



## U.S. Environmental Protection Agency Kim Stan Landfill Superfund Site Selma, Virginia

### EPA Announces Start of Construction for Kim Stan Landfill Cleanup

April 2006

#### Summary

In January 2006, construction began at the Kim Stan Landfill Superfund Site in Selma, Virginia. This work initiates EPA's cleanup of the former landfill site. Cleanup is necessary to address the contaminated landfill wastewater, commonly known as leachate, which has impacted the ground water and surface water at the site.

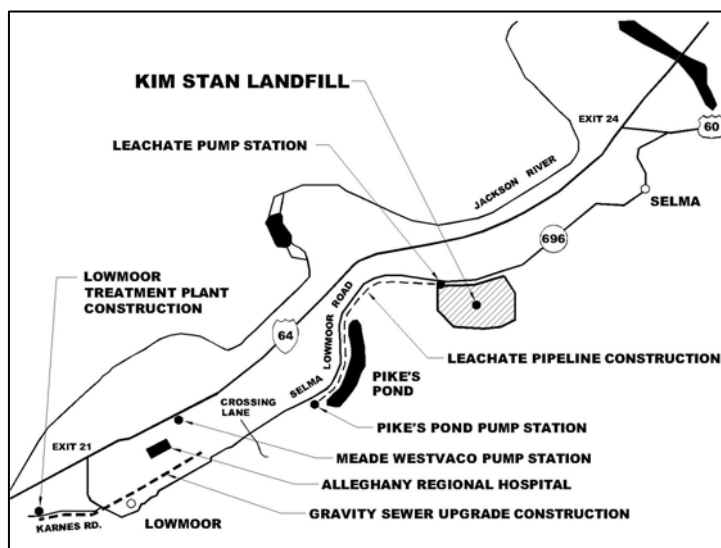
The cleanup of the Kim Stan Landfill site has four major elements: 1) The installation of a pipeline to convey leachate from the landfill to the Alleghany County sewer system, 2) an upgrade to the county sewer system to handle the additional flow from the landfill to the county's Low Moor Wastewater Treatment Plant (the treatment plant); 3) an upgrade of the treatment plant to improve its ability to handle the wastewater flow from the landfill; and 4) installation of a cap and other engineering controls at the landfill site for long-term protection of the environment.

At this time, construction is starting only on the leachate pipeline, the sewer, and the treatment plant upgrade. Future phases of the project will involve construction of a multi-layer cap and containment system. The cap and containment system will prevent leachate from continuing to form at the landfill and will permanently contain any residual leachate trapped beneath the landfill cap.

When this initial phase of the project is completed in December 2006, the portion of the leachate currently being released from the landfill to the surface environment will be conveyed instead to the treatment plant.

This will result in a substantial improvement in surface water quality near the landfill. Additional leachate control will be accomplished when the landfill cap is completed in the future.

EPA is managing the cleanup construction, and the Virginia Department of Environmental Quality (VADEQ) is providing technical support services. The Virginia Department of Transportation (VDOT) and the Alleghany County Government are also cooperating in the cleanup effort. The Kim Stan Advisory Committee will continue to monitor and represent community interests throughout the project.



#### What to Expect During Construction

Construction will take approximately 10 to 11 months. The initial work is scheduled to be completed by December 2006.

The treatment plant upgrade will be conducted in the immediate area of the existing Alleghany County sewage treatment plant located on Karnes Road. This work will include the construction of a new 265,000 gallon treatment tank adjacent to the two existing treatment tanks at the site.

Construction of the leachate pipeline and sewer system upgrades will be conducted over the much

wider area between the treatment plant and the landfill site which are located approximately 2.5 miles apart. The existing gravity sewer from the treatment plant to Alleghany Regional Hospital will be reconstructed, and an existing sewer pump station located near the Meade Westvaco facility in Low Moor will also be upgraded.

A new leachate pump station will be installed at the landfill, and a pipeline will be installed along Selma-Low Moor Road (State Route (SR) 696) from the landfill site to a new pump station to be constructed near Pikes Pond. Other existing county sewer lines between Pikes Pond and Crossing Lane will also be upgraded.

### **Some Things You May Notice as Construction Progresses:**

#### **Equipment and Gear**

Various construction vehicles and equipment may be seen during construction activities, including: backhoes (for trenching); bull dozers (for clearing, grubbing, and earth moving); dump trucks (for transporting backfill materials to the site and/or removing excess soil); pickup trucks and other support vehicles, and various types of delivery trucks.

Additional equipment will be used for the leachate pipeline and sewer work, including directional drilling and pipe bursting equipment, wastewater bypass pumps and piping, roadway plates, and traffic control devices. Pile drivers, concrete mixers, and cranes will be used periodically at the treatment plant site during construction.

Equipment and materials will be stored primarily at the treatment plant property, but other locations may also be used periodically along the existing sewer line right-of-way and easement areas.

#### **Traffic**

As many as ten vehicles per day will be used to support general construction activities. Heavy vehicles (dump trucks, cement mixers, cranes, pile drivers, etc.) will occasionally travel to and from the treatment plant site along Karnes Road, or along the other area roadways to support the work.

Traffic may periodically be delayed during certain sewer reconstruction activities. However, access to all residences and businesses will be maintained throughout the project.

Roadways that may experience traffic delays and temporary lane closures include Karnes Road between the treatment plant and SR696 (April – May 2006); SR696 in the vicinity of the CSX railroad overpass (May – July 2006); and the section of SR696 between Crossing Lane and the landfill site (April 2006 – June 2006).

#### **Safety**

Standard construction safety procedures will be used. A health and safety plan to protect workers and minimize impacts to the local community has been developed for the site. Traffic safety control devices will be used as required by VDOT to ensure safe conditions within the roadways.

EPA's oversight contractor will conduct periodic audits of the jobsite to promote a safe workplace and ensure compliance with applicable OSHA and related health and safety regulations and practices.

#### **Hours of Construction Activity**

Work will be conducted between 7:00 a.m. and 6:00 p.m., Monday through Friday. Work beyond these hours, including work on weekends or holidays, if approved, will be limited to completing critical activities.

#### **Dust and Air Pollution**

During construction, dust and air pollution will be minimized. Bare soils will be kept wet, as necessary. Properly operating combustion emission control devices will be required on construction vehicles and equipment, and motorized equipment not actually in use will be shut down whenever possible.

#### **Noise**

Efforts will be made during construction to ensure minimal annoyance to the general public, residents, and businesses in the vicinity of the work. The duration of road or sewerline work in any given area should not exceed two to three weeks.

No construction activities should cause excessive noise. When used, noisy equipment, such as generators, compressors, and pumps, will be equipped with mufflers or silencers.

### **Construction Specifics**

#### **Leachate Pipeline and Sewer System Upgrade**

This portion of the project will begin with work to upgrade the gravity sewer. Pump station and leachate pipeline construction will follow.

The sewer upgrade will include replacing approximately 3,200 feet of 6-inch and 8-inch gravity sewer pipe with 10-inch polyvinyl chloride (PVC) piping. This will increase the amount of wastewater that can flow through the sewer system.

Open-cut excavation, pneumatic pipe bursting, or directional drilling construction techniques, will be used, depending on site constraints. Modifications will be made to 21 existing manholes, and the sewer crossing over Karnes Creek will also be upgraded.

Pump station work will include: 1) renovation of the existing Meade Westvaco Pump Station; 2) construction of a new pump station near Pikes Pond that will replace two small stations in the area; and 3) the construction of a leachate pump station at the

landfill capable of pumping between 10,000 – 30,000 gallons per day.

All three pump stations will be equipped with controls that will allow for remote operation from the treatment plant.

Finally, approximately 4,300 linear feet of 2" PVC force main pipe will be constructed using open-cut or directional drilling techniques to convey the leachate from the landfill to the Pikes Pond pump station. This pipeline will be installed in the center of SR696 because the roadway has fiber optic and water lines on either side.

#### **Low Moor Wastewater Treatment Plant Upgrade**

The treatment plant will be upgraded with the installation of a third 265,000-gallon tank to supplement the two existing treatment tanks at the plant. The new treatment tank will add wastewater storage capacity, operational flexibility, and backup treatment capabilities for the plant.

In addition to the new treatment tank construction, new storm sewers will be installed at the plant site to improve drainage, a new perimeter fence will be installed, and more trees will be planted to enhance the visual buffer between the treatment plant site and nearby residences.



**LOW MOOR WASTEWATER TREATMENT PLANT**

## **Contacts for the Community**

For more information about the Kim Stan project, contact:

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**Written information about the site is available at:**

Clifton Forge Public Library

535 Church Street

Clifton Forge, VA 24422

540-863-2519

**You may obtain access to EPA documents electronically on the Internet:**

[www.kimstancleanup.com](http://www.kimstancleanup.com)