new clean-up goals. In addition, O&M plans were submitted for both the Facility and Meadow Brook properties. The 2004 review also concluded that in order for the remedy to remain protective in the long-term, the following actions needed to be taken: 1. updated institutional controls needed to be recorded, and 2. Operation and Maintenance (including monitoring) needed to be conducted regularly (both of which have since occurred).

The Third Five-Year Review, completed in December 2009, concluded that the remedy at the Norwood PCBs Site continues to protect human health and the environment through meeting groundwater clean-up goals, the establishment of institutional controls, and the maintenance of remedy infrastructure concurrently during redevelopment of the Site. The 2009 Five Year Review also concluded that in order for the remedy to remain protective, the Operation & Maintenance (O&M) Plan and Environmental Monitoring Plan (EMP) must be updated to reflect changes in site conditions as a result of the redevelopment. These have been updated and approved (January 2011).

The Fourth Five-Year Review is due in December 2014.

Community Involvement

EPA community participation at the site has taken many forms. In addition to statutorily-required meetings and public hearings associated with the 1989 ROD and 1996 ROD Amendment, EPA has participated in numerous other outreach activities. EPA conducted public outreach during each of the five-year reviews. EPA prepared updated Fact Sheets in 2003, 2005, and 2007. The Fact Sheets were distributed to mailing list recipients as well as hand-distributed to all abutting residences and business owners. Extra copies of the fact sheets have been made available to the public at the following locations: the Norwood Public library and Norwood Town Hall.

In addition, EPA has attended numerous Public Meetings during the site redevelopment approval process. All Community Involvement activities required and in association with this proposed deletion have been completed, including the publication of a notice in a local newspaper of general circulation regarding this proposed deletion and the availability of documents located in the Deletion Docket.

Determination That the Site Meets the Criteria for Deletion in the NCP

The NCP specifies that EPA may delete a site from the NPL if “all appropriate responsible parties or other persons have implemented all appropriate response actions required” or “all appropriate fund-financed response under CERCLA has been implemented, and no further response action by responsible parties is appropriate”. EPA, with the concurrence of the Commonwealth of Massachusetts through the MassDEP by a letter dated [Date], believes these criteria for deletion have been satisfied. Therefore, EPA is proposing the deletion of the site from the NPL. All of the completion requirements for the site have been met as described in the Norwood PCBs Final Close Out Report (FCOR) dated September 2009.

V. Deletion Action

The EPA, with concurrence of the Commonwealth of Massachusetts through the MassDEP has determined that all appropriate response actions under CERCLA, other than operation and maintenance, routine monitoring, and five year reviews, have been completed. Therefore, EPA is deleting the Site from the NPL.

Because EPA considers this action to be noncontroversial and routine, EPA is taking it without prior publication. This action will be effective May 31, 2011 unless EPA receives adverse comments by May 2, 2011. If adverse comments are received within the 30-day public comment period, EPA will publish a timely withdrawal of this direct final notice of deletion before the effective date of the deletion, and it will not take effect. EPA will prepare a response to comments and continue with the deletion process on the basis of the notice of intent to delete and the comments received. There will be no additional opportunity to comment.

List of Subjects in 40 CFR Part 300

Environmental protection, Air pollution control, Chemicals, Hazardous waste, Hazardous substances, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Superfund, Water pollution control, Water supply.

Dated: March 17, 2011.

Ira W. Leighton,
Acting Regional Administrator, EPA Region 1.

For the reasons set out in this document, 40 CFR part 300 is amended as follows:

PART 300—[AMENDED]

1. The authority citation for part 300 continues to read as follows:
SUPPLEMENTARY INFORMATION:

FOR FURTHER INFORMATION CONTACT:
Kenneth Rusk, Staff Director, Office of Railroad Safety, FRA, 1200 New Jersey Avenue, SE., Washington, DC 20590 (telephone: (202) 493–6236); or Sarah Grimmer Yurasko, Trial Attorney, Office of Chief Counsel, FRA, 1200 New Jersey Avenue, SE., Washington, DC 20590 (telephone: (202) 493–6390).

SUPPLEMENTARY INFORMATION:
Table of Contents for Supplementary Information

I. Concrete Crossties Overview
A. Derailment in 2005 near Home Valley, Washington

On April 3, 2005, a National Railroad Passenger Corporation (Amtrak) passenger train traveling at 60 miles per hour on the BNSF Railway Company’s (BNSF) line through the Columbia River Gorge (near Home Valley, Washington) derailed on a 3-degree curve. According to the National Transportation Safety Board (NTSB), 30 people sustained injuries. Property damage totaled about $854,000. See NTSB/RAB–06–06. According to the NTSB, the accident was caused in part by excessive concrete crosstie abrasion, which allowed the outer rail to rotate outward and create a wide gage track condition. This accident illustrated the potential for track failure with subsequent derailment under conditions that might not be readily evident in a normal visual track inspection. Conditions giving rise to this risk may include concrete tie rail seat abrasion, track curvature, and operation of trains through curves at speeds leading to unbalance (which is more typical of passenger operations). Subsequently, this accident also called attention to the need for clearer and more appropriate requirements for concrete ties, in general. This final rule addresses this complex set of issues as further described below.

B. General Factual Background on Concrete Crossties

Traditionally, crossties have been made of wood, but due to improved continuous welded rail processes, elastic fastener technology, and concrete prestressing techniques, the use of concrete crossties is widespread and growing. On major railroads in the United States, concrete crossties are used in both freight and passenger operations, both under revenue service, dates back to 1970s were focused on the strength and prestressing tendons and concrete material optimization such as aggregate grading or under revenue service, dates back to 1893. The first railroad to use concrete crossties was the Philadelphia and Reading Company in Germantown, PA. In 1961, the Association of American Railroads (AAR) carried out comprehensive laboratory and field tests on prestressed concrete crosstie performance. Replacing timber crossties with concrete crossties on a one-to-one basis at 19 1/2-inch spacing proved acceptable based on engineering performance, but was uneconomical.

Increasing crosstie spacing from the conventional 20 inches to 30 inches increased the rail bending stress and the load that each crosstie transmitted to the ballast; however, the increased rail bending stress was within design limits. Further, by increasing the crosstie base to 12 inches, the pressure transmitted from crosstie to ballast section was the same as for timber crossties. Thus, by increasing the spacing of the crossties while maintaining rail, crosstie, and ballast stress at acceptable levels, the initial research showed that fewer concrete crossties than timber crossties could be used, making the application of concrete crossties a possible economical alternative to timber crossties.

Early research efforts in the 1960s and 1970s were focused on the strength characteristics of concrete crossties, i.e., bending at the top center and at the bottom of the crosstie under the rail seat or the rail-crosstie interface, and material optimization such as aggregate and prestressing tendon and concrete dynamic loading, usually toward the field-side of the concrete rail base. This highly-concentrated non-uniform dynamic loading puts stress on the crosstie that can lead to the development of a failure. Additionally, repeated wheel loading rapidly accelerates rail seat deterioration where the padding material fails and the rail steel is in direct contact with the concrete. The use of automated technology can help inspectors ensure rail safety on track constructed of concrete crossties. While wood and concrete crossties differ structurally, they both must still support the track in compliance with the Federal Track Safety Standards (49 CFR part 213). The use of concrete crossties in the railroad industry, either experimentally or under revenue service, dates back to 1893. The first railroad to use concrete crossties was the Philadelphia and Reading Company in Germantown, PA. In 1961, the Association of American Railroads (AAR) carried out comprehensive laboratory and field tests on prestressed concrete crosstie performance. Replacing timber crossties with concrete crossties on a one-to-one basis at 19 1/2-inch spacing proved acceptable based on engineering performance, but was uneconomical. Increasing crosstie spacing from the conventional 20 inches to 30 inches increased the rail bending stress and the load that each crosstie transmitted to the ballast; however, the increased rail bending stress was within design limits. Further, by increasing the crosstie base to 12 inches, the pressure transmitted from crosstie to ballast section was the same as for timber crossties. Thus, by increasing the spacing of the crossties while maintaining rail, crosstie, and ballast stress at acceptable levels, the initial research showed that fewer concrete crossties than timber crossties could be used, making the application of concrete crossties a possible economical alternative to timber crossties.

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