

HAMILTON STREET

BRIDGE SITE:

(Spokane Manufactured Gas Plant &
American Tar Company Sites)



DRAFT SECOND SUPPLEMENTAL and REMEDIAL INVESTIGATION & FEASIBILITY STUDY REPORTS

The Washington State Department of Ecology has received the draft Second Supplemental and Remedial Investigation Report & the draft Feasibility Study Report for the Hamilton Street Bridge Site. These reports were completed as required in Agreed Order No. 00TCPER-754 issued under the authority of the Model Toxics Control Act (MTCA) Chapter 70.105D RCW. The Order was issued to Avista Corporation and Burlington Northern Santa Fe (BNSF) collectively known as the potentially liable persons (PLPs). The Remedial Investigation defines the nature and extent of contamination at the Site and the Feasibility Study identifies and evaluates cleanup options for the Site.

Ecology invites the public to review and comment on the draft Second Supplemental and Remedial Investigation & Feasibility Study Reports. Public comments will be accepted **December 15, 2000 through January 18, 2001**. The box at the right indicates where comments may be sent and additional information obtained.

SITE BACKGROUND

The Site is located at North 111 Erie Street, Spokane, Washington (Figure 1). It is generally located at the present-day Brown Building Materials salvage and sales operation, situated beneath the Hamilton Street James E. Keefe Bridge along the Spokane River. It includes properties associated with the former Spokane Manufactured Gas Plant, the Burlington Northern and Santa Fe Railway Company (BNSF), and the former Chicago Milwaukee & Saint Paul Railroad (CM&SPR) property, which are now owned by Spokane River Properties and BNSF. (Figure 2).

Between approximately 1905 and 1948, manufactured coal gas and carbureted water gas were produced on the Spokane Manufactured Gas Plant property. From 1948 to approximately 1956, a propane-air system was operated from the manufactured gas plant, utilizing the facility for gas mixing, storage, and distribution. The propane-air system was used until natural gas was available. To reflect the change from coal gas manufacturing to natural gas distribution, the company changed its name to Spokane Natural Gas Company in 1956.

DECEMBER 2000

Public Comment Period:
**December 15, 2000 through
January 18, 2001.**

**Questions and written
comments to:**

Dr. Teresita Bala
Department of Ecology
Toxics Cleanup Program
4601 N. Monroe
Spokane, WA 99205-1295
E-mail tbal461@ecy.wa.gov
(509) 456-6337 or
1-800-826-7716

REPOSITORIES:

Department of Ecology
Eastern Regional Office
4601 N. Monroe
Spokane, WA 99205-1295

Spokane Public Library
906 West Main Avenue
Spokane, WA 99201

Mailing List Contact:

**Carol Bergin at Ecology toll
free at 1-800-826-7716 or in
Spokane at (509) 456-6360**
E-mail cabe461@ecy.wa.gov

In 1958, Washington Water Power Company (WWP), now Avista Corporation, merged with the Spokane Natural Gas Company. The gas plant facilities were demolished in 1959. WWP stored and dispensed natural gas from the Site until 1962 or 1963. Mr. Richard Brown leased the Spokane Manufactured Gas Plant property from WWP starting in 1963 and purchased it in 1978. In 1982, the property was deeded to Spokane River Properties, of which Mr. Brown is the general partner.

During the operation of the manufactured gas plant, coal tar, a by-product of coal-gas production, was transferred via pipeline to a coal-tar processing and distribution facility at an adjacent property. The adjacent property was leased from the Northern Pacific Railroad, now BNSF. C. G. Betts Company operated this facility until the early 1930s when the operations were taken over by the American Tar Company. The American Tar Company operated the facility until 1967, reportedly shipping tar from Seattle after the Spokane Manufactured Gas Plant was shut down. Mr. Brown began leasing the American Tar Company property from BNSF in 1968 and continues to lease the property today.

The existing riverfront property at the Site, property west of the Spokane Manufactured Gas Plant property and north of the BNSF land, was formerly owned by CM&SPR. Mr. Brown purchased this property in 1981, and the title is now held by Spokane River Properties.

PREVIOUS STUDIES

The U.S. Environmental Protection Agency (EPA) conducted a preliminary assessment of the Spokane Manufactured Gas Plant and American Tar Company properties in 1987. EPA completed a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) screening investigation of the American Tar Company Site in 1988 and of the Spokane Manufactured Gas Plant Site in 1995 and referred both sites to the Washington Department of Ecology for further consideration.

Ecology has combined the Spokane Manufactured Gas Plant and American Tar Company sites into one referred to as the Hamilton Street Bridge Site. This Site has a ranking of three under MTCA (score of one to five with one being of highest rank).

In 1997 the Washington Department of Transportation conducted an environmental investigation of the Site as part of a proposed highway realignment of Trent Avenue. Their study showed the presence of coal-tar waste covering an area of two to three acres and extending below ground surface to a depth in excess of 40 feet. The primary contaminants of concern in the soils are a class of hydrocarbon chemicals known as polynuclear aromatic hydrocarbons (PAHs).

In late 1997, Avista initiated investigations of ground water and soil contamination. The results further defined the lateral boundaries of the soil contamination and showed that the soil contamination does not adversely affect ground water outside the limits of soil contamination. The

results also show that the Site does not impact the Spokane River sediments and surface water.

In 1998 BNSF conducted a soil and ground water investigation on the former American Tar Company operation property. Contaminants related to the coal tar were found in soil samples but were not detected in ground water samples from monitoring wells installed on the property.

REMEDIAL INVESTIGATION (RI)

Additional investigations to further evaluate the vertical extent of contamination, ground water quality, and hydraulic gradients were required under the Order to complete the RI.

The draft Second Supplemental and Remedial Investigation Report incorporates results from past investigations with results from additional Site investigations to define the nature and extent of contamination. Results show that constituents typically associated with manufactured gas plant processes and/or coal tar processing were found in Site soil samples up to 80 feet below ground surface. These constituents include volatile organic hydrocarbons (VOCs) and semivolatile organic hydrocarbons (sVOCs), PAHs, and inorganic compounds.

Ground water monitoring was focused outside of the contaminated soil area because ground water within the soil affected area is assumed to be contaminated. Relatively few of the Site contaminants were detected in the ground water samples analyzed. The limited extent of ground water

contamination outside of the impacted soil area indicate that constituents that are leached into the ground water are undergoing biodegradation through physical, chemical, and biological processes. The study also shows that the Spokane River surface water level is generally higher in elevation than ground water, except during periods of peak runoff in the late spring to early summer.

FEASIBILITY STUDY (FS)

The FS Report examines cleanup alternatives that protect human health and the environment. Remedial alternatives for both the ground water and soils are analyzed to determine which combination of alternatives will be most appropriate for the Site. Five alternatives were evaluated based on MTCA criteria after an initial screening of processes and alternatives. These alternatives include:

Limited Soil Capping, Natural Attenuation, Ground Water Monitoring and Institutional Controls.

Low Permeability Cap, Natural Attenuation, Ground Water Monitoring, and Institutional Controls

Shallow Excavation of Soils and Filling to 15 Feet over the Site, Natural Attenuation, Ground Water Monitoring, and Limited Institutional Controls

Shallow Barrier Wall Installed between the Site and River, Limited Soil Capping, Natural Attenuation, Ground Water Monitoring, and Institutional Controls

Streambank Bioengineering, Limited Soil Cap, Natural Attenuation, Ground Water Monitoring, and Institutional Controls.

The cleanup alternative recommended by the PLPs in this report is **Limited Soil Capping, Natural Attenuation, Ground Water Monitoring, and Institutional Controls.**

WHAT HAPPENS NEXT?

Public comments on the draft reports will be considered and these reports will be modified, if necessary. Ecology will then prepare a Draft Cleanup Action Plan (DCAP) that will specify the selected remedy for the Site. The public will have an opportunity to review and comment on the DCAP.

HOW CAN YOU BE INVOLVED?

- ◆ **Review the draft Second Supplemental and Remedial Investigation & Feasibility Study Reports.**

The documents at the Spokane Library-Main Branch are available any time during regular library hours. To review documents at Ecology in Spokane, contact Johnnie Harris at (509) 456-2751 to schedule an appointment. Reviews may be scheduled Monday through Thursday, 8-5 p.m. by appointment.

- ◆ **Send in your written comments December 15, 2000 through January 18, 2001 to: Dr. Teresita Bala, Site Manager at Ecology (see box on page one for details).**

- ◆ **Share this information with any individuals or groups you think should be informed about the Site.**

Ecology will review and respond to all written comments received and will revise the above documents, if necessary. A Responsiveness Summary will be prepared by Ecology and made available at the repository locations if significant public comments are received.