



Technical Assistance Services *for Communities* Tucson International Airport Area Technical Assistance Needs Assessment

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Technical Assistance Needs Assessment Report

Site Name: Tucson International Airport Area Superfund Site
Site Location: Tucson, Arizona
Date: April 12, 2018

Introduction

The U.S. Environmental Protection Agency's (EPA's) Technical Assistance Services for Communities (TASC) program conducted this Technical Assistance Needs Assessment (TANA) for the community near the Tucson International Airport Area (TIAA) Superfund site. Its purpose is to better understand the current technical assistance needs of the TIAA site community related to the cleanup of the TIAA Superfund site.

The recommendations in this TANA report are based on:

- Background site and community information gathered online.¹
- In-person and telephone conversations with community members and stakeholders. TANA participants are listed in the table on the following page.
- A technical assistance needs prioritization meeting with TANA participants on March 28, 2018.

This report is funded by EPA's TASC program. Its contents do not necessarily reflect the policies, actions or positions of EPA. TASC shared a draft version of the TANA report with TANA participants on January 18, 2018 for a fact-checking review. This final version incorporates comments received from the review, as well as comments received during the March 28, 2018 technical assistance needs prioritization meeting with TANA participants.

¹ The end of this document provides a list of information sources.

Entity/Organization	Participants²	Date	Format
Environmental Justice Task Force	<ul style="list-style-type: none"> • Linda Robles • Roberto S. Jaramillo • Monica Rivera 	October 17, 2017	In-person
Ward 5	<ul style="list-style-type: none"> • Councilman Richard Fimbres • Mark Kerr, Chief of Staff • Lupita Robles, Council Aide • Matt Pate, Staff Aide 	October 17, 2017	In-person
Ward 1	<ul style="list-style-type: none"> • Vice Mayor/Councilwoman Regina Romero • Steve Arnquist, Senior Council Aide 	October 17, 2017	In-person
Tucson Water	<ul style="list-style-type: none"> • Jeff Biggs, Administrator of Strategic Initiatives Division 	October 18, 2017	In-person
Unified Community Advisory Board ³	<ul style="list-style-type: none"> • Yolanda D. Herrera • Bill R. Jeffers • Marti Lindsey • Margie Mortimer • Donald Matthieu 	October 18, 2017	In-person and via email
University of Arizona	<ul style="list-style-type: none"> • Denise Moreno Ramirez, Doctoral Student, Department of Soil, Water and Environmental Science and School of Anthropology – Medical Anthropology 	October 18, 2017	In-person
Pima County	<ul style="list-style-type: none"> • Dr. Francisco García, Assistant County Administrator for Health Services & Chief Medical Officer 	October 30, 2017	Phone
Pima County Health Department	<ul style="list-style-type: none"> • Kim Tham, Senior Special Staff Advisor 	October 31, 2017	Phone
U.S. House of Representatives, Arizona's 3 rd District	<ul style="list-style-type: none"> • Congressman Raul M. Grijalva 	October 31, 2017	Phone
Pima County Board of Supervisors, District 2	<ul style="list-style-type: none"> • Hon. Ramón Valadez 	November 29, 2017	Phone
Pima County Department of Environmental Quality	<ul style="list-style-type: none"> • Ursula Nelson, Director 	November 29, 2017	Phone

² This is not an inclusive list. Some participants requested that their names not be published.

³ UCAB members who participated in the TANA were identified and invited by the UCAB Co-Chair. Upon request, TASC provided the TANA questions via email to share with other UCAB members.

Site Background and Past Community Involvement

The Tucson International Airport Area Superfund site covers about 10 square miles in Pima County, Arizona, south of the intersection of Interstate Freeways 10 and 19. The site includes the Tucson International Airport, a portion of Tohono O’Odham Indian Reservation land, neighborhoods in the cities of Tucson and South Tucson, and the Air Force Plant #44 Raytheon Missile Systems Company.

Since 1942, at least 20 facilities have operated on site; industrial uses and waste disposal activities led to soil and groundwater contamination. The City of Tucson detected groundwater contamination in the early 1950s, and improper waste disposal practices at the site stopped in the early 1970s. EPA and the City of Tucson sampled groundwater in 1981 after residents reported that water from private wells west of the airport property had a foul chemical odor. This sampling revealed unsafe levels of trichloroethylene (TCE), a chemical used as a metal degreaser, in several city wells on the south side of Tucson. EPA added the site to the Superfund program’s Superfund National Priorities List in 1982. Additional sampling identified a main plume of groundwater contamination about 5 miles long and a half-mile wide. Other smaller contamination plumes are located north and northeast of the airport. The City of Tucson has closed all municipal wells exceeding the State’s health levels and notified private well owners about the potential risks of contamination.

When the contamination was first discovered, EPA identified TCE as the primary contaminant of concern, with perchloroethylene (PCE), dichloroethylene (1,1-DCE), chloroform, benzene and chromium as other contaminants of concern. EPA identified 1,4-dioxane as an additional contaminant of concern in the early 2000s. Since cleanup began, more than 40 billion gallons of groundwater have been treated, with more than 130,000 pounds of contaminants removed from soil and groundwater at the site. Cleanup is ongoing; a new advanced oxidation process (AOP) treatment system currently treats all contaminants of concern, including 1,4-dioxane.

There have been several community involvement efforts at the site. In the 1990s, the League of United Latin American Citizens (LULAC) was a recipient of an EPA Technical Assistance Grant. The Unified Community Advisory Board (UCAB), composed of residents and representatives from the various site agencies, has been active since 1995. UCAB’s goal is to help the community engage with the cleanup process. UCAB meets quarterly on the third Wednesday of January, April, July and October. The community has also had significant interactions with the site and site agencies over time. These interactions are discussed further in the next section.

Perspectives on Community Technical Assistance Needs from Community Conversations

TASC conducted TANA conversations from October to November 2017.⁴ Participants in the needs assessment shared a variety of concerns related to the community’s potential technical assistance needs.

The main concern expressed by participants is that public awareness and understanding of the Superfund site and cleanup process is limited. Participants provided potential explanations for why awareness and understanding may be low at the site, and offered potential solutions to increase and improve public awareness and engagement.

⁴ These community members and stakeholders were recommended by EPA or other participants.

One of these explanations is the community’s history of distrusting site agencies, dating back to when public officials wrongly assured the community that people were not drinking water with unsafe TCE levels. Participants discussed the importance of acknowledging the site’s complicated history for many community members. With 1,4-dioxane emerging as a contaminant of concern in recent years, participants noted that it is even more important for the city, county and other site agencies to be transparent. Participants shared possible solutions, including relying on existing community resources and leadership, to help build trust and to increase community awareness and understanding of site issues and activities.

Participants noted that while UCAB members are informed about site activities, the information is not necessarily then disseminated to the broader community. Participants suggested ways to help increase UCAB’s effectiveness and inclusiveness. Participants also identified specific technical assistance needs and other needs. The subsections below provide more information on these findings.

Low Public Awareness and Understanding of the Superfund Site

A primary concern shared by all participants is the general public’s relative lack of awareness of the status of the Superfund site and its cleanup. The participants agreed that the general community does not have a clear understanding of the cleanup process or the contamination. Participants shared different potential explanations for why site awareness may be low and offered some potential solutions to increase public awareness and engagement. These findings are summarized in the table below.

Low Public Awareness and Understanding Insights Shared by Participants	Solutions to Increase Public Awareness and Engagement Offered by Participants
<p>Outreach methods have not been effective at reaching all parts of the community.</p>	<ul style="list-style-type: none"> • Provide all information in both English and Spanish. • Conduct one-on-one, on-the-ground outreach when possible. Phone calls, emails and news releases may also help. • Partner with and use existing community resources for outreach.⁵ • Have smaller group conversations to better engage the community. • Use more online outreach, such as social media and ads on Pandora and Facebook, while understanding that not everyone has computer and Internet access. • Provide more information about existing community groups and community involvement opportunities. • Consider outreach through English and Spanish publications such as the <i>Arizona Daily Star</i>, the <i>Tucson Citizen</i>, <i>Tucson Weekly</i>, the <i>Tucson Sentinel</i>, the <i>Daily Territorial</i>, <i>La Estrella De Tucson</i>, <i>Arizona Bilingual</i> and <i>El Imparcial</i>. • Consider outreach through radio and television. • Consider including information with water bills. • Use mass mailings. • Engage the Native American community. • Reach out to elected and public officials at the city, county and state levels.

⁵ The next subsection lists specific suggestions provided by participants.

	<ul style="list-style-type: none"> • Work with schools. This may also help reach non-English-speaking parents whose children can help translate for them. • Invite political reporters to attend UCAB and/or other site meetings/events. • Provide information to more of the community, and not just south-side neighborhoods. Provide information to people who have since moved away. • Provide information to newer residents.
Community members are not understanding the material or the message.	<ul style="list-style-type: none"> • Provide all information in both English and Spanish. • Use plain language.⁶ • Consider providing information at different levels for community members with varying levels of involvement and understanding of site issues. • Provide more visuals on fact sheets/newsletters, and include contact information. • Provide a plain language summary and document review that accompanies technical documents, particularly for documents with public comment periods. • Provide a community workshop series (potentially at Sunnyside High School) to explain the Proposed Plan and the selected alternative, the cleanup process, historical context, and how to submit effective public comments. • Provide a glossary of terms. • Provide appropriate printed materials and videos. • Clarify misinformation and confusion surrounding compensation, litigation and related topics to be able to move forward with explaining current Superfund activities. • Provide small group tours of the new AOP treatment system. • Consider developing videos to share information.
The community's history of distrust affects how people may receive information.	<ul style="list-style-type: none"> • Acknowledge the community's history and the significance of what has taken place. Listen to the stories of people who have been affected. The University of Arizona's Oral History project can be a resource for agencies to better understand these stories. • Partner with and use existing community resources for outreach.⁷ • Partner with or have trusted entities provide information to the community. Some participants noted that, compared to other agencies, the Pima County Health Department has a stronger relationship with the community and could be a good partner. • Have smaller group conversations to better engage the community. • Be more proactive in providing information to the community. For example, provide information about why current levels of contamination are safe, announce public comment periods in a timely manner, and provide resources to help the community understand technical documents. • Focus on transparency and openness. For example, be clear that although the new treatment facility addresses 1,4-dioxane, it cannot remove all possible contaminants, and that as time goes on, there is the possibility that more chemicals may be discovered in the groundwater. • Depending on the situation, avoid having elected officials speak at events, as it may make issues seem unnecessarily political.

⁶ Participants identified different ways of interpreting the term “plain language.” To the participants, plain language could include using non-technical language, providing more background and context, and providing accompanying visuals with written explanations.

⁷ The next subsection lists specific suggestions provided by participants.

<p>Although UCAB is available as a resource, it could be more effective.</p>	<ul style="list-style-type: none"> • Use communication experts to help make UCAB presentations more understandable to the general public. • Provide information at a more basic level for newer UCAB meeting participants. • Provide support to improve UCAB meeting minutes. For example, some participants would like the minutes to be available more quickly and to be more accurate. • Consider supplementing UCAB presentations with smaller group presentations in the community. • Revisit UCAB membership to include newcomers and younger members of the community. • Improve information dissemination to the broader community in plain language.
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Using Existing Community Resources for Outreach

Participants suggested relying on existing community resources and leadership to help promote outreach and build trust. Participants suggested the following next steps:

- Develop and provide train-the-trainer workshops, modules and toolkits to help build community capacity for the long term.
 - Advocacy and grassroots organization training could be part of this training.
 - With trained community members, there will be more consistency regarding the people providing information.
 - Having trusted members of the community on the ground to answer questions about the site will be helpful for public awareness and understanding of the site. Consider Promatora health programs as a model for this.
- Engage neighborhood leaders, block leaders and the 29 neighborhood associations in Tucson.
- Collaborate and coordinate outreach and engagement with the Pima County Health Department and the University of Arizona to help build overall trust.
- Reach out to existing community groups, such as Derechos Humanos and other organizations, to have small group conversations.
- Keep elected officials, City Council, the Board of Supervisors and state representatives up to date on cleanup activities, and partner with them to include site updates in their newsletters.

Specific Technical Assistance and Other Needs

While this TANA focuses on technical assistance needs, all needs expressed by participants are documented. The following table summarizes specific technical assistance needs as well as other needs shared by participants.

Technical Assistance Need Type	Individual Needs Mentioned
Informational Needs	<ul style="list-style-type: none"> • Information on the cleanup timeline and how long the cleanup process will take. • Information on the general Superfund cleanup process. • Historical information about the site, including the extent of historical contamination and remediation. • Updated site and area maps. • Potential health consequences of contamination. • The status and safety of drinking water. • Current exposure risks. • Information about 1,4-dioxane. • How to submit effective public comments and information about public comment periods. • Information about Agency for Toxic Substances and Disease Registry (ATSDR) studies. • Document reviews in plain language. • A frequently asked questions (FAQ) sheet about the site. • Information about cleanup technologies and how the approach to cleanup at the site compares to the newest technologies available.
Procedural/Structural Needs	<ul style="list-style-type: none"> • An ongoing process to look at community needs. • A presentation on different types of technical assistance services so the community can understand what is available and which services would be most appropriate. • Facilitation and mediation support to help different groups engage in meaningful discussion together. • A more user-friendly information repository and EPA website.
Other Needs	<ul style="list-style-type: none"> • Allow the community to share concerns beyond the confines of the Superfund process to help acknowledge and validate these concerns. • Clarify misinformation and confusion surrounding compensation, litigation and related topics in order to be able to move forward with explaining current Superfund activities.

Prioritization of Technical Assistance Needs from the March 28, 2018 Meeting

On March 28, 2018, TASC hosted a technical assistance needs prioritization meeting with TANA participants in Tucson, Arizona. TASC circulated the meeting announcement and a list of 23 technical assistance needs identified in the TANA⁸ with the individuals that participated in the TANA conversations in October and November 2017, and requested email input on the technical assistance needs priorities if people were unable to attend the March 28, 2018 meeting.

At the technical assistance needs prioritization meeting, the list of 23 needs from the TANA were prioritized by meeting participants. The meeting participants emphasized that all 23 of the needs were

⁸ The 23 technical assistance needs identified were primarily taken from the table on pages 6-7 of the TANA, with a few exceptions based on community input and feedback.

very important. After further discussion, they grouped the needs into three levels– 1st priority, 2nd priority and 3rd priority. Needs were not prioritized within these levels.

The meeting participants also shared their thoughts on effective ways to address their prioritized needs. They mentioned the importance of using different methods for reaching people, including in-person community events as well as written materials that could be shared through different venues. Participants also emphasized the importance of having information available in both English and Spanish, and being more inclusive and transparent in outreach efforts.

1st Priority Technical Assistance Needs

- Historical information about the site, including the extent of historical contamination and completed and future remediation (fact sheet or presentation).
- Information on the potential health consequences of contamination (fact sheet or presentation).
- Information about the status and safety of drinking water (fact sheet or presentation).
- An ongoing process to look at community needs.
- Renewal and improvement of the UCAB charter, structure, membership and outreach approaches.
- More frequent site and cleanup updates in plain English and Spanish.

2nd Priority Technical Assistance Needs

- Information on the cleanup timeline and how long the cleanup process will take (fact sheet or presentation).
- Information about 1,4-dioxane (fact sheet or presentation).
- Information about how to submit effective public comments and information about public comment periods (fact sheet or presentation).
- Frequently asked questions (FAQ) sheet about the site.
- Information about current and potential new cleanup technologies (fact sheet or presentation).
- An improved website that is easy to navigate and is helpful to community members.
- Glossary of terms.

3rd Priority Technical Assistance Needs

- Information on the Superfund cleanup process (fact sheet or presentation).
- Updated site and area maps.
- Information about current exposure risks (fact sheet or presentation).
- Information about Agency for Toxic Substances and Disease Registry (ATSDR) studies (fact sheet or presentation).
- Document reviews in plain language (fact sheet/written summary or presentation).
- Presentation on types of technical assistance services available to communities.
- Facilitation and mediation support to help groups work better together.
- A more user-friendly and accessible information repository.
- Clarification of misinformation and confusion surrounding compensation and litigation.
- Contact information for agencies and key staff.

Recommendations for Technical Assistance

This section describes recommendations to help meet community needs based on conversations with community members and stakeholders. These recommendations focus on technical assistance. They could be fulfilled by EPA and other involved entities such as state agencies and the U.S. Air Force, with support from the TASC program and other technical assistance programs where appropriate. Draft recommendations have been revised based on the March 28, 2018 Prioritization Meeting.

TASC recommends addressing the community's needs in the order of the priorities identified during the March 28, 2018 Prioritization Meeting.

1st priority needs as identified by the community

- Provide in-person workshops/presentations and fact sheets about the following topics. Fact sheets should be in plain English and Spanish, and include visuals and maps. The topics below could be grouped together as appropriate for the workshops/presentations and fact sheets.
 - Site and cleanup updates.
 - Historical information about the site, including the extent of historical contamination and completed and future remediation.
 - Information on the potential health consequences of contamination.
 - Information about the status and safety of drinking water.
- Coordinate and host regularly-scheduled quarterly conference calls with community members to encourage community-agency interaction and continue to gather information on community needs.
- Provide additional meeting support to the UCAB with a focus on potential renewal of and updates to the UCAB charter, meeting structure, outreach methods (including website) and membership. This could include providing plain language support for the technical presentations shared by consultants so that the information can be more easily disseminated to the general public.

2nd priority needs as identified by the community

- Provide in-person workshops/presentations and fact sheets about the following topics. Fact sheets should be in plain English and Spanish, and include visuals and maps. The topics below could be grouped together as appropriate for the workshops/presentations and fact sheets.
 - Information on the cleanup timeline and how long the cleanup process will take.
 - Information about 1,4-dioxane.
 - Information about how to submit effective public comments and information about public comment periods.
 - Information about current and potential new cleanup technologies.
- Provide short fact sheets (1-2 pages each) for the community.
 - Frequently asked questions (FAQ) sheet about the site.
 - Glossary of terms.
- Provide or support site website changes to improve site navigation and readability. This could include reaching out to community leaders via phone or email for additional input.

3rd priority needs as identified by the community

- Provide in-person workshops/presentations and fact sheets about the following topics. Fact sheets should be in plain English and Spanish, and include visuals and maps. The topics below could be grouped together as appropriate for the workshops/presentations and fact sheets.
 - Information on the Superfund cleanup process.
 - Information about current exposure risks.
 - Information about ATSDR studies.
 - Technical review of key documents.
 - Information on the types of technical assistance services available to communities.
 - Clarification of misinformation and confusion surrounding compensation and litigation.
- Provide updated site maps and contact information for the community.
- Provide professional facilitation and mediation support to help different community groups work better together. This could include having professional facilitators work with community leaders to develop productive meeting agendas and having professional facilitation of public meetings.
- Regularly review and update the information repository. This could include providing materials in Spanish, when possible.

Additional recommendations

- Continue working with community groups and agency partners to be more proactive with sharing information and building trust. This could include partnering with agencies for outreach materials and events, keeping websites and repositories up to date, and providing facilitation support to help meetings run smoothly.
- Provide train-the-trainer Superfund workshops for community leaders on the Superfund process and cleanup activities. This could include developing modules and toolkits to help community leaders continue to build capacity within their neighborhoods.
- Update the TANA after a specified period to more formally consider additional community needs. Based on community interest and needs at that time, potentially develop a community outreach plan to broaden community awareness of the site and reach out to newer residents.

Sources Consulted for Background Information on the Site and the Community

- EPA Site Overview for Tucson International Airport Area Superfund site. Available at: <https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0900684>.
- Excerpts from the May 1985 series from the *Arizona Daily Star* newspaper, shared by community participants to provide historical context.

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