

The Former Chanute AFB **Environmental Update**

May 2009

Toll Free: 1-866-725-7617

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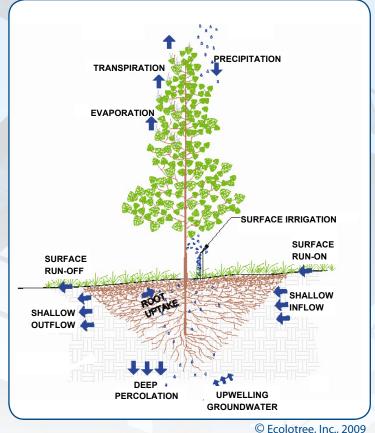
Air Force tests innovative "green" environmental cleanup at Chanute

Hybrid poplar trees may provide the Air Force with a "green" solution to environmental cleanup challenges at the former Chanute AFB. The restoration program at the former base, managed by the Air Force Real Property Agency (AFRPA) will test this technology in the cleanup efforts for a landfill at Chanute.

Going "green" at Chanute

In May, Shaw Environmental, Inc., will begin a treatability study to evaluate the use of poplar trees to absorb leachate (liquid and/or groundwater that has been in contact with landfill waste) possibly emanating from beneath a landfill at the base. Shaw was awarded a \$38.7M contract by the Air Force Center for Engineering and the Environment (AFCEE) in December 2008 to perform environmental remediation work at Chantue.

The trees will be planted around the landfill where they will act as barriers, preventing leachate migration, as well as filter any contaminants that may be present. This barrier, called an Evapotranspiration Buffer, also promotes the phytoremediation of soil contaminants—a method by which plants are used to clean up pollution in the environment by their own natural processes.



The diagram above demonstrates the use of poplar trees to manage and uptake the groundwater creating a barrier, while cycling carbon compounds, ammonia, and nutrients. Beginning in May, this type of environmental remediation system will undergo testing at the former Chanute AFB.

Innovative cleanup to benefit the community, the environment and the future

The study will continue for about three years and will determine if the approach offers significant potential benefits over conventional mechanical pump and treat methods. While the treatability study is being conducted at the landfill, the Air Force will also operate an existing mechanical leachate collection system at a second landfill. Because sample results indicate low levels of contaminants exist beneath this landfill, the Air Force believes it is prudent to operate this collection system to ensure the Air Force's priority of protecting human health and the environment.

The Air Force expects the use of these poplar trees will reduce energy consumption, increase ecological habitat in the area, and reduce the cost of maintenance of pump and treat systems while providing similar or better leachate capture and treatment. If successful, the use of the poplar trees will meet federal environmental management requirements, and will reduce the environmental footprint of the system needed to address any leachate migration. The Air Force will use the results of the treatability study to determine if the process can be applied to Chanute's remaining landfills.

Air Force Real Property Agency 143 Billy Mitchell Blvd., Suite 1 San Antonio, Texas 78226

May 14 Restoration Advisory Board Meeting

Join us at the next RAB Meeting!

May 14, 2009 at 12:00 p.m. Rantoul Business Center (Former Smith Hall) 601 S. Century Blvd., Suite 1106

Contact Information

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recuback, comments, and more information			
I would like more information about the environmental cleanup of the former Chanute Air Force Base.			
I would like more information about the Restoration Advisory Board for the former Chanute Air Force Base.			
Please let us know how we are doing. Your comments and opinions are welcome and assist the Air Force in providing the most accurate and up-to-date information regarding the cleanup of the former Chanute Air Force Base. Fill out this form and send it to the address listed below.			
Name (Mr./Mrs./Ms.)			
Organization			
Street address	State	_ Zip	Phone
Additional Comments			

Feedback Comments and More Information