

Proposed Statewide General NPDES Permit for Discharges from Natural Gas Facilities

State Water Resources Control Board
Stakeholder Outreach Meetings
May 2015

Today's Meeting

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- Overview of National Pollutant Discharge Elimination System Program
- Natural Gas Facilities – Activities & Locations
- Wastewater Discharge Characteristics
- Best Management Practices and Treatment Methods
- Current Discharge Permitting
- Challenges
- Permit Adoption Process
- Questions

National Pollutant Discharge Elimination System (NPDES) Program

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NPDES Program - began with 1972 amendments to Federal Water Pollution Control Act

Section 101(a) sets

- Objective: Restore and maintain the chemical, physical, and biological integrity of the nation's waters
- National Goals:
 - Make U.S. waters **fishable and swimmable waters** by 1983
 - Eliminate the discharge of pollutants by 1985
 - NPDES Program as the mechanism to achieve these goals

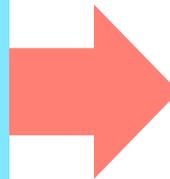


NPDES Program Framework

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Discharging

- Pollutants
- All “point sources”
- Into “waters of the United States”



Must obtain an NPDES permit from the U.S. Environmental Protection Agency or an approved* State



*Authorized State program
(California is an authorized state for NPDES permitting)

Pollutants

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Section 122.2 of Title 40, Code of Federal Regulations (CFR), defines a pollutant, in part, as

- Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water



Point Sources

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Section 122.2 of 40 CFR defines a point source, in part, as

- Any discernible, confined, and discrete conveyance from which pollutants are or may be discharged
 - Point Source Discharges
 - Municipal, industrial, and urban runoff

Waters of the United States

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Section 122.2 of 40 CFR defines “waters of the United States,” in part, as

- All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters subject to the ebb and flow of the tide



What is an NPDES Permit?

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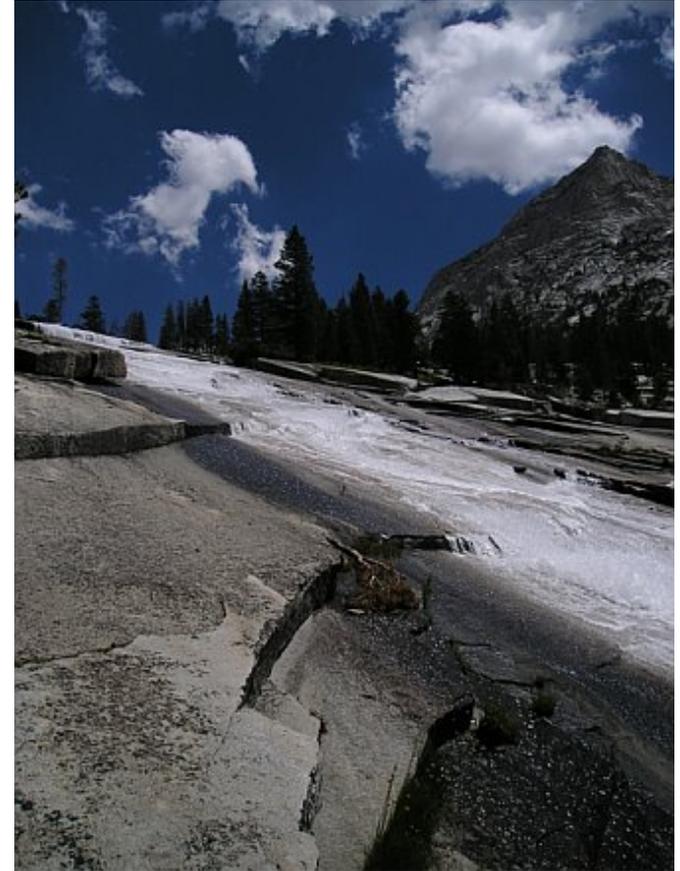
- License to discharge
- No right to a permit, can be revoked for cause
- Effective term of 5 years
- Types: Individual, general, minor, and major



Classes of Pollutants

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- Conventional (biochemical oxygen demand, total suspended solids (TSS), oil & grease, pH, coliform)
- Toxic – 126 priority toxic pollutants (metals and organics)
- Non-conventional (ammonia, chlorine, phosphorous)



General NPDES Permit Components

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- Scope of Statewide General Permit
 - ▣ Discharges Authorized Under Permit
- Permit Coverage and Application Requirements
 - ▣ Permit Coverage
 - ▣ Permit Effective Date
 - ▣ Application Package Requirements
 - ▣ Notice of Applicability
 - ▣ Permit Coverage Termination
 - ▣ Permit Transfer
- Findings



General NPDES Permit Components

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- Discharge Prohibitions
- Effluent Limitations
- Receiving Water Limitations
- Multiple Uses or Beneficial Reuses
- Provisions
- Compliance Determination
- Monitoring & Reporting Program
- Fact Sheet



Fundamental Principle of Permit

To provide an NPDES permit that allows natural gas facilities to conduct mandated responsibilities while maintaining and improving water quality protection.

Natural Gas Facilities - Activities

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- Maintenance (Scheduled and Unscheduled)
- Pressure Testing
 - ▣ Pipeline Integrity Program
 - ▣ Pipeline Safety Enhancement Plan
 - ▣ Assess integrity of pipelines
 - Hydrostatic pressure test or replace
 - Valve automation/replacement
- Construction Site Dewatering

Natural Gas Facilities - Locations

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- Transmission pipelines
- Distribution
 - Wholesale
 - Municipal Utilities
- Storage facilities

Activities Requiring Discharge Permit

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Hydrostatic Pressure Testing



Site Dewatering

Wastewater Discharge Characteristics

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- Hydrostatic Pressure Testing
 - Source water constituents: potable, non-potable, and Title 22 recycled water (e.g., residual chlorine)
 - Existing Pipe: TSS, pH, petroleum hydrocarbons, oil & grease
 - New Pipe: TSS



Wastewater Discharge Characteristics

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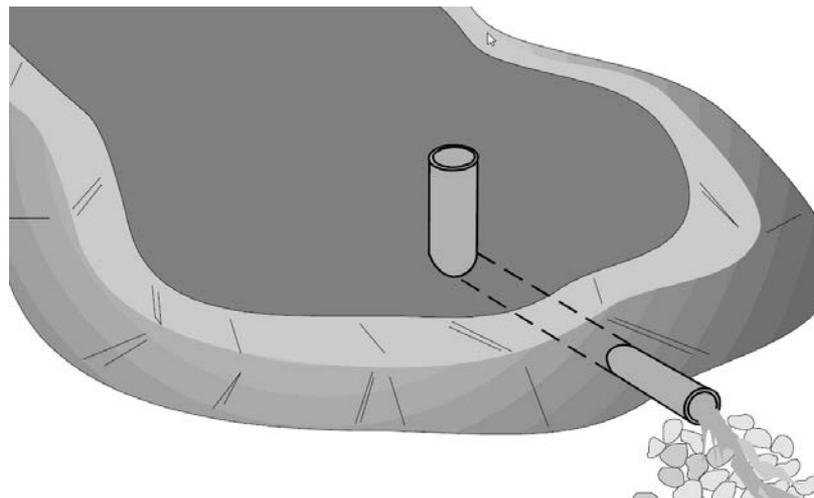


- Site Dewatering
 - Site seepage and drainage, and groundwater infiltration
 - TSS, oil & grease, and constituents native to site
 - Incidental rainfall, stormwater inflow, and water line breaks

Best Management Practices (BMPs) and Treatment Methods

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- Hydrostatic Testing
 - ▣ Flow control and solids removal (e.g., Baker tanks)
 - ▣ Discharge BMPs (e.g., erosion and sediment control)
 - ▣ Dechlorination



BMPs and Treatment Methods

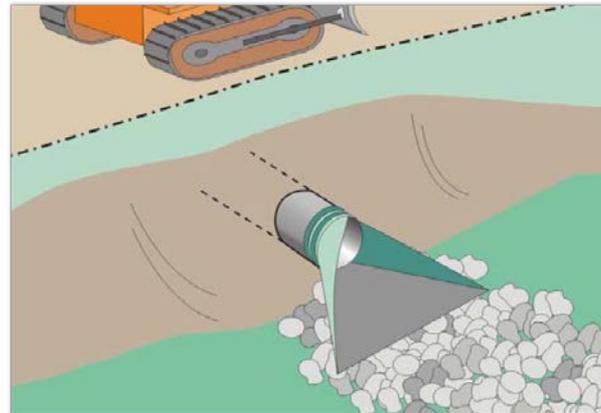
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- Hydrostatic Testing
Engineered Treatment for
Existing Pipe
 - Bag filters
 - Activated carbon
filtration



BMPs and Treatment Methods

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- Site Dewatering
 - ▣ Flow control and solids removal
 - ▣ Filters – portable cartridge
 - ▣ Discharge BMPs (e.g., erosion and sediment control)

Current Discharge Permitting

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- Land Discharges
 - Statewide General Waste Discharge Requirements for Discharges to Land with a Low-Threat to Water Quality
 - Order 2003-0003-DWQ
- Surface Water Discharges
 - Regional Water Quality Control Boards (Regional Water Boards)
 - Low-Threat General NPDES Permits
 - Limited-Threat General NPDES Permits

Challenges

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- Multiple and variable Regional Water Board permits/requirements
- Large projects within multiple Regional Water Board regions
- Facility assessments may lead to the need for prompt repair/replacement actions
- Emergencies or urgent repairs
- Permit lead times can be critical paths to projects
- Current general permits have conditions that exclude a large portion of activities; thus, requiring additional permits

Permit Adoption Process

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- ❑ Development of draft permit
- ❑ Draft permit posted – **September 22, 2015**
- ❑ State Water Board Public Hearing – **October 20, 2015**
- ❑ Public comment period ends – **November 3, 2015**
- ❑ Revise draft permit for State Water Board consideration
 - Revisions must respond to public comments
 - Comments in support are also important
 - Issued 10 days prior to adoption meeting
- ❑ State Water Board Adoption Date – **February 2, 2016**

Contact

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For more information and updates, please visit:

http://www.waterboards.ca.gov/water_issues/programs/npdes/natural_gas/

QUESTIONS?