# NetDMR

## Electronic Exchange of Discharge Monitoring Reports

EXCHANGE NETWORK SUCCESS STORY

Environmental Information Exchange Network

## Need for the Exchange Network

The Clean Water Act requires that facilities with National Pollution Discharge Elimination System (NPDES) permits regularly submit information about their wastewater discharges in the form of Discharge Monitoring Reports (DMRs). These reports summarize data on the quantity and quality of wastewater and allow regulators to track compliance.

State and other regulatory agencies receive monthly hard copy DMRs from regulated facilities. These reports can contain hundreds of values and run to hundreds of pages. States then have to manually enter data into their electronic database and send it to EPA along with other permitting, compliance, and enforcement information. Processing paper submissions and manually entering data is error-prone and time consuming. Many agencies face long backlogs and can't take full advantage of the information in the DMRs.

## The Exchange Network Solution

Building on earlier work to develop tools for the electronic submission and exchange of DMR data, a team of States developed NetDMR. It is a web-based, open-source application that allows facilities to securely submit data directly to EPA's discharge permit data system (ICIS-NPDES). NetDMR allows agencies to access the reported data easily and automatically.

With NetDMR, agencies can provide their reporting facilities with a web interface to access and view scheduled DMRs, give them the ability to enter and quality assure DMR data, and allow them to sign and submit DMRs electronically. The system also automatically provides facilities with customized information on their permit requirements—pulled from EPA's Integrated Compliance Information System (ICIS).

NetDMR can also be adapted to pull monitoring requirements from a State's own permitting database and to submit data directly to State and other regulatory agencies.

By 2012, the Exchange Network seeks to have nearly all NPDES permittees that are regulated by a NetDMR State or EPA reporting through NetDMR.

***"The DMR data flow has great potential for a strong return on investment from implementing Exchange Network technologies. Because of the sheer volume of the data being sent from facilities to the state and then on to the U.S. EPA, there is considerable room to improve the business process (a slight cost savings will be magnified due to the large volume of data)."***

*—Exchange Network Return on Investment and Business Process Analysis*


### SUMMARY

**Need**

- Electronic reporting alternative to time-consuming and error-prone manual data entry
- Compliance with federal electronic reporting requirements

**Solution**

- NetDMR system to support electronic data reporting from facilities and exchange of data between States, tribes, and EPA
- Well-documented solution with robust installation instructions to support easy use by partners

**Benefits**

- Saves time and money
- Easy to implement
- Uses existing Exchange Network technology
- Complies with federal electronic reporting requirements
- Improves data quality
- Improves data access

### *State and tribal partners can implement NetDMR in different ways*

Partners can implement NetDMR in the way that works best with their business processes and systems. Options are:

- Partners use a version of NetDMR hosted and maintained by EPA; OR
- Partners host NetDMR locally to receive electronic reports directly from facilities. The local NetDMR implementation retrieves permit data from ICIS using the Exchange Network services provided. Then, partners exchange data with EPA using the ICIS-NPDES data flow; OR
- Partners modify NetDMR to work with their existing systems and obtain permit data from a local database. (Some or all of the permits affected may not be in the ICIS database due to local statute or business process.) Reports are received and stored locally, and the permitting authority transmits DMR data relevant to ICIS-NPDES to EPA through the DMR data flow.

# The Benefits

NetDMR offers a number of benefits:

- *It saves time and money.* Electronic DMR reporting has the highest documented return on investment of any other EPA data automation project—implementation by all or most NPDES facilities could save industry, states, and EPA around $100 million per year.
- *It is easy to implement*. NetDMR is an open-standards system that is well-documented and comes with robust implementation instructions.
- *It uses existing Exchange Network technology*. Implementing NetDMR doesn't require new software development because it uses Exchange Network technology that has already been deployed—both to retrieve permit information and to return DMR data.
- *It complies with federal requirements*. NetDMR is CROMERR-approved, which means that it complies with EPA requirements for electronic reporting systems.
- *It improves data quality*. By moving data directly from facilities to EPA, NetDMR eliminates the possibility of data entry errors by State and other permitting authorities.
- *It improves data access*. NetDMR provides regulatory staff with electronic access to all DMR data, including data for smaller facilities whose monitoring data was often never entered into electronic databases under older paper-based reporting.

## LEARN MORE

**To learn more about NetDMR, please see further information at:**

**www.exchangenetwork.net/exchanges/water/netdmr.htm**

**www.epa.gov/netdmr/**

**Or, contact:**

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## The Evolution of Net DMR

Starting in 2002, states began developing tools for exchanging DMR information electronically. With funding from the Exchange Network Grant Program, a team of nine States developed eDMR, which allowed facilities to submit data electronically to State permitting authorities.

Although pilot programs implemented in a few States succeeded as "proofs of concept," eDMR required each State to build its own customized system, and it was not widely implemented. To extend the functionality of eDMR and make it easy for many States to use, a consortium of States—also with funding from the Exchange Network grant program—developed NetDMR.