RATIONALE

DISCHARGES ASSOCIATED WITH HYDROSTATIC TESTING OF GAS OR PETROLEUM PIPELINES, STORAGE TANKS, AND SIMILAR VESSELS

GENERAL PERMIT IN COLORADO
FIRST ISSUE
CDPS PERMIT NUMBER COG-604000

I. STATUS

This is the first separate general permit for discharges associated with hydrostatic testing of gas or petroleum pipelines, storage tanks, and similar vessels. Previously these discharges were covered, as categories, under the Minimum Industrial Discharge (MINDI) general permit (COG-600000). This change was made to provide more specific limitations for this category and support efficiency in the development of certifications.

II. TYPES OF DISCHARGES COVERED

Scope of A General Permit

The general permit provides coverage for types of discharges that can be characterized as: ***an intermittent or temporary discharge****, containing concentrations of pollutants of concern that pose low risk to impairing receiving water quality, and possess minimal toxicity. Long-term or continuous discharges may require coverage under an individual permit.*

The effluent limits are based on the water-quality standards for the receiving water and, thus, are protective of the designated beneficial uses. All minimal discharge general permits contain narrative limitations and exclusions in common (see Part I.B.1. of the permit). Additions to the numeric limitations and monitoring requirements may occur on a site-specific basis after review of facility information and The Basic Standards and Methodologies for Surface Water (Regulation No. 31) and/or the Basic Standards for Ground Water (Regulation No.41) . The scope of this permit does include discharges to land (with the potential to enter groundwater) that are not subject to the jurisdiction of an implementing state agency., Every certification will include one or more tables that specify the limitations and monitoring requirements that apply to the discharge. Dischargers that do not fit under this characterization and/or possess highly toxic chemicals in elevated concentrations should apply for coverage under an individual permit.

Exceptions to numeric effluent requirements can exist where the application of Best Management Practices (BMPs) is sufficient to protect water quality and the inclusion of additional requirements (i.e., numeric limits, monitoring of effluent) is not necessary. This shall only be applicable when the pipelines and vessels being tested are new, no additives are added to the source water, the flow rate is minimal, the permittee doesn't have a history of non-compliance, and the discharge is not to a 303 (d) listed segment for pollutants of concern (see Regulation No. 93, Section 303(d) List Water-Quality-Limited Segments Requiring TMDLs. The permittee will be required to create a BMP Plan. The decision whether numeric effluent limits will apply or if the discharge can occur under the implementation of a BMP Management Plan will be specified in the certification to discharge. See section I.B.3. and I.B.4 of the General Permit for BMP Management Plan details.

Scope of This General Permit

This general permit (COG-604000) authorizes discharges from: hydrostatic testing of new and existing gas or petroleum pipelines, storage tanks, and similar vessels. For this permit, hydrostatic testing also includes flushing.

The periodic testing activity is conducted for one of two reasons. First, the testing is done to meet an internal requirement of the operator. Second, the testing is done to meet the requirements of the U.S. Department of Transportation (49 CFR 192, Subpart J – Test Requirements) and in accord with Section 192.515 (b) – "the operator shall insure that the test medium is disposed of in a manner that will minimize damage to the environment". Discharges of hydrostatic test water may originate from a variety of facilities, including but not limited to – gathering or transmission pipelines, natural gas liquid extraction plants, natural gas processing plants, gas compressor stations, refineries, petrochemical manufacturing plants. Discharges to groundwater(within site boundaries) will not be covered under this general permit, if the facility is subject to the jurisdiction of an implementing agency (i.e., Colorado Oil and Gas Conservation Commission, Colorado Division of Oil and Public Safety).

This general permit does not apply to treatment facilities hydrotesting or flushing pipelines for treated-water transport that are covered under the General Permit for Discharges Associated with Treated Water Distribution Systems, COG-38000.

Characteristics of Discharge

The general characteristics of the expected discharge are presented below and are used by the permit writer to determine availability of coverage under this general permit.

Source Water Source water used in hydrostatic testing may come from a variety of sources – rivers, streams, lakes, ponds, wells, and drinking water supplies. When the source water is obtained from a drinking water supply, residual chlorine is a pollutant of concern and the Division has included effluent limits (numeric or narrative) to control this pollutant on the basis that there is reasonable potential for the discharge to cause or contribute to an exceedance of a water quality standard . When the source water is obtained from a river, stream, lake, or pond, and the discharge is not to a 303(d) listed segment, the Division has determined there is no reasonable potential for the pollutants in the source water to cause or contribute to an exceedance of a water quality standard on the basis that the discharge is intermittent or temporary, and that concentrations of pollutants will not be increased during the use of the water. An additional reasonable potential analysis will be conducted for discharges to 303(d) listed waters to determine if site-specific effluent limits are required or the discharge may be more appropriately covered under an individual permit. When the source water is groundwater, only discharges of "uncontaminated" groundwater will be authorized. Contaminated groundwater may include that contaminated with pollutants from a landfill, mining activity, industrial pollutant plume, underground storage tank, or other source of human-caused groundwater pollution and exceeding the State groundwater standards in Regulations 5 CCR 1002-41 and 42. The Division will review information provided in the application to determine whether the source water is uncontaminated. The Division has determined that there is no reasonable potential for naturally occurring constituents in uncontaminated groundwater to cause or contribute to exceedance of a water quality standard on the basis that the levels will not exceed State groundwater standards and the discharge is intermittent or temporary. The Division, may on a case-by-case basis where there is evidence that the groundwater has naturally high levels of constituents potentially harmful to aquatic life, conduct an additional reasonable potential analysis and include a site-specific effluent limit in the certification. It is assumed that toxic chemical additives (i.e., corrosion inhibitors, antifreeze, biocides) will not be added to the source water.

Low-Volume Batch Discharge Hydrostatic testing is generally performed by sealing the equipment, piping or vessel to be tested and providing a water fill location. After the equipment, piping or vessel is full, the pressure is increased to the desired level using a high pressure pump system and then held at pressure for several hours (in some cases, hydrostatic testing may be performed at atmospheric pressure). Following the test, the pressure is released and the equipment, piping or vessel is drained by gravity flow, pumping, or air pressure. In some cases, the discharge is collected in a tank for testing and/or treatment prior to discharge to the water body. Hydrostatic test water discharges are, therefore, batch discharges with a short-term duration. Typical volumes per test range from 10,000 to 50,000 gallons. However, if the total discharge is expected to be 1,000,000 gallons or greater, then an individual permit may be required (contact permit writer).

Residue. Residue in the pipeline may contribute to the pollutants of concern in the discharge from the hydrostatic testing. New structures should be relatively free of potential pollutants but may include – construction debris, suspended solids from soil, welding solids, lubricating oils, and pH. Existing structures may contain residues from natural gas, hydrocarbon condensates, and petroleum products (i.e., benzene, toluene, and xylenes). Therefore, the Division has made a qualitative determination of reasonable potential for petroleum sources and iron from the pipelines and has included the applicable water quality standards for benzene, toluene, ethylbenzene, xylenes, and total recoverable and dissolved iron as later described.

Receiving Water. Division decisions on coverage under this general permit considers the following conditions:

This general permit does not provide coverage for discharges to a water body with the designation of "outstanding waters".

Discharge to a stormwater conveyance system is not expected to be a common event, given the expected right-of-way setting of the pipelines. However, this general permit can provide coverage, if the owner of the conveyance system is contacted by the permittee prior to discharge and complies with the owners' ordinances, regulations, and additional requirements. Further, the permittee should provide the owner- prior to actual discharge- specific information on times and locations of expected discharges.

Discharges to impaired water are allowed since the effluent limits are equal to the water-quality standards and the discharge is expected to be short-term or intermittent.

III. PERMIT CONDITIONS

Numeric effluent limitations (Tables 1 and 2 and Part I.B.2. of the permit) are imposed for pollutants that are specific to the types of discharges. Since each type is a batch discharge, the limitations can be expressed in terms of a daily maximum concentration - as allowed under 40 CFR 122.45 (e) and (f). A professional decision is made to use the 30-day average, if the parameter does not have a daily maximum value in Regulation No. 31.

*Table 1. Effluent Limitations and Monitoring Requirements for **New** Pipelines, Tanks, or Other Similar Vessels*

Effluent Parameter	*Discharge Limitation Daily Maximum*	*Monitoring Frequency*[1]	*Sample Type*
Flow, gpm	*Report*[2]	*NA*	*NA*
Total Suspended Solids, mg/l	*30*	*2X/discharge*	*Grab*
Oil and Grease, mg/l[3]	*10*	*2X/discharge*	*Visual/Grab*
pH, s.u.	*6.5 – 9.0*	*2X/discharge*	*In-situ*
Iron, Dissolved, mg/l	*0.3*	*2X/discharge*	*Grab*
Site-specific[4]			
Total Residual Chlorine, mg/l	*0.019*	*2X/discharge*	*In-situ*
Other Pollutants, units	*Limit*	*2X/discharge*	*Grab*
Other Pollutants, units	*Report*	*2X/discharge*	*Grab*
Total Dissolved Solids, mg/l[5]	*Report*	*2X/discharge*	*Grab*
Total Phosphorus, mg/l[6]	*0.05*	*2X/discharge*	*Grab*
Total Phosphorus, mg/l[6]	*Report*	*2X/discharge*	*Grab*

*Table 2. Effluent Limitations and Monitoring Requirements for **Used** Pipelines, Tanks, or Other Similar Vessels*

Effluent Parameter	*Discharge Limitation Daily Maximum*	*Monitoring Frequency*[1]	*Sample Type*
Flow, gpm	*Report*[2]	*NA*	*NA*
Total Suspended Solids, mg/l	*30*	*2X/discharge*	*Grab*
Oil and Grease, mg/l[3]	*10*	*2X/discharge*	*Visual/Grab*
pH, s.u.	*6.5 – 9.0*	*2X/discharge*	*In-situ*
Iron, Total Recoverable, mg/l	*1.0*	*2X/discharge*	*Grab*
Iron, Dissolved , mg/l	*0.3*	*2X/discharge*	*Grab*
Site-specific[4]			
Total Residual Chlorine, mg/l	*0.019*	*2X/discharge*	*In-situ*
Benzene, mg/l	*0.0022*	*2X/discharge*	*Grab*
Toluene, mg/l	*1.0*	*2X/discharge*	*Grab*
Ehtylbenzene, mg/l	*0.530*	*2X/discharge*	*Grab*
Xylenes, mg/l	*1.4*	*2X/discharge*	*Grab*
Other Pollutants, units	*Limit*	*2X/discharge*	*Grab*
Other Pollutants, units	*Report*	*2X/discharge*	*Grab*
Total Dissolved Solids, mg/l[5]	*Report*	*2X/discharge*	*Grab*
Total Phosphorus, mg/l[6]	*0.05*	*2X/discharge*	*Grab*
Total Phosphorus, mg/l[6]	*Report*	*2X/discharge*	*Grab*

[1] Samples will be taken during the first and last hour of discharge. If the discharge is less than an hour, then the samples will be collected during the first and last 15 minutes of discharge. The sample point will be immediately following the discharge from the pipeline or vessel. If the discharge is going through BMPs then sampling shall occur after such BMP treatment and prior to discharge to waters of the state. If the same hydrotesting program is conducted at discrete locations along an extensive pipeline, then the monitoring frequency can be adjusted on a site-specific basis with support for this decision provided in the certification. For example, once the 2X/discharge monitoring is completed on the first two tested pipeline segments and evaluated, then the subsequent monitoring efforts may be reduced to 1X/discharge.

[2] Flow can be measured with a recorder or determined from estimates based on volume of fill water, dimension of the pipeline, or volume of vessel filled with water.

[3] There shall be no visible sheen. If a visible sheen is detected a grab sample is required.

[4] Limits will be established on a site-specific basis for additional parameters based on an assessment of the submitted information and results of discussions with permittee by the permit writer. The rationale used for site-specific limitations will be presented in the certification. If the source water is from a drinking water supply, then total residual chlorine monitoring is required.
If the pipeline or vessels is expected to contain residual of petrochemical products, then BTEX monitoring is required.
Other pollutants may be added based on a discharge to an impaired water body and/or based on pollutant of concern determination resulting from nature of the source water, source water additives, and /or residues in the pipeline or vessel.

[5] Monitoring is required only for discharges within the Colorado River Basin

[6] Monitoring and/or numeric effluent limits may apply to discharges to watersheds with a control regulation for Phosphorus.

a. *Regulations for Effluent Limitations (Regulation No. 62) – Section 62.4 of the regulations includes effluent limitations that apply to all discharges of wastewater to state waters. These regulations are the basis for Oil and Grease and Total Suspended Solids limitations. These limits are the same as existed in the MINDI permit.*

b. *Technology-Based Limitations – No federal guidelines have been promulgated for this type of facility and none are expected. Since most hydrostatic testing occurs within the petroleum industry, to determine if any residual from prior use is being discharged, effluent limitations and monitoring for benzene, toluene, ethylbenzne, and xylene (see discussion in later paragraphs) are required as these parameters are good indicators of the presence of petroleum constituents.*

c. *Water Quality Standard-based Limitations (Discharges to Surface Waters)*

Water quality-based limits are imposed for pH, total residual chlorine (TRC), total recoverable iron and dissolved iron, and benzene, toluene, ethylbenzene, and xylene. The pH limits are the same as existed in the MINDI permit. The limits for TRC are also the same as existed in the MINDI permit with the exception that antidegradation-based limits are not applied (see below). The total recoverable and dissolved iron limits are more stringent than in the MINDI permit because they are based on the respective standards. The limit for benzene included in this permit is equal to the water-quality standard which is a change from the MINDI permit.

1. *pH – This parameter is limited by Water Quality Standards as the water quality standards of 6.5-9.0 s.u. range are more stringent than those specified under the Regulations for Effluent Limitations(Regulation No. 62)*

2. *Total Residual Chlorine – The TRC limitations are equal to the most stringent standards found in Table II of The Basic Standards and Methodologies for Surface Water (Regulation No. 31). Effluent must be dechlorinated by chemical or physical means prior to discharge to meet limitations. If chlorine is not present in any concentration in the source water and none is added, the permit writer can exempt a permittee from TRC effluent limits and monitoring.*

3. *Total Recoverable and Dissolved Iron – Because iron in various forms can be present, dissolved iron and total recoverable iron limits are imposed. Both iron limitations will apply and are equal to most stringent standards found in Table III of The Basic Standards and Methodologies for Surface Water (Regulation No. 31). In this rationale and permit, the standards in ug/l have been included as limits in terms of mg/l.*

4. *Benzene, Toluene, Ethylbenzene, and Xylene – Since most hydrostatic testing occurs within the petroleum industry, to determine if any residual from prior use is being discharged, the effluent limitations and monitoring for benzene are required as this parameter is a good indicator of the presence of petroleum constituents. The benzene, toluene, ethylbenzene, and xylenes, limitations are the most stringent, petroleum-related standard found in the Basic Standards for Organic Chemicals table in The Basic Standards and Methodologies for Surface Water (Regulation No. 31), and have been converted from ug/l to mg/l.*

5. *Other Pollutants Limitations and/or Monitoring – The permit writer will review the application and determine if any additional pollutants must be limited and/or monitored to protect the classified uses assigned to the receiving water. If required, the permit writer will set these additional limitations equal to the appropriate water-quality standards. A flow limit for each outfall is to be identified on each certification.*

d. *Chemicals – The application must include disclosure of chemicals that may be present on the interior surface of the pipeline, tank, or vessel and/or that may be used as an additive in the hydrostatic test water. Also, the source and water quality of the test water should be disclosed. This information is necessary in the assessment of possible coverage under this general permit.*

e. *Salinity Requirements – All permit actions for discharges to surface waters in the Colorado River Basin must include salinity monitoring. Accordingly, the permit writer will perform an analysis, as set out in the paragraphs that follow, to determine which salinity requirements apply pursuant to the requirements of Section 61.8(2)(l) of the Colorado Discharge Permit System Regulations(Regulation No. 61). Multiple discharges covered from a single facility are subject to the limitation that would apply if there were a single discharge point.*

In conformance with the Colorado Discharge Permit System Regulation (Regulation No. 61), existing permits for discharges to the Colorado River basin incorporate total dissolved solids (TDS) as the monitoring parameter for compliance with the salinity requirements. Electrical conductivity (EC) may be substituted for TDS if a correlation exists between TDS and EC is established for the discharge, based on 5 paired samples, and approval by the permit writer.

To ensure compliance with the regulations, the compliance staff will review the reported data that the facility will not discharge more than 1 ton per day, or 365 tons/year. For facilities exceeding this threshold, a salinity report is required that includes satisfactory demonstration by the permittee that it is not practicable to prevent the discharge of all salt. The Division will decide

on this exception prior to the start of discharge and may require further actions by the permittee to reduce the salt load before approval of the discharge.

Based on the effluent data in the application from a new facility, the permit writer will make an assessment of the expected salinity load in the discharge (from concurrent flows at all outfalls) and if less than 1 ton/day, the calculation will be documented in the issued certification. If the load exceeds this level, then the discharge can not be authorized. However, as stated above, the Division can grant an exception. The sequence of discharges from hydrostatic testing of long pipelines or several vessels is important to this assessment.

Because the discharges covered under this permit are short-term and usually once per location, two analyses for TDS are normally required. The certification will indicate if additional salinity reporting requirements are waived and the basis for this decision.

f. *Control Regulations – Control regulations exist to place additional limits on discharges to surface waters in five watersheds – Dillon Reservoir, Cherry Creek Reservoir, Chatfield Reservoir, Cheraw Lake, and Bear Creek Reservoir. The total available wasteloads (i.e., phosphorus) have been allocated in these regulations to various point and non-point sources that discharge on these watersheds.*

Certifications for discharges to these watersheds may include limitations and/or monitoring requirements for the parameters specified in the regulation. Since the discharges are expected to be short-term and contain levels of the control parameters equal to or less than the concentrations in nearby ambient waters, these authorized loads are viewed as de minimus and not subject to assignment under the above allocation process (i.e., see Section 72.2.12 of Regulation No. 72). The permit writer will briefly state in the certification the reason, with supporting data, the basis for the de minmus decision, when the basin regulation does not state that such industrial contributions are considered minimal.

g. *Antidegradation – As set out in The Basic Standards and Methodologies of Surface Water, Section 31.8(3)(c)(ii)(C), an antidegradation analysis is required for all waters not designated as Use Protected, except in cases where the regulated activity will result in only temporary or short term changes in water quality. Discharges permitted under this general permit are expected to be short-term or intermittent. With consideration that these discharges are of good quality and in accordance with Section 31.8(3)(c)(ii)(C) of The Basic Standards and Methodologies For Surface Waters (Regulation No. 31), which exempts regulated activities that result in only temporary or short-term changes in water quality, an antidegradation analysis is not necessary.*

h. *Whole Effluent Toxicity (WET) – WET testing is not a part of this permit. Discharges covered under this minimal discharge general permit are judged to have minimal impact on the receiving waters; thus, these discharges are not expected to exhibit whole effluent toxicity. If an application shows that or if the permit writer determines that the proposed discharge may or will exhibit whole effluent toxicity, an individual permit with effluent limitations and other permit conditions, including a WET limit and monitoring, will be considered more suitable.*

i. *Mixing Zones – Under this general permit mixing zone regulations do not apply , since water-quality standards are applied as the effluent limits(i.e., no dilution is allowed.).*

j. *Discharges to 303(d) listed waters – Since the effluent limits are equal to the water-quality standards and the discharge is expected to be short-term or intermittent, the assumption is that the discharge will not further impair the quality of the receiving water for the 303(d)-listed parameters.*

k. *Discharges to Ground Water – Discharges permitted under this general permit may travel to groundwater via land application, infiltration ponds or other approved means. Because the standards for groundwater are based on water supply and agricultural uses, which also apply to surface waters of the state, the Division has determined that discharges that are protective of surface water standards are also protective of groundwater standards, unless a more stringent site-specific groundwater standard has been adopted. The Division will include a site-specific limit in the certification or require coverage under an individual permit as needed to implement more stringent site-specific groundwater standards. Certain discharges, due to proximity to alluvial water associated with nearby surface flow, are considered to be hydrologically connected this surface flow and will be considered a discharge to surface water.*

Additionally, the permittee will need to demonstrate in the application by what method effluent is discharged to ground water, and how and where effluent can be monitored prior to discharge to ground water. Since this is a general permit, it is not practical to require that a permittee install ground water monitoring wells for compliance determination, all applicable effluent limitations will be met prior to application to the land.

All mentioned above, there may be situations where the discharge can not be authorized, under the Division's jurisdiction, and a certification can not be issued. In these instances, an applicant will need to contact another state agency.

l. Project Coverage – Entities such as oil and gas pipeline companies frequently hydrostatically test several segments of pipeline that extends across a large area. The permit writer has discretion to issue one certification that covers all discharges from a single project when this is practical and avoids unnecessary repetitive certifications. When project coverage is issued, the permit writer will determine that all effluent limitations and monitoring requirements are appropriate for all covered discharges to qualify for project coverage.

IV. APPLICATION

Dischargers can apply for coverage under this general permit once the permit is issued.

Holders of certifications under the administratively extended MINDI (COG-600000) for hydrostatic testing will automatically be transferred to this new general permit. Their coverage under the MINDI will be transferred without a lapse of coverage (i.e. discharging without a permit) and without loss of fee payments. Incidentally, the annual fee for each of these general permits is $630, effective July 1, 2007. The permittee will have 90 days, from the date of transfer, to comply with any new terms and conditions of this general permit.

The Division will be terminating the MINDI permit (COG-600000) in a few months.

Nicole Smith
June 22, 2007

V. PUBLIC NOTICE COMMENTS

During the extended public notice period (June 22 to July 27, 2007), written comments were received from

Public Service Company of Colorado
Wright Water Engineers Inc,
Colorado Stormwater Council
Keep It Clean Partnership
Chatfield Watershed Authority, and
Roxborough Park Metropolitan District.

The Division will provide copies of any written comments upon written request. Topical summaries of the comments by entity and the response of the Division are provided below.

During the public notice period, the Division received numerous verbal requests to clarify that this general permit applies to industrial pipelines and not to domestic pipelines for treated-water transport, since the hydrotesting of the latter pipelines is already covered under another general permit (i.e., Discharges Associated with Treated Water Distribution Systems, COG-380000). This clarification is made with added text in the rationale and permit. The detailed information is added under "II. Types of Discharges Covered" in the rationale.

Public Service Company of Colorado, PSCo (dba Xcel Energy)

Comment 1: *The proposed monitoring frequency is based on the Division's Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Industrial and Domestic Wastewater Treatment Facilities. This policy is not applicable to the types of discharges covered under this permit which are expected to be short-term, not continuous, and at numerous locations along a pipeline. PSCo recommends that the monitoring frequency be adjusted to reflect the types of discharges this permit will cover, or provide language in the permit that the monitoring frequency will be established on a case-by-case basis.*

Response: The rationale has been revised because the monitoring frequency is not based on the policy referenced and instead is specific to this general permit. The low-volume batch discharge feature of hydrotesting is now specifically addressed under Section II of the rationale. On this basis, the limitations are set to daily maximum values with monitoring done twice per discharge event (see footnotes to Tables 1 and 2). This monitoring frequency should be reasonable for the discharge events that are expected to occur with hydrotesting. If the same hydrotesting program is conducted at discrete locations along an extensive pipeline, then the monitoring frequency can be adjusted on a site-specific basis with support for this decision provided in the certification. For example, once the 2X/discharge monitoring is completed on the first tested pipeline segment and evaluated, then the subsequent monitoring efforts may be reduced to 1X/discharge.

Comment 2: *The rationale states that a flow limit for each outfall will be identified; however, the permit states that a flow limit might apply. PSCo requests that the Division's intention be clarified, since these statements are inconsistent. Further, the requirement for a flow recorder is impossible to meet in most discharge situations and the flexibility stated in Part I.B.2.e should be allowed.*

Response: Consistent with the requirements of 5 CCR 1002-61.8(2)(i), the permittee shall report the volume of water discharged. Footnote to the tables now indicates that the flow estimate can be derived using one of several methods. The Division's intent is to have a reasonable estimate of the total flow discharged as a result of the hydrotesting and the assumption is made that the discharged volume will generally be in the range of 20,000 to 50,000 gallons per test and not exceed 1,000,000 gallons. The inconsistency is corrected.

Comment 3: *PSCO believes that the preparation of a Best Management Practices (BMP) plan is unnecessary and impractical given the type and duration of the discharges. The key elements of a BMP are already addressed in other sections of the permit or in sections of the application for a permit. For example, minimization of erosion is addressed as a narrative limitation. PSCo suggests that answers to questions in the application include a short description of how a particular concern will be addressed, as a practical alternative to requiring the preparation of an entirely separate document.*

Response: The permit has been clarified to indicate that a BMP Plan is only required when numeric effluent limits do not apply. In these cases, the Division believes it will be important to have site-specific measures that will be used to ensure the protection of water quality standards.

Comment 4: *The permit requires quarterly reporting of routine monitoring data collected at the outfall. Since the discharges are expected to be short-term and not continuous, this quarterly requirement is impractical. PSCo recommends that monitoring data be reported to the Division by the 28th of the month following the discharge.*

Response: Revisions are made to require monitoring 2X/discharge and monthly reporting by the 28th day of the month following the discharge.

Comment 5: *The option for a short-term certification is not available under the proposed permit. PSCo advocates the availability of this option, since it is compatible with the short-term nature of the discharges and would not require the additional paperwork of submitting quarterly "no discharge" reports for most of the 5 year period.*

Response: Effective July 1, 2007, legislation (HB 07-1329) removed the option for a short-term certification under annual fees –"(T) Category 26 Minimal discharge of industrial or commercial wastewaters – general permit". Thus, once the testing is complete, the certification can be terminated to avoid the need to submit monthly DMRs for the remainder of the general permit period. Termination of permit coverage needs to be initiated by the permittee.

Comment 6: *The Division has 30-days to review the application before deciding on issuance or denial of the certification. Given the nature of the discharges i.e., short-duration, low toxicity, not chemically complex), PSCo asks that this review time be shortened to 10 or 15 days to expedite the review process (such as is done with applications for the construction stormwater permit).*

Response: The Division recognizes the importance of timely action on applications for certifications under general permits and makes an effort to reach a decision within two weeks, especially if the permittee has initiated contact with the permit writer before submitting the application and discussed the nature of the project and basis for urgent action. The Division will continue to informally expedite the review process to meet the needs of permittees when possible; however, the option for the 30-day review period is needed since the Division encounters unexpected periods of excessive workload and can not maintain the shorter response time.

Comment 7: *Part I.A.3 of the permit indicates that projects within a geographic area may obtain blanket coverage, but there is no supporting explanation as to why project must be in the same geographic area. PSCo would like to obtain statewide coverage for discharges from testing of existing pipelines and not be restricted to coverage by geographic area.*

Response: Since a geographic area can be defined as an area within the boundaries of the state, statewide coverage is available for certifications under this general permit. If this option is exercised in the certification, the decision and supporting reasoning is to be provided in the rationale (see Project Coverage). The Division has issued numerous certifications with statewide coverage.

Comment 8: *Since the effluent limits are to be equal to the water-quality standards, the assumption can be made that the discharge will not impair the quality of the receiving water for the 303(d) listed parameters. On this basis, PSCo believes that footnote 3 to the table addressing limitations and monitoring requirements for testing of used pipelines should be deleted.*

Response: The footnote has been revised and indicates that additional parameters will be added, if the discharge contain as the same pollutant of concern that is the basis for listing the receiving water as impaired. On this basis other limits, equal to the water-quality standard, will be added if the permit writer decides this is needed to protect water quality.

Comment 9: *The rationale states that one salinity sample is required; however, the permit states that monthly samples will be taken for six months. PSCo requests clarification on the salinity sampling requirement. Further, PSCo supports the requirement for one sample is collected per discharge.*

Response: The 2x/discharge monitoring requirement applies to salinity and will be included for those discharges to waters of the Colorado River watershed. Since this measurement can be obtained with the use of an inexpensive hand-held electronic instrument (i.e., conductivity meter), this requirement should be attainable. However, the correlation between TDS and EC must be shown by paired analysis of 5 samples before the EC measure can be used instead of TDS.

Comment 10: *PSCo recommends that only the definitions utilized in the rationale and permit be included in the definition section.*

Response: The Division uses a standard boilerplate for permit documents which includes a set of definitions for common terms used in permits. The effort to adjust this list for each permit action is not warranted, given the limited resources of the Division and the lack of key negative consequences if additional definitions are provided.

Wright Water Engineers, Inc. (WWE)

Comment 11: *WWE believes that weekly rather than 3-days-per-week sampling is adequate for short-term discharges authorized under this general permit.*

Response: The Division reconsidered the sampling frequency and made a revision (refer to response to Comment 1).

Comment 12: *WWE believes that the requirement for a flow measurement device is not necessary and suitable simple options are available (i.e., bucket and stopwatch, volume of water is known, estimates based on pipeline dimensions).*

Response: The Division agrees and acknowledges that flow measurement options are available (refer to response to Comment 2).

Comment 13: *WWE believes that the requirement for Best Management Practices (BMP) plan for each discharge is not necessary, especially for those entities that may conduct 10 or more pipeline tests in a given year. The suggestion is that a general, institutional BMP plan (i.e., identify variety of acceptable BMPs for treatment of testing discharges and guidance for selecting appropriate BMP based on site-specific conditions)be prepared by the permittee.*

Response: The permittee may prepare a BMP plan for submittal as part of the application for a certification. As discussed in the response to Comment 3, the Division will review this plan and how it can be used to support the development of a certification.

Comment 14: *WWE provided a table of detailed edits and revisions to the rationale (8 entries) and permit (21 entries).*

Response: Many of the suggestions addressed material in the public notice draft that has been changed. The Division made an effort to evaluate the intent of the suggestions as they relate to the revised text and made additional changes. For example, the suggestion to include flushing as a recognized activity that could be authorized under the hydrotesting general permit was implemented in the revised general permit.

Colorado Stormwater Council (CSC)

Comment 15: *The CSC is concerned about the impacts to Colorado Municipal Separate Storm Sewer Systems (MS4s) that may result from the discharges that may be authorized under the array of proposed minimal industrial discharge general permits the Division sent to public notice on June 22, 2007. A the Division's July 10 meeting, CSC and other attendees expressed concerns about the inadequacy of the 30-day comment period to review and respond to these proposed general permits and requested extensions. The Division extended the comment period to August 27 for all proposed general permits, except for the hydrostatic testing general permit which was extended to July 27. CWC felt that all public comment periods should have been extended to August 27 and does not understand why one was treated differently.*

Response: The extension period for the hydrostatic testing general permit was not extended for two reasons.

First, the permit applied to well-defined activity within a relatively narrow industrial sector and discharges would be predominately in rural areas. Unfortunately, the draft sent to public notice was insufficiently clear about the exclusion of hydrotesting of treated water pipelines. With the further clarification of the scope of the permit, the expected level of general public concern would be substantially diminished. One of the key industries (PSCo) impacted by this general permit did provide substantial comments on the draft (see Comments 1 through 10).

Second, the Division needs to issue a certain number of permits, including certifications, by 1 October 2007 to meet the issuance goals set by EPA Region 8. The timely issuance of this general permit will contribute to the attainment of that goal. Thus, the Division reached the conclusion that, with the assumption on diminished concern by the general public, the approach to issue the general permit could proceed as planned.

Comment 16: *The proposed permit requires the permittee to obtain approval from each MS4 for a state-authorized discharge. This process raises several issues to the MS4s:*

- *Under the Phase I and II MS4 permits, discharges authorized under a separate Division permit and in compliance with the provisions of those permits are allowable but appear to conflict with other MS4 permit language (Part I.A.2 and Part II.A.2) and possibly with local ordinances.*
- *Does a MS4 incur a level of liability for a Division permitted discharge if the MS4 conveyance is utilized to transport the discharge to state waters? MS4 permits require action to address illicit discharges to stormwater sewer system.*
- *Some MS4s prefer only notification of Division permitted discharges but do not want to be required to provide approval of this discharge. Others prefer approval of such discharges in advance of Division permit issuance. There has been insufficient time for MS4s to develop internal strategies to address how this process would work.*
- *There is a need for a system whereby an MS4 can determine if a Division permitted discharger may or may not be potential source of a reported illicit discharge, such as a website where permitted dischargers enter addresses of where they are operating each week, and MS4s have access to that information to either accept or deny discharge to their storm drain system .*

On the basis of the above concerns, CSC requests the following changes to the permit:

- *Remove the application requirement that a permittee obtain written approval from the owner of the storm drain system for discharge,*
- *Add provision to exempt MS4s of liability for dischargers permitted under Division permit – including bypass, spill, or upset conditions.*
- *Develop, with adequate MS4 input, a website where an MS4 can access information on proposed discharge locations and expected dates of discharge.*
- *Provision to notify the MS4 in the event of a spill or noncompliance situation.*

Response: Based on input from MS4s, the permit no longer requires prior written approval from the owner of the system to be submitted with the application. The owner of the storm drain system has the right to decide on what inflows are accepted by the system -such as the owner of a domestic waster treatment facility has the right to decide on flows entering their collection system. For this reason, the Division can not unilaterally authorize a discharge to either type of permitted system and, thus, will require the permittee to contact the owner of the system to verify if there are additional ordinances, regulations, or requirements set by the owner of the system.

In response to the liability questions raised at the July 10 meeting, the Division provided an initial response in a July 13 letter sent to the MS4 contacts. Briefly, the response is - "Therefore, unless specifically directed by the Division, the MS4 permits do not require permittees to implement procedures to address pollutant sources resulting from activities and discharges not required by the program elements in Part I.B of the permits."

The Division is considering improved ways to provide detailed information on certifications issued under specific general permits, including online inventories.

The Division has a standing spill notification program which includes notification of the collection system and/or downstream water users when such events occur. This program will be reviewed to identify the need for specific text on notification of MS4s.

Comment 17: *If the Division has made the decision that discharges covered under this general permit may go to the stormwater system, then these permits should be best Management Practice (BMP) based, with the BMPs chosen to correspond with the constituents of concern. CSC requests that the general permit be changed from limited-based to a BMP-based.*

Response: The Division will maintain the options to use BMP-based and limit-based conditions in general permits, based on which combination is judged to be most effective in providing water-quality protection.

Comment 18: *Upset and by-pass language in Part II.6 and 7 is typical of wastewater process discharges and not to types of discharges expected under this general permit. CSC request that the bypass and upset clauses be removed from the permit.*

Response: Part II of the permit is standard boilerplate for use in all permits as required in the regulation and is not changed to accommodate the many specific conditions that may apply to a particular permit. If a component of Part II is not reasonably applicable to the nature of the authorized discharge, then there is a basis for non-implementation.

Comment 19: *The permit is unclear about coverage of discharges of potable water, which would be covered under a Treated Water Distribution general permit. Additional information is needed on clarification of the activities and/or volume thresholds that are intended to require coverage by this general permit.*

Response: This clarification is now provided (refer Section II in the rationale).

Keep It Clean Partnership (KICP)

Comment 20: *KICP was disappointed that the public comment period for this general permit was not extended to August 27, as was done for the other associated general permits sent to public notice on June 22, 2007. The KICP requests that the permit clarify that coverage does not include flushing, cleaning, maintenance, or operation of drinking water distribution system and related appurtenances, since such discharges are covered under the general permit for treated water and associated treated water management plan requirement of that permit.*

Response: The reason for not extending the public notice period is provided in the response to Comment 15. The clarification that the permit does not apply to treated water pipelines is added to the permit (refer to response to Comment 15 and second paragraph under Section V of the rationale).

Comment 21: *The KICP letter included many comments on the array of minimal industrial discharge general permits sent to public notice on June 22, 2007. These are summarized below.*

- *BMP-based permits are desirable for many of the discharges as opposed to limit-based permits*
- *Coordination between state and locals is essential*
- *The Division is to be applauded for reaching out to industry(such as heat transfer equipment cleaning industry) that performs discharge activities with a consistent, simple statewide compliance message and identifying appropriate BMPs for each activity, which is essential for compliance and enforcement.*

Response: The Division will continue with outreach efforts to stakeholders on permitting processes.

Chatfield Watershed Authority (CWA)

Comment 22: *The CWA does not support the position that all discharges are automatically de minimus, in terms of phosphorous contribution and requests that each certification state the reason, with supporting data, for the de minimus decision.*

Response: The Division reconsiders this assumption during the review of application for a certification. The Division agrees to provide in the certification information that was used to support use of this assumption

Comment 23: *While the prior minimal industrial discharge general permit had a phosphorus "report only" requirement, the proposed general permit does not list phosphorus limits or monitoring requirements. Please clarify.*

Response: The Division may require a phosphorous limit and/or monitoring for discharges to watershed subject to such control regulations. These requirements are addressed in Tables 1 and 2.

Comment 24: *CWA raised issues related to wasteload allocation for discharges authorized under the proposed general permit and how are these considered.*

Response: The Division issued certifications under the assumption that the specific discharge would contribute a de minimus amount of phosphorous and thus would not require consideration as to which category of wasteload allocation for total phosphorous would apply(i.e., reserve pool). The Division has not reviewed the available data from dischargers authorized under general permits to control watershed, assessed the total annual contribution of total phosphorus, evaluated the need for placing further conditions in general permits to annually limit the phosphorous load from all such discharges, and discussed with appropriate control authorities any needed set-aside of the reserve pool for this load.

Comment 25: *CWA recommends that the Division convene a small workgroup of Division staff and select members from the four affected watersheds to clarify the intent and language used in the proposed general permits, with respect to control regulations. Further, the CWA would like to have more involvement in the general permitting process in order to be able to provide a consistent message to industrial dischargers to the watershed and plan for associated workload increase to deal with such permitting issues.*

Response: The Division will continue discussions with stakeholders in the affected watersheds to determine if changes to the permit process or control regulations are warranted.

Roxborough Park Metropolitan District (RPMD) (letter by legal counsel- JacksonKelly, Attorneys at Law, PLLC)

Comment 26: *RPMD believes that there is inadequate water-quality data and scientific information available to evaluate the array of minimal industrial discharge general permits sent to public notice on June 22, 2007. Therefore, the Division should either –*

provide the relevant data and calculations and extent of each pollutant likely discharged form each facility operating under each general permit- then extend the comment deadline for 45 days,
or
terminate and void the proposed actions to adopt the general permits.

Response: General permits are created to provide permit coverage to facilities with similar operations and similar effluent chemistry. These permits are set up so that they can be obtained quickly, as opposed to an individual permit which may take a substantially longer time frame to obtain. Under these circumstances, limitations are set at the water quality standards, therefore, the facility is unable to take advantage of any dilution that may be available in meeting the permit limits.

In determination for coverage under the general permit, the source water and other potential additional parameters of concern are evaluated and additional requirements may be added to the certification. All applicable water quality standards may be covered under these certifications. Also, the permittee may be asked for additional information on the source water or effluent if possible (such as a water quality analysis), to assist in determining if there are other parameters of concern. Additionally, if there are unique circumstances surrounding a specific discharge, or if it is determined that a facility cannot meet the limitations set under the general permit, then coverage under the general would be denied and that facility would then need to apply for an individual permit.

Comment 27: *RPMD questions the assumption that discharges are expected to be de minimus contributors of phosphorus and request information used to reach this conclusion. Further, the suggestion in the permit that the permit writer will determine the actual quantity of discharged phosphorus and then reach a decision for certification precludes public knowledge of and input to this decision-making to set effluent limits.*

Response: The Division will provide additional information in the certifications on how de minimus decisions were reached (refer to responses to Comments 23 and 24).

While the permit writer does have some flexibility to use professional judgment in reaching a de minimus decision about the possible phosphorous load in the discharge, these decisions are reviewed by the Unit Manager before the certification is issued. As noted above, certifications will now include information on such decisions and the Division will meet with representatives of the control authorities to discuss further improvement to how control regulations are implemented in general permits and, subsequently, in certifications. As regulations and policies now exist, the issuance of a certification, and any amendments, are not subject to public notice or a standing requirement to solicit public input. The Division welcomes comments on issued certifications and Division-initiated amendments will occur if the Division concurs with the request.

Nicole Smith
September 11, 2007