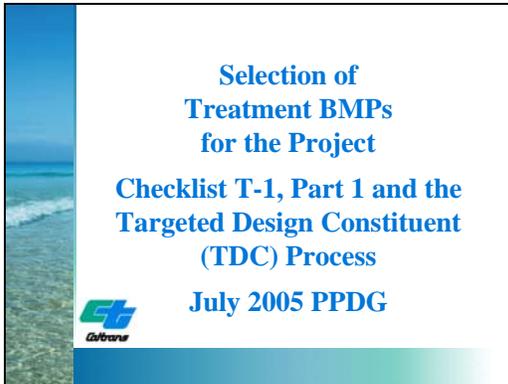
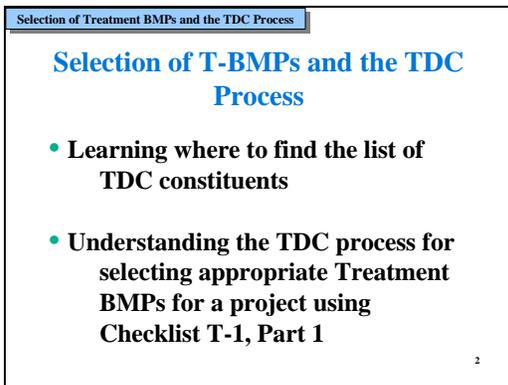


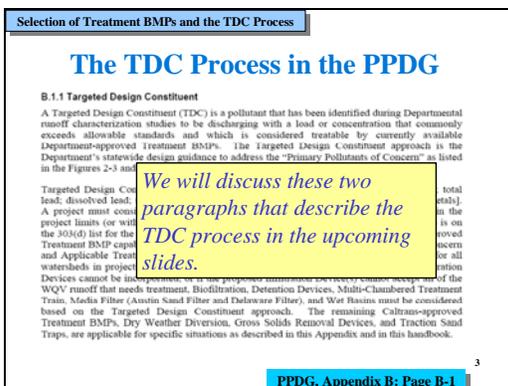
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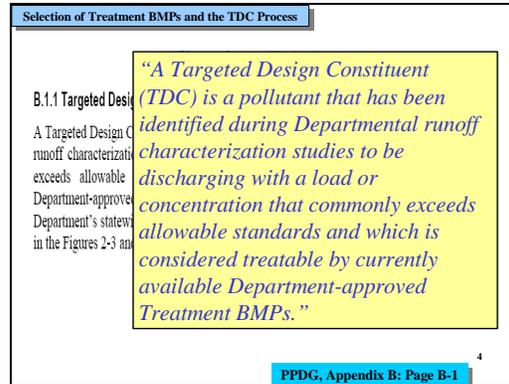
**Slide 1:** The TDC process (“Targeted Design Constituent”) will help the PE determine the most appropriate Treatment BMP for the project. The Targeted Design Constituent approach is the Department’s statewide design guidance to address the “Primary Pollutants of Concern” as listed in the Figures 2-3 and 2-3(D7). You will see that the TDC process is incorporated into Checklist T-1, Part 1, and is described on Page B-1, PPDG Appendix B.



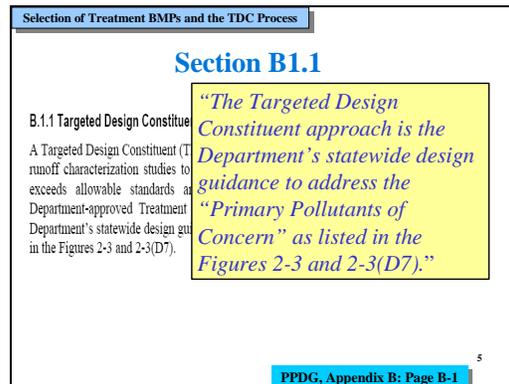
**Slide 2:** Various aspects of the TDCs are discussed in the upcoming slides.



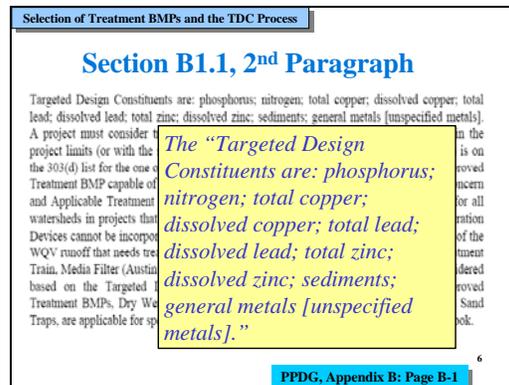
**Slide 3:** We will begin by referring to PPDG Appendix B, page B-1.



**Slide 4:** Refer to text in the highlighted box.



**Slide 5:** Refer to text in the highlighted box.



**Slide 6:** Refer to text in the highlighted box.



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**Treatment BMPs Checklist T-1, Part 1**

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District/Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

1. Dry Weather Flow Diversion

(a) Are diversion flows generated by Caltrans anticipated to be consistent?  Yes  No

**Question 2 relates to the use of Gross Solids Removal Device Treatment BMPs**

Diversion, complete and attach Part 3 of this checklist

(b) Is the receiving water on the 303(d) list for litter/trash or has a TMDL been issued for litter/trash?  Yes  No

If Yes, consider Gross Solids Removal Devices (GSRDs), complete and attach Part 6 of this checklist. Note: Biofiltration Systems, Infiltration Basins, Detention Devices, Media Filters, HCTTs, and Wet Basins also can capture litter – consult with District/Regional NPDES if these devices should be considered to meet litter/trash TMDL.

13

PPDG Checklist T-1, Part 1: Page E-28

**Slide 13:** Refer to text in the highlighted box.

**Treatment BMPs Checklist T-1, Part 1**

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District/Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

5. (a) Does the project discharge to any 303(d) listed water body?  Yes  No  
 If No, go to Question 17, General Purpose Pollutant Removal

(b) If Yes, is the identified pollutant(s) considered a Targeted Design Constituent (TDC) (check all that apply):  
 \_\_\_ phosphorus \_\_\_ nitrogen \_\_\_ total copper \_\_\_ dissolved copper  
 \_\_\_ total lead \_\_\_ dissolved lead \_\_\_ total zinc \_\_\_ dissolved zinc  
 \_\_\_ sediments \_\_\_ general metals [unspecified metals]

(c) If only one TDC is checked above, continue to Question 6.  Complete

(d) If more than one TDC is checked, contact your District/Regional NPDES Coordinator to determine priority before continuing with this checklist.  Complete

16

PPDG Checklist T-1, Part 1: Page E-29

**Slide 16:** There are several parts to Question 5, and we will discuss them over the next few slides.

**Treatment BMPs Checklist T-1, Part 1**

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District/Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

3. Is project located in an area (e.g., mountain regions) where traction sand is applied more than twice a year?  Yes  No

If Yes, consider **Traction Sand Traps**, complete and attach Part 7 of this checklist.

**Question 3 relates to the use of Traction Sand Trap Treatment BMPs**

(b) Would infiltration pose a threat to local groundwater quality as determined by the District/Regional NPDES Storm Water Coordinator?  Yes  No

If the answer to either part of Question 4 is Yes, then Infiltration Devices are infeasible and the consideration of Infiltration Devices should not be made when completing Questions 5 through 17.

14

PPDG Checklist T-1, Part 1: Page E-28

**Slide 14:** Question 3 also concerns one of the “remaining Caltrans-approved Treatment BMPs,” in this case Traction Sand Traps.

**Treatment BMPs Checklist T-1, Part 1**

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District/Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

5. (a) Does the project discharge to any 303(d) listed water body?  Yes  No  
 If No, go to Question 17, General Purpose Pollutant Removal

**“Question 5a: (a) Does the project discharge to any 303(d) listed water body? If No, go to Question 17, General Purpose Pollutant Removal.”**

(d) If more than one TDC is checked, contact your District/Regional NPDES Coordinator to determine priority before continuing with this checklist.  Complete

17

PPDG Checklist T-1, Part 1: Page E-29

**Slide 17:** The TDC process is for 303(d) listed water bodies. If discharge does not go to either a 303(d) listed water body nor to a TMDL listed water body, then we will use General Purpose objectives, on Question 17.

This question is being revised – the intent was also to go through Question 6; a draft version is shown on the next slide.

**Treatment BMPs Checklist T-1, Part 1**

**Question 4 relates to regulations that would prohibit infiltration of runoff; remember that Infiltration Device Treatment BMPs are always the 1st choice when treatment must be considered for the project.**

checklist.

4. (a) Are there local influent limits for infiltration or Basin Plan restrictions or other local agency prohibitions that would restrict the use of the infiltration devices?  Yes  No

(b) Would infiltration pose a threat to local groundwater quality as determined by the District/Regional NPDES Storm Water Coordinator?  Yes  No

If the answer to either part of Question 4 is Yes, then Infiltration Devices are infeasible and the consideration of Infiltration Devices should not be made when completing Questions 5 through 17.

15

PPDG Checklist T-1, Part 1: Page E-28

**Slide 15:** Question 4 concerns the ability to infiltrate runoff from the project. Recall that Infiltration Devices are the 1st choice for the Treatment BMP to be placed within those projects that are required to consider treatment of runoff.

**Treatment BMPs Checklist T-1, Part 1**

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District/Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

5. (a) Does the project discharge to any 303(d) listed water body?  Yes  No  
 If No, go to Question 17, General Purpose Pollutant Removal

**Upcoming change to the PPDG, Question 5(a) for a ‘No’ response:  
 “If No, go to Question 6, then to Question 17 if directed.”**

(d) If more than one TDC is checked, contact your District/Regional NPDES Coordinator to determine priority before continuing with this checklist.  Complete

18

PPDG Checklist T-1, Part 1: Page E-29

**Slide 18:** The point here is: always go to Question 6 after completing Question 5.

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Selection of Treatment BMPs and the TDC Process

Treatment BMPs  
 Checklist T-1, Part 1

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District-Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

5. (a) Does the project discharge to any 303(d) listed water body?  Yes  No  
 If No, go to Question 17, General Purpose Pollutant Removal

(b) If Yes, is the identified pollutant(s) considered a Targeted Design Constituent (TDC) (check all that apply):  
 \_\_\_ phosphorus \_\_\_ nitrogen \_\_\_ total copper \_\_\_ dissolved copper  
 \_\_\_ total lead \_\_\_ dissolved lead \_\_\_ total zinc \_\_\_ dissolved zinc  
 \_\_\_ sediments \_\_\_ general metals [unspecified metals]

**Question 5(a): If Yes, go to Question 5(b)**

Coordinator to determine priority before continuing with this checklist.  Complete

PPDG Checklist T-1, Part 1: Page E-29

Slide 19: Refer to text in the highlighted box.

Selection of Treatment BMPs and the TDC Process

Treatment BMPs  
 Checklist T-1, Part 1

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District-Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

5. (a) Does the project discharge to any 303(d) listed water body?  Yes  No  
 If No, go to Question 17, General Purpose Pollutant Removal

(b) If Yes, is the identified pollutant(s) considered a Targeted Design Constituent (TDC) (check all that apply):  
 \_\_\_ phosphorus \_\_\_ nitrogen \_\_\_ total copper \_\_\_ dissolved copper  
 \_\_\_ total lead \_\_\_ dissolved lead \_\_\_ total zinc \_\_\_ dissolved zinc  
 \_\_\_ sediments \_\_\_ general metals [unspecified metals]

(c) If only one TDC is checked above, continue to Question 6.  Complete

(d) If more than one TDC is checked, contact your District/Regional NPDES Coordinator to determine priority before continuing with this checklist.  Complete

**Question 5(d): "If more than one TDC is checked, contact your District/Regional NPDES Coordinator to determine priority before continuing with this checklist."**

PPDG Checklist T-1, Part 1: Page E-29

Slide 22: Refer to text in the highlighted box.

Selection of Treatment BMPs and the TDC Process

Treatment BMPs  
 Checklist T-1, Part 1

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District-Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

5. (a) Does the project discharge to any 303(d) listed water body?  Yes  No  
 If No, go to Question 17, General Purpose Pollutant Removal

(b) If Yes, is the identified pollutant(s) considered a Targeted Design Constituent (TDC) (check all that apply):  
 \_\_\_ phosphorus \_\_\_ nitrogen \_\_\_ total copper \_\_\_ dissolved copper  
 \_\_\_ total lead \_\_\_ dissolved lead \_\_\_ total zinc \_\_\_ dissolved zinc  
 \_\_\_ sediments \_\_\_ general metals [unspecified metals]

(c) If only one TDC is checked above, continue to Question 6.  Complete

(d) If more than one TDC is checked, contact your District/Regional NPDES Coordinator to determine priority before continuing with this checklist.  Complete

**Question 5(b): Check all that apply, where the "Targeted Design Constituents are: phosphorus; nitrogen; total copper; dissolved copper; total lead; dissolved lead; total zinc; dissolved zinc; sediments; general metals [unspecified metals]."**

PPDG Checklist T-1, Part 1: Page E-29

Slide 20: These are the same constituents as noted in PPDG Appendix B1.1.

Selection of Treatment BMPs and the TDC Process

Treatment BMPs  
 Checklist T-1, Part 1

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District-Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

5. (a) Does the project discharge to any 303(d) listed water body?  Yes  No  
 If No, go to Question 17, General Purpose Pollutant Removal

(b) If Yes, is the identified pollutant(s) considered a Targeted Design Constituent (TDC) (check all that apply):  
 \_\_\_ phosphorus \_\_\_ nitrogen \_\_\_ total copper \_\_\_ dissolved copper  
 \_\_\_ total lead \_\_\_ dissolved lead \_\_\_ total zinc \_\_\_ dissolved zinc  
 \_\_\_ sediments \_\_\_ general metals [unspecified metals]

(c) If only one TDC is checked above, continue to Question 6.  Complete

(d) If more than one TDC is checked, contact your District/Regional NPDES Coordinator to determine priority before continuing with this checklist.  Complete

**Question 5(d): Since a constituent on a 303(d) list may be shown as High, Medium, or Low priority – our goal is to treat the higher ranking constituents; District/Regional NPDES will help with this.**

PPDG Checklist T-1, Part 1: Page E-29

Slide 23: Since constituents on a 303(d) list are categorized as having a High, Medium, or Low priority – the District NPDES Coordinator will help determine which TDC constituent to address in the event of multiple listings.

Selection of Treatment BMPs and the TDC Process

Treatment BMPs  
 Checklist T-1, Part 1

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District-Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

5. (a) Does the project discharge to any 303(d) listed water body?  Yes  No  
 If No, go to Question 17, General Purpose Pollutant Removal

(b) If Yes, is the identified pollutant(s) considered a Targeted Design Constituent (TDC) (check all that apply):  
 \_\_\_ phosphorus \_\_\_ nitrogen \_\_\_ total copper \_\_\_ dissolved copper  
 \_\_\_ total lead \_\_\_ dissolved lead \_\_\_ total zinc \_\_\_ dissolved zinc  
 \_\_\_ sediments \_\_\_ general metals [unspecified metals]

(c) If only one TDC is checked above, continue to Question 6.  Complete

(d) If more than one TDC is checked, contact your District/Regional NPDES Coordinator to determine priority before continuing with this checklist.  Complete

**Question 5(c) "If only one TDC is checked above, continue to Question 6."**

PPDG Checklist T-1, Part 1: Page E-29

Slide 21: Question 5(c) and 5(d) are related; both concerning the number of TDC constituents in the 303(d) listed water body.

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**Selection of Treatment BMPs and the TDC Process**

**Treatment BMPs  
Checklist T-1, Part 1**

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District-Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

6. Consult with the District/Regional Storm Water Coordinator to determine whether Treatment BMP selection will be affected by any existing or future TMDL requirements.  Complete

*“TMDLs are pollutant load allocations for all point sources and nonpoint sources, and are intended to achieve a pollutant reduction goal along with a safety factor. TMDLs are developed in response to identification of pollutants as impairing a specific body of water identified in the 303(d) list.”*

PPDG Checklist T-1, Part 1: Page E-29

**Slide 24:** Question 6 requires the PE to consult District NPDES about TMDLs; if a TMDL will soon be placed, Treatment BMPs or other requirements may be imposed on the project if the Department is deemed to be a contributor to the pollutant for that TMDL.

Definition of TMDL: A TMDL (Total Maximum Daily Load) are pollutant load allocations for all point sources and non-point sources, and are intended to achieve a pollutant reduction goal along with a safety factor. TMDLs are developed in response to identification of pollutants as impairing a specific body of water identified in the 303(d) list.

**Selection of Treatment BMPs and the TDC Process**

**Treatment BMPs  
Checklist T-1, Part 1**

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District-Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

6. Consult with the District/Regional Storm Water Coordinator to determine whether Treatment BMP selection will be affected by any existing or future TMDL requirements.  Complete

*Expectation of a future “TMDL” may affect selection of the Treatment BMP to be placed on the project, if the Department is deemed to be a contributor to the pollutant that the TMDL would address; consult with District/Regional NPDES.*

PPDG Checklist T-1, Part 1: Page E-29

**Slide 25:** Refer to text in the highlighted box.

**Selection of Treatment BMPs and the TDC Process**

**Treatment BMPs  
Checklist T-1, Part 1**

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District-Co-Route: \_\_\_\_\_  
 KP (PM): \_\_\_\_\_ EA: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

6. Consult with the District/Regional Storm Water Coordinator to determine whether Treatment BMP selection will be affected by any existing or future TMDL requirements.  Complete

*Upcoming revision to the PPDG, Question 6: “Continue to Question 7 on this checklist, as directed by District/Regional Storm Water Coordinator.”*

PPDG Checklist T-1, Part 1: Page E-29

**Slide 26:** Refer to text in the highlighted box.

**Selection of Treatment BMPs and the TDC Process**

**Example: Treatment BMP  
Selection Process for TSS**

15. Is sediment (total suspended solids [TSS]) the TDC? If Yes for TSS, consider:

- Infiltration Devices
- Austin Sand Filter
- Delaware Filter
- Wet Basin
- Detention Device
- Biofiltration Strip
- MCTT
- Biofiltration Swale

*Question 15 will be used as an example Questions 7 through 17 on Checklist T-1, Part 1.*

27  
PPDG Checklist T-1, Part 1: Page E-31

**Slide 27:** Let’s go through the sequence for a project having a 303(d) listing for a single pollutant, Sediment, and no TMDLs. Question 5(a) would be “Yes”, Question 5(b) would be checked for “sediments” Question 5(c) would be: continue to Question 6, and under the discussion required by Question 6 would be direction from the District NPDES Coordinator to continue with the checklist. The PE would then check “No” for Questions 7 through 14, with be Question 15 being a “Yes”; Question 15 shows the approved Treatment BMPs in order of preference based on load reduction (performance) for Sediment, using both initial construction and later lifetime costs for the device, excluding right of way.

**Selection of Treatment BMPs and the TDC Process**

**Treatment BMP Selection  
Process**

15. Is sediment (total suspended solids [TSS]) the TDC? If Yes for TSS, consider:

- Infiltration Devices
- Austin Sand Filter
- Delaware Filter
- Wet Basin
- Detention Device
- Biofiltration Strip
- MCTT
- Biofiltration Swale

*Note the heavy lines under Infiltration Devices, Wet Basin, and MCTT.*

28  
PPDG Checklist T-1, Part 1: Page E-31

**Slide 28:** Note that a three heavy lines separate the Treatment BMPs into four groups; the first group is Infiltration Devices; then the group with ASF, DF, and Wet Basin; then the group with Detention Devices, Biofiltration Strips, and MCTT; then the final group, consisting of the single entry of Biofiltration Swale.

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Selection of Treatment BMPs and the TDC Process

### Treatment BMP Selection Process

15. Is sediment (total suspended solids [TSS]) the TDC? If Yes for TSS, consider:

- Infiltration Devices
- Austin Sand Filter
- Delaware Filter
- Wet Basin
- Detention Device
- Biofiltration Strip
- MCTT
- Biofiltration Swale

*These lines divide the T-BMPs on this list into four groups; each group produces approximately equal treatment for this constituent.*

PPDG Checklist T-1, Part 1: Page E-31

**Slide 29:** Within each group the Treatment BMPs have approximately equal effectiveness, and are then ‘sublisted’ in order of increasing cost as you descend on the list. However, within each group any of the Treatment BMPs may be selected for placement if meeting site conditions.

there is no other device that has the combination of effectiveness and lifetime costs.

Selection of Treatment BMPs and the TDC Process

### Treatment BMP Selection Process

15. Is sediment (total suspended solids [TSS]) the TDC? If Yes for TSS, consider:

- Infiltration Devices
- Austin Sand Filter
- Delaware Filter
- Wet Basin
- Detention Device
- Biofiltration Strip
- MCTT
- Biofiltration Swale

*This group of three represents the 2<sup>nd</sup> choice for T-BMPs for this constituent; consider if unable to place Infiltration Devices.*

PPDG Checklist T-1, Part 1: Page E-31

**Slide 32:** However, if selection of Infiltration Devices is not possible; then next group of devices, three in this case, Austin Sand Filters, Delaware Filters (both of which are Media Filters), and Wet Basins, all have about the same effectiveness in treating for sediment, and any could be placed. However, as is the convention used on this checklist, the listing shows devices in order of increasing cost per unit of water treated as we descend the list, and therefore in this case the ASF would be selected if at all possible.

Selection of Treatment BMPs and the TDC Process

### Treatment BMP Selection Process

15. Is sediment (total suspended solids [TSS]) the TDC? If Yes for TSS, consider:

- 1<sup>st</sup>  Infiltration Devices
- 2<sup>nd</sup>  Austin Sand Filter
- Delaware Filter
- Wet Basin
- 3<sup>rd</sup>  Detention Device
- Biofiltration Strip
- 4<sup>th</sup>  MCTT
- Biofiltration Swale

*Treatment is listed as most effective (1<sup>st</sup>) to least effective (last group).*

PPDG Checklist T-1, Part 1: Page E-31

**Slide 30:** Realize also that for each device that is initially selected using this process; the PE must then complete another checklist must be completed to verify that Feasibility and Design requirements can be met and therefore that the device can be placed.

Selection of Treatment BMPs and the TDC Process

### Treatment BMP Selection Process

15. Is sediment (total suspended solids [TSS]) the TDC? If Yes for TSS, consider:

- Infiltration Devices
- \$  Austin Sand Filter
- \$  Delaware Filter
- \$  Wet Basin
- Detention Device
- Biofiltration Strip
- MCTT
- Biofiltration Swale

*Within any group, life-cycle costs are increasing downwards (shown schematically).*

PPDG Checklist T-1, Part 1: Page E-31

**Slide 33:** Refer to text in the highlighted box.

Selection of Treatment BMPs and the TDC Process

### Treatment BMP Selection Process

15. Is sediment (total suspended solids [TSS]) the TDC? If Yes for TSS, consider:

- 1<sup>st</sup>  Infiltration Devices
- Austin Sand Filter
- Delaware Filter
- Wet Basin
- Detention Device
- Biofiltration Strip
- MCTT
- Biofiltration Swale

*1<sup>st</sup> choice for T-BMP for this constituent (as a ‘group’ of one). Note: Infiltration Devices are always the 1<sup>st</sup> choice for treatment for projects considering T-BMPs.*

PPDG Checklist T-1, Part 1: Page E-31

**Slide 31:** Infiltration devices are always the first choice for treatment, given that it is considered to be 100% effective. Note that it is the only device that is above the first heavy line, meaning

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**Treatment BMP Selection Process**

15. Is sediment (total suspended solids [TSS]) the TDC? If Yes for TSS, consider:

- \_\_\_ Infiltration Devices
- \_\_\_ Austin Sand Filter
- \_\_\_ Delaware Filter
- \_\_\_ Wet Basin
- \_\_\_ Detention Device
- \_\_\_ Biofiltration Strip
- \_\_\_ MCTT
- \_\_\_ Biofiltration Swale

*3<sup>rd</sup> choice for the T-BMPs for this constituent; go to a lower group if unable to use T-BMPs from a higher group.*

34

PPDG Checklist T-1, Part 1: Page E-31

**Slide 34:** If none of the 2nd group could be sited, for whatever reason, we would go the next group, and consider these three devices: Detention Devices, Biofiltration Strips, and MCTT. Again, within this grouping of approximately equally efficient devices, the least costly is shown first, and the most costly is shown last.

**Treatment BMP Selection Process**

15. Is sediment (total suspended solids [TSS]) the TDC? If Yes for TSS, consider:

- \_\_\_ Infiltration Devices
- \_\_\_ Austin Sand Filter
- \_\_\_ Delaware Filter
- \_\_\_ Wet Basin
- \_\_\_ Detention Device
- \_\_\_ Biofiltration Strip
- \_\_\_ MCTT
- \_\_\_ Biofiltration Swale

*Last choice from the four groups for the T-BMP for this constituent.*

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PPDG Checklist T-1, Part 1: Page E-31

**Slide 35:** The last group has a single entry, the Caltrans-approved Treatment BMP Biofiltration Swales.

Realize also that for each device that is initially selected using this process; the PE must then complete another checklist must be completed to verify that Feasibility and Design requirements can be met and therefore that the device can be placed.

**Treatment BMPs**

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_  
 KP (PM) \_\_\_\_\_ District/Co-Route: \_\_\_\_\_  
 RWQCB: \_\_\_\_\_ EA \_\_\_\_\_

*Biofiltration is always encouraged, as indicated by this Question.*

18. Biofiltration

(a) Are site conditions and climate favorable to allow suitable vegetation to be established?  Yes  No

(b) Have Biofiltration strips and swales been considered to the extent practicable? Note: Biofiltration BMPs should be considered for all projects, even if other Treatment BMPs are placed.  Yes  No

If No to (a) or (b), document justification in Section 5 of the SWDR.

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PPDG Checklist T-1, Part 1: Page E-31

**Slide 36:** After completing Questions 7 through 17, Question 18 in effect encourages the PE to place Biofiltration on the project, by asking about general siting criteria for Biofiltration systems. In all cases Biofiltration Treatment BMPs can be placed to the maximum amount within the project, including upstream from other Treatment BMP systems (in most situations except for the placement of Biofiltration Systems, ‘daisy-chaining approved Treatment BMPs is not required when meeting MEP standards).

**Treatment BMPs Checklist T-1, Part 1**

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_ District/Co-Route: \_\_\_\_\_  
 KP (PM) \_\_\_\_\_ EA \_\_\_\_\_  
 RWQCB: \_\_\_\_\_

19. After completing the above, complete and attach the checklists shown below for every Treatment BMP under consideration  Complete

\_\_\_ Biofiltration Strips and Biofiltration Swales: Checklist T-1, Part 2  
 \_\_\_ Dry Weather Diversion: Checklist T-1, Part 3

*The PE must verify that Feasibility and Design requirements can be met by completing another checklist for each T-BMP proposed for placement, such as T-1, Part 2 for Biofiltration.*

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PPDG Checklist T-1, Part 1: Page E-31

**Slide 37:** Following completion of Questions 7 through 18, all the Treatment BMPs should be reviewed by later checklists, as indicated in Question 19. The later checklists will help the PE verify that Feasibility and Design requirements can be met and therefore that the Treatment BMP under consideration can be placed.

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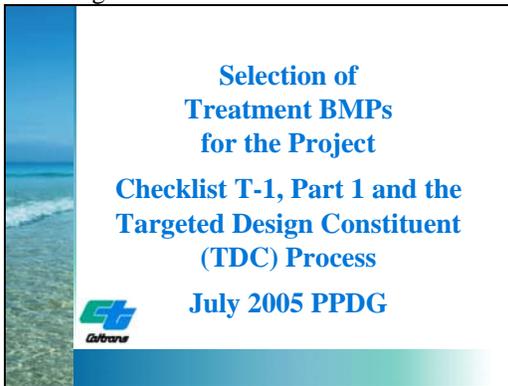
**TDCs & Treatment BMPs**

Treatment BMP	Nutrients		Metals						TSS	*General Pollutants*
	P	N	Total Cu	Dissolved Cu	Total Pb	Dissolved Pb	Total Zn	Dissolved Zn		
Biofiltration Systems	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Infiltration Devices	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Detention Devices	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Media Filters	Yes	Yes* Austin only	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
MCTTs	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Wet Basins	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes

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PPDG Checklist T-1, Part 1: Questions 7 – 17 for TDC constituents

**Slide 38:** This table shows the TDC pollutants that each Treatment BMP is effective in removing.



**Slide 39:** End of the presentation.