myDEQ Contingency Reporting

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GWICU

ADEQ
Arizona Department
of Environmental Quality

My Job in Groundwater ICU

- Compliance Assistance Coordinator for the Inspections and Compliance Unit
- Oversee all contingency report submissions via mail, email, and myDEQ
- Provide compliance assistance to customers
- Review data/Self Monitoring Reporting Forms while doing quality assurance
- Work on in-house projects to help end users

Benefits of Reporting Online

APP Contingency Reporting Now Available Online in myDEQ

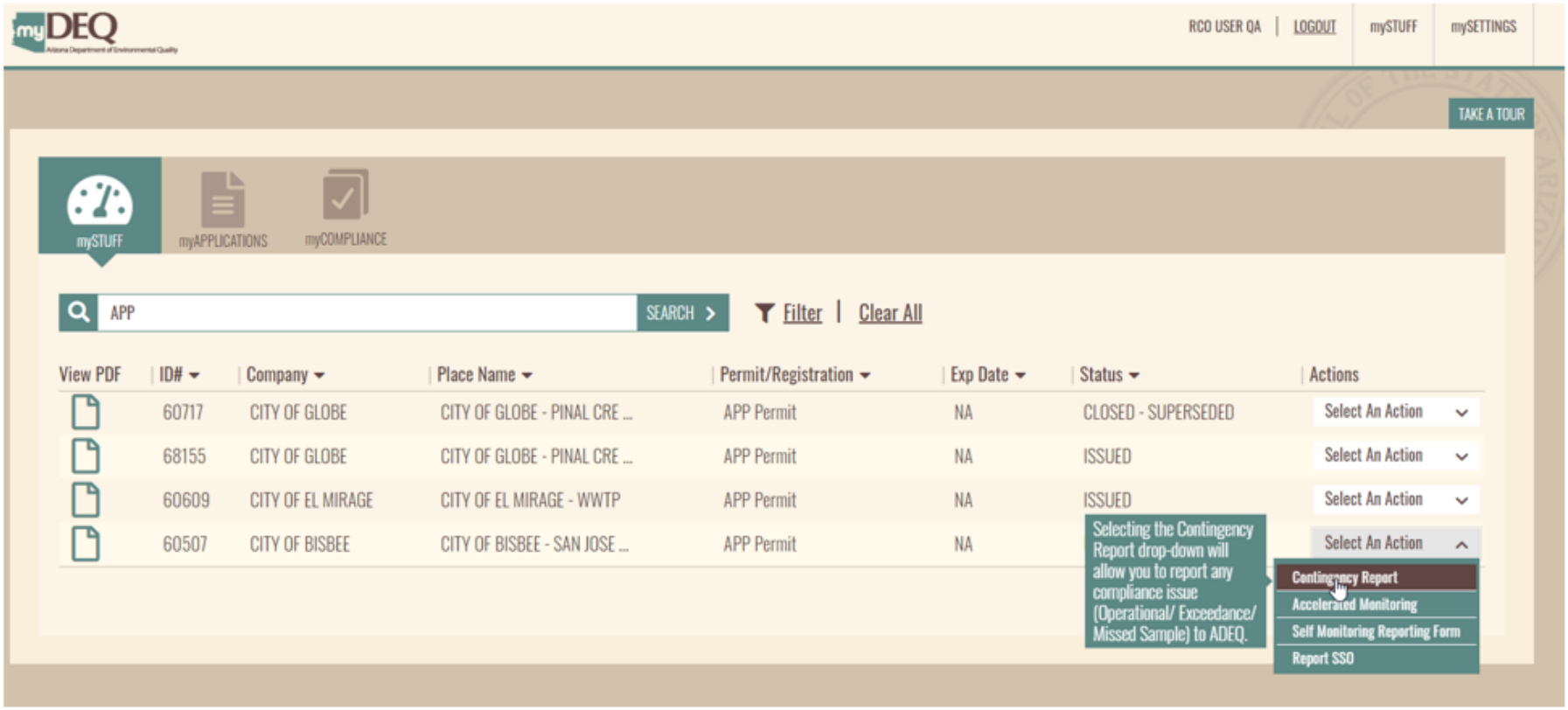
Submit Aquifer Protection Permit (APP) Reports (5-day and 30-day) using myDEQ, ADEQ's online portal.

As a myDEQ user, you can access the myDEQ portal at your convenience, 24/7, and soon be able to:

- Submit reports online in one standardized, easy-to-use path
- Receive confirmation emails upon report submission
- Easily access an inventory of reports submitted via myDEQ
- Submit updates and/or additional information, as needed
- Receive bi-weekly alerts on unresolved reports so you can stay in compliance

For more information, including frequently asked questions, visit:
azdeq.gov/myDEQ/ContingencyReporting

Compliance in myDEQ



→ This is showing the mySTUFF page within myDEQ

→ Select the Contingency Report Action for the correct APP LTF

When to Submit Contingency Reports

- Contingency reports are required by your permit
- When there is an AQL, DL, AL exceedance or another permit violation
- Having an exceedance without a corresponding 5 & 30 day contingency report is technically a ***permit violation***

5 Day Report

- 5 Day contingency reports need to be submitted ***5 days after*** becoming aware of the incident or exceedance
- The 5 Day report acts almost like a notification to ADEQ to let us know you know what's happening and you are working to fix it
- In myDEQ, a 5 Day report will ask you to include…
  - Incident information
  - Potential impacts
  - Pollutant information

5 Day Report Layout

Incident information

Incident Information

Incident Type: AQL Exceedance
Occurrence Date: 09/05/2019
Date You Became Aware of Incident: 09/06/2019

Estimated Time to Resolution: 3 WEEKS
Incident Title: myDEQ SW Test
Incident Description: This where the facility or RP will describe the incident and write down any information that is important to the incident

Potential impacts

Potential Impacts

Are there any known or potential impacts to public health?
- Drinking Water Contamination
- Other Potential Exposure

Description: A description of the potential impacts will be written here

Are there any known or potential environmental impacts?
- Groundwater Impact

Description: A description of the potential environmental impacts will be written here

Were potentially impacted users(property owners, facilities, drinking water systems) notified?
Yes
Description: Who was or wasn't notified

Is there reasonable potential for an AWQS exceedance?
No
Description: Any potential for an AWQS exceedance would be here

Pollutant information

Pollutant Information

Monitoring Point: GW - POC 1 - MW-1
Parameter/Pollutant: TOTAL ARSENIC
Sample Result: 1.0 MG/L
Description (optional): An optional description of the exceedance will go here
Upload Exceedance Lab Report (optional):

Permit Limits:

AL	AQL	DL	MAX	MIN
.04	.05	NA		

Verification Sampling

- Verification samples are uploaded either with the 5 day or 30 day, or not at all. It depends on the exceedance.
- When a verification sample needs to be submitted, it will ask you to include…
  - Verification sample result
  - Verification sample date
  - Uploaded verification sample lab report

Verification Sampling in the Permit

2.6.4 Aquifer Quality Limit Violation

1. If an AQL set in Section 4.2, Table IIA and IIB has been exceeded, the permittee may conduct verification sampling within five days of becoming aware of the exceedance. The permittee may use results of another sample taken between the date of the last sampling event and the date of receiving the result as verification.
2. If the verification sample does not confirm an AQL violation, no further action is needed under this Section.
3. If verification sampling confirms that an AQL was violated for any parameter or if the permittee opts not to perform verification sampling, then, the permittee shall increase the frequency of monitoring as follows:

2.6.2.3.2 Alert Levels for Pollutants with Numeric Aquifer Water Quality Standards

1. In the case of an exceedance of an AL for a pollutant set in Section 4.2, Tables IIA and IIB, the permittee may conduct verification sampling within five days of becoming aware of the exceedance. The permittee may use results of another sample taken between the date of the last sampling event and the date of receiving the result as verification.
2. If verification sampling confirms the AL exceedance or if the permittee opts not to perform verification sampling, then the permittee shall increase the frequency of monitoring for the pollutants set in Section 4.2, Tables IIA and IIB as follows:

Specified Monitoring Frequency (Section 4.2, Table II)	Monitoring Frequency for AL Exceedance
Daily	Daily
Weekly	Daily
Monthly	Weekly
Quarterly	Monthly
Semi-annually	Quarterly
Annually	Quarterly

In addition, the permittee shall immediately initiate an investigation of the cause of the AL exceedance, including inspection of all discharging units and all related pollution control devices, review of any operational and maintenance practices that might have resulted in an unexpected discharge, and hydrologic review of groundwater conditions including upgradient water quality.

→ Example of permit language for verification sampling an AQL violation

→ Example of permit language for verification sampling an AL groundwater violation

Please read the verification sampling language in your permit

Accelerated Monitoring

- When a customer fills out the 5 Day report online, myDEQ determines if that facility should be in accelerated monitoring for that analyte depending on if they exceeded an AL, DL, or AQL.
- Once in accelerated monitoring, the sampling frequency bumps up by one.
- Samples uploaded by the customer get reviewed and given a ‘pass’ or ‘fail’
- The end of accelerated monitoring is done manually by ADEQ

Accelerated Monitoring in the Permit

Specified Monitoring Frequency (Section 4.2, Table II)	Monitoring Frequency for AQL Exceedance
Daily	Daily
Weekly	Daily
Monthly	Weekly
Quarterly	Monthly
Semi-annually	Quarterly
Annually	Quarterly

In addition, the permittee shall immediately initiate an evaluation for the cause of the violation, including inspection of all discharging units and all related pollution control devices, and review of any operational and maintenance practices that might have resulted in unexpected discharge.

The permittee also shall submit a report according to Section 2.7.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. A verified exceedance of an AQL will be considered a violation unless the permittee demonstrates within 30 days that the exceedance was not caused or contributed to by pollutants discharged from the facility. Unless the permittee has demonstrated that the exceedance was not caused or contributed to by pollutants discharged from the facility, the permittee shall consider and ADEQ may require corrective action that may include control of the source of discharge, cleanup of affected soil, surface water, or groundwater, and mitigation of the impact of pollutants on existing uses of the aquifer. Corrective actions shall either be specifically identified in this permit, included in an ADEQ approved contingency plan, or separately approved according to Section 2.6.6.

Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions or other actions.

- → Accelerated monitoring varies permit to permit, but it is *most* common for AL or AQL violations within *groundwater monitoring*
- → Monitoring frequency increases
- → Within 30 days, the permittee needs to provide proof they are or not contributing
- → ADEQ will request corrective action from the permittee if they are contributing
- → A Permit amendment may also be an option if ADEQ and customer see fit

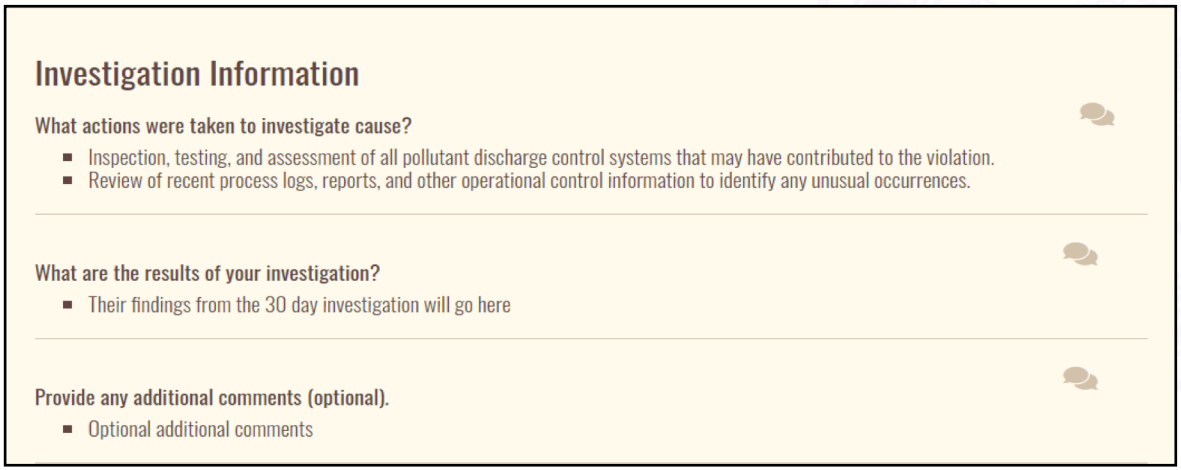
Please read your permit's 2.6 sections to better understand your specific violation, exceeding, and accelerated monitoring requirements

30 Day Report

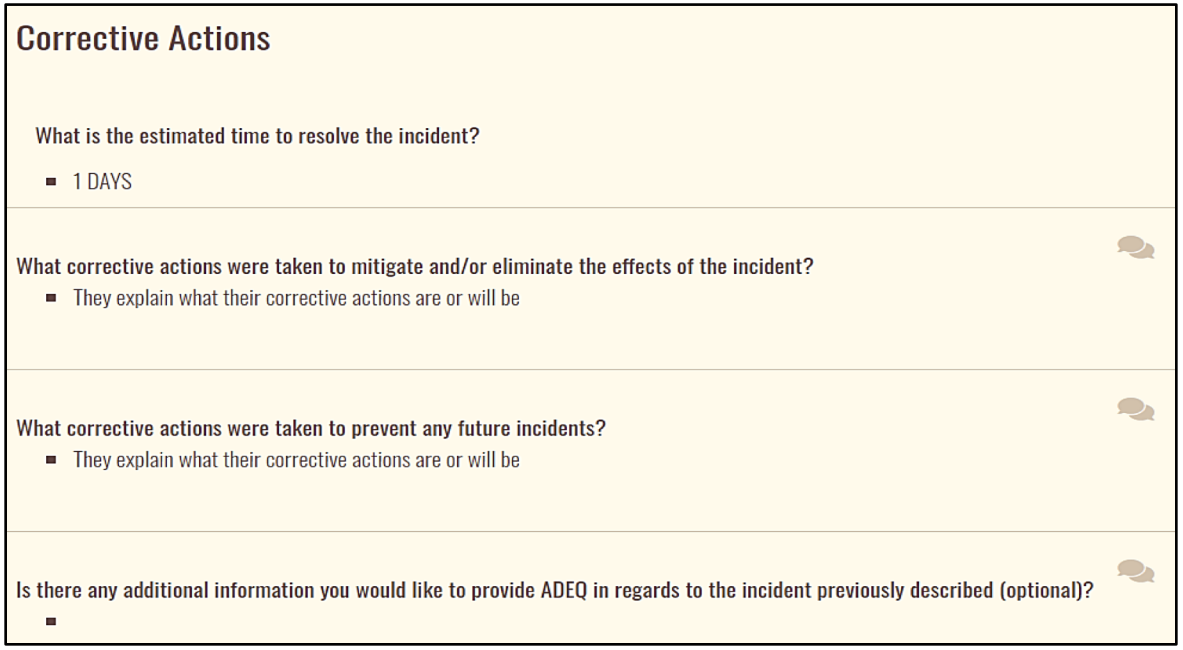
- 30 Day contingency reports need to be submitted ***30 days after*** becoming aware of the incident or exceedance
- Within this report, the results of the ***investigation*** should be documented along with the ***root cause***
- ADEQ also needs to know what ***corrective action*** has been or will be done to prevent this from happening in the future

30 Day Report Layout

Investigative Information

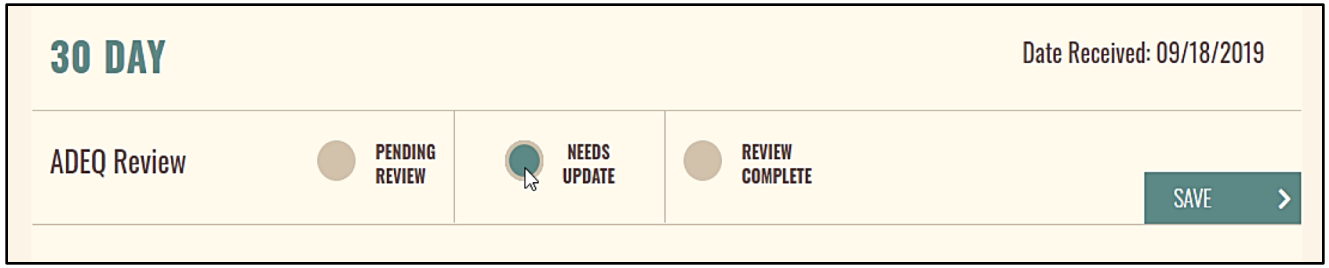


Corrective Actions



30 Day Reports Cont.

- If your submitted 30 Day report isn't clear enough or doesn't have enough information, it will need an update from you, the customer. This will take the form of a response to a comment by ADEQ.
- The customer will be notified by myDEQ if this is the case



Do Detailed Reports Matter?

- Detailed, clear, and concise contingency reports are important because…
  - The root causes are documented internally and help staff better understand commonalities for wastewater treatment system deficiencies
  - More detail will ensure ADEQ understands the problem entirely
  - Detailed reports help prepare inspectors for possible future inspections
  - Creates more detailed records for possible future inquires

Bad Report Example

5 DAY — Date Received: 01/22/2020

ADEQ Review — Review Completed

Internal Review Comments

Incident Information

Incident Type: DL Exceedance
Occurrence Date: 12/04/2019
Date You Became Aware of Incident: 12/16/2019

Estimated Time to Resolution: 2 DAYS
Incident Title: Total N Exceedance
Incident Description: Exceeded permit for total Nitrogen

← Submitted well after 5 days

← Incident description has no information

Pollutant Information

Monitoring Point: DWNSTRM OF DECHLORINATION BEFORE DISCHRG
Parameter/Pollutant: TOTAL NITROGEN
Sample Result: 12.2 MG/L
Description (optional):
Upload Exceedance Lab Report (optional):

Permit Limits:

AL	AQL	DL	MAX	MIN
8	NA	10		

VERIFICATION SAMPLE — NO

← Did not give description

← Did not upload lab report

← Did not submit a verification sample

Bad Report Cont.

Investigation Information

What actions were taken to investigate cause?

- Inspection, testing, and assessment of all pollutant discharge control systems that may have contributed to the violation.
- Review of recent process logs, reports, and other operational control information to identify any unusual occurrences.

What are the results of your investigation?

- Air needs adjustment at the WWTP.

Provide any additional comments (optional).

-

← Non-descriptive investigation results

← No additional information given

Corrective Actions

What is the estimated time to resolve the incident?

- 2 DAYS

What corrective actions were taken to mitigate and/or eliminate the effects of the incident?

- Adjust air at WWTP

What corrective actions were taken to prevent any future incidents?

- Rare occurence, monitor air levels daily to prevent future exceedance

← "adjust air" is not adequate corrective action explanation

Good Report Example

Incident Information

Incident Type: DL Exceedance
Occurrence Date: 05/31/2019
Date You Became Aware of Incident: 07/28/2019

Estimated Time to Resolution: 2 MONTHS
Incident Title: TN Geomean Discharge Limit Exceedance
Incident Description: System has a hard time denitrifying incoming wastewater due to low flow.

Potential Impacts

Are there any known or potential impacts to public health?
- No Potential Impact

Description: The system discharges into a subsurface discharge field at a monthly average of 2600 gallons per day.

Are there any known or potential environmental impacts?
- No Potential Impact

Description: Such low flow couldn't contaminate the environment.

Were potentially impacted users(property owners, facilities, drinking water systems) notified?
No
Description: No need to.

Is there reasonable potential for an AWQS exceedance?
No
Description: Such low flow there could be no negative impact to the aquifer.

← Simple but good description

← Good potential impact descriptions with explanations

Good Report Cont.

Pollutant Information

Monitoring Point: POD EFF PUMP STATION
Parameter/Pollutant: 5 MO. ROLLING GEO MN TOTAL NITROGEN
Sample Result: 14.8 MG/L
Description (optional):
Upload Exceedance Lab Report (optional): 05-28 BCP Lab Results.pdf

Permit Limits:

AL	AQL	DL	MAX
8	NA	10	

VERIFICATION SAMPLE

Internal Review Comments

Verification Sample Result: 1.93 MG/L
Verification Sample Date: 06/11/2019
Upload Verification Sample Lab Report: 06-11 BCP Lab Results Verification Sample.pdf

← Uploaded the lab report

← Submitted verification sample

Good Report Cont.

Investigation Information

What actions were taken to investigate cause?

- Inspection, testing, and assessment of all pollutant discharge control systems that may have contributed to the violation.
- Review of recent process logs, reports, and other operational control information to identify any unusual occurrences.

What are the results of your investigation?

- Low flow and high dissolved oxygen contributed to high TN. Closed one air valve in aeration basin to restrict dissolved oxygen in tank to help encourage de-nitrification.

Provide any additional comments (optional).

- This system is a 30,000 gpd facility that is only receiving around 3,000 gpd.

← Gave root cause
← Corrective action

← Additional info

What corrective actions were taken to mitigate and/or eliminate the effects of the incident?

- An anoxic basin mixer was found in the off position and turned back on; sponges were found growing in the effluent channel post filtration; sponges were removed and the channel chlorinated; the in-line turbidimeter was calibrated and inspected; the chlorine contact basin was pumped down, inspected and cleaned; dead sponges and settled debris were removed from the basin; adjustments were made to the dissolved oxygen in the aeration basin.

← Detailed corrective action

What corrective actions were taken to prevent any future incidents?

- The turbidimeter was serviced by a HACH service technician on February 6, 2020. The turbidimeter is scheduled for a monthly calibration check by plant operations staff.

← Corrective action plan

Is there any additional information you would like to provide ADEQ in regards to the incident previously described (optional)?

- Once the service was performed on the turbidimeter, the turbidity began analyzing accurate results well below the 2.0 NTU average.

← Additional info

Questions?

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