



# ECO, INC.

*"Integrating ECOnomy and ECOlogy  
Since 1990"*

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[www.ecoarkansas.com](http://www.ecoarkansas.com)

RECEIVED

JUN 13 2016

Kn 1149

June 13, 2016

Ellen Carpenter, ADEQ Water Division Manager  
Water Division  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118-5317

Re: Carroll-Boone Water District Phase I Water Transmission Line Project Application for  
Hydrostatic Testing Discharge Permit (ARG670000)

Ms. Carpenter,

On behalf of the Carroll-Boone Water District (CBWD), ECO, Inc. hereby submits this, Notice of Intent (NOI), Disclosure Statement, Site Maps, Captor MSDS Sheets, and \$200 permit fee for coverage under the Hydrostatic Testing Discharge Permit (ARG670000).

The CBWD located in Eureka Springs, Arkansas provides potable water to Green Forest, Berryville, Harrison, a significant portion of Eureka Springs, and several other small municipalities. Due to an increase in water demands in the service area, the existing high service water pumps are being forced to pump more water into the existing water transmission system causing the frictional losses in the existing pipe to become greater, limiting the ability of the current water transmission system to meet the overall water demand for the service area. To meet the increased water demands of the system, 36,570 LF of new 36-inch water transmission line is being installed parallel to the existing 24-inch water transmission line. Hydrostatic testing of a recently installed section of the waterline (approximately 16,500 LF) is scheduled to commence on June 27, 2016 and be completed on June 30, 2016. The discharge is anticipated to be completed in 10 to 12 hour shifts each of the 3 days. The discharge will be directed into a straw bale and rip rap area as to prevent scouring and erosion of soil at the discharge location.

The hydrostatic testing will be conducted by Rosetta Construction, LLC who is the contractor for the waterline project. Rosetta Construction will flush and de-chlorinate water from the new 36-inch water transmission line using potable water from the CBWD Water Treatment Plant at the Outfall No. 1 location indicated on the Notice of Intent (NOI) and site maps included with this application packet. The de-chlorination procedure will be performed using an Arden 2 1/2-inch De-Chlorination Bazooka that will be connected directly to a fire hydrant at the discharge location. Rosetta Construction will use the additive Captor during the de-chlorination process, which will be added at the discharge point through the Arden system. Captor is a calcium thiosulfate solution and the MSDS has been included with this application packet.

During the de-chlorination process, a sample of the discharge water will be obtained and tested using the first in, first out method, as required by the ARG670000 Permit in the field using a Hach Pocket Colorimeter II. The Hach Pocket Colorimeter II uses the N,N-diethyl-para-phenylenediamine (DPD) colorimetric testing method for total chlorine. This test will be performed throughout the entire duration of the discharge procedure to ensure that all discharged water is de-chlorinated. During the discharge a field grab sample will be obtained in approved sample containers by CBWD personnel. The sample containers will then be transported to Arkansas Analytical and analyzed for Total Suspended Solids (TSS), Oil and Grease (O&G), and pH as required by Section 2.1 of ARG670000.

There will only be one discharge location (Outfall No. 1) during the hydrostatic testing activities, as shown on the site maps also provided with this application packet. The exact location is as follows:

**36° 23' 53.99" N  
93° 47' 25.54" W**

**Township 20 N  
Range 26 W  
Section 18  
Carroll County, Arkansas**

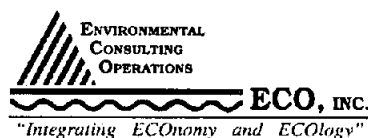
Should any questions arise during the processing of this application or if any additional information is required, please do not hesitate to contact me by phone at (479) 518-1819 or by email at [seth@ecoarkansas.com](mailto:seth@ecoarkansas.com).

Cordially,



Seth Pickens, B.S., CCSI, CPSWPPP  
Senior Environmental Scientist  
Environmental Consulting Operations, Inc.  
17724 I-30 STE 5A  
Benton, AR 72019

Enclosures





ARKANSAS  
Department of Environmental Quality

### Instruction for Notice of Intent (NOI)

#### NPDES GENERAL PERMIT ARG670000 HYDROSTATIC TESTING DISCHARGE

The attached form can be used by all persons desiring coverage under NPDES General Permit ARG670000 (for hydrostatic discharge). The form should be completed and submitted to NPDES Section of the Water Division no later than thirty (30) days prior to the date coverage is desired.

In accordance with the Arkansas Pollution Control and Ecology Commission (APCEC) Regulation No. 9, a permit fee of \$200 must accompany this Notice of Intent at the time of submission. Failure to remit the required fee may be grounds for the Director to deny coverage under this general permit and require the owner or operator to apply for an individual permit.

Be sure to read the information regarding Permit No. ARG670000 on the Department's web site at [http://www.adcq.state.ar.us/water/branch\\_permits/general\\_permits/default.htm](http://www.adcq.state.ar.us/water/branch_permits/general_permits/default.htm). It describes what constitutes coverage under this permit, effluent requirements, discharge limitations, and other standard conditions that are applicable to this permit.

Standard Industrial Classification (SIC) Code and the North America Classification Industrial Code (NAICS) may be obtained from <http://www.census.gov/epcd/www/naicstab.htm>.

This Notice of Intent must be signed by a person authorized under the provisions of state and federal law, and who should be familiar with the provisions of 40 CFR 122.22 pertaining to signatory authority. Be sure to read the Certification.

If you have any questions concerning the ARG670000 permit information or Notice of Intent, please contact the NPDES Branch of the Water Division at (501) 682-0623.

#### REMEMBER THE FOLLOWING:

1. The Notice of Intent must be complete. Do not leave any question blank; use "NA" if a question is not applicable.
2. A \$200.00 check or money order must accompany the Notice of Intent at the time of submission. The Notice of Coverage (NOC) will not be issued until payment has been received by ADEQ.
3. A site map showing the location of the discharge points must be attached
4. Read and sign the Certification.
5. MSDS Sheets for Additives.

#### Return the completed forms to:

Arkansas Department of Environmental Quality  
Permits Branch, Water Division  
5301 Northshore Drive  
North Little Rock, AR 72118

Or by electronic mail to: [Water.permit.application@adeq.state.ar.us](mailto:Water.permit.application@adeq.state.ar.us) (Complete documents must be submitted in .pdf format (e.g. NOI, site map, and/or SWPPP))

WATER DIVISION  
5301 NORTSHORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118  
PHONE 501-682-0623 / FAX 501-682-0880  
[www.adcq.state.ar.us](http://www.adcq.state.ar.us)

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Revised 04/24/2012



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## INSTRUCTIONS

### I. How to Determine Latitude and Longitude:

If a physical address is known go to [www.terraser.com](http://www.terraser.com) and proceed with the following steps:

1. Select Advanced Find
2. Select Address
3. Input address
4. Click on Aerial Photo
5. Click on the Info link at the top of the page
6. Note the Latitude and Longitude are in Decimal Coordinates.
7. Go to [www.geology.enr.state.nc.us/gis/latlon.html](http://www.geology.enr.state.nc.us/gis/latlon.html) to convert coordinates to Degrees, Minutes, and Seconds.

NOTE: If a physical address does not exist you may find the coordinates in the Legal Description of the property.

### II. How to Determine the Accuracy, Method, Datum, Scale, and Description for the Facility/Outfall Latitude and Longitude:

**Horizontal Accuracy Measure** – This indicates the accuracy, **in meters**, of the latitude/longitude location, or how close the specific latitude/longitude location is guaranteed to be to the real-world location. It is typically a function of the method used to obtain the latitude/longitude.

**Horizontal Collection Method** - The text that describes the method used to determine the latitude and longitude coordinates for a point on the earth.

Address Matching-House Number	Public Land Survey-Quarter Section
Address Matching-Block Face	Public Land Survey-Section
Address Matching-Street Centerline	Classical Surveying Techniques
Address Matching-Nearest Intersection	Zip Code-Centroid
Address Matching-Digitized	Unknown
Address Matching-Other	GPS-Unspecified
Census Block-1990-Centroid	GPS with Canadian Active Control System
Census Block/Group-1990-Centroid	Interpolation-Digital Map Source (TIGER)
Census Block/Tract-1990-Centroid	Interpolation-SPOT
Census-Other	Interpolation-MSS
GPS Carrier Phase Static Relative Position	Interpolation-TM
GPS Carrier Phase Kinematic Relative Position	Public Land Survey-Eighth Section
GPS Code (Pseudo Range) Differential	Public Land Survey-Sixteenth Section
GPS Code (Pseudo Range) Precise Position	Public Land Survey-Footing
GPS Code (Pseudo Range) Standard Position (SA Off)	Zip+4 Centroid
GPS Code (Pseudo Range) Standard Position (SA On)	Zip+2 Centroid
Interpolation-Map	Loran C
Interpolation-Photo	Interpolation-Other
Interpolation-Satellite	

**Horizontal Reference Datum** - The code that represents the reference datum used in determining latitude and longitude coordinates.

Unknown	WGS84
NAD27	NAD83

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**Source Map Scale** - The scale used to determine the latitude and longitude coordinates.

Not Applicable	1:62,500
Unknown	1:63,000
1:15,840	1:63,350
1:20,000	1:63,360
1:24,000 (1" = 2,000')	1:100,000
1:25,000	1:250,000

**Reference Point Description** - The place for which geographic coordinates were established.

Facility/Station Building Entrance or Street Address	Facility Center/Centroid
Boundary Point	Intake Point
Treatment/Storage Point	Release Point
Monitoring Point	Other

III. How to Determine your Hydrologic Basin Code for the Facility/Outfall:

1. Locate the county of your facility on the map on Page 4.
2. Find the numbered segment overlaying the county. For example 2C overlays most of Saline County.
3. Find the Eight Digit Hydrologic Basin Code located inside the numbered segment.

IV. How to Determine your Stream Segment for the Facility/Outfall:

1. Locate the county of your facility on the map on Page 4.
2. Find the numbered Stream Segment overlaying the county. For example 2C overlays most of Saline County. 2C would be the Stream Segment for any facility located within that segment.

V. How to Determine your Ultimate Receiving Waters:

1. Locate the county of your facility on the map on Page 4.
2. Find the numbered segment overlaying the county. For example 2C overlays most of Saline County.
3. Match the number from the segment to one of the numbered Ultimate Receiving Waters. For example: A facility located in Western Saline County is in segment 2C. The "2" determines that the Ultimate Receiving Water for the project is the Ouachita River.

VI. Signatory Requirements:

The information contained in this form must be certified by a **responsible official** as defined in the "signatory requirements for permit applications" (40 CFR 122.22).

Responsible official is defined as follows:

**Corporation**, a principal officer of at least the level of vice president, treasurer

**Partnership**, a general partner

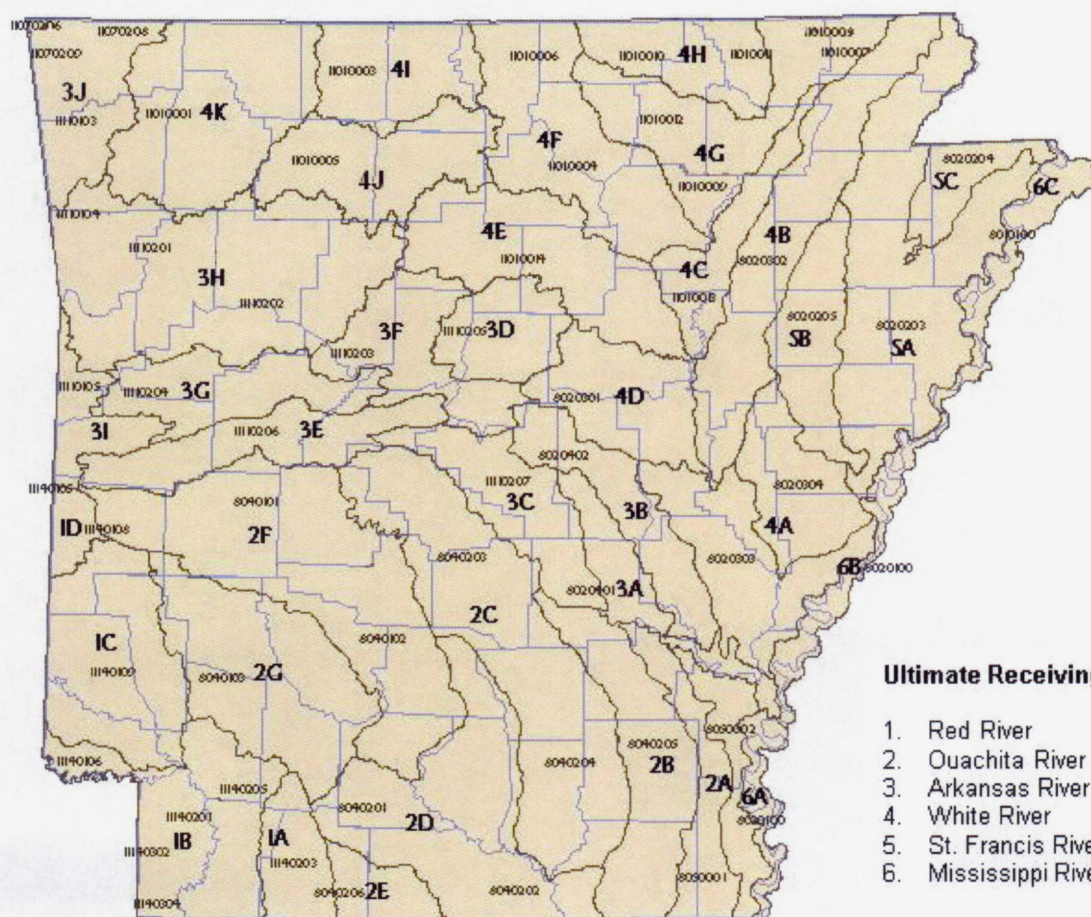
**Sole proprietorship**: the proprietor/owner

**Municipal, state, federal, or other public facility**: principal executive officer, or ranking elected official

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## Ultimate Receiving Waters

1. Red River
2. Ouachita River
3. Arkansas River
4. White River
5. St. Francis River
6. Mississippi River

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Revised 04/24/2012

**ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY  
NOTICE OF INTENT  
PIPELINE HYDROSTATIC TESTING DISCHARGE  
NPDES GENERAL PERMIT ARG670000**

Application Type: New ☒ Renewal ☐ Permit # ARG67\_\_\_\_\_  
AFIN# 08-00033

**I. PERMITTEE/OPERATOR INFORMATION**

Permittee (Legal Name): Carroll-Boone Water District Operator Type:  
Permittee Mailing Address: 11501 HWY 187 ☐ State ☒ Public  
Permittee City: Eureka Springs ☐ Federal ☐ Corporation\*  
Permittee State: AR Zip: 72631 ☐ Sole Proprietorship/Private  
Permittee Telephone Number: (479) 253-7269 \*State of Incorporation: \_\_\_\_\_  
Permittee Fax Number: N/A The legal name of the Permittee must be  
Permittee E-mail Address: cbwd@arkansas.net identical to the name listed with the  
Arkansas Secretary of State.

**II. INVOICE MAILING INFORMATION**

Invoice Contact Person: Cathy Klein City: Eureka Springs  
Invoice Mailing Company: Carroll-Boone Water District State: AR Zip: 72019  
Invoice Mailing Address: 11501 HWY 187 Telephone: (479) 253-7269

**III. FACILITY INFORMATION**

Facility Name: Carroll-Boone Water District Facility Contact Person: Barry Connell  
Facility Address: 11501 HWY 187 Contact Title: General Manager  
Facility County: Carroll Contact Telephone Number: (479) 253-7269  
Facility City, State & Zip: Eureka Springs, AR 72631 Contact E-mail: cbwd@arkansas.net

Facility SIC Code: 4941 Facility NAICS Code: 22131 Type of Business: Water Treatment Plant  
Facility Latitude: 36 Deg 24 Min 41.18 Sec Facility Longitude: 93 Deg 50 Min 22.07 Sec  
Accuracy: < 5M Method: Precise Position Datum: WGS84 Scale: Unknown Description: Facility Center  
Section: 10 Township: 20 Range: 27

**IV. DISCHARGE INFORMATION**

Is the permittee capable of meeting the applicable effluent limits and conditions of the general permit?  
☒ Yes ☐ No\*

\*If the answer is NO, do not submit the NOI for permit coverage.

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY  
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Outfall Number:	1					
Stream Segment:	4K					
Hydrologic Basin Code:	1101001					
Outfall Latitude:	36	°	23	'	53.99"	N
Outfall Longitude:	93	°	47	'	25.54"	W
County:	Carroll County, AR					
Start Date:	June 27, 2016			End Date:	June 30, 2016	
Name of Receiving Stream:	Leatherwood Creek, thence the Kings River, and thence the White River					
Are any of the Receiving Streams on the latest Clean Water Act section 303 (d) list of impaired waters or have an approved TMDL? If yes, list the Receiving Streams.	Yes. The White River has an established TMDL for the pollutants Be and SO4.					
Estimated Volume of Discharge:	942,058				gallons	
Estimated Rate of Discharge:	500				GPM	
Source of Test Water:	Potable Water from Carroll-Boone Water Treatment Plant					
Pipeline/Vessel:	<input type="checkbox"/> Used <input checked="" type="checkbox"/> Virgin <input type="checkbox"/> Other _____					
Describe material from which pipeline/vessel was constructed:	36" Class 200 Ductile Iron Pipe (DIP)					
Type of fluid normally contained/transported through pipe/vessel:	Potable Water from Carroll-Boone Water Treatment Plant					
Are Corrosion Inhibitors Used?:	No					
Does pipeline use compressor lubricants containing polychlorinated biphenyls (PCBs)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

Outfall Number:						
Stream Segment:						
Hydrologic Basin Code:						
Outfall Latitude:		°		'		
Outfall Longitude:		°		'		
County:						
Start Date:				End Date:		
Name of Receiving Stream:						
Are any of the Receiving Streams on the latest Clean Water Act section 303 (d) list of impaired waters or have an approved TMDL? If yes, list the Receiving Streams.						
Estimated Volume of Discharge:					gallons	
Estimated Rate of Discharge:					MGD	
Source of Test Water:						
Pipeline/Vessel:	<input type="checkbox"/> Used <input type="checkbox"/> Virgin <input type="checkbox"/> Other _____					
Describe material from which pipeline/vessel was constructed:						
Type of fluid normally contained/transported through pipe/vessel:						
Are Corrosion Inhibitors Used?:						
Does pipeline use compressor lubricants containing polychlorinated biphenyls (PCBs)?	<input type="checkbox"/> Yes <input type="checkbox"/> No					

WATER DIVISION  
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PHONE 501-682-0623 / FAX 501-682-0880

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**ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY  
NOTICE OF INTENT  
PIPELINE HYDROSTATIC TESTING DISCHARGE  
NPDES GENERAL PERMIT ARG670000**

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Additional Outfalls can be added using separate attached pages.

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**V. FACILITY PERMIT INFORMATION**

NPDES Individual Permit Number (If Applicable): N/A  
NPDES General Permit Number (If Applicable): ARG640030  
State Construction Permit Number(If Applicable): N/A  
NPDES General Construction Stormwater Permit Number (If Applicable): ARR154727

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**VI. OTHER INFORMATION:**

Additional Location Description N/A  
Additional Comments: N/A  
Consultant Contact Name: Seth Pickens  
Consultant Email Address: seth@ccoarkansas.com  
Consultant Address: 17724  
130 STE  
5A City: Benton State: AR Zip: 72019  
Consultant Phone Number: (501) 315-9009 Consultant Fax Number: N/A

**Disclosure Statements:**

Arkansas Code Annotated Section 8-1-106 requires that all applicants for the issuance or transfer of any permit, license, certification or operational authority issued by the Arkansas Department of Environmental Quality (ADEQ) file a disclosure statement with their applications. The filing of a disclosure statement is mandatory. No application can be considered complete without one. You must submit a new disclosure statement even if you have one on file with the Department. The form may be obtained from ADEQ web site at: [http://www.adeq.state.ar.us/disclosure\\_stmt.pdf](http://www.adeq.state.ar.us/disclosure_stmt.pdf).

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**VII. PERMIT REQUIREMENT VERIFICATION**

Please check the following to verify completion of permit requirements.

	Yes	No	* If No is answered for any of the questions, then a permit can not be issued!
Submittal of Complete NOI?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Submittal of Required Permit Fee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Check Number: <u>5158</u>
Submittal of Site Map?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Submittal of Disclosure Statement?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

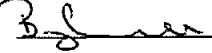
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VIII. CERTIFICATION OF OPERATOR

BC (Initial) "I certify that, if this facility is a corporation, it is registered with the Secretary of the State of Arkansas."  
BC (Initial) "I certify that the cognizant official designated in this Application is qualified to act as a duly authorized representative under the provisions of 40 CFR 122.22(b). If no cognizant official has been designated, I understand that the Department will accept reports signed only by the Applicant."  
BC (Initial) "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Responsible Official Printed Name: Barry Connell Title: General Manager  
Responsible Official Signature:  Date: 6/9/2016  
Responsible Official Email: cbud@arkansas.net

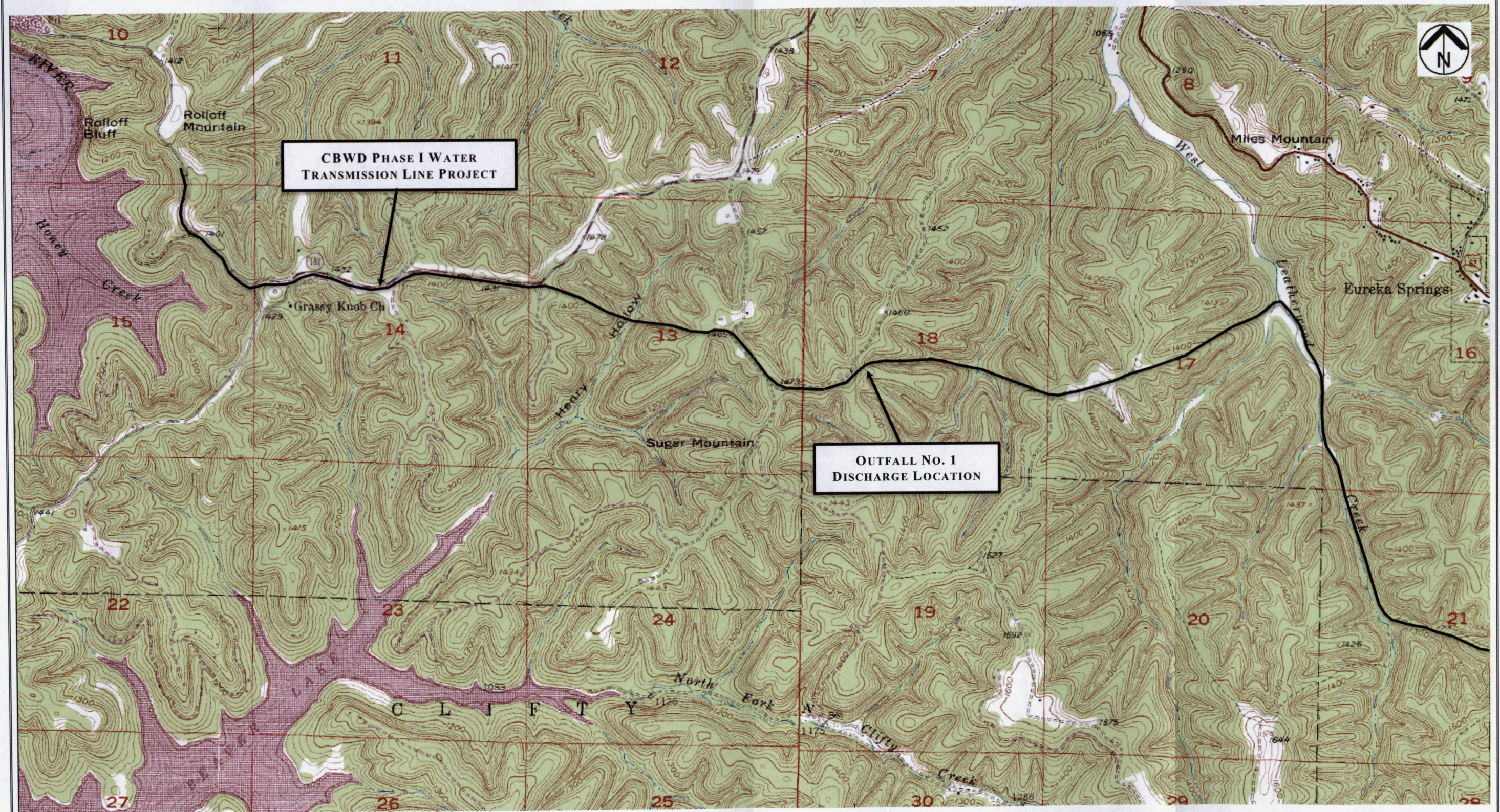
Cognizant Official Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Cognizant Official Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Cognizant Official Email: \_\_\_\_\_ Telephone: \_\_\_\_\_

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Figure 2. Phase I Water Transmission Line Topographic Map (Beaver Quadrangle)





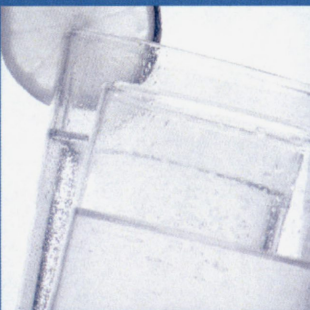
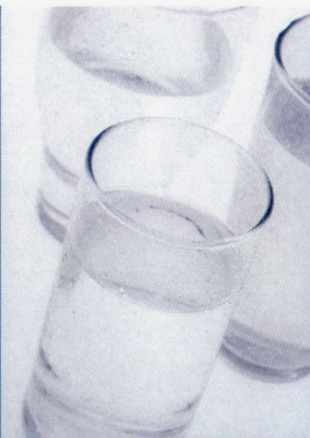
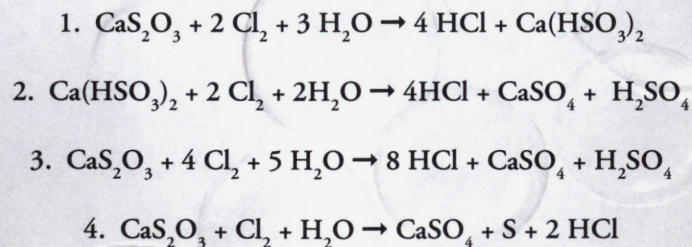
Captor® (calcium thiosulfate solution) is a relatively new product, now available to the potable water and wastewater treatment industries. Captor is a nearly odorless, colorless, non-hazardous, non-toxic solution. It is certified in accordance with ANSI NSF Standard 60 for drinking water applications.

Captor is now solving a number of traditional problems for water and wastewater treatment plant operators. Tank and line heating are generally not needed, and the product presents no problem with off-gassing. In ozone destruction, Captor is more efficient and requires lower dosing rates than other chemicals.

Why not modernize your treatment process with water-clear Captor? It offers several advantages over the use of alternative chemicals, including:

- A safe, non-hazardous solution
- A less corrosive material
- No potential SO<sub>2</sub> exposure
- No off-gassing
- Water clear
- Nearly odorless
- Maintains a low freezing point
- Harder to crystallize
- Applicator friendly
- Carrier water not required

### Equations for Reactions of Captor with Chlorine



### Captor® Application Guidelines for Dechlorination

In order to maximize your prospects for success and to achieve a low, cost-effective treatment, we would like to provide you with the following application guidelines:

1. **Process Flow Control:** A simple feed pump and chlorine monitoring system is required for dechlorination with Captor. Where Sodium Bisulfite is in use, we suggest you flush-out existing lines, equipment and storage tank thoroughly prior to any use of Captor.
2. **Dosage Ratio:** Municipalities generally use a multiplier of about 1.48 pounds of Captor per pound of chlorine. This ratio has proven to be effective year-round. (Please refer to our dosage chart below for more details.)
3. **Chemical Mixing:** Good mixing is important for cost-effective dechlorination, as it can significantly reduce the amount of Captor required for treatment.
4. **Contact Time:** While Captor reduces chlorine instantaneously, it may still require a few minutes to bring lingering chlorine levels to zero residual. Please allow a adequate lag time for the treated effluent to travel from the dechlorination zone to the final chlorine residual sampling point.
5. **Maintenance:** We recommend flushing and disinfecting supply lines and day tanks at least once per year to avoid potential plugging and/or product contamination.

Please note that the guidelines listed above are the basics for using Captor in dechlorination, but general guidelines are not always sufficient to ensure both effective and efficient treatment. If you experience any issues with the performance of Captor, please give us a call – we will be happy to review your application and method, and assist you in maximizing both the efficiency and effectiveness of treatment.

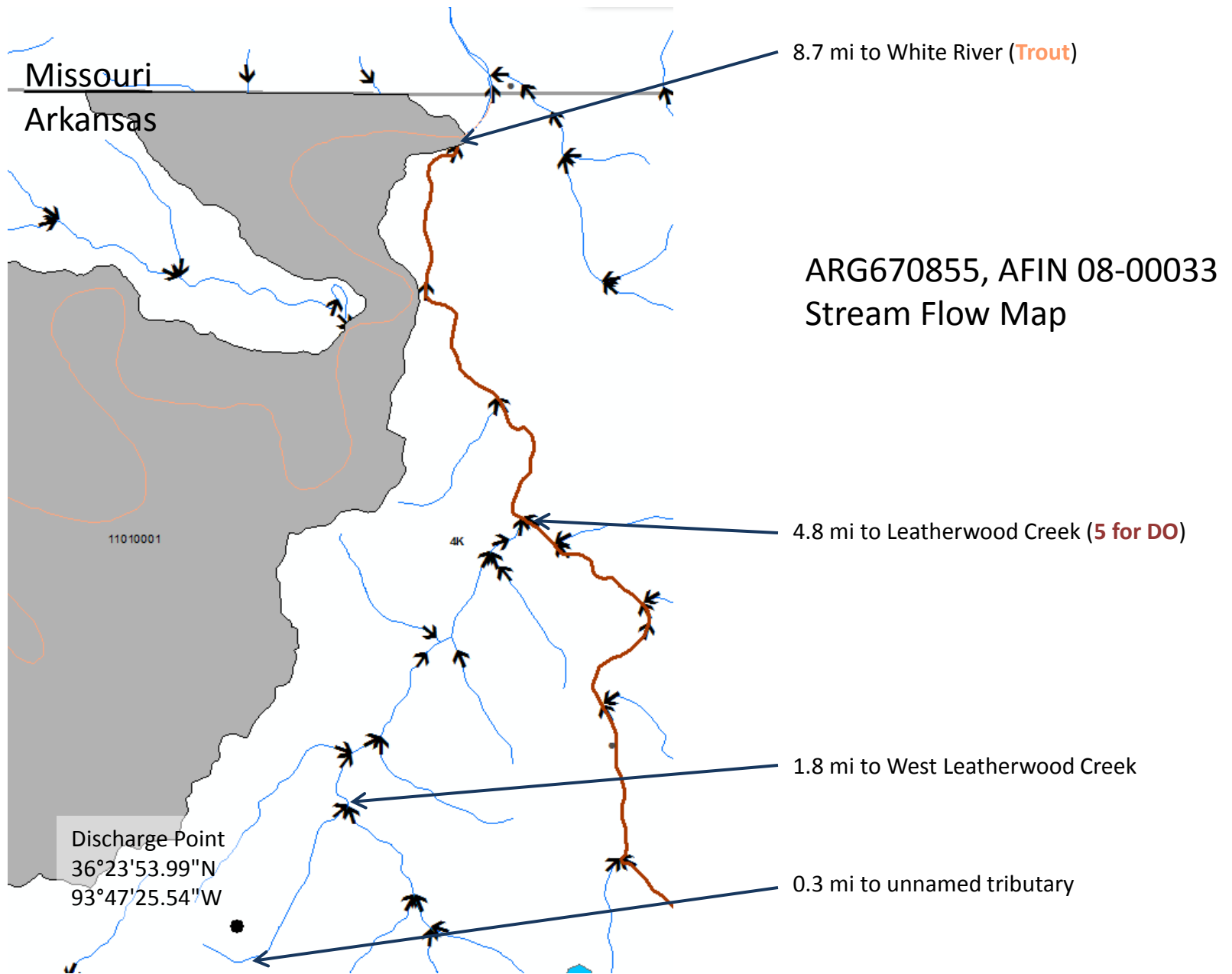
### Dosage Rates for Dechlorination

Gallons of Captor® per million gallons of water  
Parts per Million Chlorine

	1	2	3	4	5	6	7	8	9	10
pH										
6.5	5.4	10.9	16.3	21.7	27.1	32.5	37.9	43.4	48.8	54.2
6.8	5.3	10.5	15.8	21.0	26.3	31.5	36.8	42.0	47.1	52.5
7.0	5.1	10.3	15.4	20.6	25.7	30.8	36.0	41.1	46.2	51.4
7.2	5.0	10.0	15.1	20.1	25.1	30.1	35.2	40.2	45.2	50.2
7.4	4.9	9.8	14.7	19.6	24.5	29.4	34.3	39.2	44.2	49.1
7.6	4.8	9.6	14.4	19.2	24.0	28.7	33.5	38.3	43.1	47.9
7.8	4.7	9.3	14.0	18.7	23.4	28.0	32.7	37.4	42.1	46.7
8.0	4.6	9.1	13.7	18.2	22.8	27.3	31.9	36.5	41.0	45.6
8.5	4.3	8.4	12.8	17.1	21.3	25.6	29.9	34.1	38.4	42.7
9.0	4.0	8.0	11.9	15.9	19.9	23.9	27.8	31.8	35.8	39.8
9.5	3.7	7.4	11.1	14.8	18.4	22.1	25.8	29.5	33.2	36.9
10.0	3.4	6.8	10.2	13.6	17.0	20.4	23.8	27.2	30.6	34.0

*These rates are approximate and may be affected by factors such as temperature, reaction time and dissolved compounds in water which may react with Captor.*





# **INSTRUCTIONS FOR DISCLOSURE STATEMENT**

Arkansas Code Annotated Section 8-1-106 requires that all applicants for the issuance, or transfer of any permit, license, certification or operational authority issued by the Arkansas Department of Environmental Quality (ADEQ) file a disclosure statement with their applications. The filing of a disclosure statement is mandatory. No application can be considered complete without one.

Disclosure statement means a written statement by the applicant that contains:

- The full name and business address of the applicant and all affiliated persons;
- The full name and business address of any legal entity in which the applicant holds a debt or equity interest of at least five percent (5%) or that is a parent company or subsidiary of the applicant, and a description of the ongoing organizational relationships as they may impact operations within the state;
- A description of the experience and credentials of the applicant, including any past or present permits, licenses, certifications, or operational authorizations relating to environmental regulation;
- A listing and explanation of any civil or criminal legal actions by government agencies involving environmental protection laws or regulations against the applicant and affiliated persons in the ten (10) years immediately preceding the filing of the application, including administrative enforcement actions resulting in the imposition of sanctions, permit or license revocations or denials issued by any state or federal authority, actions that have resulted in a finding or a settlement of a violation, and actions that are pending;
- A listing of any federal environmental agency and any other environmental agency outside this state that has or has had regulatory responsibility over the applicant; and
- Any other information the Director of the Arkansas Department of Environmental Quality may require that relates to the competency, reliability, or responsibility of the applicant and affiliated persons.

## **Exemptions:**

The following persons or entities are not required to file a disclosure statement:

- Governmental entities, consisting only of subdivisions or agencies of the federal government, agencies of the state government, counties, municipalities, or duly authorized regional solid waste authorities as defined by § 8-6-702. (This exemption shall not extend to improvement districts or any other subdivision of government which is not specifically instituted by an act of the General Assembly.)
- Applicants for a general permit to be issued by the department pursuant to its authority to implement the National Pollutant Discharge Elimination System for storm water discharge.
- If the applicant is a publicly held company required to file periodic reports under the Securities and Exchange Act of 1934 or a wholly owned subsidiary of a publicly held company, the applicant shall not be required to submit a disclosure statement, but shall submit the most recent annual and quarterly reports required by the Securities and Exchange Commission which provide information regarding legal proceedings in which the applicant has been involved. The applicant shall submit such other information as the director may require that relates to the competency, reliability, or responsibility of the applicant and affiliated persons.

## **Exemptions continued:**

**The following permits, licenses, certifications, and operational authorizations are also exempt from submitting a disclosure statement:**

- **Hazardous Waste Treatment, Storage, and Disposal Permit Modifications (Class 1, 2, and 3), as defined in Arkansas Pollution Control and Ecology Commission (APC&EC) Regulation 23;**
- **Phase 1 Consultants, as defined in APC&EC Regulation 32;**
- **Certifications for Operators of Commercial Hazardous Waste Facilities, as defined in APC&EC Regulation 23 § 264.16(f);**
- **Regulated Storage Tank Contractor or Individual License Renewals as defined in APC&EC Regulation 12;**
- **Certifications for Persons Operating and Maintaining Underground Storage Tank Systems which Contain Regulated Substances, as defined in APC&EC Regulation 12.701, *et. seq.*;**
- **Individual Homeowners seeking coverage under General Permit ARG5500000;**
- **Wastewater Operator Licenses, as defined in APC&EC Regulation 3;**
- **Water Permit Modifications for permits issued under the authority of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. §8-4-101, *et. seq.*);**
- **Solid Waste Permit Modifications for permits issued under APC&EC Regulation 22;**
- **Solid Waste Landfill Operator License Renewals, as defined in Regulation No. 27;**
- **Air Permit Modifications for permits issued under APC&EC Regulations 18, 19, and 26; and**
- **Asbestos Certification Renewals, as defined in Regulation 21.**

**Deliberate falsification or omission of relevant information from disclosure statements shall be grounds for civil or criminal enforcement action or administrative denial of a permit, license, certification, or operational authorization.**

# ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY DISCLOSURE STATEMENT

## Instructions for the Completion of this Document:

- A. Individuals, firms or other legal entities with no changes to an ADEQ Disclosure Statement, complete items 1 through 5 and 18.
- B. Individuals who never submitted an ADEQ Disclosure Statement, complete items 1 through 4, 6, 7, and 16 through 18.
- C. Firms or other legal entities who never submitted an ADEQ Disclosure Statement, complete 1 through 4, and 6 through 18.

If Not Submitting by ePortal, Mail Original to:

ADEQ

DISCLOSURE STATEMENT

[List Proper Division(s)]

5301 Northshore Drive

North Little Rock, AR 72118-5317

1. APPLICANT: (Full Name)

Carroll-Boone Water District

2. MAILING ADDRESS (Number and Street, P.O.Box Or Rural Route) :

11501 HWY 187

3. CITY, STATE, AND ZIPCODE:

Eureka Springs, AR 72631

4a. Applicant Type:

☐ Individual ☒ Corporate or Other Entity

4b. Reason for Submission:

☒ Permit ☐ License ☐ Certification ☐ Operational Authority

☐ New Application ☐ Modification ☐ Renewal Application (If no changes from previous disclosure statement, complete number 5 and 18.)

4c. Division:

☐ Air ☒ Water ☐ Hazardous Waste ☐ Regulated Storage Tank ☐ Mining ☐ Solid Waste

5. Declaration of No Changes:

The violation history, experience and credentials, involvement in current or pending environmental lawsuits, civil and criminal, have not changed since the last Disclosure Statement that was filed with ADEQ on July 2006

**6. Describe the experience and credentials of the Applicant, including the receipt of any past or present permits, licenses, certifications or operational authorization relating to environmental regulation. (Attach additional pages, if necessary.)**

**7. List and explain all civil or criminal legal actions by government agencies involving environmental protection laws or regulations against the Applicant \* in the last ten (10) years including:**

1. Administrative enforcement actions resulting in the imposition of sanctions;
2. Permit or license revocations or denials issued by any state or federal authority;
3. Actions that have resulted in a finding or a settlement of a violation; and
4. Pending actions.

**(Attach additional pages, if necessary.)**

**\* Firms or other legal entities shall also include this information for all persons and legal entities identified in sections 8-16 of this Disclosure Statement.**

**8. List all officers of the Applicant. (Add additional pages, if necessary.)**

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

**9. List all directors of the Applicant. (Add additional pages, if necessary.)**

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

**10. List all partners of the Applicant. (Add additional pages, if necessary.)**

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

**11. List all persons employed by the Applicant in a supervisory capacity or with authority over operations of the facility subject to this application.**

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

12. List all persons or legal entities, who own or control more than five percent (5%) of the Applicant's debt or equity.

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

13. List all legal entities, in which the Applicant holds a debt or equity interest of more than five percent (5%).

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

14. List any parent company of the Applicant. Describe the parent company's ongoing organizational relationship with the Applicant.

NAME: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

Organizational Relationship:

15. List any subsidiary of the Applicant. Describe the subsidiary's ongoing organizational relationship with the Applicant.

NAME: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

Organizational Relationship:

16. List any person who is not now in compliance or has a history of noncompliance with the environmental laws or regulations of this state or any other jurisdiction and who through relationship by blood or marriage or through any other relationship could be reasonably expected to significantly influence the Applicant in a manner which could adversely affect the environment.

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

17. List all federal environmental agencies and any other environmental agencies outside this state that have or have had regulatory responsibility over the Applicant.



## 18. VERIFICATION AND ACKNOWLEDGEMENT

The Applicant agrees to provide any other information the director of the Arkansas Department of Environmental Quality may require at any time to comply with the provisions of the Disclosure Law and any regulations promulgated thereto. The Applicant further agrees to provide the Arkansas Department of Environmental Quality with any changes, modifications, deletions, additions or amendments to any part of this Disclosure Statement as they occur by filing an amended Disclosure Statement.

**DELIBERATE FALSIFICATION OR OMISSION OF RELEVANT INFORMATION FROM DISCLOSURE STATEMENTS SHALL BE GROUNDS FOR CIVIL OR CRIMINAL ENFORCEMENT ACTION OR ADMINISTRATIVE DENIAL OF A PERMIT, LICENSE, CERTIFICATION OR OPERATIONAL AUTHORIZATION.**

**COMPLETE THIS SECTION ONLY IF SUBMITTING OTHER THAN BY EPORTAL:**

I, Barry Connell, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violation.

APPLICANT  
SIGNATURE:



TITLE: General Manager

DATE: 6/9/2014

**MATERIAL SAFETY DATA SHEET**

**Best Sulfur Products**

**A division of Ag Formulators Inc.**

**5427 E. Central Ave.**

**Fresno, CA 93725**

**For Emergency Information call Chemtrec (800) 424-9300**

**For Technical Information call (800) 800-4854**

Effective date: 05-16-05

Supersedes: 02-25-03

**I. IDENTIFICATION**

**Product:** BSP CAPTOR®  
**Chemical Name:** Calcium Thiosulfate Solution  
**Formula:**  $\text{CaS}_2\text{O}_3$   
**Chemical Family:** Inorganic Salt

**II. COMPOSITION**

<u>Chemical</u>	<u>CAS#</u>	<u>Concentration</u>	<u>Regulation</u>
Calcium Thiosulfate	10124-41-1	30%w/v	No
A solution of $\text{CaS}_2\text{O}_3$ in water			

**III. HAZARDOUS IDENTIFICATION**

CERCLA Ratings (0-3): Health = 0 Fire = 0 Reactivity = 0 Persistence = 0  
NFPA Ratings (0-4): Health = 0 Fire = 0 Reactivity = 0

**NSF International Standard 60 listed for use in drinking water.**

**IV. EMERGENCY AND FIRST AID PROCEDURES**

**POTENTIAL SHORT-TERM HEALTH EFFECTS:**

**SKIN CONTACT:** Immediately flush with large quantities of water, remove contaminated clothing and shoes and wash product from skin.

**EYE CONTACT:** Immediately flush eyes with clean water, lifting upper and lower lids, for at least 15-20 minutes. Obtain medical attention if irritation occurs or persists.

**INGESTION:** If vomiting occurs, keep head lower than hips to help prevent aspiration. Treat symptomatically and supportively. Get medical attention if needed.

**INHALATION:** Remove victim from contaminated area. If breathing is labored, administer oxygen. If breathing has ceased, clear the airway and begin mouth to mouth.

**LONG-TERM HEALTH EFFECTS:** No information on long-term effects is available.

## **V. FIRE AND EXPLOSION HAZARD**

Negligible hazard when exposed to heat or flame

**EXTINGUISHING MEDIA:** Extinguish using agent suitable for type of surrounding fire.

**FIRE FIGHTING:** Move container from fire area if possible. Avoid breathing vapors. Keep upwind. Use agents suitable for type of surrounding fire. Avoid breathing hazardous vapors. Keep upwind.

**HAZARDOUS COMBUSTION PRODUCTS:** Thermal decomposition products may include toxic oxides of sulfur.

FLASH POINT :	n/d
FLAMMABLE LIMITS IN AIR:	n/d
AUTO IGNITION TEMPERATURE (degrees C (F) :	n/d
EXTINGUISHING MEDIA:	CO <sub>2</sub> , dry chemical foam, water spray

## **VI. ACCIDENTAL RELEASE MEASURES**

Absorb small spills with sand, earth, sweeping compound or other inert absorbent. Dispose of in accordance with all government regulations. Large spills should be diked to prevent entry of large quantities of product into sewers or drains. Recover as much of solution as possible. On large spills, land application could be possible as long as application rates are not exceeded, please check with the local Ag Commissioner for permission. Dispose of in accordance with applicable local, county, state, and federal regulations.

## **VII. HANDLING AND STORAGE**

Do not heat drums with any welding equipment as explosion may occur. Avoid breathing gas. Do not get in eyes, on skin, or on clothing. Store in a cool, dry place in properly designed vessels.

## **VIII. EXPOURE CONTROLS / PERSONAL PROTECTIONS**

No occupational exposure limits have been established by OSHA, ACGIH, or NIOSH.

PROTECTIVE EQUIPMENT SHOULD BE USED DURING THE FOLLOWING PROCEDURES:

- Manufacture or formulation of this product
- Repair and maintenance of contaminated equipment.
- Clean up of leaks and spills
- Any other activity that may result in hazardous exposures.

**RESPIRATORY PROTECTION:**

None generally required. If conditions exist where excessive mist might be generated, a mist respirator is recommended.

In case of emergency conditions such as fire, high heat, and or contact with acids, use a NIOSH / MSHA approved full-face respirator with SO<sub>2</sub> gas cartridge. Use positive pressure self-contained breathing apparatus for emergency or other conditions requiring a higher level of protection.

**CLOTHING:** Rubber gloves and apron should be used for prolonged or repeated contact. Safety glasses or chemical goggles are recommended to avoid eye contact. Do not wear contact lenses.

**IX. PHYSICAL AND CHEMICAL PROPERTIES**

**DESCRIPTION:** Clear colorless solution

**Molecular Weight:** 152.20

**Water Solubility:** Completely soluble in water

**Molecular formula for active ingredient:** CaS<sub>2</sub>O<sub>3</sub>

**Solvent Solubility:** Nearly insoluble in alcohol

**Specific Gravity:** 1.245

**pH:** 6.5 – 7.5

**Vapor pressure:** (mm Hg) N/D

**X. STABILITY AND REACTIVITY**

Stable under normal conditions and pressures.

**CONDITIONS TO AVOID:** Avoid contact with acids. Sulfur dioxide could be released if mixed with acids.

**INCOMPATIBILITIES:** Reacts with acid to form sulfur dioxide. Corrosive to brass and copper.

**XI. TOXICOLOGICAL INFORMATION:**

**LD 50 (rat):** Anhydrous CaS<sub>2</sub>O<sub>3</sub> : 374 mg/kg intravenous

**LD 50 (rat):** 573 mg/kg intraperitoneal

**LD 50 (mouse):** rat LD 50; 115 mg/kg intraperitoneal

**CARCINOGEN STATUS:** None

**ACUTE TOXICITY LEVEL:** Insufficient data.

**TARGET EFFECTS:** No data available.

**SKIN CONTACT:** May be irritating

**EYE CONTACT:** May be irritating.

**INGESTION:** Thiosulfate salts are poorly absorbed from the alimentary tract.

Ingestion may result in a cathartic effect.

**CHRONIC EXPOSURE:** No data available for any type of exposure.

## **XII. DISPOSAL CONSIDERATIONS**

Contaminated cleanup materials may be hazardous. Refer to Sections IV and VIII of this MSDS sheet before handling. All contaminated materials should be placed in disposable containers and buried in an approved dumping area. Follow all local rules governing waste disposal in your area.

## **XIII. TRANSPORTATION INFORMATION**

**Classification:** NA

**D.O.T. Proper Shipping Name:** Not hazardous by D.O.T. Regulations

**Other Requirements:** NA

## **XIV. REGULATORY INFORMATION**

### **REGULATORY INFORMATION**

**SARA TITLE III SECTION 313:** NOT LISTED

**RCRA HAZARDOUS WASTE:** NOT LISTED

**CA Prop. 65:** NOT LISTED

## **XV. OTHER INFORMATION**

The information herein is given in good faith but no warranty, expressed or implied, is made.



## Safety Data Sheet

### Captor®

SDS Number: 2908 Revision: July 1, 2014

#### Section 1: IDENTIFICATION

1.1 Product Name: Captor®

1.2 Other Identification:

Chemical Family: Inorganic salt solution  
Formula:  $\text{CaS}_2\text{O}_3$   
Reach Pre-Registration #: 05-2115925358-40-0000

1.3 Recommended Use of Chemical: Water treatment

1.4 Manufacturer: Tessenderlo Kerley, Inc.  
2255 N. 44<sup>th</sup> Street, Suite 300  
Phoenix, Arizona 85008-3279  
Information: (602) 889-8300

1.5 Emergency Contact: Tessenderlo Kerley, Inc. (800) 877-1737  
CHEMTREC (800) 424-9300, Domestic  
(703) 527-3887, International

#### Section 2: HAZARD(S) IDENTIFICATION

2.1 Hazard Classification: Health None  
Physical None

2.2 Signal Word: Not Applicable

2.2.1 Hazard Statement(s): Not Applicable

2.2.2 Symbol(s): Not Applicable

2.2.3 Precautionary Statement(s): Avoid contact with eyes.  
Use/store in cool, well ventilated areas.  
Avoid prolonged/repeated breathing of vapors.  
Avoid prolonged/repeated contact with the skin.  
Keep away from any sources of heat or flames.  
Store totes or small containers out of direct sunlight.  
Wear protective apron, gloves and eye and face protection.

Do not allow release to aquatic waterways.

**2.3 Unclassified Hazard(s):** None

**2.4 Unknown Toxicity Ingredient:** None

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Chemical Ingredients:** (See Section 8 for exposure guidelines)

Chemical	Synonym Common Name	CAS No.	EINECS No.	% by Wt.
Thiosulfuric acid (H <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ), calcium salt	Calcium thiosulfate	10124-41-1	233-333-7	20 - 30
Water	Water	7732-18-5	231-791-2	70 - 80

**Section 4: FIRST AID MEASURES**

**4.1 Symptoms/Effects:**

Acute: Eye contact may cause eye irritation. Repeated or prolonged skin contact may cause skin irritation. Ingestion may irritate the gastrointestinal tract.

Chronic: No known chronic effects.

**4.2 Eyes:** Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to insure thorough flushing of the entire area of the eye and lids. Obtain medical attention if irritation occurs.

**4.3 Skin:** Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Obtain medical attention if irritation occurs.

**4.4 Ingestion:** If victim is conscious, give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Obtain medical attention.

**4.5 Inhalation:** Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start CPR.

**Section 5: FIRE FIGHTING MEASURES****5.1 Flammable Properties:** (See Section 9, for additional flammable properties)

Heating this product to dryness will cause the release of oxides of sulfur.

NFPA:                      Health - 0                      Flammability - 0                      Reactivity - 0

**5.2 Extinguishing Media:**

**5.2.1 Suitable Extinguishing Media:**                      Not flammable, use media suitable for combustibles involved in fire.

**5.2.2 Unsuitable Extinguishing Media:**                      None known

**5.3 Protection of Firefighters:****5.3.1 Specific Hazards Arising from the Chemical:**

**Physical Hazards:**                      Heating (flames) of closed or sealed containers may cause violent rupture of containers due to thermal expansion of compressed gases.

**Chemical Hazards:**                      Heating causes release of oxides of sulfur. Sulfur dioxide is highly irritating to the eyes, respiratory tract and moist skin.

**5.3.2 Protective Equipment and Precautions for Firefighters:**

Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear. Keep containers/storage vessels in fire area cooled with water spray.

**Section 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal Precautions:**                      Use personal protective equipment specified in Section 8. Isolate the hazard area and deny entry to unnecessary, untrained and unprotected personnel.

**6.2 Environmental Precautions:**

Large quantities should be kept out of "waters of the United States" because of potential aquatic toxicity (See Section 12).



**6.3 Methods of Containment:**

**Small Release:** Confine and absorb small releases with sand, earth or other inert absorbent.

**Large Release:** Shut off release if safe to do so. Dike spill area with earth, sand or other inert absorbents to prevent runoff into surface waterways (potential aquatic toxicity).

**6.4 Methods for Cleanup:**

**Small Release:** For small areas shovel up the absorbed material and place in drums for disposal as a chemical waste.

**Large Release:** Recover as much of the spilled product as possible using portable pump and hoses. Treat remaining material as a small release (above).

<b>Section 7: HANDLING and STORAGE</b>
--

**7.1 Handling:** Avoid contact with eyes. Use only in a well ventilated area. Wash thoroughly after handling product. Avoid prolonged or repeated contact with the skin.

**7.2 Storage:** Store in well ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store totes and smaller containers out of direct sunlight at moderate temperatures. (See Section 10.5 for materials of construction).

<b>Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
---

**8.1 Exposure Guidelines:**

Chemical	OSHA PELs		ACGIH TLVs	
	TWA	STEL	TWA	STEL
Not Applicable				

**8.2 Engineering Controls:** None

**8.3 Personal Protective Equipment (PPE):**

**8.3.1 Eye/Face Protection:** Chemical goggles and a full face shield.

- 8.3.2 Skin Protection:** Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to reuse.
- 8.3.3 Respiratory Protection:** None required. If conditions exist where mist may be created, a NIOSH/MSHA approved mist respirator should be worn.
- 8.3.4 Hygiene Considerations:** There are no known hazards associated with this product when used as recommended, however common good industrial hygiene practices should be followed, such as washing thoroughly after handling and before eating or drinking.

## Section 9: PHYSICAL and CHEMICAL PROPERTIES

<b>9.1 Appearance:</b>	Colorless liquid
<b>9.2 Odor:</b>	Fresh concrete to no odor at all
<b>9.3 Odor Threshold:</b>	Not determined
<b>9.4 pH:</b>	6.5 – 8.0
<b>9.5 Melting Point/Freezing Point:</b>	Salt out temperature is 32°F ( <i>Typical</i> )
<b>9.6 Boiling Point:</b>	100°C (212°F) with decomposition
<b>9.7 Flash Point:</b>	Not applicable
<b>9.8 Evaporation Rate:</b>	Not applicable
<b>9.9 Flammability:</b>	Not applicable
<b>9.10 Upper/Lower Flammability Limits:</b>	Not applicable
<b>9.11 Vapor Pressure:</b>	37mm Hg @ 100°F
<b>9.12 Vapor Density:</b>	Same as water
<b>9.13 Relative Density:</b>	1.25 – 1.26 (10.4 – 10.5 Lbs/gal) ( <i>Typical</i> )
<b>9.14 Solubility:</b>	Complete
<b>9.15 Partition Coefficient:</b>	Data not available
<b>9.16 Auto-Ignition Temperature:</b>	Not applicable
<b>9.17 Decomposition Temperature:</b>	Data not available
<b>9.18 Viscosity:</b>	2.11 cSt @ 25°C

## Section 10: STABILITY and REACTIVITY

- 10.1 Reactivity:** Avoid interaction with heat, flames, oxidizers or acids.
- 10.2 Chemical Reactivity:** This is a stable product under normal temperatures, 60 – 120°F (15 – 49°C).
- 10.3 Possibility of Hazardous Reactions:**  
See Section 10.5, below.
- 10.4 Conditions to Avoid:** Heating above 120°F (49°C)

**10.5 Incompatible Materials:** Strong oxidizers such as nitrates, nitrites or chlorates can cause explosive mixtures if heated to dryness. Acids will cause the release of sulfur dioxide, a severe respiratory hazard. The following materials of construction are not compatible with calcium thiosulfate solutions; carbon steel, copper or its alloys (brass, bronze) or galvanized steel.

**10.6 Hazardous Decomposition Products:**

Calcium oxide and oxides of sulfur. Sulfur dioxide is a severe respiratory irritant.

**Section 11: TOXICOLOGICAL INFORMATION**

**11.1 Oral:** Oral Rat (female) LD<sub>50</sub>: > 2,000 mg/Kg (OECD 425)

Interperitoneal Rat LD<sub>50</sub>: 573.mg/Kg

Intravenous Rat LD<sub>50</sub>: 344 mg/Kg

Intraperitoneal Mouse LD<sub>50</sub>: 115 mg/Kg

**11.2 Dermal:** Data not available

**11.3 Inhalation:** Data not available

**11.4 Eye:** Data not available

**11.5 Chronic/Carcinogenicity:** Not listed in NTP, IARC or by OSHA

**11.6 Teratology:** Data not available

**11.7 Reproduction:** Data not available

**11.8 Mutagenicity:** Data not available

**Section 12: ECOLOGICAL INFORMATION**

**12.1 Ecotoxicity:** Data not available.

**12.2 Persistence & Degradability:** Data not available.

**12.3 Bioaccumulative Potential:** Data not available.

**12.4 Mobility in Soil:** Data not available.

**12.5 Other Adverse Effects:** Data not available.

### Section 13: DISPOSAL CONSIDERATIONS

Consult federal, state and local regulations for disposal regulations.

### Section 14: TRANSPORT INFORMATION

#### 14.1 Basic Shipping Description:

<b>14.1.1 Proper Shipping Name:</b>	Calcium thiosulfate solution (Not regulated by DOT)
<b>14.1.2 Hazard Classes:</b>	Not applicable
<b>14.1.3 Identification Number:</b>	Not applicable
<b>14.1.4 Packing Group:</b>	Not applicable
<b>14.1.5 Hazardous Substance:</b>	No
<b>14.1.6 Marine Pollutant:</b>	No

#### 14.2 Additional Information:

##### 14.2.1 Other DOT Requirements:

<b>14.2.1.1 Reportable Quantity:</b>	Not applicable
<b>14.2.1.2 Placard(s):</b>	Not applicable
<b>14.2.1.3 Label(s):</b>	Not applicable

**14.2.2 USCG Classification:** Class 43, Misc. water solutions Chris Code: unknown

##### 14.2.3 International Transportation:

<b>14.2.3.1 IMO:</b>	Non-hazardous under IMO regulations
<b>14.2.3.2 IATA:</b>	Non-hazardous under IATA regulations
<b>14.2.3.3 TDG (Canada):</b>	Non-hazardous under TDG regulations
<b>14.2.3.4 ADR (Europe):</b>	Non-hazardous under ADR regulations
<b>14.2.3.5 ADG (Australia):</b>	Non-hazardous under ADG regulations

**14.2.4 Emergency Response Guide:** Not applicable

**14.2.5 ERAP (Canada):** Not applicable

**14.2.6 Special Precautions:** None

<b>Section 15: REGULATORY INFORMATION</b>
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**15.1 U.S. Federal Regulations:**

**15.1.1 OSHA:** This product meets the criteria of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200).

**15.1.2 TSCA:** Product is contained in USEPA Toxic Substance Control Act Inventory

**15.1.3 CERCLA:** Reportable Quantity – Not applicable

**15.1.4 SARA Title III:**

**15.1.4.1 Extremely Hazardous Substance (EHS):** No

<b>15.1.4.2 Section 312 (Tier II) Ratings:</b>	Immediate (acute)	Yes
	Fire	No
	Sudden Release	No
	Reactivity	No
	Delayed (chronic)	No

**15.1.4.3 Section 313 (FORM R):** Not applicable

**15.1.5 RCRA:** Not applicable

**15.1.6 CAA (Hazardous Air Pollutant/HAP):** Not Applicable

**15.2 International Regulations:****15.2.1 Canada:**

**15.2.1.1 WHMIS:** Not hazardous

**15.2.1.2 DSL/NDL:** Listed in DSL

**15.3 State Regulations:**

**15.3.1 CA Proposition 65:** No

**Section 16: OTHER INFORMATION**

**REVISIONS:** The entire SDS was reformatted to comply with the new Hazard Communication Standard dated March 26, 2012, by Regulatory Affairs of Tessenderlo Kerley, Inc.

*The information above is believed to be accurate and represents the best information currently available to Tessenderlo Kerley, Inc. (TKI). No warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this information or the product, the safety of this product, or the hazards related to its use. Users should make their own investigations to determine the suitability of the information for their particular purpose and on the condition that they assume the risk of their use thereof. TKI reserves the right to revise this Safety Data Sheet periodically as new information becomes available.*