

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 ARCH STREET
PHILADELPHIA, PENNSYLVANIA 19103-2029

National Railroad Passenger Corporation, d/b/a Amtrak, Respondent : Proceedings Pursuant To Section 1414(g) of the Safe Drinking Water Act, as amended, 42 U.S.C. § 300g-3(g)
: :
: Docket No. SDWA-03-2012-0113-DS
:

ADMINISTRATIVE ORDER FOR COMPLIANCE ON CONSENT

STATUTORY AUTHORITY

1. The following FINDINGS are made and ORDER FOR COMPLIANCE issued under the authority vested in the Administrator of the United States Environmental Protection Agency ("EPA") by Sections 1414(g) and 1445 of the Federal Safe Drinking Water Act ("SDWA" or "Act"), 42 U.S.C. §§ 300g-3(g) and 300j-4. The Administrator of EPA has delegated the authority to take these actions to the Regional Administrator of EPA Region III, who has redelegated these authorities to the Director, Water Protection Division.
2. EPA and the National Railroad Passenger Corporation (doing business as Amtrak and hereafter referred to as "Amtrak" or "Respondent") (EPA and Amtrak are hereafter collectively referred to as "the Parties.") agree that resolution of this matter without litigation is in the public interest and want to ensure Amtrak's passengers and crew receive safe and reliable

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REGIONAL DEPARTMENT OF ENVIRONMENTAL PROTECTION
EPA REGION III, PHILA. PA

drinking water. The National Railroad Passenger Corporation consents to the issuance of this Administrative Order on Consent (“AOC” or “Order”) and agrees to perform all actions required by its terms and conditions.

DEFINITIONS

3. For the purpose of this Order the following definitions and the definitions in 40 C.F.R. § 141.2 apply:

3.1. “FDA” is the Food and Drug Administration.

3.2. “Finished water” means water that is introduced into the distribution system of a public water system and is intended for distribution and consumption without further treatment, except as treatment is necessary to maintain water quality in the distribution system (*e.g.*, supplemental disinfection, addition of corrosion control chemicals).

3.3. “FRA” is the Federal Railroad Administration.

3.4. “Human consumption” means drinking, bathing, showering, hand washing, teeth brushing, food preparation, dishwashing, and maintaining oral hygiene.

3.5. “Onboard water system” means a railroad car that qualifies as a public water system under the SDWA and the national primary drinking water regulations. The components of the onboard water system include the water service panel, the filler neck of the rail car

finished water storage tank, and all finished water tanks, piping, treatment equipment, and plumbing fixtures within rail cars that supply water for human consumption to passengers and crew.

3.6. "Operates," for the purposes of this AOC, shall mean that Amtrak maintains the components of the onboard water systems that supply water for human consumption to passengers and crew.

3.7. "Preventive Maintenance Plan" ("PMP") is a collection of Amtrak Standard Maintenance Procedures, and other documents, that define the mechanical maintenance plan meeting FRA requirements as they are defined in the Code of Federal Regulations ("C.F.R.") for each car type Amtrak owns and/or Operates. The PMP includes requirements for the Sampling Plan (as defined below) for onboard water systems.

3.8. "Roster" or "Water-Carrying Car Roster" means the subset of the Amtrak Master Roster that lists all rail cars either owned or Operated by Amtrak that serve water for human consumption to at least twenty-five (25) individuals at least sixty (60) days per year. The Roster serves as the inventory of cars subject to this AOC.

3.9. "Sampling Plan" is a plan to protect Amtrak passengers and each onboard water system from microbiological contaminants. The Sampling Plan shall be included in the Amtrak Preventive Maintenance Plan required under Paragraph 18. of this Order.

3.10. "Self inspection" means an onsite review of the onboard water system, including water service panel, the filler neck of the rail car finished water storage tank, and all finished water tanks, piping, treatment equipment, and plumbing fixtures within rail cars that supply water for human consumption to passengers and crew.

3.11. "Watering point" means the water supply, methods and facilities for delivering finished water from the water supply to the rail cars.

These facilities may include water trucks, carts, cabinets, and hoses.

FINDINGS OF FACTS AND CONCLUSIONS OF LAW

4. Amtrak is a corporation organized and existing under the laws of the District of Columbia that owns a national railroad system for passenger travel, and also Operates additional railroad cars.
5. Amtrak is a "person" as defined by Section 1401(12) of the SDWA, 42 U.S.C. § 300f (12), and 40 C.F.R. § 141.2.
6. Since Amtrak conveys its passengers in interstate commerce, Amtrak is covered by the national primary drinking water regulations in accordance with Section 1411(4) of the SDWA, 42 U.S.C. § 300g(4), and 40 C.F.R. § 141.3 (d).
7. Amtrak owns and/or Operates passenger railroad cars that supply water to its passengers.

8. Amtrak owns and/or Operates passenger railroad cars that regularly supply water for human consumption to an average of at least twenty-five (25) individuals daily for at least sixty (60) days out of the year.
9. Amtrak therefore owns and/or Operates passenger railroad car that meet the definition of “public water system” as defined by Section 1401(4) of the SDWA, 42 U.S.C. § 300f (4), and 40 C.F.R. § 141.2.
10. Amtrak passenger railroad cars that meet the conditions in Paragraph 8 are considered “transient non-community water systems” (“TNCWS”) as defined by 40 C.F.R. § 141.2.
11. Any passenger railroad car that is a TNCWS is subject to, among other requirements, the maximum contaminant level for microbiological contaminants in 40 C.F.R. § 141.63, the monitoring requirements in 40 C.F.R. § 141.21, and the public notification requirements in Subpart Q.
12. Since 1983, Amtrak has been providing coliform sampling data to EPA pursuant to a series of EPA-approved Operations and Maintenance Plans meant to ensure the safety of Amtrak drinking water and has complied with EPA’s Interstate Carrier Conveyance Guidance (June 20, 1979).
13. The Airline Drinking Water Rule, issued October 19, 2009, established a new protocol for monitoring, disinfecting, and flushing an interstate carrier conveyance’s (ICC) transient non-community drinking water systems. To address Amtrak’s operations, this AOC is based upon the major provisions of that rule.

14. For the purposes of this AOC, Amtrak does not contest EPA's jurisdiction and authority to issue and enforce any part of this AOC.
15. Amtrak represents that it has entered into this AOC for the purpose of settling and compromising disputed claims without having to incur the expense of contested litigation. By entering into this AOC and complying with its terms, Amtrak does not affirmatively admit any violations of the Act or assertions of jurisdiction referenced within this AOC, and this AOC shall not be interpreted as including such admission.

ORDER ON CONSENT

Therefore, EPA ORDERS and Amtrak consents to conduct the following activities:

16. Coliform Sampling Plan - Within sixty (60) days of the effective date of this AOC, Amtrak shall submit to EPA for review and approval a coliform sampling plan ("Sampling Plan") to protect its passenger cars' onboard water systems from microbiological contaminants. The Sampling Plan shall be incorporated by reference in the Amtrak Preventive Maintenance Plan (PMP) required under Paragraph 18. of this Order. Any subsequent changes to the Sampling Plan shall also be incorporated by reference in the PMP.
 - 16.1. For each car type (*e.g.*, sleeper, coach) as normally defined in the Amtrak data systems (Attachment A lists the current/active car fleets

with the car type codes), the Sampling Plan shall include the elements set forth in Subparagraphs 16.2 through 16.4. For each of Amtrak's fleets (*e.g.*, Amfleet 1, Superliner 1, Acela), the Sampling Plan will, as necessary, account for differences in water service among equipment with different car codes.

16.2. Analytical Methodology - Amtrak shall follow the sampling and analysis requirements set forth in this Order until otherwise notified in writing by EPA.

16.2.1. The standard sample volume required for total coliform analysis, regardless of the method used, is 100 mL.

16.2.2. Amtrak needs to determine only the presence or absence of total coliforms and/or *E. coli*.

16.2.3. Amtrak shall conduct analyses for total coliform and *E. coli* in accordance with the analytical methods approved in 40 C.F.R. § §141.21 (f)(3) and 141.21 (f)(6). Amtrak shall specify in its Sampling Plan the State or EPA certified laboratories that will perform the sampling analysis.

16.2.4. The time from sample collection to initiation of analysis shall not exceed 30 hours. Amtrak is encouraged but not required to hold samples below 10° C during transit.

16.2.5. The invalidation of a total coliform sample result can be made only by EPA in accordance with 40 C.F.R. § 141.21(c)(1)(i),

(ii) or (iii), or by the certified laboratory in accordance with 40 C.F.R. § 141.21(c)(2).

16.2.6. Certified Laboratories - To determine compliance with this Order, samples shall be considered only if they have been analyzed by a laboratory certified by a State or EPA. "State" refers to a State or Tribe that has received primacy for public water systems under Section 1413 of the SDWA.

16.3. Routine and Follow-up Monitoring - For each onboard water system, the sampling frequency is determined based on the disinfection and flushing recommended by the PMP.

16.3.1. Amtrak shall collect 100 mL total coliform routine samples at the frequency specified in the Sampling Plan as required by Paragraph 16.3.2 of this Section. One sample shall be taken from each tank from each car; each sample shall be analyzed for total coliform.

16.3.2. Amtrak shall perform routine disinfection and flushing in compliance with the PMP. Based on this disinfection and flushing schedule, the sampling frequency for sampling each onboard water system is as follows:

16.3.2.1. Within 24 months of EPA's approval of the Sampling Plan, Amtrak will collect samples from each car on the Water-Carrying Car Roster.

- 16.3.2.2. Starting January 1, 2015, Amtrak will collect samples at least once every calendar year for all active sleeper, slumber, dormitory, diner, lounge, and buffet cars. For all other active cars on the Roster, samples will be collected at least once every two calendar years.
- 16.3.3. All samples are targeted to be collected during the normal course of scheduled maintenance, when the cars are taken off line. Routine coliform samples shall not be drawn within three (3) calendar days after disinfection and flushing.
- 16.3.4. The Sampling Plan shall provide guidance to the Amtrak personnel or contractors collecting the samples. At a minimum, the Sampling Plan shall include the following:
- 16.3.4.1. Coliform sample collection procedures;
- 16.3.4.2. The frequency and number of routine and follow-up samples to be taken:
- 16.3.4.3. The timing of routine and follow-up sample collection in relation to when disinfection and flushing occurs; and
- 16.3.4.4. The procedures for communicating sample results so required actions are followed promptly.
- 16.3.5. If any routine or follow-up coliform sample is total coliform-positive, Amtrak shall analyze that total coliform-positive culture medium to determine if *E. coli* is present.

16.3.6. Negative Routine Coliform Samples Results - For cars with routine sample results that are total coliform-negative, Amtrak shall maintain the routine monitoring frequency in Subparagraph 16.3. Amtrak shall report the results as part of the quarterly reports required by Paragraph 23.

16.3.7. Positive Routine *E. coli* Sample Results - If any sample is *E. coli*-positive, Amtrak shall:

16.3.7.1. Restrict public access to the water system as expeditiously as possible. If the sample was collected from a car that is in service, restrict access no later than 24 hours after the laboratory notifies Amtrak of the positive results. All restrictions shall stay in place until the onboard water system is disinfected and flushed and all follow-up samples, as described in Subparagraph 16.3.8, are total coliform-negative; and

16.3.7.2. Disinfect and flush in accordance with Amtrak's Preventative Maintenance Plan, and take follow-up samples as described in Subparagraph 16.3.8.

16.3.8. Post-Disinfection Flushing and Follow-up Sampling - Following receipt of any total coliform-positive, or *E. coli*-positive result from a certified laboratory, Amtrak shall perform follow-up sampling after disinfection. For follow-up sampling, Amtrak shall

take a complete set of total coliform samples consisting of one 100 mL sample from the same routine sample collection location as identified in the approved Sampling Plan. If any follow-up sample is total coliform positive, Amtrak shall follow the procedures in Subparagraphs 16.3.3 - 16.3.7. If all follow-up samples are negative, Amtrak shall return to routine monitoring frequency under Subparagraph 16.3.

16.4. Roster - Amtrak shall submit, annually, a Water-Carrying Car Roster ("Roster") as an inventory of each active car and an updated designation of the car types, in accordance with historical inventory designations. This inventory shall be limited to those cars that are TNCWS and which Amtrak owns and/or Operates. The initial inventory (Roster) shall be submitted with the Sampling Plan. Updates to the Roster shall identify cars that were active and designate any cars that have changed status to "inactive" any time during the reporting period.

17. When EPA notifies Amtrak that EPA has approved the Sampling Plan, it will thereby be incorporated by reference into and, thus, enforceable under this AOC. Amtrak shall comply with the Sampling Plan as a requirement of this AOC.

17.1. Prior to implementation, modifications to an approved Sampling Plan must be submitted to EPA for review and approval.

Modifications to the Roster listed in Paragraph 16.4 do not require approval.

18. Preventive Maintenance Plan (PMP) - Amtrak has developed and implemented a mechanical operations and maintenance plan meeting FRA requirements (as defined in the Code of Federal Regulations, 49 CFR 238.301 *et seq.*) for each car type Amtrak owns and/or Operates. This PMP shall include disinfection and flushing requirements based on manufacturer recommended schedules and routine monitoring as prescribed in the PMP. No later than 30 days after submittal of the Sampling Plan, Amtrak shall submit for approval its revised PMPs to include the following minimum requirements and procedures:

- 18.1. Procedures for disinfection and flushing, including frequency of disinfection and flushing, the disinfecting agent, disinfectant concentration to be used, disinfectant contact time, and flushing volume to disinfect.

- 18.2. Frequency of disinfection and flushing will be in accordance with the approved PMP.

- 18.3. The Sampling Plan, in accordance with Paragraph 16. of this Order;

- 18.4. Training requirements for all personnel involved in the onboard water system operation and maintenance including boarding procedures, sample collection procedures, disinfection and flushing

procedures, and public health and safety reasons for the requirements;

18.5. Procedures for self-inspection of the railroad cars including inspection of water storage tanks, distribution system, supplemental treatment fixtures if applicable, valves, hoses and backflow prevention devices;

18.6. Procedures and Requirements for Boarding Water - Amtrak shall board water within the United States in accordance with FDA regulations (21 C.F.R. Part 1250, Subpart E). Amtrak shall include in the PMP a description of how the water will be transferred from the watering point to the rail car in a manner that ensures it will not become contaminated during transfer and a list identifying watering points that includes the name of the supplying water system.

18.6.1. The procedures for boarding water shall include a description of the emergency measures that Amtrak shall take if it learns at any time that the water boarded from a watering point is not safe for human consumption.

18.6.2. For water boarded from outside the United States, Amtrak shall meet the requirements of this Paragraph.

19. When EPA notifies Amtrak that EPA has approved the revisions to the PMP, they will thereby be incorporated into and, thus, enforceable under this AOC. Amtrak shall comply with the PMP as a requirement of this

AOC. Prior to implementation, modifications to an approved PMP that are subject to this AOC shall be submitted to EPA for review and approval.

20. Communication with water suppliers – Within ninety (90) days of the effective date of this Order, Amtrak shall submit for approval a Water System Communications Plan describing how it communicates with water suppliers with respect to emergency notifications of water quality problems and tracks receipt of routine notifications such as Consumer Confidence Reports. For watering points outside of the United States, Amtrak shall include a procedure for communication to ensure that water is safe for human consumption. Amtrak shall comply with the Water System Communication Plan as a requirement of this AOC. Prior to implementation, modifications to the approved Water System Communication Plan must be submitted to EPA for approval. Any subsequent changes to the Water System Communication Plan shall be incorporated into the AOC.

20.1. The Water System Communications Plan shall include a list emergency notification contacts at each water system identified in Paragraph 18.6.

21. Notification - Within ninety (90) days of the effective day of this Order, Amtrak shall submit to EPA for review and approval a public notification plan (“Notification Plan”) for providing notice to its passengers and crews

in response to situations that may be a public health risk. Upon approval of the Notification Plan, it will thereby be incorporated by reference into and, thus, enforceable under this AOC. Amtrak shall comply with the Notification Plan as a requirement of this AOC. Prior to implementation, modifications to the approved Notification Plan must be submitted to EPA for approval. Any subsequent changes to the Notification Plan shall be incorporated into the AOC.

22. When this AOC requires Amtrak to restrict public access to water, Amtrak shall use the Notification Plan for implementing restrictions for water service.
23. Amtrak shall submit quarterly electronic reports within thirty (30) days after the end of each quarter (December 31, March 31, June 30 and September 30) to EPA. Electronic reports shall be Excel compatible and may be sent via the existing data systems Amtrak currently uses to submit reports to EPA. The reports shall be submitted to EPA at the email address listed in Paragraph 24. The reports shall be in the format currently used for all reporting (An example is attached to this AOC as Attachment B.), unless both Parties mutually agree to modify the format. Amtrak shall submit the first report by the last day of the month following completion of the first quarter following the effective date of this AOC.

- 23.1. The reports shall include a tabulation of results of sampling conducted during each quarter with the following information:
- 23.1.1. Car number;
 - 23.1.2. Car fleet;
 - 23.1.3. Car type;
 - 23.1.4. Date the sample was collected and the type of sample (*i.e.*, routine, follow-up, or special purpose samples);
 - 23.1.5. Laboratory that analyzed the samples;
 - 23.1.6. Coliform result (positive/negative) and/or *E. coli* (positive or negative);
 - 23.1.7. Date car is drained, flushed and disinfected, if the result is Coliform positive;
 - 23.1.8. Date of crew and passenger notification and duration of notification, if result is *E. coli* positive; and
 - 23.1.9. Service status (For purposes of this AOC, Service Status refers to whether a particular car is in revenue service by Amtrak during the period in question.).
- 23.2. As part of its quarterly report, Amtrak shall report any cars not in compliance with the Sampling Plan and/or PMP, including any noncompliance with the provisions of Paragraphs 16. and 18. respectively.

23.3. As part of its quarterly report, Amtrak shall report any notices provided in accordance with the Notification Plan, including car number, purpose of notification, population to whom notification is provided, and duration of notification.

23.4. In the report for the quarter ending December 31st, Amtrak shall submit:

23.4.1. An update to the Roster, including any changes to the inventory, and service or revenue status of cars, and dates of those changes;

23.4.2. The car disinfection and flushing report for the calendar year; and

23.4.3. A certification that the PMP, Notification Plan, and Water System Communications Plan are up to date.

24. All reports shall be sent to Karen D. Johnson Chief , Ground Water and Enforcement Branch, or her designee, at the following address:

Karen D. Johnson, Chief
Ground Water and Enforcement Branch (3WP22)
Water Protection Division
U.S. Environmental Protection Agency
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029
Email address: johnson.karend@epa.gov

25. Submission of reports shall not excuse the Amtrak's obligation to comply with this AOC.

26. Recordkeeping - Amtrak shall maintain sampling records consistent with the following requirements:
- 26.1. Amtrak shall keep all records of bacteriological sampling and analyses for at least five (5) years, including the following information:
- 26.1.1. The date, time, and place of sampling, and the name of the person who collected the sample;
- 26.1.2. Identification of the sample as a routine, follow-up, or special purpose sample;
- 26.1.3. Date of the analysis;
- 26.1.4. Laboratory and person responsible for performing the analysis;
- 26.1.5. The analytical technique/method used; and
- 26.1.6. The results of the analysis identified by routine or follow-up samples.
- 26.2. Amtrak shall keep records of any disinfection and flushing for at least five (5) years, including the following information:
- 26.2.1. The date and time of the disinfection and flushing; and
- 26.2.2. The type of disinfection and flushing (*i.e.*, routine or corrective action).
- 26.3. Amtrak shall keep records of all self-inspections for at least ten (10) years, including the following information:
- 26.3.1. The completion date of the self-inspection; and

- 26.3.2. Any written reports, summaries, or communications related to the self-inspection.
- 26.4. Amtrak shall maintain the Sampling Plans and make them available for review by EPA upon request, including during compliance audits.
- 26.5. Amtrak shall maintain the PMPs in accordance with this AOC and make the PMPs available for review by EPA upon request, including during compliance audits.
- 26.6. Amtrak shall maintain the Notification Plan and keep copies of public notices to passengers and crew issued as required by this AOC for at least five (5) years after issuance.
- 26.7. Amtrak shall maintain the Water System Communications Plan and make it available for review by EPA upon request, including during compliance audits.
27. Audits and inspections - EPA or its representatives may conduct audits or inspections of Amtrak authorized by Section 1445 of the SDWA, 42 U.S.C. § 300j-4. In addition, Amtrak or its representatives shall perform a visual self-inspection of all water system components for each onboard water system in accordance with the PMP. Amtrak shall address all deficiencies identified during compliance audits and routine self-inspections within 90 days of identification of the deficiency or, where such deficiency is identified during extended or heavy maintenance, before

the rail car is put back into service. This includes any deficiency in the water system's design, construction, operation, maintenance, or administration, as well as any failure or malfunction of any system component that has the potential to cause an unacceptable risk to health or that could affect the reliable delivery of safe drinking water.

28. Failure to Perform Required Routine Disinfection and Flushing - If Amtrak fails to perform routine disinfection and flushing for any rail car with an onboard water system at the frequency defined in the PMP, it shall provide, as required by Paragraph 23. written notification to EPA of this failure. The notice shall include a schedule for additional monitoring on a case specific basis for that car.
29. Amtrak may be found to be in violation of the SDWA when it has an *E. coli* positive sample in any monitoring period.
30. Amtrak may be found to be in violation of this AOC when it fails to comply with any provision of this AOC. EPA may, in its discretion, prior to making any such finding of violation, notify Amtrak in writing of its proposed finding, and may allow Amtrak a reasonable amount of time (as determined by EPA based upon the nature and extent of the alleged violation) to respond to EPA and correct any deficiencies.

GENERAL PROVISIONS

31. This AOC does not waive, suspend, or modify the requirements of the SDWA and its implementing regulations found in 40 C.F.R. Part 141, which remain in full force and effect.
32. Violation of any terms of this AOC may subject Amtrak to a civil penalty of up to \$37,500 per day of violation under Section 1414(g)(3) of the SDWA, 42 U.S.C. § 300g-3(g)(3), pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, as amended by the Debt Collection Improvement Act of 1996, and the subsequent Civil Monetary Penalty Inflation Adjustment Rule, 40 C.F.R. Part 19. Amtrak may also be subject to civil penalties under Section 1445(c) of the SDWA, 42 U.S.C. § 300j-4(c).
33. Compliance with the terms and conditions of this Order shall not in any way be construed to relieve Amtrak of its obligation to comply with all applicable provisions of federal, state, or local law, nor shall it be construed to be a determination of any issue related to any federal, state, or local permit. Compliance with this Order shall not be a defense to any actions subsequently commenced for any violation of federal laws and regulations administered by EPA, and it is the responsibility of Amtrak to comply with such laws and regulations.

EFFECTIVE DATE

34. The effective date of this Consent Agreement and Final Order is the date on which it is filed with the Regional Hearing Clerk after signature by the Region III, Water Protection Division Director.

TERMINATION

35. The term of this AOC shall be for five (5) years from the effective date.

The AOC shall terminate on the fifth anniversary of the effective date.

Sixty (60) days after the termination date EPA shall confirm the AOC's termination in writing.

35.1. This AOC will not terminate if EPA determines that Amtrak has violated the terms of the AOC.

35.2. Before this AOC terminates, the Parties may agree to extend it or negotiate a new Order. Both EPA and Amtrak must agree in writing to any extension of this AOC or a new AOC.

FOR THE NATIONAL RAILROAD PASSENGER CORPORATION



MICHAEL STERN
Managing Deputy General Counsel

4/26/12

Date



ROY DEITCHMAN
Vice President
Environmental Health and Safety

April 26, 2012

Date

SO ORDERED this 26th day of April, 2012.



JOHN M. CAPACASA, Director
Water Protection Division
U.S. EPA, Region III

ATTACHMENT A

Car Fleets with the Car Type Codes

Attachment A

Car Code (CCODE)

1. Heritage
2. Amfleet I
3. Amfleet II
4. Superliner I
5. Horizon
6. Turboliner
7. Superliner II
8. Viewliner
9. Cal Trans
10. Talgo
11. Surfliner
12. Acela

Car Type (CTYPE)

1. Coach
2. Sleeper
3. Slumber
4. Dormitory
5. Diner
6. Lounge
7. Other Food Car, e.g., Parlor, Buffet, etc.

Attachment B

Reporting Format

