



Instructions for Filing Electronic Discharge Monitoring Reports (DMRs)

This document is intended to provide guidance to wastewater operators for proper data entry on the monthly reports. Following these instructions will help minimize errors and violations.

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System Requirements

- A personal computer having Windows 95 or higher operating system
- Microsoft Excel 97 or higher
- Internet access for electronic submission

Procedure

1. Open the file from your email attachment using Microsoft Excel. These reports may be referred to as Discharge Monitoring Reports (DMRs) or Monthly Operation Reports (MORs). The two terms are synonymous. The report form is an Excel 2010 workbook (.xlsx) consisting of several worksheets, which are represented by the tabs at the bottom of the screen. If you have difficulty opening the file, please contact your local field office.
2. Ensure that the program is maximized so that the tabs for each of the worksheets are visible in the lower left portion of the screen. Click on the tab for the worksheet named "Cover".
3. The facility name and NPDES number displayed on the cover sheet must be that of your facility. If not, contact your local field office immediately. Each DMR form generated by the database contains unique identifiers. You cannot submit your report on a form intended for another facility.
4. The cover page indicates the date range for which the DMR is valid. The DMR should not be used prior to the start date on the cover page, but may continue to be used beyond the end date if a new permit has not yet been issued for your facility. **If the permit is amended for any reason, a new DMR will need to be generated.**
5. To save a blank copy for use as a template, click on "File" in the menu bar at the top of the screen. Select "Save As" from the menu. Use the "Save In" box to select the location on your computer where you would like to save the file (such as the desktop). In the "Save as type" box select "Excel Workbook (*.xlsx)". Click the "Save" button.
6. Enter the requested information on the Cover sheet. At a minimum, include the name of the responsible operator and the phone number at which s/he can be reached if there are any questions. Limit the operator name to 50 characters to prevent an error in the upload process. Select the appropriate month and year from the choices listed

in the drop-down menus. Do **NOT** type the date in these boxes. The date on the cover page must correspond to the month during which the data was collected, rather than the month in which it is submitted. For example, the data collected for January is submitted in early February, but the cover page for this report should have January entered for the month. Comments that exceed 255 characters will not be uploaded to the database. Include lengthy comments in the body of the email or attach a separate document to the email.

The screenshot shows an Excel spreadsheet with the following content:

- Header:** IOWA DEPARTMENT OF NATURAL RESOURCES
NPDES REPORTING SYSTEM - DISCHARGE MONITORING REPORT
FACILITY INFORMATION
- Validity:** This form is valid 3/1/2020 to 2/28/2025
- Facility Name:** LONE ROCK, CITY OF STP
- Permit #:** 5547001
- Month/Year:** 1 | 2021
- Outfall #:** 001 - DISCHARGE FROM A TWO CELL CONTROLLED DISCHARGE LAGOON
- Operator Name:** John Smith
- Certification #:** 1234
- Phone #:** 123-456-7890
- Lab Cert. #:** 123
- Comments:** (Large text area with a note: "Include Comments longer than 1000 characters in email")
- Signature:** (Empty line for signature)
- Disclaimer:** I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.
- Navigation:** Cover | 001-INFLUENT | 001-EFFLUENT | 001-OPERATIONAL

- Click on the worksheet named "001 – INFLUENT". This worksheet is where you will enter data for all the influent (raw waste) monitoring listed for outfall 001 in your NPDES permit. The worksheet named "001 – EFFLUENT" is where you will enter data for all the effluent (discharge) monitoring listed for outfall 001. The worksheet named "001 – OPERATIONAL" is where you will enter data for all the operational monitoring. Please note that much of the operational monitoring is now being removed from permits upon renewal. The DMR will only include columns for the required monitoring specified by your permit. If you have additional outfalls, there will be worksheets for entry of the required monitoring data for those outfalls. If you have industrial contributors, there will be worksheets for the entry of data for each of those.
 - These worksheets are in typical spreadsheet format, with horizontal rows and vertical columns.
 - Some rows/columns are hidden as they contain formulas and other programming information to allow for proper calculations. These hidden cells are locked and cannot be accessed without a password. The built-in formulas are also password protected.
 - Rows 1 through 8 are the pre-filled form header rows.
 - Rows 9 through 14 contain the column headers that describe the parameter, monitoring location, required sampling frequency, and units of the data to be entered.
 - Row 15 contains the drop-down menus where the No Data Indicators (NODIs) are entered whenever there is no other data to report in the column. This line will initially show up as red, but will change to white once data has been entered in the column. **The NODIs are not to be used when data is entered in rows 19 through 49 of that column.** See pages 4-5 for more info on the correct use of the NODIs.
 - Row 16 contains a space where you may enter the limit of quantitation (LOQ) for a specified parameter (optional). The LOQ may be specified in your NPDES permit for individual parameters which require more sensitive laboratory methods for detection at lower levels. Entering the LOQ will show that proper laboratory methods are being utilized to ensure that the minimum LOQ is being met.
 - Your monitoring data will be entered in rows 19 through 49.

- The total, monthly and weekly averages (or geometric mean if applicable), and daily maximum and minimums will automatically be calculated in rows 51 through 55.
 - Column A contains the row headers, including the days of the month (1 through 31).
 - Data **must** be entered in the appropriate row and column to indicate the date on which the measurement was performed or the sample was collected. For 24-hour composite samples, the collection date is the day on which you pulled the last portion of the sample.
 - Data **must** be in the units indicated in the column header (e.g. all flow values must be reported in million gallons per day (MGD)).
 - The DMR contains all of the monitoring required by your NPDES permit. The reports must be filled out in their entirety to avoid possible monitoring violations. If you do not have data to report for a particular parameter, see the “No Data Indicators” section of this document for further instructions.
8. Once all the data is entered, click on “File” in the menu bar at the top of the screen. Select “Save As” from the menu. Use the “Save In” box to select the location on your computer where you would like to save the file. In the “File Name” box type your file name. Include the month and year of the report in the file name. In the “Save as type” box select “Excel Workbook (*.xlsx)”. Click on the “Save” button. The Excel workbook must be submitted, NOT a .pdf version of the DMR.
 9. When data for all required monitoring has been entered and saved, attach a copy of the report file to an e-mail message and send it to the appropriate field office. Rule 567 IAC 63.7(455B) requires that records of operation be submitted to the DNR within 15 days of the end of the monitoring period. **If some sample results are not received before the due date of the DMR, leave the column blank and make a note in the “Comments” box on the cover sheet. Submit an amended report as soon as the results are received.**
 10. Upon receipt of the DMR, you will get an automatic response email indicating that your email has been received. If you do not receive a response, check your spam folder or contact the field office. Retain these emails as proof of submission.

| Field Office | Email Address for DMR Submission | Office Phone Number |
|-----------------------------|--|---------------------|
| Field Office 1 – Manchester | FO1.MOR@dnr.iowa.gov | 563-927-2640 |
| Field Office 2 – Mason City | FO2.MOR@dnr.iowa.gov | 641-424-4073 |
| Field Office 3 – Spencer | FO3.MOR@dnr.iowa.gov | 712-262-4177 |
| Field Office 4 – Atlantic | FO4.MOR@dnr.iowa.gov | 712-243-1934 |
| Field Office 5 – Des Moines | FO5.MOR@dnr.iowa.gov | 515-725-0268 |
| Field Office 6 – Washington | FO6.MOR@dnr.iowa.gov | 319-653-2135 |

Signatures

According to Rule 567 IAC 63.11, all records of operation shall include a certification statement which attests that all information contained therein is representative and accurate and shall contain the signature of a duly authorized representative. This certification statement and signature box are on the cover page of each DMR. For electronic submissions of records of operation, there is no requirement to include an electronic signature; however, **a signed/dated “official” paper copy of the DMR must be maintained at the facility for a minimum of three years.** All DMRs must be submitted in Excel format – do NOT change the format of the file in order to include a signature.

Calculations

All routine calculations (lbs/day, 30-day averages, 7-day averages, totals, maximums, minimums) are performed by formulas embedded in the form. Do not attempt to alter the formulas or the results of the calculations. These cells are protected and secured by passwords. An error message will pop up if you attempt to enter data in these cells.

Microsoft Excel

✕



The cell or chart you're trying to change is on a protected sheet. To make a change, unprotect the sheet. You might be requested to enter a password.

OK

Avoid cutting and pasting data from one area of the form to another as this may result in a reference (#REF!) error. These errors occur in the hidden cells of the form and must be corrected by DNR staff before uploading the DMR or data omissions may occur.

If your DMR has mass (lbs/day) calculations, the flow (MGD) and the concentration (mg/L) must both be reported on the same day.

Missing Data

If some daily readings are missed, **do NOT enter "0" on those days**. Instead, simply leave those cells blank. Entering a 0 will result in improperly calculated monthly averages. If readings are taken, but there is nothing to report (e.g. for an industrial contributor which had no discharge on a given day), then zeros may be entered on those days.

Non-Existent Days

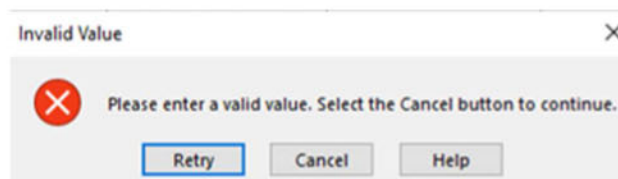
For months which have fewer than 31 days, do **NOT** enter "0" or any other data in the extra rows. Entering a 0 will result in improperly calculated monthly averages.

Numeric Data

Very small values may be automatically reformatted by the form. For example, 0.0000000001 will be displayed as "1E-10" on the DMR. Very large values may cause failure of the DMR to upload. The majority of these values are the result of calculations based on erroneously entered data, such as flow not reported in MGD.

Non-Numeric Data

The cells are formatted such that they do not allow you to enter any non-numeric data. If you attempt to enter text or anything other than a number, an error message will pop up prompting you to enter a valid value.



Zero Values (0)

Zero values cannot be transmitted to the EPA database. Therefore, avoid entering zeros on your DMR whenever possible. All analytical tests have a minimum detection level. If your results are below this level, they should be reported as less than (<) values. If you do not receive wastewater from an industrial contributor on a given day, a zero may be entered in the flow column on this day. If all values for the month were 0, leave the column blank and choose the appropriate NODI from the drop-down menu at the top of that column.

Less Than Values (<)

Less than values must be entered on the report form using the less than symbol (<) immediately (no space) before the number (e.g. <5). Less than values are assigned a numerical value of zero for calculation purposes. Mass calculations utilizing less than values will display a < symbol as the result. If all the data in a given column are less than values, row 15 may remain red. That is acceptable; data entry in the column is complete.

Greater Than Values (>)

On occasion, the laboratory may report a result as a greater than (>) value. The form will not allow you to enter the greater than symbol when entering these values. Therefore, report only the numeric value and place a note in the comments box on the cover page that indicates that the value in question was actually reported as greater than by the laboratory. If this happens, contact your laboratory and work with them to ensure that proper dilutions are set up for the testing so that accurate values are reported.

No Data Indicators (NODIs)

No Data Indicators are intended to explain why required monitoring was not performed or no data is reported. **If you enter even one piece of monitoring data in any given column, do NOT enter a NODI at the top of that column.** Once entered, you may remove a NODI from the drop-down menu by clicking on the cell and then hitting the delete key on your keyboard.

The drop-down menu located in row 15 at the top of each column includes the fourteen choices listed below. The drop-down menu is not visible until you click on one of the cells in this row. This row is initially highlighted in red to indicate that data is missing from the column. Once the monitoring data OR a NODI is entered, the highlighted color will change from red back to white (or yellow).

| CBOD5 | |
|---------------------|----|
| MG/L | |
| TWICE PER DRAWDOWN | TW |
| Permit Duration | |
| - | |
| 01 - LAGOON STOR | ^ |
| 02 - LOW FLOW | |
| 03 - OPR SHUTDOWN | |
| 04 - OUTFALL FROZ | |
| 05 - NO DETECTION | |
| 06 - NOT REQ / MP | |
| 07 - NOT REPORTED | |
| 08 - BROKEN EQUIP | ∨ |
| 09 - LAB ERROR | |
| 10 - UNDER CONSTR | |
| 11 - NO OPERATOR | |
| 12 - CERTIFIED | |
| 13 - NO DISCHARGE | |
| 14 - FLOOD DISASTER | ∨ |

- 1- LAGOON STORAGE – There is no discharge and wastewater is being stored in the lagoon. All lagoon facilities should use this indicator rather than option 13. Do NOT choose this option for influent sampling, pre-discharge sampling, cell depth, or annual total nitrogen/nitrate/TKN columns.
- 2- LOW FLOW – The flow is too small for proper measurements or sampling.
- 3- OPR SHUTDOWN – The operation generating the wastewater (e.g. an industrial contributor) is shut down or a treatment unit (e.g. aeration basin) is out of service.
- 4- OUTFALL FROZ – The outfall pipe is frozen shut, preventing a discharge. This option shall not be used for cell depth measurements at lagoon facilities during the winter. When frozen or snow-covered, lagoon facilities must estimate cell depth to the nearest 6" and report it at the specified frequency in the permit.
- 5- NO DETECTION – The measurement or analysis result is below the minimum detection or quantification limit of the procedure. These results are often reported as less than (<) values.
- 6- NOT REQ/MP – The monitoring was not required to be performed during that particular monitoring period. For example, if monitoring is required once every 3 months, enter "06-NOT REQ/MP" for the two months when the monitoring is not performed. Use this option for annual total nitrogen/nitrate/TKN discharged, which are only required to be reported on the February DMR each year. Use this option for annual total toxicity (typically required once every 12 months) and for pre-discharge sampling data.
- 7- NOT REPORTED – Required monitoring was not completed. Please note: this is a monitoring violation.
- 8- BROKEN EQUIP – Broken equipment prevented performance of the required monitoring. It is expected that the broken equipment be repaired or replaced as soon as possible and the required monitoring resumed in a timely manner.
- 9- LAB ERROR – Laboratory error or accident resulting in no data or unreliable data. Whenever possible, try to obtain replacement samples within the month. If you utilize this option, your laboratory must provide an explanation of the error, and this documentation should be maintained along with your records.
- 10- UNDER CONSTR – The treatment facility or treatment units are under construction preventing a discharge or the performance of the required monitoring.
- 11- NO OPERATOR – There is no operator at the facility to perform the required monitoring. Please note: this is a monitoring violation.

- 12- CERTIFIED – In lieu of actual laboratory analysis for Total Toxic Organics (TTO), compliance may be certified by an industrial contributor by signing a certification statement. This indicator does NOT mean that the samples were analyzed by a certified laboratory.
- 13- NO DISCHARGE – The facility is in operation, but there is no discharge of wastewater. Do NOT use this option for lagoon facilities (use #1 above).
- 14- FLOOD DISASTER – The required monitoring could not be collected due to flood conditions. You may also use this option if the required monitoring could not be collected due to the COVID-19 pandemic.

If monitoring was missed for a portion of the month only, do NOT use the NODI if there is any data included in the column. To report these issues, place a note in the comments box explaining the lack of data.

Bypass Reporting

Older versions of the DMR had a column for reporting bypasses; however, this column has been removed. Current rules require all bypasses (or other non-compliance) to be verbally reported to the DNR within 24 hours of occurrence or discovery. A written report must be submitted within 5 days of the bypass rather than with the next DMR. A fillable .pdf of the written bypass report form is available by contacting your local field office to request a copy, or by downloading it from the [NPDES Operator Information](#) page of the DNR website. The written bypass reports may be submitted to the same email address as your DMRs.

Pre-Drawdown Sample Results

Controlled discharge lagoons are required to take pre-drawdown samples at least two weeks prior to an anticipated discharge. **Report this data in the available columns on the operational page; do NOT enter it on the effluent page.** Note: If your DMR contains lbs/day columns for pre-discharge monitoring, contact your local field office to have these columns removed. If your pre-discharge sampling results are within your permit limits, you may proceed with your discharge and you do not need to verbally report the results to the field office. If the pre-discharge sampling results exceed any of the 30-day average effluent limits, you must contact the local Field Office for guidance before beginning your discharge.

E. coli Monitoring

If your permit requires E. coli monitoring, your DMR will contain a formula for calculating the geometric mean of all sampling results in place of the monthly average. **Be aware that the geometric mean calculation cannot be performed with any zeros or less than values.** If all of your E. coli results are reported as less than values, enter “05-No Detection” in the drop-down menu at the top of this column. If some, but not all, of the E. coli results are reported as less than values, enter the numeric portion of the results only (e.g. if your result is <2, enter 2) and place a note in the comments box on the cover page to indicate which results were actually less than values.

As of 2021, changes have been made to the form which allow entry of < values in the E. coli column. If your DMR form was generated before 2021, you may contact your field office for a new form. Otherwise, do not enter the < symbol as indicated above.

Controlled discharge lagoons that have E. coli limits will have two columns for reporting E. coli sampling results. The first column, labeled “Geo Mean-WSL” for the frequency (line 12), is where you will report the sampling results on the date the samples were taken. The second column, labeled “Discharge Period Geo Mean,” is where you will report the geometric mean of all samples taken during the discharge period, which may include results from more than one month. This result should be entered on the last day of the discharge.

| 8 | Mon. Point | FINAL EFFLUENT | EFFLUENT AFTER DISINFECTION | EFFLUENT AFTER DISINFECTION - GEO MEAN |
|----|--------------|-----------------------|-----------------------------|--|
| 9 | Parameter | FLOW | E. COLI | E. COLI |
| 10 | Units | MGD | #/100 ML | #/100 ML |
| 11 | Frequency | DAILY DURING DRAWDOWN | GEO. MEAN-WSL | DISCHARGE PERIOD GEO MEAN |
| 12 | Start Date | | | |
| 13 | End Date | Permit Duration | Permit Duration | Permit Duration |
| 14 | No Discharge | | | |
| 15 | LOG | | | |
| 18 | Day: 1 | | | |
| 19 | 2 | | | |
| 20 | 3 | | | |
| 21 | 4 | | | |
| 22 | 5 | | | |
| 23 | 6 | | | |
| 24 | 7 | | 0.15 | |
| 25 | 8 | | 0.3 | |
| 26 | 9 | | 0.3 | 150 |
| 27 | 10 | | 0.3 | |
| 28 | 11 | | 0.3 | |
| 29 | 12 | | 0.3 | |
| 30 | 13 | | 0.3 | |
| 31 | 14 | | 0.3 | |
| 32 | 15 | | 0.3 | 90 |
| 33 | 16 | | 0.3 | |
| 34 | 17 | | 0.3 | |
| 35 | 18 | | 0.3 | |
| 36 | 19 | | 0.3 | |
| 37 | 20 | | 0.3 | |
| 38 | 21 | | 0.3 | |
| 39 | 22 | | 0.3 | 210 |
| 40 | 23 | | 0.3 | |
| 41 | 24 | | 0.15 | 141.53 |
| 42 | 25 | | | |
| 43 | 26 | | | |
| 44 | 27 | | | |
| 45 | 28 | | | |
| 46 | 29 | | | |
| 47 | 30 | | | |
| 48 | 31 | | | |
| 50 | Total | 5.1 | 450 | 141.53 |
| 51 | Monthly Avg. | 0.283333333 | 141.5308194 | 141.53 |
| 52 | Daily Max. | 0.3 | 210 | 141.53 |
| 53 | Daily Min. | 0.15 | 90 | 141.53 |
| 54 | Max. 7/Avg. | 0.3 | 210 | 141.53 |

Effluent Toxicity Test Results

Enter Ceriodaphnia Acute Toxicity test results in the column labeled "TOX CER". Enter Pimephales Acute Toxicity results in the column labeled "TOX PIM". Enter a "1" for passing results or a "2" for failing results, and include copies of the test results with your DMR. Toxicity tests are typically required once every 12 months. If you did not take a sample for Acute Toxicity during the month and it has been less than 12 months since the last test was performed, enter the "06-NOT REQ/MP" NODI in both columns. If it has been more than 12 months since the last toxicity tests were performed and you did not take a sample during the month enter the "07-NOT REPORTED" NODI in both columns.

Total Toxic Organics (TTO)

Industrial users that are required to monitor for TTO may be allowed to submit a signed certification statement to the City in lieu of actual monitoring. The City must maintain copies of the signed certification statements in their records and choose "12-CERTIFIED" for this column on the DMR.

Visual Observations

Your NPDES permit may require visual observations of your river diffuser or storm water outfalls. To indicate that an observation was made, enter "1" on the DMR on the date that the observation was completed. Select the NODI "06-NOT REQ/MP" during the months that the monitoring is not required. Visual observations must be documented in a log book, which shall be retained on site and made available to the DNR upon request.

Diffuser Performance

Facilities with river diffusers are required to conduct monthly visual observations, annual diffuser performance evaluations, and a bathymetric analysis of the receiving stream once per permit cycle. To indicate that the diffuser performance validation ("Diff Val") or bathymetric analysis ("Bathy") was completed, enter "1" on the DMR on the date that the analysis was conducted. Select the NODI "06-NOT REQ/MP" during the months that the monitoring is not required.

Landfill Leachate

If your facility accepts leachate from a landfill, you will indicate completion of the annual leachate monitoring by entering a "1" in the LEACHATE column on the DMR on the day that the leachate samples are collected. Select the NODI "06-NOT REQ/MP" during the months that the monitoring is not required. Results of annual leachate monitoring must be submitted to the permit writer and the local field office.

Special Monitoring

See the "Special Monitoring Requirements" section of your NPDES permit, which may contain special instructions on calculations and reporting for E. coli, annual total nitrogen/nitrate/TKN discharged, etc. Report annual totals on day 1 of the specified DMR (usually February).

Amended DMRs

If you discover an error in a DMR that was already submitted or you need to resubmit a DMR to include sampling results that were not previously available, you may correct and resubmit the DMR. Place a comment explaining the reason for the resubmission on the cover page of the DMR and include a note in the email.