STATE WATER RESOURCES CONTROL BOARD
1001 I Street, Sacramento, California 95814
http://www.waterboards.ca.gov/water_issues/programs/npdes/natural_gas
ORDER WQ 2017-XXXX-DWQ
GENERAL PERMIT NO. CAG670001

STATEWIDE GENERAL ORDER FOR DISCHARGES FROM NATURAL GAS UTILITY CONSTRUCTION, OPERATIONS AND MAINTENANCE ACTIVITIES

A Discharger described in Table 1 may apply for coverage under this General Order in compliance with the waste discharge requirements as specified by California Water Code, article 4 (commencing with section 13260) and set forth in this General Order:

Table 1. Discharger Information

Discharger	A company that constructs, operates, and maintains facilities for transmission, and distribution of natural gas.

Table 2. Administrative Information

The State Water Board adopted this General Order on December 5, 2017.
This General Order shall become effective on December 5, 2017.
This General Order shall expire on December 1, 2022.
The U.S. Environmental Protection Agency and the State Water Board have classified discharges authorized by this General Order as minor discharges.

CERTIFICATION

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this General Order with all attachments is a full, true, and correct copy of the General Order adopted by the State Water Board on December 5, 2017.

Jeanine Townsend
Clerk to the Board

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I. SCOPE OF STATEWIDE GENERAL ORDER

The California Water Code section 13263(i) provides that the State Water Resources Control Board (State Water Board) may prescribe general waste discharge requirements (WDRs) for a category of discharges to serve as a statewide general order. The statewide general order shall implement the provisions, prohibitions, and water quality objectives contained in statewide and/or region-specific water quality control plans that govern the discharge.

California Water Code section 13263(i) sets forth the circumstances under which general order coverage may apply, consistent with federal regulations. Specifically, section 122.28 of title 40 Code of Federal Regulations (40 C.F.R.) provides for issuance of general National Pollutant Discharge Elimination System (NPDES) permits to regulate a category of point sources which:

- Involve the same or substantially similar types of operations.
- Discharge the same type of waste.
- Require the same type of effluent limitations or operating conditions.
- Require similar monitoring.
- Are more appropriately regulated under a general permit rather than an individual permit.

Statewide discharges from natural gas facilities including discharges from excavation (e.g., conventional excavation and hydro-excavation), construction, testing (e.g., hydrostatic testing), maintenance, operation and/or repair activities are within the categories listed above. Therefore, these discharges may be regulated under a general order that serves as general WDRs for discharges to (1) waters of the United States (U.S.), (2) non-federal surface waters, and/or (3) land, with the potential of reaching groundwater in California. Non-federal surface waters is synonymous with surface waters of the state that are not waters of the U.S. This General Order does not authorize direct discharge to groundwater.

Discharges from natural gas facilities, including discharges from excavation, construction, testing, maintenance, operation and/or repair activities in California, may pose a threat to existing and potential beneficial uses of waters of the U.S., non-federal surface water, and groundwater if not properly controlled and regulated. This General Order includes findings, effluent limitations, and provisions that incorporate (1) water quality criteria from the California Toxics Rule and National Toxics Rule, and (2) water quality objectives contained in water quality control plans, including Basin Plans, implemented by the State Water Board and the nine Regional Water Quality Control Boards (Regional Water Boards).

II. PERMIT COVERAGE AND APPLICATION REQUIREMENTS

This General Order authorizes discharges described below to waters of the U.S., non-federal surface waters, and land. The State Water Board strongly encourages natural gas companies to (1) exhaust land discharge options to the maximum extent possible prior to discharging to waters of the U.S. or non-federal surface waters, and (2) maximize the use of recycled water as source water when available.

A. Permit Coverage

This General Order authorizes planned, emergency, and unplanned discharges from the following activities:

1. Hydrostatic testing of existing natural gas facilities.
2. Hydrostatic testing of new natural gas facilities.
3. Site dewatering related to excavation, construction, testing, maintenance and/or repair of natural gas facilities.

Planned Discharges. Discharges due to scheduled dewatering and hydrostatic testing of new and/or existing natural gas facilities related to excavation, construction, testing, maintenance, operation and/or repair.

Emergency Discharges. Discharges due to a sudden unexpected occurrence involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services, including the provision of natural gas supplies.

Unplanned Discharges. Discharges due to dewatering resulting from water pipe ruptures, groundwater seepage, collection of rain water, incidental storm water inflow, local run-on, or urgent operations, maintenance and/or repair activities.

B. Native American Tribe Pre-Discharge Notification List

Within 30 days of adoption of this Order, State Water Board staff will send a notification to all Native American Tribal entities listed on the California Native American Heritage Commission list, including the following information:

- Brief description of the discharges regulated by this Order, and
- The opportunity to request a 30-day pre-discharge notification of any potential planned discharges from projects in the geographic area affiliated with the specific Tribe.

Water Board staff will provide Tribal entities 14 days from when they receive the State Water Board letter to submit their request for pre-discharge notification. The resulting State Water Board Native American Tribe Pre-Discharge Notification List (that lists Tribes that opted to receive a 30-day pre-discharge notice), will be attached to an applicant's Notice of Applicability issued by the Deputy Director of Water Quality. Dischargers enrolled in this Order must provide the required pre-discharge notification for planned discharges to affiliated Tribal representatives on a project-specific basis.

C. Application Package Requirements

Approval to discharge under this General Order provides regulatory coverage for all discharges resulting from hydrostatic testing and dewatering activities to be conducted by a natural gas company described in section II.A above. To obtain regulatory coverage under this General Order, an applicant shall submit a complete application package to the State Water Board at least 30 days prior to commencing discharge activities.

An applicant proposing to discharge in accordance with this General Order from multiple facilities throughout its service area need only submit one complete application package and

pay one application fee for regulatory coverage of all its discharges to waters of the U.S., non-federal surface waters, and land. A complete application package for obtaining regulatory coverage under this General Order includes the following items:

1. **Notice of Intent.** A completed Notice of Intent form (see Attachment B of this General Order) for planned discharges. The Notice of Intent shall include, at minimum, the following information.

    a. Discharger name, contact information, and general facility/project information.

    b. General information regarding the proposed discharges from hydrostatic testing from new pipelines, existing pipelines, or site dewatering activities.

    c. Identification of the Regional Water Board regions in which discharges will occur.

    d. Potential beneficial reuses of discharge water (e.g., dust control, urban or agricultural irrigation).

    e. Certification that a Best Management Practices and Control Strategy Plan as described in section IX.A.4 of this General Order will be maintained and implemented at the project site.

    f. Certification that the Discharger will provide the following information a minimum of 30 calendar days prior to initiation of planned discharges to the appropriate Tribal entities on the State Water Board Native American Tribe Pre-Discharge Notification List that are affiliated with the project site(s):

        i. A general description and map of the location of pipeline segments to be tested, and points of discharge, as available;

        ii. Contact information for Utility Operator employed by the applicant gas company;

        iii. Estimated time period discharges are proposed to occur; and

        iv. As applicable, site-specific cultural resource avoidance and minimization measures, including best management practices, to be implemented at the discharge site.

2. **Map.** A map (local or regional) showing the general boundaries of the applicant's service area(s).

3. **Application Fee.** A fee payable to the State Water Board for enrollment under this General Order for a minor discharge, based on Category 1 in section 2200(b)(9) of title 23, California Code of Regulations, available at http://www.waterboards.ca.gov/resources/fees/water_quality/#npdes. The initial fee will serve as the application fee, and each subsequent annual fee will apply to all discharges covered by this General Order during the corresponding year.

D. Notice of Applicability

Upon receipt of a complete application package, the Deputy Director of the Division of Water Quality (Deputy Director) will determine the applicability of this General Order based on the information provided in the application package. If the application package is complete and the information provided is in accordance with the application requirements of this General Order (section II.C), the Deputy Director will issue a Notice of Applicability providing regulatory coverage for the authorized discharges within the service areas identified in the application package. The regulatory coverage commences for new projects starting on the date specified in the Notice of Applicability. If the application package is not complete or the described discharge is deemed ineligible for regulatory coverage under this General Order, the Deputy Director will send a response letter to the applicant describing: (1) the missing information that renders the application package incomplete, and/or (2) why the discharge is not eligible for regulatory coverage under this General Order.

E. Existing Regional Water Board Permit Coverage

Upon the Deputy Director's issuance of the Notice of Applicability in accordance with this General Order, the State Water Board expects the applicable Regional Water Board to no longer authorize new requests for regulatory coverage under any Regional Water Board order or waiver for discharges authorized by this General Order. Discharges from existing projects with existing regulatory coverage under a Regional Water Board order or waiver may be completed under that Regional Water Board permit order/waiver.

F. Permit Transfer

A change in ownership of the facilities authorized to discharge under this General Order requires the current owner to provide written notice to the State Water Board at least 30 days in advance of transfer of ownership. The Deputy Director may require the new owner to submit a complete application package to seek regulatory coverage under this General Order if the nature or location of discharges has changed from the application package on file.

III. FINDINGS

The State Water Board finds:

A. Legal Authorities

This General Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260) for discharges to water of the U.S., to non-federal surface water, and to land. In addition, this General Order serves as an NPDES permit for point source discharges to waters of the U.S. pursuant to section 402 of the Clean Water Act, implementing regulations adopted by the United States Environmental Protection Agency (U.S. EPA), and chapter 5.5, division 7 of the California Water Code (commencing with section 13370).

B. Background and Rationale for Requirements

The State Water Board developed the requirements in this General Order based on readily available information. The Fact Sheet (Attachment F) contains background information and rationale for the requirements in this General Order, and is hereby incorporated into, and

constitutes as findings for, this General Order. Likewise, all other attachments are also incorporated into this General Order.

C. Threat and Complexity of Discharge

This General Order requires the Discharger to implement the appropriate best practicable treatment and/or control for all its discharges. This General Order requires pollutant concentrations in the discharge to be below applicable criteria prior to discharge into a receiving water or to land. Discharges in compliance with the requirements of this General Order are considered a low threat discharge. The threat and complexity of the discharges authorized by this General Order fall under category 1C in accordance with article 1, chapter 9, division 3, title 23 of the California Code of Regulations.

D. National Toxics Rule and California Toxics Rule

U.S. EPA adopted the National Toxics Rule in December 1992 and amended the rule in May 1995 and November 1999. Approximately 40 criteria in the National Toxics Rule are applied in California. In May 2000, U.S. EPA adopted the California Toxics Rule which promulgated new criteria for toxic pollutants discharged to waters of the U.S. in California. The California Toxics Rule contains water quality criteria specifically for protecting the beneficial uses of waters of the U.S. from discharges of priority pollutants. The California Toxics Rule incorporates the previously adopted National Toxics Rule criteria that are applicable to waters of the U.S. in California. U.S. EPA amended the California Toxics Rule in February 2001.

E. State Implementation Policy

In March 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). The State Water Board amended the SIP in February 2005. The SIP establishes implementation provisions for (1) priority pollutant criteria in the California Toxics Rule, (2) priority pollutant objectives established by Regional Water Boards in their Basin Plans, and (3) chronic toxicity controls for discharges to waters of the U.S. This General Order implements the SIP for discharges to non-ocean waters of the U.S. including indirect discharges via a storm drain or conveyance system that drains to a non-ocean water of the U.S.

F. California Ocean Plan

In 1972, the State Water Board adopted the Water Quality Control Plan for Ocean Waters of California (Ocean Plan). The State Water Board last amended the Ocean Plan in May 2015. The Ocean Plan is applicable to point source discharges to California's ocean water. To protect the beneficial uses of California's ocean water, the Ocean Plan establishes water quality objectives and an implementation program. This General Order implements the Ocean Plan for discharges directly into the Pacific Ocean, and indirect discharges via a storm water system or conveyance system that drains into the Pacific Ocean.

G. California Code of Regulations Title 27 Exemption

The treatment and disposal of wastewater or groundwater to land authorized by this General Order, that complies with preconditions in California Code of Regulations, title 27 section 20090, are exempt from the requirements of title 27, specifically the Consolidated Regulations for Treatment, Storage, Processing or Disposal of Solid Waste in California Code of

Regulations, title 27, division 2, subdivision 1, section 20005, et seq. (See Fact Sheet, Attachment F, for discussion of preconditions.)

H. Water Quality Control Plans

The Regional Water Boards have adopted region-specific water quality control plans (Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives. In addition, the Basin Plans implement State Water Board Resolution 88-63, which established state policy that designates all waters of the state, with certain exceptions, shall be considered suitable or potentially suitable for municipal or domestic supply. Requirements of this General Order implement provisions contained in the applicable Basin Plans.

I. Areas of Special Biological Significance

In March 2012, the State Water Board adopted Resolution 2012-0012, Approving Exceptions to the California Ocean Plan for Selected Discharges into Areas of Special Biological Significance, Including Special Protections for Beneficial Uses, and Certifying a Program Environmental Impact Report. The State Water Board later amended the resolution in June 2012 through Resolution 2012-0031. As amended, Resolution 2012-0012 granted an exception from the Ocean Plan prohibition to multiple parties designated as regulated small municipal separate storm sewer systems. The exception contains “Special Protections” to protect beneficial uses and maintain natural water quality in Areas of Special Biological Significance.

To discharge into an Area of Special Biological Significance, the parties must comply with the terms of the Exception and have an appropriate authorization to discharge through an NPDES permit. The parties authorized to discharge under the General Exception are listed in Attachment D of the NPDES General Permit for Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Order 2013-0001-DWQ).

Order 2013-0001-DWQ allows short-duration, intermittent non-storm water discharges related to utilities (such as site dewatering, potable water system flushing, and hydrostatic testing discharges) to a segment of a municipal separate storm sewer system with a direct discharge to an Area of Special Biological Significance if such discharges are authorized by an NPDES permit issued by the State Water Board or a Regional Water Board. Through Order 2013-0001-DWQ, the State Water Board found that the short-duration and intermittent nature of discharges, such as those authorized under this General Order, are not anticipated to alter the natural ocean water quality in an Area of Special Biological Significance. However, Order 2013-0001-DWQ provides for the State Water Board or a Regional Water Board to prohibit a discharge based on a site-specific determination that a specific discharge could alter the natural ocean water quality in an Area of Special Biological Significance.

J. Total Maximum Daily Load Implementation

Section 122.44(d)(1)(vii)(B) of 40 C.F.R. specifies that water quality-based effluent limitations must be “consistent with the assumptions and requirements of any available waste load allocations.” The State Water Board has determined that discharges regulated under this General Order meet 40 C.F.R section 122.44(d)(1)(vii)(B) because (1) applicable total maximum daily loads (TMDLs) do not identify specific waste load allocations for discharges from natural gas activities and discharges from these activities do not significantly impact water

quality, (2) more stringent requirements than those included in this General Order will not contribute to the actions needed to address impairment of surface waters with TMDLs, and (3) compliance with the requirements of this General Order results in compliance with an applicable TMDL.

The State Water Board may consider adding additional TMDL-specific permit requirements to this General Order through a subsequent permit amendment or reissuance to implement future adopted TMDLs that address pollutants likely to be in discharges authorized under this General Order.

K. California Environmental Quality Act – Waters of the United States

Under California Water Code section 13389, the action to adopt the NPDES permit portion of this General Order is exempt from the provisions of chapter 3 of the California Environmental Quality Act (CEQA) commencing with section 21000 of division 13 of the Public Resources Code.

L. California Environmental Quality Act – Non-Federal Surface Waters and Land

In order to comply with the California Environmental Quality Act (CEQA) (Public Resources Code, section 21000 et. seq.), the State Water Board considered the environmental impacts associated with the adoption of this General Order and prepared an Initial Study in accordance with California Code of Regulations, title 14 section 15063. Many of the activities that are described in this General Order are categorically exempt from CEQA. (Cal. Code Regs., tit. 14, §15300.). CEQA section 15300.2 provides exceptions to the categorical exemptions based on location, cumulative impact, significant impact, scenic highways, hazardous waste sites, and historical resources. Because this General Order covers the entire state, one or more of the exceptions may be encountered when pipeline operators seek enrollment under this General Order. Therefore, the State Water Board adopted the mitigated negative declaration described below pursuant to the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15063).

Analysis in the Initial Study and early consultation with responsible and trustee agencies did not identify any significant impacts on the environment that could not be mitigated. On December 5, 2017, the State Water Board adopted Resolution 2017-00XX, approving a mitigated negative declaration addressing impacts to the environment associated with discharges to waters of the state as regulated by this General Order.

M. Native American Consultation

With the passage of Assembly Bill 52 (Gatto, 2014), the California Legislature added new requirements to CEQA in order to ensure that local and Tribal governments, public agencies, and project proponents have information available early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. The Public Resources Code now establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." (Pub. Resources Code, § 21084.2.) The State Water Board, as lead agency for CEQA, consulted with two tribes that requested consultation – the Wiyot Tribe and the United Auburn Indian Community. The consultations with the Native American tribes resulted in additional notification requirements during the application process for regulatory coverage under this General Order, and corresponding project-specific notification during project initiation.

N. Homeland Security Compliance

If the requirements in this General Order conflict with the requirements of the Homeland Security Act and/or any other federal law that pertains to security in the U.S., the Homeland Security Act and/or any other federal law that pertains to security in the U.S. shall take precedence. Regulatory coverage under this General Order may be unavailable if the application and compliance information provided to the State Water Board is insufficient to demonstrate eligibility and/or compliance.

O. Cost of Compliance

The Notice of Applicability, monitoring, and reporting required by this General Order are necessary to ensure permit compliance and protection of water quality. The burden and cost of monitoring and reporting are reasonable and consistent with State Water Board Resolution 2013-0029 to reduce the cost of permit compliance while maintaining water quality.

P. Polychlorinated Biphenyls

U.S. EPA regulates the use, storage, cleanup, and disposal of polychlorinated biphenyls (PCBs) under 40 C.F.R. part 761, implementing the Toxic Substance Control Act provisions for PCBs. This General Order does not supersede any regulatory requirements of 40 C.F.R. part 761 applicable to natural gas pipelines including, but not limited to, condensate liquids in natural gas pipelines; reuse; abandonment in place; disposal of pipeline or segments; or cleanup or disposal of PCB wastes due to releases of liquids from natural gas pipeline systems. This General Order does not relieve any person (company, utility, or other entity) that owns or operates natural gas pipeline systems from complying with all applicable regulatory requirements of 40 C.F.R. part 761.

Q. Recycled Water Issues

Recycled water may be used in hydrostatic tests for the hydrostatic test water, dust control, irrigation of restored landscaping, or other uses. When used in compliance with State Water Board Policy for Water Quality Control for Recycled Water, title 22 of the California Code of Regulations (Title 22), and all applicable state and federal water quality laws, the State Water Board finds that recycled water is safe for approved uses. The following State Water Board decisions support the use of recycled water as a safe alternative to raw and potable water supplies for activities resulting in discharges authorized under this General Order:

1. The State Water Board's Strategic Plan Update 2008-2012 includes a priority to increase sustainable local water supplies available for meeting existing and future beneficial uses by 1,725,000 acre-feet per year in excess of 2002 levels by 2015.

2. The State Water Board Policy for Water Quality Control for Recycled Water states in part the following goals:

    a. Increase the use of recycled water over the 2002 level by at least 1 million acre feet per year by 2020 and by at least 2 million acre feet per year by 2030;

    b. Increase the amount of water conserved in urban and industrial uses by 20 percent compared to 2007; and

c. Substitute as much recycled water for potable water as possible by 2030.

R. Beneficial Uses of Receiving Waters

Regional Water Board Basin Plans establish surface water and groundwater quality objectives to protect the beneficial uses of a water body. The water quality objectives may be narrative, numerical, or both. This General Order authorizes discharges to surface water and land (with the potential of reaching groundwater). Thus, this General Order includes requirements and provisions to protect beneficial uses for these receiving waters. Regional Water Boards determine beneficial uses for receiving waters in their respective Basin Plans.

Inland surface water beneficial uses in the Basin Plans include, but are not limited to: agricultural supply (AGR), cold freshwater habitat (COLD), estuarine habitat (EST), flood peak attenuation or flood water storage (FLD), freshwater replenishment (FRSH), groundwater recharge (GWR), inland saline water habitat (SAL), municipal and domestic supply (MUN), warm freshwater habitat (WARM), water quality enhancement (WQE), wetland habitat (WET), and wildlife habitat (WILD).

Coastal water beneficial uses include, but are not limited to: hydropower generation (POW), marine habitat (MAR), preservation of areas of special biological significance (ASBS), and shellfish harvesting (SHELL).

Beneficial uses for both inland and coastal surface water beneficial uses include, but are not limited to: aquaculture (AQUA), commercial and sport fishing (COMM), industrial process supply (PRO), industrial service supply (IND), migration of aquatic organisms (MIGR), Native American culture (CUL), navigation (NAV), non-contact water recreation (REC-2), rare, threatened, or endangered species (RARE), spawning, reproduction, and/or early development (SPWN), subsistence fishing (FISH), and water contact recreation (REC-1).

Groundwater beneficial uses include: municipal supply (MUN), industrial service supply (IND), industrial process supply (PROC), fresh water replenishment (FRESH), aquaculture (AQUA), wildlife habitat (WILD), water contact recreation (REC-1), agricultural supply (AGR), and groundwater recharge (GWR). Some beneficial uses only apply to certain geographic areas within regions.

S. Antidegradation

Intermittent discharges to receiving waters in accordance with the requirements of this General Order are low threat discharges that will not cause impact to beneficial uses. However, the discharges may temporarily degrade the existing water quality of the receiving waters. The State Water Board finds that the construction, excavation, maintenance, repair, and testing of natural gas facilities is necessary for the provision of a public utility and public safety. Therefore, the State Water Board finds that limited degradation caused by discharges pursuant to this General Order is acceptable for the social and economic benefit of the people of the state. See Fact Sheet section II.E for the antidegradation analysis that serves as the basis of this finding.

T. Notification of Interested Parties

On August 25, 2017, the State Water Board notified interested agencies and persons of its intent to prescribe WDRs for discharges from natural gas facilities by issuing a draft General Order for public comment and review. The State Water Board provided the public with 30 days for review and submittal of public comments.

U. Consideration of Public Comment

On October 3, 2017, the State Water Board held a public hearing to hear and consider public comments pertaining to this General Order. The State Water Board also considered all written public comments submitted by the due date of October 10, 2017, prior to adopting this General Order. The Fact Sheet (Attachment F) provides details regarding the public notice and public hearing.

THEREFORE, IT IS HEREBY ORDERED that, to meet the provisions contained in California Water Code, division 7 (commencing with section 13000) and regulations adopted thereunder, and the provisions contained in the federal Clean Water Act and regulations and guidelines adopted thereunder, Dischargers approved for regulatory coverage shall comply with the requirements of this General Order.

IV. DISCHARGE PROHIBITIONS

A. Direct discharges to an Area of Special Biological Significance are prohibited. Discharges to a municipal separate storm sewer system that discharges directly to an Area of Special Biological Significance are prohibited unless the owner or operator of the storm sewer system has been granted an exception under the Ocean Plan section III.J or as specified in State Water Board Resolution 2012-0012 as amended by Resolution 2012-0031 (or subsequent amendments or revisions thereto).

B. Discharges to federal and non-federal wetlands and/or vernal pools are prohibited.

C. The discharge of waste classified as hazardous (Cal. Code Regs., tit. 23, § 2521(a)), or designated (Wat. Code, § 13173) is prohibited.

D. The use of recycled water in a manner different than described in the approved Title 22 engineering report is prohibited.

E. The discharge of hydrostatic test water, other industrial wastewater, treated industrial wastewater, or recycled water to waters of the U.S., non-federal surface waters, or land within the Lake Tahoe Basin is prohibited.

F. The discharge of recycled water to Alpine County is prohibited.

V. FINAL EFFLUENT LIMITATIONS FOR PLANNED DISCHARGES TO WATERS OF THE U.S.

The discharge shall not exceed the effluent limitations listed in the tables below. The Discharger shall collect a representative sample of the effluent prior to discharge to a water of the U.S.

A. Final Effluent Limitations for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries

1. Final Effluent Limitations for Priority Pollutants

Discharges to inland waters, estuaries, and enclosed bays that are waters of the U.S. shall not exceed the maximum daily effluent limitations specified in Table 3 and the applicable maximum daily effluent limitations in Tables 4A, 4B, or 4C for hardness-dependent metals.

Table 3. Final Effluent Limitations for Discharges of Priority Pollutants to Inland Surface Waters, Enclosed Bays, and Estuaries

Constituent	CAS Number	Effluent Limitation (µg/L)
1, 1,2-Trichloroethane	79005	1.2
1, 1-Dichloroethylene	75354	0.114
1,1,2,2-Tetrachloroethane	79345	0.34
1,2 Dichlorobenzene	95501	1,200
1,2-Dichloroethane	107062	0.76
1,2-Dichloropropane	78875	1.04
1,2-Diphenylhydrazine	122667	0.08
1,2-Trans-Dichloroethylene	156605	20
1,3 Dichlorobenzene	541731	800
1,3-Dichloropropylene	542756	1
1,4 Dichlorobenzene	106467	40
2,3,7,8-TCDD (Dioxin)	1746016	0.000000026
2,4,6-Trichlorophenol	88062	4.2
2,4-Dichlorophenol	120832	186
2,4-Dimethylphenol	105679	1,080
2,4-Dinitrophenol	51285	140
2,4-Dinitrotoluene	121142	0.22
2-Chloronaphthalene	91587	3,400
2-Chlorophenol	95578	240
2-Methyl-4,6-Dinitrophenol	534521	26.8
3,3'-Dichlorobenzidine	91941	0.08
4,4'-DDD	72548	0.00166
4,4'-DDE	72559	0.00118
4,4'-DDT	50293	0.00118
Acenaphthene	83329	2,400
Acrolein	107028	640
Acrylonitrile	107131	0.118
Aldrin	309002	0.00026
alpha-Endosulfan	959988	0.056 (Freshwater) 0.0087 (Saltwater)
Anthracene	120127	19,200
Antimony	7440360	12
Arsenic	7440382	150 (Freshwater) 36 (Saltwater)
Asbestos	1332214	14,000,000 (fibers/L)
Benzene	71432	2.0
Benzidine	92875	0.00024

Constituent	CAS Number	Effluent Limitation (µg/L)
Benzo(a)Anthracene	56553	0.0088
Benzo(a)Pyrene	50328	0.0088
Benzo(b)Fluoranthene	205992	0.0088
Benzo(k)Fluoranthene	207089	0.0088
beta-BHC	319857	0.028
beta-Endosulfan	33213659	0.056 (Freshwater) 0.0087 (Saltwater)
Bis(2-Chloroethoxy)Methane	111911	0
Bis(2-Chloroethyl)Ether	111444	0.062
Bis(2-Chloroisopropyl)Ether	39638329	2,800
Bis(2-Ethylhexyl)Phthalate	117817	3.6
Bromoform	75252	8.6
Butylbenzyl Phthalate	85687	6,000
Carbon Tetrachloride	56235	0.5
Chlorobenzene	108907	140
Chlordane	57749	0.00114
Chlorodibromomethane	124481	0.802
Chrysene	218019	0.0088
Cyanide	57125	5.2 (Freshwater) 1 (Saltwater)
Dibenzo(a,h)Anthracene	53703	0.0088
Dichlorobromomethane	75274	1.12
Dieldrin	60571	0.00028
Diethyl Phthalate	84662	46,000
Dimethyl Phthalate	131113	626,000
Di-n-Butyl Phthalate	84742	5,400
Endosulfan Sulfate	1031078	220
Endrin	72208	0.036 (Freshwater) 0.0023 (Saltwater)
Endrin Aldehyde	7421934	1.52
Ethylbenzene	100414	6,200
Fluoranthene	206440	600
Fluorene	86737	2,600
gamma-BHC	58899	0.038
Heptachlor	76448	0.00042
Heptachlor Epoxide	1024573	0.0002
Hexachlorobenzene	118741	0.0015
Hexachlorobutadiene	87683	0.88
Hexachlorocyclopentadiene	77474	100
Hexachloroethane	67721	3.8

Constituent	CAS Number	Effluent Limitation (µg/L)
Indeno(1,2,3-cd) Pyrene	193395	0.0088
Isophorone	78591	16.8
alpha-BHC	319846	0.0078
alpha-Endosulfan	959988	220
Mercury	7439976	0.1
Methyl Bromide	74839	96
Methylene Chloride	75092	9.4
Nitrobenzene	98953	34
N-Nitrosodimethylamine	62759	0.00138
N-Nitrosodi-n-Propylamine	621647	0.01
N-Nitrosodiphenylamine	86306	10
Pentachlorophenol	87865	0.56
Phenol	108952	42,000
Polychlorinated biphenyls (PCBs)	1336-36-3	0.00034
Pyrene	129000	1920
Selenium	7782492	5.0 (Freshwater) 71 (Saltwater)
Tetrachloroethylene	127184	1.6
Thallium	7440280	3.4
Toluene	108883	300
Toxaphene	8001352	0.00146
Trichloroethylene	79016	5.4
Vinyl Chloride	75014	1.0

Table 4A. Final Effluent Limitations for Priority Pollutants Hardness-Dependent Metals with Hardness 0 to <40 mg/L

Parameter	Unit	Hardness in mg/L Maximum Daily Effluent Limitations			
		H <10	10≤ H <20	20≤ H <30	30≤ H <40
Cadmium, Total Recoverable	µg/L	0.2	0.5	0.9	1.4
Chromium (III)	µg/L	29	72	109	144
Copper, Total Recoverable	µg/L	0.8	2.3	3.8	5.2
Lead, Total Recoverable	µg/L	0.1	0.5	0.9	1.4
Nickel, Total Recoverable	µg/L	7	17	27	35
Silver, Total Recoverable	µg/L	0.02	0.2	0.4	0.7
Zinc, Total Recoverable	µg/L	9	24	37	49

Table 4B. Final Effluent Limitations for Priority Pollutants Hardness-Dependent Metals with Hardness 40 to <80 mg/L

Parameter	Unit	Hardness in mg/L Maximum Daily Effluent Limitations			
		40≤ H <50	50≤ H <60	60≤ H <70	70≤ H <80
Cadmium, Total Recoverable	µg/L	1.8	2.3	2.8	3.2
Chromium (III)	µg/L	177	208	239	269
Copper, Total Recoverable	µg/L	6.6	8.0	9.3	10.7
Lead, Total Recoverable	µg/L	1.9	2.4	3.0	3.6
Nickel, Total Recoverable	µg/L	44	52	59	67
Silver, Total Recoverable	µg/L	1.0	1.4	1.9	2.5
Zinc, Total Recoverable	µg/L	61	72	83	94

Table 4C. Final Effluent Limitations for Priority Pollutants Hardness-Dependent Metals with Hardness ≥80 mg/L

Parameter	Unit	Hardness in mg/L Maximum Daily Effluent Limitations			
		80≤ H <90	90≤ H <100	100≤ H <200	H ≥200
Cadmium, Total Recoverable	µg/L	3.6	3.9	5.6	7.0
Chromium (III)	µg/L	297	326	474	600
Copper, Total Recoverable	µg/L	12	13	20	27
Lead, Total Recoverable	µg/L	4.2	4.9	8.8	13
Nickel, Total Recoverable	µg/L	75	82	121	154
Silver, Total Recoverable	µg/L	3.1	3.7	8.1	13
Zinc, Total Recoverable	µg/L	104	115	169	215

For saltwater discharges, this General Order sets the final effluent limitations for the metals shown in Table 5.

Table 5. Final Effluent Limitations for Protection of Aquatic Life for Saltwater Discharges

Constituent	Effluent Limitation (µg/L)
Cadmium, Total Recoverable	9.3
Copper, Total Recoverable	3.1
Lead, Total Recoverable	8.1
Nickel, Total Recoverable	8.2
Silver, Total Recoverable	1.9
Zinc, Total Recoverable	81

2. Final Effluent Limitations for Total Residual Chlorine

For all previously-chlorinated[1] planned discharges directly into, or within 300 feet of, the receiving water, the total residual chlorine concentration shall not exceed the following limitations:

a. 0.011 mg/L, as a 4-day average.

[1] For example, treated potable water, recycled water, etc.

b. 0.019 mg/L, as a 1-hour average.

A discharge is in compliance with the total residual chlorine effluent limitations if the total residual chlorine concentration measured by a handheld field chlorine meter is below a minimum level (quantifiable level) of 0.1 mg/L chlorine. See section X.B of this General Order for information to determine compliance with total residual chlorine effluent limitations.

B. Final Effluent Limitations for Discharges to the Pacific Ocean

1. Final Effluent Limitations for Priority Pollutants

Discharges to the Pacific Ocean shall not exceed the maximum daily effluent limitations (MDEL) specified in Table 6.

Table 6. Final Maximum Daily Effluent Limitations Discharges of Priority Pollutants to the Pacific Ocean

Compound	Effluent Concentration (µg/L)	Averaging Period
Arsenic	32	MDEL
Cadmium	4	MDEL
Chlorinated Phenolics	4	MDEL
Chromium (Hexavalent)[1]	8	MDEL
Copper	12	MDEL
Cyanide[2]	4	MDEL
Endosulfan	0.018	MDEL
Endrin	0.004	MDEL
Hexachlorocyclohexane[3]	0.008	MDEL
Lead	8	MDEL
Mercury	0.16	MDEL
Nickel	20	MDEL
Selenium	60	MDEL
Silver	2.8	MDEL
Total Chlorine Residual	8	MDEL
Zinc	80	MDEL

[1] Dischargers may, at their option, meet this objective as a total chromium objective.
[2] Requirement may be met by measurement of weak acid-dissociable cyanide (SM 4500-CN-I-1999) or measurement of "available" cyanide species using an approved method in 40 C.F.R. part 136.
[3] Hexachlorocyclohexane shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

Discharges to the Pacific Ocean shall not exceed the average monthly effluent limitations (AMEL) specified in Table 7.

Table 7. Final Average Monthly Effluent Limitations Discharges of Priority Pollutants to the Pacific Ocean

Compound	Effluent Concentration (µg/L)	Averaging Period
1,1,1-Trichloroethane	540000	AMEL
1,1,2,2-Tetrachloroethane	2.3	AMEL
1,1,2-Trichloroethane	9.4	AMEL

Compound	Effluent Concentration (µg/L)	Averaging Period
1,1-Dichloroethylene	0.9	AMEL
1,2-Dichloroethane	28	AMEL
1,2-Diphenylhydrazine	0.16	AMEL
1,3-Dichloropropene	8.9	AMEL
1,4-Dichlorobenzene	18	AMEL
2,4,6-Trichlorophenol	0.29	AMEL
2,4-Dinitrophenol	4	AMEL
2,4-Dinitrotoluene	2.6	AMEL
3,3'-Dichlorobenzidine	0.0081	AMEL
4,6-Dinitro-2-methylphenol	220	AMEL
Acrolein	220	AMEL
Acrylonitrile	0.1	AMEL
Aldrin	0.000022	AMEL
Antimony	1200	AMEL
Benzene	5.9	AMEL
Benzidine	0.000069	AMEL
Beryllium	0.033	AMEL
Bis(2-chloroethoxy) methane	4.4	AMEL
Bis(2-chloroethyl) ether	0.045	AMEL
Bis(2-chloroisopropyl) ether	1200	AMEL
Bis(2-ethylhexyl) phthalate	3.5	AMEL
Carbon tetrachloride	0.9	AMEL
Chlordane	0.000023	AMEL
Chlorobenzene	570	AMEL
Chlorodibromomethane	8.6	AMEL
Chloroform	130	AMEL
DDT	0.00017	AMEL
Dichlorobenzene	5100	AMEL
Dichlorobromomethane	6.2	AMEL
Dichloromethane	450	AMEL
Dieldrin	0.00004	AMEL
Diethyl phthalate	33000	AMEL
Dimethyl phthalate	820000	AMEL
Di-N-butyl phthalate	3500	AMEL
Ethylbenzene	4100	AMEL
Fluoranthene	15	AMEL
Halomethanes	130	AMEL
Heptachlor	0.00005	AMEL
Heptachlor epoxide	0.00002	AMEL

Compound	Effluent Concentration (µg/L)	Averaging Period
Hexachlorobenzene	0.00021	AMEL
Hexachlorobutadiene	14	AMEL
Hexachlorocyclopentadiene	58	AMEL
Hexachloroethane	2.5	AMEL
Isophorone	730	AMEL
Nitrobenzene	4.9	AMEL
N-nitrosodimethylamine	7.3	AMEL
N-nitrosodi-N-propylamine	0.38	AMEL
N-nitrosodiphenylamine	2.5	AMEL
PAHs	0.0088	AMEL
PCBs	0.000019	AMEL
TCDD equivalents	3.9E-09	AMEL
Tetrachloroethylene	2	AMEL
Thallium	2	AMEL
Toluene	85000	AMEL
Toxaphene	0.00021	AMEL
Tributyltin	0.0014	AMEL
Trichloroethylene	27	AMEL
Vinyl Chloride	36	AMEL

2. Final Effluent Limitations for Chlorine

For all previously-chlorinated[5] planned discharges directly into, or within 300 feet of ocean water, the total residual chlorine concentration in the discharge shall not exceed the following limitations:

a. 0.008 mg/L, as a daily maximum.

b. 0.060 mg/L, as an instantaneous maximum.

A discharge is in compliance with the total residual chlorine effluent limitations if the total residual chlorine concentration measured by a handheld field chlorine meter is below a minimum level (quantifiable level) of 0.1 mg/L chlorine. See section X.B of this Order for information to determine compliance with total residual chlorine effluent limitations.

C. Final Effluent Limitations for Hydrostatic Testing Discharges from Existing Facilities

1. The pollutant concentrations of Total Petroleum Hydrocarbons as Diesel in the discharge shall not exceed 2.0 mg/L.

2. The pollutant concentrations of Total Petroleum Hydrocarbons as Gasoline in the discharge shall not exceed 5.0 µg/L.

A discharge is in compliance with the Total Petroleum Hydrocarbons as Gasoline effluent limitation if the laboratory analytical monitoring result is “non-detect” using a U.S.

EPA authorized laboratory analytical method with a method detection limit of 23 µg/L or lower.

D. Final Effluent Limitations for All Discharges

1. Oil and grease shall not exceed 10 mg/L.
2. Turbidity shall not exceed 50 Nephelometric Turbidity Units.
3. pH in the discharge shall be within 6.0 to 9.0 standard units.

VI. FINAL EFFLUENT LIMITATIONS FOR PLANNED DISCHARGES TO NON-FEDERAL SURFACE WATER

Discharges to non-federal surface waters shall not exceed any effluent limitation for discharges established in section V of this General Order for waters of the U.S.

VII. FINAL EFFLUENT LIMITATIONS FOR PLANNED DISCHARGES TO LAND

A. The maximum concentration of polychlorinated biphenyls shall not exceed 0.5 µg/L.

B. Dissolved oxygen in the effluent shall be equal to, or greater than 1.0 mg/L.

VIII. RECEIVING WATER LIMITATIONS FOR PLANNED DISCHARGES

A. Discharge to Waters of the U.S

Receiving water limitations for waters of the U.S. are based on water quality objectives contained in: (1) Regional Water Board Basin Plans, and (2) State Water Board water quality control plans and policies. Discharges to waters of the U.S. authorized under this General Order shall not adversely impact beneficial uses and shall not cause or contribute the following in the receiving water:

1. **pH.** The pH level to be outside the range of the pH receiving water objective in a corresponding Regional Water Board Basin Plan. Discharges to the Pacific Ocean shall not change the pH at any time more than 0.2 units from that which occurs naturally.
2. **Chemical Constituents.** Chemical constituents to be present in concentrations that adversely affect beneficial uses.
3. **Floating Material and Trash.** Floating material, debris, or trash to be present that cause nuisance or adversely affect beneficial uses.
4. **Sediment and Total Suspended Solids.** The sediment load and total suspended solids discharge rate to be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

5. **Toxicity.** Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses, that produce a detrimental response in human, plant, animal, or aquatic life, or that bioaccumulate in aquatic resources at levels harmful to human health. Discharges to the Pacific Ocean shall not exceed 0.3 acute toxic unit and 1 chronic toxic unit.
6. **Hydromodification.** Velocity and/or volume of discharge to modify the existing physical characteristics of a water body, or cause significant erosion or alteration of the watercourse.
7. **Turbidity.** Turbidity concentrations to exceed corresponding Regional Water Board Basin Plan water quality and Ocean Plan objectives for turbidity. In no case shall turbidity increase more than 20 percent over background levels.
8. **Dissolved Oxygen.** Concentrations of dissolved oxygen (DO) to fall below the DO objective in a Regional Water Board Basin Plan, or 5.0 milligram/Liter (mg/L), whichever is more stringent. During any period when the receiving water DO concentration is already below the applicable Basin Plan objective or 5.0 mg/L, the discharge shall not cause any further depression of the DO concentration. The DO concentration in a discharge to the Pacific Ocean shall not at any time be depressed more than 10 percent from that which occurs naturally as the result of the discharge of oxygen demanding waste materials.
9. **Floating Materials.** Oils, greases, waxes, floating material (liquids, solids, foams, and scum), or suspended material to create a nuisance or adversely affect beneficial uses.
10. **Color, Taste and Odor.** Alteration of the apparent color, taste, or odor beyond present natural background levels.
11. **Biostimulation.** Biostimulatory substances to be present in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
12. **Nuisance or Adverse Effects.** Deposition of material that causes a nuisance or adversely affects beneficial uses.
13. **Temperature.** The ambient receiving water temperature to be altered more than 5ºF.
14. **Radionuclides.** Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in Title 22, California Code of Regulations, that harm human, plant, animal, or aquatic life, or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. Ocean discharges of radioactive waste shall not degrade marine life.

B. Discharge to Non-Federal Surface Waters

Surface waters of the state that are not waters of the U.S. may have similar beneficial uses as those of waters of the U.S. To protect the beneficial uses of surface waters of the state that are not waters of the U.S., this General Order requires the same receiving water limitations for discharges to non-federal surface waters to be the same as the receiving water limitations for discharges to waters of the U.S.

C. Discharge to Land

Discharges to land with the potential of reaching groundwater authorized under this General Order shall not cause or contribute to the exceedance of a water quality objective in the applicable Regional Water Board Basin Plan.

IX. PROVISIONS

A. General Provisions

1. This General Order does not preempt or supersede the authority of municipalities, flood control agencies, or other local agencies to prohibit, restrict, or control discharges of waste subject to their jurisdiction.

2. Reopener Provisions

   The State Water Board may reopen this General Order prior to its expiration date in any of the following circumstances.

   a. For modification, revocation, and/or reissuance, in accordance with the provisions contained in 40 C.F.R. section 122.62.

   b. To address conditions that necessitate a major modification of a permit as described in 40 C.F.R. section 122.62, including but not limited to the following:

      i. If new or amended applicable water quality standards are promulgated or approved pursuant to section 303 of the Clean Water Act, or amendments thereto, this General Order may be reopened and modified in accordance with the new or amended standards.

      ii. When information that was not available at the time of permit issuance justifies new permit requirements.

3. Pre-Discharge Notification to State and Regional Water Board

   The Discharger shall submit a Pre-Discharge Notification Form (See Attachment C) to notify the State Water Board and applicable Regional Water Boards of all planned discharges at least seven (7) business days prior to commencement of discharge.

   If the planned discharge will be entering a municipal separate storm sewer system, the Discharger shall send a copy of the Pre-Discharge Notification Form to the owner or operator of a municipal separate storm sewer system at least seven (7) business days prior to discharging to the municipal system.

   This General Order does not take precedence over local storm sewer or flood control authority to prohibit, restrict, or control discharges authorized under this General Order to storm sewer systems or other facilities within its jurisdiction.

4. 30-Day Notification to Tribal Entities

   The Discharger must provide a 30-calendar day advance notice of project-specific planned discharges to lands, and to surface waters through lands, affiliated with any Native American Tribes included on the State Water Board Native American Tribe Pre-Discharge Notification List, as described in section II.B. above. The written notification to Tribal representatives must include the following information:

a. A general description and map of the location of pipeline(s) to be tested and points of discharge;

b. Contact information for Utility Operator employed by the applicant gas company;

c. Estimated time period discharges are proposed to occur; and

d. As applicable, site-specific cultural resource avoidance and minimization measures, including best management practices, to be implemented at the discharge site.

5. Best Management Practices and Control Strategy Plan

The Discharger must prepare a Best Management Practices and Control Strategy Plan (Plan), update the Plan annually, and implement best management practices and treatment per its Plan. The Discharger must maintain an electronic or hardcopy of the most-updated Plan at the facility project site and update the Plan as necessary for guidance and training to the Discharger's excavation, construction, operation, testing, maintenance and/or repair staff or contractors. The Discharger must make the Plan available to State Water Board or Regional Water Board staff during an inspection or upon request.

The Plan must contain, at a minimum, the following items:

a. Each type of anticipated discharge authorized under this General Order (e.g., hydrostatic testing of new and existing facilities or site dewatering discharges).

b. A description of the best management practices and/or best practicable treatment or control to be implemented for each type of discharge to comply with requirements of this General Order.

c. As applicable, site-specific cultural resource avoidance and minimization measures as set forth in section IX.A.4.d. above and a description of the corresponding on-site best management practices to be implemented.

d. Standard operating procedures to use in an emergency or unplanned discharge.

6. Revegetation

If the project will involve revegetation, the Discharger must replace plantings as determined by a qualified biologist[2]. The replacement plantings shall be based on a reference site within the native plant community in the vicinity of the project.

[2] A qualified biologist is one that based upon academic training, experience, and knowledge can provide an evaluation of the issue being considered. Qualified biologists should not work outside their particular field of expertise.

B. Provisions for Planned Discharges to Waters of the U.S.

1. Monitoring and Reporting

The Discharger shall comply with the compliance monitoring requirements specified in the Monitoring and Reporting Program (Attachment E). All data and information required to be collected or additionally collected pertaining to discharges authorized under this General Order must be reported to the State Water Board as specified in Attachment E.

2. Best Management Practices and Control Strategy Plan

Dischargers must comply with the Plan specified in section IX.A.5. Best management practices shall be consistent with the general guidance contained in the U.S. EPA Guidance Manual for Developing Best Management Practices (EPA 833-B-93-004) available at http://www.epa.gov/nscep/. The Discharger shall identify, develop, and implement necessary treatment and best management practices, and/or best practicable treatment or control, prior to discharge. At a minimum, the Plan shall achieve the following performance measures:

a. Prevent toxicity to aquatic life from chlorine and other constituents in the discharge.

b. Prevent riparian erosion and hydromodification by implementing flow dissipation, erosion control, and hydromodification-prevention measures where needed.

c. Minimize sediment discharge, turbidity, trash, and color impacts.

d. Prevent additional chemicals or other substances from being introduced into the discharge after treatment and/or control; and

e. Prevent the addition of pollutants from non-permitted process waters or chemical spills.

The Discharger shall provide the Plan to the Regional Water Boards and State Water Board upon request.

C. Provisions for Planned Discharges to Non-Federal Surface Waters

Surface waters of the state that are not waters of the U.S. may have similar beneficial uses as those of waters of the U.S. For discharges to non-federal surface waters, the Discharger shall comply with provisions for discharges to waters of the U.S. as described in section IX.B above.

The Discharger shall comply with any water quality related mitigation measures in the CEQA document approved through State Water Board Resolution 2017-XXXX, and/or any future project-specific CEQA document. If a project requires mitigation measures per the CEQA document, the Discharger shall update the Plan and implement the mitigation measures in addition to the Plan provisions described in section IX.B.2, Provisions for Planned Discharges to Waters of the U.S.

D. Provisions for Emergency and Unplanned Discharges

Upon determination that an emergency or unplanned discharge has occurred, the Discharger shall: (1) implement appropriate best management practices and/or best practicable treatment or control as soon as feasible after taking all necessary actions to protect public health and safety, and (2) promptly notify the appropriate tribal entities on the State Water Board Native

American Tribe Pre-Discharge Notification List if tribal cultural resources may have been impacted. The Discharger shall promptly terminate the discharge to avoid further impacts until cultural resource matters are addressed.

E. Provisions for Planned Discharges to Land

1. Application Rate

   The Discharger must ensure adequate acreage is available to apply discharge at a rate that will not create nuisance conditions (e.g. vectors, nuisance odors, off-site discharge) or degrade groundwater quality to an unacceptable level.

2. Environmental Mitigation

   In sensitive areas where discharges occur, and where the discharge to land will result in saturated surface soils or otherwise impact species that reside in subterranean burrows, an environmental review must be conducted before the discharge is initiated. Environmental review involves an assessment of existing conditions and may include a query of species accounts using published literature and data provided by the California Natural Diversity Data Base, field surveys, field evaluations, and biological resource monitoring. If there is the potential to have a substantial adverse effect on sensitive species identified as a threatened, endangered, candidate, or special status species identified in regional plans, policies, or regulation, appropriate avoidance and minimization measures must be applied to avoid or minimize impacts where possible. When significant unavoidable impacts to state or federal listed species may occur (e.g. take of listed species), work will begin only after the appropriate state and/or federal permits are secured.

3. Oils and Oil Sheens

   If present, the Discharger must separate and collect oil, including oil sheen, from the effluent prior to discharge.

4. Polychlorinated Biphenyls (PCBs)

   Wastewater that is ineligible for land application or that contains dissolved phase PCBs above the effluent limitation shall (1) not be discharged before treatment or (2) be hauled offsite for proper disposal consistent with 40 C.F.R. section 761.79(b).

5. Condensate

   If present, the Discharger must collect condensate from the test segment using all available drip valves and similar equipment designed to remove pipeline liquids before conducting hydrostatic testing.

6. Nuisance Conditions

   Land application of discharges shall not cause nuisance conditions.

7. Application Method

   Wastewater and/or groundwater may be applied to land using spray, flood, infiltration pond, or drip methods. Spray irrigation of discharges is permitted when wind speed (including gusts) does not exceed 30 miles per hour. Wind speed may be measured onsite or at a nearby weather station operated by a government organization.

F. Provisions for Planned Discharges to Pond Systems

1. Freeboard

   The Discharger shall maintain a minimum of one foot of freeboard at all times in lined ponds to provide adequate storage capacity and prevent spills. Freeboard shall be measured vertically from the lowest elevation of the lined pond berm to the water surface.

2. Pond Systems

   a. For unlined pond systems designed to collect discharges for percolation, evaporation, or subsequent land application, pond systems shall have sufficient capacity to accommodate discharges, design seasonal precipitation, extracted groundwater, and wind driven waves. Design seasonal precipitation shall be based on the 25-year return period monthly values for the active project months (initiation through restoration). The California Department of Water Resources Engineering Meteorology Department provides monthly rainfall totals, including calculation of return period values.

   b. For pond systems designed to allow discharges to surface waters or that do not comply with the pond design standard presented above (section IX.F.2.a), pond effluent shall comply with the effluent limitations and receiving water limitations in this General Order for discharges to waters of the U.S.

   c. Objectionable odors shall not create nuisance conditions beyond the limits of the pond facility. A dissolved oxygen concentration less than 1.0 mg/L in the upper one foot of any pond shall be evidence of the potential to generate objectionable odors.

   d. Burrowing animals active in areas that may compromise the integrity of a pond containment shall be promptly controlled and repairs to the containment completed as soon as possible.

3. Vector Control

   The Discharger shall take actions including, but not limited to the following, to mitigate vector and mosquito breeding:

   a. Implement an erosion control program to ensure small coves and irregularities are not created around the perimeter of the pond surface.

   b. Minimize weeds through harvesting, control of water depth, or use of a shoreline synthetic liner or herbicides.

   c. Remove dead algae, vegetation, and debris from the pond surface.

   d. Coordinate with the local vector control district to supplement the measures described above in cases where other methods are infeasible.

G. Provisions for Use of Recycled Water

1. Recycled water use shall comply with the Title 22 water recycling criteria, this General Order, the Notice of Applicability, a Title 22 engineering report, and any Division of Drinking Water approval conditions.

2. Public contact with wastewater/recycled water shall be precluded through use of fences, signs, and/or other appropriate means. All public use areas where recycled water is used shall be posted with signs that are visible, in a size no less than four inches by eight inches and include the following wording, “Recycled Water – Do Not Drink.” (Cal. Code Regs., tit. 22, § 60310(g).)

3. Land application areas shall be managed to mitigate breeding of mosquitoes including, but not limited to the following:

    a. There shall be no standing water 48 hours after application of wastewater.

    b. Tailwater ditches must be maintained essentially free of emergent, marginal, or floating vegetation.

    c. Low-pressure and unpressurized pipelines and ditches accessible to mosquitoes shall not be used to store wastewater or recycled water.

    d. Coordination with the local mosquito abatement or vector control district to supplement the measures described above in cases where other methods are infeasible.

4. Discharges to land must comply with the following setbacks in Table 8. However, some existing sites may not comply with the setbacks provided herein. Such noncomplying sites may be permitted under this General Order if nuisance conditions do not result from the noncompliance. In some cases, more than one setback standard exists. The following procedure shall be implemented when determining the appropriate setback:

    a. Discharges to receiving surface water bodies (federal and non-federal surface waters) that must comply with the requirements in this General Order for discharge to waters of the U.S., are exempt from setback requirements.

    b. When the setback requirement comes from Title 22, approval of a variance must be obtained from the Division of Drinking Water.

    c. When the setback comes from the California Well Standards, a reduced setback may be allowed based on site-specific conditions; review the California Well Standards for clarification. Approval of the variance must be obtained from the State Water Board Division of Water Quality Deputy Director.

    d. Setbacks that are not referenced to a requirement listed above are to be based on professional judgment.

Table 8. Setbacks for Recycled Water Discharges

Equipment or Activity	Domestic Well	Flowing Stream[1]	Ephemeral Stream Drainage[2]	Property Line	Lake or Reservoir[3]
Land Application Area Requirements					
Land Application Area (disinfected tertiary recycled water)[4]	50 ft.[7]	25 ft.	25 ft.	25 ft.	200 ft.
Land Application Area (disinfected secondary-2.2 or secondary-23 recycled water)[5]	100 ft.[9]	50 ft.	50 ft.	100 ft.[11] 50 ft.[8]	200 ft.
Spray Irrigation (disinfected tertiary recycled water)[6]	No spray irrigation of any recycled water, other than disinfected tertiary recycled water, shall take place within 100 feet of a residence or a place where public exposure could be similar to that of a park, playground, or school yard.				
Storage or Treatment Ponds					
Impoundment (disinfected tertiary recycled water)[4]	100 ft.[10]	100 ft.	100 ft.	50 ft.	200 ft.
Impoundment (disinfected secondary -2.2 or secondary -23 recycled water)[5]	100 ft.[9]	100 ft.	100 ft.	50 ft.	200 ft.

[1] A flowing stream shall be measured from the ordinary high water mark established by fluctuations of water elevation and indicated by characteristics such as shelving, changes in soil character, vegetation type, presence of litter or debris, or other appropriate means.
[2] Ephemeral Stream Drainage denotes a surface water drainage feature that flows only after rain or snow-melt and does not have sufficient groundwater seepage (baseflow) to maintain a condition of flowing surface water. The drainage shall be measured from a line that defines the limitation of the ordinary high water mark (described in “1” above). Irrigation canals are not considered ephemeral stream drainage features. The ephemeral stream shall be a “losing stream” (discharging surface water to groundwater) at the proposed project site.
[3] Lake or reservoir boundary measured from the high water line.
[4] Disinfected tertiary recycled water is defined in section 60301.230, title 22 of the California Code of Regulations.
[5] Disinfected secondary-2.2 recycled water is defined in section 60301.220, title 22 of the California Code of Regulations. Disinfected secondary-23 recycled water is defined in section 60301.225, title 22 of the California Code of Regulations.
[6] Additional restrictions for spray irrigation of recycled water are contained in section 60310(f), title 22 of the California Code of Regulations.
[7] Setback established by section 60310(a), title 22 of the California Code of Regulations. A reduced setback is allowed as described in section 60310(a), title 22 of the California Code of Regulations, if all the conditions in the section are met and compliance is documented in the Notice of Intent and Notice of Applicability.
[8] Setback for drip or flood application methods. Spray irrigation is subject to additional setbacks and restrictions. (See footnote 6.)
[9] Setback established by section 60310(c), title 22 of the California Code of Regulations.
[10] Setback established by section 60310(b), title 22 of the California Code of Regulations.
[11] Setback established by section 60310(f), title 22 of the California Code of Regulations.

H. Provisions for Groundwater Extraction Near Hazardous Waste Release Sites

When groundwater dewatering will occur, determination of the presence of nearby hazardous materials sites is required. If groundwater dewatering will occur within 250 feet of a hazardous material release site, or a chemical plume[3] emanating from a hazardous material release site a hydrogeologic evaluation is required to determine if the dewatering activities will significantly affect conditions at the release site. Significant effects include causing loss of hydraulic control of a plume under remediation, lowering the groundwater table when floating non-aqueous phase liquid (e.g., gasoline) is present, or migration of an existing plume. Determination of the presence of hazardous material release sites shall be made using the State Water Board's GeoTracker system, available at: <http://geotracker.waterboards.ca.gov/>.

1. When a hydrogeologic evaluation is required, consultation with the State Water Board and/or Regional Water Board is required. Additional analysis of dewatering activities, testing, and treatment of extracted groundwater may be required.

2. Dewatering an excavation to remove storm water that has flowed into the excavation via the surface, or to remove water that resulted from a broken pipe (potable water, sewage, recycled water, or storm drain) is exempt from the consultation requirement.

X. COMPLIANCE DETERMINATION

The State and Regional Water Boards shall determine compliance with final effluent limitations using sample reporting protocols defined in the Monitoring and Reporting Program of this General Order. The State and Regional Water Boards shall deem the Discharger out of compliance with effluent limitations as follows. All information on monitoring instrument calibration shall be reported with the field monitoring data unless otherwise requested by the State and/or Regional Water Board.

A. General

When determining compliance with an effluent limitation and more than one monitoring sample result is available, the State and Regional Water Board shall base compliance on the arithmetic mean concentration of the data set collected within the time corresponding with the averaging period. In those cases where the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND), the State and Regional Water Boards shall base compliance with the effluent on the median concentration of the data in place of the arithmetic mean.

B. Total Residual Chlorine Effluent Limitations

Dischargers shall determine compliance with the total residual chlorine effluent limitations using field monitoring data that show either a positive dechlorination agent residual or a total residual chlorine concentration below a minimum level (quantifiable level) of 0.1 mg/L chlorine. The monitoring instruments used to obtain field data shall be maintained and calibrated in

[3] For the purposes of this General Order, a hazardous waste release site includes the site and associated chemical plume. The plume is defined by the areal extent of groundwater containing the hazardous material (or a daughter product) at a concentration above the maximum contaminant level or remedial cleanup concentration established by a regulatory agency, whichever is lower.

accordance with the manufacturer's recommendations. All information on monitoring instrument calibration shall be reported with the field monitoring data.

The State and Regional Water Boards shall deem a field monitoring result with a total residual chlorine concentration greater than or equal to 0.1 mg/L out of compliance with a total residual chlorine effluent limitation.

C. Total Petroleum Hydrocarbons as Gasoline Effluent Limitation

The State and Regional Boards shall deem a laboratory analytical monitoring result out of compliance if a TPHG concentration is detected (including "detected but non-quantifiable") using a U.S. EPA authorized method with a method detection level of 23 ug/L or lower. A laboratory analytical monitoring result must show "non-detect" to be determined in compliance.

ATTACHMENT A – DEFINITIONS

Adverse Effect or Adverse Impact to Beneficial Uses
A detrimental effect to one or more beneficial uses of a surface or groundwater body caused by the discharge.

Area of Special Biological Significance
An ocean area designated by the State Water Resources Control Board (State Water Board) as requiring protection of species or biological communities to the extent that maintenance of natural ocean water quality is ensured. All Areas of Special Biological Significance are also classified as a subset of State Water Quality Protection Areas. Areas of Special Biological Significance are also referred to as State Water Quality Protection Areas – Areas of Special Biological Significance.

Authorized Discharge
Any discharge that is authorized pursuant to this General Order from the date of issuance of a Notice of Applicability to the Discharger by the State Water Board.

Basin Plan
The Water Quality Control Plan adopted by a Regional Water Quality Control Board (Regional Water Board). A Basin Plan designates the beneficial uses of the waters within the Regional Water Board boundaries, establishes water quality objectives for these waters, and contains implementation programs and policies to achieve water quality objectives for all waters in the Regional Water Board boundary.

Beneficial Uses
Existing or potential uses of waters within the boundary of a Regional Water Board as designated in the Regional Water Board's Basin Plan.

Best Management Practices
Methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to water of the United States, non-federal surface water, or groundwater. Best management practices include structural and nonstructural controls, and operations and maintenance procedures, which can be implemented prior, during and/or after discharge producing activities.

Chlorinated Water
Water that was dosed with chlorine to adequately sanitize and disinfect the water.

Deputy Director
The Deputy Director of the Division of Water Quality for the State Water Board or any persons delegated by the Deputy Director to serve as acting Deputy Director.

Discharge
Effluent that has received best management practices and/or best practicable treatment or control prior to entering receiving water.

Discharge to Land
A discharge to land that does not runoff into a surface water and/or a conveyance to a surface water, and will possibly discharge to groundwater.

Discharger
A company that constructs, operates, and maintains facilities for transmission and distribution of natural gas.

Effluent
Wastewater exiting natural gas facilities prior to entering best management practices and/or best practicable treatment or control measures.

Emergency Discharge
An unplanned discharge due to a sudden unexpected occurrence involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services, including the provision of natural gas supplies. Emergency discharges include, but are not limited to, discharges from emergency natural gas facility failure and repair and ruptures during hydrostatic testing.

Enclosed Bays
Indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estuaries
Surface waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuaries do not include inland surface waters or ocean waters.

Hydrostatic Pressure
The pressure exerted by a fluid at equilibrium at a given point within the fluid, due to the force of gravity. For the purpose of this General Order, the fluid is water.

Impaired Water Body
A water body segment that is listed on the most recent U. S. Environmental Protection Agency-approved Clean Water Act section 303(d) list of impaired water bodies.

Indirect Discharge
Any discharge that enters a water of the U.S. by first traveling via a storm drain or any other constructed conveyance system.

Inland Surface Waters
All waters of the U.S. that do not include the ocean, enclosed bays, or estuaries.

Method Detection Limit
Minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 C.F.R. part 136, Attachment B, revised as of July 3, 1999.

Minimum Level and Reporting Level
The concentration at which the entire analytical system gives a recognizable signal and acceptable calibration point. The minimum level is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed. A reporting level is the minimum level for reporting and compliance determination included in this General Order.

Municipal Separate Storm Sewer System Operator
The entity responsible for the operation of a local municipal separate storm sewer system.

National Pollutant Discharge Elimination System
The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Clean Water Act sections 307, 402, 318, and 405.

Natural Gas Facilities
Pipelines and piping systems, compressor stations, valves and manifolds, metering equipment, and other appurtenances constructed and operated for the purpose of transmission and distribution of natural gas.

Non-Federal Surface Waters
Non-federal surface waters means surface water or groundwater, including saline waters, within the boundaries of the state that are not waters of the United States. Discharge to certain waters of the state (e.g., wetlands or vernal pools) are prohibited in the General Order.

Noncompliant Discharge
The State and Regional Water Boards deem discharges out of compliance with effluent limitations when a pollutant concentration in the monitoring sample is greater than or equal to the corresponding effluent limitation and greater than or equal to the Reporting Limit for the pollutant.

Not Detected
Sample results less than the properly calibrated monitoring equipment's method detection limit.

Nuisance
Anything which meets one of the following:

1. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property;
2. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; or
3. Occurs during, or as a result of, the treatment or disposal of wastes.

Ocean Waters
Territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the California Ocean Plan.

Planned Discharge
Discharges due to scheduled dewatering and hydrostatic testing of new and/or existing natural gas facilities related to excavation, construction, testing, and repair.

Priority Pollutants
Substances defined in Clean Water Act section 502(6) (33 U.S.C. § 1362(6)), and incorporated by reference into California Water Code section 13373.

Recycled Water
Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable water supply resource.

Site Dewatering
Removal of groundwater and other water such as rainwater, local runoff and/or water from water pipeline breaks that collect in excavations (including trenches).

Unplanned Discharge
Discharges due to dewatering resulting from water pipe ruptures, groundwater seepage, collection of rain water, incidental storm water inflow, local run-on, or urgent operations, maintenance and/or repair activities.

Waters of the State
Any surface water or groundwater, including saline waters, within the boundaries of the state. Waters of the state includes waters of the United States. Figure A-1 is a flow chart that illustrates the relationship between waters of the state and waters of the United States.

Waters of the United States
Generally refers to surface waters, as defined for the purposes of the Federal Clean Water Act. Waters of the United States are distinguished from non-federal waters of the state by certain characteristics. Discharges of pollutants to waters of the United States are regulated by the Clean Water Act.
Figure A-1 is a flow chart that illustrates the relationship between waters of the state and waters of the United States.

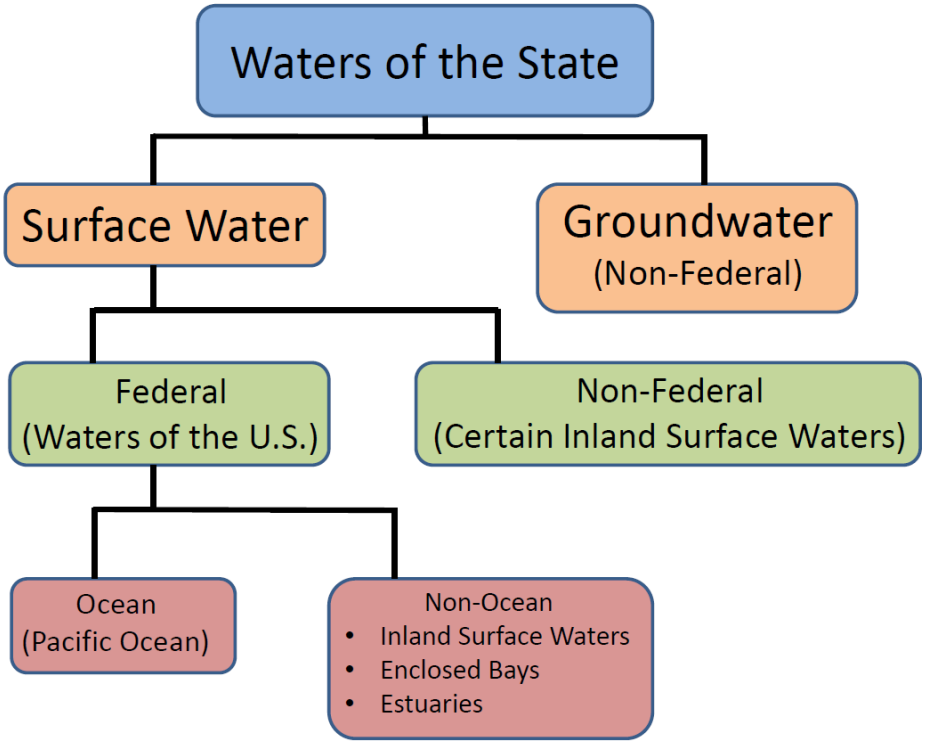
Waters of the State
Surface Water
Groundwater
(Non-Federal)
Federal
(Waters of the U.S.)
Non-Federal
(Certain Inland Surface Waters)
Ocean
(Pacific Ocean)
Non-Ocean
• Inland Surface Waters
• Enclosed Bays
• Estuaries

Figure A-1

ATTACHMENT B – NOTICE OF INTENT

ORDER WQ 2017-XXXX-DWQ
GENERAL PERMIT NO. CAG670001

STATEWIDE GENERAL ORDER FOR DISCHARGES FROM NATURAL GAS FACILITIES

1. NATURAL GAS COMPANY OWNER (APPLICANT)

Name			
Mailing Address			
City	State	ZIP	Phone
Contact Person/Title		Email	

2. BILLING ADDRESS

Name			
Mailing Address			
City	State	ZIP	Phone
Contact Person			

3. DISCHARGE INFORMATION

Identify the type of discharges to receive regulatory coverage. (Check all that apply):

- ☐ Hydrostatic Testing of New Natural Gas Facilities
- ☐ Hydrostatic Testing of Existing Natural Gas Facilities
- ☐ Site Dewatering from Excavation, Facility Construction, Testing, Maintenance, Operation and Repair

Describe the Applicant's natural gas facilities and service area. Provide a map as an attachment to this Notice of Intent (local and/or regional) that shows the boundaries of the service areas where discharges from existing or future facilities may occur.

4. RECEIVING WATER INFORMATION

Circle the Regional Water Quality Control Boards where receiving waters are located. (Check all that apply):

Region 1, 2, 3, 4, 5, 6, 7, 8, and/or 9[1]

5. BEST MANAGEMENT PRACTICES AND CONTROL STRATEGY PLAN CONTACT INFORMATION

Provide the contact information of the one Applicant representative to respond to State and Regional Water Board inquiries regarding the Applicant's Best Management Practices and Control Strategy Plan.

Company Name	Contact Person/Title
Phone	Email Address

6. APPLICATION FEE

☐ Provide the appropriate applicable fees. Checks shall be made payable to the State Water Resources Control Board.

The discharges authorized under this General Order are subject to the fees for Category 1 discharges pursuant to California Code of Regulations, title 23, and section 2200(b)(9). The fee covers all discharges authorized under this General Order. Information on applicable fees can be found at http://www.waterboards.ca.gov/resources/fees/water_quality/#npdes.

[1] See http://www.waterboards.ca.gov/publications_forms/publications/factsheets/docs/region_brds.pdf for Regional Water Board jurisdiction by county.

7. APPLICANT CERTIFICATION

"I certify under penalty of law that:

(1) this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

(2) the appropriate Tribal entities on the State Water Board Native American Tribe Pre-Discharge Notification List that are affiliated with the project site(s) will be provided a minimum of 30-calendar days prior notice of initiation of planned discharges per Section II.C.1.f of this Order.

I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment."

Printed Name: _____

Signature: _____ Date: _____

Title: _____

PLEASE SUBMIT NOTICE OF INTENT FORM, ATTACHED MAPS, AND APPLICATION FEE TO THE FOLLOWING ADDRESS:

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER QUALITY
P.O. BOX 100
SACRAMENTO, CA 95812-0100
ATTENTION: NPDES WASTEWATER UNIT, 15TH FLOOR

STATE USE ONLY

WDID:	Regional Water Board Office	Date NOI Received:	Date NOI Processed:
Case Handler's Initial:	Fee Amount Received:	Check #:	

ATTACHMENT C – PRE-DISCHARGE NOTIFICATION FORM

To fulfill Provision IX.A.3 of this General Order, the Discharger must submit a completed Pre-Discharge Notification Form to the State Water Resources Control Board at least seven (7) days prior to any planned discharge activity. A copy of the submitted form must be provided to the owner or operator of any municipal separate storm sewer system at least seven (7) days prior to any planned discharge into a local municipal separate storm sewer system, as applicable. (See section IX.A.3 of this General Order for more details.)

1. NATURAL GAS COMPANY INFORMATION

Name of Company		
Waste Discharge Identification Number (WDID): *(The WDID is shown in the Notice of Applicability)*		
Mailing Address		
City	State	ZIP
Contact Person/Title		Email and Phone Number

2. CONTRACTOR (IF APPLICABLE)

Name		
Mailing Address		
City	State	ZIP
Contact Person/Title		Email and Phone Number

3. BENEFICIAL REUSE OF DISCHARGE WATER

Identify the potential beneficial reuses the discharge may be used for, prior to ultimate disposal. (Check all that apply):

- ☐ Dust Control
- ☐ Construction Supply Water
- ☐ Urban or Agricultural Irrigation
- ☐ Other. Please explain.
- ☐ None. Please explain why reuse is not feasible.

4. PLANNED DISCHARGES TO SURFACE WATER

Project Name:		
Project Type:		
Discharge Start Date:	Project End Date:	Discharge End Date:

Identify the type of activity potentially resulting in discharge to a water of the U.S. (Check all that apply).

☐ Hydrostatic Pressure Testing of New Natural Gas Facilities

☐ Hydrostatic Pressure Testing of Existing Natural Gas Facilities

☐ Site Dewatering

☐ Other (explain below)

Describe location of discharge and name of water body. Provide a map (local and/or regional) showing project location and discharge locations. Provide identifying information for the surface waters, municipal storm drain systems, and/or other conveyance systems proposed to receive discharges. (List the names of receiving waters below).

_____

_____

For projects with site dewatering, will the project occur within 250 feet of a hazardous materials site? If yes, provide hydrologic evaluation for the site. See IX.H Provisions for Groundwater Extraction Nearby Hazardous Waste Release Sites for requirements.	☐ Yes	☐ No
Is revegetation required for the project? If yes, provide information for replacement plantings determined by a qualified biologist.	☐ Yes	☐ No
Does the discharge have multiple outfall locations with same source water, and with similar discharge characteristics?	☐ Yes	☐ No
Is any portion of the discharge to a municipal separate storm sewer system? Identify the municipal separate storm sewer system and the associated municipality. _____	☐ Yes	☐ No

Circle the Regional Water Quality Control Board(s) where receiving water bodies are located:

See http://www.waterboards.ca.gov/publications_forms/publications/factsheets/docs/region_brds.pdf for Regional Water Board jurisdiction by county.

Region(s) 1, 2, 3, 4, 5, 6, 7, 8, or 9

5. PLANNED DISCHARGES TO LAND

Project Name:		
Project Type:		
Discharge Start Date:	Project End Date:	Discharge End Date:

Identify the type of discharge potentially resulting in discharge to land. (Check all that apply).

- ☐ Hydrostatic Pressure Testing of New Natural Gas Facilities
- ☐ Hydrostatic Pressure Testing of Existing Natural Gas Facilities
- ☐ Site Dewatering
- ☐ Other (explain below)

Describe location of discharge. Provide a map (local and/or regional) showing project location and discharge locations. Provide identifying information for specific plots of land proposed to receive discharges.

_____

_____

For projects with site dewatering, will the project occur within 250 feet of a hazardous materials site? If yes, provide hydrologic evaluation for the site. See IX.G Provisions for Groundwater Extraction Nearby Hazardous Waste Release Sites for requirements.	☐ Yes	☐ No
Will wastewater and/or treated groundwater be applied to ponds, result in saturated surface soils, or otherwise impact sensitive species that reside in subterranean burrows? If yes, provide a screening of existing conditions performed by a qualified biologist.	☐ Yes	☐ No
Is revegetation required for the project? If yes, provide information for replacement plantings determined by a qualified biologist.	☐ Yes	☐ No

Circle the Regional Water Quality Control Board(s) where discharges are located:

See http://www.waterboards.ca.gov/publications_forms/publications/factsheets/docs/region_brds.pdf for Regional Water Board jurisdiction by county.

Region(s) 1, 2, 3, 4, 5, 6, 7, 8, or 9

BEST MANAGEMENT PRACTICES OR TREATMENT

Describe the Best Management Practices and/or treatment methods (with appropriate citations to the Best Management Practices and Control Strategy Plan) that are anticipated to be used to ensure that the discharge maintains compliance with the terms and conditions of this General Order.

_____

_____

_____

_____

_____

_____

ATTACHMENT D – STANDARD PROVISIONS

These standard provisions are applicable to discharges authorized by this General Order.

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

The Discharger must comply with all of the conditions of this General Order. Any noncompliance constitutes a violation of the Clean Water Act and the California Water Code and is grounds for a potential enforcement action, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).) This also applies to land discharges.

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Order. (40 C.F.R. § 122.41(c).) This also applies to land discharges.

C. Duty to Mitigate

The Discharger must take all reasonable steps to minimize or prevent any discharge in violation of this General Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).) This also applies to land discharges.

D. Proper Operation and Maintenance

The Discharger must at all times properly operate and maintain all facilities (and related appurtenances), best management practices, and/or best practicable treatment or control, which are installed or used by the Discharger to achieve compliance with the conditions of this General Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision includes the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this General Order. (40 C.F.R. § 122.41(e).) This also applies to land discharges.

E. Property Rights

This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).) This also applies to land discharges.

The issuance of this General Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).) This also applies to land discharges.

F. Inspection and Entry

The Discharger shall allow State Water Resources Control Board (State Water Board) and/or Regional Water Quality Control Board (Regional Water Board) staff, United States Environmental Protection Agency (U.S. EPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code § 13383). This also applies to land discharges:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this General Order (33 U.S.C. § 1318(a)(4)(B)(i); 40 C.F.R. § 122.41(i)(1); Wat. Code, §§ 13267, 13383);
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this General Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(2); Wat. Code, §§ 13267, 13383);
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this General Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(3); Wat. Code, §§ 13267, 13383); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the Clean Water Act or the California Water Code, any substances or parameters at any location. (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This General Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).) This also applies to land discharges.

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this General Order after the expiration date of this General Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

C. Transfers

This General Order is not transferable to any person except after notice to the State Water Board. The State Water Board may require modification or revocation and reissuance of this General Order or Notice of Applicability to change the name of the Discharger and incorporate such other requirements as may be necessary under the Clean Water Act and the California Water Code. (40 C.F.R. §§ 122.41(l)(3) and 122.61.) This also applies to land discharges.

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for monitoring must be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).) This also applies to land discharges.

B. Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 or alternative test methods approved by U.S. EPA for the analyses of pollutants unless another method is required under 40 C.F.R. subchapters N or O. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. part 136 or alternative test methods approved by U.S. EPA for the analysis of pollutants or pollutant parameters or as required under 40 C.F.R. chapter I, subchapter N or O. For the purposes of this paragraph, a method is sufficiently sensitive when:

1. For compliance monitoring, the method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter; or
2. The method has the lowest ML of the analytical methods approved under 40 C.F.R. part 136 or required under 40 C.F.R. chapter I, subchapter N or O for the measured pollutant or pollutant parameter.

C. In the case of pollutants or pollutant parameters for which there are no approved methods under 40 C.F.R. part 136 or otherwise required under 40 C.F.R. chapter I, subchapters N or O, monitoring must be conducted according to a test procedure specified in this General Order for such pollutants or pollutant parameters. (40 C.F.R. §§ 122.21(e)(3), 122.41(j)(4), and 122.44(i)(1)(iv).) This also applies to land discharges.

IV. STANDARD PROVISIONS – RECORDS

A. The Discharger must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this General Order, and records of all data used to complete the application for this General Order, for a period of at least five (5) years or as required by Environmental Laboratory Accreditation Program requirements from the date of the sample, measurement, report or application. This period may be extended by request of the State Water Board Deputy Director at any time. (40 C.F.R. § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
2. The individuals who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)).

1. The name and address of the Discharger (40 C.F.R. § 122.7(b)(1)); and
2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

D. Any records associated with Native American tribal consultations and tribal cultural resources are subject to the confidentiality provisions consistent with Public Resource Code § 21082.3(c).

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger must furnish to the State Water Board, applicable Regional Water Board, or U.S. EPA within a reasonable time, any information which the State Water Board, applicable

Regional Water Board, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this General Order or to determine compliance with this General Order. Upon request, the Discharger must also furnish to the State Water Board, applicable Regional Water Board, or U.S. EPA copies of records required to be kept by this General Order. (40 C.F.R. § 122.41(h) and Wat. Code, §§ 13267, 13383.) This also applies to land discharges.

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the State Water Board, applicable Regional Water Board, and/or U.S. EPA must be signed and certified in accordance with Standard Provisions – Reporting sections V.B.2 through V.B.8 below. (40 C.F.R. § 122.41(k).) This also applies to land discharges.
2. For a corporation, all permit applications must be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)
3. For a partnership or sole proprietorship, a general partner or the proprietor shall sign all permit applications, respectively. (40 C.F.R. § 122.22(a)(2).)
4. For a municipality, state, federal, or other public agency, all permit applications must be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA). (40 C.F.R. § 122.22(a)(3).)
5. All reports required by this General Order and other information requested by the State Water Board, applicable Regional Water Board, or U.S. EPA must be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
    a. The authorization is made in writing by a person described in Standard Provisions – Reporting section V.B.2 above (40 C.F.R. § 122.22(b)(1));
    b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

c. The written authorization is submitted to the State Water Board. (40 C.F.R. § 122.22(b)(3).)

6. If an authorization under Standard Provisions – Reporting section V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

7. Any person signing a document under Standard Provisions – Reporting section V.B.2 or V.B.3 above must make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 C.F.R. § 122.22(d).)

8. If documents described in Standard Provisions – Reporting section V.B.1, V.B.2, or V.B.3 are submitted electronically by or on behalf of the NPDES-regulated facility, any person providing the electronic signature for such documents must meet all relevant requirements of Standard Provisions – Reporting section V.B, and must ensure that all of the relevant requirements of 40 C.F.R. part 3 (including, in all cases, subpart D to part 3) (Cross-Media Electronic Reporting) and 40 C.F.R. part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R. § 122.22(e).)

C. Monitoring Reports

1. Monitoring results must be reported at the intervals specified in the Monitoring and Reporting Program in this General Order. (40 C.F.R. § 122.41(l)(4).) This also applies to land discharges.

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the State Water Board for reporting the results of monitoring, or disposal practices. As of December 21, 2016 all reports and forms must be submitted electronically by the Discharger to the initial recipient, as defined in Standard Provisions – Reporting section V.J, in compliance with this section and 40 C.F.R. part 3 (including, in all cases, subpart D to part 3), section 122.22, and 40 C.F.R. part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Discharger may be required to report electronically if specified by the permit or if required to do so by state law. (40 C.F.R. § 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this General Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. subchapters N or O, the results of such monitoring must be included in the calculation and reporting of the data submitted in the DMR. (40 C.F.R. § 122.41(l)(4)(ii).) This also applies to land discharges.

4. Calculations for all limitations, which require averaging of measurements, must utilize an arithmetic mean unless otherwise specified in this General Order. (40 C.F.R. § 122.41(l)(4)(iii).) This also applies to land discharges.

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this General Order, must be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).) This also applies to land discharges.

E. Twenty-Four Hour Reporting

The Discharger must report any noncompliance which may impact beneficial uses of the receiving waters, endanger health, or endanger the environment to the State Water Board. Any information must be provided verbally by calling (916) 319-9152 with a follow-up email to NPDES_wastewater@waterboards.ca.gov within 24 hours from the time the Discharger becomes aware of the circumstances. A written report must also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written report must contain: (1) a description of the cause of noncompliance, (2) the period of noncompliance including exact dates and times, (3) a description of the corrective actions taken to cease noncompliant discharge, (4) the date and time the noncompliant discharge ceased, and (5) further changes made to Discharger's operations to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).) This also applies to land discharges.

F. Planned Changes

The Discharger must give notice to the State Water Board as soon as possible of any planned physical alterations or additions to the permitted facility or activity (i.e., as described in the Notice of Intent or the Project Notification). Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R.§ 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

The Discharger must give advance notice to the State Water Board of any planned changes in the permitted facility or activity that may result in gross noncompliance with the requirements of this General Order. (40 C.F.R. § 122.41(l)(2).) This also applies to land discharges.

H. Other Noncompliance

The Discharger must report all instances of noncompliance not reported under Standard Provisions – Reporting sections V.C, V.D, and V.E above at the time monitoring reports are

submitted. The reports must contain the information listed in Standard Provision – Reporting section V.E above. (40 C.F.R. § 122.41(l)(7).)

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the State Water Board, applicable Regional Water Board, or U.S. EPA, the Discharger must promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).) This also applies to land discharges.

J. Identification of the Initial Recipient for NPDES Electronic Reporting Data

The owner, operator, or the duly authorized representative of an NPDES-regulated facility is required to electronically submit the required NPDES information (as specified in appendix A to 40 C.F.R. part 127) to the appropriate initial recipient, as determined by U.S. EPA, and as defined in 40 C.F.R. section 127.2(b). U.S. EPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state, and by NPDES data group [see 40 C.F.R. section 127.2(c)]. U.S. EPA will update and maintain this listing. (40 C.F.R. § 122.41(l)(9).)

VI. STANDARD PROVISIONS – ENFORCEMENT

The State and Regional Water Boards are authorized to enforce the terms of this permit under several provisions of the California Water Code, including, but not limited to, sections 13268, 13385, 13386, and 13387. This also applies to land discharges.

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

California Water Code sections 13267 and 13383 authorize the State Water Resources Control Board (State Water Board) to require technical and monitoring reports. Section 122.48 of title 40 of the Code of Federal Regulations (40 C.F.R.), requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. This Monitoring and Reporting Program establishes monitoring and reporting requirements for all discharges authorized by this General Order in accordance with federal and state regulations.

I. GENERAL MONITORING PROVISIONS

A. For discharges to water of the U.S., the Discharger must conduct monitoring according to U.S. Environmental Protection Agency (U.S. EPA) test procedures approved under 40 C.F.R. part 136 or alternative test methods approved by U.S. EPA, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act, as amended. The Discharger may use alternative test procedures provided that they have been approved by the State Water Board or Regional Water Quality Control Boards (Regional Water Boards) and U.S. EPA.

B. For discharges to waters of the U.S., the Discharger must use sufficiently sensitive analytical test methods with minimum levels (MLs) equal to or less than the effluent limitations in this General Order, in accordance with U.S. EPA's Sufficiently Sensitive Methods Rule. (40 C.F.R. § 122.21(e)(3).)

   If the effluent limitation is below the MLs of all approved analytical methods, the Discharger must use the best available procedure that meets the lowest minimum level requirements consistent with section III.B. in Attachment D, Standard Provisions – Monitoring. Analytical methods used must be consistent with the requirements of 40 C.F.R. part 136 and approved by U.S. EPA.

C. Detection of a pollutant means a sample result is greater than or equal to the method detection limit. Sample results less than the ML, but greater than or equal to the method detection limit, shall be reported as "Detected, but Not Quantified" or DNQ. The estimated chemical concentration of the sample shall be used to compare to the effluent limitation.

D. All laboratory analyses shall be performed in a laboratory certified by the State Water Board's Environmental Laboratory Accreditation Program to perform such analyses.

E. The Discharger shall report monitoring results, including noncompliance, at intervals and in a manner specified in this Monitoring and Reporting Program. The results shall be submitted to the State Water Board in a format which allows direct comparison with the effluent limitations and requirements of this General Order.

F. If the Discharger monitors any pollutant more frequently than required by this General Order using test procedures provided in 40 C.F.R. part 136 or approved by U.S. EPA, the results of the monitoring shall be included in the reporting of the data submitted in the Discharger's Annual Report. The Discharger shall also report increased frequency of monitoring.

G. Samples and measurements taken as required herein shall be representative of the nature of the monitored discharge after implementation of any necessary best management practices and/or best practicable treatment or control. The Discharger shall take all samples at the

monitoring locations specified below and, unless otherwise specified, before the discharge combines with or is diluted by any other waste stream or body of water.

H. The Discharger shall maintain sufficient resources, including trained personnel and properly calibrated and maintained field instruments, to adequately perform all field measurements required in this General Order. Trained personnel acting on the Discharger's behalf may use handheld devices to perform onsite field measurements. The Discharger shall maintain a manual containing the proper operating procedures for all field monitoring devices onsite or at the Discharger's office.

I. The Discharger shall select appropriate field devices consistent with accepted scientific practices to ensure the accuracy and reliability of measurements of monitored discharges. The Discharger shall properly maintain and calibrate all devices per manufacturer instructions to ensure the devices' continued accuracy.

J. The Discharger shall retain records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this General Order for a period of at least five years or as required by Environmental Laboratory Accreditation Program requirements from the date of the sample, measurement, and report. This period may be extended by request of the State or Regional Water Board.

II. MONITORING REQUIREMENTS FOR PLANNED DISCHARGES

A. Effluent Monitoring to Waters of the U.S.

The Discharger shall monitor the discharge and receiving water at locations specified in Table E-1 below. Monitoring shall include projects with multiple outfall locations.

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	The latitude and longitude where a representative sample of the effluent can be collected prior to discharge to a surface water.[1]
--	SW-001	The location of a direct discharge.

[1] A Discharger with multiple discharges from a single project (1) using the same source water, (2) implementing the same series of best management practices, and (3) and discharging effluent of the same or substantially similar discharge characteristics requires only one representative effluent sampling location of each type of discharge (i.e. hydrostatic testing of new pipelines, hydrostatic testing of existing pipelines, dewatering) for the project site.

The Discharger shall monitor the discharge as specified in Table E-2, Discharge Compliance Monitoring and the requirements below:

1. The Discharger shall analyze pollutants using the analytical methods described in 40 C.F.R. part 136 or alternative test methods approved by U.S. EPA.

2. The Discharger may use a hand-held field meter, provided the meter uses a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. The Discharger shall maintain at the work site a calibration

and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program.

3. The Discharger must monitor total chlorine residual with a method sensitive to and accurate at a reporting level of 0.1 mg/L.

4. Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries. The Discharger shall collect samples for comparison with the effluent limitations in Section V.A, Final Effluent Limitations for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries. Until discharge has ceased, the Discharger shall continue collecting weekly samples but only for constituents which exceeded effluent limitations in the first sampling event with the exception of required method detection limits and/or MLs in Section X of this General Order. The Discharger shall use analytical methods with MLs that are below the effluent limitations. If the lowest ML published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California is not below the effluent limitation, the Discharger shall use the analytical method with the lowest ML.

5. Discharges to the Pacific Ocean. The Discharger shall collect samples for comparison with the effluent limitations in Section V.B, Final Effluent Limitations for Discharges to the Pacific Ocean prior to discharge. Until discharge has ceased, the Discharger shall continue collecting weekly samples but only for constituents which exceeded effluent limitations in the first sampling event. The Discharger shall use analytical methods with MLs that are below the effluent limitations. If the lowest ML published in Appendix II of the California Ocean Plan is not below the effluent limitation, the Discharger shall use the analytical method with the lowest ML.

6. For each project, if four consecutive weekly samples of a constituent that exceeded its effluent limitation in the initial sampling show concentrations less than the effluent limitation, monitoring for that constituent shall be reduced to monthly.

7. For every five million gallons discharged, the Discharger shall conduct monitoring to determine if the discharge characteristics have changed and if new monitoring requirements are needed. If the initial results for the second five million gallon monitoring show no change from the initial results of the first five million gallon monitoring, this General Order does not require the Discharger to conduct further monitoring every five million gallons.

8. Dischargers shall conduct compliance monitoring for each groundwater basin during dewatering to determine if the character of the discharge has changed and if it exceeds effluent limitations.

Table E-2. Discharge Compliance Monitoring

Parameter	Units	Sample Type	Sampling Frequency
California Ocean Plan Constituents/Parameters	µg/L	Grab	Weekly[2]
pH	Standard Units	Grab	Weekly[2]
Priority Pollutants	µg/L	Grab	Weekly[2]
Oil and Grease	mg/L	Grab	Weekly[2]
Temperature	°F	Grab	Weekly[2]

Parameter	Units	Sample Type	Sampling Frequency
Total Petroleum Hydrocarbons as Gasoline[1]	µg/L	Grab	Weekly[2]
Total Petroleum Hydrocarbons as Diesel[1]	mg/L	Grab	Weekly[2]
Total Residual Chlorine	mg/L	Grab	Weekly[2]
Turbidity	Nephelometric Turbidity Units	Grab	Weekly[2]

[1] Additional monitoring requirement for discharges from existing facilties.
[2] Weekly sampling frequency is required only for those pollutants/parameters that exceeded effluent limitations in the first sampling event.

B. Effluent Monitoring for Discharges to Non-Federal Surface Waters

Non-federal surface waters may have similar beneficial uses as those of waters of the U.S. To protect the beneficial uses of non-federal surface waters, this General Order requires the same effluent monitoring for discharges to non-federal surface waters required for discharges to waters of the U.S.

C. Effluent Monitoring for Discharges to Land

The Discharger shall monitor the discharge at locations specified in Table E-3, Monitoring Station Locations for Land Discharges.

Table E-3. Monitoring Station Locations for Land Discharges

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	The latitude and longitude where a representative sample of the effluent can be collected prior to discharge to land.*

* A Discharger with multiple discharges from a single project (1) using the same source water, (2) implementing the same series of BMPs, and (3) and discharging effluent of the same or substantially similar discharge characteristics requires only one representative effluent sampling location for each type of discharge (i.e. hydrostatic testing of new pipelines, hydrostatic testing of existing pipelines, dewatering) for the project site.

The Discharger shall monitor the discharge at EFF-001 for constituents specified in Table E-4, Compliance Monitoring for Land Discharges.

Table E-4. Compliance Monitoring for Land Discharges

Constituent/Parameter	Units	Sample Type	Minimum Sampling Frequency
Land Application Area[1]	Not Applicable	Observe	Weekly
Polychlorinated Biphenyls[2]	mg/L	Grab	Weekly
Dissolved Oxygen	mg/L	Grab	Weekly
Pond Freeboard[3]	Feet	Measure	Weekly
Separate Phase Products[4]	Gallons	Measure	Continuous

[1] Land application area monitoring shall report any vector generation, saturated soil conditions, odors, or runoff conditions.
[2] Polychlorinated biphenyls monitoring is not required when new pipe is being installed.
[3] Freeboard shall be measured from the pond water surface to the lowest point of overflow for monitoring of all pond systems.
[4] Any separate phase products collected (e.g., gas condensate prior to the test initiation, or oil or oil sheen removed from pipeline facilities and/or hydrostatic test wastewater) shall be reported.

D. Receiving Water Monitoring

1. Surface Water – Waters of the U.S.

When the Discharger determines there has been a noncompliant discharge to a water of the U.S. that may impact beneficial uses, this General Order requires the Discharger to conduct receiving water monitoring. In such instances, the Discharger shall monitor the water of the U.S. visually at and downstream of the discharge location. Monitoring shall consist of digital photographs and documentation of observed effects the discharge has on the water of the U.S. in regards to erosion, discoloration, impact on aquatic life, sedimentation, floating material, visible films, sheens, or coatings, and potential nuisance conditions.

For noncompliant discharges, the Discharger shall include photographs and documented observations of the receiving water conditions in its Annual Monitoring Report. If the conditions surrounding the water of the U.S. present a hazard to monitoring personnel, the Discharger shall conduct visual monitoring using telephoto lenses and binoculars. If further hazards exist that may render visual monitoring unsafe, monitoring is not required; however, the Discharger shall document such hazards in the monitoring report. Monitoring of waters of the U.S. is not required for emergency discharges.

2. Surface Water – Non-Federal Surface Waters

Non-federal surface waters may have similar beneficial uses as those of waters of the U.S. To protect the beneficial uses of non-federal surface waters, this General Order requires the same receiving water monitoring for discharges to non-federal surface waters required for discharges to waters of the U.S.

3. Land – Not Applicable

This General Order does not require receiving water monitoring for discharges to land with the potential of reaching groundwater.

III. MONITORING REQUIREMENTS FOR EMERGENCY AND UNPLANNED DISCHARGES

This General Order does not require monitoring for emergency and unplanned discharges.

IV. POST-NOTIFICATION OF EMERGENCY OR NONCOMPLIANT DISCHARGES

Within 24 hours of the Discharger becoming aware of emergency discharges or noncompliant discharges that cause an impact to beneficial uses, the Discharger shall notify the State Water Board (and municipal separate storm sewer system operators, if applicable). The notification within 24 hours must be provided verbally by calling (916) 319-9152 or electronically by emailing NPDES_wastewater@waterboards.ca.gov. The Discharger must provide a written report within

five (5) days of the time the Discharger becomes aware of the emergency discharges or noncompliant discharges. The notification shall include all of the following information:

A. The limitations for which noncompliance occurred;

B. The date, time, location, and estimated duration of the emergency or noncompliant discharge;

C. The applicable receiving water body;

D. The estimated volume of discharge during the emergency, noncompliant, or discharge;

E. The cause of the emergency or noncompliant discharge; and

F. The corrective actions taken or planned to (1) prevent future emergency or noncompliant discharges or (2) repair the system failure.

V. REPORTING AND RECORDKEEPING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions, Attachment D for discharges to waters of the U.S. related to monitoring, reporting, and recordkeeping.

2. The Discharger shall report to the State Water Board and Regional Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.

3. The Discharger may request the Deputy Director of the Division of Water Quality to reduce monitoring frequencies based on statistical trends of monitoring data that support a reduction in monitoring frequencies.

4. If no discharge has occurred during a reporting period, the Discharger shall still submit a monitoring report which documents that there was no discharge.

5. Provision V.C.2 of Attachment D specifies that by December 21, 2016, the Discharger must report monitoring results on a Discharge Monitoring Report form specified by the State Water Board. However, the State Water Board's California Integrated Water Quality System (CIWQS) currently does not provide for entry of self-monitoring reports by dischargers regulated under a general order. At any time during the term of this General Order, the State Water Board may notify the Discharger to electronically submit self-monitoring reports using CIWQS (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall submit annual self-monitoring reports in PDF or other electronic formats to NPDES_wastewater@waterboards.ca.gov.

B. Annual Self-Monitoring Report

1. The Discharger shall submit an Annual Report (for the period from January 1 through December 31) no later than April 1 of the following year during the term of this General Order. The Annual Report shall contain, at a minimum, the following information:

a. An executive summary that includes a discussion of compliance or noncompliance with this General Order and a brief evaluation of the Best Management Practices and Control Strategy Plan (Waste Discharge Requirements, section IX.A.4).

b. A summary of monitoring data generated.

c. A summary of relevant field observations.

d. A map showing the general location of each monitored discharge location.

e. A list of all monitored discharge locations with identification and location information (i.e., city/county and street address and/or latitude/longitude), the date when each monitored discharge occurred, and the estimated volume of wastewater discharged.

f. A description of the Discharger's sample collection, sample analysis, and quality control procedures.

g. A tabulation of the results which shall show the monitored discharge location, collection date, effluent limitations in Tables 3, 4A through 4C, 5, and 6A through 6C and corresponding monitoring results, and MLs and method detection limits for each constituent.

h. Weekly monitoring results for constituents which exceed effluent limitations in the first sampling event.

i. All discharges to a municipal separate storm sewer system that discharges directly to an Area of Special Biological Significance if the discharges are within one mile inland from the Area of Special Biological Significance shoreline.

j. An estimate of annual volume discharged. The Discharger shall describe the methods and assumptions used to calculate the estimate.

k. An estimate of annual volume of water beneficially reused. The Discharger shall describe the methods and assumptions used to calculate the estimate.

l. An estimate of annual volume of recycled water used. The Discharger shall describe the methods and assumptions used to calculate the estimate.

2. The Discharger shall arrange all reported data in a tabular format so that they are readily discernible. The data shall be summarized to clearly illustrate compliance or noncompliance with effluent limitations and whether best management practices and/or best practicable treatment or control are effective.

3. The Discharger shall attach a cover letter to the Annual Report. The information contained in the cover letter shall clearly identify noncompliance with this General Order, discuss corrective actions taken or planned, and provide a time schedule for corrective actions. The Discharger must include a description of the requirement that was not complied with and a description of the noncompliance.

4. The Discharger shall submit the Annual Report to the State Water Board, signed and certified as required by the Standard Provisions to NPDES_wastewater@waterboards.ca.gov.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F - FACT SHEET

This Fact Sheet includes the legal requirements and technical rationales that serve as the basis for the requirements of this General Order. As described in section III.B of this General Order, the State Water Resources Control Board (State Water Board) incorporates this Fact Sheet as its findings supporting the issuance of this General Order.

I. REGULATORY BACKGROUND

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act) was amended to provide that the discharge of pollutants to waters of the United States (U.S.) from any point source is effectively prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit.

On September 22, 1989, the U.S. Environmental Protection Agency (U.S. EPA) granted the State of California, through the State Water Board and the Regional Water Quality Control Boards (Regional Water Boards), the authority to issue general NPDES permits pursuant to title 40 Code of Federal Regulations (40 C.F.R.) parts 122 and 123.

Section 122.28 of 40 C.F.R. provides for issuance of general permits to regulate a category of point sources if the sources involve the same or substantially similar types of operations; discharge the same type of waste; require the same type of effluent limitations or operating conditions; require similar monitoring; and are more appropriately regulated under a general permit rather than individual permits.

The California Water Code section 13263(i) provides that the State Water Board may prescribe general waste discharge requirements (WDRs) for a category of discharges to serve as a statewide general order. The statewide general order shall implement the provisions, prohibitions, and water quality objectives contained in statewide and/or region-specific water quality control plans that govern the discharge.

Discharges of pollutants to waters of the U.S. required to be regulated with an NPDES permit, in accordance with the Clean Water Act, include those from natural gas facility excavation, construction, testing, maintenance, operation and repair activities. The Clean Water Act does not include an exemption from federal regulation based on volume or flow of discharge. Therefore, wastewater discharges to waters of the U.S. from all sizes of natural gas facilities are required to be regulated by an NPDES permit.

II. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements in this General Order are based on the applicable plans, policies, and regulations identified in the Findings in section III of this General Order. This section provides supplemental information, where appropriate, for the plans, policies, and regulations relevant to the discharge.

A. Legal Authorities

1. This General Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260) for discharges from natural gas facilities including discharges from excavation (e.g., conventional excavation and hydro-excavation), construction, testing (e.g., hydrostatic testing), maintenance, operation and repair activities to water of the U.S., non-federal surface water[5], and land with the potential of reaching groundwater. This General Order does not authorize direct discharge to groundwater.

   In addition, the State Water Board is issuing this General Order pursuant to section 402 of the Clean Water Act and implementing regulations adopted by U.S. EPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). This General Order shall serve as an NPDES permit for point source discharges to waters of the U.S. from natural gas facility activities described above.

2. California Water Code section 13260(a) requires that any person discharging waste or proposing to discharge waste within any region, other than to a community sewer system, that could affect the quality of the waters of the state[6], file a Report of Waste Discharge to obtain coverage under WDRs or a waiver of WDRs. California Water Code section 13050(d) states, "Waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal." For the purposes of this General Order, the Notice of Intent contained in Attachment B is considered equivalent to a Report of Waste Discharge.

3. This General Order allows the use of recycled water (as defined in California Water Code section 13050(n)) and requires all recycled water use to comply with the applicable requirements described in chapter 3, division 4, title 22, of the California Code of Regulations (Title 22).

4. California Water Code section 13263(i) states that the State Water Board or a Regional Water Board may prescribe general WDRs for a category of discharges if the State Water Board or a Regional Water Board finds or determines that all of the following criteria apply to the discharges in that category:

   a. The discharges are produced by the same or similar operations.

   b. The discharges involve the same or similar types of waste.

   c. The discharges require the same or similar treatment standards.

   d. The discharges are more appropriately regulated under general WDRs than individual WDRs.

[5] Non-federal surface water means a surface water of the state that is not a water of the U.S.
[6] The term "waters of the state" includes waters of the U.S., non-federal surface waters, and groundwater.

Hydrostatic tests and site dewatering activities that will be regulated under this General Order are consistent with the criteria listed above. All discharges regulated under this General Order will be from similar operations and will be consistent with the description of the discharge as defined in this General Order. Dischargers will use similar treatment and control for discharges to land. Individual permits are not necessary because the discharges are similar and discharge requirements would be similar if individual permits were issued.

B. State and Federal Regulations, Policies, and Plans

1. **National Toxics Rule and California Toxics Rule.** U.S. EPA adopted the National Toxics Rule in December 1992, and amended it in May 1995 and November 1999. About 40 criteria in the National Toxics Rule applied in California. On May 18, 2000, U.S. EPA adopted the California Toxics Rule (CTR). The CTR (as amended on February 13, 2001) promulgated new toxics criteria for California and incorporated the previously adopted National Toxics Rule criteria that were applicable in the state. These rules contain water quality criteria for priority pollutants.

2. **State Implementation Policy.** In March 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). In February 2005, the State Water Board amended the SIP. The SIP establishes implementation provisions for (1) priority pollutant criteria in the California Toxics Rule, (2) priority pollutant objectives established by Regional Water Boards in their water quality control plans (Basin Plans), and (3) chronic toxicity controls for discharges to waters of the U.S. This General Order implements the SIP for discharges to non-ocean waters of the U.S. including indirect discharges via a storm drain or conveyance system that drains to a non-ocean water of the U.S.

3. **California Ocean Plan.** In 1972, the State Water Board adopted the Water Quality Control Plan for Ocean Waters of California (Ocean Plan). The State Water Board last amended the Ocean Plan amendment in May 2015. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean waters of the state. To protect the beneficial uses of ocean water, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this General Order implement the Ocean Plan and are applicable for those discharges entering directly into the ocean waters of the state or indirectly via municipal separate storm sewer system facilities that convey flow into the ocean waters of the state near the location of discharge.

4. **California Code of Regulations, Title 27 Exemption.** The activities regulated by this General Order are exempt from the requirements of title 27 as long as the activities meet, and continue to meet, all preconditions listed below. (Cal. Code Regs., tit. 27, § 20090.)

    a. Discharges to land, including but not limited to land application areas, evaporation ponds, percolation ponds, or subsurface leach fields if the following conditions are met:

        i. The State Water Board or applicable Regional Water Board has issued WDRs, reclamation requirements, or waivers of these requirements.

ii. The discharge is in compliance with an applicable water quality control plan.

iii. The discharge does not need to be managed according to chapter 1, division 4.5, title 22 of the California Code of Regulations as a hazardous waste. (Cal. Code Regs., tit. 27, § 20090(b).)

b. Treatment in fully enclosed facilities, such as tanks, or in concrete lined facilities of limited areal extent, such as oil water separators designed, constructed, and operated according to American Petroleum Institute specifications. (Cal. Code Regs., tit. 27, § 20090(i).)

Table F-1. Examples of California Code of Regulations, Title 27 Exemptions

Discharge Activity	Potentially Applicable Exemptions
Disposal of recycled water used in hydrostatic testing.	Section 20090 (a) Sewage, domestic wastewater, and treated effluent (recycled water is treated effluent).
Applying discharge to evaporation ponds, storage ponds, percolation ponds, rapid infiltration basins, land application areas, spray fields, etc.	Section 20090 (b) Wastewater discharges to land.
Discharge collection, flow equalization, and treatment in a storage tank or other treatment provided prior to land application of discharge. (e.g., storage tank(s), sand/media filter, package treatment tank, clarifier, pumping sumps.)	Section 20090 (i) Waste treatment in fully enclosed facilities.

5. **Water Quality Control Plans.** The Regional Water Boards have adopted Basin Plans that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives. In addition, the Basin Plans implement State Water Board Resolution 88-63, which established state policy that designates all waters of the state, with certain exceptions, as suitable or potentially suitable for municipal or domestic supply. The Basin Plans identify typical beneficial uses as follows: municipal and domestic supply, agricultural irrigation, stock watering, process supply, service supply, hydropower supply, water contact recreation, canoeing and rafting recreation, other non-contact water recreation, warm freshwater aquatic habitat, cold freshwater habitat, warm fish migration habitat, cold fish migration habitat, warm and cold spawning habitat, wildlife habitat, navigation, rare, threatened, or endangered species habitat, groundwater recharge, and freshwater replenishment. Requirements of this General Order implement provisions contained in the applicable Basin Plans.

6. **Areas of Special Biological Significance.** Section 36700 (f) of the Public Resources Code defines a state water quality protection area (SWQPA) as a nonterrestrial marine or estuarine area designated to protect marine species or biological communities from an undesirable alteration in natural water quality, including, but not limited to, areas of special biological significance that have been designated by the State Water Board through its water quality control planning process. In addition, section 36710 (f) of the Public Resources Code states: “In a state water quality protection area, waste

discharges shall be prohibited or limited by the imposition of special conditions in accordance with the Porter-Cologne Water Quality Control Act . . . and implementing regulations, including, but not limited to, the California Ocean Plan . . . and the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California . . . adopted by the state board. No other use is restricted." The California Ocean Plan includes designations and implementation provisions for SWQPA-ASBS (areas of special biological significance) and SWQPA-GP (general protection within Marine Protection Areas.) No SWQPA-GP have yet been designated.

To protect Areas of Special Biological Significance, this General Order does not authorize direct discharges into these areas.

7. **Clean Water Act 303(d) List.** Under section 303(d) of the 1972 Clean Water Act, states, territories, and authorized tribes are required to develop lists of water quality limited segments. The waters on these lists do not meet water quality standards even after discharges of point sources of pollution have installed the minimum required levels of pollution control technology. On June 26, 2015, U.S. EPA gave final approval to California's 2012 Water Quality Integrated Report and supporting documentation pursuant to Clean Water Act sections 303(d) and 305(b). The Basin Plans reference this list of Water Quality Limited Segments, which are defined as "…those sections of lakes, streams, rivers or other fresh water bodies where water quality does not meet (or is not expected to meet) water quality standards even after the application of appropriate limitations for point sources (40 C.F.R. section 130.2(j))." The Basin Plans also state, "Additional treatment beyond minimum federal standards will be imposed on dischargers to Water Quality Limited Segments. Dischargers will be assigned or allocated a maximum allowable load of critical pollutants so that water quality objectives can be met in the segment." Impaired waters are those waters not meeting quality standards pursuant to section 303(d), thus do not support beneficial uses. States must also prioritize the water bodies on the list and develop action plans, called total maximum daily loads (TMDLs) to improve the water quality. California impaired waters, as approved by the State Water Board, are listed on http://gispublic.waterboards.ca.gov/webmap/303d_2012/files/2012_USEPA_approv_303d_List_Final_20150807.xlsx.

   TMDLs are currently required for all waters and pollutants on the section 303(d) list. TMDLs must consider and include allocations to both point sources and nonpoint sources of listed pollutants. The State Water Board is required to ensure that the effluent limitations in this General Order are "consistent with the assumptions and requirements of any available waste load allocation for the discharge." (40 C.F.R. section 122.44(d)(1)(vii)(B).)

8. **Assembly Bill 52 Native Americans: California Environmental Quality Act.** As required by Public Resources Code section 21080.3.1, the State Water Board held consultation with two California Native American tribes, the Wiyot Tribe and the United Auburn Indian Community, during development of this General Order and the corresponding mitigated negative declaration. As a result of the consultations, gas companies enrolled under this General Order must provide 30-day advance notice, in writing, of a proposed discharge within the affiliated lands of any tribe that has requested such notifications.

9. **Homeland Security Compliance.** If the reporting requirements in this General Order conflict with the requirements of the Homeland Security Act or any other federal law that pertains to security in the U.S., the Homeland Security Act or any other federal law that pertains to security in the U.S. shall take precedence. Regulatory coverage under this General Order may be unavailable if the information provided is insufficient to demonstrate eligibility or compliance.

10. **Cost of Compliance.** State Water Board Resolution 2013-0029 directs actions to reduce the cost of compliance to Dischargers subject to Water Board permitting while maintaining water quality protection. The State Water Board considered cost of compliance in this General Order. The burden and cost of preparing reports are reasonable and consistent with the interest of the state in maintaining water quality.

11. **Polychlorinated Biphenyls.** Polychlorinated biphenyls (PCBs) were historically used as lubricating oil in compressors or to fog pipelines to inhibit corrosion. PCBs have low water solubility but are soluble in solvents or oils. PCBs may migrate in natural gas pipelines as contaminated oil, dissolved in natural gas condensate, or as a separate phase associated with water. The transport of PCBs in natural gas pipelines is controlled by the formation and movement of these liquids. Because liquid in a natural gas pipeline is undesirable, pipeline operators actively monitor for and remove pipeline liquids. The liquids may be removed at valves, mainline and station drips, drip legs, or pig/slug launch or retrieval locations.

12. **Recycled Water.** The State Water Board's Division of Drinking Water has the primary statewide responsibility for protecting public health and implements statewide water recycling criteria in Title 22. Approved uses of recycled water under Title 22 depend on the level of treatment, disinfection, and potential for public contact. The Division of Drinking Water has categorized recycled water based on treatment and disinfection levels. Title 22 does not include any uses of undisinfected secondary recycled water (Cal. Code Regs., tit. 22, § 60301.900) that would be relevant to hydrostatic test activities. The categories of recycled water allowed to be used as a water supply for purposes of this General Order are listed below:

    a. Disinfected secondary-23 recycled water (Cal. Code Regs., tit. 22, § 60301.225.)

    b. Disinfected secondary-2.2 recycled water (Cal. Code Regs., tit. 22, § 60301.220.)

    c. Disinfected tertiary recycled water (Cal. Code Regs., tit. 22, § 60301.230.)

    When recycled water is used, setbacks may be necessary. Table 8, Provisions for Use of Recycled Water in section IX.G.4 of this General Order contain setbacks to reduce pathogenic risks by coupling pathogen inactivation rates with groundwater travel time to a well or other potential exposure route (e.g. water contact activities). In general, a substantial unsaturated zone reduces pathogen survival compared to saturated soil conditions. Fine grained (silt or clay) soil particles reduce the rate of groundwater transport and, therefore, are generally less likely to transport pathogens; coarse grained soil particles or fracture flow groundwater conditions may be more likely to transport pathogens. Setbacks also provide attenuation of other constituents through physical, chemical, and biological processes. The setbacks provided in this General Order are

based on the Title 22 water recycling criteria, the California Well Standards, the California Plumbing Code, and commonly imposed setbacks by regulatory agencies.

13. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the Clean Water Act and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding requirements specify that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. This General Order is a new statewide general NPDES permit for discharges from natural gas facilities including discharges from excavation (e.g., hydro-excavation), construction, testing (e.g., hydrostatic testing), maintenance, operation and repair activities that result in discharges to waters of the U.S., non-federal surface waters, and land. The State and Regional Water Boards have not previously issued an NPDES permit or another order specifically to natural gas companies for the discharges that are authorized in this General Order. Currently, discharges authorized under this General Order have coverage under Regional Water Board de minimis or low threat general permits. Most of the effluent limitations in the Regional Water Boards' de minimis or low threat general permits are higher than the effluent limitations proposed in this General Order except for the effluent limitations shown in Table F-2 below. Thus, this General Order sets the effluent limitations for these constituents as shown in Table F-2. If a Regional Water Board does not provide justification for its effluent limitations as noted in Table F-2, this General Order sets the effluent limitations to twice the CTR criterion or the maximum contaminated levels (MCLs) in Title 22. Thus, this General Order complies with anti-backsliding requirements.

To the extent that this Order may impose less stringent limitations than those contained in the existing Regional Water Board permits, applicable exceptions to the anti-backsliding prohibition that are supported by the analysis above include: waters in attainment, where permit requirements are consistent with antidegradation (§ 303(d)(4)(B)); new information available (§ 402(o)(2)(B)(i)); and events beyond dischargers' control (§ 402(o)(2)(C)), due to the unplanned or emergency nature of the discharges.

Table F-2. Comparison of CTR Criteria, MCLs, and Regional Water Board Effluent Limitations

Constituent	CTR Criterion (µg/L)	MCL (µg/L)	Effluent Limitations (µg/L)			
			R3 2011-0223	R4 2013-00095	R5 2013-0073-01	General Order
1,2-Dichlorobenzene	2700	600	10[1]	600[2]	1,204	1,200[2]
1,2-Trans-Dichloroethylene	700	10	10[2]	10[2]	20	20[2]
1,3-Dichloropropylene	10	0.5	0.5[2]	0.5[2]	1	1[2]
1,4-Dichlorobenzene	400	5	5.0[2]	5[2]	10	10[2]
Antimony	14	6	6[2]	6[2]	12	12[2]
Benzene	1.2	1	1[2]	1[2]	2	2[2]
Chlorobenzene	680	70	70[2]	30[3]	70[4]	140[2]
Hexachlorocyclopentadiene	240	50	5.2[5]	480	100	100[2]
Phenol	21,000	Not Available	1[7]	1,000[7]	42,130	42,130[2]
Toluene	6,800	150	150[2]	150[2]	300	300[2]

Vinyl Chloride	2	0.5	0.5[2]	0.5[2]	1	1[2]

[1] Order R3-2011-0223 based this effluent limitation on the Secondary MCL. However, there is no Secondary MCL for this constituent.
[2] Orders R3-2011-0223 and R4-2013-00095 apply set these effluent limitations to the CTR criteria or the MCL. However, due to the short-term and intermittent nature of the discharges covered in this General Order, the effluent limitations for these constituents are set to twice the twice the CTR criteria or MCLs.

[3] Order R4-2013-00095 does not provide the basis for this effluent limitation. Thus, this General Order sets the effluent limitation to twice the MCL.
[4] This is likely an oversight since all of R5-2013-0073-01's effluent limitations are twice the MCL. Thus, this General Order sets the effluent limitation to twice the MCL.
[5] Order R3-2011-0223 based this effluent limitation on U.S. EPA's National Ambient Water Quality Criteria. Since an MCL which is lower than the CTR criterion is available, this General Order sets the effluent limitation to twice the MCL.
[6] Orders R3-2011-0223 and R4-2013-00095 based their effluent limitation for phenol on their respective region's Basin Plan. However, due to the short-term and intermittent nature of the discharges covered in this General Order, the effluent limitations for these constituents are set to twice the twice the CTR criterion.

14. **Endangered Species Act.** This General Order does not authorize any act that results in the taking of a threatened or endangered species, or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C. sections 1531 to 1544). This General Order requires compliance with effluent limitations for discharges to a water of the U.S. and land, and other requirements to protect the beneficial uses of all waters of the state. The Dischargers covered under this General Order are responsible for meeting all requirements of the applicable Endangered Species Act.

C. California Environmental Quality Act – Discharge to Waters of the U.S.

Under California Water Code section 13389, the action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act, Public Resources Code division 13, chapter 3, and sections 21000 through 21177.

D. California Environmental Quality Act – Discharge to Non-Federal Surface Waters and Land

This General Order covers hydrostatic testing of new, existing, and expanding natural gas pipelines. However, the California Environmental Quality Act (CEQA) analysis in this General Order was limited to existing natural gas pipeline systems. New facilities are subject to project specific CEQA evaluations and local land use authorities, which have discretion over approval, siting, and design of new or expanding facilities.

The CEQA evaluation addresses discharges to waters of the state which includes groundwater and surface waters that are not designated as waters of the U.S. (non-federal surface waters). A mitigated negative declaration was prepared to address: (1) the CEQA requirements for the State Water Board's discretionary action of adopting a general order; and (2) the potential environmental effects from hydrostatic testing and site dewatering.

G. To address Assembly Bill 52, titled the Native Americans: California Environmental Quality Act, State Water Board staff issued an invitation for consultation to Tribal interests listed on the State Water Board Tribal database. During development of this General Order, State

Water Board staff consulted with representatives from the Wiyot Tribe and the United Auburn Indian Community. This Order requires the Discharger to provide Native American tribes that opt to be notified a pre-discharge notification that includes: (1) project description, gas company personnel contact information, time period of testing and discharges, and description of applicable site-specific cultural resource avoidance and minimization measures to be implemented.

Categorical exemptions apply to many aspects of mandatory testing and maintenance of natural gas pipelines. Section 15300 of CEQA exempts certain projects that have been determined to not have a significant effect on the environment. Table F-3 summarizes the categorical exemptions that may apply to hydrostatic testing and maintenance of natural gas pipelines.

Table F-3. Categorical Exemptions

Section	Categorical Exemption
15301	Existing Facilities - Investor or publicly owned utilities used to provide electric power, natural gas, sewerage, or other public utility services.
15302	Replacement or Reconstruction - Existing utility systems and/or facilities involving negligible or no expansion of capacity.
15303	New Construction or Conversion of Small Structures - Water main, sewage, electrical, gas, and other utility extensions, including street improvements, of reasonable length to serve such construction.
15304	Minor Alterations to Land - Minor trenching and backfilling where the surface is restored.

E. Antidegradation

Section 131.12 of 40 C.F.R. requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established Resolution 68-16, the Statement of Policy with Respect to Maintaining High Quality of Waters in California (Antidegradation Policy), which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plans implement, and incorporate by reference, both the state and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. section 131.12 and Resolution 68-16.

The discharges authorized under this General Order are of short-duration and intermittent in nature. In addition, the Discharger is required to implement best management practices and/or best practicable treatment and/or control for discharges that have a reasonable potential to cause or contribute to an excursion above applicable water quality criteria or objectives prior to discharge to ensure compliance with the effluent limitations in this General Order. Thus, the State Water Board finds that the impact on existing receiving water quality from these short-duration and intermittent discharges that are in compliance with this General Order will cause minimal degradation. The State Water Board finds that such temporary impacts are for the

social and economic benefit of the people of the state. The discharges are a result of conducting required facility hydrostatic testing and site dewatering from excavation, construction, testing, maintenance, operation and repair by natural gas companies. The streamlined permitting procedure of this General Order allows for timely permitting of these discharges for the safety of the people of the state. Therefore, the discharges permitted under this General Order are consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.

Consistent with California Water Code section 13241, the State Water Board considered the following factors when establishing the requirements contained in this General Order:

1. Past, present, and probable future beneficial uses of receiving water;
2. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto;
3. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;
4. Economic considerations;
5. Need for developing housing within the regions; and
6. Need to develop and use recycled water.

III. DEVELOPMENT OF THE PERMIT

A. Importance of Natural Gas Facilities

Natural gas transmission and use are important to California’s economy. Use of pipelines is the safest method of delivering natural gas to the point of use. The California Energy Commission states the following:

1. Natural gas is one of the two primary fuels that drive California's energy system. Natural gas is used to generate electricity and heat and cool buildings and water. It also has multiple uses within the transportation sector. Natural gas is an important source of energy in California since the state's power plants rely on this fuel. California's residential and commercial building sectors combined consume more than 40 percent of the total state natural gas usage.

2. California gets 10 percent of its natural gas from in-state production and 90 percent from five interstate natural gas pipelines.

3. In 2012, the total natural gas demand in California for industrial, residential, commercial, and electric power generation was 2,313 billion cubic feet per year, up from 2,196 billion cubic feet per year in 2010. Demand in all sectors except electric power generation remained relatively flat for the last decade due in large part to energy efficiency measures, but demand for power generation rose about 30 percent between 2011 and 2012.

4. Over 90 percent of households with gas service have gas heating, which accounted for 46 percent of all residential gas consumption in 2012. Water heating, including that for clothes washers and dishwashers, consumes the second largest portion at 42 percent.

5. Except for the industrial and petroleum extraction sectors, natural gas demand is seasonal. In the winter, natural gas consumption spikes as residential and commercial customers increase space heating. For gas used in electric generation, periods of warmer weather increase demand for air conditioning. These seasonal trends affect both the overall demand for natural gas and the requirements of pipelines and storage to deliver the gas when it is needed, and store it when it is not.

6. Natural gas-fired generation has become the dominant source of electricity in California. It fuels about 43 percent of electricity consumption. Because natural gas is a resource that is available when the availability of hydroelectric power generation and/or other sources decrease, use varies greatly from year to year.

B. Need for General Order

Natural gas companies and their contractors construct, operate, and maintain facilities for the transmission and distribution of natural gas to industrial, commercial, institutional, governmental, and residential customers in California. The companies conduct mandatory facility inspections and testing to ensure public health and safety. This General Order authorizes discharges of pollutants by natural gas companies and their contractors to surface waters and/or land that comply with applicable water quality standards after implementation of best management practices and/or best practicable treatment or control. Discharges regulated under this General Order include discharges from excavation (e.g., hydro-excavation), construction, testing (e.g., hydrostatic testing), maintenance, operation and repair activities.

Natural gas companies are regulated by both federal (e.g., Department of Transportation) and state (e.g., California Public Utilities Commission) agencies. These agencies have adopted pipeline safety related programs (California Public Utilities Commission - e.g., June 2011, Decision 11-02-019; Department of Transportation – e.g., December 2003, amendments to 49 C.F.R. part 192) that necessarily involve hydrostatic testing and/or site dewatering. For example, California Public Utilities Commission Decision 11-06-017 directs natural gas companies to prepare a Natural Gas Transmission Pipeline Replacement or Testing Implementation Plan to conduct hydrostatic testing and/or replace specified natural gas transmission pipelines that do not have documentation of hydrostatic testing, or where the hydrostatic test does not meet 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, natural gas companies are proceeding with the substantial workload of conducting mandatory pipeline integrity assessments, replacing, maintaining and repairing pipelines and/or facilities identified in the assessments, and implementing facility automation and replacement of valves and appurtenances. Natural gas companies testing existing pipelines or constructing new pipelines will need to excavate, construct, test, operate and maintain the new pipeline, causing discharges of hydro-excavation and hydrostatic testing source water, and groundwater due to site dewatering.

Hydro-excavation is a non-mechanical excavation process that removes soil without manual or mechanical digging. Known as a “soft excavation technology”, hydro-excavation combines high pressure water and an air vacuum. The water is used to break up soil while air conveyance or vacuum is simultaneously used to transfer the soil or debris to a debris tank. This allows for less destructive and more accurate excavations, and minimizes damage to underground utilities.

Hydrostatic testing typically consists of filling segments of new or existing pipeline with water, pressurizing the water within the pipeline, and checking to confirm the pressure is maintained. The source waters used for hydrostatic testing may include: municipal potable water; treated or untreated groundwater and surface waters (e.g., streams, reservoirs/impoundments, or irrigation canals); and recycled municipal wastewater treated to meet recycled water requirements of title 22 of the California Code of Regulations. Once the hydrostatic test is completed, the water is removed from the pipeline. The release of hydrostatic test water results in intermittent and short-duration (i.e., weeks to six months) discharges of low to high volumes (i.e., from thousands of gallons up to millions of gallons) to surface water and/or land. Discharges may be potentially used further for beneficial purposes such as dust suppression, compaction, or irrigation water supply.

The quality of the discharge from excavation and testing activities depends on the quality of the source water and groundwater, and the pollutants that may be present in the ground, groundwater, or new and existing facilities. In general, natural gas companies conduct hydrostatic testing and hydro-excavation using good quality source water available to minimize treatment and optimize the disposal options for the discharge. The source water is selected based on availability of sufficient volume and cost. Because potable water and recycled water are both treated (which typically includes chlorination) to meet specific water quality standards, the total residual chlorine in these treated waters can be toxic to aquatic organisms at very low concentrations. Additionally, surface and groundwater supplies used for testing may introduce a variety of pollutants to receiving water when discharged to a water body other than the source water body.

Hydrostatic testing is anticipated to introduce a known set of pollutants to the source water used for testing. Hydrostatic testing discharges from existing facilities may contain petroleum hydrocarbons and related compounds associated with the gas, gas condensates, or oils used in compressor stations and may also contain constituents released from pipelines (e.g., oil and grease) that may result in pollutant concentration differences between the source water, the discharge water, and the receiving water.

In addition to hydrostatic testing, excavation is often required for construction, operation, maintenance and repair. Excavation sites within areas with high groundwater tables may need to be dewatered by pumping the groundwater away from the site to be able to complete the activity. Further, excavations and trenches may also collect other waters such as rainwater, local runoff, or water from water pipeline breaks that need to be dewatered. Site dewatering discharges may contain constituents associated with the following: (1) excavation disturbances (e.g., oil or grease), (2) naturally occurring constituents (e.g., trace metals or salts), or (3) pollutants that may be present in groundwater or other waters at the dewatering site.

Discharges from natural gas facilities will be to waters of the state which include waters of the U.S., non-federal surface water, and land. This General Order requires discharges to non-federal surface waters to comply with the requirements for discharges to waters of the U.S. This General Order requires discharges to land with the potential of reaching groundwater to not cause or contribute to the exceedance of a water quality objective in the applicable Regional Water Board Basin Plan.

Discharges to land may be percolated from ponds or applied to land surface by spray, flood, or drip methods. The choice of disposal method will depend upon site conditions and project-specific issues, the amount of discharge generated, the value of the discharge for irrigation or reuse, available water supply, and site-specific disposal options.

Prior to the adoption of this General Order, natural gas companies were required to obtain NPDES permits, land application WDRs, and waivers of WDRs from the applicable Regional Water Boards for their project discharges. There was no existing regulatory measure with combined NPDES requirements and land discharge requirements throughout the state that allowed for consistent and uniform regulatory coverage for discharges from natural gas facilities. As projects span across different regions, natural gas companies had to comply with a broad range of regulatory requirements from each Regional Water Board. This General Order provides consistent regulation of discharges from natural gas facilities including discharges from excavation (e.g., hydro-excavation), construction, testing (e.g., hydrostatic testing), and repair activities throughout the state.

IV. PERMIT COVERAGE

This General Order authorizes planned discharges to a water of the U.S., a non-federal surface water, or land due to excavation, construction, testing, maintenance, operation and repair of new and existing natural gas facilities. This General Order also authorizes discharges to the aforementioned waters resulting from an emergency and unplanned event associated with the following activities:

A. Emergency natural gas facility failure and repair including ruptures during hydrostatic testing as a result of an emergency-related failure.

B. Natural catastrophe and related repairs of damaged natural gas facilities.

C. Unplanned dewatering resulting from water pipe ruptures, groundwater seepage, collection of rain water, incidental storm water inflow, local run-on, urgent maintenance, and repair activities, etc.

Natural gas companies must comply with California Public Utilities Commission Decision 11-06-017. This General Order streamlines the permitting process for mandatory projects so that natural gas companies can conduct all of these activities in compliance with California Public Utilities Commission Decision 11-06-017.

V. APPLICATION REQUIREMENTS

To obtain authorization under this General Order, applicants must submit a complete application package to the State Water Board any time after the adoption of this General Order but least at least 30 days prior to the expected date of discharge. The 30-day requirement will provide State Water Board staff enough time to review the application package, request any additional information, and ensure the application package is complete prior to approval by Deputy Director of the Division of Water Quality (Deputy Director). The application package must include the following items to be deemed complete:

A. A Notice of Intent (Attachment B), signed in accordance with the signatory requirements of the Standard Provisions in Attachment D;

B. A site map that identifies the boundaries of the applicant's service area and discharge locations; and

C. An application fee. The fee for enrollment under this General Order is payable to the State Water Board and must be based on Category 1 in section 2200(b)(9) of title 23, California Code of Regulations, which can be found at http://www.waterboards.ca.gov/resources/fees/water_quality/#npdes.

This General Order requires submission of the above information to ensure that Discharger information is entered into the State Water Board's California Integrated Water Quality System which facilitates staff's management of the Discharger's information and compliance with this General Order. California Water Code section 13260(d) requires each person for whom waste discharge requirements are issued to pay an annual fee to the State Water Board. California Water Code section 13260(f) requires: (1) the State Water Board to adopt a schedule of fees by emergency regulation; and (2) fees to be adjusted annually to conform to the revenue levels set forth in the State Budget Act for the activities that have been issued waste discharge requirements.

As required by Public Resources Code section 21080.3.1, the State Water Board consulted with interested Tribal representatives during the development of this General Order. The consultations resulted in the addition of the following requirement for the Notice of Intent:

The gas company applicant certifies the appropriate Tribal entities on the State Water Board Native American Tribe Pre-Discharge Notification List that are affiliated with the project site(s) will be provided a minimum of 30 calendar days prior notice of initiation of planned discharges per Section II.C.1.f of this Order. Tribes that request such 30-day notification must be, at minimum, provided the follow information:

- A general description and map of the location of project pipelines and discharges;
- Contact information for the project Utility Operator employed by the Discharger;
- Estimated time period the project discharges will occur, through the duration of all proposed discharges; and
- As applicable, project-specific cultural resource avoidance and minimization measures, including best management practices, to be implement at the discharge sites.

VI. NOTICE OF APPLICABILITY

State Water Board staff will review the application package for completeness and applicability under this General Order. Upon approval of the application package, the Deputy Director will issue a Notice of Applicability. An applicant with multiple proposed natural gas facility discharges need only submit one complete application package and obtain one Notice of Applicability for regulatory coverage of all its eligible discharges to a water of the U.S., non-federal surface water, or to land with the potential to reach groundwater. Regulatory coverage for planned, unplanned, and emergency discharges that occur within the areas identified in the application package commences on the date specified in the Notice of Applicability to the Discharger.

If the submitted application package is not complete in accordance with this General Order or the discharge is deemed ineligible for coverage under this General Order, the Deputy Director will send a response letter to the applicant within 30 days of application submittal, outlining: (1) the

missing information that renders the application package incomplete; or (2) why the described discharge is not eligible for coverage under this General Order.

VII. EXISTING REGIONAL WATER BOARD PERMIT COVERAGE

The State Water Board's intention in the issuance of this statewide General Order is to provide consistent and efficient regulation of discharges as described in section IV, Permit Coverage from natural gas facilities statewide. Thus, through this General Order, the State Water Board expects applicable Regional Water Boards to no longer authorize new requests for regulatory coverage under any Regional Water Board NPDES permit for discharges authorized by this General Order on the effective date of regulatory coverage specified in the Notice of Applicability. Projects with existing regulatory coverage under a Regional Water Board permit may be completed under that permit.

VIII. PERMIT TRANSFER

A change in ownership of the facilities authorized to discharge under this General Order requires the current owner to provide written notice to the State Water Board at least 30 days in advance of transfer of ownership. The Deputy Director may determine that the new owner must submit an application package to seek coverage under this General Order if the nature or location of the discharge has changed from the application package on file.

IX. DISCHARGE PROHIBITIONS

This General Order prohibits discharges to Areas of Special Biological Significance, vernal pools, and wetlands. This General Order also prohibits discharges to waters of the U.S., non-federal surface waters and land within the Lahontan Region.

A. **Areas of Special Biological Significance.** As stated in Fact Sheet section II.B.6, to protect Areas of Special Biological Significance, this General Order does not authorize direct discharges into these coastal areas. In addition, discharges from natural gas facilities to a municipal separate storm sewer system which discharges directly to an Area of Special Biological Significance are prohibited unless the owner or operator of the municipal separate storm sewer system has been granted an exception for such discharge under Ocean Plan section III.J or as specified in State Water Board Resolution 2012-0012 as amended by Resolution 2012-0031 (or subsequent amendments or revisions thereto).

B. **Vernal Pools.** Vernal pools are seasonal depressional wetlands that occur in Mediterranean climate conditions. They are covered by shallow water for variable periods from winter to spring, but may be completely dry for most of the summer and fall. These wetlands range in size from small puddles to shallow lakes and usually exist in a gently sloping plain of grassland. Vernal pools are sometimes connected to each other by small drainages known as vernal swales, forming complexes. Beneath vernal pools lies either bedrock or a hard clay layer in the soil that helps keep water in the pool. Climatic changes associated with each season cause dramatic changes in the appearance of vernal pools. The pools collect water

during winter and spring rains, changing in volume in response to varying weather patterns. During a single season, pools may fill and dry several times. In years of drought, some pools may not fill at all. This General Order prohibits discharges to vernal pools because the unique environment of vernal pools provides habitat for numerous rare plants and animals that are able to survive and thrive in these conditions. Many of these plants and animals spend the dry season as seeds, eggs, or cysts, and then grow and reproduce when the ponds are again filled with water.

C. **Wetlands.** An area is a wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater or shallow surface water or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area either lacks vegetation or the vegetation is dominated by hydrophytes. Wetlands vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation and other factors, including human disturbance. In California, there are two general categories of wetlands: (1) coastal or tidal wetlands and (2) inland or non-tidal wetlands.

1. Coastal or tidal wetlands are found along the coast of the Pacific Ocean and are closely linked to estuaries where sea water mixes with fresh water to form an environment of varying salinities. Certain grasses and grasslike plants have adapted to the saline conditions that form the tidal salt marshes found along the Pacific coast. Some tidal freshwater wetlands form beyond the upper edges of tidal salt marshes outside the influence of salt water.

2. Inland or non-tidal wetlands are most common on floodplains along rivers and streams (riparian wetlands), in isolated depressions surrounded by dry land, along the margins of lakes and ponds, and in other low-lying areas where groundwater intercepts the soil surface or where precipitation sufficiently saturates the soil (vernal pools and bogs). Inland or non-tidal wetlands include marshes and wet meadows dominated by herbaceous plants, swamps dominated by shrubs, and wooded swamps dominated by trees.

3. Wetlands often provide critical habitat for wildlife, in some cases providing habitat for organisms adapted to breeding exclusively in such areas. Because of the potential for unique habitat and assemblage of organisms that depend upon the habitat, this General Order prohibits natural gas facilities from discharging to wetlands.

D. Section 13952 of the California Water Code restricts the use of wastewater, treated wastewater, or recycled water within the Tahoe Basin. Furthermore, the Lahontan Basin Plan prohibits discharge of industrial wastes within the Lake Tahoe Basin. Thus, this General Order prohibits the discharge of wastewater, treated wastewater, recycled water, and industrial wastes to waters of the U.S., non-federal surface waters, and land within the Lake Tahoe Basin.

E. Section 13952.5 of the California Water Code provides exclusive authority to the Lahontan Regional Water Board to prescribe waste discharge requirements for treated sewage effluent out of the Lake Tahoe Basin to Alpine County within the Lahontan region. Thus, this General Order prohibits discharge of recycled water to Alpine County.

X. RATIONALE FOR EFFLUENT LIMITATIONS - DISCHARGE TO WATER OF THE U.S.

The Clean Water Act requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants they discharge into waters of the U.S. The control of pollutants discharged is established through effluent limitations and other requirements in NDPES permits. There are two principal bases for effluent limitations: (1) 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards; and (2) 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the waters of the U.S.

This General Order authorizes discharges from excavation, construction, testing, maintenance, operation and repair of natural gas facilities to inland waters, enclosed bays, estuaries, and the Pacific Ocean in California that are waters of the U.S. The water quality criteria and objectives applicable to these waters of the U.S. are contained in the CTR, Regional Water Board Basin Plans, State Water Board water quality control plans, Ocean Plan, and State and Regional Water Board policies that implement federal and state water quality standards.

A. Basin Plan Objectives

Regional Water Boards' Basin Plans specify various narrative and numeric water quality objectives associated with specific beneficial uses including incorporation by reference of the maximum contaminant levels as specified in title 22 of the California Code of Regulations. Typical narrative objectives most relevant to this General Order are listed below:

1. **Total Residual Chlorine Toxicity.** The toxicity objective typically states, "All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms." This General Order uses U.S. EPA's water quality criteria and the Ocean Plan's objectives for chlorine to implement the narrative toxicity objective to protect for total residual chlorine discharges that may occur with discharges authorized under this General Order.

   Chlorine is extremely toxic to aquatic organisms. Due to the potential for chlorine to be discharged, discharges authorized under this General Order have a reasonable potential to cause or contribute to an instream excursion above Basin Plans' narrative toxicity objective. This General Order imposes numeric WQBELs for total residual chlorine because it is feasible and necessary to calculate numeric WQBELs for this toxic pollutant in order to protect beneficial uses in waters of the U.S. Field chlorine meters are readily available and used to measure total residual chlorine in water. Therefore, it is feasible to collect representative total residual chlorine concentration data to determine compliance with its numeric WQBELs.

   The total chlorine residual WQBELs established in this General Order are based on U.S. EPA criteria for discharges to inland U.S. waters, enclosed bays, and estuaries and set at 0.011 mg/L and 0.019 mg/L expressed as a 4-day average concentration and 1-hour average, respectively. The U.S. EPA Technical Support Document for Water Quality-Based Toxics Control (EPA/505/2-90-001) contains statistical methods for converting chronic (four-day) and acute (1-hour) aquatic life criteria to average monthly and maximum daily effluent limitations based on the variability of the existing data and the expected frequency of monitoring. However, because discharges authorized under this

General Order are typically short-duration, reasonable potential exists for acute toxicity over short periods of time and the shorter averaging periods that form the basis of the criteria are considered more appropriate than average monthly limitations. The limitations apply to all planned discharges directly into or within 300 feet of non-ocean waters of the U.S. Similarly, the total chlorine residual WQBELs established in this General Order for discharges to the Pacific Ocean are based on the Ocean Plan objectives and set at 0.008 mg/L and 0.06 mg/L expressed as a maximum daily average and an instantaneous maximum concentration, respectively. A field monitoring result with a total residual chlorine concentration equal to or greater than 0.1 mg/L shall be deemed out of compliance with the total residual chlorine effluent limitation. The provisions and effluent limitations in this General Order are sufficient to protect water quality from toxicity due to total residual chlorine; thus, this General Order does not require natural gas companies to conduct toxicity tests.

2. **Total Petroleum Hydrocarbons.** Section 13241, division 7 of the California Water Code specifies that Water Boards shall establish water quality objectives which, in the Water Boards' judgment, are necessary for the reasonable protection of beneficial uses and for the prevention of nuisance.

   Taste and odor thresholds published by the U.S. EPA and found in U.S. EPA's National Recommended Water Quality Criteria form the basis for many secondary drinking water maximum contaminant levels. Taste and odor thresholds are used to translate narrative water quality objectives that prohibit adverse tastes and odors and nuisance conditions. To protect waters of the U.S. from taste and odor impacts from Total Petroleum Hydrocarbons as gasoline, this General Order sets the effluent limitation for Total Petroleum Hydrocarbons as gasoline at 5 µg/L from the U.S. EPA Health Advisory Taste and Odor Threshold for Total Petroleum Hydrocarbons as gasoline.

   Additionally, discharges are not anticipated to impact water quality due to Total Petroleum Hydrocarbons as diesel because discharges authorized under this General Order are short-term and intermittent. Thus, using the taste and odor thresholds found in U.S. EPA's Health Advisory Taste and Odor Threshold for the effluent limitation for Total Petroleum Hydrocarbons as diesel is not practical, and field testing is sufficient. Furthermore, in a field environment with other petroleum sources (including vehicle exhaust), detecting diesel odor from water with less than 2 mg/L Total Petroleum Hydrocarbons as diesel is infeasible. Heavier hydrocarbon compounds such as diesel are generally undetectable using an odor test until it reaches approximately 2 mg/L[7]. Therefore, this General Order sets the effluent limitation for Total Petroleum Hydrocarbons as diesel to 2 mg/L to protect water quality and allow personnel to detect diesel in the field using an odor test.

3. **Oil and Grease.** Oil and grease are not readily soluble in water and form a film on the water surface. Oily films can coat birds and aquatic organisms, impacting respiration and thermal regulation, and causing death. Oil and grease can also cause nuisance conditions (taste and odor), are aesthetically unpleasant, and can restrict a wide variety of beneficial uses such as municipal and domestic supply, warm freshwater habitat, and

[7] McKee, J. and Wolf, H., 1963, Water Quality Criteria, State Water Resources Control Board, Publication No. 3-A, page 230.

water quality enhancement. The limits for oil and grease are based on Basin Plans' narrative objective which states, "Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses."

The numeric limitations are empirically based on concentrations at which an oil sheen becomes visible in water. Using a daily average effluent limitation would not allow determination of a visible oil sheen. However, using the monthly average effluent limitation will allow determination of a visible oil sheen. Thus, this General Order sets a monthly average effluent limitation of 10 mg/L.

4. **pH.** The pH objective in Basin Plans varies; some objectives are fixed numeric objectives while others provide a numeric range such as *"…the pH shall not to be depressed below 6 or raised above 9. This encompasses the pH range usually found in waters. Controllable water quality factors shall not cause changes greater than 0.5 unit in normal* ambient *pH levels."*

   Review of Regional Water Board Basin Plans indicates that water quality objectives for pH in waters of the U.S. vary from 6.0 to 6.5 at the lower range to 8.5 to 9.0 at the higher range. The Ocean Plan effluent limitation for pH is the range of 6.0 to 9.0 as a weekly average. For this General Order, the WQBEL specifies that the maximum daily average pH shall be within the range of 6.0 to 9.0 to include all pH values from the applicable Basin Plan objectives.

5. **Turbidity.** The turbidity objectives in the Basin Plans vary. Some objectives are fixed numeric objectives while others provide a narrative objective. Review of Regional Water Boards' general NPDES permits indicates a range of maximum daily average effluent limitations for turbidity ranging from 50 to 150 NTUs, while the Ocean Plan effluent limitations are 100 NTUs as weekly average and 225 NTUs as an instantaneous maximum. The turbidity effluent limitation of 50 NTU is based on the lowest turbidity limit from Regional Water Board permits. Impacts to water quality are not anticipated as the discharges are short-term, low volume, and intermittent.

B. California Toxics Rule and National Toxics Rule Criteria

The CTR and National Toxics Rule specify numeric aquatic life and human health criteria for priority pollutants applicable to inland surface waters, enclosed bays, and estuaries that are waters of the U.S. This General Order establishes effluent limitations based on the CTR aquatic life and human health criteria to protect beneficial uses.

The CTR establishes human health criteria for the consumption of water and organisms, and separate criteria for the consumption of organisms only. The water and organisms consumption criteria apply to waters designated with the Municipal Water Supply (MUN) beneficial use in statewide and regional water quality control plans. For waters with no designated MUN beneficial use, the human health organisms-only consumption criteria apply. To protect all human health beneficial uses, this General Order applies the criteria for water and organisms when establishing effluent limitations for human health criteria because they are more stringent than the criteria for organisms only.

C. Ocean Plan Objectives

The Ocean Plan requires that there shall not be degradation of marine communities or other exceedances of water quality objectives due to waste discharges. Table 1 of the Ocean Plan specifies numeric water quality objectives for the protection of marine aquatic life and human health (carcinogens and non-carcinogens) for priority pollutants and conventional parameters. This General Order establishes effluent limitations for all pollutants, including those for human health criteria to protect the beneficial uses of the Pacific Ocean.

D. Technology-Based Effluent Limitations

Clean Water Act section 301(b) and 40 C.F.R. section 122.44 require that NPDES permits include conditions meeting technology-based effluent limitations at a minimum, and any more stringent effluent limitations necessary to meet water quality standards. The Clean Water Act requires U.S. EPA to develop effluent limitations guidelines and standards representing application of best practicable treatment control technology, best available technology economically achievable, best conventional pollutant control technology, and best available demonstrated control technology for new sources. Clean Water Act section 402(a)(1) and 40 C.F.R. section 125.3 authorize the use of Best Professional Judgment to derive technology-based requirements and effluent limitations on a case-by-case basis when effluent limitations guidelines are unavailable.

Technology-Based Best Management Practices Effluent Specifications. This General Order does not establish technology-based effluent limitations because U.S. EPA has not established effluent limitation guidelines for the types of discharges this General Order authorizes. Moreover, data necessary to develop technology-based effluent limitations on a case-by-case basis for each water body in California, using Best Professional Judgment, are unavailable. The State Water Board finds that the technology-based effluent limitations in Regional Water Board Basin Plans apply to discharges that are continuous in nature and contain wastes. This General Order regulates short-duration and intermittent natural gas company discharges not expected to contain the degree of “waste” contained in municipal or industrial wastewater or storm water.

E. Water Quality-Based Effluent Limitations

This General Order contains WQBELs that implement water quality criteria and objectives to protect beneficial uses. Where numeric water quality criteria/objectives have not been established, three options exist to protect water quality: (1) 40 C.F.R. section 122.44(d) specifies that WQBELs may be established using U.S. EPA criteria guidance under Clean Water Act section 304(a); (2) proposed state criteria or a state policy interpreting narrative criteria supplemented with other relevant information may be used; or (3) an indicator parameter may be established.

Federal regulations require the development of numeric WQBELs unless infeasible. (40 C.F.R. section 122.44(d); 40 C.F.R. section 122.44(k)(3).) This General Order imposes numeric WQBELs for pollutants because it is feasible and necessary to protect beneficial uses in waters of the U.S. where discharges authorized under this General Order may occur. The process to determine reasonable potential and establish WQBELs when necessary is intended to protect the designated beneficial uses and achieve applicable water quality objectives or criteria of waters of the U.S. as specified in Basin Plans, other state plans and policies, or the

CTR and National Toxics Rule. The SIP establishes implementation provisions for priority pollutant criteria and includes the process for conducting a reasonable potential analysis and establishing WQBELs for any applicable priority pollutant objectives in Basin Plans or priority pollutant criteria contained in the CTR and National Toxics Rule. In addition, the Ocean Plan provides procedures to determine reasonable potential and set effluent limitations for discharges to the Pacific Ocean.

Discharges from natural gas company activities such as excavation, construction, testing, maintenance, operation and repair are short-duration, intermittent, and pose a low threat to water quality. Thus, discharges authorized under this General Order are not expected to cause or contribute to an instream excursion above a water quality criterion or objective. However, as specified in 40 C.F.R. section 122.44, whether a pollutant has reasonable potential to exceed a water quality criterion or objective is the fundamental step in determining whether effluent limitations are required. Specific monitoring data are not available to conduct a reasonable potential analysis for this General Order. Thus, this General Order sets effluent limitations equal to CTR criteria and other objectives in Regional Water Board Basin Plans and the California Ocean Plan. This General Order also establishes effluent limitations for pH, total residual chlorine, total petroleum hydrocarbons as diesel and gasoline, and turbidity. The Discharger shall implement best management practices and/or best practicable treatment or control prior to discharge to ensure compliance with the effluent limitations in this General Order.

Determination of Water Quality Based Effluent Limitations. Section 122.45(d) of 40 C.F.R. requires development of a maximum daily effluent limitation and an average monthly effluent limitation for dischargers other than publicly owned treatment works unless impracticable. Discharges authorized under this General Order typically are not expected to exceed one month. Thus, average monthly effluent limitations are not applicable for these discharges. Instead, this General Order establishes maximum daily effluent limitations which are more appropriate to regulate the discharges covered under this General Order for discharges to non-ocean waters of the U.S. However, for discharges to the Pacific Ocean, this General Order implements maximum daily effluent limitations and average monthly effluent limitations as specified in the Ocean Plan.

This General Order requires the Discharger to conduct monitoring to ensure discharges meet effluent limitations. However, this General Order only requires the Discharger to continue collecting weekly samples for constituents which exceed effluent limitations in the first monitoring event until the discharge has ceased.

Discharges authorized under this General Order typically are not expected to exceed five million gallons. However, for every five million gallons discharged, this General Order requires the Discharger to conduct monitoring to determine if the discharge characteristics have changed and if new monitoring requirements are needed. If the initial results for the second five million gallon monitoring show no change from the initial results of the first five million gallon monitoring, this General Order does not require the Discharger to conduct further monitoring every five million gallons.

In addition to conducting compliance monitoring for every five million gallons discharged, Dischargers must also conduct compliance monitoring for each groundwater basin during dewatering to determine if the character of the discharge has changed and if it exceeds effluent limitations.

This General Order establishes effluent limitations are as follows:

1. Inland Surface Water Discharges - Constituents with Aquatic Life Criteria

To ensure protection of beneficial uses, this General Order uses CTR criteria as the basis for effluent limitations for inland surface water discharges.

For priority pollutants with aquatic life criteria, the CTR contains criteria based on continuous concentration and maximum concentration. The criterion continuous concentration is based on a four-day average exposure duration for aquatic life; the criterion maximum concentration for aquatic life "equals the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects." Toxicity tests used to derive the criterion maximum concentration can vary in exposure duration, but are all substantially shorter periods than the four days used for the criterion continuous concentration. Information provided by natural gas company representatives indicate that the shortest duration of discharges can last several hours to longer than four days. Thus, the criterion continuous concentration is more applicable than the criterion maximum concentration. Furthermore, because the discharges are short-duration, intermittent, and not expected to exceed one month, average monthly effluent limitations are not applicable. In addition, maximum daily effluent limitations are not as protective of water quality as the criterion continuous concentrations. Thus, this General Order sets the effluent limitations shown in Table F-4 to the criterion continuous concentration for aquatic life.

Table F-4. Final Effluent Limitations for Protection of Aquatic Life

Constituent	Freshwater Effluent Limitation (µg/L)	Saltwater Effluent Limitation (µg/L)
alpha-Endosulfan	0.056	0.0087
Arsenic	150	36
beta-Endosulfan	0.056	0.0087
Cyanide	5.2	1
Endrin	0.036	0.0023
Selenium	5.0	71

In addition to the effluent limitations in Table F-4 above, this General Order sets effluent limitations for hardness-dependent metals. Total hardness in water is critical to assess applicable water quality criteria for certain metals for the protection of aquatic life beneficial uses in freshwater inland waters, enclosed bays, and estuaries that are waters of the U.S. Water hardness affects the reasonable potential analysis of these metals and the need for effluent limitations. The CTR specifies equations for hardness-dependent acute (one-hour) and chronic (four-day) criteria for these metals. Use of the lowest ambient surface water hardness is most protective of aquatic life beneficial uses for hardness-dependent metals. However, for effluent-dominated discharge conditions, use of the lowest observed effluent hardness is appropriate and provides similar protection to using ambient surface water hardness. In addition, it is likely that discharges covered under this General Order will be to storm sewers which are not generally a water of the U.S. Furthermore, surface water hardness may be difficult to determine due to accessibility issues. Thus, effluent hardness will be representative of ambient surface water hardness. The State Water Board finds that for the short-duration and intermittent

discharges authorized under this General Order, it is not feasible or practical to require evaluation of all possible hardnesses for each discharge.

Effluent limitations contained in F-5A, F-5B, and F-5C for cadmium, chromium (III), copper, lead, nickel, silver, and zinc are based on hardness, which the Discharger shall provide in its monitoring report. For waters with hardness concentrations of less than 100 mg/L (as $CaCO_3$), Tables F-5A, F-5B, and F-5C show effluent limitations in 10 mg/L increments. For each segment, the corresponding effluent limitation is based on the central value between the lower and upper bounds. For waters with hardness concentrations greater than or equal to 100 mg/L but less than 200 mg/L, effluent limitations shall be based on a hardness value of 150 mg/L. For waters with hardness concentrations greater than or equal to 200 mg/L, effluent limitations shall be based on a hardness value of 200 mg/L.

Table F-5A. Final Effluent Limitations for Priority Pollutants Hardness-Dependent Metals with Hardness 0 to <40 mg/L

Constituent	Unit	Hardness in mg/L Maximum Daily Effluent Limitations			
		H <10	10≤ H <20	20≤ H <30	30≤ H <40
Cadmium, Total Recoverable	µg/L	0.2	0.5	0.9	1.4
Chromium (III)	µg/L	29	72	109	144
Copper, Total Recoverable	µg/L	0.8	2.3	3.8	5.2
Lead, Total Recoverable	µg/L	0.1	0.5	0.9	1.4
Nickel, Total Recoverable	µg/L	7	17	27	35
Silver, Total Recoverable	µg/L	0.02	0.2	0.4	0.7
Zinc, Total Recoverable	µg/L	9	24	37	49

Table F-5B. Final Effluent Limitations for Priority Pollutants Hardness-Dependent Metals with Hardness 40 to <80 mg/L

Constituent	Unit	Hardness in mg/L Maximum Daily Effluent Limitations			
		40≤ H <50	50≤ H <60	60≤ H <70	70≤ H <80
Cadmium, Total Recoverable	µg/L	1.8	2.3	2.8	3.2
Chromium (III)	µg/L	177	208	239	269
Copper, Total Recoverable	µg/L	6.6	8.0	9.3	10.7
Lead, Total Recoverable	µg/L	1.9	2.4	3.0	3.6
Nickel, Total Recoverable	µg/L	44	52	59	67
Silver, Total Recoverable	µg/L	1.0	1.4	1.9	2.5
Zinc, Total Recoverable	µg/L	61	72	83	94

Table F-5C. Final Effluent Limitations for Priority Pollutants Hardness-Dependent Metals with Hardness ≥80 mg/L

Constituent	Unit	Hardness in mg/L Maximum Daily Effluent Limitations			
		80≤ H <90	90≤ H <100	100≤ H <200	H ≥200
Cadmium, Total Recoverable	µg/L	3.6	3.9	5.6	7.0
Chromium (III)	µg/L	297	326	474	600
Copper, Total Recoverable	µg/L	12	13	20	27
Lead, Total Recoverable	µg/L	4.2	4.9	8.8	13

Constituent	Unit	Hardness in mg/L Maximum Daily Effluent Limitations			
		80≤ H <90	90≤ H <100	100≤ H <200	H ≥200
Nickel, Total Recoverable	µg/L	75	82	121	154
Silver, Total Recoverable	µg/L	3.1	3.7	8.1	13
Zinc, Total Recoverable	µg/L	104	115	169	215

For saltwater discharges, the CTR specifies the criteria as shown in Table F-6 below. This General Order implements the criteria as effluent limitations as shown in Table F-6.

Table F-6. Final Effluent Limitations for Protection of Aquatic Life Saltwater Discharges

Constituent	Effluent Limitation (µg/L)
Cadmium, Total Recoverable	9.3
Chromium (III)	None
Copper, Total Recoverable	3.1
Lead, Total Recoverable	8.1
Nickel, Total Recoverable	8.2
Silver, Total Recoverable	1.9
Zinc, Total Recoverable	81

2. Inland Surface Water Discharges - Constituents with Human Health Criteria

For pollutants with human health criteria, the CTR establishes human health criteria for the consumption of water and organisms, and separate criteria for the consumption of organisms only. The water and organisms consumption criteria apply to waters designated with the MUN beneficial use in statewide and regional water quality control plans. For waters with no designated MUN beneficial use, the human health organisms-only consumption criteria apply. To protect all human health beneficial uses, this General Order applies the criteria for water and organisms when establishing effluent limitations for human health criteria because they are more stringent than the criteria for organisms only. This General Order does not include effluent limitations for constituents with only organisms-only consumption criteria.

In addition, there are constituents with MCLs more stringent than the CTR criteria as shown in Table F-2 (Comparison of CTR Criteria, MCLs, and Regional Water Board Effluent Limitations). This General Order uses the MCLs for these constituents as the bases for their corresponding effluent limitations.

The CTR sets human health criteria as average monthly effluent limitations. However, because discharges authorized under this General Order are typically short-duration and intermittent, maximum daily effluent limitations are more appropriate than average monthly effluent limitations. To convert the average monthly effluent limitations to maximum daily effluent limitations, the SIP provides a conversion table with multipliers. The SIP specifies a default coefficient of variation of 0.6 for sample sizes less than 10. Based on this coefficient of variation, the applicable multiplier is two. The number of samples for each project covered by this General Order is expected to be less than 10. Thus, this General Order sets the maximum daily effluent limitations shown in Table F-6

for human health by multiplying the human health criteria by two. For constituents with MCLs more stringent than the CTR criteria, this General Order sets effluent limitations to twice the MCLs which are still below the CTR criteria.

Table F-7. Final Effluent Limitations for Protection of Human Health

Constituent	Criterion/MCL (µg/L)	Effluent Limitation (µg/L)
1, 1,2-Trichloroethane	0.6	1.2
1, 1-Dichloroethylene	0.057	0.114
1,1,2,2-Tetrachloroethane	0.17	0.34
1,2-Dichlorobenzene	2,700/600	1,200
1,2-Dichloroethane	0.38	0.76
1,2-Dichloropropane	0.52	1.04
1,2-Diphenylhydrazine	0.04	0.08
1,2-Trans-Dichloroethylene	700/10	20
1,3 Dichlorobenzene	400	800
1,3-Dichloropropylene	10/0.5	1.0
1,4 Dichlorobenzene	400/5	10
2,3,7,8-TCDD (Dioxin)	0.000000013	0.000000026
2,4,6-Trichlorophenol	2.1	4.2
2,4-Dichlorophenol	93	186
2,4-Dimethylphenol	540	1,080
2,4-Dinitrophenol	70	140
2,4-Dinitrotoluene	0.11	0.22
2-Chloronaphthalene	1,700	3,400
2-Chlorophenol	120	240
2-Methyl-4,6-Dinitrophenol	13.4	26.8
3,3'-Dichlorobenzidine	0.04	0.08
4,4'-DDD	0.00083	0.00166
4,4'-DDE	0.00059	0.00118
4,4'-DDT	0.00059	0.00118
Acenaphthene	1,200	2,400
Acrolein	320	640
Acrylonitrile	0.059	0.118
Aldrin	0.00013	0.00026
Anthracene	9,600	19,200
Antimony	14	28
Asbestos	7,000,000 (fibers/L)	14,000,000 (fibers/L)
Benzene	1.2/1	2.0
Benzidine	0.00012	0.00024
Benzo(a)Anthracene	0.0044	0.0088

Constituent	Criterion/MCL (µg/L)	Effluent Limitation (µg/L)
Benzo(a)Pyrene	0.0044	0.0088
Benzo(b)Fluoranthene	0.0044	0.0088
Benzo(k)Fluoranthene	0.0044	0.0088
beta-BHC	0.014	0.028
Bis(2-Chloroethyl)Ether	0.031	0.062
Bis(2-Chloroisopropyl)Ether	1,400	2,800
Bis(2-Ethylhexyl)Phthalate	1.8	3.6
Bromoform	4.3	8.6
Butylbenzyl Phthalate	3000	6,000
Carbon Tetrachloride	0.25	0.5
Chlorobenzene	680/70	140
Chlordane	0.00057	0.00114
Chlorodibromomethane	0.401	0.802
Chrysene	0.0044	0.0088
Cyanide	700	1,400
Dibenzo(a,h)Anthracene	0.0044	0.0088
Dichlorobromomethane	0.56	1.12
Dieldrin	0.00014	0.00028
Diethyl Phthalate	23,000	46,000
Dimethyl Phthalate	313,000	626,000
Di-n-Butyl Phthalate	2,700	5,400
Endosulfan Sulfate	110	220
Endrin	0.76	1.52
Endrin Aldehyde	0.76	1.52
Ethylbenzene	3,100	6,200
Fluoranthene	300	600
Fluorene	1,300	2,600
gamma-BHC	0.019	0.038
Heptachlor	0.00021	0.00042
Heptachlor Epoxide	0.0001	0.0002
Hexachlorobenzene	0.00075	0.0015
Hexachlorobutadiene	0.44	0.88
Hexachlorocyclopentadiene	240/50	100
Hexachloroethane	1.9	3.8
Indeno(1,2,3-cd) Pyrene	0.0044	0.0088
Isophorone	8.4	16.8
alpha-BHC	0.0039	0.0078
alpha-Endosulfan	110	220

Constituent	Criterion/MCL (µg/L)	Effluent Limitation (µg/L)
Mercury	0.05	0.1
Methyl Bromide	48	96
Methylene Chloride	4.7	9.4
Nitrobenzene	17	34
N-Nitrosodimethylamine	0.00069	0.00138
N-Nitrosodi-n-Propylamine	0.005	0.01
N-Nitrosodiphenylamine	5	10
Pentachlorophenol	0.28	0.56
Phenol	21,000	42,000
Polychlorinated biphenyls (PCBs)	0.00017	0.00034
Pyrene	960	1920
Tetrachloroethylene	0.8	1.6
Thallium	1.7	3.4
Toluene	6,800/150	300
Toxaphene	0.00073	0.00146
Trichloroethylene	2.7	5.4
Vinyl Chloride	2/0.5	1.0

3. Ocean Discharges

Information provided by natural gas company representatives indicates that the shortest duration of discharges can last several hours to weeks. Additionally, discharges are typically not expected to exceed one month. Thus, this General Order sets the effluent limitations for ocean discharges to the daily maximum concentration rather than the instantaneous maximum, and 30-day average, or six-month median concentrations to protect marine aquatic life.

Table F-7A. Final Effluent Limitations for Protection of Marine Aquatic Life

Constituent	Effluent Concentration (µg/L)
Arsenic	32.
Cadmium	4.
Chlorinated Phenolics	4.
Chromium (Hexavalent)[1]	8.
Copper	12.
Cyanide[2]	4.
Endosulfan	0.018
Endrin	0.004
Hexachlorocyclohexane[3]	0.008
Lead	8.
Mercury	0.16
Nickel	20.
Selenium	60.
Silver	2.8

Constituent	Effluent Concentration (µg/L)
Total Chlorine Residual	8.
Zinc	80.

[1] Dischargers may, at their option, meet this objective as a total chromium objective.
[2] Requirement may be met by measurement of weak acid-dissociable cyanide (SM 4500-CN-I-1999) or measurement of "available" cyanide species using an approved method in 40 C.F.R. part 136.
[3] Hexachlorocyclohexane shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

In addition, for human health objectives, the Ocean Plan only specifies average monthly effluent limitations. Unlike the SIP, the Ocean Plan does not contain procedures to convert average monthly effluent limitations to maximum daily effluent limitations. Thus, this General Order sets the effluent limitations for ocean discharges to the to the human health objectives in the Ocean Plan with a limitation basis of average monthly as shown in Tables F-7B and F-7C.

Table F-7B. Final Effluent Limitations for Protection of Human Health - Noncarcinogens

Constituent	Effluent Concentration (µg/L)
Acrolein	220
Antimony	1,200
Bis(2-chloroethoxy) methane	4.4
Bis(2-chloroisopropyl) ether	1,200
Chlorobenzene	570
Di-n-butyl phthalate	3,500
Dichlorobenzene	5,100
Diethyl phthalate	33,000
Dimethyl phthalate	820,000
4,6-Dinitro-2-methylphenol	220
2,4-Dinitrophenol	4.0
Ethylbenzene	4,100
Fluoranthene	15
Hexachlorocyclopentadiene	58
Nitrobenzene	4.9
Thallium	2
Toluene	85,000
Tributyltin	0.0014
1,1,1-Trichloroethane	540,000

Table F-7C. Final Effluent Limitations for Protection of Human Health - Carcinogens

Constituent	Effluent Concentration (µg/L)
Acrylonitrile	0.10
Aldrin	0.000022
Benzene	5.9
Benzidine	0.000069
Beryllium	0.033
Bis(2-chloroethyl) ether	0.045
Bis(2-ethylhexyl) phthalate	3.5

Constituent	Effluent Concentration (µg/L)
Carbon tetrachloride	0.90
Chlordane	0.000023
Chlorodibromomethane	8.6
Chloroform	130
DDT	0.00017
1,4-Dichlorobenzene	18
3,3'-Dichlorobenzidine	0.0081
1,2-Dichloroethane	28
1,1-Dichloroethylene	0.9
Dichlorobromomethane	6.2
Dichloromethane	450
1,3-Dichloropropene	8.9
Dieldrin	0.00004
2,4-Dinitrotoluene	2.6
1,2-Diphenylhydrazine	0.16
Halomethanes	130
Heptachlor	0.00005
Heptachlor epoxide	0.00002
Hexachlorobenzene	0.00021
Hexachlorobutadiene	14
Hexachloroethane	2.5
Isophorone	730
N-nitrosodimethylamine	7.3
N-nitrosodi-N-propylamine	0.38
N-nitrosodiphenylamine	2.5
PAHS	0.0088
PCBs	0.000019
TCDD equivalents	0.0000000039
1,1,2,2-Tetrachloroethane	2.3
Tetrachloroethylene	2.0
Toxaphene	0.00021
Trichloroethylene	27
1,1,2-trichloroethane	9.4
2,4,6-trichlorophenol	0.29
Vinyl Chloride	36

F. Total Maximum Daily Load Implementation

In California, the Regional Water Boards or U.S. EPA develops TMDLs. TMDLs developed by Regional Water Boards are designed as Basin Plan amendments and include implementation provisions. TMDLs developed by U.S. EPA typically contain the total load and load allocations required by Clean Water Act section 303(d), but do not contain implementation provisions. This is because U.S. EPA authorities related to implementation of nonpoint source pollution control measures are generally limited to education and outreach as provided by Clean Water Act section 319. TMDLs are currently required for all waters and pollutants on the 303(d) list, although not all waters of the U.S. on the 303(d) list have a TMDL. TMDLs must consider and include allocations to both point sources and nonpoint sources of listed pollutants. Although the abbreviation stands for "total maximum daily load," the limitations contained in a TMDL may be other than "daily load" limitations. There can also be multiple TMDLs applicable to a

particular water body or there can be one TMDL that addresses numerous pollutants. The basis for grouping pollutants into one TMDL depends on whether there can be a common analytical approach to the assessment or a common management response to the impairment.

The State Water Board is required to ensure that the effluent limitations in this General Order are "consistent with the assumptions and requirements of any available waste load allocation for the discharge." (40 C.F.R. § 122.44(d)(1)(vii)(B)) Although TMDLs apply to discharges authorized under this General Order, none of the TMDLs or supporting staff reports indicates that discharges from hydrostatic testing and dewatering authorized under this General Order are significant sources of the relevant pollutants. However, the State Water Board's review of Regional Water Board TMDLs found that the Los Angeles and San Diego Water Boards have existing TMDLs in their Basin Plans that include waste load allocations for a general category of discharges. The general category includes "other NPDES discharges," "general NPDES discharges," or "minor NPDES discharges" that indirectly include discharges from hydrostatic testing and site dewatering. Thus, the Los Angeles and San Diego Water Boards' TMDLs are applicable to the discharges from hydrostatic testing and site dewatering and are implemented under this General Order.

Based on the data that are currently available and the nature of discharges (short-term, intermittent, and seasonal) from hydrostatic testing and dewatering authorized under this General Order, the State Water Board has determined that discharges regulated under this General Order meet 40 C.F.R section 122.44(d)(1)(vii)(B) because (1) applicable TMDLs do not identify specific waste load allocations for discharges from natural gas activities and these discharges do not significantly impact water quality, (2) more stringent requirements than those included in this General Order will not contribute to the actions needed to address impairment of surface waters with TMDLs, and (3) compliance with the requirements of this General Order results in compliance with an applicable TMDL.

If the Deputy Director determines that any existing TMDLs or any newly approved TMDLs, establish waste load allocations that must be implemented through TMDL-specific permit requirements for discharges from hydrostatic testing and site dewatering that are authorized under this General Order, the Discharger will be required to maintain enrollment under this General Order until the Regional Water Board issues an individual or general permit for those discharges contributing to the impairment. Alternatively, if further TMDLs are adopted that address pollutants that are likely to be in discharges from hydrostatic testing and dewatering, and allocate waste loads specifically to natural gas companies regulated under this General Order, the State Water Board may consider adding TMDL-specific permit requirements to this General Order in a subsequent permit amendment or reissuance.

XI. RATIONALE FOR EFFLUENT LIMITATIONS - NON-FEDERAL SURFACE WATER

Non-federal surface waters of the state may have similar beneficial uses as those of waters of the U.S. To protect the beneficial uses of non-federal surface waters of the state, this General Order requires the same final effluent limitations for discharges to non-federal surface waters to be the same as the final effluent limitations for discharges to waters of the U.S.

XII. RATIONALE FOR EFFLUENT LIMITATIONS - LAND

U.S. EPA regulates the use, storage, cleanup, and disposal of PCBs under its regulations in 40 C.F.R. part 761 implementing the Toxic Substance Control Act provisions for PCBs. On October 6, 2015, U.S.EPA Region IX issued written guidance to the State Water Board clarifying regulation of land applying discharges generated in hydrostatic testing of natural gas pipelines. The letter stated, “After pressure testing of gas pipelines is completed, the water may be reused without restriction if it contains PCB levels equal to or below 0.5 µg/L and the water does not contain an oily sheen or an oil (organic) layer. If after pressure testing the PCB levels in the water are above the unrestricted use level of 0.5 µg/L, the water must be decontaminated to meet that PCB level and remove any oil layer or oily sheen before reuse.” Thus, this General Order specifies a limitation of 0.5 µg/L for PCB for discharges to land.

Chemical testing of hydrostatic test water is only required for natural gas facility equipment previously used to store or transmit natural gas. Discharges from new pipe or other equipment do not have the potential to contain PCBs.

XIII. RATIONALE FOR RECEIVING WATER LIMITATIONS

This General Order established the limitations for waters of the U.S. in accordance with (1) federal and state water quality standards per the Clean Water Act and regulations adopted thereunder, (2) narrative and numeric water quality objectives in the Basin Plans of the Regional Water Boards, and (3) narrative and numeric water quality objectives in the Ocean Plan.

The Basin Plans contain water quality objectives to protect the beneficial uses of surface water and groundwater, including objectives for chemical constituents, toxicity, and taste, and odor. The Basin Plans require the application of the most stringent objectives necessary to ensure that surface water and groundwater do not contain chemical constituents, toxic substances, radionuclides, or taste and odor producing substances in concentrations that adversely affect domestic drinking water supply, agricultural supply, or any other beneficial use. The toxicity objective requires that surface water and groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans, plants, animals, or aquatic life. The chemical constituent objective requires that surface water and groundwater shall not contain chemical constituents in concentrations that adversely affect any beneficial use. The taste and odor objective states that surface water and groundwater shall not contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

The Ocean Plan requires that there shall not be degradation of marine communities or other exceedances of water quality objectives due to waste discharges.

A. Surface Water – Waters of the U.S. (Federal Water)

This General Order contains limitations for discharges to waters of the U.S. based on the Basin Plans’ numeric and narrative water quality objectives for: oil and grease; turbidity; pH; significant erosion or alteration of a watercourse; and total residual chlorine. In addition, this General Order includes limitations for total petroleum hydrocarbons in both gasoline and diesel ranges.

B. Surface Water – Non-Federal Water

This General Order requires the same receiving water limitations for discharges to non-federal surface waters as receiving water limitations for discharges to waters of the U.S. Non-federal surface waters may have similar beneficial uses as those of waters of the U.S. Thus, those beneficial uses also need to be protected.

C. Land

This General Order requires discharges to land with the potential of reaching groundwater to not exceed water quality objectives in the applicable Regional Water Boards' Basin Plans to protect beneficial uses of the state's groundwater.

XIV. RATIONALE FOR PROVISIONS

A. General Provisions

1. Reopener Provisions

The reopener provisions in this General Order provide an explanation of the State Water Board's authority to reopen this General Order in accordance with 40 C.F.R. section 122.62 due to causes including, but not limited to, the promulgation of new regulations or the adoption of new regulations by the State Water Board.

2. Pre-Discharge Notification to State and Regional Water Boards

This General Order requires the Discharger to provide planned discharge information to the State Water Board and the Regional Water Board to inform Water Board staff where and when the Discharger will be discharging within the Regional Water Board's jurisdictional areas as authorized by this General Order. This General Order requires a Discharger having multiple hydrostatic testing or dewatering discharges from a single project, using the same source water and involving the same or substantially similar discharge characteristics to notify the State Water Board and applicable Regional Water Board only once. The Discharger shall provide the information to the State Water Board and applicable Regional Water Board at least seven (7) days prior to commencing a discharge.

3. Pre-Discharge Notification Procedures for Discharge to a Municipal Separate Storm Sewer System

State Water Board Resolution 2012-0012, as amended by Resolution 2012-0031, (*Approving Exception to the California Ocean Plan for Selected Discharges into Areas of Special Biological Significance, Including Special Protections for Beneficial Uses, and Certifying a Program Environmental Impact Report*) approves specified exceptions for 27 applicants, including many municipal separate storm sewer systems. Resolution 2012-0012 allows an NPDES permitting authority to authorize non-storm water discharges to a municipal separate storm sewer system that discharges to an Area of Special Biological Significance only to the extent the NPDES permitting authority finds that the discharge does not alter natural ocean water quality in the Area of Special Biological Significance. The Statewide General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Order 2013-001-DWQ, NPDES No. CAS000004)

authorizes certain short-duration, intermittent non-storm water discharges related to linear underground projects, including groundwater dewatering and hydrostatic pressure test discharges, and discharging to a segment of a municipal separate storm sewer system with a direct discharge to an Area of Special Biological Significance, provided they are authorized by an NPDES permit issued by the State Water Board or Regional Water Board. The State Water Board found that the short-term and intermittent duration of these discharges renders them unlikely to result in substantial alteration of natural ocean water quality in an Area of Special Biological Significance. If the State Water Board or Regional Water Board determines that a specific discharge does alter the natural ocean water quality in an Area of Special Biological Significance, the discharge may be prohibited. In accordance with Resolution 2012-0012, as amended by Resolution 2012-0031, this General Order provides regulatory coverage for hydrostatic testing and site dewatering discharges to constructed municipal separate storm sewer system facilities and natural water bodies within a municipal separate storm sewer system agency service area, to the extent that the discharge does not alter natural water quality in the ASBS. For an Area of Special Biological Significance, Resolution 2012-0012 provides that the NPDES permitting authority may allow non-storm dry weather discharges that are essential for emergency response purposes.

Given the short-duration and intermittent nature of expected discharges to municipal separate storm sewer systems that discharge directly to an Area of Special Biological Significance, the State Water Board finds that discharges to a municipal separate storm sewer system with a direct discharge to an Area of Special Biological Significance authorized under this General Order are not expected to result in a substantial alteration of natural ocean water quality.

This General Order does not supersede the authority of a municipal separate storm sewer system owner/operator to prohibit, restrict, or control discharges authorized under this General Order to constructed storm drain systems or other constructed facilities (i.e., non-waters of the U.S. or state) within its jurisdiction as allowed by local, state, and federal law. Therefore, this General Order provides regulatory coverage of discharges to a municipal separate storm sewer system as specified in section IX.A.3 of this General Order (Provisions for Discharges to Water of the U.S.). However, this General Order requires a Discharger to notify the municipal separate storm sewer system authority and applicable Regional Water Board with jurisdiction over the area where the discharge will occur of hydrostatic testing or site dewatering discharges prior to initiating any discharge activity. The Discharger must provide the notification at least seven (7) business days in advance of the proposed discharge**.**

4. Pre-Discharge Notification to Appropriate Tribal Entities

This General Order requires the Discharger to provide an advance written notice to the appropriate Tribal entities, a minimum of 30-calendar days prior to project initiation of planned discharges within the Tribe's affiliated lands, that at minimum includes the following information:

1. A general description and map of the location of pipeline(s) to be tested and points of discharge;

2. Contact information for Utility Operator employed by the applicant gas company;

3. Estimated time period discharges are proposed to occur; and

4. As applicable, description of the site-specific cultural resource avoidance and minimization measures, including best management practices, to be implemented at the discharge site.

5. Best Management Practices and Control Strategy Plan

This General Order requires Dischargers to develop and implement a Best Management Practices and Control Strategy Plan (Plan) for discharges authorized under this General Order. The Plan is a written document that describes the Discharger's approach and procedures to be implemented for each type of discharge (i.e., hydrostatic testing of new facilities, hydrostatic testing of existing facilities, and site dewatering) to continuously comply with (1) effluent limitations for discharges to water of the U.S., non-federal surface water, and land; and (2) other requirements of this General Order. The Plan must also include site-specific cultural resource avoidance and minimization measures (as applicable), as set forth in section XIV.A.4. above, and a description of the corresponding on-site best management practices to be implemented.

The Discharger must maintain an electronic or hard copy of the Plan at each project site and make the Plan available to State and Regional Water Board staff upon request. For discharges to waters of the U.S., best management practices shall be consistent with the general guidance in U.S. EPA's Guidance Manual for Developing Best Management Practices (EPA 833-B-93-004) available from the U.S. EPA National Service Center for Environmental Publications website at http://www.epa.gov/nscep/. Although the guidance is specific to discharges to water of the U.S., the guidance may be applicable to discharges to non-federal surface water and land.

6. Unplanned and Emergency Discharges

For unplanned or emergency discharges, the Discharger shall implement appropriate best management practices and/or best practicable treatment or control as soon as feasible after taking all necessary actions to ensure the protection of public health and safety.

7. Revegetation

If the project will involve revegetation, the Discharger must replace plantings as determined by a qualified biologist. The replacement plantings will typically be based on a reference site within the native plant community in the vicinity of the project. Restoration of excavated areas, equipment storage areas, and any pipeline repair areas will be restored to their preconstruction condition to the extent practicable. Native plant species appropriate to the local area will be used where possible. Drought tolerant, non-invasive plant species will be used to revegetate. Revegetation performance criteria consist of absolute and relative vegetation cover, species richness, and plant density. Replacement plantings should be determined by a qualified, local biologist, and typically will be based on a reference site within the native plant community in the vicinity of the project. Using native plant species can provide habitat and food sources for native animal species and will not result in noxious weeds that may need to be controlled by chemical or physical methods.

B. Provisions for Discharges to Waters of the U.S.

1. Standard Provisions

a. Standard Provisions apply to all NPDES permits in accordance with 40 C.F.R. section 122.41 and additional conditions applicable to specified categories of permits in accordance with 40 C.F.R. section 122.42 provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 C.F.R. section 122.42.

b. Sections 122.41(a)(1) and (b) through (n) of 40 C.F.R. establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the permit.

c. Section 123.25(a) of 40 C.F.R. allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 C.F.R. section 123.25, this General Order omits federal conditions that address enforcement authority specified in 40 C.F.R. section 122.41(j)(5) and (k)(2) because the enforcement authority under the California Water Code is more stringent. In lieu of these conditions, this General Order incorporates by reference California Water Code section 13387(e).

2. Best Management Practices and Control Strategy Plan

This General Order does not establish specific technology-based effluent limitations because the pollutants that may occur in discharges that this General Order covers may vary. As allowed under 40 C.F.R. section 122.44(k), best management practices will serve in lieu of technology-based effluent limitations, in order to carry out the purposes and intent of the Clean Water Act. As stated in section IX.A.4, this General Order requires Dischargers to develop and implement a Plan.

C. Provisions for Discharges to Non-Federal Surface Water

Surface waters that are waters of the U.S. and surface waters that are not waters of the U.S. may have similar beneficial uses. To protect the beneficial uses of both types of state surface waters, this General Order specifies provisions for discharges from natural gas facilities to both types of state surface waters.

D. Provisions for Emergency and Unplanned Discharges

In the event of an emergency or unplanned discharge, the Discharger is responsible for protecting public health and safety. Implementing appropriate best management practices and/or best practicable treatment or control may delay actions for public health protection and safety. Thus, this General Order requires that the Discharger implement best management practices and/or best practicable treatment or control as soon as feasible after taking all necessary actions to protect public health and safety.

E. Provisions for Discharges to Land

Standard provisions for discharges to land are in accordance with waste discharge requirements for discharges to land throughout the state.

If Dischargers use hydrostatic testing or site dewatering discharges for land application, Dischargers must ensure adequate acreage is available to allow application rates that will not create nuisance conditions (e.g. vectors, nuisance odors, off-site discharge) or degrade groundwater quality to an unacceptable extent.

F. Provisions for Discharges to Pond Systems

Standard provisions for discharges to pond systems are consistent with waste discharge requirements for discharges to pond systems throughout the state.

G. Provisions for Use of Recycled Water

Standard Provisions for use of recycled water are in accordance with title 22 of the California Code of Regulations.

H. Provisions for Groundwater Extraction Near Hazardous Waste Release Sites

When groundwater dewatering will occur, determination of the presence of nearby hazardous materials sites is required. If groundwater dewatering will occur within 250 feet of a hazardous material release site, a hydrogeologic evaluation is required to determine if the dewatering activities will significantly affect conditions at the release site. Significant effects include causing loss of hydraulic control of a plume under remediation, lowering the groundwater table when floating non-aqueous phase liquid (e.g., gasoline) is present, or migration of an existing plume. Determination of the presence of hazardous material release sites shall be made using the State Water Board's GeoTracker system, available at: <http://geotracker.waterboards.ca.gov/>.

1. When a hydrogeologic evaluation is required, consultation with the State Water Board and/or Regional Water Board is required. Additional analysis of dewatering activities, testing, and treatment of extracted groundwater may be required.

2. Dewatering an excavation to remove storm water that has flowed into the excavation via the surface, or to remove water that resulted from a broken pipe (potable water, sewage, recycled water, or storm drain) is exempt from the consultation requirement.

Long-term groundwater extraction can change groundwater flow directions, vertical gradients between aquifer zones, smearing of separate phase products (e.g., gasoline), and loss of control of groundwater plumes. In most cases, dewatering activities associated with construction activities are limited to the first saturated interval and the aquifer is unconfined. Groundwater extraction from unconfined aquifers results in a smaller cone of depression than results when a confined aquifer is pumped. The 250 feet radius described above is intended to provide sufficient distance from the hazardous release site to minimize the potential for undesirable flow direction changes to occur as a result of groundwater extraction at a construction site.

XV. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS FOR PLANNED DISCHARGES

Section 122.48 of 40 C.F.R. requires that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorize the State Water Board to require technical and monitoring reports. The Monitoring and Reporting Program of this General Order defines the compliance monitoring, and recordkeeping and reporting requirements to implement federal and state requirements. The paragraphs below provide the rationale for the monitoring and reporting requirements contained in Attachment E of this General Order.

Effluent monitoring is necessary to assess compliance with effluent limitations and specifications, assess the effectiveness of the implemented best management practices and any treatment methods, and to assess the impacts of the discharge.

The Monitoring and Reporting Program of this General Order contains effluent monitoring requirements to provide: (1) the Discharger with necessary information to make informed decisions regarding the implementation of effective best management practices and/or best treatment or control; and (2) the State Water Board to determine compliance with effluent limitations and other requirement of this General Order.

A. Effluent Monitoring – Discharge to Water of the U.S.

Pursuant to the requirements of 40 C.F.R. section 122.44(i)(2), reporting of effluent monitoring is required for all constituents with effluent limitations. The effluent monitoring requirements are as follows:

Prior to initiation of a discharge to a water of the U.S. that is authorized under this General Order, the Discharger shall monitor each discharge as follows:

1. **Parameter Monitoring Requirements.** This General Order requires effluent monitoring of each defined effluent discharge for pH, turbidity, oil and grease, and for any pollutants with applicable effluent limitations. Additionally, for any hydrostatic testing that uses a chlorinated source water for testing, effluent monitoring for total residual chlorine is required. For any hydrostatic testing of an existing natural gas facility where the source water used for the testing may come into contact with natural gas residues in the pipelines and other facilities being tested, effluent monitoring is required for total petroleum hydrocarbons in addition to other required pollutants. Additional monitoring specifications for total residual chlorine are described below.

2. **Total Residual Chlorine.** For all previously-chlorinated[8] planned discharges directly into, or within 300 feet of, inland surface waters, enclosed bays, and estuaries, and ocean waters, this General Order requires effluent monitoring for total residual chlorine for all hydrostatic testing discharges that are conducted with a chlorinated source water. The State Water Board acknowledges the complications of achieving relatively low reporting levels in field locations. To address this issue, the Drinking Water Systems Permit (Order 2014-0194-DWQ) set a reporting limitation of 0.1 mg/L for total chlorine

[8] For example, treated potable water, recycled water, etc.

residual. The method in Order 2014-0194-DWQ is appropriate for this General Order. Therefore, Dischargers are allowed to use portable chlorine analysis methods to monitor total residual chlorine in the effluent. The Dischargers must use an analytical method capable of achieving a reporting level of 0.1 mg/L.

3. **Total Petroleum Hydrocarbon-Gasoline Effluent Limitation.** The State and Regional Boards shall deem a laboratory analytical monitoring result out of compliance if a TPHG concentration is detected (including "detected but non-quantifiable") using a U.S. EPA authorized method with a method detection limit of 23 ug/L or lower. A laboratory analytical monitoring result must show "non-detect" to be determined in compliance.

4. **Monitoring Frequency.** This General Order requires effluent to be monitored for all discharges at least once and then on a weekly basis thereafter. This means that an effluent must be monitored and analyzed for all the pollutants required by the Monitoring and Reporting Program within the first seven days of the discharge to a water of the U.S. For discharges that occur over a period of more than seven days, additional effluent monitoring is required on a weekly basis for the duration that the discharge activity occurs. The Monitoring and Reporting Program provides an opportunity to minimize collection of redundant and unnecessary effluent monitoring data. If four consecutive samples of a constituent show that the concentrations are less than the effluent limitation, monitoring for that constituent shall be reduced to monthly. This provision is consistent with State Water Board Resolution 2013-0029 which directs staff to take actions to reduce the cost of compliance to Dischargers subject to Water Board NPDES permits while protecting water quality protection.

5. **Discharge Monitoring Not Required.** To minimize collection of redundant and unnecessary effluent data, the Monitoring and Reporting Program specifies that discharge monitoring is not required for the following discharge conditions:

   a. The discharge does not ultimately reach a water of the U.S.;

   b. The discharge is to a municipal separate storm sewer system conveyance system channel that is not a water of the U.S. and/or the state; or

   c. The discharge is the result of an emergency situation as defined in section II.A, Permit Coverage of this General Order.

B. Effluent Monitoring – Discharge to Non-Federal Surface Water

Surface waters that are waters of the U.S. and surface waters that are not waters of the U.S. may have similar beneficial uses. To protect the beneficial uses of both types of state surface waters, this General Order specifies the same effluent limitations, monitoring and reporting requirements for discharges from natural gas facilities to both types of state surface waters.

C. Effluent Monitoring – Discharge to Land

This General Order specifies effluent limitations, monitoring and reporting requirements for discharges from natural gas facilities to land as follows:

1. **Parameter Monitoring Requirements.** This General Order requires effluent monitoring of each defined effluent discharge for polychlorinated byphenyls, dissolved oxygen, pond freeboard, and separate phase products. Additionally, this General Order requires land application area monitoring and reporting of any vector generation, saturated soil conditions, odors, and/or runoff conditions.

2. **Monitoring Frequency.** This General Order requires effluent to be monitored for all discharges at least once and then on a weekly basis thereafter.

D. Receiving Water Monitoring

1. Monitoring of Water of the U.S.

The Monitoring and Reporting Program has established monitoring requirements for direct discharges to waters of the U.S. to assess compliance with effluent limitations and the impacts of the discharge on waters of the U.S. The Monitoring and Reporting Program requires the Discharger to conduct visual monitoring for all planned noncompliant direct discharges to waters of the U.S.; however, the Monitoring and Reporting Program does not require the Discharger to monitor discharges that do not go to a water of the U.S. or are associated with a defined emergency discharge situation. Additionally, to minimize unnecessary collection of monitoring data, monitoring is not required for discharges to constructed features such as constructed municipal separate storm sewer system facilities, irrigation canals and ditches that are not waters of the U.S. Further, the Monitoring and Reporting Program requires Dischargers to monitor discharges to waters of the U.S. only if the discharge location is safely accessible. If hazards exist that prohibit safely conducting the monitoring, such monitoring is not required and the hazards shall be documented in the discharge monitoring report. The visual monitoring requirements consist of digital photograph collection and documentation of observed effects of the discharge on waters of the U.S. in regards to erosion, sedimentation, floating material, visible films, sheens, or coatings, and potential nuisance conditions.

2. Monitoring of Non-Federal Surface Water

Surface waters that are waters of the U.S. and non-federal surface waters that are not waters of the U.S. may have similar beneficial uses. To protect the beneficial uses of both types of state surface waters, this General Order specifies the same monitoring and reporting requirements for discharges from natural gas facilities to both types of state surface waters.

3. Monitoring of Discharge to Land

This General Order does not require receiving water monitoring for discharges to land with the potential of reaching groundwater.

E. Post-Notification Requirements

The Monitoring and Reporting Program requires the Discharger to notify the State Water Board within 24 hours of becoming aware of a discharge to a water of the U.S., a non-federal surface water, or to land that is noncompliant with this General Order that may endanger human health

or the environment. This is to ensure that the Water Boards are aware of the discharge and can take the appropriate action if necessary.

F. Reporting and Recordkeeping Requirements

Section 122.48 of 40 C.F.R. requires that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program for this General Order requires the Discharger to prepare and submit an annual Self-Monitoring Report to the State Water Board by April 1 of each year that provides information, as specified in Attachment E, for the Discharger's activities conducted during the period of January 1 through December 31 of the previous year. The Discharger shall attach a cover letter to the Annual Report. The information contained in the cover letter shall clearly identify noncompliance with this General Order, discuss corrective actions taken or planned, and provide a time schedule for corrective actions. The Discharger must include a description of the requirement that was not complied with and a description of the noncompliance.

This General Order requires Dischargers to report all discharges to a municipal separate storm sewer system that discharges directly to an Area of Special Biological Significance if the discharges are within one mile inland from the Area of Special Biological Significance shoreline. Since there are a number of discharges to municipal separate storm sewers, it is difficult to determine if discharges to a municipal separate storm sewer authorized under this General Order will ultimately discharges to an Area of Special Biological Significance. Thus, the scope was limited to one mile from an Area of Special Biological Significance shoreline. This General Order uses the one mile requirement specified in the Statewide General NPDES Permit for Utility Vault Discharges.

Dischargers shall also report an estimate of the annual volume discharged or beneficially reused, and the volume of recycled water used. The State Water Board strongly encourages natural gas companies to (1) exhaust land discharge options to the maximum extent possible prior to discharging to waters of the U.S. or non-federal surface waters, and (2) maximize the use of recycled water as source water when available. Reporting the amount of recycled water used is consistent with the Climate Change Resolution.

XVI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS FOR EMERGENCY/UNPLANNED DISCHARGES

In the event of an emergency or unplanned discharge, the Discharger is responsible for protecting public health and safety. Requiring sampling and monitoring of the discharges may cause delays in the Discharger's ability to take necessary actions to protect public health and safety. Thus, this General Order does not require Dischargers to monitor emergency and unplanned discharges.

XVII. PUBLIC PARTICIPATION

The State Water Board is considering the issuance of this statewide General Order which also will serve as a statewide general NPDES permit, for untreated or treated point source wastewater discharges from hydrostatic testing and dewatering by natural gas companies. This General Order shall serve as (1) the statewide general NPDES permit for discharges from single or multiple

discharge points to water of the U.S. and (2) the statewide general order for discharges to non-federal surface water and/or land.

A. Notification of Interested Parties

State Water Board staff conducted two informational meetings to describe the need for the proposed General Order and to solicit stakeholder input regarding the scope and issues to be addressed in this General Order. The first meeting was conducted on May 8, 2015 (9:30 a.m. to 12:00 p.m.) at the CalEPA Building, Room Training 1 West, 1001 I Street in Sacramento, California. The second meeting was conducted on May 21, 2015 (1:00 p.m. to 3:30 p.m.) at the Southern California Gas Company's Energy Resource Center, 9240 E. Firestone Blvd. in Downey, California.

The State Water Board has notified interested agencies, parties, and persons of its intent to prescribe this General Order for discharges from natural gas companies and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided to interested parties through specific mailings, distribution through the State Water Board Lyris Email System, and through publication in major newspapers throughout California.

The public has access to the agenda and any changes in dates and locations through the State Water Board's website at: http://www.waterboards.ca.gov/board_info/calendar/.

B. Written Comments

As a step in the WDR adoption process, the State Water Board staff has developed a tentative General Order. The State Water Board encourages public participation in the adoption process for this General Order. The staff determinations are tentative. Interested persons are invited to submit written comments concerning this tentative General Order. Comments must be submitted either in person or by fax, email, or mail to the Executive Office at the State Water Board at the address above on the cover page of this General Order.

Only written comments received at the State Water Board office by 12:00 pm on **October 10, 2017** will be fully addressed by staff and considered by the State Water Board.

C. Public Hearing

The State Water Board will hold a public hearing on the tentative General Order during its regular Board meeting on the following date and time and at the following location:

Date:	October 3, 2017
Time:	9:30 a.m.
Location:	Joe Serna Jr., CalEPA Headquarters Building Coastal Hearing Room 1001 I Street, Second Floor Sacramento, CA 95814

Interested persons are invited to attend. At the public hearing, the State Water Board will hear testimony, if any, pertinent to the discharge and General Order. The State Water Board will

hear oral testimony; however, for accuracy of the record, important testimony should be in writing.

D. Information and Copying

General Order-related documents, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the State Water Board by calling (916) 341-5455.

E. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding this General Order should contact the State Water Board, reference the General Order, and provide a name, address, and phone number. Alternatively, any person may sign up for the electronic mailing list at: http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml.

F. Additional Information

Requests for additional information or questions regarding this General Order must be directed to NPDES_wastewater@waterboards.ca.gov.