Crossett, Arkansas: Collaborative Community Action Planning at Work

U.S. EPA Region 6 Environmental Justice Summit
Dallas, Texas ~ August 10, 2016
Crossett, Arkansas

- Population of about 5,500 residents
- Located in southeastern Arkansas
- EPA Region 6 contacted regarding concerns about air emissions, water discharges, and more
- EPA Region 6, ADEQ, and ADH drafted a community action plan to address community concerns
- EPA-State-Local-Industry collaboration
Georgia-Pacific, LLC
Crossett, Arkansas
Traylor Champion, Senior Vice-President
Environmental Affairs and Product Safety
A community with a friendly atmosphere and hard-working spirit
Hydrogen sulfide monitoring equipment in Crossett
Crossett Ambient H2S Monitoring (30 minute average)  
October 2014 - July 2016

Below general odor threshold 91.8% of time

Odor likely detectable 8% of time

0.15% of time
9 Events > 70 ppb generally at night and 2-3 hours in duration
Max value ~210 ppb
Public Health’s Participation in Crossett Community Concerns

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ADH Personnel Involved:

• Public Health Physician
• Engineering Director, Water Division
• ATSDR/Environmental Epidemiologists (Agency for Toxic Substances & Disease Registry Cooperative Agreement Partner)
• Cancer Epidemiologists
• Public Information Officers
• Local Health Unit Nurses & Administrator
Conclusion 1: ADH and ATSDR conclude that substances (analytes) present in the public drinking water systems are not expected to harm people’s health and pose no risk to public health. The exposure pathway for drinking water is eliminated since no contamination has been detected at levels of public health concern in the drinking water supplies.

Conclusion 2: ADH and ATSDR conclude there is no significant difference to indicate elevated cancer cases for Ashley County as compared with the state of Arkansas.

Leading Causes of Death (All Ages), Arkansas 2009 and Ashley County 1999-2009

Arkansas 2009
- Heart Disease: 25.4
- Cancer: 22.7
- Chronic lower respiratory diseases (emphysema, bronchitis, asthma): 6.4
- Stroke: 5.9
- Unintentional Injury: 5.1

Ashley County 1999-2009
- Heart Disease: 28.7
- Cancer: 22.8
- Stroke: 10.8
- Unintentional Injury: 5.5
- Chronic lower respiratory diseases (emphysema, bronchitis, asthma): 4.1

Source: WISQARS Leading Causes of Death (not available at the county-level)
Source: CDC Wonder Compressed Mortality File

Hydrogen Sulfide (H$_2$S)  
Air Monitoring

Teledyne Advanced Pollution Instrumentation (TAPI) Model T101 UV Fluorescence H2S Analyzer

Detectable range of 0.4 – 500 parts per billion (ppb)

Odor threshold level = 0.5 ppb
(Odors can alert people that something may be harmful, but generally you can smell many chemicals before they are at levels that are harmful to your health.)

Background levels = typically less than 1 ppb

Acute screening level = 70 ppb

H$_2$S $\rightarrow$ heavier-than-air, colorless gas with an odor of rotten eggs

H$_2$S $\rightarrow$ exposures at low levels have not been shown to result in any lasting health effects

H$_2$S $\rightarrow$ not known to cause cancer (i.e., not a carcinogen)
30-Minute Averages from October 2014 – September 2015

Peak Levels for 30-min Rolling Average

Screening Value Level (70 ppb)

Date: 10/1/2014 to 9/30/2015

ppb = parts per billion

Daily Averages from October 2014 – September 2015

24-Hour Average Hydrogen Sulfide Levels

Screening Value Level (70 ppb)

Date: 10/1/2014 to 9/30/2015

ppb = parts per billion

Final Reports from ADH and TRC (GP Contractor) Sent to ADEQ Website for Public Viewing

ADEQ Home Page: Air Monitoring at Georgia-Pacific (https://www.adeq.state.ar.us/)

https://www.adeq.state.ar.us/air/compliance/georgia_pacific.aspx
CROSSETT AND GEORGIA-PACIFIC

Stuart Spencer, Associate Director
Office of Air Quality

ADEQ
ARKANSAS
Department of Environmental Quality

Crossett photos by Arkansas Dept. of Parks and Tourism
About ADEQ

• Located in North Little Rock and around the state
• Mission is “To protect, enhance, and restore the natural environment for the well-being of all Arkansans.”
• Regulatory, Education, Assistance
Mission, Office of Air Quality

• To “preserve and protect the air quality for the citizens of Arkansas through implementation and enforcement of applicable regulations in a fair and equitable manner.”
Permit Contents

- Facility description
- Emission rate limits
- Testing requirements
- Monitoring
- Recordkeeping and reporting

ADEQ currently has active air permits for six facilities in Crossett.
Georgia-Pacific in Crossett

- GP Chemicals  AFIN 02-00028
- GP Paper      AFIN 02-00013
- GP Plywood/Stud Mill (not operating) AFIN 02-00005

Crossett is in Ashley County.
GP Chemicals
GP Chemicals

• Latest Title V permit issued March 14, 2016 - March 13, 2021
• ADEQ held public hearing in Crossett on draft renewal in June 23, 2015
• Also ADEQ regulates for hazardous waste
GP Paper
GP Paper

- Latest Title V permit issued August 4, 2011
- Five year duration
- Received renewal application on February 5th, 2016
  - Administratively complete February 9th
- Draft permit is pending
- ADEQ held public hearing June 7, 2016 on proposal to modify
- Modified permit was finalized on July 11th.
GP Plywood/Stud Mill

• Latest Title V issued March 13, 2012
• Valid through March 12, 2017
• GP submitted a request to revoke the Title V permit on August 2, 2016
Arkansas Ambient Air Monitoring Network

ADEQ has placed a monitor in Crossett for PM 2.5
Crossett Monitor

• In operation since 2001
• Has consistently reported low values
• Monitoring data available at https://www3.epa.gov/airdata/
2014 Community Action Plan

• ADEQ and other agencies tasked with actions to address Crossett community concerns.

• ADEQ’s response to our commitments:
Air Concerns

Make available information on the facilities within Ashley County.

☑️ Database of all permits issued by ADEQ available at [www.adeq.state.ar.us](http://www.adeq.state.ar.us) searching by facility AFIN number, city, or county

From the homepage, select “Databases” from the top of the page. Then select “PDS”
Air Concerns

Make available information on the facilities within Ashley County.

Additionally, ADEQ and other agencies conducted a public meeting in Crossett in August 2014 to provide information.

ADEQ has conducted at least two public hearings on draft permit decisions since the 2014 meeting.
Air Concerns

Inform community how to access information on permit renewal cycles and detail public participation process and opportunities

Information about ADEQ website provided at the public meeting and later hearings
Air Concerns

EPA and ADEQ to determine whether more air quality monitoring should be conducted.

☑ GP has conducted voluntary temporary monitoring for hydrogen sulfide.
Community wants agencies and facility to provide information, be responsive to concerns.

✔ ADEQ, ADH, and EPA have coordinated meetings, training, access to information
Participation

• Citizens may submit comments during announced comment periods
  ➢ When an application is considered administratively complete
  ➢ When ADEQ issues a draft permit decision

• Citizens may request a public hearing and ask questions or make comments

• Citizens may contact ADEQ anytime about environmental concerns
Citizen Toolbox

• ADEQ website www.aedq.state.ar.us
• Sign up for updates and information https://www.aedq.state.ar.us/poa/pi/emaillists.aspx
• Report concerns through the website https://www.aedq.state.ar.us/complaints/ and find information there about apps