation Services*
- *Any other source that the Permittee determines may contribute a significant pollutant load to its MS4*

Comment 1: DOT-HWYS requests to remove Part D.1.a.(1) as the revised Part D.1.a includes targeted groups in the sentence, “*The program shall target: locations of illicit discharges, decision-makers, industrial and commercial businesses, construction operators, homeowners, university students, and school children, and the general public.*” Please also see Response #7 in our “DOT-HWYS Comments to CWB Responses on Draft Permit”.

CWB Response: Parts D.1.a. and D.1.a.(1) were revised.

7. **Part D.1.a.(2)** – *The Permittee shall include in the public education plan the following activities, with anticipated frequencies that each activity will be conducted over the permit term:*

- *Adopt-A-Stream Program*

Comment: DOT-HWYS requests replacing “Adopt-A-Stream Program” with “Adopt-A-Highway Program”. The justification for this request is that the “Adopt-A-Stream Program” is a City program, while the “Adopt-A-Highway Program” is an existing program implemented by DOT-HWYS.

CWB Response: Acknowledged, however, please clarify if its “Adopt-A-Highway Program” includes cleaning of any streams within its Right-of-Way.

8. **Part D.1.a.(3)** – *The Permittee shall evaluate the progress of the public education program based on the following:*

- *Number of people trained*

Comment: DOT HWYS requests to remove training from the public education program evaluation as training is addressed through other programs, in which DOT-HWYS will report on the number of people trained.

CWB Response: Acknowledged.

9. **Part D.1.c.(1)** – *Licenses for private drain connections. The Permittee shall require licenses for private drain connections and maintain a database of all licensed connections to its MS4.*

Comment: DOT-HWYS requests to replace the term “licenses” with “connection permits”, as that is the terminology used by DOT-HWYS. Again, the City issues licenses for private drain connections to its MS4 and DOT-HWYS issues connection permits for private drain connections to its MS4.

CWB Response: Acknowledged.

10. **Part D.1.c.(2)** – *Permit/approval to discharge storm water from construction projects and industrial facilities. The Permittee shall require a permit or (written equivalent) approval for the discharge of storm water associated with construction (i.e., from both private and public projects) and industrial activities (a.k.a. discharge permit) into their MS4 and maintain a database of the permits/approvals. Prior to the issuance of the discharge permit, the Permittee shall ensure that the project/facility has provided proof of filing a Notice of Intent (NOI) or NPDES application for permit coverage and that Site-Specific BMP Plan, Storm Water Pollution Control Plan or other plans relating to pollution prevention (e.g., Erosion and Sediment Control, Grading, Post-construction BMP and Landscaping Plans) or similar document(s) have been approved by the DOT-HWYS.*

Comment: DOT-HWYS request to clarify why this item is added under Illicit Discharge Detection and Elimination. Part D.1.d.(3)(iii) has the same language relating to connection and discharge permits issued by DOT-HWYS. Therefore, DOT-HWYS requests to remove this item from Illicit Discharge Detection and Elimination. DOT-HWYS will ensure that the discharge permit approvals are consistent with Part D.1.d.(3)(iii).

CWB Response: Acknowledged.

11. **Part D.1.d.(1)** - *Requirement to implement BMPs. The Permittee shall require, via the establishment of rules, proposed construction projects to implement BMPs and standards described in the following:*

- *Hawaii Standard Specifications for Road and Bridge Construction and/or Special Provisions*
- *Construction Best Management Practices Field Manual*
- *Maintenance Activities Best Management Practices Field Manual*
- *Storm Water Permanent Best Management Practices Manual*

The standards and manuals shall be annually reviewed and as necessary annually revised to include descriptions of new, modified, or revised permanent BMPs and LID practices. Any revisions shall be discussed within its Annual Report and the documents included within its SWMP Plan. At a minimum, the information in the Construction BMP Field Manual shall be consistent with EPA's Menu of BMPs for Construction Site Runoff Control. Refer to the EPA's website at: <http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm>. All documents shall be made available to DOT-HWYS staff, contractors, and consultants, as appropriate.

Comment 1: DOT-HWYS has no authority to make rules or ordinances. DOT-HWYS is only able to create guidelines, standards, and manuals. Therefore, DOT-HWYS requests to revise this item to read:

“The Permittee shall require, via the establishment of guidelines, proposed construction projects to implement BMPs and standards described in the following:”

CWB Response: Please explain how DOT-HWYS requires construction projects to follow its standards or manuals. Language has been added to allow for other equivalent rule processes.

Comment 2: DOT-HWYS request to revise the first sentence of the second paragraph to read:

“The standards and manuals shall be annually reviewed and, as necessary, revised to include descriptions of new, modified, or revised permanent BMPs and LID practices.”

CWB Response: Acknowledged.

12. **Part D.1.d.(2)** – *Inventory of construction sites. The Permittee shall implement a system to track both private and public construction projects (i.e., contract, in-house, maintenance, and encroachment). This system shall track information on the project (including permit or file number, if available), status of plan review and approval, inspection dates, and if applicable, enforcement actions and whether the project has applied for coverage under HAR, Chapter 11-55, Appendix C, NPDES General Permit Authorizing the Discharge of Storm Water Associated with Construction Activity (a.k.a. General Construction Activity Storm Water permit) (unless the project will disturb less than one acre of land) and satisfied any other applicable requirements of the NPDES permit program (i.e., an individual NPDES permit).*

Comment: DOT-HWYS request to revise the first sentence to read:

“The Permittee shall implement a system to track both private and public construction projects (i.e., contract, in-house, maintenance, and encroachment) within six (6) months.”

The justification for this request is that this is a new requirement within the MS4 NPDES Permit and implementing such a system will require coordination among various sections, approvals, and time to train responsible individuals. For these reasons, DOT-HWYS will not be able implement this system immediately.

CWB Response: Acknowledged.

13. **Part D.1.d.(3).(i)** – *Review the applicable Site-Specific BMP Plan and other plans relating to pollution prevention (e.g., Erosion and Sediment Control, Grading, Post-construction BMP and Landscaping Plans) or similar document(s) to verify that it fully meets all requirements of DOT-HWYS' standards (e.g.,*

Standard Specifications and/or Special Provisions), the HAR, Chapter 11-55, Appendix C, at a minimum be consistent with the EPA's Menu of BMPs, and any other requirements under the NPDES permit program, as applicable.

Comment: DOT-HWYS request to replace the phrase, “*at a minimum be consistent with the EPA's Menu of BMPs*” with:

“at a minimum be consistent with the Construct BMP Field Manual”

The reason for this request is that it will ensure no confusion for DOT-HWYS staff, who currently reference the Construction BMP Field Manual and it would be consistent with Part D.1.d.(1).

CWB Response: The phrase “at a minimum be consistent with the EPA's Menu of BMPs” has been deleted.

14. **Part D.1.d.(3).(ii)** – Review the applicable Site-Specific BMP Plan and other plans relating to pollution prevention (e.g., Erosion and Sediment Control, Grading, Post-construction BMP and Landscaping Plans) or similar document(s), prior to plan approval to verify that the proposed construction projects will implement measures to ensure that the discharge of pollutants from the site will be reduced to the appropriate discharge limitations subject to the Best Available Technology currently available (BAT)/ Best Conventional Pollutant Control Technology (BCT) discharge requirement, consistent with the CWA and other respective federal and state requirements for such facilities and will not cause or contribute to an exceedance of water quality standards

Comment 1: DOT-HWYS request to combine Parts D.1.d.(3).(i) and D.1.d.(3).(ii) as both requirements are similar.

CWB Response: Acknowledged.

Comment 2: DOT-HWYS requests to revise the phrase, “*to ensure that the discharge of pollutants from the site will be reduced to the appropriate discharge limitations subject to the Best Available Technology currently available (BAT)/Best Conventional Pollutant Control Technology (BCT) discharge requirement*” to read:

“to ensure that the discharge of pollutants from the site will be reduced to the appropriate discharge limitations to the Maximum Extent Practicable (MEP)”

The reason for this request is that using the MEP standard would be consistent with Part D.1.d. Additionally the BAT/BCT standard is terminology typically used for discharges from industrial sources.

CWB Response: No Change. However, relocated to within Part D.1.d.(3)(i). Construction is an industrial activity.

15. **Part D.1.d.(3).(iii)** – *Ensure that, prior to issuing a connection or discharge permit or Permit to Perform Work Upon State Highways the project owner has provided proof of filing a Notice of Intent (NOI) or NPDES application for permit coverage and that Site-Specific BMP Plan or other plans relating to pollution prevention (e.g., Erosion and Sediment Control, Grading, Post-construction BMP and Landscaping Plans) or similar document(s) have been approved by the DOT-HWYS*

Comment: Not all connection/discharge permits and projects using the “Permit to Perform Work upon State Highways” require a NOI or NPDES application for permit coverage. It is difficult to recommend a method to reword this paragraph as the previous permit seemed to focus on the NGPC requirements that the revised language has removed. However, one suggestion might be to add, “...requiring coverage under the General Construction Activity Storm Water permit...” As in the following:

“Ensure that, prior to issuing a connection or discharge permit or Permit to Perform Work Upon State Highways requiring coverage under the General Construction Activity Storm Water permit, the project owner has provided proof of filing a Notice of Intent (NOI) or NPDES application for permit coverage and that Site-Specific BMP Plan or other plans relating to pollution prevention (e.g., Erosion and Sediment Control, Grading, Post-construction BMP and Landscaping Plans) or similar document(s) have been approved by the DOT-HWYS”

CWB Response: Acknowledged. Refer to the revised permit.

16. **Part D.1.d.(3).(iv)** - *Within 90 calendar days of the effective date of this permit, the Permittee shall update and submit for review and acceptance, a plan review checklist that its reviewers shall use in evaluating the plans and BMPs or other similar document(s) which have been implemented pursuant to this Part [i.e., Part D.1.d.]. Copies of this plan review checklist shall be provided to applicants for connection and discharge permits and permits to perform work upon State Highways and to consultants and contractors for their use in developing the Plans or other similar document(s) for DOT-HYWS-contracted construction projects. The plan review checklist shall include, at a minimum, but not be limited to identifying any deficiencies and for the date when corrective actions were completed. A system shall be implemented to ensure all deficiencies, identified during the review process has been remedied. A site map shall accompany the plan review checklist which notes the locations of the deficiencies.*

Comment: DOT-HWYS request to remove “The plan review checklist shall include, at a minimum, but not be limited to identifying any deficiencies and for the date when corrective actions were completed. A system shall be implemented

to ensure all deficiencies, identified during the review process has been remedied. A site map shall accompany the plan review checklist which notes the locations of the deficiencies.”

Deficiencies and corrective actions do not apply to the site-specific BMP plan checklist and review process. The plan review process consists of review comments and clarifications. DOT-HWYS has developed a separate checklist to be used on site for construction inspections of BMPs.

CWB Response: Revised to specify “comments on any deficiencies” and “the date when comments were addressed...” The last sentence was revised to “A copy of the plan being reviewed shall be attached to the plan review checklist.”

17. **Part D.1.d.(4).(ii)** – *In addition to inspections required by the NPDES permit program, all contract, in-house and maintenance construction projects shall be inspected at least monthly by a qualified construction inspector who is independent (i.e., not involved in the day-to-day planning, design, or implementation) of the construction projects to be inspected. The Permittee may use more than one (1) qualified construction inspector for these inspections. The reporting procedures shall include, at a minimum, notification of any deficiencies to the DOH.*

Comment: Similar to what is currently in Consent Decree Injunctive Relief Item 10.g.(2).(a), DOT-HWYS would like to add the following:

“Upon three successive monthly inspections that indicate, in total, no critical or major deficiencies or less than six minor deficiencies with no more than three minor deficiencies in one month in a project’s BMPs or other storm water management activities, HDOT may decrease the inspection frequency for such project to quarterly. However, if while under a quarterly inspection frequency, an inspection of a project conducted pursuant to this Paragraph indicates at least one critical or major deficiency or a total of three or more minor deficiencies in the project’s BMPs or other storm water management activities, the inspections frequency shall immediately return to no less than monthly.”

This clause would allow DOT-HWYS to focus its inspection resources on those construction projects which have a greater risk to discharge pollutants.

CWB Response: Acknowledged. Refer to the permit for additional language.

18. **Part D.1.d.(4).(iii)** – *All projects with a Permit to Perform Work Upon State Highways, connection permit, or discharge permit shall be inspected at least once annually or once during the life of the project, whichever comes first, by a qualified construction inspector who is independent (i.e., not involved in the day-to-day planning, design, or implementation) of the construction projects to be inspected.*

Comment: The “Permit to Perform Work Upon State Highways” is typically used for Encroachment, Maintenance, and a variety of other projects. The use of “Permit to Perform Work Upon State Highways” may be used incorrectly in its current context. DOT-HWYS requests that “Permit to Perform Work Upon State Highways” be deleted and revised to “encroachment permit” if that is the intent of CWB. Please also review all other uses of “Permit to Perform Work Upon State Highways”.

CWB Response: Encroachment permit was added.

19. **Part D.1.d.(4).(iv)** – *Develop and implement a standard inspection form and reporting and corrective procedures for inspections, including use of an inspection checklist, or equivalent, and the Permittee shall track inspection results in a database or equivalent system. The inspection checklist shall, include at a minimum, but not be limited to identifying any deficiencies and the date of the corrective actions. A site map shall accompany the inspection checklist, which notes the locations of the deficiencies. The inspection form, inspection checklist, reporting and corrective procedures shall be submitted to DOH for review and acceptance within 90 calendar days of the effective date of this permit.*

Comment 1: DOT-HWYS would like to note that a standard inspection form may not be applicable for all construction projects. Inspection forms will differ for encroachment projects from other projects as these projects are typically less complex and smaller in scope.

CWB Response: Acknowledged.

Comment 2: DOT-HWYS requests to remove the phrase, “in a database or equivalent system.”

DOT-HWYS is currently tracking inspection results across all construction field offices and feels it should be allowed to track inspections using the method of its choice.

CWB Response: No change.

Comment 3: For large and complicated construction projects, a site map to accompany the inspection checklist may not be practicable because it may include several maps or plans. DOT-HWYS typically references plans for locations of the deficiencies. Therefore, DOT-HWYS requests to revise the second to last sentence to read,

“A site map shall accompany the inspection checklist, which notes the locations of the deficiencies, where feasible.”

CWB Response: No change. We believe a site map which accompanies the inspection checklist is even more important for large and complicated projects. Only the plans where the deficiencies are location need to be included.

20. **Part D.1.d.(5).(i)** – *Enforce its standards and the implementation of BMPs at all construction sites, including the establishment of its own rules for penalty and the collection of fines.*

Comment: The additional requirement to establish rules for penalty and the collection of fines will add complexity to DOT-HWYS existing enforcement program. DOT-HWYS recommends that the sentence be revised to read:

“Enforce its standards and the implementation of BMPs at all construction sites.”

DOT-HWYS currently uses process such as liquidated damages, withholding of payment, and non-performance of work letters to contractors and bonding companies as methods of enforcement.

CWB Response: No change.

21. **Part D.1.d.(6)** – *Process to refer noncompliance and non-filers to DOH. In the event the Permittee has exhausted its use of sanctions and cannot bring a construction site or construction operator into compliance with its ordinances or this permit, or otherwise deems the site to pose an immediate and significant threat to water quality, the Permittee shall provide email notification to cleanwaterbranch@doh.hawaii.gov, Attn: Enforcement Section Supervisor within one (1) week of such determination. Email notification shall be followed by written notification and include a copy of all inspection checklists, notes, and related correspondence on CD/DVD in pdf format (300 minimum dpi) within two (2) weeks of the determination. In instances where an inspector identifies a site that has not applied for permit coverage under the NPDES permit program, the Permittee shall provide written notification to DOH within two (2) weeks of the discovery.*

Comment: Ordinances is a City term and therefore DOT-HWYS does not create ordinances nor has the authority to enforce local ordinances. For these reasons, DOT-HWYS requests to revise the first sentence to read:

“In the event the Permittee has exhausted its use of sanctions and cannot bring a construction site or construction operator into compliance with its DOT-HWYS permit conditions or this permit, or otherwise deems the site to pose an immediate and significant threat to water quality, the Permittee shall provide email notification to cleanwaterbranch@doh.hawaii.gov, Attn: Enforcement Section Supervisor within one (1) week of such determination.”

CWB Response: Replaced “ordinances” with “rules, standards.”

22. **Part D.1.e** – *The Permittee shall further develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that result in a land disturbance of one (1) acre or more and smaller projects that have the potential to discharge pollutants to the DOT-HWYS' MS4. The Permittee's program must ensure that permanent controls are in place to prevent or minimize water quality impacts to the MEP. Criteria shall be established when permanent post-construction BMPs must be included in a project design to address storm water impacts and pollutants of concern. These criteria shall take into consideration, among other things, potential water quality impacts anticipated from the permanent post-construction conditions.*

Comment 1: DOT-HWYS agrees with DOH and recognizes the need to consider smaller projects (less than one acre of new, permanent impervious surface) that have the potential to discharge pollutants to the DOT-HWYS' MS4 for permanent controls. However, DOT-HWYS disagrees with the association of land disturbance to storm water runoff management from new development and redevelopment projects.

DOT-HWYS once again requests to revise the first sentence of this Part to read:

“The Permittee shall further develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that create one (1) acre or more of new, permanent impervious surface.”

Please also see Response #11 in our “DOT-HWYS Comments to CWB Responses on Draft Permit”.

CWB Response: Replaced “land disturbance” with “impervious area” language.

Comment 2: DOT-HWYS has an established criteria which was developed to meet the requirements of the current permit and the Oahu Storm Water Management Program Plan (SWMP). The Unified Criteria has been effective since February 5, 2006. For this reason, DOT-HWYS requests to revise the sentence, “*Criteria shall be established when permanent post-construction BMPs must be included in a project design to address storm water impacts and pollutants of concern*” to read:

“Review and update as necessary the criteria defining when permanent post-construction BMPs, including, LID techniques, must be included in a project design to address storm water impacts and pollutants of concern.”

CWB Response: Acknowledged.

23. **Part D.1.e.(1)** – *The Permittee shall revise its standards for addressing post-construction BMPs to include Low Impact Development (LID) requirements.*

Within six (6) months of the effective date of this permit, the Permittee shall submit to DOH for review and acceptance, a plan for requiring LID in the standards to the MEP, including revision to the plan review and inspection checklists to include LID. LID refers to storm water management practices which seek to mimic natural processes and protect water quality via infiltration, evapotranspiration or reuse of storm water runoff at the site where it was generated. The standards shall be applicable to all construction projects disturbing at least one (1) acre and smaller projects that have the potential to discharge pollutants to the DOT-HWYS' MS4. The plan for the implementation of LID provisions in the DOT-HWYS' standards shall include at a minimum the following:

- *Criteria for requiring implementation.*
- *Investigation into the development of quantitative criteria for a specific design storm to be managed by LID techniques. Examples of design storm requirements include: 24-hour, 85% storm through infiltration; on-site management of the first inch of rainfall within a 24-hour period; retention of the 100-year, 2-hour storm; or on-site management of the 24-hour, 95% storm.*
- *Feasibility criteria for circumstances in which a waiver could be granted for the LID requirements.*
- *When a LID waiver is granted, alternatives such as offsite mitigation and/or non-LID treatment control BMPs could be required.*

A draft of the revised standards, shall be submitted to the DOH for review and acceptance within 12 months after the effective date of this permit and include the above (i.e., criteria for requiring implementation, feasibility criteria, alternatives when a LID waiver is granted) at a minimum, and also reflect the conclusion of the investigation of quantitative LID criteria. Within 18 months after the effective date of this permit, subject to adoption by rulemaking, the revised Standards shall be submitted to the DOH. To the extent that the revised Standards have not been adopted, the Permittee shall submit a compliance schedule for adoption, which shall not exceed 24 months after the effective date of this permit.

Comment: DOT-HWYS requests removing this section in its entirety and replacing with language similar to CALTRANS draft permit (NPDES NO. CAS000003) dated August 2011:

Low Impact Development (LID)

The goal of LID is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating storm water runoff close to its source. LID employs principles such as preserving and recreating natural landscape features and minimizing imperviousness to create functional and appealing site drainage that treats storm water as a resource, rather than a waste product. LID

treatment measures include harvesting and use, infiltration, evapotranspiration, or biotreatment. All new development and redevelopment projects shall integrate LID principles into project designs through:

i) Site Design Principles

- (1) Conservation of natural areas, to the extent feasible, including existing trees, vegetation and soils;*
- (2) Minimization of the impervious footprint of the project;*
- (3) Minimization of disturbances to natural drainages;*
- (4) Design and construction of pervious areas to effectively receive runoff from impervious areas, taking into consideration the pervious areas' soil conditions, slope and other pertinent factors;*
- (5) Use of climate-appropriate landscaping that minimizes irrigation and runoff, promotes surface infiltration, and minimizes the use of pesticides and fertilizers;*

ii) Source Control Design Principles

- (1) Minimization of storm water exposure to on-site pollutants through design features that may include covered outdoor wash areas, sanitary sewer connections for wash areas, wash area equipment, and accessories;*
- (2) Proper design of covers and drains, and protections for outdoor material storage areas, repair and maintenance bays, and fueling areas; and*
- (3) Proper design of trash storage areas to eliminate exposure.*

iii) Storm Water Treatment and Infiltration Principles

In selecting storm water treatment and infiltration systems to meet the LID requirements of this Order, the Department shall give first priority to storm water treatment systems that reduce runoff, store storm water for beneficial use, and/or enhance infiltration to the extent that is practical and safe. Examples include soil quality improvement and biofiltration strips and swales. Basins, filters, and prefabricated/ proprietary storm water treatment systems shall only be considered where the higher priority alternatives are infeasible.

In developing the requirements for the CALTRANS permit, the California State Water Resources Control Board has recognized the inherent difficulty in implementing LID techniques on the linear ROW of highway projects. The Draft Fact Sheet states:

“This Order approaches LID through source control design principles, site design principles and storm water treatment and infiltration principles. Source control and site design principles are required as applicable to provide enough flexibility such that projects are not forced to include inappropriate or impractical measures.”

Please also see Response #12 in our “DOT-HWYS Comments to CWB Responses on Draft Permit”.

CWB Response: To our knowledge, the language in CALTRANS draft permit was not finalized. Their final language incorporates the 85th percentile 24-hour storm event which is one of the criteria to be considered in DOT-HWYS’ draft permit. Refer to the draft permit for other revisions to this part.

24. **Part D.1.e.(2)** – *The Permittee shall not advertise any construction project nor award any construction contract unless until the project design has been reviewed to ensure that appropriate permanent post-construction BMPs, which include LID practices, have been included in the project design and are included in the bid package to ensure compliance with this part of the permit. No project shall proceed without the inclusion of appropriate permanent post-construction BMPs unless a waiver is granted based on specific documentation demonstrating that such post-construction BMPs are not feasible. Project documents for projects that will include installation of permanent post-construction BMPs shall also include appropriate requirements for their future continued maintenance.*

Comment 1: DOT-HWYS would like CWB to acknowledge that LID practices cannot be included in the project design and in the bid package until the revised standards are adopted as required in Part D.1.e.(1).

CWB Response: Acknowledged. Revise language to “which include LID practices upon adoption into its Standards...”

Comment 2: DOT-HWYS requests modifying the second sentence to read:

“No project shall proceed without the inclusion of appropriate permanent post-construction BMPs unless a waiver is granted by DOT-HWYS based on specific documentation demonstrating that such post-construction BMPs are not feasible.”

CWB Response: Acknowledged.

Comment 3: DOT-HWYS will comply with the current proposed language for design-bid-build projects. However, DOT-HWYS would like to request that CWB include language to exclude design-build projects. Due to its unique nature, design-build projects only have general Post-Construction requirements provided prior to award. Specific requirements are included later in the design-build process.

Please also see Response #14 in our “DOT-HWYS Comments to CWB Responses on Draft Permit”.

CWB Response: Refer to the revised language.

“For design-bid- build projects, the Permittee shall not advertise any construction project nor award any construction contract unless until the project design has been reviewed and approved to ensure that appropriate permanent post-construction BMPs, which include LID practices upon adoption into its Standards, have been included in the project design and are included in the bid package to ensure compliance with this part of the permit. For design-build projects, the Permittee shall review and approve the project design the same as for design-bid-build projects prior to implementation.”

25. Part D.1.e.(3) – BMP, Operation and Maintenance, and Inspection Database - *The Permittee shall implement its Asset Management System to track the frequency of inspections and maintenance of the Permanent BMPs. The Asset Management System database shall include both public and private activities or projects which initially discharge into the Permittee's MS4 and shall be mapped on the geographic information system (GIS). In addition to the standard information collected for all projects (e.g. project name, owner, location, start/end date, etc.), the database shall also include, at a minimum:*

- *Type and number of LID practices*
- *Type and number of Source Control BMPs*
- *Type and number of Treatment Control BMPs*
- *Latitude/Longitude coordinates of controls using Global Positioning Systems (GPS) and NAD83 Datum*
- *Photographs of controls*
- *Operation and maintenance requirements*
- *Frequency of inspections*
- *Frequency of maintenance*

Comment 1: DOT-HWYS requests modifying the first sentence to read:

“The Permittee shall continue to implement a database to track the frequency of inspections and maintenance of Permanent BMPs.”

The reason for this request is that DOT-HWYS would like to maintain the flexibility to migrate the database outside of the Asset Management System to provide additional functionality and ease of use. In either case, the database maintained by DOT-HWYS will include, at a minimum, the bulleted requirements of this section. This request applies to both sentences referencing the “Asset Management System”.

Please also see Response #15 in our “DOT-HWYS Comments to CWB Responses on Draft Permit”.

CWB Response: No change. However, DOT-HWYS may migrate the database outside of the Asset Management System assuming that the information is available in both databases.

Comment 2: Specifically for Permanent BMPs for “Private Activities”, DOT-HWYS would like to remove the last three bullets:

- *Operation and maintenance requirements*
- *Frequency of inspections*
- *Frequency of maintenance*

The justification for this request is that DOT-HWYS would like to put the onus on the private owner for the inspection and maintenance of the permanent BMPs.

CWB Response: Acknowledged. The sentence referring to “private activities” was deleted.

26. **Part D.1.f.(1).(iii)** – The Permittee shall perform regularly scheduled roadside litter pickup and litter container servicing.

Comment: DOT-HWYS requests to remove this requirement. DOT-HWYS feels this requirement was mistakenly included from the City’s MS4 Permit Part D.1.f.(1).(iii) as this is a City Program and not pertinent to DOT-HWYS activities.

CWB Response: Acknowledged.

27. **Part D.1.f.(1).(v)** – *Within 12 months of the effective date of this permit, the permittee shall develop and submit to DOH for review and acceptance, a trash reduction plan which assesses the issue, identifies and implements control measures, and monitors these activities to reduce trash loads from the MS4. The plan shall include, at a minimum and be formatted consistent with the following:*

- *Quantitative estimate of the debris currently being discharged (baseline load) from the MS4, including methodology used to determine the load.*
- *Description of control measures currently being implemented as well as those needed to reduce debris discharges from the MS4 consistent with short-term and long-term reduction targets.*
- *A short-term plan and proposed compliance deadline for reducing debris discharges from the MS4 by 50% from the baseline load.*
- *A long-term plan and proposed compliance deadline for reducing debris discharges from the MS4 to zero.*
- *Geographical targets for trash reduction activities with priority on waterbodies listed as impaired for trash on the State’s CWA Section 303(d) list.*

- *Trash reduction-related education activities as a component of Part D.1.a.*
- *Integration of control measures, education and monitoring to measure progress toward reducing trash discharges.*
- *An implementation schedule.*
- *Monitoring plan to aid with source identification and loading patterns as well as measuring progress in reducing the debris discharges from the MS4.*
- *The Annual Report shall include a summary of its trash load reduction actions (control measures and best management practices) including the types of actions and levels of implementation, the total trash loads and dominant types of trash removed by its actions, and the total trash loads and dominant types of trash for each type of action.*

The plan shall provide for compliance with the above short-term and long-term discharge limits in the shortest practicable timeframe.

Comment: DOT-HWYS requests to remove this section for the following reasons:

- a. As argued by the City, DOT-HWYS disagrees with inclusion of Trash Provisions without approved TMDLs or intensive trash assessment as required by 303(d) listing process. In rebuttal to CWB's response to City's comments dated May 2, 2011 (<http://hawaii.gov/health/environmental/water/cleanwater/pubntcs/S000002/05026PRM.11d.pdf>):
 - i. The language for the trash reduction requirements within the San Francisco's MS4 Permit appear to be based an extensive multi-year study of trash, *A Rapid Trash Assessment Method Applied to Waters of the San Francisco Bay Region: Trash Measurement in Streams* (April 2007) and a two-year comment period prior to inclusion into their permit. As no prior trash monitoring studies or Trash TMDL analysis have been conducted for water bodies on Oahu, the inclusion of a trash reduction provision in this Permit is unreasonable and has no technical basis.
- b. The trash reduction requirements proposed do not differentiate between the watersheds and is unrealistically applied island wide in an unscientific and arbitrary manner. In support, DOH's *2006 State of Hawaii Water Quality Monitoring and Assessment Report* (January 2008) only includes trash as a pollutant for specific water bodies on Oahu.
- c. We feel that imposing trash reduction provisions for only two of the point source dischargers, the City and the DOT-HWYS, with no requirements for other stakeholders within the watersheds of Oahu is an undue burden and provides unknown benefits to water quality.

DOT-HWYS agrees with the CWB and considers trash an important priority for our programs. However, we suggest that large scale trash reduction efforts should be carefully planned with due consideration to scientific methods, data collection, resources, and cost effectiveness. Therefore, we propose to work with DOH, the City, and other stake holders within various watersheds to conduct a trash assessment, determine current trash loads, and develop a technical basis for future Trash TMDLs. We request to include the trash provisions within future NPDES permits upon the development and approval of the Trash TMDL.

CWB Response: No change. The same response as provided to the City in response their comment #3, dated May 2, 2011 is provided.

The San Francisco Bay MS4 permit provides a precedent for requiring aggressive trash reduction measures in large scale MS4 permits prior to TMDL completion. See page 85 et seq. of the pdf:

http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2009/R2-2009-0074.pdf. The requirements imposed in the San Francisco Bay MS4 go beyond what DOH proposed in this permit. DOH is clearly authorized to incorporate the recommended provisions, as they are BMP-based requirements to address an existing, recognized, water quality impairment problem.

Furthermore, control of trash has been a fundamental requirement of the NPDES permit program for MS4s ever since EPA's stormwater regulations were promulgated in 1990; see 40 CFR 122.26(d)(2)(iv)(A)(1) which requires controls for trash as a component of an MS4's stormwater management program.

The proposed permit language does not impose a specific numeric or narrative WQBEL but instead requires the permittee to develop and submit a trash control plan. It is clearly within the State's authority to require this approach, which provides CCH sufficient time to develop and submit a reasonable and defensible trash control plan. As noted in the Introduction to the Permit Writers' Manual, "This manual... examines technical considerations for developing NPDES permits for wastewater discharges." (p. vii, emphasis added). EPA's April 2010 MS4 Permit Improvement Guide

(http://www.epa.gov/npdes/pubs/ms4permit_improvement_guide.pdf) explains that:

"If no WLA has been assigned to the MS4, the permit writer should still consider pollutants of concern identified in 303(d) lists and TMDLs when developing Permit Requirements. Such information will help identify whether more targeted permit conditions are needed to reduce the discharge of these pollutants. (p. 5)."

28. **Part D.1.f.(3).(ii)** – *Require the implementation of temporary erosion control measures (e.g., erosion control blankets and/or fabrics, gravel bag placement and silt fencing/fiber rolls) on erosional areas within DOT-HWYS right-of-ways with the potential for significant water quality impact if a permanent solution is not*

immediately possible. Notwithstanding any other implementation provisions, the SWMP shall require the implementation of such temporary erosion control measures on all applicable areas within one (1) year of the effective date of this permit. For projects which require a CWA Section 401 Water Quality Certification (WQC), the WQC application shall be submitted to DOH within one (1) year of the effective date of this permit and be implemented with six (6) months of the WQC or other regulatory permit(s) issuance date.

Comment: DOT-HWYS request revising the following sentence, “Notwithstanding any other implementation provisions, the SWMP shall require the implementation of such temporary erosion control measures on all applicable areas within one (1) year of the effective date of this permit” to read:

“Notwithstanding any other implementation provisions, the SWMP shall require the implementation of such temporary erosion control measures on all applicable areas within eighteen (18) months of the effective date of this permit”

DOT-HWYS requests additional time to comply with this provision because the inventory of sites may substantially increase with the issuance of additional WLAs, which is a major component of site identification.

CWB Response: Revised as suggested, however, requirements of this part do not only apply to watersheds with DOH adopted and EPA approved TMDLs.

29. **Part D.1.f.(3).(iii)** – Develop a maintenance plan for vegetated portions of the drainage system used for erosion and sediment control, and LID features; including controlling any excessive clearing/removal, cutting of vegetation, and application of herbicide which affects its usefulness. This plan shall be submitted to the DOH within 90 calendar days of the effective date of this permit.

Comment: DOT-HWYS requests nine (9) months to submit the maintenance plan as this is a new requirement and will require extensive effort. Please also see Response #19 in our “DOT-HWYS Comments to CWB Responses on Draft Permit”.

CWB Response: Acknowledged.

30. **Part D.1.f.(3).(iv)** – Implement erosion control projects to prevent erosion at its storm drain system outlets with significant potential for water quality impacts to be completed within five (5) years of the effective date of this permit. An implementation schedule and project status shall be provided in the Annual Report. The Permittee shall install velocity dissipators or other BMPs to reduce erosion at locations identified by the Islandwide Retrofit Study or through its periodic required inspections.

Comment 1: DOT-HWYS would like to request the language for this provision to more closely resemble that of Part D.1.f.(1).(v) Action Plan for Retrofitting Structural BMPs. As such, DOT-HWYS envisions this section reading:

“Provide the DOH with an Action Plan to address erosion at its storm drain system outlets with significant potential for water quality impacts to be completed within one (1) year of the effective date of this permit, which shall identify outfalls to be addressed, explanation on the basis for their selection and an implementation schedule. The implementation schedule shall cover a five (5) year period. An annual status report on the implementation schedule shall be included in the Annual Report. The Permittee shall install velocity dissipators or other BMPs to reduce erosion at locations identified by the Islandwide Retrofit Study or through its periodic required inspections. The Action Plan may include, but not be limited to projects in compliance with any TMDL implementation and reduction plan.”

The reason for this request is that Putting out a DOT-HWYS project is a complicated process including various approvals. Please see *Figure 1. DOT-HWYS Typical Construction Project Life-Cycle*. Given the condition that everything runs smoothly, it could take at least three years for DOT-HWYS to start implementation of projects to address erosion at outfalls.

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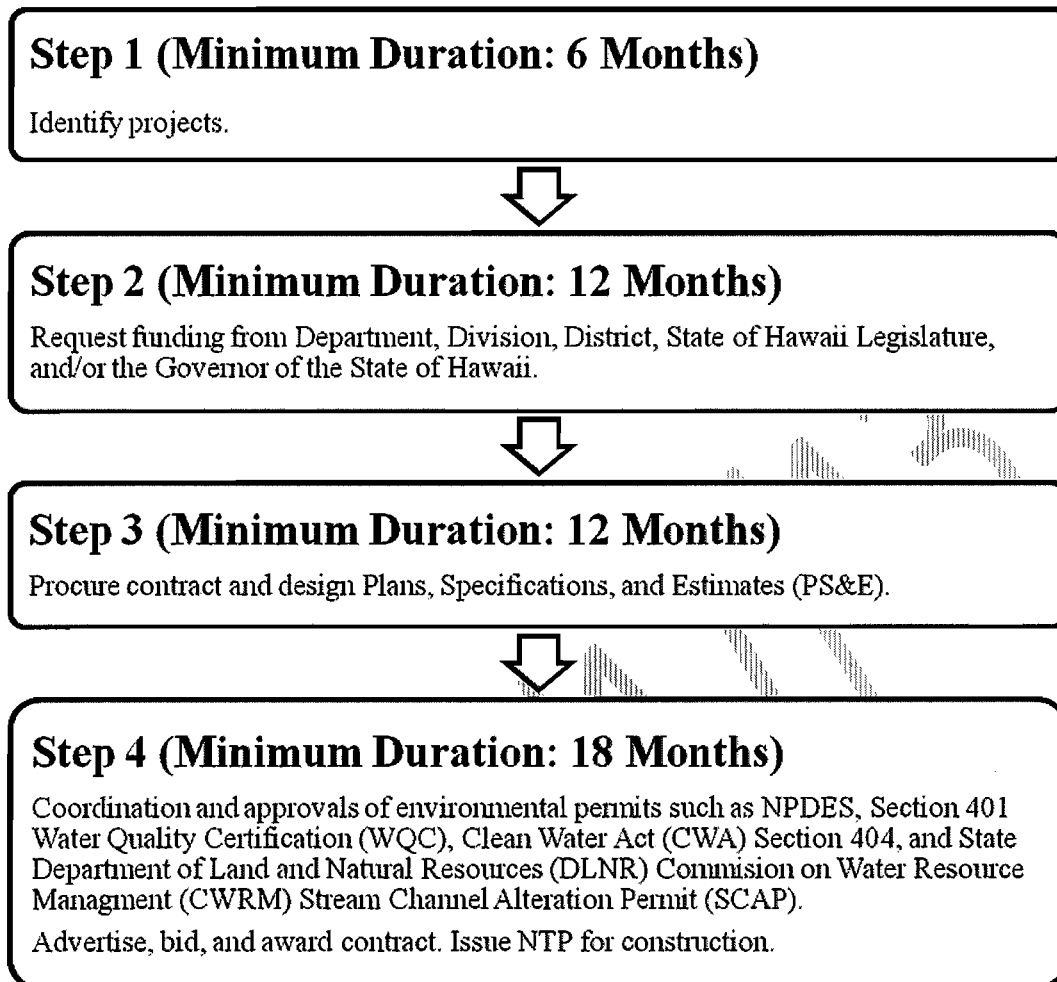


Figure 1. DOT-HWYS Typical Construction Project Life-Cycle

CWB Response: Acknowledged.

31. **Part D.1.f.(4).(i)** – *BMPs and Field Manual for municipal maintenance activities. The Permittee shall implement the BMPs as identified in the field manual titled "Maintenance Activities Best Management Practices Field Manual" (Field Manual) for all municipal maintenance activities. Examples of such activities include, but are not limited to: paving and road repairs, street cleaning, saw cutting, concrete work, curb and gutter replacement, buried utility repairs and installation, vegetation removal, painting and paving, debris and trash removal, spill cleanup, etc. The Field Manual shall be updated as necessary or at least once per permit term and include written procedures to minimize pollutant discharge for maintenance activities which have the potential to discharge pollutants to its MS4.*

Comment: DOT-HWYS requests to remove all uses of “municipal” as that is pertinent to the City and not DOT-HWYS.

CWB Response: Acknowledged.

32. **Part D.1.f.(4).(ii)** – *The Permittee shall further develop and provide annual training to staff on proper municipal maintenance activities to prevent storm water pollution. The training shall cover the Field Manual, identify potential sources of pollution, general BMPs that can be used to reduce and/or eliminate such sources, and specific BMPs for their activities. The training shall incorporate components of the public education campaign being implemented by the City and educate staff that they serve a role in protecting water quality. Staff shall be made aware of the NPDES permit, the overall SWMP, and the applicable BMPs Program(s).*

Comment 1: DOT-HWYS requests to remove all uses of “municipal” as that is pertinent to the City and not DOT-HWYS.

CWB Response: Acknowledged.

Comment 2: DOT-HWYS again requests to modify the third sentence to read:

“The training shall incorporate components of the public education campaign being implemented by Oahu District Maintenance and educate staff that they serve a role in protecting water quality.”

The justification for this request is that the City was consulted when the storm water training program for Oahu District Maintenance staff was initially developed. The DOT-HWYS maintenance training program is now mature and customized to State related activities and DOT-HWYS no longer feels the need to incorporate components of the City’s program.

Please also see Response #21 in our “DOT-HWYS Comments to CWB Responses on Draft Permit”.

CWB Response: Revised to read “The training shall incorporate components of the public education campaign and educate staff that they serve a role in protecting water quality.”

33. **Part D.1.g.(1)** – *Inventory and Map of Industrial Facilities and Activities. The Permittee shall update and submit, in electronic portable document format (pdf - minimum 300 dpi), the industrial facilities and activities inventory (industrial inventory), sorted by TMK, and map of such facilities and activities discharging, directly or indirectly, to its MS4 within its Annual Report.*

Comment: DOT-HWYS requests to revise this section to read:

“Inventory and Map of Industrial Facilities and Activities. The Permittee shall update and submit, in electronic portable document format (pdf - minimum 300 dpi), the industrial facilities and activities inventory (industrial inventory),

sorted by TMK, and map of such facilities and activities discharging, directly or indirectly, to its MS4 within its 4th Annual Report.”

DOT-HWYS requests this change to be consistent with the current permit, the City’s permit, and Part D.1.g.(2).

CWB Response: Acknowledged.

34. **Part D.1.g.(2)** – *Inventory and Map of Commercial Facilities and Activities. The Permittee shall update and submit, in pdf format (minimum 300 dpi), the commercial facilities and activities inventory (commercial inventory), sorted by priority areas, and map of such facilities and activities discharging, directly or indirectly, to its MS4 within the permit renewal application.*

Comment: DOT-HWYS requests to revise this section to read:

“Inventory and Map of Commercial Facilities and Activities. The Permittee shall update and submit, in pdf format (minimum 300 dpi), the commercial facilities and activities inventory (commercial inventory), sorted by priority areas, and map of such facilities and activities discharging, directly or indirectly, to its MS4 within its 4th Annual Report.”

DOT-HWYS requests this change to be consistent with the current permit, the City’s permit, and Part D.1.g.(1).

CWB Response: Acknowledged.

35. **Part D.1.g.(4)** – *Inspection of Industrial and Commercial Facilities and Activities. The industrial/commercial inspection program shall be implemented and updated as appropriate to reflect the outcomes of the investigations.*

The Permittee shall ensure industrial and commercial facilities and activities identified in the industrial and commercial inventories required under Parts D.1.g.(1) and D.1.g.(2) are inspected and re-inspected as often as necessary based on its findings to ensure corrective action were taken and the deficiency resolved.

At a minimum, the Permittee shall inspect each industrial facility that does not have NPDES permit coverage under the NPDES permit program at least twice per permit term, and each industrial facility that does have such NPDES permit coverage at least once per permit term. Any industrial facility discharging Industrial Storm Water (as defined by 40 C.F.R. Part 122.26(b)(14)) that does not have NPDES Permit coverage shall be reported to DOH within 30 days of the inspection. Commercial dischargers are to be ranked according to relative risk of discharge of contaminated runoff to the DOT-HWYS MS4. The highly ranked commercial facilities shall be inspected at least once per permit term.

Inspections must consist of a review of implementation of BMPs for compliance with local ordinances and this permit to assess potential impacts to receiving waters. Inspections shall also assess potential sources of pollutants to the DOT-HWYS MS4 and require controls to prevent discharge of pollutants to the DOT-HWYS MS4. All inspections shall be in accordance with the applicable portions of the "NPDES Compliance Inspection Manual" (EPA 305-X-04-001), dated July 2004. Inspectors shall be trained to identify deficiencies, assess potential impacts to receiving waters, and evaluate the appropriateness and effectiveness of deployed BMPs and SWPCPs, if applicable. The inspectors shall use an inspection checklist, or equivalent, and photographs to document site conditions and BMP conditions. Records of all inspections shall be maintained for a minimum of five (5) years, or as otherwise indicated.

The Permittee shall submit semi-annual inspection report(s) to the DOH by October 31st and April 30th for inspections done within the previous period.

Comment: DOT-HWYS requests to revise the second paragraph to read:

“At a minimum, the Permittee shall inspect each industrial facility that does not have NPDES permit coverage under the NPDES permit program at least twice every five (5) years, and each industrial facility that does have such NPDES permit coverage at least once every five (5) years. Any industrial facility discharging Industrial Storm Water (as defined by 40 C.F.R. Part 122.26(b)(14)) that does not have NPDES Permit coverage shall be reported to DOH within 30 days of the inspection. Commercial dischargers are to be ranked according to relative risk of discharge of contaminated runoff to the DOT-HWYS MS4. The highly ranked commercial facilities shall be inspected at least once every five (5) years.”

This proposed language will be consistent with the terms of the current MS4 NPDES Permit and the timeframe for these inspections will not be subject to any delay in permit issuance.

CWB Response: Acknowledged.

- 36. Part D.1.g.(5) – Enforcement Policy for Industrial Facilities and Activities.** *Within one (1) year of the effective date of this permit, the Permittee shall develop and implement an enforcement policy for industrial or commercial facilities which have failed to comply with State, City, government regulations, and/or terms of this permit. The policy shall be part of the overall escalating enforcement policy and must consist of the following:*

- ❖ *Issuance of written documentation to a facility representative within 30 calendar days of storm water deficiencies identified during*

- inspection. Documentation must include copies of all field notes, correspondence, photographs, and sampling results if applicable.*
- ❖ *A timeline for correction of the deficiencies.*
 - ❖ *Provisions for re-inspection and potential enforcement actions, if necessary.*
 - ❖ *Establish rules for penalty and the collection of fines.*

In the event the Permittee has exhausted all available sanctions and cannot bring a facility or activity into compliance with local ordinances and this permit, or otherwise deems the facility or activity an immediate and significant threat to water quality, the Permittee shall provide email notification to cleanwaterbranch@doh.hawaii.gov, Attn: Enforcement Section Supervisor within one (1) week of such determination. Email notification shall be followed by written notification and include a copy of all inspection checklists, notes, photographs, and related correspondence on CD/DVD in pdf format (300 minimum dpi) within two (2) weeks of the determination. In instances where an inspector identifies a facility that has not applied for the General Industrial Storm Water permit coverage or any other applicable NPDES permit, the Permittee shall provide email notification to DOH within one (1) week of such determination.

Comment: DOT-HWYS requests this section to be consistent with its current MS4 NPDES Permit and reflect the MS4 NPDES Permit issued to the City on May 24, 2011. DOT-HWYS requests that this section be replaced with:

“Enforcement Policy for Industrial Facilities and Activities. The Permittee shall continue to implement its enforcement policy for industrial or commercial facilities which have failed to comply with local ordinances and/or terms of this permit. The policy shall be part of the overall escalating enforcement policy and must consist of the following:

- Issuance of written documentation to a facility representative within two (2) weeks of storm water deficiencies identified during inspection. Documentation must include copies of all field notes, correspondence, photographs, and sampling results if applicable.
- A timeline for correction of the deficiencies.
- Provisions for re-inspection and potential enforcement actions, if necessary.

In the event the Permittee has exhausted all available sanctions and cannot bring a facility or activity into compliance with local ordinances and this permit, or otherwise deems the facility or activity an immediate and significant threat to water quality, the Permittee shall provide email notification to DOH within one (1) week of such determination. Email notification shall be followed by an electronic copy on CD/DVD in pdf

format (300 minimum dpi) of all inspection checklists, notes, photographs, and related correspondence within two (2) weeks of the determination. In instances where an inspector identifies a facility that has not applied for the General Industrial Storm Water permit coverage or any other applicable NPDES permit, the Permittee shall provide email notification to DOH within one (1) week of such determination.”

CWB Response: No Change.

37. **Part E.1** – *DOT-HWYS Municipal Industrial facilities (baseyards) covered under this permit shall comply with the requirements in HAR, Chapter 11-55, Appendix B. The baseyards to be covered are: Keehi, Kakoi, Pearl City, Waianae, H-3, Wahiawa, Hauula, and Windward Baseyards.*

Comment: As stated in Comment #1, DOT Highways requests to remove the H-3, Wahiawa, and Hauula Baseyards from this list as they are not industrial facilities as defined in 40 CFR 122.26(b)(14). The facilities to remain included in the MS4 NPDES Permit are: Keehi, Kakoi, Pearl City, Waianae, and Windward Baseyards.

Please also see Response #26 in our “DOT-HWYS Comments to CWB Responses on Draft Permit”.

CWB Response: Acknowledged.

38. **Part E.3** – *The Permittee shall submit within 90 calendar days from the effective date of this permit for review and acceptance, the CWB NOI General Form, CWB NOI Form B and SWPCP for each baseyard, which has not yet been submitted and be included within its SWMP Plan. The SWPCPs must be implemented upon the effective date of this permit.*

Comment: DOT-HWYS requests modifying the last sentence to read:

“The updated SWPCPs must be implemented upon acceptance from DOH.”

The justification for this suggested revision is that DOT-HWYS cannot implement the SWPCPs upon the effective date of the permit if the SWPCPs are to be submitted within 90 calendar days from the effective date of the permit.

CWB Response: Revised to “The SWPCPs must be implemented upon submittal to DOH.”

39. **Part F.3.a** – *The Permittee shall submit to DOH a WLA Implementation and Monitoring Plan for Kaneohe Stream; and updated plans for the existing Ala Wai Canal, Kawa Stream, Waimanalo Stream, and Kapaa Stream. The draft and final Implementation and Monitoring Plans shall be made available on the Permittee's*

website for public review and comment. For TMDLs, which include WLAs for the City and County of Honolulu (City), the plan shall be developed jointly [i.e., only one (1) plan per TMDL watershed] with activities to be implemented by the DOT-HWYS and City concurrently with the purpose of maximizing the effectiveness of the activities. The plans shall be submitted within one (1) year of the effective date of this permit.

Comment: DOT-HWYS requests to remove Waimanalo Stream from the list of Implementation Plans to be revised. DOT-HWYS and the City submitted the *Implementation and Monitoring Plan for Waimanalo Stream* on March 28, 2007. DOT-HWYS received comments from DOH-CWB on April 17, 2008 and incorporated the requested revisions and submitted the *Revised & Final Implementation and Monitoring Plan for Waimanalo Stream* on November 3, 2008. Since that time, DOT-HWYS has completed the implementation of the BMPs described in the Revised & Final Plan, and continues to operate and maintain the structural BMPS while continuing the street sweeping, catch basin cleaning, illicit discharge detection and elimination, chemical application BMP program, and public outreach BMPs as per the *Revised & Final Implementation and Monitoring Plan for Waimanalo Stream*.

CWB Response: No Change. DOT-HWYS is required to demonstrate compliance with the WLAs consistent with the TMDL Report.

Comment: DOT-HWYS would like to state that while it intends to jointly develop an implementation and monitoring plan with the City, its implementation schedule might vary from the City due to funding differences and land ownership issues.

CWB Response: Acknowledged.

40. **Part F.3.a.(5)** – *A monitoring plan which shall identify representative outfalls within its respective watershed to be monitored, rationale for selecting those outfall, and description of the water quality monitoring activities to demonstrate consistency with the WLAs.*

Comment: DOT-HWYS request to revise the text to read:

“A monitoring plan which shall identify representative outfalls within its respective watershed to be monitored, rationale for selecting those outfall, and description of the water quality monitoring and other monitoring activities to demonstrate consistency with the WLAs.”

Monitoring of activities such as street sweeping and catch basin cleaning includes documenting the volume and/or mass of material removed.

CWB Response: Acknowledged.

41. **Part F.3.b** - *The Permittee shall submit a compliance schedule with a final compliance deadline to comply with the TMDL waste load allocations only, as specified in the following within one (1) year of the effective date of this permit. The compliance schedule shall provide for the implementation of the BMPs, monitoring to evaluate its performance, and time to make adjustments necessary to demonstrate consistency with the WLAs at the earliest possible time. If the schedule extends beyond a year, interim dates and milestones shall be included in the schedule with the time between interim dates not to exceed one year. After the deadline, compliance with the WLAs are required.*

Comment: DOT-HWYS requests to renumber this Part as Part F.3.a.(6) as the compliance schedule is an additional minimal requirement of the Implementation Plans in Part F.3.a., and revise the text to read,

“As part of each Implementation and Monitoring Plan, the Permittee shall submit a compliance schedule with a final compliance deadline to comply with the TMDL waste load allocations, as specified in the following: within one (1) year of the effective date of this permit for. The compliance schedule shall provide for the implementation of the proposed activities and BMPs detailed in Part F.3.a.(3), monitoring to evaluate its their performance, and time to make adjustments necessary to demonstrate consistency with the WLAs at the earliest possible time. If the schedule extends beyond a year, interim dates and milestones shall be included in the schedule with the time between interim dates not to exceed one year. After the deadline, compliance with the WLAs are required.”

In DOH’s response to DOT-HWYS’s previous comment on this section, DOH referenced the November 12, 2010 EPA memorandum titled, ‘*Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Waste Load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs"*’ (November 2010 Memo). It must be noted that on March 17, 2011, EPA issued a letter seeking public comments on the November 2010 Memo and plans to, “either retain the memorandum without change, to reissue it with revisions, or to withdraw it.” As of November 1, 2011, EPA has not issued instruction as to the final disposition of the November 2010 Memo.

Assuming the November 2010 Memo is retained without change, the March 17, 2011 letter clarifies that, “*The guidance provided in the 2010 memorandum recognizes developments over the past eight years....*” And, “*As such, the 2010 memorandum reflects EPA’s view that there has been an incremental evolution of the stormwater permits program and the TMDL program that has been occurring since 2002, such that numeric effluent limitations are no longer as rare as they were in 2002.*”

The Ala Wai, Waimanalo Stream, and Kawa Stream TMDL's were developed prior to the 2002 memo, and utilized some basic order-of-magnitude assumptions regarding the concentration of pollutants in stormwater discharges from DOT-HWYS outfalls. Namely, concentrations were, "developed from event mean concentration (EMC) data reported by EPA's *National Urban Runoff Program*" and are not representative of actual storm water discharges from DOT-HWYS MS4, but rather national averages from the mainland. Even the Kapa'a Stream TMDL approved in 2007 utilized EPA's *National Urban Runoff Program* data rather than MS4 discharge data and can be said to be of the "2002 memo methodology".

The 2010 Memo clearly states on page 4, "*The permitting authority's decision as to how to express the WQBEL(s), either as numeric effluent limitations or BMPs, including BMPs accompanied by numeric benchmarks, should be based on an analysis of the specific facts and circumstances surrounding the permit, and/or the underlying WLA, including the nature of the stormwater discharge, available data, modeling results or other relevant information.*" DOT HWYS feels strongly that BMP based effluent limits as described in the suggested text in this comment with the requirements of Part F.3.a.(3), (4), and (5) comply with the requirement of 40 CFR §122.44(d)(1)(vii)(B), that, NPDES permits must contain effluent limits and conditions consistent with the requirements and assumptions of the WLAs in the TMDL, and that this is the most appropriate method of implementing the WLAs assigned to DOT-HWYS until such time as the TMDLs are revised. *Table 1. Assumptions and Requirements in TMDLs Relevant to DOT-HWYS NPDES PERMIT* provides details of each TMDL and the assumptions and requirements relevant to DOT-HWYS.

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Table 1: Assumptions and Requirements in TMDLs Relevant to DOT-HWYS NPDES PERMIT

| Watershed | Date issued (revised) | Requirement for HDOT WLA? | Assumption in TMDL Documents | Numeric Effluent Limit Applicable? |
|-----------|-----------------------|---------------------------|--|------------------------------------|
| Ala Wai | 1995 (2002) | No | <p>The City and DOT storm water discharges may contribute significant sources of nutrients to the watershed, but insufficient information is available to distinguish among them. These sources would be considered together in the urban land use category reported by Freeman.</p> <p>The DOT plan should specifically identify both implementation and monitoring actions that will be carried out to reduce nutrient loading and measure the effectiveness of these actions in meeting the WLAs and the associated water quality standards.</p> <p>No data were identified for this analysis which relate nutrient levels in Ala Wai Canal to rainfall-related runoff and nutrient concentrations in its tributaries.</p> <p>Both models use local land use information and pollutant loading factors based on land use-specific event mean concentrations (EMCs) from U.S. EPA's National Urban Runoff Program.</p> | No |
| Waimanalo | 2001 | No | <p>Several iterations of BMP implementation and TMDL monitoring may be needed to track changes in pollutant loading and transport over time; consequently, an adaptive management approach should be applied to TMDL implementation. The TMDLs presented in Section 5 are initial estimates, and represent pollution reduction targets for the first round of BMP design and installation along Waimanalo Stream.</p> <p>Samples collected by the US Geological Survey (USGS) in 1998 in other streams on</p> | No |

| | | | Oahu that drain urban and agriculture areas | |
|---------|-------------|-----|---|----------|
| Kawa | 2002 (2005) | Yes | In 2005 revision, DOT runoff concentrations are developed from event mean concentration (EMC) data reported for commercial, industrial, residential, and highway land use categories by EPA's National Urban Runoff Program (EPA 1983, Pitt et al. 2003). | No |
| Kapa'a | 2007 | Yes | Storm runoff concentrations were developed from event mean concentration (EMC) data reported by EPA's National Urban Runoff Program (EPA 1983, Pitt et al 2003) and other estimates of nonpoint source pollutant loading rates (Shannon and Brezonik 1972, Uttermark et al 1974). | No |
| Kaneohe | 2009 | Yes | Characteristic storm runoff concentrations of TSS, TN, and TP are estimated for each land use category, based first on reported stormwater runoff data and then adjusted to reflect observed wet weather Kaneohe Stream concentrations. | Possibly |

Please also see Response #31 in our "DOT-HWYS Comments to CWB Responses on Draft Permit".

CWB Response: This section was revised. For existing DOH adopted and EPA approved TMDLs, the compliance schedules shall be included into the permit prior to issuance. After permit issuance, the permit shall be reopened to include compliance schedules for additional TMDLs.

42. **Part F.3.b.(1)** *The Permittee and the City shall work together and comply with the joint WLAs as specified in the following: Revisions to Total Maximum Daily Loads for the Ala Wai Canal, Island of Oahu, Hawaii Report (dated June 2002), Table 8: TMDLS, Wasteload Allocations, and Load Allocations for Ala Wai Canal Watershed (Pages 25-26) at...*

Comment 1: DOT-HWYS suggest adding the first sentence of Part F.3.b.(1) to the end of Part F.3.b. and revising for clarity to read:

Part F.3.b. The Permittee shall submit a compliance schedule with a final compliance deadline to comply with the TMDL waste load allocations only, as specified in the following within one (1) year of the effective date of this permit. The compliance schedule shall provide for the implementation of the BMPs, monitoring to evaluate its performance, and time to make adjustments necessary to demonstrate consistency with the WLAs at the earliest possible time. If the schedule extends beyond a year, interim dates and milestones shall be included in the schedule with the time between interim dates not to exceed one year. After the deadline, compliance with the WLAs are required. The Permittee and the City shall work together and comply with the joint WLAs as specified in the following:

Part F.3.b.(1) *Revisions to Total Maximum Daily Loads for the Ala Wai Canal, Island of Oahu, Hawaii Report (dated June 2002), Table 8: TMDLS, Wasteload Allocations, and Load Allocations for Ala Wai Canal Watershed (Pages 25-26) at...*

As it reads currently, the action to comply with the joint WLAs only applies to the Ala Wai TMDL.

CWB Response: A compliance schedule for each TMDL shall be included into the permit.

Comment 2: DOT-HWYS requests deleting this Part until such time that the *Revisions to Total Maximum Daily Loads for the Ala Wai Canal – Island of Oahu*, approved in June 2002, is updated.

In Section 3. Source Analysis and Estimation, the June 2002 TMDL document, states, “The CCH and DOT stormwater discharges may contribute significant sources of nutrients to the watershed, but insufficient information is available to distinguish among them. These sources would be considered together in the urban land use category reported by Freeman.”

The TMDL document continues in Section 9. Implementation Expectations to recommend, “Hawaii Department of Transportation should identify actions

necessary to implement its WLA, with the intent that these actions will be incorporated in the NPDES permit when it is reissued in 2004. The DOT plan should specifically identify both implementation and monitoring actions that will be carried out to reduce nutrient loading and measure the effectiveness of these actions in meeting the WLAs and the associated water quality standards.”

It is clear from the Implementation Expectations recommended for DOT that the requirements and assumptions of the WLAs in the TMDL are for the implementation of BMP-based effluent limits as expressed in the November 2002 EPA Guidance Memorandum, *Establishing Total Maximum Daily Load (TMDL) Waste Load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs*.

Additionally, in comparison to the City, DOT-HWYS’ contribution to the Ala Wai Canal is minimal and to have a combined allocation is unreasonable. The June 2002 TMDL document specifies a clear and separate recommendation for the City WLA Implementation. In accordance with 40 CFR §122.44(d)(1)(vii)(B), the DOT-HWYS WLA Implementation Plan should be separate from the City and incorporate BMP-based effluent limits and monitoring actions that will be carried out to reduce nutrient loading and measure the effectiveness of these actions in meeting the WLAs and the associated water quality standards. DOT-HWYS submitted a *Implementation a Monitoring Plan for the Ala Wai Canal WLAs* as Appendix M.2 of the 2007 SWMP, and continues to implement this plan.

CWB Response: This section shall be revised. DOT-HWYS will need to determine how many acres it has versus the total number of urban acres and then DOH will assign a percentage of the waste load allocation as their effluent limit.

43. **Part F.3.b.(5)** – *In accordance with 40 CFR §122.44(d)(1)(vii)(B), where a TMDL has been approved, NPDES permits must contain effluent limits and conditions consistent with the requirements and assumptions of the WLAs in the TMDL. However, for the TMDL approved for Waimanalo Stream, the Permittee shall comply with the water quality standards (WQS) as specified in HAR, Chapter 11-54-5.2(b) – Specific criteria for streams, and submit a compliance schedule with a final compliance deadline within one (1) year of the effective date of this permit. The compliance schedule shall provide for the implementation of the BMPs, pre and post activity monitoring to evaluate its performance, and time to make adjustments necessary to demonstrate compliance with the water quality standards at the earliest possible time. If the schedule extends beyond a year, interim dates and milestones shall be included in the schedule with the time between interim dates not to exceed one (1) year. The Permittee shall, at a minimum, monitor for compliance with the WQS at one (1) monitoring location within the watershed and within 90 calendar days of the effective date of this permit, identify its location on a map and discuss the rationale for its selection.*

HAR, Chapter 11-54-5.2(b) – Specific criteria for streams

(b) Specific criteria for streams. Water column criteria for streams shall be as provided in the following table:

| <u>Parameter</u> | Geometric mean not to exceed the <u>given value</u> | Not to exceed the given value more than <u>ten per cent of the time</u> | Not to Exceed the given value more than <u>two per cent of the time</u> |
|--|---|---|---|
| Total Nitrogen (ug N/L) | 250.0* 180.0** | 520.0* 380.0** | 800.0* 600.0** |
| Nitrate + Nitrite Nitrogen (ug [NO ₃ +NO ₂]-N/L) | 70.0* 30.0** | 180.0* 90.0** | 300.0* 170.0** |
| Total Phosphorus (ug P/L) | 50.0* 30.0** | 100.0* 60.0** | 150.0* 80.0** |
| Total Suspended Solids (mg/L) | 20.0* 10.0** | 50.0* 30.0** | 80.0* 55.0** |
| Turbidity (N.T.U.) | 5.0* 2.0** | 15.0* 5.5** | 25.0* 10.0** |

* Wet season - November 1 through April 30.

** Dry season - May 1 through October 31.

L = liter

N.T.U. = Nephelometric Turbidity Units. A comparison of the intensity of light scattered by the sample under defined conditions with the intensity of light scattered by a standard reference suspension under the same conditions. The higher the intensity of scattered light, the higher the turbidity.

ug = microgram or 0.000001 grams

pH Units - shall not deviate more than 0.5 units from ambient conditions and shall not be lower than 5.5 nor higher than 8.0

Dissolved Oxygen - Not less than eighty per cent saturation, determined as a function of ambient water temperature.

Temperature - Shall not vary more than one degree Celsius from ambient conditions.

Specific Conductance - Not more than three hundred micromhos/centimeter.

(2) Bottom criteria for streams:

- (A) Episodic deposits of flood-borne soil sediment shall not occur in quantities exceeding an equivalent thickness of five millimeters (0.20 inch) over hard bottoms twenty-four hours after a heavy rainstorm.
- (B) Episodic deposits of flood-borne soil sediment shall not occur in quantities exceeding an

- equivalent thickness of ten millimeters (0.40 inch) over soft bottoms twenty-four hours after a heavy rainstorm.
- (C) In soft bottom material in pool sections of streams, oxidation-reduction potential (EH) in the top ten centimeters (four inches) shall not be less than +100 millivolts.
 - (D) In soft bottom material in pool sections of streams, no more than fifty per cent of the grain size distribution of sediment shall be smaller than 0.125 millimeter (0.005 inch) in diameter.
 - (E) The director shall prescribe the appropriate parameters, measures, and criteria for monitoring stream bottom biological communities including their habitat, which may be affected by proposed actions. Permanent benchmark stations may be required where necessary for monitoring purposes. The water quality criteria for this subsection shall be deemed to be met if time series surveys of benchmark stations indicate no relative changes in the relevant biological communities, as noted by biological community indicators or by indicator organisms which may be applicable to the specific site.

Comment: DOT-HWYS requests deleting this Part until such time that the initial estimates of the TMDLs provided in Section 5 of the *TMDL for Waimanalo Stream* approved in March 2001 are updated.

On page 6 of the March 2001 TMDL document, it states, “*Several iterations of BMP implementation and TMDL monitoring may be needed to track changes in pollutant loading and transport over time; consequently, an adaptive management approach should be applied to TMDL implementation. The TMDLs presented in Section 5 are initial estimates, and represent pollution reduction targets for the first round of BMP design and installation along Waimanalo Stream.*”

Additionally, the *Waimanalo Stream TMDL Implementation Plan* approved in August 2001 addresses DOT-HWYS participation in the Implementation Plan in two sections:

- In Section IV. PRIORITIES FOR IMPLEMENTATION as one of the eight activities identified as high priority for implementation:

“Reduce nutrients and sediments in urban runoff, especially from roads and roadsides. Incorporate BMP requirements into stormwater permits of City/County of Honolulu and Hawaii Dept. of Transportation. Incorporate pollutant removal into design of drainage systems for new developments.”

- **And in Section VI. GOVERNMENT ROLES AND MECHANISMS:**

*“**Priority Action:** When these permits are renewed, every 5 years, they must include provisions consistent with TMDLs for Waimanalo, e.g. BMPs to reduce nitrogen and sediment inputs to the stream in segments where*

the TMDLs are not currently met. These can include planting vegetation and mowing roadsides, street sweeping, cleaning catch basins and other BMPs. Priority should be given to the land areas adjacent to Middle Kahawai and Middle Waimanalo segments of the stream. These permit conditions are enforceable by DOH and EPA.”

The draft permit correctly states that, “In accordance with 40 CFR §122.44(d)(1)(vii)(B), where a TMDL has been approved, NPDES permits must contain effluent limits and conditions consistent with the requirements and assumptions of the WLAs in the TMDL.”

The requirements and assumptions of the *TMDL for Waimanalo Stream* and the *Waimanalo Stream TMDL Implementation Plan* were that requirements for BMP implementation would be incorporated into the DOT-HWYS MS4 permit. This was accomplished through the *Implementation and Monitoring Plan for Waimanalo Stream* submitted by DOT-HWYS/City, including the revised Plan submitted in response to comments from DOH-CWB. This Plan detailed activities and BMPs to be implemented.

DOT-HWYS has completed implementation of the BMPs in the revised Plan, and has programs and systems in place to continue implementation of the street sweeping, catch basin cleaning, illicit discharge detection and elimination, chemical application, and public outreach BMP programs including continued monitoring to document the effectiveness of these programs.

Please also see Response #34 in our “DOT-HWYS Comments to CWB Responses on Draft Permit”.

CWB Response: This section will be revised to assign WLAs based on a percentage of permittee’s land area to be determined by DOT-HWYS.

44. **Part F.4** – *As additional WLAs are adopted by DOH and approved by the EPA that identify the Permittee as a source, the Permittee shall develop Implementation and Monitoring Plans for a minimum of one (1) additional WLA per year within one (1) year of the approval date. Compliance with their assigned WLAs are required within two (2) years of the TMDL approval date.*

Comment: DOT-HWYS requests to delete the last sentence. The two year time frame for compliance with any and all future TMDLs is arbitrary and will be in many cases impossible. For example, compliance with a new TMDL that would require construction of a significant number of structural BMPs or other capital construction projects within two years is not possible. See chart below. For most projects, site selection, procurement of a designer, design, permitting, procurement of a contractor, construction, commissioning, and performance monitoring to verify pollutant removal cannot be completed within two years.

DOH and EPA have the authority and means to establish a schedule for compliance within each approved TMDL as part of the Implementation Plan prepared with the TMDL. These schedules should reflect compliance by all stakeholders and have timelines established to achieve compliance with the LAs and WLAs as soon as possible, but with realistic assumptions of the activities required by each stakeholder, and the duration required for each activity.

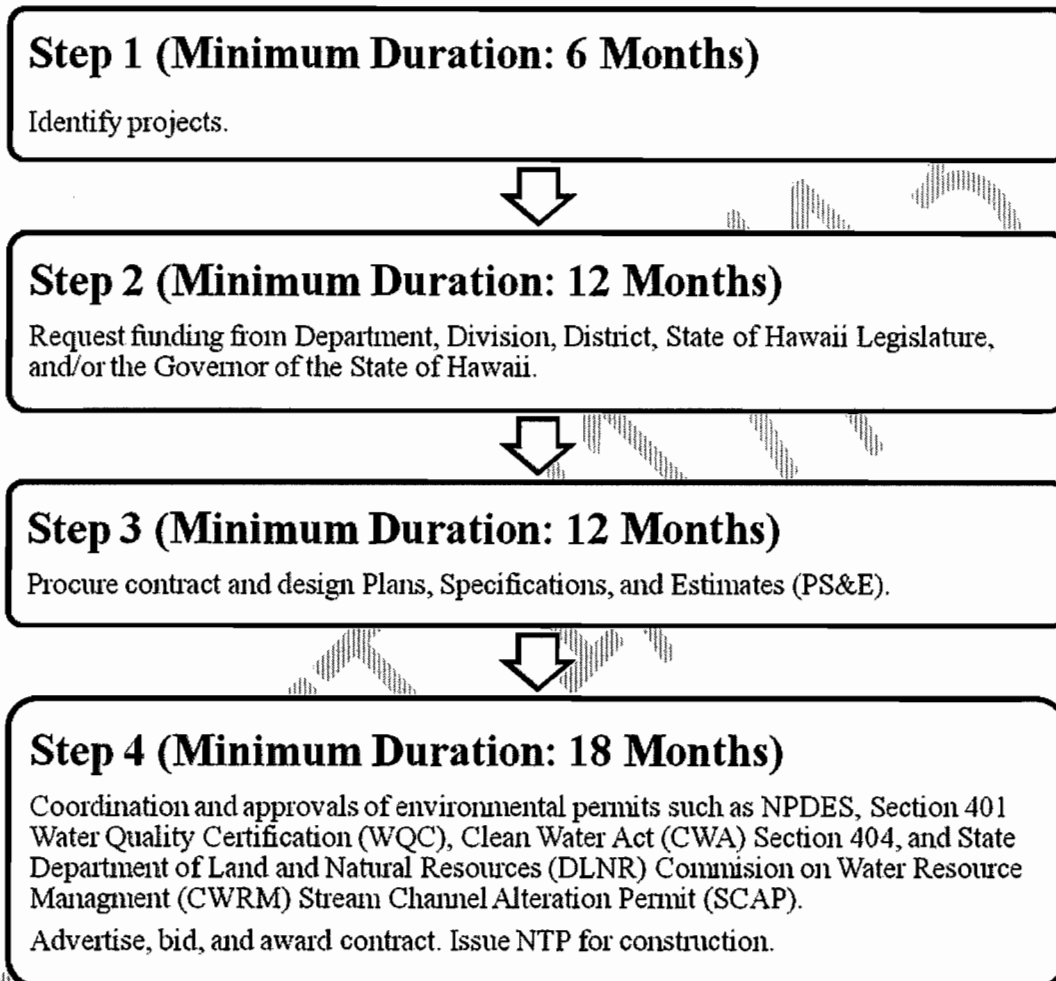


Figure 1. DOT-HWYS Typical Construction Project Life-Cycle

CWB Response: The two (2) year WLA compliance deadline language shall be removed and replaced with language allowing DOT-HWYS to develop compliance schedules for future WLAs to be included within its I&M Plan. The I&M Plan will be available for public comment during reopening of the permit.