



Department of Environmental Quality

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MEMORANDUM

TO: CBM Operators/Consultants and Interested Parties

FROM: Todd Parfitt, NPDES Program Manager

DATE: September 2, 2003

SUBJECT: Wyoming NPDES Program Implementation Changes

In a continuing effort to improve program efficiency and quality, the NPDES program has adopted the following program implementation changes. As with all programs, there may be exceptions where the changes described in this Memorandum would not be applicable, based on site specific criteria. These exceptions will be handled on a case by case basis.

1. Applications:

(A.) Incomplete applications

Addressing incomplete applications can and does consume significant staff resources. Consequently, new, renewal, and modification permit applications which are incomplete will be returned and taken out of the permit processing que if the incomplete information is not provided to the Wyoming Department of Environmental Quality (WDEQ) within 15 days of the notification of the deficiencies. The WDEQ will notify applicants in writing of the application deficiencies and will specify a required submittal date of all deficient information.

The WDEQ also recognizes that there is an expectation that an applicant be advised of the completeness or deficiencies of a permit application within a reasonable time frame. Therefore, the WDEQ will make an effort to notify applicants of the completeness or deficiency of permit applications within 45 days of receipt. There may be instances, because of work load or other extenuating circumstances where notification may not occur within the desired 45 days. In those instances, the WDEQ will make an effort to notify applicants of the expected completeness review schedule.

(B.) Permit Application Identification and Tracking

In an effort to minimize the handling and processing time associated with permit applications, the WDEQ is requesting that operators submit permit applications with a unique footer on each page of the application. In addition to reducing the staff time required to process a permit application, this procedure will ensure proper processing of permit applications and minimize the chances of misplaced paperwork. The following format is requested:

Company Name: Year/Month/Day/NEW, MOD, RENEWAL/10 Digit HUC/Application # for that day.

2. Initial Monitoring Report (IMR) Data Requirements

(A.) IMR Constituents

Based on a review of initial monitoring report (IMR) data submitted to date, the WDEQ has sufficient information to conclude that certain constituents are not present in coal bed methane produced water in concentrations that would pose a threat to surface water quality. The WDEQ has, therefore, concluded that sufficient justification exists to modify the IMR constituent list for new permits by removing the following constituents:

1. Dissolved Chromium
2. Dissolved Boron
3. Dissolved Fluoride
4. Dissolved Nickel
5. Dissolved Potassium
6. Dissolved Silver
7. Total Antimony
8. Total Cyanide
9. Total Thallium
10. Phenol
11. Total Petroleum Hydrocarbons

Existing permits which contain these constituents as part of the IMR requirement must sample for all listed constituents or submit a modification request to remove the constituents from the IMR requirement. In an effort to minimize the impacts on the NPDES program resources, it is strongly recommended that operators sample for all constituents listed in the permit, rather than submitting a modification request.

(B) Possible Removal of IMR Requirements

There may be sufficient data in certain watersheds to justify removal of IMR requirements. As industry provides supporting documentation to characterize the expected range of discharge water quality for a given watershed and specific coal seam, the WDEQ will evaluate and make a determination regarding the continuing need for additional water characterization data for that watershed.

3. Watershed Permitting

(A) Limitation on Outfalls per Permit

The number of outfalls per permit has historically been limited to 10, unless the permittee demonstrated a viable reason for needing more than 10. This limitation was originally intended to help the permitting program manage and monitor the increased quantity of CBM discharges. As the NPDES program continues to work toward the development of a watershed based approach to permitting, it has become apparent that restricting the number of outfalls per permit may not be the most efficient means to manage permits or the water resource. Therefore, the WDEQ has adopted a watershed based permitting strategy which allows an unlimited number of outfalls per permit, as long as all outfalls are to the same drainage. It is the WDEQ's position that this permitting approach will lead to consistent permit conditions; simplification of comprehensive reviews; and a reduction in the number of permits issued. This approach will allow for a more manageable permitting system and provide a mechanism to more efficiently assess cumulative impacts on drainages.

4. Permit Modifications

(A) Adding New Wells

A permit modification for adding new wells is required when there is reasonable potential for the source water to be substantially different than what was originally permitted (e.g., from a new coal seam).

Addition of new wells from the same coal seam, already covered by the discharge permit, is not expected to result in reasonable potential for the source water to be substantially different than what was originally permitted and will not require a permit modification, as long as the originally permitted flow volume is not exceeded and the operator is in compliance with the effluent limitations in the existing permit, based on self monitoring results. The operator is, however, required to submit a notification letter to the WDEQ which contains the following information at a minimum:

- Permit number and facility name;
- Operator name, address, and contact;
- Identification of the coal seam associated with the existing and new wells;
- Identification of the outfalls associated with the existing and new wells;
- The calculated maximum potential flow volume associated existing and new wells; and
- Status of compliance with effluent limitations.

For administrative purposes, the WDEQ is developing a standard notification form letter which will be made available on the WDEQ Website. All administrative notification letters for adding new wells should be made using the WDEQ notification form.

(B) Adding New Outfalls

Modification requests for adding new outfalls to permits that do not reflect current water quality standards (i.e., were drafted and issued under pre July 2001 Wyoming Surface Water Quality Standards) will be processed as renewals. The rationale for this procedure is that modifications adding new outfalls to permits written under the pre July 2001 water quality standards would result in different effluent limits for different outfalls within the same permit. The differing limits for outfalls within the same permit would create difficulties and inefficiencies in generating and reviewing DMRs and create confusion for operators, consultants, and WDEQ inspectors conducting compliance monitoring.

In these circumstances, operators have the option to either renew the existing permit by updating all outfalls to existing standards, or, as an alternative, the operator could apply for a new individual permit, avoiding the need for modification and/or renewal.

(C) Major Modification Requests

For a period of time, major modification requests were being processed as permit renewals rather than permit modifications. This was being done in an attempt to incorporate other implementation changes that may have occurred since the time the permit was issued. However, the WDEQ has reevaluated this process and has concluded that in most circumstances, only the conditions of the permit requested to be modified should be addressed and the permit should not be automatically renewed.

Therefore, major modification requests will be processed as modifications rather than renewals unless any of the following conditions exist:

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- (1) The permit is within 6 months of expiration.
- (2) The WDEQ has knowledge of an issue (e.g., existing landowner concerns).

- (3) There are non-compliance issues that are not being addressed.
- (4) The requested major modification results in an increase in maximum potential discharge flow volume as described in the most recent application or permit.

If the permit contains points of compliance (POCs), the POCs will remain in the permit until the permit is renewed. It is the WDEQ's intent to replace POCs with end of pipe limitations in most circumstances when permits are renewed. New permits will emphasize the use of end of pipe limitations as the primary compliance point.

(D) Modification Requests Under a Remediation Compliance Schedule

Modification requests may be delayed if the modification request is related to a permit condition where there is an unresolved permit violation or other compliance related concern. Modification requests received by the WDEQ related to a permit violation or other compliance related concern that has been addressed by the permittee (either through a compliance schedule or other appropriate corrective measure approved by the WDEQ) will not be delayed for this reason provided that the modification application is accompanied by a compliance notification letter describing the compliance schedule or other appropriate corrective measure taken to address the non compliance.

5. No Discharge and Insufficient Flow

The WDEQ acknowledges that because of the remoteness of CBM outfalls and the fact that outfalls associated with CBM permits may discharge intermittently or infrequently, it can be difficult to collect self monitoring effluent samples within a reporting period. The WDEQ has determined that an outfall can be reported as non discharging provided that a good faith effort has been made to collect a representative sample and documentation of the good faith effort is provided with the self monitoring reports.

When conducting compliance monitoring inspections, there are occasions when there is a discharge, but a representative sample can not be obtained because of insufficient flow at the outfall. Many operators and inspectors have questioned what constitutes insufficient flow for obtaining a representative sample from an outfall. The WDEQ has explored this issue with the WDEQ water quality laboratory staff, WDEQ compliance inspectors, and in collaboration with CBM operators and consultants familiar with the issue.

Based on the discussions and information collected during the review of this issue, the WDEQ has concluded that there are circumstances where a representative sample cannot be collected because of insufficient flow. However, sufficient documentation would need to be provided to make a demonstration of insufficient flow.

The following information describes the information that the Wyoming NPDES program deems adequate documentation for a “No Discharge” determination or an “Insufficient Flow” determination:

(A) Frequency of Visits to the Outfall

In order to determine the number of visits to document a “good faith effort” has been made to obtain a representative NPDES sample, consideration was given to:

- The range of NPDES permit sampling frequencies (annual, semi-annual, quarterly, and monthly);
- Minimizing impacts to surface landowners, air quality, and roads; and
- Feasibility and economics of the frequency of site visits.

The following table shows the minimum number of site visits to the outfall suggested to support a “good faith effort.”

Sample Period	ANNUAL	SEMI-ANNUAL	QUARTERLY	MONTHLY
No. of Site Visits	6	3	2	1
Frequency	At least once every two months	At least once every two months	At least once every 6 weeks	Every month

(B) Insufficient Flow Documentation

For purposes of determining compliance with an NPDES permit, “Insufficient flow” is defined as the flow rate at which a representative sample cannot be collected from an outfall. A flow rate from an outfall of less than 150 ml/minute is considered by the WDEQ NPDES program to be insufficient flow. If the normal flow rate of an outfall is less than 150 ml/minute, then the outfall will be deemed to have insufficient flow and be reported as such on the discharge monitoring report (DMR). As is required for all outfalls, flow must be measured from a free fall of water from the final treatment unit. Where a treatment unit is not present, flow must be measured from a free fall of water prior to entering surface waters of the state. Flow measurements must accompany the discharge monitoring report and be recorded in the written field records and made available for inspection.

(C) **Accessibility of Sample Points**

Flow out of a standpipe must be coalesced into a single accessible flow with a free fall of water to allow for an instantaneous flow volume measurement and proper sample collection. All outfalls must have sufficient free fall to allow flow volume measurement using a one gallon bucket.

(D) **Photo Documentation**

Photo-documentation must be collected at each outfall during each sampling attempt to record the no discharge or insufficient flow conditions. The photo documentation must be maintained with the self monitoring records and made available for inspection.

(E) **Written Documentation**

During each sampling attempt, the operator must record on a field sheet evidence of current and past flow. Verbal reports by the operator's field personnel concerning flow conditions must also be documented in the written field record.

6. **Duration of Permits**

The maximum term of any NPDES permit is five (5) years. Permits must be renewed or terminated after the term of the permit. The WDEQ generally issues permits for a five year term unless the applicant requests a shorter term or there are exceptional circumstances that would necessitate a shorter permit term.

7. **Field Reconnaissance**

Applications often identify outfall locations in the application without the operator having actually been in the field to verify that the proposed outfall location is feasible or agreeable to landowners. The result of this lack of field "ground truthing" reconnaissance is tremendous increase in major modifications to move outfalls greater than the allowable one time move of 1510 feet. Therefore, the WDEQ is requesting all outfall locations be ground truthed in the field prior to submitting the permit application. This will result in a reduction of permit modification requests, freeing up WDEQ staff resources leading to more expedient permit reviews.

For clarification, a permittee is allowed to move their outfall **one time only** no more than 1510 feet from what was identified in the original application, without having to obtain a permit modification. Once the outfall has been established, any change in outfall location requires a major modification.

8. SEO Permit Requirement

In an effort to avoid permitting delays and to ensure that NPDES permits do not conflict with downstream water appropriations and the duties of the State Engineers Office (SEO), the WDEQ and SEO recommend the operator schedule a pre-application conference with the agencies where on-channel reservoirs or off-channel reservoirs with SEO beneficial uses are contemplated. The pre-application conference will provide the operator with an opportunity to present the proposed water discharge plan and get feedback from the two agencies on specific concerns or requirements.

9. Other Changes under Consideration

In a continuing effort to develop and issue timely permits that are protective of the surface waters of Wyoming, the WDEQ is conducting a comprehensive evaluation of the NPDES permitting program. Additional changes under consideration at this time include, but are not limited to, the following:

- Watershed Based Permitting
- Electronic DMR Submittal