



Monitoring Assistance Program

Carling Olson,
Monitoring Assistance Program Coordinator



Carling Olson has been the Monitoring Assistance Program Coordinator since September 2019.

Previously, Carling has worked with the Arizona Department of Environmental Quality's (ADEQ) Drinking Water Value Stream as a Compliance Assistance Coordinator beginning in November 2015. She has been heavily involved in reshaping the value stream in her time with ADEQ.

Prior to her work with ADEQ, Carling spent 8 years working at an Arizona certified commercial environmental laboratory.



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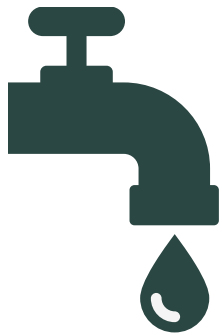




WHAT IS MAP?



- Developed in the 1990s by AZ



- Assists small drinking water systems comply with Safe Drinking Water Act
 - Sample Collection
 - Sample Transportation
 - Sample Analysis
 - Laboratory Reports



FREQUENTLY ASKED QUESTIONS

What does MAP sample for?

- MAP samples for the contaminants required to be taken at the Entry Point to the Distribution System (EPDS) sampling tap.
- Initial, Routine, and Reduced monitoring schedules.
- Contaminants include:
 - Nitrate
 - Nitrite
 - Asbestos
 - Radionuclides
 - Inorganic Chemicals
 - Volatile Organic Chemicals
 - Synthetic Organic Chemicals

■ Nitrate/Nitrite

- If the result reaches or exceeds the MCL, the system has **24 hours** from laboratory notification to take a confirmation sample.



- If taken, the original and confirmation samples will be averaged, and possible increased monitoring will be assessed from the averaged result.
 - If not taken, the system has triggered a Tier 1 Public Notice and must distribute the Public Notice within 24 hours, in the case of an MCL exceedance.
- **This is the responsibility of the system, not MAP.**
 - Contact your County's Compliance Assistance Coordinator for more direction.

- IOCs (minus Nitrates), VOCs, SOCs
 - Confirmation samples for results exceeding the MCL can be taken within 2 weeks of laboratory notification.
 - If taken, the original and confirmation samples will be averaged, and possible MCL violation will be assessed from the averaged result.
 - If not taken, the system has triggered a Tier 2 Public Notice and must distribute the Public Notice within 30 days of lab notification.
 - MAP will take these confirmation samples.
 - Contact MAP Coordinator with any questions

- If MAP sampling results yield a MCL exceedance and confirmation sampling is required, MAP will do all confirmation samples except Nitrates.
- It is the systems responsibility to complete nitrate confirmation samples. This is due to the short turn-around times associated with nitrate samples
- Confirmation sample and any resample results will also be sent to the system by the MAP contractor.



- MAP does not cover:
 - triggered increased monitoring,
 - treatment-related quarterly monitoring, or
 - Point of Use device monitoring.



- *The system is responsible for conducting this type of sampling.*

Who is required to participate in MAP?

- All Community serving less than 10,000 people
 - except state or federally owned water systems
- All Non-transient non-community public water systems serving less than 10,000 people
 - except state or federally owned water systems

- MAP does *not* sample for contaminants required to be sampled within the distribution system.
 - Total Coliform/ *E. Coli*,
 - Lead and Copper,
 - Stage 1 Disinfection Byproducts (residual chlorine, chlorine dioxide, chlorite, bromate, pre-cursors),
 - Stage 2 Disinfection Byproducts (TTHM and HAA5).
- *These samples are the responsibility of the system.*



- MAP systems are required to pay a yearly fee of \$250 + \$2.57 per service connection.
 - AAC R18-4-304
- The MAP fee covers all sampling and analytical costs during the calendar year.
 - Due to the high volume of samples that MAP collects, you enjoy lower analytical costs than you would receive as a single client of another lab.
- Quarter specific annual invoicing beginning 2021



- Some years, depending on monitoring schedule frequencies, MAP does not use all of the money it collects. In these instances, MAP systems will received a credit on their next invoices to account for the un-used monies. (AAC R18-4-304).

- State or federally owned water systems or those with populations greater than 10,000 may opt to participate in MAP voluntarily if they abide all MAP guidelines and continue participating in the program for at least three years.
 - Send an official letter requesting enrollment into the MAP coordinator.

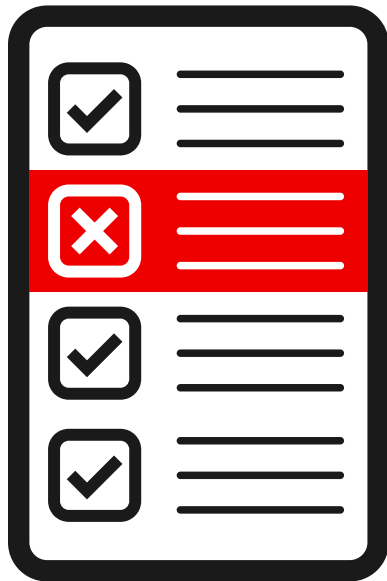
Can I opt out of the program?

- Systems required to be in MAP cannot opt out.
- If your system participates in MAP voluntarily, you can opt out by sending an official letter request to the MAP Coordinator. If applicable, the system's participation will be discontinued starting in the next calendar year.

- MAP sends out cards every year for system's to return with updated information. Alternatively, you can contact the MAP Coordinator or your system's Compliance Assistance Coordinator to update information at any time

- Will your EPDS be down during the scheduled sampling event?
- Contact the MAP Sampler and Coordinator and advise them of the situation. MAP sampling may be expedited or postponed so sampling is completed when the EPDS is online.





- If a MAP sampler comes to your system and you are unable or unwilling to show them where the appropriate EPDS is, they will submit an Exhibit E.
 - This states that MAP attempted to take the sample but was unable.
 - This also takes the responsibility off of MAP
- In this case, the system will have to take their own samples and deliver it to the MAP contracted laboratory.

Laboratory reports

Acknowledgement of Samples Received

Addr: Loma Linda Water Co.
P.O. Box 967
Thatcher, AZ 85552

Client ID: MAP
Folder #: 788786
Project: AZD406005
Sample Group: Annual 2019

Attn: Loma Linda Estates, Inc.
Phone: 928-428-3357

Project Manager: Thomas D. French
Phone: (480) 778-1558
Sampler: Ralph Smith

The following samples were received from you on February 14, 2019 at 08:38. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
201902140062	EPDS001	02/12/2019 1511

PWSID: AZD406005
Well ID: 001
SDWIS PWSID: AZD406005
SDWIS SAMPLE POINT ID: EPDS001

Nitrate as Nitrogen by IC Sampling Event

Test Description

Arizona Department of Environmental Quality
Drinking Water Inorganic Chemical Analysis Report Form
Entry Point To the Distribution System (EPDS) Only

PWS ID: AZD406005 PWS Name: Loma Linda Water Co.

02/12/2019 1511 (24 hr Clock) Loma Linda Estates, Inc.
Sample Date Sample Time Owner/Contact Person

928-428-3357
Owner/Contact Fax Number Owner/Contact Phone Number

Sample Type
 Compliance Monitoring
Sample Collection Point
 EPDS# 001
EPDS001
Sampling Site ID

For MCL or Composite Level Exceedance

Original Violation Specimen Number

Sample Type
 Confirmation
 Confirmation - Composite

INORGANIC CHEMICAL ANALYSIS
>>> To be completed by laboratory personnel <<<

Analysis Method	MCL	Reporting Limit	Contaminant Name Method	Cont. Code	Analysis Run Date	Results	Exceeds MCL	Exceeds Trigger Limit
200.8	0.010	0.005	Arsenic	1005			<input type="checkbox"/>	
200.8	2	1	Barium	1010			<input type="checkbox"/>	
200.8	0.005	0.0025	Cadmium	1015			<input type="checkbox"/>	
200.8	0.1	0.05	Chromium	1020			<input type="checkbox"/>	
4500F-C	4	0.5	Fluoride	1025			<input type="checkbox"/>	
245.1	0.002	0.001	Mercury	1035			<input type="checkbox"/>	
300.0	10	2.5	Nitrate (as N)	1040	02/14/2019	1.5	<input type="checkbox"/>	(5 mg/L) <input type="checkbox"/>
300.0	1	0.25	Nitrite	1041			<input type="checkbox"/>	0.5 mg/L <input type="checkbox"/>
200.8	0.05	0.025	Selenium	1045			<input type="checkbox"/>	
200.8	0.006	0.003	Antimony	1074			<input type="checkbox"/>	
200.8	0.004	0.002	Beryllium	1075			<input type="checkbox"/>	
4500CN-F	0.2	0.1	Cyanide	1024			<input type="checkbox"/>	
200.8	No MCL	0.05	Nickel*	1036			<input type="checkbox"/>	
200.8	0.002	0.001	Thallium	1085			<input type="checkbox"/>	
200.7	No MCL	10	Sodium*	1052			<input type="checkbox"/>	

Laboratory Information
>>> To be completed by laboratory personnel <<<

Lab ID Number: AZ0778
Specimen Number: 201902140062
Name: Eurofins Eaton Analytical, LLC
Printed Name and Phone Number of Lab Contact: Thomas D. French (480) 778-1558
Authorized Signature: *Thomas D. French*
Date Public Water System Notified: 2/15/2019
Comments:

MAP-2019 Sampler: Batch Smith
All units must be reported in milligrams per liter (mg/L)
*Contaminants without an MCL
DWAR 2IN, Revised 8/2009



each
the

trigger level or the maximum contaminant level (MCL)

- The system is responsible for reviewing the lab reports following MAP sampling.
 - Things that trigger Increased Monitoring:
 - Exceeding Nitrate or Nitrite trigger limits
 - Exceeding any IOC MCL
 - Having a detect on SOC or VOC above the reporting limit in the Safe Drinking Water Act
 - Exceeding RADs MCL

- If you haven't received your MAP sampling lab report within 1-2 months of the sampling event...

Call Carling Olson 602-771-4518 !!!





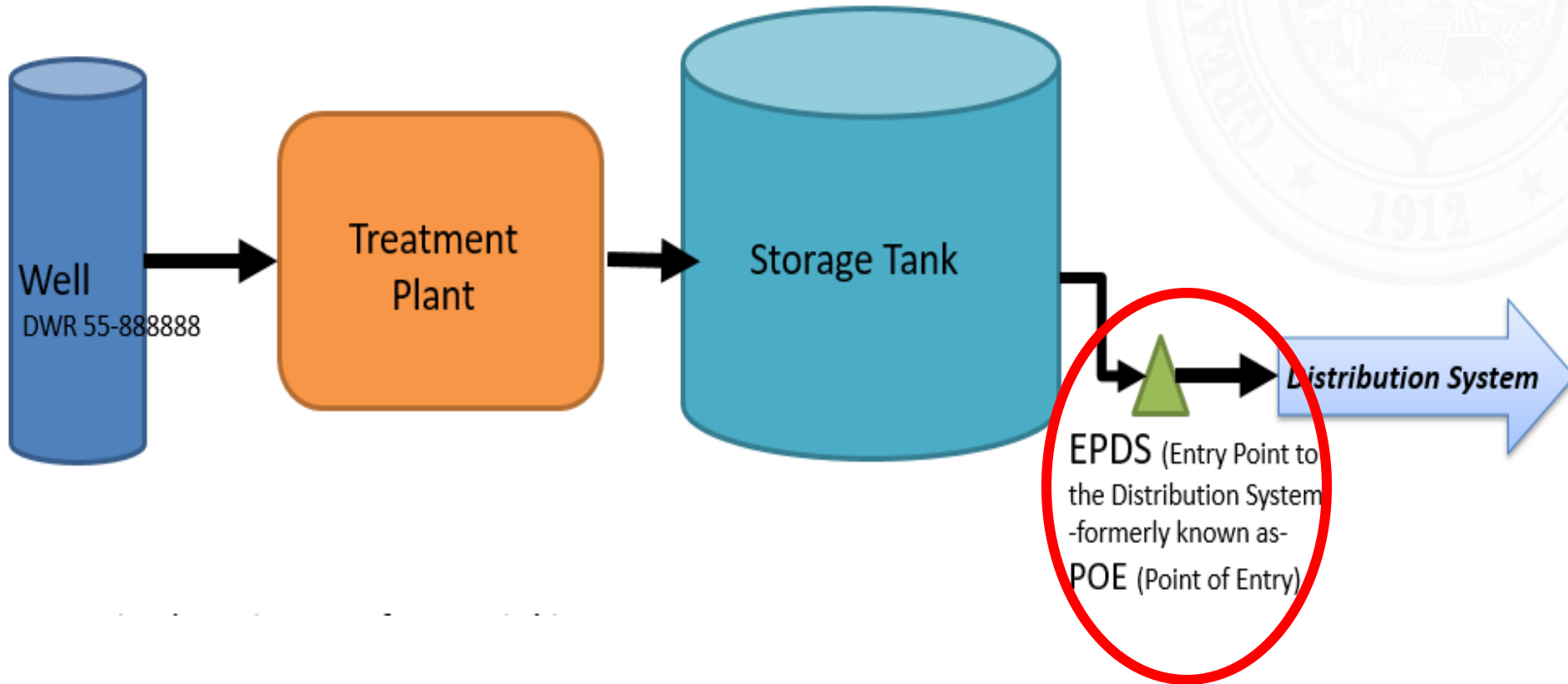
- MAP systems are still eligible to apply for reduced monitoring waivers, however, costs of the monitoring waiver application and approval processes often outweigh the benefits. By participating in MAP, your system is already receiving cost benefits.



MAP SAMPLING TIPS & TRICKS

1. Know how many EPDS taps your system has and where they are located.
 - EPDS = a compliance sampling point anywhere on the finished water line that is representative of a water source. The EPDS tap must be located after the Well or surface water intake, treatment, storage or pressure tank, and immediately prior to where the water is discharged into the distribution system, and before the first service connection.

Where is the EPDS?



2. Ensure all EPDSs have sampling taps installed so that sampling can be conducted as scheduled.
3. Make sure all EPDSs are in working order when sampling is scheduled
4. Make sure EPDSs are easily accessible. If the EPDS is locked behind a security gate, a water system representative with a key must be available during the sampling.
5. Tag all EPDS sampling taps for proper identification. Contact your sampler or MAP to obtain tags. MAP samplers are also able to assist in tagging.

6. Keep all contact and water system information (like service connections & population) updated with MAP to ensure accurate billing and sampling.
7. Contact ADEQ when an EPDS is out of service to avoid missed monitoring violations and to help MAP avoid unnecessary trips.

If MAP is unable to sample an EPDS, the water system must resolve the issue and contact MAP to re-schedule the sampling. Missed monitoring violations will be issued if sampling is not conducted.



GET MAP UPDATES...

Thank you
Carlir
Monitori
Monitori
Safe Dri
Ph: 602-
[Subscri](#)
[azdeg](#)



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UPCOMING MAP IMPROVEMENTS...



Questions?

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