



FACT SHEET PROPOSED STATEWIDE GENERAL PERMIT FOR DISCHARGES FROM NATURAL GAS COMPANIES

The State Water Resources Control Board (State Water Board) is proposing to develop a new Statewide General National Pollutant Discharge Elimination System (NPDES) Permit for discharges resulting from hydrostatic testing and site dewatering of natural gas utilities. This Fact Sheet describes the testing operations of natural gas utilities, potential discharge activities requiring permitting, and the State Water Board's proposed approach to developing a new general NPDES permit for consistent statewide requirements for the discharges.

PURPOSE AND NEED FOR A NEW GENERAL PERMIT

The purpose of the proposed general permit is to provide a consolidated and consistent set of statewide regulatory requirements for the natural gas companies to facilitate the timely authorization and completion of hydrostatic testing and dewatering activities that result in intermittent and short-duration discharges throughout California. Many of the construction and maintenance activities of these companies consist of long and linear utility alignments inherent to the industry; thus, they do not correspond closely to conventional single site construction activities and maintenance programs with variable discharges requiring regulation by the Regional Water Quality Control Boards (Regional Water Boards). A general NPDES permit would provide uniform regulatory procedures as the planning activities, discharges, and treatment processes and best management practices (BMPs) that the gas companies use for these activities are relatively similar.

BACKGROUND ON NATURAL GAS COMPANIES – WATER USE AND DISCHARGE ACTIVITIES

Natural gas companies construct, operate, and maintain natural gas transmission and distribution facilities within California. Natural gas facilities include pipelines, storage tanks, compressor stations, valves and manifolds, metering equipment, and other appurtenances. Construction and maintenance activities for these facilities may require hydrostatic pressure testing of new and existing facilities, as well as conducting site dewatering for work on underground facilities. Natural gas companies also construct new pipelines for various reasons such as load growth in existing communities, development of new communities, upgrades or replacement of existing infrastructure, or

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enhanced reliability of the natural gas system. These companies also maintain existing pipelines for various reasons such as pipeline integrity testing, installation of auxiliary pipeline equipment (e.g., valves), visual inspections, and pipeline repairs.

The California Public Utilities Commission (Commission) issued Decision 11-06-017 in June 2011, which directed natural gas companies to prepare a Natural Gas Transmission Pipeline Replacement or Testing Implementation Plan. Thus, natural gas companies must pressure test or replace all natural gas facilities that do not have documentation of a pressure test or where the pressure test does not meet updated regulatory standards. Decision 11-06-017 further directs natural gas companies to consider retrofitting pipelines to allow for inline inspections and enhanced shutoff valves as part of those plans. As a result of Decision 11-06-017, natural gas companies currently are experiencing a substantial increase in workload to conduct the required pipeline integrity assessments, replace and repair any pipeline facilities where necessary based on the assessments, and otherwise implement needed facility automation and replacement of valves and appurtenances.

Hydrostatic pressure testing is critical for the proper construction, installation, and operation of natural gas facilities and the pipeline integrity assessments required for compliance with CPUC Decision 11-06-017. Preparations for hydrostatic testing involve developing equipment staging areas at designated locations along a pipeline alignment, excavating and exposing small areas of the pipeline for equipment access, and setting up necessary test equipment. The hydrostatic pressure testing process involves sealing the segment of pipe to be tested, installing manifolds for filling the pipe with water, pressurizing and holding the pipe in a pressurized state for several hours, and identifying any leaks. Following the test, the pressure is released and the pipe is drained by gravity, pump, or air pressure. The release of hydrostatic test water results in intermittent and short-duration wastewater discharges of moderate volume (e.g., thousands of gallons, up to hundreds of thousands of gallons). Discharge flow rates may vary from 100 gallons per minute (gpm) up to 1,000 gpm, depending on the project size, and generally last from one to five days at a single discharge location. The source waters used for such tests may include treated municipal potable water from hydrants or reservoirs, treated municipal and untreated rural groundwater wells, fresh surface waters (e.g., streams, reservoirs/impoundments, or irrigation canals), or high quality treated and disinfected municipal wastewater (recycled water).

Temporary site dewatering activities and discharges may occur in relation to construction, hydrostatic testing activities, or other routine repairs and maintenance conducted by the natural gas companies. These companies conduct dewatering to maintain reasonably dry working conditions for access and worker safety at natural gas facilities. Dewatering involves collection of accumulated rainfall and stormwater inflow, overland drainage, water line breaks, and groundwater infiltration into excavated areas. Discharges also may result during drilling, construction, and purging of wells installed to aid in site dewatering or for cathodic protection of pipelines.

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POTENTIAL CHEMICAL CONSTITUENTS IN DISCHARGES AND THREATS TO WATER QUALITY

Discharges associated with hydrostatic testing of new pipelines may contain chemical constituents present in the source water used for pressure testing, such as residual chlorine in potable municipal water. Hydrostatic testing discharges from existing natural gas pipelines additionally may contain petroleum hydrocarbons and other compounds associated with the gas, gas condensates, or oils used at compressor stations. Discharges from the hydrostatic testing and dewatering operation sites may contain suspended solids, oil and grease, and other naturally occurring constituents from contact with soil/pavement and incidental runoff at the sites, or constituents in shallow groundwater (e.g., salinity). Constituents that are present in excessive levels in the discharges may be of concern to aquatic organisms that live in the receiving waters, as well as to drinking water, fishing, and recreational uses.

CURRENT REGULATORY CONTROLS FOR THE DISCHARGES

To date, natural gas companies that conduct hydrostatic testing and dewatering discharge to surface water and land through individual permits and applicable general NPDES permits of the Regional Water Boards. These companies develop individualized application materials and permit compliance procedures to meet the terms and conditions of these different types of permits. The process typically includes investigating options of discharge to land, municipal sanitary sewers, municipal stormwater systems, and natural drainage features. Wastewater treatment methods used for discharges may include one or more of the following methods: best management practices, settling ponds or “baker” storage tanks for suspended solids reduction, bag filters, dechlorination if chlorinated potable source water supplies are used, and advanced treatment including granular activated carbon filtration when necessary. Inspection, monitoring, and chemical testing results determine if more advanced treatment is necessary. Additionally, for both hydrostatic testing and dewatering sites, natural gas companies use BMPs such as splash pads for velocity reduction, settling ponds, and protection of drainage features from runoff to avoid and minimize discharge-related soil erosion.

FUNDAMENTALS OF THE PROPOSED STATEWIDE GENERAL PERMIT

The proposed general permit will provide the natural gas companies with increased regulatory certainty through a permit that implements effluent and receiving water limitations, specifications, and monitoring requirements that are specific to the water quality threat of their discharges. The State Water Board has identified several objectives for the proposed general permit with respect to permit requirements and administrative procedures, as follows:

1. Permit Requirement Objectives
 - a. Accommodate variable source waters for hydrostatic testing;

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- b. Accommodate incidental/unplanned items (e.g., pipeline breaks, stormwater inflow, and emergency repairs);
 - c. Accommodate beneficial reuse of discharges with acceptable water quality;
 - d. Comprehensive coverage that obviates the need for individual permits; and
 - e. Discharge monitoring streamlined based on potential threat;
2. Administrative Permitting and Compliance Procedures
- a. Develop streamlined permit application and approval process;
 - b. Single fee collection process for the discharger;
 - c. Simplified online compliance reporting procedures via the State Water Board's California Integrated Water Quality System.

SCHEDULE

The draft schedule for the development and adoption of the Statewide NPDES General Permit is shown below:

- Stakeholder outreach meetings – May 8, 2015 and May 21, 2015
- Public review of draft general permit – September and October 2015
- Public workshop for draft general permit – October 20, 2015
- Public review of final draft general permit – December 2015
- Water Board adoption of general permit – February 2, 2016

ADDITIONAL INFORMATION

State Water Board staff has created an electronic subscription mailing list for the Statewide General NPDES Natural Gas Utilities Permit. To subscribe to the list to receive periodic announcements and updates via email, click on this link and follow instructions below:

http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml.

1. Enter your email address and full name in the required spaces.
2. Click on the Water Quality title bar to view its content.
3. Check the Gas Utilities Statewide General NPDES Permit box. You may also check the box for any other programs you would like to subscribe to.
4. Click on the Subscribe button to the right of the location in which your email address and full name was entered. You are now subscribed to the mailing list.

If you have any questions regarding the proposed general permit, please contact Ariana Villanueva at (916) 341-5775 or ariana.villanueva@waterboards.ca.gov. The website for this permit is under construction and will be available soon.