



**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

**KENTUCKY DIVISION OF WATER
WELLHEAD PROTECTION PLAN
5-YEAR UPDATE FORM**

Update Requirements:

This form should be used for the 5-year update submittal requirements of the Kentucky Wellhead Protection Program (WHPP) in compliance with 401 KAR 4:220 and SDWA Section 1428. Once the form is complete, please sign and send to:

Kentucky Division of Water
Watershed Management Branch
Attention: Rob Blair
300 Sower Boulevard, 3rd Floor
Frankfort, Kentucky 40601 or robert.blair@ky.gov

For assistance contact Rob Blair at (502) 782-6893 or robert.blair@ky.gov

System Information:

PWS Name: **Augusta Regional water System**

PWS ID Number: **KY0120013**

AI Number: **386**

Contact Person/Title: **Susan Butts/Water Treatment Plant Senior Operator**

Mailing Address: **PO Box 85, Augusta, KY 41002**

Telephone: **606-756-3305** Email: **sbutts@augustaky.com**

System Type*: **Community**

*Community; Non-Transient/Non-Community; Transient/Non-Community

Source*: **Four (4) Wells** *Well(s) or Spring(s) and total number of each

County: **Bracken**

ADD: **Buffalo Trace**

WWD Permit #: **0359, 0282** Permitted Amount (mgd): **1.152 MGD**

Population Served: **8,250**

Overall Susceptibility Rating*: **Medium** *High, Medium or Low

WHPP Changes Summary: **No Changes Noted**

Update Form Instructions:

Please complete each section that applies to any system or WHPP updates and submit the supporting documentation. Please indicate if a section is not applicable to this update. **Sections 4 and 6 through 11 are required for every 5-year update.**

Please sign certification on the last page upon completion.

Section Updates:

Section 1: Treatment Plant

If the treatment plant location has changed then provide a new location map below. This can be a county road map or a GIS-produced map. Please use the area below to provide relevant details, or to indicate that no change has occurred.

No change.

Section 2: Water Withdrawal and Water Quality

If there have been changes in water withdrawal rates or water quality since the last submittal, provide a discussion of the relevant details in the space below (include new Water Withdrawal Permit Number if applicable). Include supporting documentation as an attachment.

No change.

Section 3: Change or Modification to Groundwater Source

If the system has changed or modified the wells or springs being used, provide the following: 1) a description of changes/modifications; 2) copies of the relevant form(s) (Kentucky Water Well Record, Well Maintenance & Plugging Record, Well Inspection Form or Spring Inventory Record); and 3) any other information relating to well construction (i.e., installation logs, driller's logs, lithologic or geophysical logs), below.

No change

Section 4 (REQUIRED): Planning Team

Effective water supply protection requires community involvement and public awareness. Identify the planning team consisting of a leader and at least two team members, with their respective titles, below.

Leader: Susan Butts

Team Members:

- Michael Brothers: BCWD Distribution**
- Darian Blevins: WWTP Operator**
- John Olson: WTP Operator**
- Dean Litzinger: WTP Operator**
- Doug Padgett: WTP Operations Manager**
- Anthony Habermehl: BCWD Water Board Chairman**
- Diana Moran: BCWD Office Manager**

Section 5: WHPA Delineation

If the system is revising a Wellhead Protection Area (WHPA) delineation, or if a new groundwater source has been added since the last submittal, provide a site-specific description of the local geology and aquifer. Include references for published literature. Provide a summary of any aquifer tests (i.e. pumping tests, slug tests, tracer tests), including data gathering and evaluation methods. Show calculations and supporting data for each WHPA delineated or revised. Include the detailed hydrogeologic report as an attachment.

No change.

Section 6 (REQUIRED): WHPA Map

Provide a WHPA map that shows each groundwater source labeled with the appropriate AKGWA #, all protection zones identified and the Contaminant Source Inventory (CSI) point locations. If no changes have occurred since the last submittal, then a copy of the most recent WHPA/CSI map can be resubmitted. Please contact program staff for assistance.

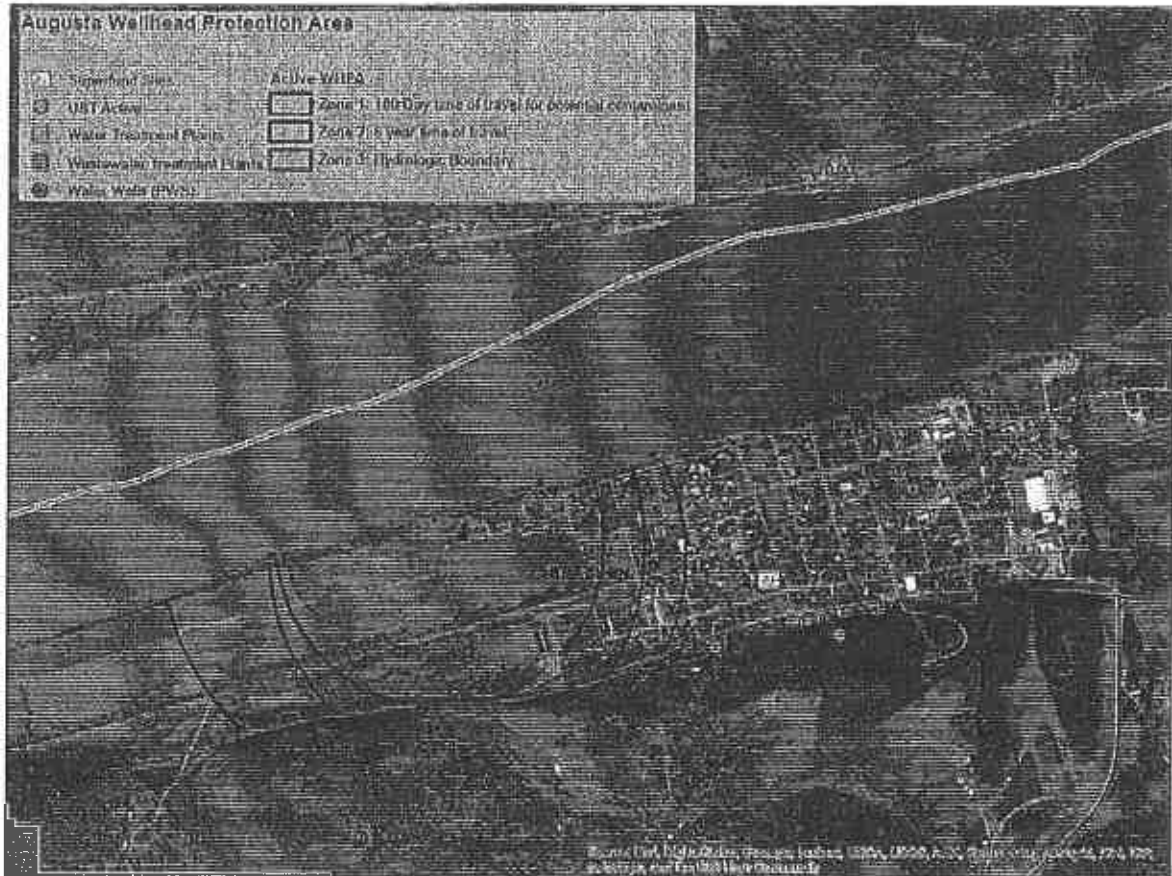
Attached as Exhibit A

Section 7 (REQUIRED): Contaminant Source Inventory

Provide an updated CSI in table format. This can be created using the spreadsheet template provided, and copied into the space below. If no changes occurred since the last update, the table can be pulled from previous WHPP documents. Each contaminant source listed should have Contaminant Source ID # that corresponds to the WHPA map in Section 6. The CSI table must show the susceptibility determination ranking for each contaminant source. Include a brief discussion of the overall system susceptibility. Please contact program staff for assistance.

Attachment 5 and 6: New Wellhead Protection Area

Augusta has decommissioned some of their wells and drilled one new well since the original plan was developed. The wells that were abandoned, as well as the new well, are all a part of the same wellfield. The wells all withdraw water from the Ohio River Alluvium within around 1000 ft of each other. Since the new well is in the same general area as the other wells a 400 ft radius was used for zone one. The new well is to the east of the original wellfield so zones two and three were extended to the east to include the area of influence for the new well.



ID#	Source	Latitude	Longitude	Quantity	Proximity Ranking	Cont. Value	Hydrologic Sensitivity	Numeric Ranking	Susceptibility Ranking
1	CSX Railroad			1	2	3	2	17	High
2	Agriculture			1	3	2	2	17	High
3	Wastewater Plant	38.773443	-84.014153	1	2	2	2	12	Medium
4	Water Plant	38.769622	-84.012674	1	1	1	2	7	Low
5	Roads			1	3	3	2	17	High

Section 8 (REQUIRED): Management Strategies

Provide a discussion of the previous and newly proposed management strategies. This discussion must include the previous management strategies that were implemented as well as the goals that were met. Next, include any NEWLY proposed management strategies, associated goals, implementation plans and the party responsible for implementation.

Previous Management Strategy Update:

Public Education:

- **Develop and distribute materials for homeowners about household chemicals**
- **Allow School visits**

Regulatory Enforcement:

- **Ask factories and gas stations to develop Groundwater Protection Plans**
- **Distribute residential Groundwater Protection Plans when needed**

Newly Proposed Management Strategies:

No new strategies at this time

Section 9 (REQUIRED): Contingency and WHP Planning

Provide a description of Contingency and WHP Planning. Complete the Emergency Response Phone List, Procedures for Public Notification, identification of Potential Future Problems and the procedures to establish Alternative Water Supplies. This section must also address how often the WHPP will be reviewed and updated.

Contingency Plans:

Short Term: Use different well; Purchase water

Long Term: Drill new wells

Emergency Response Phone List

Local Emergency Response	Phone Number
Plant Operator	606-756-3305
Augusta Fire Department	606-735-2700
Augusta Police Department	606-756-3296
County Office of Emergency Management	606-735-2570
Local Emergency Dispatch	606-735-2700

State and Federal Assistance	Phone Number
Kentucky DOW (Frankfort)	(502) 564-3410
Kentucky DOW Associated Field Office	(859) 525-4923
Kentucky Environmental Response Team 24 hour response line	(502) 564-2380 (800) 928-2380
Kentucky State Fire Marshall	(502) 573-0382

Procedures for Public Notification:

In the event of a water system emergency that would threaten the health or life of the public, use the following procedure. Prepare and broadcast an advisory, including directions for the public. Describe the public notification process and provide contacts for those media outlets. If the system uses methods other than traditional media please list them.

Newspaper, Television, and Radio Stations	Phone Numbers
Bracken County Newspaper	606-735-2198
The Ledger Independent	606-564-9091
WFTM Radio	606-564-3361
Channel 12 Cincinnati	513-763-5500

Potential Future Problems:

Describe the *most likely* scenarios that could threaten the water supply.

The most likely scenario for contamination would be a spill from a railroad accident.

Alternative Water Supply (Short and Long Term):

Describe the short term and long term water supply alternatives that address each of the potential future problems identified above. List all current interconnections with other water systems. Discuss the capacity of each potential alternative water supply to sustain normal operations.

If contamination occurs, depending on the nature and extent of the contaminant, long and short term contingency plans should be in place. Long term contingency plans include drilling new wells in an area unaffected by the contamination. Augusta sells water to Bracken county as well as Pendleton water district so an interconnect that could supply the system with an alternative source of water is unlikely. Short term contingency plans include issuing a boil water notification to customers and purchasing water from another water company or providing bottled water.

Schedule for Update and Review:

The Wellhead Protection Plan will be reviewed regularly and updated every five years as required by regulation.

Section 10 (REQUIRED): Copies of Public Notices and Education Materials

Provide copies of wellhead protection public notices and education materials distributed.

Click here to enter text.

Section 11 (REQUIRED): Public Meeting Documentation***

Provide the record of WHPP public meeting attendance, minutes and comments.

Click here to enter text.

*****Non-Community Water Systems are not required to have public meetings for 5 year updates, but must post a public notice in a conspicuous place. A public notice template is provided as a separate document. However, public input and associated documentation are encouraged. Please contact program staff if you have any questions.**

Certification Signature

"I certify that this document and all attachments were prepared under my direction or supervision. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete."

Signature: _____ **Date:** Click here to enter text.

Printed Name/Title: Doug Padgett, Operations Manager

Assistance:

For any assistance please contact Wellhead Protection Staff:

Rob Blair (502) 782-6893
Robert.Blair@ky.gov

Laura Norris (502) 782-7029
Laura.Norris@ky.gov

Allan Shingleton (502) 782-6907
Allan.Shingleton@ky.gov

Please sign and return completed form to:

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Watershed Management Branch
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or robert.blair@ky.gov