Self Monitoring Reporting Forms (SMRFs) for Aquifer Protection Permittees

**What is a SMRF?**
The Self Monitoring Reporting Form (SMRF) is designed for facilities that have an Aquifer Protection Permit. The SMRF is developed based on requirements in the permit to ensure that monitoring is conducted properly. The permittee is required to monitor and report results using the provided SMRF.

**Why do I receive a new copy of my SMRF?**
Each new LTF receives a new SMRF electronically to download, fill out and submit using ADEQ’s online portal, myDEQ, per the permit requirements. Not every new LTF will have a SMRF available right away because new permits typically take effect the following quarter. SMRFs can be provided upon request in PDF or paper format.

**Can I create my own SMRF?**
No, only ADEQ’s provided SMRFs are accepted by our database.

**Can I change the order of my SMRF’s parameters?**
No, the organization of parameters must remain in the order that exists on your SMRF.

**How is the SMRF organized?**
The SMRF is organized first by sampling frequency, then reporting frequency and monitoring point.

**Why do I need to provide a telephone contact to submit my SMRF?**
Providing a contact name and telephone number will help us expedite resolving any issues found during data entry. This information is entered on the SMRF in the upper left field.

**If I forgot to sample during a quarter, can I make up the sample in the next quarter?**
No, the quarter is defined in your permit and samples must be reported within that period. We recommend sampling at the beginning of each quarter.

**Why does the SMRF need to be signed by a Principal Executive officer or Authorized agent to be accepted by ADEQ?**
It is required by law that the SMRF be signed by a principal executive officer or authorized agent. If not, then ADEQ cannot legally accept the submission.

**How do I report results if the lab sends them in micrograms per liter (ug/l), but my SMRF requires milligrams per liter (mg/l)?**
Your results must be converted to the correct unit of measurement required in your permit and reported on your SMRF. For example: 1 ug/l = .001 mg/l.

**Should I leave blanks on my SMRF if I do not have results?**
You should never leave blanks on the SMRFs where results are required. You should explain why a result is not provided for each parameter by using SMRF codes and comments.
How do I know when I should report YES or NO on my SMRF? The only results that should be reported as "Yes" or "No" are those being reported for the 4 of 7 Fecal or 4 of 7 E. Coli parameter calculations. "Yes" should be reported when the standard is met and "No" should be reported when the standard is not met.

How do I report results pending from my laboratory? You should submit your SMRF on time to avoid a non-submittal violation. Provide a comment on the SMRF next to the parameter with pending results to notify our staff about why the result is not being submitted.

How do I correct an error on a previous SMRF submission? In myDEQ, re-download that specific reporting frequency SMRF spreadsheet, enter the correct information into it, then re-upload it in myDEQ. After certification, we will make the correction in our records.

If I cannot use NODI codes on my SMRF, how do I report no-data issues? NODI codes are used for discharge monitoring reports by facilities permitted under the Arizona Pollutant Discharge Elimination System program. SMRFs, on the other hand, are reported by facilities permitted under our Aquifer Protection Program, and require entering a reason in the Result field why a sample is not being provided.

Examples of commonly reported reasons:
- No Discharge
- Dry Well
- Phase Monitoring
- Facility Not Constructed
- Holiday Conditional Monitoring
- Weekend
- No Sample
- No Flow

A list of Aquifer Protection Program SMRF codes are included on the second tab of the SMRF spreadsheet.

What are the monitoring period begin/end dates for an annual SMRF, and when is it due? The begin date is the first day of the monitoring annual period, and the end date is the last day of that same annual period. There is one annual period per year:

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Begin Date</th>
<th>End Date</th>
<th>SMRF Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan. 1</td>
<td>Dec. 31</td>
<td>Jan. 30</td>
</tr>
</tbody>
</table>

How do I calculate the geometric mean? The 5-month rolling geometric mean (GMS) is determined by multiplying the five (5) most recent monthly sample values (m1, m2, etc.) together, then taking the fifth root of the product:

Example:
- If the required month is December:
  - August = 12.0 mg/l
  - September = 8.0 mg/l
  - October = 5.0 mg/l
  - November = 10.0 mg/l
  - December = 8.0 mg/l

\[
GMS = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}
\]

8.2 mg/l is the geometric mean for December.

When one of the five monthly sample values is less than the reporting limit, use a value 1 significant digit less than the reporting limit in the calculation. For example, a sample value less than 2 would become "1.9." Do not use zero as one of the monthly sample values.

If you do not have five values for the calculation of the geometric mean, the geometric mean cannot be calculated and a SMRF code must be used until the facility has enough data to calculate it.

How do I calculate the seven sample median? The seven sample median is determined by collecting the seven most recent
weekly or monthly samples and then arranging them in ascending or descending order and selecting the middle or “median” as the result.

Example:
week/month 1 = 5
week/month 2 = 8
week/month 3 = 10
week/month 4 = 9
week/month 5 = 1
week/month 6 = 0
week/month 7 = 4
From 0, 1, 4, 5, 8, 9 and 10, the seven sample median is 5.

How do I determine my daily sampling for fecal coliform or E. Coli?
When daily sampling is required for fecal coliform or E. coli in the permit “daily” is defined as every day in which a sample can practically be obtained and delivered in sufficient time for proper analysis, provided that no less than four (4) samples in each seven-day period are obtained and analyzed.

How do I calculate the 4 out of 7 sampling for discharge monitoring (BADCT)?
When daily sampling is required for fecal coliform or E.Coli, if at least four (4) out of the last seven (7) daily samples in a week are below the discharge limit in the permit, report “YES” in the appropriate spaces that correspond to that week on the SMRF (indicating that the standard has been met). Note: The YES/NO calculation must start on the last day of the quarter and move backwards.

How do I calculate the 4 of 7 sampling for reclaimed water monitoring?
The four (4) out of seven (7) rule is applied daily. In order to comply with the Rule four (4) out of every seven (7) daily samples must meet the discharge limit in the permit. For example, in order to report for Sunday, you would start on Sunday and count 6 days back to determine if there are four (4) out of the last seven (7) daily samples below the discharge limit in the permit. If this is the case, then you report “YES” in the corresponding space for that Sunday. Then you would move to Monday and count back 6 days to see if four (4) out of the seven (7) days are below the discharge limit and write down a “YES” for Monday if the standard was met. You continue on and do this for each day in that month for the four (4) out of seven (7) sampling requirements. If any time during the month 4 out of the last 7 samples for a day are not below the discharge limit, report “NO” for that day.

How do I calculate my monthly average flow?
Add up Total Flow for each day and then divide by the number of days in that month.

Example: May total is 1,465,000 gallons. 1,465,000 gpd/31 days = 47,258 gpd for monthly average.

The date reported for these parameters can be either the first or last day of each month.

How do I convert my results from gallons per day to million gallons per day?
Divide the number of gallons per day by 1,000,000.

Example: 47,258 gpd / 1,000,000 = .047 mgd (rounded).

How do I report my freeboard results on my SMRF?
Freeboard results are not required on most SMRFs, but they need to be recorded in the on-site logbook. If your facility reports freeboard results on the SMRF, use a “T” or “F” in the result field. A “T” in the result field represents a true violation of your permit limit. An “F” in the result field represents everything is fine, or freeboard results are within the limit of your permit.

How do I stay within my reporting frequency when I have weekly sampling for freeboard?
Visual inspections are not required on most SMRFs, but need to be recorded in the on-site log book. Weekly sampling/visual inspection refers to results that must be sampled on a weekly basis in a quarter. This means that 13 results are required each quarter for the weekly sampling to be completed correctly. Start on the first day of the reporting quarter and count out 7 days to get 13 separate results. Sampling/visual inspections can be performed anytime during the 7 day period.

The 1st quarter should be counted out and reported as follows:
January - March (1st Quarter)

<table>
<thead>
<tr>
<th>Wk 1</th>
<th>Wk 2</th>
<th>Wk 3</th>
<th>Wk 4</th>
<th>Wk 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wk 6</td>
<td>Wk 7</td>
<td>Wk 8</td>
<td>Wk 9</td>
<td></td>
</tr>
<tr>
<td>Wk 10</td>
<td>Wk 11</td>
<td>Wk 12</td>
<td>Wk 13*</td>
<td></td>
</tr>
</tbody>
</table>

* The last week may or may not have 7 days in it but a weekly result is still required.

April 1 starts the 2nd quarter and the new weekly reporting. We recommend sampling/inspecting on the first day of the reporting period in order to achieve 13 results for each quarter.

**My results are below the detection limit, what should I do?**

Some parameters in your permit require a statistical value, therefore "ND" and "0" are not accepted. Instead, enter the result as less than (<) the method detection limit.

For parameters with non-detect limits, you may enter a 0 for non-detects. Check the footnotes in the monitoring tables in your permit for guidance on how non-detects are defined.

**What if my lab detection limit is greater than my AL/DL/AQL?**

If the lab result is considered non-detect but that result is above the permit limit, talk with your lab to see if the method detection limit can be lowered. The reporting limit (RL) provided by the lab can be used in place of the ND result. In the comment section of that line on the SMRF, document the original result the lab provided.

**It won’t let me submit my SMRF without matching contingency reports. What if I don’t have contingency reports to match?**

myDEQ gives two options in the SMRF error screen:
1) Re-upload
2) Return to mySTUFF

To submit your SMRF without matching contingency reports: click Return to mySTUFF, navigate to the quarterly SMRF, and then it should say “SMRF uploaded ready to submit.”

Remember, it is still required by your permit to submit any missing contingency reports for any AL/DL/AQL exceedances.

**Can I use the verification samples as the original results for AQL exceedances?**

If there is an AQL exceedance, most can be verified. If this verification sample was taken within five days of you becoming aware and is below the permit limit, the original exceedance is null and void. The compliant verification sample can now be used as that result on the SMRF. For more information read section 2.6.4 and/or 2.6.2.3.2 of your Aquifer Protection Permit.

**Things to remember:**
- Update facility operator information
- If the Responsible Corporate Officer (RCO) for your myDEQ account changes, use this guidance document to update the RCO: azdeq.gov/emergencyRCOrequest
- Confirm all data entries have the correct date, unit, and/or SMRF code.
- Review permit for correct result type for P/A, non-compliant/compliant parameters ("<" vs. no ") before submitting.
- All SMRFs and contingency reports must be certified and submitted by the RCO (or delegated officer) on the myDEQ account, not the data entry user. Learn more about user roles and responsibilities in myDEQ at azdeq.gov/mydeq/UserRoles.
- Late and/or missing SMRF submissions and contingency reports will be escalated to further enforcement by our inspections and compliance team.

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**For more information:**

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Learn more about user roles and responsibilities in myDEQ at azdeq.gov/mydeq/UserRoles.