



COLORADO

Department of Public Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

APPLICATION GUIDANCE DOCUMENT

COLORADO DISCHARGE PERMIT SYSTEM (CDPS) General Permits:

- Construction Dewatering (COG070000)
- Remediation Activities Discharging To Surface Water (COG315000), or
- Remediation Activities Discharging To Groundwater (COG316000)

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This guidance is designed to assist in completing the application for processing each of the three permit types listed above. The Water Quality Control Division may request additional information and characterization of the proposed discharge to ensure that the appropriate permit coverage is requested and the appropriate permit certification is issued. The division may deny or change the requested type of discharge permit after review of the submitted application and will notify the applicant of the changes. Please note:

- Coverage under the “Subterranean Dewatering or Well Development” General Permit (COG6030000) is not available using this permit application form.
- The discharge of contaminated groundwater to an impoundment is regulated by the Solid Waste Program in the Hazardous Materials and Waste Management Division, and also cannot be covered under any of the above permits.
- The discharge of uncontaminated groundwater to land may be discharged under the division’s *Low Risk Discharge Guidance: Discharges of Uncontaminated Groundwater to Land* as an alternative to obtaining coverage to discharge under this permit. The low risk policy is available for download at www.coloradowaterpermits.com.
- As provided in General Permit COR030000, the discharge of uncontaminated groundwater to land may also be discharged under an existing construction stormwater permit where permit conditions are met.



A. PERMIT INFORMATION

Reason for Application: Indicate whether this is an application for a new certification or if you are renewing an existing certification (as required prior to the expiration date of an existing general permit or certification). If you are renewing an existing certification, please provide the existing permit certification number.

Applicant is: Indicate the entity that will hold (be legally responsible for) the permit.

Application is for the following discharge permit (select ONE): In order to determine whether your project qualifies for coverage under a construction dewatering general permit (COG070000) or requires a remediation general permit (COG315000 or COG316000), you must determine whether there are known sources of groundwater contamination located in the vicinity of your project site. Where nearby sources of groundwater contaminations are identified, you will need to determine whether your project has the potential to draw-in contaminated groundwater. The best way to make this determination is to use the criteria in Table 1 below to determine if your project site is located in the vicinity of potential ground water contamination. If so, collect a sample of groundwater from your project site (i.e., water that is representative of the water you propose to discharge). Then, use Table 1 to determine what parameters to include in your analysis, have it analyzed for those parameters described, and submit the data with your permit application.

Table 1: Locations of Potential Groundwater Contamination

Is Your Project Site Located in the Vicinity of Potential Groundwater Contamination? ¹	
Project Location Relative to a Source of Potential Groundwater Contamination	Analytical Data Likely to be Required with the Permit Application
Within 0.5 mile of an <u>open</u> Leaking Underground Storage Tank (LUST) site <i>(Note that closed LUSTs are assumed to pose a low risk for potential groundwater contamination and, therefore, the submission of analytical data based on proximity to a closed LUST is not required)</i>	BTEX only
Within 0.5 mile of an <u>open</u> Voluntary Cleanup (VCUP) site	All parameters listed in Attachment 1 of the permit application (or an alternate list approved by the division) ²
Within 0.5 mile of an Environmental Covenant	
Within 0.5 mile of an <u>open</u> Resource Conservation Recovery Act (RCRA) Corrective Action Site	
Within 1.0 mile or more of a Superfund site or National Priorities List (NPL) site with associated groundwater contamination	

¹ This table provides examples of sources of contamination. Other types and sources of potential groundwater contamination may exist.

² Analyze a groundwater sample that is representative of the water you propose to discharge for the parameters of concern for the project areas (i.e., total, dissolved, potentially dissolved). This may be a subset of Attachment 1 in the permit application. Note this subset list must be approved by the division. See Important Notes in Appendix A at the end of this guidance for more information on this topic.

Information regarding the locations of the various types of contaminated sites (LUST, VCUP, Environmental Covenants, RCRA Corrective Action, or Superfund) may be found in Appendix B of this document.

Once you have determined if your project site is located in the vicinity of potential groundwater contamination, use the [flowchart](#) on the following page to help determine the appropriate permit coverage for your discharge.

Table 2 below supplements the selection process by providing possible groundwater contamination scenarios and general permit descriptions and coverage. Select the one type of permit coverage most appropriate for this project. Please note that one application is intended to cover one project and one type of permit. Where multiple projects or types of permits are required, you must submit an appropriate number of permit applications.

Table 2: General Permit Descriptions and Information¹

	Construction Dewatering (COG70000)	Remediation Activities Discharging to Surface Waters (COG315000)	Remediation Activities Discharging to Ground Water (COG316000)
Covered Discharges	<u>Uncontaminated source water OR Contaminated (by BTEX only) source water</u> ² that has come into contact with construction activities	Discharges from treatment and/or remedial activities of <u>contaminated</u> groundwater, alluvial water, stormwater, and/or surface water (which may be associated with construction activities)	Discharges from treatment and/or remedial activities of <u>contaminated</u> groundwater, alluvial water, stormwater, and/or surface water (which may be associated with construction activities)
Discharge Location	To surface water and/or to land with potential percolation to groundwater	To surface water or land with potential percolation to groundwater <u>hydrologically connected</u> to surface water	To land with the potential to percolate to groundwater <u>not hydrologically connected</u> to surface water
Applicant Requirements	BTEX ³ Analysis (if within one half mile of an open LUST)	Influent Screening ⁴	Influent Screening
Division Authorization	Discharges under this permit <u>will not</u> be authorized if pollutants may be present in the source water in concentration greater than a numeric water quality standard of the receiving water	Discharges under this permit <u>may</u> be authorized if pollutants may be present in the source water in concentration greater than a numeric water quality standard of the receiving water	Discharges under this permit <u>may</u> be authorized if pollutants may be present in the source water in concentration greater than a numeric water quality standard of the receiving water

¹ The Division may deny or change the requested type of discharge permit after review of the submitted application and will notify the applicant of the changes.

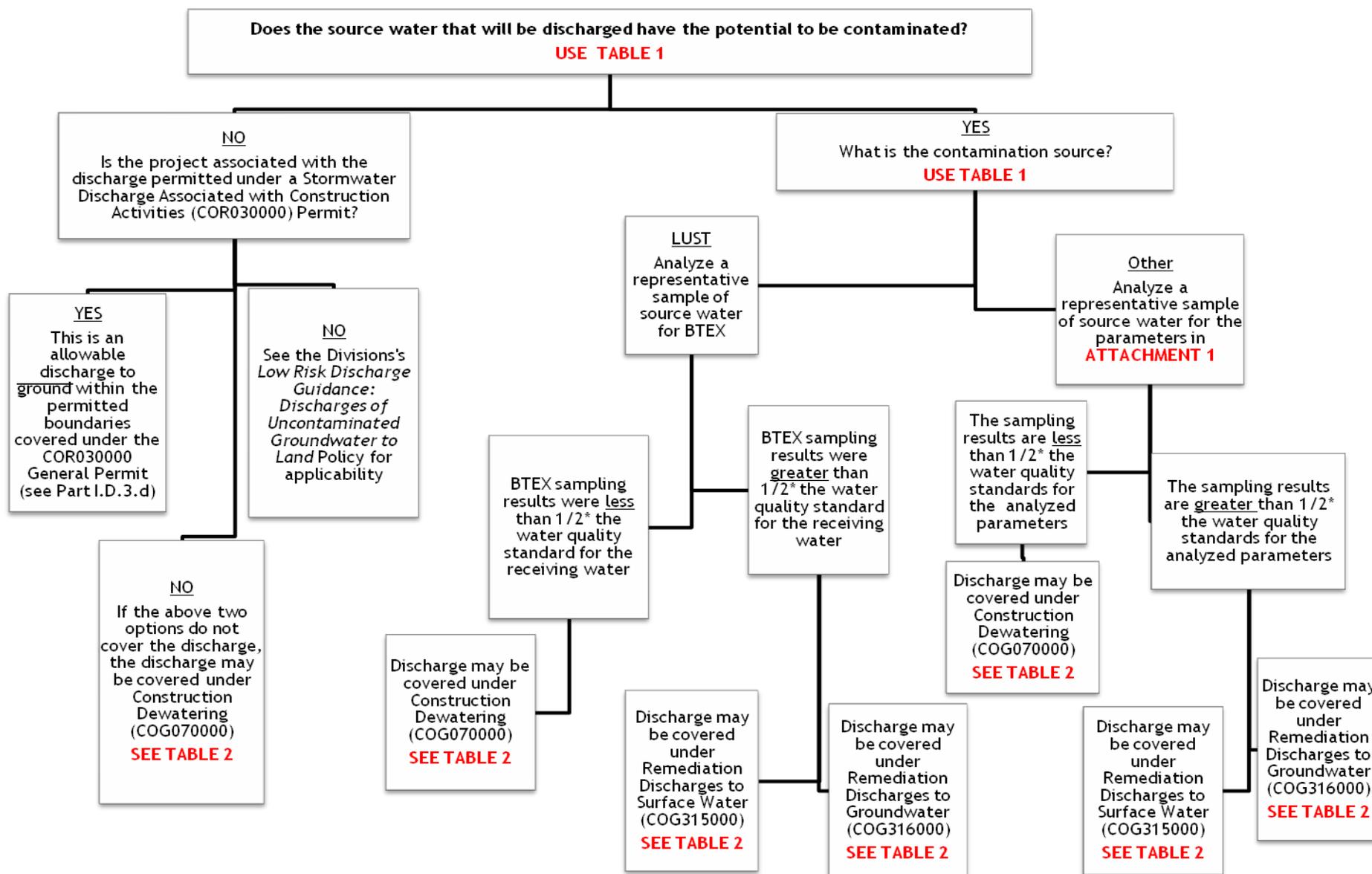
² Source Water: Groundwater, surface water, alluvial water, or stormwater mixed with groundwater and/or surface water

³ BTEX: Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) are common pollutants found in petroleum based products

⁴ See Attachment 1 in the permit application packet

Additional information and resources for identification of contaminated groundwater and sampling procedures can be found in this guidance document:

- APPENDIX A: Information for Completing Analyticals Required
- APPENDIX B: Resources for Determining Groundwater Contamination Potential
- APPENDIX C: Division Determination Using the Application Information and Data



*One-half the water quality standard is a general comparison. This may vary on a case by case basis resulting in different permit coverage than what is stated above.

B. CONTACT INFORMATION

Provide the required contact information. Note that the person listed as the *Permittee* (Responsible Position) must also be the person that signs and certifies the permit application. This person receives all permit correspondences and is legally responsible for compliance with the permit.

Note that the person listed as the *DMR Cognizant Official* will receive all pre-printed discharge monitoring report (DMR) forms associated with the permit.

C. PERMITTED FACILITY INFORMATION

Provide the required facility information.

Facility or Project Latitude/Longitude: The following definitions are based on text from the EPA Data Standard.

- **Horizontal Collection Method:** Describes the method used to determine the latitude and longitude coordinates for a point on the earth. This specifies what type of method or device was used to identify the latitude and longitude, e.g., a Global Positioning System (GPS) device, Google Earth, an address, an intersection, a census block centroid, etc. The key is that the horizontal collection method determines how the coordinates were collected, not where.
- **Reference Point:** The text that identifies the place for which the geographic coordinates were established. This specifies the location at the place where the coordinates were taken, e.g., entrance to a facility, center of a facility, etc. The key is that the reference point determines where the coordinates were collected, not how.
- **Horizontal Reference Datum:** The horizontal reference datum is the coordinate reference system to which the latitude/longitude data relate. Per EPA's *Latitude/Longitude Data Standard*, there are three possible values associated with horizontal reference datum. Horizontal reference datum possible responses are as follows:
 - North American Datum of 1927 (**NAD27**): If you are reporting a location using a USGS 7.5-minute map, NAD27 is your default datum.
 - North American Datum of 1983 (**NAD83**): NAD83 updated NAD27 with current measurements using radio astronomy and satellite observations. When the USGS began publishing digital data, the NAD83 was used, which provided a more accurate representation of the earth's shape and a more accurate depiction of the location of objects on the earth.
 - World Geodetic System of 1984 (**WGS84**): If you used a GPS or Google Earth to calculate your latitude/longitude coordinates, WGS84 is the default datum.

Standard Industrial Classification (SIC) Code(s) for this Facility: Standard Industrial Classification (SIC) codes are four digit numerical codes assigned by the U.S. government to business establishments to identify the primary business of the establishment. SIC codes can be obtained at: <https://www.osha.gov/pls/imis/sicsearch.html>. The most common SIC code for businesses conducting construction-related work is **1799: Special Trade Contractors, Not Elsewhere Classified**. This includes dewatering contractors.

D. PROJECT DESCRIPTION

D.1 Description of Activity and D.2 Description of Discharge: Provide thorough and detailed responses to the questions in these sections in order to facilitate and expedite the review and processing of your application.

Note that "in-stream" work is:

- Conducted within approximately the ordinary high water mark* of the stream, and/or
- Conducted on the bank of the stream, and
- potentially including subsurface flow to the stream.

* “The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.”

(Taken directly from USACE Regulatory Guidance Letter “Ordinary High Water Mark Identification” dated 12/07/2005)

D.3 Discharge Outfalls: Discharge “outfalls” refer to the physical location where the discharge occurs. This discharge location may be different from the source water location. For example, you may dewater your project site by pumping water from the excavation (the source) to the nearby stream (the outfall). This portion of the permit application requires information regarding your outfall location(s).

What is a defined outfall versus an undefined outfall?

The permit application requires that you specify whether the outfall is defined or undefined.

- A defined outfall has a known location, specified by latitude and longitude at the time of permit application. Where defined outfalls are requested, the division will mail DMRs that include the specified location information. Permittees often find this information helpful in managing their DMRs, and submitting the correct DMR form for the outfall location.
- An undefined outfall has an unknown location at the time of permit application. Undefined outfalls are only available for construction dewatering (COG07000, Part I.B.1). In this case the specific location for each discharge is established by the permittee at the time the discharge commences, and may not be changed once established. Permittees are responsible for making sure that the same DMR (for example the DMR labeled “Outfall 001A”) is always used for the same outfall sampling location. A single DMR cannot be used for multiple locations in the field. Undefined outfalls provide flexibility during construction activities; however, they may be difficult to manage and the most stringent water quality standards for all potentially impacted streams are applied to all discharge outfalls.

What is the maximum number of outfalls that I can request?

You are allowed to request up to 20 defined outfalls and 20 undefined outfalls in one permit application. Undefined outfalls are only available for construction dewatering. Where your project requires additional outfalls, you may request a modification to your permit certification to add additional outfalls.

Is this a discharge to surface water or to land with the potential to percolate to groundwater?

The permit application requires that you specify whether the outfall is a discharge to surface water or to land with the potential to percolate to ground water.

- A discharge to surface water can occur directly or through a conveyance such as a ditch or a storm sewer system.
- A discharge to groundwater occurs through land application and/or through discharge to a sediment basin with percolation to groundwater.
- If your discharge is to a sediment basin and the basin overtops, the division may determine that your discharge is to both surface water and groundwater, and will include appropriate permit limitations for both surface water and groundwater in your permit certification.

How do I estimate the maximum flowrate?

The estimated maximum discharge flow rate must be provided in order for the division to process the permit application. In order to estimate your maximum flow rate, you might consider the maximum capacity of the pumps at your site and the total number of pumps that can be operating together at one excavation. For stream diversions, you might estimate the maximum flow rate of the stream around your work activity. For remediation projects where treatment is in place, estimate the maximum flow rate appropriate for your treatment system. The Division will apply your flow information in your permit certification as follows:

- For construction dewatering, the acute flow limit (i.e., maximum flow limitation) will be equal to twice the estimated maximum rate flow rate provided in the permit application.
- For groundwater remediation, both the acute flow limit (i.e., maximum flow limitation) and the chronic flow limit (i.e., 30-day average flow limitation) will be based on the design capacity of the treatment as provided in the permit application.

Where will the sampling occur?

Per the general permit, discharge points shall be designed or modified so that a sample of the effluent can be obtained at a point after the final treatment process and prior to discharge to state waters. All samples must be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points cannot be changed without notification to and approval by the division. The permittee must provide access to the division to sample the discharge at these points.

E. ADDITIONAL INFORMATION

E.1 Nearby Sources of Potential Groundwater Contamination: In this portion of the application, you are required to document the results of your due diligence efforts, including whether or not you identified potential sources of groundwater contamination in the vicinity of your project. Information to help you complete this portion of the application was provided in the flowchart and tables above, as well as in Appendix A-C of this guidance document.

E.2 Chemical Additions: List any chemicals to be used in, or applied to, waters that may be discharged. Include a copy of each chemical's current Material Safety Data Sheet. All chemicals used in waters that may be discharged must be approved by the division.

E.3 Site Maps and Schematics: The complete application must include these maps and site sketches.

WATER RIGHTS

The permittee is responsible for contacting the State Engineers Office as appropriate. Issuance of a CDPS permit does not negate the need to also have the necessary water rights in place. It is also important to understand that even if the activity has an existing CDPS permit, there is no guarantee that the proper water rights are in place.

F. REQUIRED CERTIFICATION SIGNATURE [Reg. 61.4(1)(h)]

The application must be signed by the responsible party in order to be processed by the Division. An original (wet) signature is required on the permit application submitted to the division.

APPENDIX A: Information for Submitting Required Data

A list of required parameters to be sampled for is found in Attachment 1 of the permit application. (See important notes.)

Unless otherwise indicated by the division, all influent screening must adhere to the following stipulations:

- Metals analyses must be performed for the analytical form (total recoverable, potentially dissolved, and/or dissolved) identified in Attachment 1 of the permit application.
- Analytical methods for metals must measure below or equal to the practical quantitation limit (PQL) identified in Attachment 1 of the permit application.
- Analytical methods and PQLs selected for all parameters must be in accordance with the criteria established in the permit application.
- The sample collected must be representative of the source water.

IMPORTANT NOTES:

- **Alternate List of Parameters:** Where the applicant can identify the parameters associated with the source of potential groundwater contamination, the applicant may contact the division to request approval to analyze only for those parameters, and to submit data for only those parameters with the permit application.
- In lieu of submitting analytical data, you may choose to demonstrate that your site is not likely to be impacted by nearby sources of contamination by submitting other relevant information with your permit application for review and consideration by the division. For example, you may submit information regarding the geology and hydrogeology of the site, groundwater flow direction, or historic groundwater data. This information must be accompanied by a narrative discussion of how and why this information shows that groundwater at your project site is not likely to be contaminated. The division will review this information, and determine if it is sufficient to demonstrate that groundwater at the site is not likely to be contaminated. Where the division finds the information to be insufficient, the division will require additional data or information, potentially delaying the processing of the permit.
- Applicants applying under the General Permit for Remediation Activities Discharging to Groundwater (COG316000) are encouraged to contact the division prior to sample collection to ensure that the correct metal speciation is included in the sample analysis.

APPENDIX B: Resources for Determining Groundwater Contamination Potential

The following resources are available for determining if contaminated groundwater may be located near your project site:

- **Leaking Underground Storage Tanks (LUSTs):** Oil and Public Safety (OPS) COSTIS database (Storage Tank Database). Search for events by city, county, or zip code on the OPS website.
 - <https://www.colorado.gov/pacific/ops/PetroleumMaps>
- **Superfund Sites:** The CDPHE HMWMD maintains a list of active Superfund sites on its website. The division may require data even if your site is greater than one-mile from a Superfund site, based on the nature and extent of contamination at these sites.
 - <https://www.colorado.gov/pacific/cdphe/superfund-sites>
 - <https://www.colorado.gov/pacific/cdphe/hm-gis-data>
- **National Priorities List (NPL) sites:** The U.S. Environmental Protection Agency maintains a list of national priorities sites on their website.
 - <https://www.epa.gov/superfund/national-priorities-list-npl-sites-state#CO>
- **Voluntary Cleanup Sites (VCUPs):** The CDPHE Hazardous Materials and Waste Management Division (HMWMD) maintains a list of VCUPs by County. Visit the HMWMD website, and select the “Voluntary Cleanup Sites Grouped by County” list at the top of the page.
 - <https://www.colorado.gov/pacific/cdphe/voluntary-cleanup>
 - <https://www.colorado.gov/pacific/cdphe/hm-gis-data>
- **Environmental Covenants:** Environmental Covenant Sites are listed on the CDPHE HMWMD website. The county the site is located in and a map of the contaminated area are provided on this webpage.
 - <https://www.colorado.gov/pacific/cdphe/hmcovenants>
 - <https://www.colorado.gov/pacific/cdphe/hm-gis-data>
- **RCRA Corrective Action Sites:** The U.S. Environmental Protection Agency maintains a list of RCRA Hazardous Waste Corrective Action sites in Colorado that are undergoing or potentially undergoing groundwater remediation.
 - <https://www.epa.gov/cleanups/cleanups-my-community>
 - Visit the CDPHE’s Hazardous Waste Corrective Action Unit Contacts for more information on a corrective action site.
- **Brownfield Sites:** The CDPHE HMWMD maintains a list of active Superfund sites on its website.
 - <https://www.colorado.gov/pacific/cdphe/brownfields>
 - <https://www.colorado.gov/pacific/cdphe/hm-gis-data>

APPENDIX C: Division Determination Using the Application Information and Data

As a general rule of thumb, the division will make an initial determination of appropriate permit coverage based largely on the proximity of your project site to known sources of contamination and the potential to draw-in the contaminated groundwater. The division will then review analytical data and information submitted with the application, along with any additional information available to the division, to determine whether your project has the potential to draw-in contaminated groundwater and to verify that you have selected the correct permit coverage for your project. Where analytical data is included with the permit application, the division will conservatively compare the maximum detected concentration of each detected constituent to one-half the applicable water quantity standard to determine if there is reasonable potential for a pollutant in the source water to exceed a water quality standard of the receiving water.

- For project sites where no known potential sources of contamination are located within one mile of the project site AND the permit applicant has no other information which would indicate that the discharge may be contaminated:
 - No source water analytical data is required with the permit application.
 - These projects will typically be permitted under *Construction Dewatering (COG070000)*
- For project sites where known potential sources of contamination only BTEX are located within one-half mile of the project site:
 - BTEX data is required with the application, unless the applicant can provide other information indicating there is no reasonable potential for BTEX to contribute pollutants to the source water.
 - Where the data shows that the source water does not contain concentrations of BTEX greater than ½ the water quality standards of the receiving water, the project may be permitted under *Construction Dewatering (COG070000)*.
 - Where the data show that the source water does contain concentrations of BTEX greater than ½ the water quality standards of the receiving water, the project may be permitted under *Remediation Activities Discharging to Surface Water (COG315000)* or *Remediation Activities Discharging to Groundwater (COG316000)*, or an individual permit as applicable.
- For project sites where other known potential sources of contamination are located within one mile of the project site:
 - Pre-screening data (see Attachment 1 of the application) is required, unless the applicant can provide other information indicating that there is no reasonable potential for the contamination to contribute pollutants to the source water being discharged.
 - Where the data show that the source water does contain concentrations of potential pollutants from the contamination source that are greater than ½ the water quality standards of the receiving water, the project may be permitted under *Remediation Activities Discharging to Surface Water (COG315000)* or *Remediation Activities Discharging to Groundwater (COG316000)*, or an individual permit as applicable.

The flowchart in this guidance summarizes the above detailed process used by the division for evaluating data and determining appropriate permit coverage. Note that other factors may be considered outside of these guidelines, resulting in the need for additional information to supplement the permit application.