|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Part I. Project Information** | | | | | | |
| **1. Project Name:** | | | | **2. CDOT Region:** | | |
| **3. CDPS-Permit #: COR-03** | | | **4. Subaccount #:** | **5. Project # :** | | |
| **6. Ad Date:** | | **7. Drainage Plan Finalization Date:** | | | | |
| **8. Project Description:** |  | | | | | |
| **9. Detailed Project Location:** | | | | | | |
| **10. Is this a modification of an existing NDRD Form?** | | | | | **Yes** | **NO** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Part II. Determining if project status is priority** | | | | |
|  | | | | |
| Questions | Yes  Entirely | Yes Partially | No | Go To… |
| 1. Does the project result in a land disturbance of one or more acres, or does it disturb less than one acre, but is part of a larger common plan of development? |  | N/A |  | If yes go to #12  If no go to #22 |
| 1. Is the project located within the CDOT MS4 Permit boundary? |  |  |  | If yes go to #13  If no go to # 22 |
| 1. Impervious area tracking. | | | | |
| 1. Total Project Impervious Area (T) | Ft2 | | | |
| 1. Existing Impervious Area (E) | Ft2 | | | |
| 1. New Impervious Area (N) | Ft2 % Increase | | | |
| 1. Does the project discharge to the Cherry Creek Reservoir Drainage Basin? |  |  |  |  |
| 1. 303(d) Priority Project Trigger | | | | |
| 1. Does the project discharge to a 303(d) listed segment(s)? |  |  |  |  |
| 1. List each segment on the 303(d) list and the associated pollutant: | | | | |
| 1. Does the project increase the impervious area by 20% or more? |  | N/A |  |  |
| 1. Are any of the impairments listed in b above one of the following pollutants of concern: arsenic, chloride, chromium, copper, manganese, zinc, and/or sediment? |  | N/A |  | If you check yes circle relevant pollutants and segments in b. |
| 1. EA/EIS Priority Trigger | | | | |
| 1. Does the project increase new impervious area by 20% or more |  | N/A |  |  |
| 1. Is the project an EA/EIS? |  | N/A |  |  |
| 1. Is your project a Priority Project per any of the above triggers? |  |  |  | If yes go to #18  If no go to # 23 |
| 1. If YES, will the project be using the mitigation fund? |  | N/A |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Part III: Priority Project Tracking and Requirements | | | |
| 1. Cherry Creek Reservoir Basin permanent BMP requirements: Describe how this project meets Regulation 72 PWQ requirements: |  | | |
| 1. Check which Design Standard(s) your project will follow if it is a 303(d) and/or an EA/EIS priority project: | | Yes | No |
| 1. Water Quality Capture Volume | |  |  |
| 1. Infiltration Standard | |  |  |
| 1. Pollutant Removal/80% Total Suspended Solids Removal (TSS) | |  |  |
| 1. Attach an Inventory Map (see directions for required elements). Inventory map must include a tracking table as outlined in the directions. | | | |
| 1. Will any of the sites Control Measure(s) have an IGA? | | Yes | No |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part IV No Water Quality Required onsite** | Yes | No | N/A |
| 1. Is water quality not required on this project because it is less than an acre or outside MS4 per questions 11 or 12? |  |  |  |
| 1. Is this project a non-priority per question 17 (see directions for required elements)? *If yes no water quality is required onsite.* |  |  |  |

**I have reviewed the engineering used to complete the project design; drainage construction plans, drainage report, specifications, water quality report and inventory map. To the best of my knowledge, the engineering, drainage concepts and information used to complete these documents is complete, true, accurate and supports the additional review necessary for the Environmental Specialists to provide the environmental clearance for permanent water quality.**

Signature of CDOT Hydraulics Engineer or Qualified Environmental Specialist Date

**I have performed the engineering used to complete the project design; drainage construction plans, drainage report, specifications, water quality report and inventory map. To the best of my knowledge, the engineering, drainage concepts and information used to complete these documents is complete, true, accurate and supports the additional review necessary for the Environmental Specialists to provide the environmental clearance for permanent water quality.**

Signature of Consultant or Local Agency Hydraulics Engineer Date

**Instructions:**

**General Notes:**

This form is used for tracking purposes. Make sure to fill out each blank space unless the form instructs otherwise.

Page # references are to the 5/22/2014 CDPHE Interim Approval Letter (Division) which can be found on the [NDRD SharePoint site](http://teams/dtd/epb/waterquality/ndrd.form/Test/Home.aspx).

Any projects following the 2004 Program should complete the old project form.

Throughout this form the term Control Measure is used. For purposes of this form it means Best Management Practice (BMP). This terminology change reflects a CDPHE change in terminology.

**Part I: Project Information**

1. **Project Name:** Enter the Project Name as it appears in SAP. (Division, pg. 7.b.iv.A & v)
2. **CDOT Region:** Region number (e.g., Region 1). (Division, pg. 7.b.iv.A & v)
3. **CDPS-SCP Number:** CDPS-Stormwater Construction Permit number. The format of this number is always COR-03####. The first # symbol may be a letter, for example, COR-03J123. (Division, pg. 7.b.iv.A)
4. **Subaccount #:** The 5 digit subaccount/project code # (e.g., 19235). (Division, pg. 7.b.iv.A)
5. **Project #:** The project number (e.g. STU- 0253-126). (pg. 7.b.iv.A)
6. **Ad Date:** Date the project was advertised for bids. This date is important due to the CDPHE requirement to receive this form and the associated attachments, if any, within 60 days of the finalization of the drainage plans.
7. **Drainage Plan Finalization date:**  Date the drainage plans were finalized. The date for the finalization of the drainage plans will be the date the project was advertised for bids, unless otherwise indicated.
8. **Project Description:** Provide a brief description of the project. Note the purpose of the work. (I.E. This is an intersection reconstruction, adding additional turn lanes and updating lighting and traffic signals). (Division, pg. 7.b.v).
9. **Detailed Project Location:** Provide the project location such as latitude and longitude, start and end cross streets, etc. (Division, pg. 7.b.iv.A)
10. **Is this a modification of an existing NDRD form?** If you have previously filled out a NDRD form for this project, but are updating it with this form, please indicate here. If you check YES you must also attach the old form and a brief explanation of what you are changing and why. (Division, pg. 7.b.v)

This form shall be used from April 21, 2014 to the effective date of CDOT’s new MS4 Permit, unless otherwise indicated and this form should be completed for any projects that follow the 2014 Interim Program.

If this project is following the 2004 NDRD Program, please fill out a copy of the old [NDRD Form](http://teams/dtd/epb/waterquality/ndrd.form/Documents/Forms/AllItems.aspx).

*HQ encourages projects with FIR dates falling on or after July 1st, 2014 to follow the 2014 NDRD Program.*

Example:

The project was originally planned under the old 2004 NDRD Program., but qualifies for the new 2014 Interim NDRD Program and the project team decides this was the best approach. A new form should be completed and the following explanation attached along with the old NDRD form, “This project was originally planned under the old 2004 NDRD Program, it qualifies for the new 2014 Interim NDRD Program and the project team decided this was the best approach.”

**Part II: Determining if the project status is priority**

1. **Does the project result in a land disturbance of …?** If a project either disturbs one or more acres or if the project disturbs less than an acre, but is part of a common plan of development you need to check YES and move on to #12. If the answer is NO permanent water quality is not required. Go to # 22 and check YES (Division, pg. 4.a.iii (A) (i) and pg. 7.b.ii.A).
2. **Is the project located within the MS4 Permit boundary?** Indicate whether the entire project or portions of the project are within the MS4 boundary by checking YES- Entirely or YES-Partially. If you check any YES proceed to #13. NO means the project is entirely outside the MS4 boundary. If the answer is NO, then PWQ is not required. Go to #22 (Division, pg. 4.a.iii (A) (i) and pg. 7.b.ii.A).

Questions 13 – 17: For tracking purposes (if you answered YES to both questions in 11 or 12 above) you must completely answer all of these questions.

1. **How much does the project increase the impervious area?** This question is required for tracking purposes, even if your project is not a priority project. The %N calculated below is required in additional steps.

Areas of the project that were impervious prior to the start of the project are not considered to increase the impervious area (i.e. they are not new impervious). Only new impervious area counts toward the 20% in later questions.

**E=** Areas that were impervious at the start of the project

**N=** New Impervious Area (areas where pervious is now impervious)

**T =** Total Impervious Area at project completion

**T = N+E**

**N% = Percent increase of Impervious Area**

1. **N = T-E**
2. **%N increase = N/E x 100 OR %N increase = T/E - 1 x 100**

(Division, pg. 7.b.ii.A and pg. 9.d.i (B) (i))

1. **Does the project discharge to the Cherry Creek Reservoir Drainage Basin?** Does the water coming off the site enter the Cherry Creek Reservoir Drainage Basin? If the answer is YES, the portion(s) of the site discharging to Cherry Creek Reservoir drainage basin must meet the requirements for permanent BMPs as per the [Cherry Creek Reservoir Control Regulation (5 CCR 1002-72](http://www.colorado.gov/cs/Satellite?blobcol=urldata&blobheadername1=Content-Disposition&blobheadername2=Content-Type&blobheadervalue1=inline%3B+filename%3D%22Regulation+72+.pdf%22&blobheadervalue2=application%2Fpdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1251836749384&ssbinary=true)), Part 72.7.2(d)(6), (7), and (8) unless excluded in accordance with the Cherry Creek Reservoir Control Regulation (5 CCR 1002-72), part 72.7.2(c)(4). If the answer is NO then the project does not have to meet the requirements of regulation 72. In both cases move to # 15. (Division, pg. 4.a.iii(A)(ii)&(C) and pg. 7.b.ii.A)
2. **303 (d) Priority Project Trigger:** Answering the questions under #15 will determine if your project is considered a priority project per the 303(d) Priority Project trigger. If you answer **YES all 3 times** (a, c and d) then the project is considered a Priority Project. Only the portions of the project draining to the listed impaired segments are considered Priority. These portions of the project must provide water quality. If you answer **NO** just once (to either a, c or d) then the project is not considered a 303 (d) Priority Project (it may still be determined a Priority Project under 16). Even if you answer **NO** to a question, the remainder of the questions must be filled out for documentation purposes. (Division, pg. 4.a.iii(A)(ii)(b) and pg. 7.b.ii.A)
3. **Does the project discharge to a 303(d) listed segment?** See the table in [regulation 93](http://www.colorado.gov/cs/Satellite?blobcol=urldata&blobheadername1=Content-Disposition&blobheadername2=Content-Type&blobheadervalue1=inline%3B+filename%3D%22Regulation+93.pdf%22&blobheadervalue2=application%2Fpdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1251810003598&ssbinary=true) (93.3) or the Surface Water Regulation Numeric Tables (after 6/30/14) to determine which segments your project drains to and if it is impaired. The Regulation Numeric Tables can be found under the [Water Quality Control Commission Regulations](http://www.colorado.gov/cs/Satellite?c=Page&childpagename=CDPHE-Main%2FCBONLayout&cid=1251595703337&pagename=CBONWrapper). Regulations 32-39 each cover a Basin and each has link to a Numeric Standards Table for that specific basin. You may also want to use [EPA’s Watershed Assessment, Tracking & Environmental Results](http://ofmpub.epa.gov/waters10/attains_state.control?p_state=CO) site. Note: If you have GIS you can use CDPHE’s GIS maps: <http://www.colorado.gov/cs/Satellite/CDPHE-WQ/CBON/1251616086138> to see the segment and impairment. Check YES or NO as appropriate and then proceed to b. (Division, pg. 4.a.iii(A)(ii)(b) and pg. 7.b.ii.A)
4. **List each segment and associated pollutant(s):** If you answered YES to a) list the 303(d) listed segments that your project discharges to and the pollutants resulting in the segment being listed. For example: COARUA10 listed for Cu, COGUNF04 listed for FE (Trec). If the project does not drain to any 303 (d) listed segments write “N/A”. In either case proceed to c. (Division, pg. 4.a.iii(A)(ii)(b) and pg. 7.b.ii.A)
5. **Does the project increase the impervious area by 20% or more?** Use the % you provided in # 13 above .If the project added 20% or more new impervious area (where none existed before) check **YES**. If less than 20% check **NO**. Use the N% you provided in question #13. (Division, pg. 4.a.iii(A)(ii)(b) and pg. 7.b.ii.A)
6. **Are any of the impairments listed**…,Check to see if any of the listed segments in b. are impaired for arsenic (As), chloride, chromium (Cr), copper (Cu), manganese (Mn), zinc (Zn), and/or sediment. If any of the segments from b are listed for these pollutants check YES and circle the appropriate segments (and associated pollutant(s) in b).

(Division, pg. 4.a.iii (A) (ii) (b) and pg. 7.b.ii.A)

1. **EA/EIS Priority Trigger:** This question determines if your project is considered a priority project per the EA/EIS Priority Project requirements. If you answer **YES** **to both a & b** then the project is considered a Priority Project. If you answer **NO** to either a or b then the project is not considered a priority project. Even if you answer **NO** to one question the other must be completed for documentation purposes. (Division, pg. 4.a.iii(A)(ii)(a) and pg. 7.b.ii.A)
   1. Use the % you provided in # 13 above.
   2. If the project is part of an EA/or EIS than mark YES.
2. **Is your project a Priority Project per any of the above triggers?** The previous questions determined if your project is a priority project. Various answer combinations determine whether your project is priority for any of the three triggers (Cherry Creek, 303 (d), and/or EA/EIS) or not as described below:

* If you answered **YES** to 14 then you will automatically answer **YES** to 17 (or yes partially). Only the portions of the project draining to the Cherry Creek Drainage Basin are considered Priority.
* If you answered **YES to all three questions** in 15 (a, c, and d) then answer **YES (or YES-partially)** to 17. Only the portions of the project draining to the listed segments are considered Priority.
* If you answer **YES to both a & b** in 16 then you must answer **YES (or YES-Partially)** to question 17.

(Division, pg. 7.b.ii.A)

* 1. **If yes, will the project be using mitigation fund dollars?** Priority projects are eligible for mitigation fund dollars. In order to receive mitigation fund money, the projects must provide water quality cost estimates to the mitigation fund committee at scoping and at design milestones (i.e. FIR, FOR, etc.) and the project must go to advertisement as a Combination Project, meaning there is one contract but two projects. In some cases, when water quality requirements require minimal resources, the project engineer may choose to use project only funds to pay for water quality and not use mitigation funds. If the project chooses not to use the mitigation fund mark NO. If mitigation funds will be used mark YES.

**Part III: Priority Project Tracking and Requirements**

1. **Cherry Creek Reservoir Basin permanent BMP requirements:** For projects or portions of projects which are Priority because they drain to the Cherry Creek Reservoir Drainage Basin please provide a detailed description of how the Cherry Creek Design requirements have been met. (Division, pg.7.b.v)
2. **Check which Design Standard(s) your project will follow if it is a 303 (d) and/or an EA/EIS Priority Project:** You may use one or any combination of the below Design Standards as long as the requirements are fully met. Indicate which ones have been used on site. The requirements in (a) and (c) below, are for runoff from a minimum of 90% of the new impervious area: (Division, pg.7.b.v & pg. 9 d.i(B)(i))
   1. **Water Quality Capture Volume (WQCV):**
      1. **WQCV requirement:** Indicate **YES** if the WQCV standard is used anywhere on site.
   2. **Infiltration Standard:** Indicate **YES** if the Infiltration Standard is used anywhere on site.
   3. **Pollutant Removal Standard/80% TSS Removal:** Indicate **YES** if the Pollutant Removal Standard is used anywhere on site.
3. **Attach an Inventory Map:** All Priority Projects must attach a map to the NDRD form. Make sure to distinguish each type of Priority area on the map and to clearly mark the MS4 permit boundary. The map shall clearly show the project boundary, the new impervious area, the MS4 boundary, the drainage area for the Control Measure, including an identification of the impervious area and total drainage area that is located in and outside of the permit area. The maps should further distinguish which priority trigger is associated with each Control Measure drainage area. The map legend should clearly indicate each of these elements. (i.e. EA/EIS, 303(d), Cherry Creek). A legend should be included clearly indicating each designation. (Division, pg. 5.a.v. (A) (i) and pg. 7.b.v). Additionally, each map must include a Treatment Tracking Table as outlined below:

**Treatment Tracking Table**: Create a table with the same headings as below and enter each Control Measure.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Control Measure ID** | **Control Measure Type** | **Applicable Design Standard** | **% Infiltration** | **Total Tributary Area**  **(ft2)** | **Total Impervious Area**  **(ft2)** | **Tributary Impervious Area from MS4 (ft2)** | **Priority Project Impervious Tributary Area** | **Notes** |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

**Control Measure ID:** Identify each control measure (should match the attached map). For example (Grass Swale 1, Grass Swale 2, Extended Detention Basin 1) (pg. 9 d.i (B) (i) (c)).

**Control Measure Type:** List the specific type of control measure. For example extended detention basin, infiltration trench, full spectrum detention basin, etc.) (pg. 9 d.i (B) (i) (c)).

**Applicable Design Standard:** List the applicable Design Standard from form question 19 (WQCV, Infiltration, 80 % TSS) (pg. 9 d.i (B) (i) (c)). Indicate which Design Standard(s) you have used to meet the permit requirements. If you are using more than one Design Standard indicate how much treatment each provides and how together they achieve compliance.

**% Infiltration:** If using the Infiltration Standard indicate the percent of the calculated WQCV that has been infiltrated. You would calculate what the required WQCV for the tributary area. Then you calculate what percent can be infiltrate by the chosen BMP. (For example, for a given impervious area you calculate the WQCV to be 0.2 watershed inches (726 cubic feet). You determine you are able to infiltrate .10 watershed inches (363 cubic feet). This means you infiltrated 50% of the WQCV and therefore reduced the amount of actual WQCV still left to treat. Note: per the infiltration standard if you can infiltrate 70% of the WQCV you do not have to provide any WQCV.

**Total Tributary Area (ft2):** This is the total area draining to the control measure, including pervious, impervious areas and areas outside the project limits (pg. 9 d.i (B) (i) (c)).

**Total Impervious Tributary Area (ft2):** The total impervious area draining to the control measure including areas outside the project and/or MS4 limits. (pg. 9 d.i (B) (i) (c)).

**Tributary impervious from the MS4:** The total tributary area within the CDOT MS4 area draining to the control measure (pg. 7 b.v & pg. 9 d.i (B) (i) (c)).

**Priority Project Impervious Tributary Area (ft2):** This is the amount of tributary impervious area treated by the Control Measure that comes from the impervious area associated with the Priority Development Project within CDOT’s MS4 area. (pg. 7 b.v & pg. 9 d.i (B) (i) (c)).

**Notes:** Provide any additional notes that clarify earlier information or more clearly indicate how compliance has been achieved.

***See Example 1 at the end of the directions for an example of a map and associated table.***

**Important Program Note:** At completion of the project PWQ electronic records must be submitted to Region project environmental staff and a copy provided to HQ; records shall include CDOT GIS compatible polygon of the actual area treated by each Control Measure, digital copies of all associated PWQ associated documents to include, but not limited to IGA’s, Drainage Plans, as-builts and if it meets CDOTs current design standard, operation and maintenance manuals, etc. This step is required for final acceptance. (pg. 7 b.v and pg. 9 d.i (B) (i) (c).

1. **Will any of the control measures have an IGA?** Indicate if there will be an IGA associated with the project’s Control Measure(s).

**Part IV: No PWQ Required On-site**

1. **Is permanent water quality not required on-site because the project is outside the MS4 or less than an acre?** If you marked **NO** to either question 11 or 12 check **YES** here and **N/A** next to question 23. If you marked **YES** to # 22 then water quality is not required on this site. Make sure you have filled out all required boxes and that the form has been signed. Give the signed form to your RPEM who will then ensure the form and map(s) are submitted to HQ. Please also place a copy in the project file.
2. **Is the project a non-priority project?**

* If you answered **NO** to question # 17 then enter Yes in question 23
* If you answered **YES** to Question 22 check **N/A** next to question #23.

If you marked **YES** to # 23 then water quality is not required on this site. Make sure you have filled out all required boxes and that the form has been signed. Give the signed form and map(s) to your RPEM or their designee who will then ensure it is submitted to HQ. Please also place a copy in the project file.

**References:**

Colorado Water Quality Control Division (Division), NDRD Program Modification Correspondence: CDPS Permit – New Development and Redevelopment Program Description Modification – Conditional Approval CDPS Permit No.:COS000005, Colorado Department of Transportation Headquarters Water Quality Archive, May 22, 2014.

**Example 1: Inventory Map**

ROW **– CDOT MS4 boundary**

Out MS4

MS4 boundary

Control Measure 1

**Existing** Roadway

**New** Roadway

**Existing** Roadway

Project boundary

In MS4

MS4 Boundary

Project Boundary

CDOT ROW = CDOT MS4 permit boundary

Control Measure (CM) Total Tributary area

CM Impervious area

CM imp area within CDOT MS4 permit area

CM imp area associated with Priority project within CDOT MS4

**Tracking Table Example 1.a: WQCV as Design Standard**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Control Measure ID** | **Control Measure Type** | **Applicable Design Standard** | **% Infiltration** | **Total Trib**  **Area**  **(**Ft2**)** | **Total Impervious Area**  **(**Ft2**)** | **Tributary Impervious Area from MS4 (**Ft2**)** | **Priority Project Impervious Tributary Area** | **Notes** |
| **1** | **Extended Detention Basin** | **WQCV** | **N/A** | **43560** | **10890** | **5000** | **2200** |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

**Tracking Table Example 1.b: Infiltration as Design Standard**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Control Measure ID** | **Control Measure Type** | **Applicable Design Standard** | **% Infiltration** | **Total Trib**  **Area**  **(**Ft2**)** | **Total Impervious Area**  **(**Ft2**)** | **Tributary Impervious Area from MS4 (**Ft2**)** | **Priority Project Impervious Tributary Area** | **Notes** |
| **1** | **Infiltration Trench** | **Infiltration** | **70% of WQCV** | **43560** | **10890** | **5000** | **2200** |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |