2012 EPA Annual Toxics Report Summary

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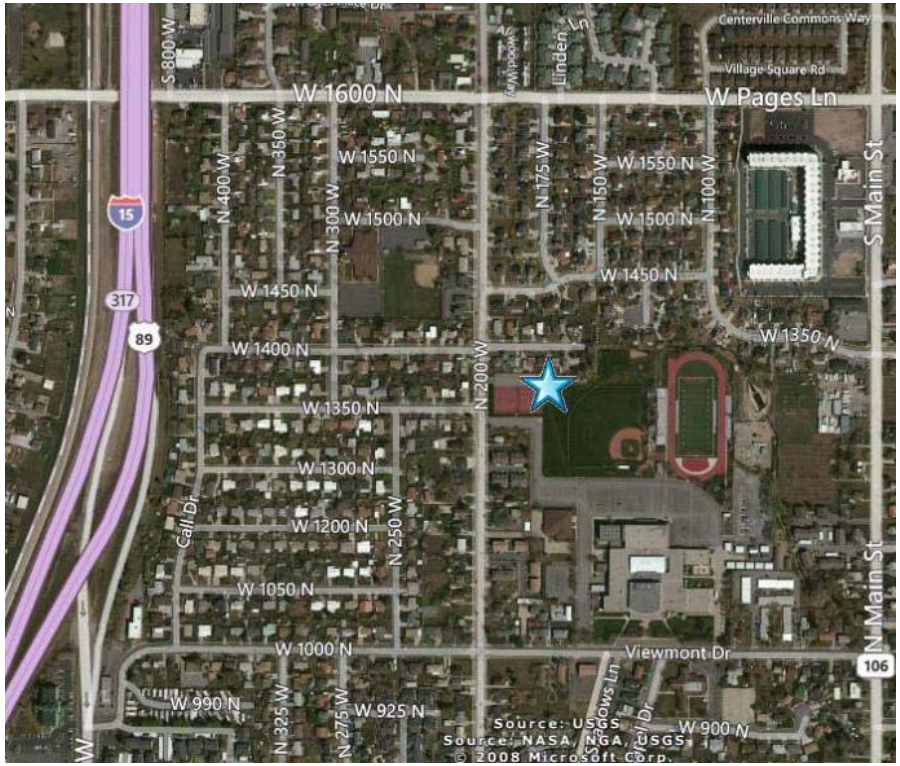
National Network Overview

- 64 Nationwide monitoring stations measuring air toxics
- Data collected on a 1-in-6 day schedule
- A single station was established in Utah in 2002

Bountiful Monitoring Station (BTUT)



Exposure Risk Metrics (Screening Values)

- **One in one million cancer risk**

  Represented as the number of people per million at risk for cancer, provided a lifetime exposure.

- **Non-cancer risk**

  Represented as Hazard Quotient. Values above one (1) represent that some health effects may occur. Values below one indicate that there is no appreciable health risk. (calculated over a lifetime)

Table 25-4. Risk-Based Screening Results for the Utah Monitoring Site

Pollutant	Screening Value ($\mu g/m^3$)	# of Failed Screens	# of Measured Detections	% of Screens Failed	% of Total Failures	Cumulative % Contribution
Bountiful, Utah - BTUT						
Benzene	0.13	56	56	100.00	11.02	11.02
Carbon Tetrachloride	0.17	56	56	100.00	11.02	22.05
Acetaldehyde	0.45	54	54	100.00	10.63	32.68
Formaldehyde	0.077	54	54	100.00	10.63	43.31
1,3-Butadiene	0.03	52	55	94.55	10.24	53.54
1,2-Dichloroethane	0.038	49	49	100.00	9.65	63.19
Arsenic (PM_{10})	0.00023	45	55	81.82	8.86	72.05
Naphthalene	0.029	41	59	69.49	8.07	80.12
Manganese (PM_{10})	0.005	37	57	64.91	7.28	87.40
Ethylbenzene	0.4	21	56	37.50	4.13	91.54
Propionaldehyde	0.8	10	54	18.52	1.97	93.50
Dichloromethane	7.7	7	56	12.50	1.38	94.88
Nickel (PM_{10})	0.0021	7	57	12.28	1.38	96.26
p-Dichlorobenzene	0.091	5	24	20.83	0.98	97.24
1,1,2,2-Tetrachloroethane	0.017	5	5	100.00	0.98	98.23
Hexachloro-1,3-butadiene	0.045	3	3	100.00	0.59	98.82
1,2-Dibromoethane	0.0017	2	2	100.00	0.39	99.21
Benzo(a)pyrene	0.00057	1	16	6.25	0.20	99.41
Chloroprene	0.0021	1	1	100.00	0.20	99.61
Lead (PM_{10})	0.015	1	57	1.75	0.20	99.80
Trichloroethylene	0.2	1	12	8.33	0.20	100.00
Total		508	838	60.62		

Cancer & Non-cancer Risk Approximation and Trends for Utah

Pollutant	Annual Average (ug/m^3)	Cancer Risk Approximation (in-a-million)	Noncancer Risk Approximation (HQ)
Formaldehyde →	4.44 ± 0.75	57.67	0.45
Benzene ↓	1.02 ± 0.13	7.92	0.03
Acetaldehyde →	2.54 ± 0.35	5.58	0.28
Carbon Tetrachloride ↑	0.66 ± 0.03	3.97	0.01
1,3-Butadiene ↑	0.12 ± 0.02	3.53	0.06

Emissions, Cancer & Noncancer Risk Approximation for Utah

Pollutant	Cancer Risk Approximation (in-a-million)	Noncancer Risk Approximation (HQ)	Annual Emissions (tpy)
Formaldehyde	57.67	0.45	68.61
Benzene	7.92	0.03	111.98
Acetaldehyde	5.58	0.28	40.38
Carbon Tetrachloride	3.97	0.01	N/A
1,3-Butadiene	3.53	0.06	14.29

Utah Toxics Report 2014

Roman Kupcov

6/1/2014

REQUEST FOR PROPOSAL
2015 Utah Toxics Study
Solicitation # TO15002

PURPOSE OF REQUEST FOR PROPOSAL (RFP)

The purpose of this request for proposal is to enter into a contract with a qualified firm to provide the Utah Division of Air Quality (DAQ) with toxics sampling media and analysis. It is anticipated that this RFP may result in a contract award to a single contractor.

This RFP, having been determined to be the appropriate procurement method to provide the best value to the State, is designed to provide interested offerors with sufficient basic information to submit proposals meeting minimum requirements. It is not intended to limit a proposal's content or exclude any relevant or essential data. Offerors are at liberty and are encouraged to expand upon the specifications to evidence service capability under any agreement.

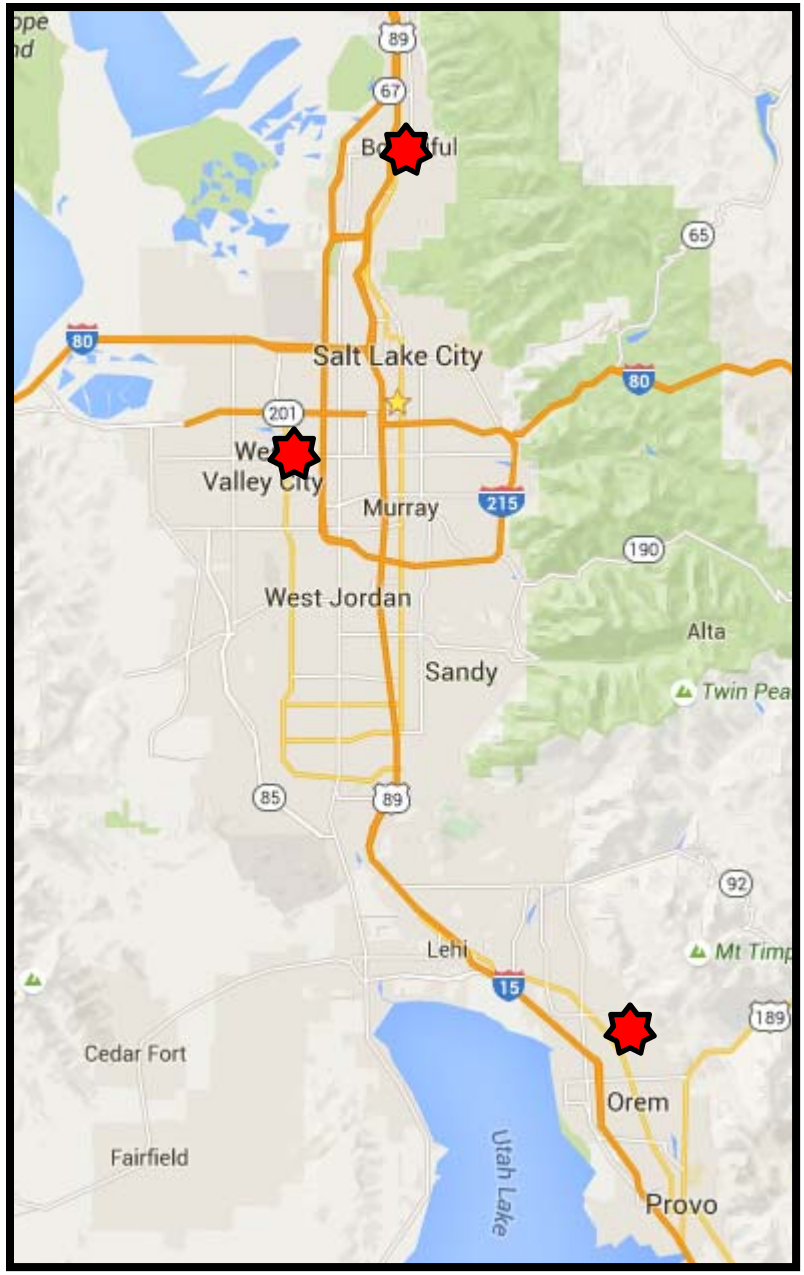
BACKGROUND

The DAQ is conducting a toxics study in 2015 aimed at determining the distribution, seasonal patterns, and the current levels of gaseous HAPs in the Salt Lake and Utah Valleys. The study is expected to last one calendar year, during which toxics data will be collected at three different locations across the valleys. The data is expected to better elucidate the impact local large and small industries, transportation, and other urban activity on the detection frequencies and the levels of HAPs.

ISSUING OFFICE AND RFP REFERENCE NUMBER

The State of Utah Division of Purchasing is the issuing office for this document and all subsequent addenda relating to it, on behalf of Utah Division of Air Quality. The reference number for the transaction is Solicitation # TO15002. This number must be referred to on all proposals, correspondence, and documentation relating to the RFP.

NOTICE: Wherever the term bid, bidder, bidding or quote appears in this solicitation or reference is made to a bid, bidder, bidding, or quote, it shall be interpreted to mean offeror, as defined in 63G-6a-103(30), RFP, or Request for Proposals, as defined in 63G-6a-103(38) and the procurement shall be conducted subject to the provisions of 63G-6a-701-711.



2015 Toxics Study

- $110,000 State research budget
- Taking a closer look at the HAPs distribution between Salt Lake and Utah Valleys
- Enhanced sampling frequency
- Comparison with historical data

AGENCY: **ENVIRONMENTAL PROTECTION AGENCY (EPA)**

TITLE: **Community-Scale Air Toxics Ambient Monitoring**

ACTION: **Request for Proposals (RFP)**

RFP NUMBER: **EPA-OAR-OAQPS-15-01**

CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA) NO: **66.034**

DATES: The closing date and time for receipt of proposal submissions, regardless of mode of submission, is **January 5, 2015, 4:00 p.m., Eastern Time (ET).** All hard copies of proposal packages must be received by Laurie Trinca **by January 5, 2015, 4:00 p.m. ET** in order to be considered for funding. Electronic submissions must be submitted electronically to EPA through Grants.gov (http://www.grants.gov) **by January 5, 2015, 4:00 p.m. ET** in order to be considered for funding. Proposals received after the closing date and time will not be considered for funding.

SUMMARY: This notice announces the availability of funds and solicits proposals for projects designed to assist state, local and tribal communities in identifying and profiling air toxics sources, assessing emerging measurement methods, characterizing the degree and extent of local air toxics problems, and tracking progress of air toxics reduction activities.

FUNDING / AWARDS: The total estimated available funding for this competitive opportunity is approximately $4,000,000. EPA anticipates awarding up to approximately 15 - 20 assistance agreements from this announcement, subject to availability of funds, the quality of proposals received, and other applicable considerations.

CONTENTS BY SECTION

I. Funding Opportunity Description
II. Award Information
III. Eligibility Information
IV. Proposal and Submission Information
V. Proposal Review Information
VI. Award Administration Information
VII. Agency Contacts
VIII. Other Information (Appendices)

2016 Toxics Study

- $355,000 Federal grant
- A wide array of real-time pollutants and HAPS.
  - $PM_{2.5}$
  - O_3, NO_x, CO
  - EC/OC
  - Speciation
  - Particulate & Gaseous HAPS
- Source apportionment modeling
- Public Outreach

Summary

- Formaldehyde is the ambient HAP with the biggest contribution to cancer and non-cancer health risks in Utah. It is the second most-emitted HAP in the State according to the NEI.
- Although benzene is the HAP with the second largest contribution, it has a significantly weaker impact than formaldehyde. It is the most emitted HAP in the State.
- Pollutants of interest:
  - Carbon Tetrachloride
  - 1,2-dichloroethane
  - Acetaldehyde
  - 1,3-butadiene
  - Dichloromethane
  - Naphthalene
- Toxics studies are underway to better understand HAPs distribution and trends across the Wasatch Front and identify the emission sources.