



Phoenix-Goodyear Airport Superfund Site

U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • February 2010

Update on Cleanup Activities for the North and South Areas of the Site

Since our last update in 2007, progress has been made in both areas on the ground water investigations and clean up activities.

Introduction

The U.S. Environmental Protection Agency (EPA) and Arizona Department of Environmental Quality (ADEQ) are publishing this fact sheet to provide an update to the impacted communities on the ongoing cleanup activities at the Phoenix-Goodyear Airport Area (PGA) Superfund site, North and South Areas, in Goodyear, Arizona.

Site Background

In 1981, the Arizona Department of Health Services (ADHS) discovered that groundwater in the Site area was contaminated with trichloroethylene (TCE) and other volatile organic compounds (VOCs) from manufacturing operations in the area. As a result, EPA listed the overall Phoenix-Goodyear Airport Site to the National Priorities List (NPL) in September 1983 as the "Litchfield Airport Area" Superfund Site. After ownership of the airport property was transferred to the City of Phoenix, the Site was renamed the Phoenix-Goodyear Airport Area (PGA) Superfund Site. The Site is in the West Basin of the Salt River Valley, within the City of Goodyear, Arizona, approximately 17 miles west of downtown Phoenix.

During the Remedial Investigation to characterize the site, it was learned that there were two distinct source areas: one centered under the Unidynamics (UPI) facility north of Yuma Road and the other was largely coming from the Goodyear Aerospace/Loral Facility adjacent to the Litchfield Airport (presently known as the Phoenix-Goodyear Airport). Thus, the PGA NPL Site now consists of two distinct areas of contaminated groundwater which originated at two locations: the former UPI facility, referred to as PGA-North, and the former Goodyear Aerospace/Loral facility, referred to as PGA-South.

Active operations took place at the UPI facility from 1963 to 1994, including manufacturing and testing mechanical and electrical components used in defense and aerospace applications. The primary operations at the plant included manufacturing rocket propellant, processing and blending powder, assembling ordnance, machining, testing explosives, ballistics and related functions. Contaminants of concern from operations on-site include perchlorate (the primary chemical ingredient of solid rocket propellant) and VOC's such as TCE which were associated with wastes disposed at the UPI facility.

The former Litchfield Airport site boundaries are Yuma Road to the north, Litchfield Road to the east, Highway 85 to the south and Reems Road to the west. On site currently is the Phoenix Goodyear Airport and Lockheed Martin Corporation.

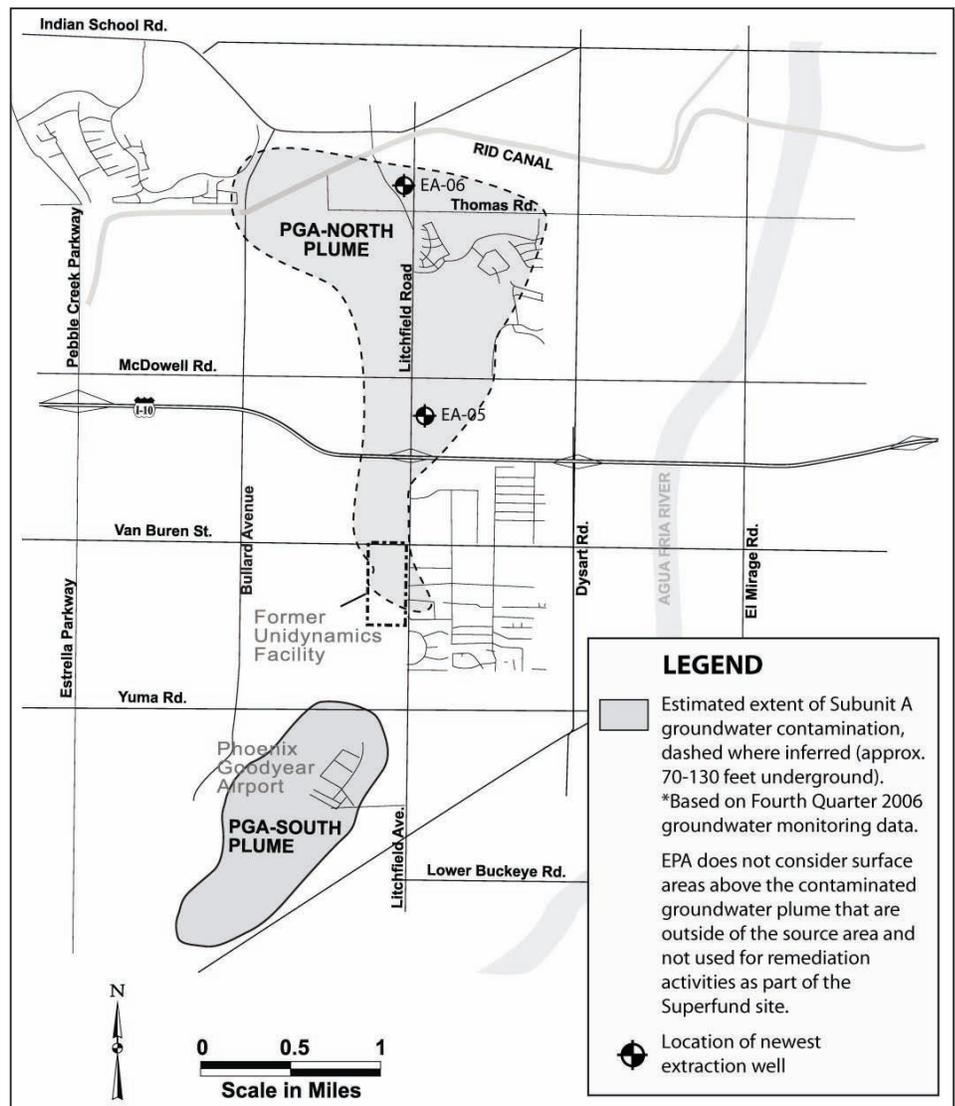
Current Status: PGA South

- To date, more than 5636 pounds of TCE have been removed through three groundwater pump and treatment systems.
- To date, approximately 16 pounds of chromium have been removed through a groundwater pump and treatment system on Well E-17.
- To date, approximately 2,524 pounds of TCE have been removed from the subsurface by the SVE system.

Groundwater monitoring continues for wells at the site while the ground water plume has been contained through the operation of on-site treatment systems. The concentrations of TCE in groundwater have been lowered to below 5 ug/L off site.

Current Status: PGA North

- Completed demolition of all buildings on site at PGA-N in September, 2009.
- To date, have removed more than 41,000 pounds of TCE through four groundwater pump and treatment systems.
- To date, approximately 11,354 pounds of VOCs have been removed from the subsurface by the soil vapor extraction (SVE) system since operations restarted in May 2004. Of the total VOCs removed, 1,600 pounds were TCE.
- An ion exchange unit was added to the Main Treatment System (MTS) to expand the treatment capabilities and allow the system to remove perchlorate. Also the treatment capability of the MTS was increased to 7 groundwater extraction wells and 6 groundwater injection wells. To date, the expanded MTS has removed more than 100 pounds of perchlorate.
- An additional 268 soil samples were collected in 2009 for the Source Areas, Soils and Facility Structures Investigation (Phase II).
- Continue to identify and control additional known and potential conduit wells.
- Continue to investigate and define the extent of ground water plume.
- Completed Engineering Evaluation Cost Analysis (EE/CA) for perchlorate.



PGA Superfund Site, WQARF Site

Site-wide Activities

Groundwater treatment continues to remove TCE in both areas, North and South, as well as treatment for perchlorate in the North area and for chromium in the South area.

Closure of Potential Conduit Wells

Potential conduit wells may allow contaminants to migrate from the upper aquifer to deeper drinking water zones along the outside of the well's casing. Investigation and closure of such wells was a priority in the late 1980's and early 1990's in the South Area. As a result, plume migration to the drinking water aquifer and off-site was minimized. Identification and closure of conduit wells which impact the Subunit C aquifer remain a priority in the North Area.

North-Area Groundwater Monitoring and Investigation

Ongoing groundwater monitoring and investigation continues in the North Area where the plume has not yet been contained. The North Area groundwater plume has undergone significant changes over the past decade that has made characterization and plume capture difficult. The primary reasons for these changes are associated with:

- Source area characterization did not occur in a timely manner.
- Capture zone of early groundwater treatment systems was not confirmed (plume expanded).
- Rapidly growing demands on groundwater resources (increased pumping from supply wells).
- Delineation of plume is ongoing but still not complete.
- Groundwater flow model with predictive capabilities is being prepared but is still not complete.

Protection of Drinking Water Wells

EPA and ADEQ continue to keep drinking water well protection as the highest priority for the remedial action at the site, both areas. The need for this is demonstrated by the municipal supply wells that have been impacted by contamination in the past. These wells include City of Goodyear wells old COG-2, and COG-10. These wells, and fire-protection well COG-4, have all been permanently sealed due to contamination issues and to prevent further contamination of the drinking water aquifer through vertical movement of contaminated water via these deep wells.

EPA and ADEQ Begin Second Five-Year Review of Cleanup

The U.S. Environmental Protection Agency (EPA) in conjunction with Arizona Department of Environmental Quality (DEQ), is currently conducting a second Five-Year Review at the Phoenix Goodyear Airport (PGA) Superfund site. The purpose of this second Five-Year Review is to evaluate the implementation and the effectiveness of the cleanup to determine if it remains protective of human health and the environment. The Superfund law requires EPA to evaluate the effectiveness and protectiveness of remedial actions every five years if a cleanup takes more than five years to complete.

This is the Site's second five-year review. A previous set of reviews, conducted in 2005 and 2006, found that the cleanups for North and South Areas could not be completely evaluated as to whether it is protective of human health and the environment. The recommendation suggested in the previous review included continuation of long-term protectiveness to be verified by monitoring the extent of groundwater contamination along the estimated groundwater contamination plume boundaries. This evaluation should be accomplished through routine monthly and quarterly groundwater sampling events. EPA continues to recommend optimization of both the regional and facility-specific systems to enhance plume capture, evaluation of applicable technologies to potentially expedite contaminant mass removal and cleanup time, and evaluation of the potential need for institutional controls.

During this review process, EPA and ADEQ will study information about the site, conduct a site inspection and interview people who are familiar with the site. The methods, findings, and conclusions of the review will be documented in the Five-Year Review Report. The report will include the following: site background and history; an explanation of remedial measures in place; a discussion of the site inspection conducted; an explanation of how the community will be notified about the review; past actions conducted as a result of previous reviews; long-term institutional controls; site recommendations (if warranted); and a statement of protectiveness. The statement of protectiveness documents whether the cleanup decisions and remedial actions continue to be effective.

Input on Five-Year Review and Availability of Report

EPA and ADEQ place a high value on community input. If you have concerns or suggestions regarding the PGA Five-Year Review, please feel free to contact the EPA and ADEQ personnel listed at the end of this fact sheet. EPA will place a copy of the final report in the information repositories after the review is complete.

Community Involvement

As part of this five-year review process, EPA and ADEQ will conduct community interviews. If you are aware of any problems or have any concerns with the remedy and would like to participate in the interviews, please contact Viola Cooper/Felicia Calderon, Community Involvement Coordinator or Catherine Brown, Remedial Project Manager with the US EPA; contact information below.

You can obtain further site information from EPA's web site: <http://www.epa.gov/region09/PGA>.

Community Involvement and Outreach

EPA and ADEQ work hard to promote meaningful community involvement and our goals are to: inform the public of current and planned site activities;

- maintain open communication about the site investigation and cleanup
- ensuring questions are answered and concerns are addressed as they occur
- and provide citizens with opportunities to comment on and be involved in cleanup decisions that will have long-term effects on the community.

EPA and ADEQ will continue to update residents about the PGA Area Superfund Site through fact sheets, public meetings and regularly scheduled Community Advisory Group (CAG) meetings. Please feel free to call or write using the contact information found on the back of this mailing. Also, if you have an interest in becoming a potential CAG member please contact the Community Involvement Coordinator (see contact information on last page). The CAG meetings are open to the public and meet on a quarterly basis to collect information about site cleanup activities and serve as a focal point for the exchange of information among the local community.

Community Involvement Plan Update

EPA and ADEQ will be updating the Community Involvement Plan (CIP) for the PGA Site. The plan will describe the community's feelings, wishes and plans for the site, as well as describe the best way for EPA to work with community members.

If you would like to participate in the interviews, please contact the contacts on the back page.

Superfund Technical Assistance Grant (TAG)

EPA and ADEQ value your input and want to help you understand the technical information relating to the cleanup of Superfund sites in your community so that you can make informed decisions. A Technical Assistance Grant (TAG) provides money for activities that help your community participate in decision making. An initial grant up to \$50,000 is available to qualified community groups so they can contract with independent technical advisors to interpret and help your community understand technical information about the site. You can obtain more information about the TAG program by contacting Viola Cooper, Community Involvement Coordinator (see contact information on last page).

Technical Assistance Services for Communities

Technical Assistance Services for Communities (TASC) is a new program to provide independent, non-advocacy educational and technical assistance to communities affected by hazardous waste sites regulated by the Resource Conservation and Recovery Act (RCRA) and Superfund programs. This program can help your community by providing experts to explain hazardous waste problems and EPA's plans to clean up the waste. EPA offers this assistance to help your community understand hazardous waste issues better, so your community can participate in the decision-making process more effectively.

Site Repository

Goodyear Branch Library

250 N. Litchfield Road, Ste 185

Goodyear, AZ 85338

(602) 652-3000

Hours: Mon–Wed 11 a.m.–7 p.m.

Thurs–Sat 10 a.m.–5 p.m.

Avondale Public Library

495 E. Western Ave.

Avondale, AZ 85323

(623) 333-2665

Hours: Mon–Thurs 10 a.m.–7 p.m.

Fri–Sat 10 a.m.–5 p.m.

EPA Superfund Records Center

95 Hawthorne St., 4th Floor

San Francisco, CA 94105

(415) 536-2000

Hours: Mon–Fri 8 a.m.–5 p.m.

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EPA encourages public participation and welcomes comments, questions, and input at any time. You may contact the Remedial Project Manager, the Community Involvement Coordinator, or leave a message on the EPA Toll-Free Information Line at (800) 231-3075 and someone will respond to you as soon as possible.



For more site information, visit the PGA Site Overview at: www.epa.gov/region09/phoenix-goodyearairport



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Una versión en español por dentro

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San Francisco, CA 94105
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