ELECTRONIC DISCHARGE MONITORING REPORT SYSTEM

MISSOURI DEPARTMENT OF NATURAL RESOURCES

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1.   Introduction

1.1 OVERVIEW OF THE ELECTRONIC DISCHARGE MONITORING REPORT, OR eDMR, SYSTEM

The Missouri Department of Natural Resources' electronic discharge monitoring report system, or eDMR system, is a web-enabled information system that allows permit holders to send reports to the department. This system is designed to provide an alternative to submitting handwritten or paper-based DMRs. The system is faster, more efficient, and requires less processing for both regulated facilities and the department. As a fully operational electronic reporting system, all of the necessary legal, security and electronic signature functionality are included for this system to serve as a completely paperless reporting system.

1.2 REASONS FOR USING AND BENEFITS FROM PARTICIPATION IN THE eDMR SYSTEM

- Reduces the permit holder's compliance costs by offering a streamlined reporting method using readily available computer tools.

- Obtains "real-time" reporting requirements.

- Online availability of DMR requirements and processing status.

- Online submission options (rather than traditional "paper"):
  - Web data entry form.
  - Copy-and-paste of sampling data from Excel® file to online entry form.
  - XML file submission.

- Up-front validation of DMR report before submissions.

- Ability to submit and certify reports; submit DMR revisions.

- Uploads supporting documentation along with DMR submissions.

- Obtains email notifications for:
  - Submission.
  - Validation.
  - Processing.
  - Password/PIN changes.
  - Other notification types.

- Tracks submission status and history of all submissions.

- Reports may be saved in progress and completed later.

- User authentication and security control.

- Secured user authentication process.

- Multiple access levels: certifier, preparer and viewer

- Saves the department implementation costs by reducing and better using resources required to manage paper-based DMR reports.

- Improves the overall effectiveness of the department's wastewater discharge program with faster response for data analyses, compliance assessment and decision-making.

1.3 eDMR SYSTEM COORDINATOR CONTACT INFORMATION

Missouri Department of Natural Resources
Water Protection Program, Operating Permits Section
P.O. Box 176
Jefferson City, MO 65102
email: edmr@dnr.mo.gov
855-789-3889 or 573-526-2082

1.4 OVERVIEW OF eDMR SYSTEM

Because the eDMR system is a web-enabled system, permit holders will be able to access it using existing Internet connections or Internet service providers. The system provides permit holders the ability to retrieve up-to-date reporting requirements from the department's centralized data system, submit original or revised DMRs, as well as review online or print their previously submitted eDMRs. In essence, the system will serve as an electronic file cabinet to help permit holders manage their own reporting requirements and view previous eDMRs.

Access to the eDMR Web server and information for specific permit holders will be restricted by authorized user names and passwords for those who register as eDMR users with the department. Users of the eDMR system will be granted one of three types of user accounts.

A permit holder can register any staff member for the "viewer" or "preparer" role, but a "certifier" must be an authorized representative of the permit holder pursuant to 10 CSR 20-6.010 and must be so designated on eDMR Permit Holder and Certifier Registration Form, MO 780-2204 found at the end of this document. User rights and privileges are described below:

USER TYPE	ACCOUNT PRIVILEGES
Viewer	• View and obtain reporting requirements. • View the status of submitted eDMRs. • View submitted data.
Preparer	• All viewer privileges. • Ability to fill out and save DMR forms.
Certifier	• All preparer privileges. • Be issued a PIN to allow eDMR submittion to the department.

2.   Who Can Participate

Any Missouri permitted facility whose operating permit requires the submittal of discharge monitoring reports. To participate in the eDMR system, permit holders will need Internet access and be able to generate eDMRs in the following formats:

1. Offline via participating permit holder's own application.
2. Online via the eDMR online data entry module.
3. Microsoft® Excel®.
4. DMR template.

In addition, permit holders will need to:

- Meet the minimum system requirements described in Section 3.1.

- Complete and submit the required registration form.

3.   Preparations for Electronic Reporting

3.1 MINIMUM SYSTEM REQUIREMENTS

Permit holders will need to access the department's eDMR system website through the Internet. The permit holder will need an Internet browser program. The eDMR application is verified to work with Microsoft® Internet Explorer® Version 6.0 or greater, which can be downloaded free from http:// www.microsoft.com/downloads. Permit holders may find other Internet browsers may work but the department cannot ensure all of the features of the eDMR system will be available.

3.2 CREATION OF COMPATIBLE XML FILES

A permit holder will need the ability to generate eDMR files in one of the following formats. If the XML submittal method is determined to be used, then refer to the department's XML transfer protocol specifications found in Section 3.3. The following options will enable a permit holder to generate files:

OPTION 1: Online via the eDMR System's Online Data Entry Module

A permit holder may use the online data entry module to generate and submit eDMRs. This interface utility is designed to assist in the preperation of eDMRs for regulatory submission by either filling out an online Web data entry form, converting the raw DMR into a Microsoft® Excel® or similar spreadsheet program, or in formatting and copying the data into the space available on the web form. Either approach will convert the data to a XML compatible eDMR submission file.

Option 2: Offline via Participating Permit Holder's Own Application

A permit holder may modify their existing database applications or report generating software to generate XML compatible files as an alternative to a written or printed file output. This may involve reprogramming existing systems or developing a template to translate information.
A template is available for download from the eDMR system.

A permit holder may purchase a vendor-provided software with the ability to generate XML-compatible files. Some software companies provide software or database systems that can generate printed versions of wastewater discharge monitoring reports. Software vendors and environmental and engineering consulting firms may be interested in developing enhancements or software, which will provide XML compatible reporting features.

3.3 XML FILE PROTOCOL

The XML file protocol is a set of instructions for formatting the current information found on the DMR into a text file. The department has adopted the national eDMR XML file protocol. This file format was developed as part of a multi-state and EPA initiative to develop a national standard for reporting of wastewater discharge monitoring reports. More information about the eDMR XML file protocol is available at the EPA data registry at exchangenetwork.net.

4.   Application Process

4.1 FILING THE APPLICATION

In addition to satisfying the minimum system requirements (Section 3.1), a permit holder should complete and submit the following information to the department, which can be found as a fillable form at dnr.mo.gov/forms/780-2204-f.pdf:

1. eDMR Permit Holder and Certifier Registration Form, MO 780-2204 - Parts A through C: These parts of the registration form verify the permit holder's desire to participate in the eDMR system. This form is also used to indicate which personnel should have viewer, preparer or certifier accounts within the eDMR system.

2. eDMR Permit Holder and Certifier Registration Form, MO 780-2204 - Part D: This part of the registration form constitutes the formal agreement between the department, the permit holder and the certifier regarding the use of the PIN. The permit holder and the designated certifier must sign Part D in accordance with 10 CSR 20-6.010 in the presence of a notary public.

4.2 ACCEPTANCE AND USE OF A PIN

Only individuals registered as a certifier are issued a PIN and will be allowed to transmit eDMRs. Each certifier will have a unique and confidential PIN. By accepting a PIN, the certifier is legally bound and responsible for all uses of the electronic signature as if it were a hand-written signature. Failure to maintain confidentiality of the PIN may result in suspension or deactivation of eDMR system privileges.

Obtaining a working PIN is a two-step process. An initial PIN will be delivered to the certifier via email upon department acceptance of the registration form. Before the first submittal, a certifier with an initial PIN must generate a working PIN when prompted by the system. Once a working PIN is assigned, the initial PIN will no longer be useable. This extra step enhances the confidentiality of the PIN.

To obtain a PIN, a person must be the permit holder or an officially authorized representative of the permit holder. The individuals who may serve as a permit holder's authorized representative are listed in 10 CSR 20-6.010.

4.3 ACCEPTANCE AS AN eDMR SYSTEM PERMIT HOLDER

After receiving and processing the registration form, the applicant will be notified by an email from edmradmin@dnr.mo.gov if they have been accepted as an eDMR system permit holder. If so, the login names and passwords will be delivered via email and all authorized PIN users will receive their initial PIN.

5.   Procedures for eDMR Submissions

5.1 OBTAIN REPORTING REQUIREMENTS

Each eDMR permit holder's reporting requirements are available on the department's eDMR system website. The requirements are available in three formats:

•   Online viewable and printable format with direct data entry.

•   XML format for download and integration of reporting requirements with a permit holder's IT systems.

•   Excel® format.

5.2 SUBMISSION STEPS

Original DMR Submission

Permit holders have two options for submitting data:

- Online Entry Forms: The designated preparer or certifier will select the appropriate date range for its discharge from the "Create a New Report" screen and select the "Online Entry" option. The designated preparer or certifier will then fill out the Web DMR form. The eDMR Users Guide and webpage-specific online help provide further submission instructions.

- XML File Upload: When uploading DMR results, the required data must be entered into a text file using the XML format. Each XML submission must include the reporting requirements followed by the reported data set. Each file must be given a unique submission ID to identify each submission. Each submission or file may contain all required DMRs for the reporting period and will be considered one file requiring only one submission number. Any subsequent transmission or resubmission will require a different submission number. The eDMR User's Guide and webpage-specific online help provide further submission instructions.

DMR Revisions

Should a revision be required to previously reported data, the permit holder must follow the proper resubmission procedure:

- Online Entry Forms: The certifier will need to browse for the original submission by going to the "Submittals/Revisions" screen, edit the data and resubmit the report.

- XML File Upload: The certifier must create a new text file in XML format. All data, not just the corrected numbers, must be included in the revised submittal. The XML format includes provisions to indicate the submission is a revision. It will indicate the submission ID of the previously submitted information. The revised file is sent in the same manner as an original submission, with its own unique submission ID. The eDMR system tracks each transaction by creating a chronology of submissions for each permit holder.

When making a revision, the system will ask for an explanation for the revision. The permit holder is encouraged to clearly state the reason, and for multi-page or multi-outfall DMRs should describe which pages or outfalls have revisions.

5.3 RECEIPT NOTIFICATION

Confirmation of the "Received" status will be provided through system after submission. The system will also email a receipt message to the certifier. After the submission has been processed, the permit holder may view the submission status at the eDMR system website. It is the permit holder's responsibility to verify receipt of the data submission.

5.4 CHECKING SUBMISSION STATUS

The eDMR system website includes a method for tracking the submissions from permit holders. The following information will be available:

STATUS	EXPLANATION
Received by eDMR System	The eDMR system server has received and successfully stored the eDMR submission. This does NOT indicate whether or not the submission meets the necessary reporting requirements.
Accepted by eDMR System	The eDMR system has successfully processed the information and submission and the eDMRs are available for viewing or printing.
Rejected by eDMR System	The eDMR system server did not accept the eDMR submission. A system message will be provided to explain the reason it could not be interpreted or accepted by the system. The report must be resubmitted.

6.   Trouble Shooting

6.1 eDMR SYSTEM OR INTERNET SYSTEM FAILURE

The department's eDMR system server has been designed with fail-over protections to provide reliable service on a continual basis. However, if the system is not responding, the permit holder should try again at a later time. There could be a temporary problem with the local Internet service provider (ISP), the Internet connection, heavy traffic or with the system server itself. A temporary inability to transmit data to the eDMR system server does NOT relieve the permit holder of the obligation to report DMR data to the department within the time frames required by the permit. In such a situation, contact the system coordinator for instructions. (see Section 1.3)

6.2 PERMIT HOLDER COMPUTER SYSTEM FAILURE

Should the ISP or connection, XML conversion utility, or other hardware or software not work, the permit holder's internal system support staff should be contacted. Such difficulties are not a valid reason for a failure to submit required data.

Routine "best practices" should be followed to assure eDMRs are submitted before the reporting deadline. If the permit holder is unable to submit the required DMRs through the system server, contact the system coordinator to determine options for reporting information to the department. (see Section 1.3)

6.3 SYSTEM ERROR MESSAGES

A current list including up-to-date information is available at the eDMR system website.

6.4 ADDITIONAL ASSISTANCE FOR TROUBLE SHOOTING

A feature to allow easy access to frequently asked questions is included at the eDMR system website. This page will be continuously updated to include current questions and information about the eDMR system. Technical support questions or comments can also be submitted to the system coordinator.

For difficulties with commercial XML translation utilities or other software problems, contact the vendor or supplier of the software.

7.   Changes in Registration

To manage and preserve the integrity of the reporting system, the department reserves the right to suspend or terminate the status of a user in the eDMR system. The permit holder has the right to request their account, or the associated user accounts be made inactive. However, a facility will be required to maintain use of the eDMR system as required by their permit or department action. Changes to user accounts require the resubmission of the registration form.

7.1 SUSPENSION OF eDMR SYSTEM STATUS

The department reserves the right to suspend or terminate the status of a permitee in the eDMR system. Reasons include, but are not limited to:

- Repeated failure to submit data in the correct format.

- Failure to meet recordkeeping requirements for reporting specific parameters.

- Submitting data files infected with a computer virus or otherwise threatening the integrity of the reporting system.

The permit holder will be notified by mail if privileges have been suspended, the reason, and what actions are required to be reinstated. During the period of suspension, the permit holder must continue to submit all required monitoring data through paper DMR submissions for the required reporting frequency.

7.2 CHANGING eDMR SYSTEM ACCOUNTS AND PINS

Should any viewer, preparer or certifier accounts require modifications or updates, the registration form must be completed and submitted to the department. In order to ensure the new certifier has been separately designated as an authorized representative for the permit holder, the registration form should specifically identify the individual as an authorized representative. In order to receive a PIN for electronic signature purposes, the authorized representative must complete all parts (A-D) of the registration form. The department will issue a new PIN for the current certifier upon written request and submittal of a revised registration form. If the security of the PIN number has been compromised, the certifier should immediately contact the eDMR system coordinator to request the PIN be deactivated and a new PIN will be issued after the department receives the written request.

The following events require the department be notified and the permit holder eDMR system registration or PIN authorization be changed:

- The certifier is no longer an authorized representative(s) for the permit holder.

- The permit holder has a reason to believe the PIN security has been compromised.

8   Other Available Resources

Further assistance or guidance is available from the eDMR system coordinator by contacting the department as indicated in Section 1.3.

8.1 XML TRANSMISSION PROTOCOL

A complete copy of the data format required by the department is available from EPA's national XML schema registry at http://www.exchangenetwork.net. The registry link at this website includes the complete eDMR XML schema.

8.2 XML CONVERSION UTILITIES

When submitting eDMR data to the department using the XML transmission protocol, permit holders may choose to use the Web based utility on the eDMR system website provided by the department, develop software in-house to generate compatible XML data files, or purchase commercial software from an outside source. It is the permit holder's responsibility to ensure the eDMR file complies with the XML protocol's data standards.

The choice of software and its ability to meet the XML protocol and the department requirements rests solely with the permit holder or its vendor. The department cannot officially review, approve or endorse any software acquired or developed to capture and transmit the DMR data.

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