



Permittees Guide on Post-Construction Best Management Practices (PCBMPs)

WHAT IS STORMWATER RUNOFF?

Stormwater runoff occurs when rain falls on impervious surfaces (e.g. driveways, sidewalks, streets, and roofs) and finds its way to the ocean through streams or the storm drain system. Urban development adds significant amounts of impervious surfaces, which increases stormwater flow because less rain is able to infiltrate into the ground.

Stormwater runoff may also carry surface pollutants such as dirt, oil, chemicals, fertilizer and pesticides, bacteria from pet waste, soaps, etc. into Hawaii's state waters.

As stewards of our natural resources, the State of Hawaii, Department of Transportation, Highways Division, Maui District (HWY-M) requires minimizing impervious surfaces and maximizing areas where stormwater runoff can infiltrate before entering the HWY-M storm drain system.

As such, **HWY-M implements criteria for PCBMPs that apply to new development and redevelopment projects.**



WHAT ARE PCBMPs? DO I NEED TO IMPLEMENT ONE?

PCBMPs are procedures or devices which reduce stormwater runoff from a site and provide a positive impact on water quality.

All non-exempt projects (new development or redevelopment) that disturb an area of one (1) acre or more of land are required to be reviewed for the inclusion of PCBMPs.

If you are applying for a Permit to Perform Work within the HWY-M Right-of-Way, you are also required to complete the **Stormwater Design Checklist Tool** that determines if PCBMPs are required for your project. The Stormwater Best Management Practices Manual and the Stormwater Design Checklist Tool can be found on our website at www.stormwatermaui.com.

Once completed, the Stormwater Design Checklist Tool should be submitted to Ty Fukuroku, Maui District Environmental Engineer at ty.h.fukuroku@hawaii.gov. If you have any questions, please contact Ty Fukuroku at **(808) 873-3535**.



PROTECT OUR WATER

- M Ā L A M A I K A W A I -

HDOT Highways Division - Maui District

650 Palapala Drive, Kahului, Maui, HI 96732

Phone: (808) 873-3535

www.stormwatermaui.com

PERMIT TO PERFORM WORK UPON STATE HIGHWAYS

Application date _____, 20____

Pursuant to the provisions of Chapter 264, Hawaii Revised Statutes as amended, Application is hereby made to perform the following work upon the State Highway and at the location(s) specified below and at no other place.

POLICE CHECKLIST: ITEMS 1 THRU 5.

1. Name of Highway _____ Route No./Section _____

2. Locations or limits on said highway _____

3. Work to be performed per attached plans approved by _____ date _____

() Access connection () Utility () Drainage Improvement () Other

4. Dates between which work will be performed: _____, 20____ to _____, 20____

5. General Notes for Construction

- a. All lanes shall be open to traffic during the hours from 6:00 AM to 8:30 AM, during the hours of 3:00 PM to 6:00 PM, and when no work is being done under this permit. Only one lane of traffic shall be closed at any other time unless otherwise approved in writing by the District Engineer.
- b. When trenching in pavement areas, safe, non-skid bridging material adequate, to handle all vehicular traffic shall be placed and securely anchored over the trench.
- c. Longitudinal drainage along the highway shall be maintained.
- d. Ductlines shall have 3-feet minimum cover if no other depth is shown on the approved plan.
- e. No material and/or equipment shall be stockpiled and/or stored within the State Highway right-of-way except at locations approved in writing by the District Engineer, or those shown on the approved plans.
- f. All regulatory, guide, and construction signs and barricades shall be of high intensity reflective sheeting.

6. Submittals required

a. Initial and date utility clearances as checked below. Contractor to also check with all other utility companies, etc. for verification of all other utility lines.

- () Electric Co. _____ () Water Supply _____ () Gas Co. _____
- () GTE—HAW'N _____ () Sewers _____ () Cable TV _____
- () AT&T _____ () _____

b. Proof of State Indemnity

() Certificate of Insurance naming the State of Hawaii as an additional insured, having respective minimum coverages for Bodily Injury or Death Per Person; Bodily Injury or Death Per Accident; and Property Damages Per Accident of:

- () \$ 100,000; \$ 300,000; \$ 50,000;
- () \$ 250,000; \$ 500,000; \$ 100,000; 30 day notice of
- () \$ _____; \$ _____; \$ _____; cancellation to the State required.

() Federal Non Liability Clause (See Item 13 on the back of this permit.)

c. \$ _____ Fee (Make check payable to the Dept. of Transportation, State of Hawaii)

Computed as follows: \$10.00 + \$0.10 x (Quantity in excess of first 20 sq. yd. and/or lineal feet)
= \$10.00 + \$0.10 x (_____ sq. yd. and/or lineal feet)

d. Performance Bond

- () \$ _____ : By Bond No. _____ ; or Other _____
- () Letter of Guarantee on file () Waived

The applicant hereby agrees that any agreement heretofore made or hereafter to be made, and the covenants and conditions stated on the reverse side hereof shall be binding upon the applicant, the applicant's heirs, personal representatives, successors, contractors and assigns. The applicant acknowledges that the applicant has read the completed form, understands its provisions, and agrees to its terms and conditions.

CONTRACTOR: _____

APPLICANT _____
(Name of applicant whether individual, firm, partnership, corporation, governmental agency, etc.)

ADDRESS: _____

TELEPHONE NUMBER: _____

(Print Name & Title of Applicant or Authorized Rep.)

EMERGENCY NOS.:

(1) NAME _____ Phone No. _____

(Signature)

(2) NAME _____ Phone No. _____

ADDRESS: _____

TELEPHONE NO.: _____

PERMIT NO.: _____

DATE: _____, 20____

Permission to perform the above described work at the location(s) stated in items 1 and 2 between the dates set forth in item 4 of the application is hereby granted. The applicant shall notify the issuing office at least 48 hours before commencing work. Any extension of completion date must be approved in writing by the issuing office. This permit expires if work is not started within 90 days of issuance date.

Director of Transportation or Authorized Representative

IN CONSIDERATION OF A PERMIT BEING ISSUED TO THE APPLICANT, THE APPLICANT HEREBY AGREES AS FOLLOWS:

Rules & Regulations

1. To perform all work in conformity with the specifications for Installation of Miscellaneous Improvements Within State Highways dated May 1, 1984, or any revision thereof, issued by the Highways Division, Department of Transportation prior to the date of this application; with applicable sections of the Standard Specifications for Road and Bridge Construction, Hawaii Highways Division, Department of Transportation, 1985, or any revision thereof effective prior to the date of the application; and with applicable statutes, ordinances and directions of the Director of Transportation or his authorized representative.
2. To comply with the provisions of the Federal Highway Administration's Federal-aid Highway Program Manual (FHPM) 6-6-3-2 and Chapter 105, Title 19* of State Administrative Rules entitled Accommodation and Installation of Utilities on State Highways and Federal-aid County Highways; and of all laws, ordinances and rules and regulations having the effect of law.
3. To install, provide, and maintain all traffic control devices in accordance with the Administrative Rules Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways as adopted by the Director of Transportation, and the FHWA Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI, Traffic Controls for Highway Construction and Maintenance Operations, dated 1984.
4. To safeguard and facilitate the movement of vehicular and pedestrian traffic in accordance with the Administrative Rules Governing the Design, Construction and Maintenance of Public Streets and Highways as adopted by the Director of Transportation; to place signs or barricades informing motorists or pedestrians of work to be done in a safe manner and to remove same upon completion of work.

Workmanship: Responsibility & Warranty

5. To diligently prosecute the work to completion, in a neat and workmanlike manner, within the dates set forth in said permit.
6. To undertake, for a period of one (1) year after the satisfactory completion of such work, any necessary repairs to highway facilities disturbed by the work performed under said permit; or to pay the actual cost of such repairs made by the Department of Transportation.
7. To remove, relocate, replace, reconstruct, or adjust, at the applicant's expense, any work or facility constructed or placed by the applicant on or under the right of way of a state highway whenever and as often as may be required by the Director or the Director's authorized representative in order to undertake the construction, reconstruction, or maintenance of said highway.
8. To keep all facilities installed under said permit in good repair so that the presence of such facility on or under the highway will in no way impair the use or usefulness of any highway improvement which may now exist or hereinafter come into existence.
9. To make all repairs in such manner as may be required by Chapter 264, Hawaii Revised Statutes.

State Indemnity

10. To protect, defend, indemnify and save harmless, the State and its agents and representatives, against any claim, liability, suit, or action of every manner and description, for any injury to or death of persons or for property damage, whenever such injury, death, or damage shall be inflicted or caused by the applicant, the applicant's agents, contractors, or representatives in connection with the work covered by said permit.
11. To procure, at the applicant's own expense, and keep in force at all times when work permitted under said permit is being done, a policy or policies of public liability and property damage insurance, naming the State as an additional insured, covering the entire work to be done under said permit and for at least the minimum coverages set forth on the reverse side hereof, the State is to be given 30 days written notice of cancellation of said insurance.
12. To supply evidence satisfactory to the State that the required insurance has been procured and is in force prior to commencing the work under said permit.
13. If the death or injury to any person, or the loss or damage to any property, is caused by the United States Government in the course of its use of the property, the liability, if any, of the U.S. Government thereof shall be determined in accordance with the applicable provisions of the Federal Tort Claims Act (62 Stat. 869,982;28 USC 2671-2680).

Nondiscrimination Covenants

14. No person on the grounds of race, color, religion, sex, or national origin shall be excluded from participating in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
15. In the construction of any improvements on, over, or under such land and the furnishing of services thereon, no person on the grounds of race, color, religion, sex, or national origin shall be excluded from participating in, denied the benefits of, or otherwise be subjected to discrimination.
16. The applicant shall use the premises in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulation may be amended.

Agreements

17. To surrender the permit herein applied for and surrender all rights thereunder whenever notified to do so because of a default in any of these conditions agreed above.
18. To keep a copy of said permit in the hands of the working crew for exhibit upon request of any authorized representative of the Department of Transportation.
19. Permit fee is not refundable under any condition.

STORM WATER POST-CONSTRUCTION BMP DESIGN CHECKLIST FOR MS4 PERMIT AREAS		<input type="checkbox"/> New Submittal <input type="checkbox"/> Resubmittal
Project Information		
Project Name: _____ Project Number: _____ Island: _____ Project Route Name(s): _____ Milepost Begin/End: _____ Watershed Location(s): _____ Disturbance Area (acres): _____ New Impervious Area (acres): _____		
Applicant Name: _____ Company: _____ Email: _____ Telephone: _____		
Applicability		
1. Check "Yes" if project entirely consists of one or more of the following activities or conditions below. The project may be exempt from Post-Construction BMPs if it includes these exempted activities ONLY . Otherwise, if the project includes other types of improvements not listed below, continue to Step 2.	Yes	
a. Project does not result in storm water discharge into the MS4 or state waters	<input type="checkbox"/>	
b. Operations and Maintenance activities	<input type="checkbox"/>	
b.1 Structural repairs	<input type="checkbox"/>	
b.2 Baseyard maintenance and repairs	<input type="checkbox"/>	
b.3 Installation or replacement of pavement striping and pavement markers	<input type="checkbox"/>	
b.4 Other _____	<input type="checkbox"/>	
c. Pavement Preservation Treatment which does not expose or disturb underlying aggregate or subgrade layer	<input type="checkbox"/>	
d. Guardrail and Underground Utility Projects	<input type="checkbox"/>	
d.1 Guardrail installation or replacement	<input type="checkbox"/>	
d.2 Utility installation or relocation	<input type="checkbox"/>	
e. Water Quality Improvements or Preservation	<input type="checkbox"/>	
e.1 Shoreline protection	<input type="checkbox"/>	
e.2 Landscaping	<input type="checkbox"/>	
e.3 Culvert rehabilitation or replacement	<input type="checkbox"/>	
e.4 Installation of Post-Construction BMPs	<input type="checkbox"/>	
e.5 Erosion and sediment control	<input type="checkbox"/>	
e.6 Rockfall mitigation	<input type="checkbox"/>	
f. Pedestrian walkways or bicycle paths	<input type="checkbox"/>	
g. Bridges or roads constructed above or below existing impervious areas	<input type="checkbox"/>	

h. "Minor" Disturbance Project	Yes
h.1 Signage	<input type="checkbox"/>
h.2 ADA ramps	<input type="checkbox"/>
i. Emergency project	<input type="checkbox"/>
j. Temporary project	<input type="checkbox"/>
If project ONLY consists of exempt activities, go to Step 7. Otherwise, continue to Step 2.	
<p>2. Is project a private construction project?</p> <p><input type="checkbox"/> Yes; project is outside the DOT-HWYS right-of-way. Post-construction BMPs must comply with the applicable county storm water requirements. Identify any county-required documentation below. Continue to Step 7.</p> <p>_____</p> <p><input type="checkbox"/> Yes; project is within DOT-HWYS right-of-way. Post-construction BMPs may be required if project has the potential to discharge storm water to the DOT-HWYS right-of-way. Continue to Step 3.</p> <p><input type="checkbox"/> No; Continue to Step 3.</p>	
<p>3. Does project result in one (1) acre or more of Disturbed Area?</p> <p><input type="checkbox"/> Yes; LID BMPs are required. Continue to Step 6.</p> <p><input type="checkbox"/> No; continue to Step 4.</p>	
<p>4. Is project a Priority Project with a high potential for pollutant discharge?</p> <p><input type="checkbox"/> Yes; Post-Construction BMPs may be required at the discretion of DOT-HWYS regardless of the amount of Disturbed Area. Continue to Step 6.</p> <p><input type="checkbox"/> No; continue to Step 5.</p>	
<p>5. Is project located within or drain to sensitive receiving waters?</p> <p><input type="checkbox"/> Yes; Post-Construction BMPs may be required at the discretion of DOT-HWYS regardless of the amount of Disturbed Area. Continue to Step 6.</p> <p><input type="checkbox"/> No; post-construction BMPs are not required. Continue to Step 7.</p>	
<p>6. Does project treat the full Required Treatment Area?</p> <p><input type="checkbox"/> Yes; continue to Step 7.</p> <p><input type="checkbox"/> No; acceptance of water quality treatment to be determined pending DOT-HWYS review. Submit a Variance Request Form. Continue to Step 7.</p>	
<p>7. Additional project information (optional):</p> <p>Signature: _____ Date: _____</p>	
<p>For Department Use Only:</p> <p>Does project adequately address post-construction BMP requirements?</p> <p><input type="checkbox"/> Yes; the project treats the full Required Treatment Areas or is designed to the MEP.</p> <p><input type="checkbox"/> No; the project is not designed to the MEP. Provide additional post-construction BMPs.</p> <p><input type="checkbox"/> No; the project will result in a debit for water quality treatment and Alternative Compliance will be required for the remainder of the Required Treatment Area.</p> <p>Reviewed By: _____ Reviewed Date: _____</p>	

STORM WATER POST-CONSTRUCTION BMP DESIGN CHECKLIST FOR NON-MS4 PERMIT AREAS		<input type="checkbox"/> New Submittal <input type="checkbox"/> Resubmittal
Project Information		
Project Name: _____ Project Number: _____ Island: _____ Project Route Name(s): _____ Milepost Begin/End: _____ Watershed Location(s): _____ Disturbance Area (acres): _____ New Impervious Area (acres): _____		
Applicant Name: _____ Company: _____ Email: _____ Telephone: _____		
Applicability		
1. Check "Yes" if project entirely consists of one or more of the following activities or conditions below. The project may be exempt from Post-Construction BMPs if it includes these exempted activities ONLY . Otherwise, if the project includes other types of improvements not listed below, continue to Step 2.	Yes	
a. Project does not result in storm water discharge into the MS4 or state waters	<input type="checkbox"/>	
b. Operations and Maintenance activities	<input type="checkbox"/>	
b.1 Structural repairs	<input type="checkbox"/>	
b.2 Baseyard maintenance and repairs	<input type="checkbox"/>	
b.3 Installation or replacement of pavement striping and pavement markers	<input type="checkbox"/>	
b.4 Other _____	<input type="checkbox"/>	
c. Pavement Preservation Treatment which does not expose or disturb underlying aggregate or subgrade layer	<input type="checkbox"/>	
d. Guardrail and Underground Utility Projects	<input type="checkbox"/>	
d.1 Guardrail installation or replacement	<input type="checkbox"/>	
d.2 Utility installation or relocation	<input type="checkbox"/>	
e. Water Quality Improvements or Preservation	<input type="checkbox"/>	
e.1 Shoreline protection	<input type="checkbox"/>	
e.2 Landscaping	<input type="checkbox"/>	
e.3 Culvert rehabilitation or replacement	<input type="checkbox"/>	
e.4 Installation of Post-Construction BMPs	<input type="checkbox"/>	
e.5 Erosion and sediment control	<input type="checkbox"/>	
e.6 Rockfall mitigation	<input type="checkbox"/>	
f. Pedestrian walkways or bicycle paths	<input type="checkbox"/>	
g. Bridges or roads constructed above or below existing impervious areas	<input type="checkbox"/>	

THIS CHECKLIST IS APPLICABLE TO ALL PROJECTS INITIATED ON OR AFTER JULY 1, 2022

h. "Minor" Disturbance Project	Yes
h.1 Signage	<input type="checkbox"/>
h.2 ADA ramps	<input type="checkbox"/>
i. Emergency project	<input type="checkbox"/>
j. Temporary project	<input type="checkbox"/>
If project ONLY consists of exempt activities, go to Step 7. Otherwise, continue to Step 2.	
<p>2. Is project a private construction project?</p> <p><input type="checkbox"/> Yes; project results in one (1) acre or more of new impervious surface within DOT-HWYS right-of-way. Post-construction BMPs are required. Continue to Step 6.</p> <p><input type="checkbox"/> Yes; project is outside the DOT-HWYS right-of-way. Post-construction BMPs are not required although highly encouraged. Continue to Step 7.</p> <p><input type="checkbox"/> No; continue to Step 3.</p>	
<p>3. Does project result in one (1) acre or more of new impervious surface?</p> <p><input type="checkbox"/> Yes; LID BMPs are required. Continue to Step 6.</p> <p><input type="checkbox"/> No; continue to Step 4.</p>	
<p>4. Is project a Priority Project with a high potential for pollutant discharge?</p> <p><input type="checkbox"/> Yes; Post-Construction BMPs may be required at the discretion of DOT-HWYS regardless of the amount of new impervious surface. Continue to Step 6.</p> <p><input type="checkbox"/> No; continue to Step 5.</p>	
<p>5. Is project located within or drain to sensitive receiving waters?</p> <p><input type="checkbox"/> Yes; Post-Construction BMPs may be required at the discretion of DOT-HWYS regardless of the amount of new impervious surface. Continue to Step 6.</p> <p><input type="checkbox"/> No; post-construction BMPs are not required. Continue to Step 7.</p>	
<p>6. Does project treat the full Required Treatment Area?</p> <p><input type="checkbox"/> Yes; continue to Step 7.</p> <p><input type="checkbox"/> No; acceptance of water quality treatment to be determined pending DOT-HWYS review. Submit a Variance Request Form. Continue to Step 7.</p>	
<p>7. Additional project information (optional):</p> <p>Signature: _____ Date: _____</p>	
<p><u>For Department Use Only:</u></p> <p>Does project adequately address post-construction BMP requirements?</p> <p><input type="checkbox"/> Yes; the project treats the full Required Treatment Areas or is designed to the MEP.</p> <p><input type="checkbox"/> No; the project is not designed to the MEP. Provide additional water quality treatment.</p> <p>Reviewed By: _____ Reviewed Date: _____</p>	

STORM WATER POST-CONSTRUCTION BMP VARIANCE REQUEST FORM	
Project Information	
Project Name: _____	
Project Number: _____	Island: _____
Project Route Name(s): _____	Milepost Begin/End: _____
Watershed Location(s): _____	
Required Treatment Area (acres): _____	Provided Treatment Area (acres): _____
Applicant Name: _____ Company: _____	
Email: _____ Telephone: _____	
Justification for Project Water Quality Debit	
1. Check "Yes" for any applicable project conditions below which will incur a debit(s).	
a. Where Low Impact Development (LID) BMPs are required, the designer shall implement LID BMPs to the Maximum Extent Practicable. Indicate any site constraints that will result in providing less than the required water quality treatment. Refer to Section 5.2 of the manual for further descriptions of the various types of constraints.	Yes
a.1 Hydrogeological Constraint	<input type="checkbox"/>
a.2 Physical Constraint	<input type="checkbox"/>
a.3 Operational Constraint	<input type="checkbox"/>
a.4 Environmental/Cultural Constraint	<input type="checkbox"/>
a.5 Other Constraint Type _____	<input type="checkbox"/>
b. Project results in an increase in impervious area	<input type="checkbox"/>
c. Project will remove an existing post-construction BMP or reduce the treatment effectiveness of an existing post-construction BMP (reduction in associated WQV or WQFR)	<input type="checkbox"/>
d. Other _____	<input type="checkbox"/>

2. Provide detailed information regarding the resulting project debits and indicate why full treatment cannot be met by using post-construction BMPs.

3. Indicate other information that will be provided to evaluate the justification of this variance request.

- | | | |
|-------------------------------|------------------------------|-----------------------------|
| a. Design drawings or details | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| b. Calculations | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| c. Photos | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| d. Other | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

4. Applicant signature and date

Signature: _____ Date: _____

For Department Use Only:

Variance Approved: Denied:

Notes:

Reviewed By: _____ Reviewed Date: _____

STORM WATER CONTROL DESIGN CHECKLIST TOOL	
Project Name: _____	
Project Number: _____ Project Route/Milepost: _____	
Advertise Date: _____	
Exemptions (check all that apply)	
<input type="checkbox"/>	Projects that do not generate 1 acre or more of new permanent impervious and are not a retail gasoline outlet, auto repair shop, restaurant, parking lot with at least 10,000 square feet of total impervious surface area
<input type="checkbox"/>	Project returns the area to pre-development runoff conditions.
<input type="checkbox"/>	Project is a utility project (check applicable type) <input type="checkbox"/> Pipeline <input type="checkbox"/> Conduit <input type="checkbox"/> Traffic Sign/Signal
<input type="checkbox"/>	Projects that are not continuous or involve several locations which may collectively generate 1 acre or more of new permanent impervious surface.
<input type="checkbox"/>	Projects that do not discharge runoff into any waters of the United States.
If none of the above is checked, the project must provide water quality controls	
Water Quality Control:	
Water quality volume required: _____ cubic feet	
Water quality volume provided by LID: _____ cubic feet	
Type of BMP used: _____	
* In the event that water quality volume cannot be treated via LID alone for safety concerns, hydrogeological constraints, physical constraints, or operational constraints alternate approved treatment BMPs will be used	
** For new gasoline outlets, auto repair shops, restaurants, and parking lots, all with at least 10,000 square feet of total impervious surface area, consider LID and apply Source Control BMPs	
Water Quality Control: (Where applicable)	
Existing Site Runoff:	
10-year: _____	cubic feet per second
25-year: _____	cubic feet per second
50-year: _____	cubic feet per second
100-year: _____	cubic feet per second
Proposed Site Runoff:	
10-year: _____	cubic feet per second
25-year: _____	cubic feet per second
50-year: _____	cubic feet per second
100-year: _____	cubic feet per second
Type of Treatment used: _____	
Description: _____	
Signatory:	