



State of the Aircraft Drinking Water Rule: *A Region 4 Perspective*

**Aircraft Drinking Water Symposium & EXPO
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OVERVIEW

- 1) ADWR Universe**
- 2) Regional Break Down**
- 3) EPA Roles & Responsibilities**
- 4) Most Common Violations in EPA Region 4**
- 5) Violations under the ADWR**
- 6) Reporting Violations to EPA**
- 7) Guidance Documents**

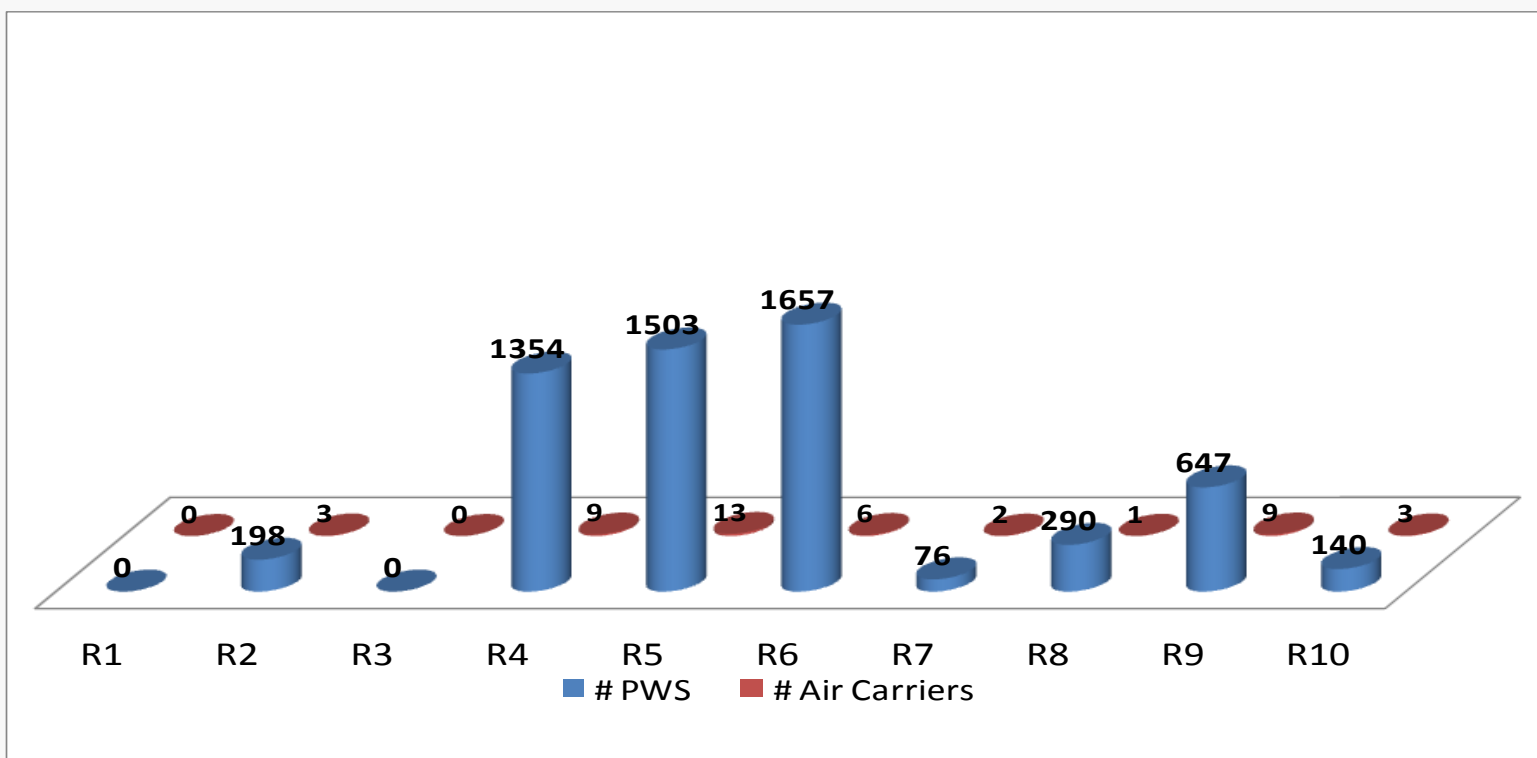
US EPA Regions



EPA has 10 regional offices across the country, each will directly implement the ADWR with the air carriers. ***Jurisdiction determined by the Region in which an air carrier is headquartered.***



**Aircraft PWSs by Region
(as of 11/26/13)**
Total PWSs = 5,865
Total Air Carriers= 46



Roles and Responsibilities

EPA HQ:

- Manage and maintain the ARCS
 - Provide technical assistance to air carriers
 - Generate potential violations (determinations made by Regions)
- Develop national implementation guidelines
- Provide national training on ADWR and ARCS
- Manage and maintain the national ADWR website
<http://water.epa.gov/lawsregs/rulesregs/sdwa/airlinewater/index.cfm>

EPA 10 Regions (for air carriers in Regional jurisdiction¹):

- Directly implement ADWR for air carriers within their region
 - First point of contact for air carriers
 - Provide rule implementation/compliance assistance
 - Review data and make “findings” on potential violations generated by ARCS
 - Provide follow-up action with air carriers
 - Determine and conduct enforcement actions
- Conduct compliance audits (at Regional discretion)

¹Jurisdiction determined by the state in which an air carrier is headquartered



- **EPA Region 4 Contact Information**
 - **Rule Implementation/Compliance Assistance**
 - Janine Morris, 404-562-9480
 - **Enforcement**
 - Amanda Driskell, 404-562-9735
 - **ARCS_CDX**
 - Pamela Riley, 404-562-9419
 - **Region 4 Email Address**
 - adwr-r4@epa.gov
 - **EPA R4 SOP for Non-Business Hours of Operation**



Headquarters EPA Contacts in Washington DC
**Office of Water/Office of Ground Water and Drinking
Water/Drinking Water Protection Division**

**Send Aircraft Drinking Water Rule (ADWR) or Aircraft
Reporting and Compliance System (ARCS) concerns/issues
to: adwr_admin@epa.gov**

- Allison Watanabe, ADWR and ARCS, 202-564-0128**
- Roger Howard, ARCS System Administrator, 202-564-9907**



Most Common Violations in Region 4

- 4) Routine Sample TC+/EC+
- 3) Routine Sample TC+/EC-
- 2) Corrective Action Reporting Violations
- 1) Routine Sample Reporting Violations



Violations

Violation Type	Requirements
M= Monitoring	• Failure to collect routine samples • Failure to return to routine monitoring • Failure to collect correct number of samples • Failure to use EPA or State certified labs • Failure to use EPA approved analytical methods • Failure to speciate for E.coli
MCL= Maximum Contaminant Level	• E.coli+ result in any monitoring period (routine and/or repeat)
OT= Other	• Failure to comply with the recordkeeping requirements • Failure to develop a coliform sampling plan as required • Failure to develop, and/or follow an O&M plan as required • Failure to train personnel • Failure to conduct a self-inspection every 5 years
R= Reporting	• Failure to comply with the reporting requirements
TT= Treatment Technique	• Failure to perform routine disinfection & flushing • Boarding water from a watering point (E.coli+ or non-E.coli+) and failure to perform the corrective actions • Failure to address deficiencies • Failure to collect follow-up samples due to E.coli+ • Failure to perform corrective disinfection and flushing due to E.coli+ or total coliform+ & E.coli- • Failure to collect repeat or follow-up samples due to total coliform+ & E.coli- • Failure to restrict public access by not providing PN to crew or, crew and passengers (E.coli+ or non-E.coli+) • Failure to restrict public access by not providing alternatives (E.coli+ or non-E.coli+)

Things to remember...



→ 10 days reporting

- 1) 10 days from the event

Under 141.806(b)(4) US EPA interprets an “event” to include the following:

- i. Each total coliform-positive event of a routine, repeat, or follow-up sample
- ii. Each *E. coli*-positive event of a routine, repeat, or follow-up sample
- iii. Each corrective action disinfection and flushing event
- iv. Each event from the date of becoming aware of boarding water that does not meet 141.803(h) or 141.803(i)
- v. Each event upon discovery of failure to perform requirement in accordance with 141.803(f) or 141.803(g)
- vi. The Administrator, the carrier, or the crew otherwise determine that notification is necessary to public health.

NOTE: Any R-reporting potential violations generated by ARCS contrary to this interpretation was deleted.

- 2) 10 days from the calendar month in which the change occurred to inventory (e.g., aircraft removed from fleet, change in status active or inactive) -- 141.806(b)(2)
- 3) 10 days from the end of the routine compliance period (for routine D&F or routine sample results that are coliform negative) – 141.806(3)

→ R-reporting violations generated at midnight of the 10th day

- ARCS configured to accommodate difference in the majority of US zones (for Alaska, Pacific, Mountain, Central, Eastern), except Hawaii

→ **72- or 24- hours** to initiate corrective actions from time of event

- 72- or 24- hours from date received notification of positive coliform sample result from lab or date of discovery of failure to initiate corrective action or perform routine D&F or routine sample
- **TT-treatment technique violations based on [date and time] input by air carrier**

→ **Electronic signature process:** must enter and sign data before 10-day deadline or R-reporting violation issued

- **If data is NOT e-signed by 10-day deadline, R-reporting violation is generated**
- Click on “Download PDF” and review *.pdf file before e-signing data: save and print if needed
- Use [Signature Summary] to identify un-signed (a.k.a. pending) data and globally e-sign data
- Use [TRANSFER] functions -- [Scrap PWS] and [Return PWS to owner] – to remove aircraft PWS from fleet automatically. [Return PWS to owner] places APWS in [Pending bin] for future claim by an air carrier.

Things to remember (cont.)...



Reporting (partial list)	
Reporting Item	Reporting Timeline
(1) Developed O&M, (2) Developed Coliform Sampling Plan, (3) D&F frequency, & (4) Sampling frequency, (5) new aircraft added to fleet (after April 19, 2011)	No later than the <u>1st calendar quarter of initial operation of the aircraft</u>
Changes to required D&F or sampling frequency	No later than <u>10 days following the calendar month in which the change occurred</u>
Routine D&F event	No later than <u>10 calendar days following the D&F period in which the D&F occurred</u>
All coliform sample results (routine, repeats and follow-up) [If results are coliform negative]	No later than <u>10 calendar days following the monitoring period in which the sampling occurred</u>
Any sample TC(+) &/or EC(+) (routine, repeat, and follow-up)	No later <u>10 calendar days of receiving sample results</u>
All events requiring notification to passengers or crew, or non-routine D&F, or non-routine sampling	No later than <u>10 days of the event**</u>

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Things to remember (cont.)...



Standard Reporting Periods based on a 12-month calendar (from Jan. 1-Dec. 31)
For routine D&F and routine sample results that are coliform negative

Routine Frequency	Quarterly D&F	Every 4 months D&F	Semi-annual D&F	Annual or less D&F
Reporting Deadline	P1 by April 10; P2 by July 10; P3 by Oct. 10; P4 by Jan. 10	P1 by May 10; P2 by Sept. 10; P3 by Jan. 10	P1 by July 10; P2 by Jan. 10	P1 by Jan. 10 YR2, or, Jan. 10 YR3 (D&F "less" than annual)
	↓	↓	↓	↓
	Annual sampling	Semi-annual sampling	Quarterly sampling	Monthly sampling
Reporting Deadline	P1 by Jan. 10 YR2	P1 by July 10; P2 by Jan. 10	P1 by April 10; P2 by July 10; P3 by Oct. 10; P4 by Jan. 10	P1 by Feb 10; P2 by Mar 10; P3 by April 10; P4 by May 10; P5 by June 10; P6 by July 10 (etc)



HQ Documents

- 1) **“Guidance Manual for the Aircraft Drinking Water Rule (ADWR) – Interim Final”** – *on EPA HQ website*
- 2) **Q&A document** – *on EPA HQ website*
- 3) **Training modules** – *on EPA HQ website*
- 4) **SOP for EPA non-business hours of operation** – *in development and will be posted to HQ website*
- 5) **MOU with FDA** – *under FDA review*
- 6) **PWS Communication Strategy** – *identified 4 case studies*
- 7) **National Violation Process Memo** – *Internal Implementation*
- 8) **National Enforcement Strategy** – *Internal Implementation*
- 9) **Applicability Memo** – *Internal Implementation*
- 10) **Compliance Audit Guidelines** – *Internal Implementation*



Additional Information

- **Download a copy of the Final ADWR, Fact Sheets, Q&As, training modules, and more at:**

ADWR HQ website:

<http://water.epa.gov/lawsregs/rulesregs/sdwa/airlinewater/index.cfm>

- **ARCS website: <http://iaspub.epa.gov/arcs>**



QUESTIONS???

