



# All About TASC

## Motorola 52nd Street CIG

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*Krissy Russell-Hedstrom*  
*TASC Technical Assistance Specialist*





# What Is TASC?

- Technical Assistance Services for Communities
- EPA-sponsored program
- Different than TAG program
- Services provided by E<sup>2</sup> Inc.





# TASC Services

- Information Assistance
- Community Education
- Technical Expertise
- Technical Assistance Needs Assessment





# Things TASC Can Do

- Fact sheets & brochures
- Websites
- Maps, diagrams, visual aids
- Translations
- Training seminars
- Community workshops
- Meeting facilitation
- Technical advisor services
  - Explain technical information
  - Help communities formulate questions and comments on agency documents



# Example Services: Tucson International Airport Area Site (R9-Arizona)

- Research general and site-specific information on 1,4-dioxane
- Prepare two page fact sheet on 1,4-dioxane in English and Spanish
- Present 1,4-dioxane information at a community meeting



TECHNICAL ASSISTANCE SERVICES FOR COMMUNITIES  
Tucson International Airport Area Superfund Site

[www.epa.gov/superfund/community/tasc](http://www.epa.gov/superfund/community/tasc)

### Basic Facts About 1,4-Dioxane and the Tucson International Airport Area

This fact sheet summarizes key issues associated with 1,4-dioxane contamination at the Tucson International Airport Area Superfund Site (TIAA). This fact sheet was produced by EPA's Technical Assistance Services for Communities (TASC) program.

Trichloroethylene (TCE) has been the primary contaminant of concern at TIAA since the site's discovery several decades ago. 1,4-Dioxane was not identified at TIAA until 2002 when it was detected in groundwater at three of TIAA's project areas: the Tucson Airport Remediation Project, Air Force Plant 44, and the Airport Property. Since these discoveries, a groundwater plume of 1,4-dioxane has been characterized (see map at right). This plume is different from the TCE groundwater plume previously characterized at the site. 1,4-Dioxane can cause negative health effects and so may be a concern for Tucson area residents. Tucson area groundwater has been treated for TCE for a number of years, and treatment for 1,4-dioxane is in its early stages.

#### What is 1,4-dioxane?

1,4-Dioxane is a flammable, colorless, synthetic, organic chemical with a faint pleasant odor. It does not stick to soil particles, so once it is introduced into the ground, it moves quickly into groundwater. Because it does not degrade under natural conditions, it remains in groundwater and migrates with it. This helps to explain the large area that the TIAA 1,4-dioxane plume covers.

*At right, The structure of 1,4-dioxane. It is an organic molecule containing only carbon, hydrogen, and oxygen atoms.*



1,4-Dioxane is used in a variety of ways, including as a stabilizer of TCE and another chemical, trichloroethane (TCA). Historically, about 90 percent of 1,4-dioxane has been used to stabilize TCA. Recent laws have limited the use of TCA due to its potential to deplete the ozone layer, and as a result, the use of 1,4-dioxane has declined in recent years. 1,4-Dioxane is also used in the manufacture of shampoos, cosmetics, and detergents and as a solvent to dissolve greasy substances. 1,4-Dioxane contamination has been detected in at least 30 other Superfund sites including the Lowry Landfill in Colorado and the Charles-George Reclamation Trust Landfill in Massachusetts.



*Above: 1,4-Dioxane Plume Extent at TIAA in 2006 (modified from Arizona Department of Environmental Quality map)*

#### Why is 1,4-dioxane an issue now?

Older laboratory methods were only capable of detecting 1,4-dioxane at very high levels. New detection technologies capable of detecting lower concentrations (between 0.024 and 16 parts per billion (ppb)) only became available starting in 1997. In addition, the Agency for Toxic Substances and Disease Registry added 1,4-dioxane to its Priority List of Hazardous Substances (a list of chemicals commonly found at Superfund sites that pose the most significant potential threat to human health due to their known or suspected toxicity and potential for human exposure) in 2005. These two events led to 1,4-dioxane becoming a contaminant of concern in groundwater at TIAA.

U.S. Environmental Protection Agency  
Technical Assistance Services for Communities 2008



# Example Services: BoRit Asbestos Tailings Pile Site (R3-Pennsylvania)

- Assist CAG in disseminating information by developing a website
- Assist CAG in producing a quarterly newsletter

## BoRit Asbestos Area Community Advisory Group Ambler / Upper Dublin / Whitpain, Pennsylvania

<a href="#">Home</a>
<a href="#">About the Area</a>
<a href="#">About the CAG</a>
<a href="#">Workgroup</a>
<a href="#">Public Meetings</a>
<a href="#">Key Documents</a>
<a href="#">Key Links</a>
<a href="#">Images</a>
<a href="#">Contact Us</a>

**NEXT PUBLIC MEETING:** Wednesday, February 4, 2009 (7:30 – 9:30 PM) at the Upper Dublin Municipal Building.

The BoRit Asbestos Area includes what is recognized as the largest unremediated asbestos site in the United States. It encompasses a 38-acre fenced-off blight that straddles the municipalities of Ambler, Upper Dublin, and Whitpain in Montgomery County, Pennsylvania.

Since the Summer of 2007, the BoRit Community Advisory Group (CAG), a diverse cross-section of 25 community and government stakeholders, has worked diligently to understand the options for mitigating the risks and realizing the potential posed by this contaminated area. It is with that collective experience and the considerable knowledge of the area by its Members, that the CAG is working to help produce and promote the most sustainable, long-term solutions for the three, interconnected parcels that make up the site.



Contractor loading asbestos/organic debris into a roll-off container for transport and disposal

11/13/2008



## Example Services: Antelope Roofing Tar Site (R9-California)

- Research health effects of asphalt roofing tar
- Present information in a report in both English and Spanish
- Present information in person at a community meeting





## Example Services: Raymark Site (R1-Connecticut)

- Review and analyze air sampling data
- Prepare a report summarizing the results of the air sampling data

**Table 8: Asbestos Statistical Data Analysis**

Year	Location	Sample Type	Action Level (f/cc)	Number of Samples	Number of Non-detects	Mean $\pm$ SD (f/cc)	Confidence Interval (f/cc)	Exceeds Action Level?
1993	Site A	Area	0.01	159	146	0.0038 $\pm$ 0.0037	Lower: 0.0033 Upper: 0.0043 p=0.05	No
		Community	0.01	263	248	0.0033 $\pm$ 0.0035	Lower: 0.0030 Upper: 0.0037 p=0.05	No
		Personal	0.1	117	49	0.0088 $\pm$ 0.0053	Lower: 0.0080 Upper: 0.0096 p=0.05	No
		Personal (TWA)	0.2	24	0	0.0064 $\pm$ 0.0035	Lower: 0.0051 Upper: 0.0076 p=0.05	No
	Site B	Area	0.01	56	35	0.0036 $\pm$ 0.0021	Lower: 0.0031 Upper: 0.0036 p=0.05	No
		Community	0.01	3	1	0.0064 $\pm$ 0.0059	Lower: -0.0036 Upper: 0.0163 p=0.05	No
		Personal	0.1	5	4	0.017 $\pm$ NA	Sample size too small for statistical test	All data points are below action level
	Site C	Area	0.01	176	163	0.0025 $\pm$ 0.0017	Lower: 0.0023 Upper: 0.0027 p=0.05	No
		Personal	0.1	27	22	0.0060 $\pm$ 0.0041	Lower: 0.0046 Upper: 0.0073 p=0.05	No
	1994	Site C	Personal	0.1	39	29	0.018 $\pm$ 0.009	Lower: 0.015 Upper: 0.020 p=0.05

NA=Not Available



- Focus on TA services
  - Long-term
  - Non-profit incorporated community groups eligible
  - 20% matching contribution by community group
  - Services by community-chosen TA
- Broad focus
  - Short or long-term
  - Any community-based organization eligible
  - No matching contribution
  - Services by EPA contractor



# TASC Technical Advisor Selection Process



# Pre-Selection Process

- CAG or community group submits request to EPA for technical advisor
- EPA directs E<sup>2</sup> Inc. to provide a technical advisor
- E<sup>2</sup> Inc. consults with CAG on desired qualities in a technical advisor
- Selection process begins





# Technical Advisor Options

- In-house employees
- Staff of sub-contractors
- Individuals registered in a technical expertise database
- Conduct a search





# Selection Criteria

- Relevant subject matter expertise
- Experience providing technical assistance
- Relevant social and cultural capabilities
- Understanding of environmental regulations, programs and agencies





## Selection Criteria (cont)

- Appropriate education and training
- Ability to be impartial and objective
- Ability to work with stakeholders
- Geographic location
- Cost effectiveness





# Community-Recommended Advisors

- Welcome
- Considered along with other options
- Conflict of interest needs to be closely evaluated
- Cost-effectiveness needs to be weighed against other options





# After Locating Technical Advisor

- If subcontractor, enter into subcontractor agreement with E<sup>2</sup> Inc. and become part of the TASC team
- Experience and resume shared with CAG
- Introduced to CAG
- CAG decides on priorities for technical advisor work
- TASC WAM creates work plan for advisor activities
- EPA approves work plan





# Questions?

Krissy Russell-Hedstrom

TASC Technical Assistance Specialist

(719) 256-6701

[krissy@e2inc.com](mailto:krissy@e2inc.com)