

**WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS**

**GENERAL WATER POLLUTION CONTROL PERMIT  
Permit Number: GP-WV-1-88**

**FACT SHEET, RATIONALE AND INFORMATION FOR  
GENERAL PERMIT FOR THE LAND APPLICATION OF TREATED WASTEWATERS  
GENERATED DURING EXPLORATORY AND DEVELOPMENTAL DRILLING OF  
WELLS**

September 2015

The West Virginia Department of Environmental Protection (DEP), Office of Oil and Gas oversees and regulates the construction, treatment and eventual plugging of natural gas and oil wells and is proposing the renewal of this general permit pertaining to the land application of treated industrial wastewaters generated during exploratory and/or developmental drilling, well treatment operations, plugging operations and reworking of wells. General Water Pollution Control Permit GP-WV-1-88 expired December 31, 2010 and has been administratively extended through December 31, 2015 pending renewal. This fact sheet explains the draft renewal general permit for the land application of these treated wastewaters.

Based on data collected since the inception of this permit and the absence of evident environmental impacts associated with the land application of treated industrial wastewaters under the coverage of this permit, the Office of Oil and Gas (OOG) considers that the duration of general permit GP-WV-1-88 can be extended for a limited period of five (5) years.

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| 1. NAME AND ADDRESS OF APPLICANT: | An applicant is any operator who generates wastewater during exploratory and/or developmental drilling, well treatment operations, plugging operations and reworking of wells and agrees to be regulated under the terms of this General Permit. |
| 2. GENERAL PERMIT NO.:            | GP-WV-1-88   |
| 3. COUNTY:                        | Every county in West Virginia  |
| 4. RECEIVING LAND:                | Any land in West Virginia described in the Fluids/Cuttings Disposal & Reclamation Plan (WW-9).   |
| 5. PUBLIC COMMENT PERIOD:         | August 31, 2015 through December 4, 2015   |

## 6. DESCRIPTION OF DISCHARGES

The process of drilling, treating, plugging or reworking natural gas or oil wells (hereinafter “well work activities”) results in the generation and storage of wastewaters within a storage pit on or near the location of the well work activity. After the completion of the well work activity, these pits are reclaimed and the fluids contained therein may be reused or disposed of via land application or underground injection. The volume and quality of the wastewater generated from these activities varies by location, and requires treatment to reduce the concentrations of metals and other contaminants to make the wastewater suitable for land application. Any water that is land applied must meet the discharge limitations contained in this general permit.

## 7. BACKGROUND

The purpose of this general permit is to establish a simple, efficient and economic method for the regulation and disposal of wastewaters generated during conventional well work activities in a manner that is fully protective of the environment. To that end, permittees shall be required to provide with Form WW-9 a groundwater protection plan (GPP) meeting the requirements identified in 47CSR58. Upon approval of a GPP and Form WW-9, this general permit will allow permittees to acquire, construct, install, modify and operate a system to treat and discharge to land wastewaters generated from conventional well work activities.

## 8. RATIONALE FOR PROPOSED DISCHARGE LIMITATIONS, MONITORING, AND TREATMENT

This general permit requires treatment of generated wastewaters to meet minimum quality standards. Prescriptive treatment protocols are established based on the initial quality of the wastewater. Permittees may utilize field kits in order to categorize pit contents and determine the appropriate treatment methods. After treatment, the wastewater must be analyzed to ensure minimum quality standards have been achieved prior to discharge. The samples collected must be representative of the discharges for land application, and must comply with the standards for sampling and analyzing wastewater covered by the permit. As there will necessarily be a delay between the sampling and ultimate disposal of these wastes, field kits shall again be utilized to ensure there have been no changes in quality prior to discharge.

The permit also requires accurate reporting of water volume discharged to land. Because the permit does not allow for ponding or runoff into surface water, the flow volume may be limited based on soil permeability, to be determined on a site specific basis, using the county soil surveys prepared by the Natural Resources Conservation Service (NRCS). Volume limitations, if established, will be site specific and based upon soil permeability, area of the discharge and slope of the site where discharge is to occur.

A limitation on the total amount of chlorides in pounds per acre that can be applied to the discharge area has been established. This standard was established as a threshold to protect against vegetative loss, and was determined after analyzing empirical data from previously filed discharge monitoring reports.

## 9. OTHER REQUIREMENTS

This general permit does not relieve the operator of any duty to report spills or accidental discharges. All spills or accidental discharges that threaten human health or the environment shall be reported to the DEP spill report telephone line immediately. A written submission addressing, among other things, the spill, its causes, and the steps that have been taken to reduce, eliminate and prevent recurrence of the problem shall be submitted within five days of the accident or spill.

The permit prohibits any discharge onto ground that is saturated, frozen or impermeable. Wastewater shall not be applied in a manner that will cause ponding, erosion or run-off into waters of the State. Land application shall be limited to only vegetated land not to include food crops or cultivated garden plots regardless of season.

To assure that the activities under this permit have not caused a violation of water quality standards or impacted the quality of the soil or vegetation, permittees may be directed to conduct soil, surface and/or groundwater testing.

The operators may use the county soil surveys available from the NRCS to determine the appropriate soil permeability factor for the site to be land applied. The soil permeability factor shall be included in the site registration application. This information should be utilized in determining the method of land application to be utilized.

No substances other than treated wastewaters generated during exploratory and/or developmental drilling, well treatment operations, plugging operations and reworking of wells may be discharged under the coverage of this permit. The wastewater discharge shall not include floating solids, visible foam, or free oil in other than trace amounts.

## 10. ANTIDegradation ISSUES

This general permit does not allow the land application of treated wastewater to adversely impact the waters of the State.