July 6, 2023

#### TRANSMITTED VIA HAND DELIVERY

**TCEQ** 

Water Availability Division, MC-160
Texas Commission on Environmental Quality
Building F, Ste. 3101
12100 Park 35 Circle
Austin, TX 78753

Subject: BASF Corporation's Application for Water Right in Brazos Basin

Dear Sir or Madam,

If you require any additional information, please contact me at 512-627-1563

or Frank Schalla at 469-408-5313

Sincerely,

Tim Osting, PE, D.WRE, CFM Principal Engineer / COO

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

TCEQ WATER RIGHTS PERMITTING APPLICATION

### ADMINISTRATIVE INFORMATION CHECKLIST

Complete and submit this checklist for each application. See Instructions Page 5.

APPLICANT(S): BASF Corporation

Indicate whether the following items are included in your application by writing either Y (for yes) or N (for no) next to each item (all items are <u>not</u> required for every application).

Y/N		Y/N	
Y	_Administrative Information Report	Y	_Worksheet 3.0
N	_Additional Co-Applicant Information	Y	_Additional W.S. 3.0 for each Point
N	_Additional Co-Applicant Signature Pages	N	Recorded Deeds for Diversion Points
Y	Written Evidence of Signature Authority	Y	Consent for Diversion Access
Y	_Technical Information Report	Y	_Worksheet 4.0
N	_USGS Map (or equivalent)	N	_TPDES Permit(s)
Y	_Map Showing Project Details	N	WWTP Discharge Data
N	_Original Photographs	N	Groundwater Well Permit
Y	_Water Availability Analysis	N	Signed Water Supply Contract
Y	_Worksheet 1.0	Y	_Worksheet 4.1
N	_Recorded Deeds for Irrigated Land	Y	_Worksheet 5.0
N	Consent for Irrigated Land	Y	_Addendum to Worksheet 5.0
Y	_Worksheet 1.1	Y	_Worksheet 6.0
N	_Addendum to Worksheet 1.1	Y	Water Conservation Plan(s)
Y	_Worksheet 1.2	Y	Drought Contingency Plan(s)
N	_Worksheet 2.0	Y	Documentation of Adoption
N	_Additional W.S. 2.0 for Each Reservoir	Y	_Worksheet 7.0
N	_Dam Safety Documents	Y	_Accounting Plan
N	_Notice(s) to Governing Bodies	Y	_Worksheet 8.0
N	Recorded Deeds for Inundated Land	Y	_Fees
N	_Consent for Inundated Land	Y	_Public Involvement Plan

### ADMINISTRATIVE INFORMATION REPORT

The following information **is required** for **all** new applications and amendments.

\*\*\*Applicants are REQUIRED to schedule a pre-application meeting with TCEQ Staff to discuss Applicant's needs prior to submitting an application. Call the Water Rights Permitting Team to schedule a meeting at (512) 239-4600.

1.	TYPE OF APPLICATION (Instructions, Page. 6)
Indica	ate, by marking X, next to the following authorizations you are seeking.
	XNew Appropriation of State Water
	Amendment to a Water Right *
	X Bed and Banks
owne matc co-ow be re recor subm amer	ou are seeking an amendment to an existing water rights authorization, you must be the er of record of the authorization. If the name of the Applicant in Section 2 does not the the name of the current owner(s) of record for the permit or certificate or if any of the viners is not included as an applicant in this amendment request, your application could sturned. If you or a co-applicant are a new owner, but ownership is not reflected in the rds of the TCEQ, submit a change of ownership request (Form TCEQ-10204) prior to nitting the application for an amendment. See Instructions page. 6. Please note that an analytication may be returned, and the Applicant may resubmit once the change of eachip is complete.
Please	e summarize the authorizations or amendments you are seeking in the space below or h a narrative description entitled "Summary of Request."
Pleas	se reference Statement 1, Summary of Request, for this requested information.

# 2. APPLICANT INFORMATION (Instructions, Page. 6)

a.

Applicant		
Indicate the number of App (Include a copy of this sect	plicants/Co-Applicants $\frac{1}{1}$ ion for each Co-Applicant, if any)	<u> </u>
What is the Full Legal Name	of the individual or entity (applica	nt) applying for this permit?
BASF Corporation		
	the legal name must be spelled exc or in the legal documents forming t	, .
You may search for your CN	a customer with the TCEQ, what is I on the TCEQ website at v/crpub/index.cfm?fuseaction=cust	
CN : 600124895	( leave blank if you do no	t yet have a CN).
application is signed by an i	of the person or persons signing the ndividual applicant, the person or signatory requirements in <i>30 TAC</i> Morrison	persons must submit written
Title: Senior Vice Preside		
Have you provided written eas an attachment to this app	evidence meeting the signatory required plication? Y/N YES	uirements in 30 TAC § 295.14,
may verify the address on the	ing address as recognized by the U he USPS website at <u>CipLookupAction!input.action</u> .	'S Postal Service (USPS)? You
Name:		
Mailing Address: 602 Co	pper Road	
City: Freeport	State: Texas	ZIP Code: <u>77541</u>
Indicate an X next to the typ	oe of Applicant:	
Individual	Sole Proprietorship-D.B.A.	
Partnership	X Corporation	
Trust	Estate	
Federal Government	State Government	
County Government	City Government	
Other Government	Other	-
For Corporations or Limited State Franchise Tax ID Num		ng) Number:

## 3. APPLICATION CONTACT INFORMATION (Instructions, Page. 9)

If the TCEQ needs additional information during the review of the application, who should be contacted? Applicant may submit their own contact information if Applicant wishes to be the point of contact.

First and Last Name: Alan Ferrell		
Title: Lake Creek Ranch & Freeport Site Spec		
Organization Name: BASF Corporation		
Mailing Address: 602 Copper Road		
City: Freeport	State:	ZIP Code:
Phone Number: (979) 415-6788		
Fax Number:		
E-mail Address:		

# 4. WATER RIGHT CONSOLIDATED CONTACT INFORMATION (Instructions, Page. 9)

This section applies only if there are multiple Owners of the same authorization. Unless otherwise requested, Co-Owners will each receive future correspondence from the Commission regarding this water right (after a permit has been issued), such as notices and water use reports. Multiple copies will be sent to the same address if Co-Owners share the same address. Complete this section if there will be multiple owners and all owners agree to let one owner receive correspondence from the Commission. Leave this section blank if you would like all future notices to be sent to the address of each of the applicants listed in section 2 above.

I/We authorize all future notices be receive	ed on my/our behalf	at the following:	
First and Last Name:			
Title:			
Organization Name:			
Mailing Address:			
City:			
Phone Number:			
Fax Number:			
E-mail Address:			

# 5. MISCELLANEOUS INFORMATION (Instructions, Page. 9)

Yes / No Yes

	TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol by all applicants/co-applicants. If you need assistance determining whether you owe delinquent penalties or fees, please call the Water Rights Permitting Team at (512) 239-4600, prior to submitting your application.
	1. Does Applicant or Co-Applicant owe any fees to the TCEQ? Yes / No $\frac{\text{No}}{\text{No}}$
	If <b>yes</b> , provide the following information:
	Account number: Amount past due:
	2. Does Applicant or Co-Applicant owe any penalties to the TCEQ? Yes / No $\underline{\text{No}}$
	If <b>yes</b> , please provide the following information:
	Enforcement order number: Amount past due:
b.	If the Applicant is a taxable entity (corporation or limited partnership), the Applicant must be in good standing with the Comptroller or the right of the entity to transact business in the State may be forfeited. See Texas Tax Code, Subchapter F. Applicant's may check their status with the Comptroller at <a href="https://mycpa.cpa.state.tx.us/coa/">https://mycpa.cpa.state.tx.us/coa/</a>
	Is the Applicant or Co-Applicant in good standing with the Comptroller? Yes / No $\underline{{}^{Yes}}$
c.	The commission will not grant an application for a water right unless the applicant has submitted all Texas Water Development Board (TWDB) surveys of groundwater and surface water use – if required. See TWC §16.012(m) and 30 TAC § 297.41(a)(5). Applicants should check survey status on the TWDB website prior to filing: <a href="https://www3.twdb.texas.gov/apps/reports/WU/SurveyStatus PriorThreeYears">https://www3.twdb.texas.gov/apps/reports/WU/SurveyStatus PriorThreeYears</a>
	Applicant has submitted all required TWDB surveys of groundwater and surface water?

a. The application will not be processed unless all delinquent fees and/or penalties owed to the

# 6. SIGNATURE PAGE (Instructions, Page. 11)

Applicant:	
Bradley Morrison	Senior Vice President -General Manager Freeport Site
(Typed or printed name)	(Title)
direction or supervision in accordance properly gather and evaluate the infor persons who manage the system, or the information, the information submitted accurate, and complete. I am aware the	document and all attachments were prepared under my e with a system designed to assure that qualified personnel rmation submitted. Based on my inquiry of the person or hose persons directly responsible for gathering the ed is, to the best of my knowledge and belief, true, here are significant penalties for submitting false of fine and imprisonment for knowing violations.
	under Title 30 Texas Administrative Code §295.14 to sign submitted written evidence of my signature authority.
Signature: (Use blue ink)	Date: 6/6/8083
Subscribed and Sworn to before me by	v the said
그 회에는 10 사이트 시간 그리고 하는데 20 이름을 가지면 하지만 하지만 하지 않는데 보고 100 시간 때문에 되었다면 하지만 하지만 하지만 하지만 하지만 하지만 하지만 하는데 사람	of June, 20 23.  a day of May, 20 27.
My commission expires on the \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2 day of May , 20 27.
Montary Public	[SEAL] [SEAL]
Exacona County, Texas	1257\4\02\ 1257\4\02\

If the Application includes Co-Applicants, each Applicant and Co-Applicant must submit an original, separate signature page

#### STATEMENT 1

# SUPPLEMENTAL ATTACHMENT TO ADMINISTRATIVE INFORMATION REPORT SUMMARY OF REQUEST

BASF Corporation is requesting a new appropriation of 9,000 acre-feet per year of State Water at a maximum diversion rate of 630 cfs from the Brazos River for use in Limestone County, Falls County, Robertson County, McLennan County, and Brazoria County, along with authorization, in accordance with the authorization under Certificate of Adjudication No. 12-4345, to use the bed and banks of Lake Creek Reservoir, Manos Creek, Brazos River, Oyster Creek, Buffalo Camp Bayou, and existing tributaries and canals to transport released water from Lake Creek Reservoir to a Brazos River diversion reach and point of use in Brazoria County. Purposes of use will be industrial and municipal.

Please reference the Plan of Diversion (Statement 5) below for a more detailed explanation of the appropriation request's proposed plan of diversion, including the proposed diversion reach, existing diversion points, existing discharge points, and the transport of waters using the bed and banks of Lake Creek Reservoir, Manos Creek, Brazos River, Oyster Creek, Buffalo Camp Bayou, and existing tributaries and canals. Water diverted from the proposed diversion reach on the Brazos River will be diverted into Harris Reservoir and Brazoria Reservoir.

An Interbasin Transfer is also requested to transfer authorized water from the Brazos River Basin into the San Jacinto – Brazos Coastal Basin. This adjoining coastal basin is exempt from additional requirements according to TWC 11.085(v). No request for Interbasin Transfer within Limestone County is necessary; water used inside Limestone County will be distributed inside the Brazos River Basin.

In the future, the proposed appropriation and bed and banks authorization may be used for municipal purposes through one or more Water Supply Contracts. The requested new appropriation will not be firm, and BASF Corporation's existing Certificate of Adjudication No. 12-4345 will serve as backup during times of limited available water.





#### **Environment, Health and Safety**

Mark J. Patterson
Vice President

October 14, 2022

Bradley Morrison BASF Corporation 602 Copper Rd Freeport, TX 77541

Dear Bradley:

Thank you for accepting the delegated responsibility to sign and to certify environmental permit applications, reports, and other related documents for the facilities of BASF Corporation to which you are assigned.

As you know, care must be taken in completing such applications and reports, since penalties may be imposed for false statements, although penalties are not ordinarily imposed for mistakes made through mere inadvertence. Your plant and site ecology personnel must work closely with you to assure accuracy. In addition, GBW/U or CLN/R are available for advice and consultation should you wish assistance in completing such documents. Please feel free to call Mark Patterson or Catherine Trinkle at Florham Park with any such questions you may have.

In carrying out your responsibilities, you are covered by the Corporate Compliance Indemnification Policy. Under that policy, the Company provides full indemnification of employee and agents against all expenses (including attorneys' fees), judgments, fines, and reasonable settlements where one has (1) acted in good faith and in a manner he or she believed to be in BASF's best interests; and (2) in a criminal context, where one did not have reasonable cause to believe the challenged conduct was unlawful.

If you have any questions about this Policy, please feel free to call our General Counsel, Karen Killeen.

Sincerely,

Mark J. Patterson Vice President

Environment, Health and Safety Services

Attachment



## **Environmental Permit/Reporting Signature Authorization**

Under federal, state, and local environmental laws, which require certification of certain permit applications, reports or other documents, authority may be delegated to a duly authorized representative with responsibilities for that operation.

The managerial position identified below is responsible for environmental activities at the **Freeport, TX** facility and has responsibility for the overall operation of the site or plant facilities subject to environmental permitting.

Therefore, I, Mark J. Patterson, Vice President, Environment, Health and Safety, do hereby authorize, **Bradley Morrison**, **Site Manager**, to certify any such permit applications, reports, and other required regulatory documents on behalf of BASF Corporation.

This authority shall continue until revoked, modified, or superseded. The person authorized herein shall not further delegate their authority.

Mark J. Patterson

<u>Vice President, Environment, Health and Safety Services</u> **Title** 

October 14, 2022 Date

Concurrence:

Catherine Trinkle (CLN/RG)

# TECHNICAL INFORMATION REPORT WATER RIGHTS PERMITTING

This Report is required for applications for new or amended water rights. Based on the Applicant's responses below, Applicants are directed to submit additional Worksheets (provided herein). A completed Administrative Information Report is also required for each application.

Applicants are REQUIRED to schedule a pre-application meeting with TCEQ Permitting Staff to discuss Applicant's needs and to confirm information necessary for an application prior to submitting such application. Please contact the Water Availability Division at (512) 239-4600 or <a href="https://www.weptman.org/www.new.gov">www.weptman.org/www.weptman.org/www.new.gov</a> to schedule a meeting.

Date of pre-application meeting: 10/31/2022, 5/10/2023

# 1. New or Additional Appropriations of State Water. Texas Water Code (TWC) § 11.121 (Instructions, Page. 12)

**State Water is:** The water of the ordinary flow, underflow, and tides of every flowing river, natural stream, and lake, and of every bay or arm of the Gulf of Mexico, and the storm water, floodwater, and rainwater of every river, natural stream, canyon, ravine, depression, and watershed in the state. TWC § 11.021.

a.	Applicant requests a new appropriation	(diversion or impoundment) of State Water? Y / $N_{\underline{Y}}$
----	--	--

b.	Applicant requests an amendment to an existing water right requesting an increase in the
	appropriation of State Water or an increase of the overall or maximum combined diversion
	rate? Y / $N_{N}$ (If yes, indicate the Certificate or Permit number:)

If Applicant answered yes to (a) or (b) above, does Applicant also wish to be considered for a term permit pursuant to TWC § 11.1381?  $\mathbf{Y} / \mathbf{N}_{\underline{\mathsf{N}}}$ 

C.	Applicant reque	ests to extend a	an existing T	erm authorizatioi	n or to make	the right pe	ermanent?
	Y / N <sub>N</sub>	<u>(</u> (If yes, indicat	e the Term C	ertificate or Perm	it number:		)

If Applicant answered yes to (a), (b) or (c), the following worksheets and documents are required:

- Worksheet 1.0 Quantity, Purpose, and Place of Use Information Worksheet
- Worksheet 2.0 Impoundment/Dam Information Worksheet (submit one worksheet for each impoundment or reservoir requested in the application)
- Worksheet 3.0 Diversion Point Information Worksheet (submit one worksheet for each diversion point and/or one worksheet for the upstream limit and one worksheet for the downstream limit of each diversion reach requested in the application)
- Worksheet 5.0 Environmental Information Worksheet
- Worksheet 6.0 Water Conservation Information Worksheet
- Worksheet 7.0 Accounting Plan Information Worksheet
- Worksheet 8.0 Calculation of Fees
- Fees calculated on Worksheet 8.0 see instructions Page. 34.
- Maps See instructions Page. 15.
- Photographs See instructions Page. 30.

Additionally, if Applicant wishes to submit an alternate source of water for the project/authorization, see Section 3, Page 3 for Bed and Banks Authorizations (Alternate sources may include groundwater, imported water, contract water or other sources).

Additional Documents and Worksheets may be required (see within).

#### 2. Amendments to Water Rights. TWC § 11.122 (Instructions, Page. 12)

This section should be completed if Applicant owns an existing water right and Applicant requests to amend the water right. If Applicant is not currently the Owner of Record in the TCEQ Records, Applicant must submit a Change of Ownership Application (TCEQ-10204) prior to submitting the amendment Application or provide consent from the current owner to make the requested amendment. If the application does not contain consent from the current owner to make the requested amendment, TCEQ will not begin processing the amendment application until the Change of Ownership has been completed and will consider the Received Date for the application to be the date the Change of Ownership is completed. See instructions page. 6.

Water Dight (Certificate or Dermit) number you are requesting to amond. N/A

water Right (Certificate of Permit) number you ar	e requesting to amend. NA
Applicant requests to sever and combine existing Certificates into another Permit or Certificate? Y	,
List of water rights to sever	Combine into this ONE water right
a. Applicant requests an amendment to an exist appropriation of State Water (diversion and/o	ŭ ŭ
If yes, application is a new appropriation for the	he increased amount, complete <b>Section 1 of this</b>

b. Applicant requests to amend existing Term authorization to extend the term or make the water right permanent (remove conditions restricting water right to a term of years)? Y / N  $^{\rm N}$ 

Report (PAGE. 1) regarding New or Additional Appropriations of State Water.

- If yes, application is a new appropriation for the entire amount, complete **Section 1 of this Report (PAGE. 1) regarding New or Additional Appropriations of State Water**.
- c. Applicant requests an amendment to change the purpose or place of use or to add an additional purpose or place of use to an existing Permit or Certificate? Y /  $N_{\underline{N}}$  If yes, submit:
  - Worksheet 1.0 Quantity, Purpose, and Place of Use Information Worksheet
  - Worksheet 1.2 Notice: "Marshall Criteria"
- d. Applicant requests to change: diversion point(s); or reach(es); or diversion rate?  $Y / N_{\underline{N}}$  *If yes, submit:* 
  - **Worksheet 3.0 Diversion Point Information Worksheet** (submit one worksheet for each diversion point or one worksheet for the upstream limit and one worksheet for the downstream limit of each diversion reach)
  - **Worksheet 5.0 Environmental Information** (Required for <u>any</u> new diversion points that are not already authorized in a water right)
- e. Applicant requests amendment to add or modify an impoundment, reservoir, or dam? Y / N N

*If yes, submit:* **Worksheet 2.0 - Impoundment/Dam Information Worksheet** (submit one worksheet for each impoundment or reservoir)

	<ul> <li>Maps – See instructions Page. 15.</li> <li>Additional Documents and Worksheets may be required (see within).</li> </ul>
3.	Bed and Banks. TWC § 11.042 (Instructions, Page 13)
a.	Pursuant to contract, Applicant requests authorization to convey, stored or conserved water to the place of use or diversion point of purchaser(s) using the bed and banks of a watercourse? TWC § $11.042(a)$ . Y/N $\underline{^{Y}}$
	If yes, submit a signed copy of the Water Supply Contract pursuant to 30 TAC §§ 295.101 and 297.101. Further, if the underlying Permit or Authorization upon which the Contract is based does not authorize Purchaser's requested Quantity, Purpose or Place of Use, or Purchaser's diversion point(s), then either:
	<ol> <li>Purchaser must submit the worksheets required under Section 1 above with the Contract Water identified as an alternate source; or</li> <li>Seller must amend its underlying water right under Section 2.</li> </ol>
b.	Applicant requests to convey water imported into the state from a source located wholly outside the state using the bed and banks of a watercourse? TWC § 11.042(a-1). Y / $N_{-}$
	<i>If yes, submit worksheets</i> 1.0, 2.0, 3.0, 4.0, 5.0, 7.0, 8.0, Maps and fees from the list below.
c.	Applicant requests to convey Applicant's own return flows derived from privately owned groundwater using the bed and banks of a watercourse? TWC § 11.042(b). Y / $N_{-}^{N}$
	<i>If yes, submit worksheets</i> 1.0, 2.0, 3.0, 4.0, 5.0, 7.0, 8.0, Maps, and fees from the list below.
d.	Applicant requests to convey Applicant's own return flows derived from surface water using the bed and banks of a watercourse? TWC § $11.042(c)$ . Y / NN_
	<i>If yes, submit worksheets</i> 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, Maps, and fees from the list below.
	*Please note, if Applicant requests the reuse of return flows belonging to others, the Applicant will need to submit the worksheets and documents under Section 1 above, as the application will be treated as a new appropriation subject to termination upon direct or indirect reuse by the return flow discharger/owner.
e.	Applicant requests to convey water from any other source, other than (a)-(d) above, using the bed and banks of a watercourse? TWC § $11.042(c)$ . Y / $N_{\underline{Y}}$
	If yes, submit worksheets 1.0, 2.0, 3.0, 4.0, 5.0, 7.0, 8.0, Maps, and fees from the list below.
	Worksheets and information:
	<ul> <li>Worksheet 1.0 - Quantity, Purpose, and Place of Use Information Worksheet</li> <li>Worksheet 2.0 - Impoundment/Dam Information Worksheet (submit one worksheet for each impoundment or reservoir owned by the applicant through which water will be conveyed or diverted)</li> <li>Worksheet 3.0 - Diversion Point Information Worksheet (submit one worksheet for the</li> </ul>
	downstream limit of each diversion reach for the proposed conveyances)
TCI	CO-10214C (02/01/2022) Water Rights Permitting Availability Technical Information Sheet Page 3 of 23

f. Other - Applicant requests to change any provision of an authorization not mentioned

• Worksheet 8.0 – Calculation of Fees; and Fees calculated – see instructions Page. 34

\_\_\_\_\_If yes, call the Water Availability Division at (512) 239-4600 to

above? Y / N N

Additionally, all amendments require:

discuss.

- Worksheet 4.0 Discharge Information Worksheet (for each discharge point)
- Worksheet 5.0 Environmental Information Worksheet
- Worksheet 6.0 Water Conservation Information Worksheet
- Worksheet 7.0 Accounting Plan Information Worksheet
- Worksheet 8.0 Calculation of Fees; and Fees calculated see instructions Page. 34
- Maps See instructions Page. 15.
- Additional Documents and Worksheets may be required (see within).

# 4. General Information, Response Required for all Water Right Applications (Instructions, Page 15)

a. Provide information describing how this application addresses a water supply need in a manner that is consistent with the state water plan or the applicable approved regional water plan for any area in which the proposed appropriation is located or, in the alternative, describe conditions that warrant a waiver of this requirement (not required for applications to use groundwater-based return flows). Include citations or page numbers for the State and Regional Water Plans, if applicable. Provide the information in the space below or submit a supplemental sheet entitled "Addendum Regarding the State and Regional Water Plans":

Please reference Statement 2 for this requested information.	

b. Did the Applicant perform its own Water Availability Analysis? Y / N $\underline{\mathsf{Y}}$ 

If the Applicant performed its own Water Availability Analysis, provide electronic copies of any modeling files and reports.

c. Does the application include required Maps? (Instructions Page. 15) Y / N $^{ extstyle Y}$ 

#### **STATEMENT 2**

# SUPPLEMENTAL ATTACHMENT TO TECHNICAL INFORMATION REPORT ADDENDUM REGARDING THE STATE AND REGIONAL WATER PLANS

The proposed appropriation of State Water and proposed bed and banks authorization in accordance with the authorization under Certificate of Adjudication No. 12-4345 will address industrial and municipal needs in the proposed places of use and do not conflict with the 2021 Region G and H Water Plan, and do not conflict with the 2022 State Water Plan. For example, projected long term municipal needs in Region G Limestone County (Brazos Basin) exceeds 600 acre-feet per year beginning in 2020. Projected long-term municipal and manufacturing needs in Region G McLennan County (Brazos Basin) exceed 900 and 500 acre-feet per year, respectively, beginning in 2020. Projected long-term manufacturing needs in Region H Brazoria County exceed 20,000 acre feet per year beginning in 2020. This requested appropriation can reduce projected water needs by approximately 9,000 acre feet per year within McLennan County, Falls County, Limestone County, Robertson County, and Brazoria County.

Exhibit 2 provides a letter from Region G Planning Group and Region H Planning Group, which state this application is not inconsistent with their respective 2021 Regional Water Plans.





**VOTING MEMBERS** 

Wayne Wilson, Chair Gail Peek, Vice-Chair David Collinsworth. Secretary/Treasurer Dirk Aaron Dale Adams Charles Beseda Jim Briggs David Blackburn Luci Dunn Scott Felton Alan Gardenhire Zach Holland Gary Myers Jennifer Nations Gary Newman Lynn Smith Dale Spurgin Kathy Turner Jones Lisa Tyer Kenny Weldon

**COUNTIES** 

Vacant

Gary Westbrook

Bell Bosque Brazos Burleson Callahan Comanche Corvell Eastland Erath Falls Fisher Grimes Hamilton Haskell Hill Hood Johnson Jones Kent Knox Lampasas Lee Limestone McLennan Milam Nolan Palo Pinto Robertson Shackelford Somervell Stephens Stonewall **Taylor** 

Throckmorton Washington Williamson Young

BRAZOS RIVER AUTHORITY, Administrative Agent P.O. Box 7555 • Waco, Texas 76714-7555 (254) 761-3100 • Fax (254) 761-3204

www.brazosgwater.org

March 17, 2023

Kathy Alexander, PhD Policy and Technical Analyst Texas Commission on Environmental Quality Water Availability Division, MC-160 12100 Park 35 Circle Austin, TX 78753

**RE: BASF Water Right Application** 

Dear Dr. Alexander:

The Region G Water Planning Group (Brazos G) is providing this letter at the request of BASF Corporation. BASF anticipates applying for a new, non-firm surface water right to divert up to 9,000 ac-ft/year from the Brazos River on an interruptible basis for municipal and industrial use in the Brazos River Basin and San Jacinto-Brazos Coastal Basin. As part of this application, TCEQ is requiring that BASF provide a letter from applicable Regional Water Planning Groups (RWPGs) stating that the proposed water right is not inconsistent with the 2021 Regional Water Plans (RWPs).

The Region G Water Planning Group (Brazos G) discussed this topic at its regular public meeting on March 8, 2023. It was noted that Texas Water Development Board (TWDB) rules concerning RWPs require supplies reflected in the plan to be firm, and thus exclusion of the proposed application from the 2021 Brazos G RWP was appropriate. Further, the project is not expected to require substantial new infrastructure which would warrant inclusion in the plan, nor is the applicant anticipated to seek funding for the project through TWDB. Based on these factors, the Region G Water Planning Group took formal action at the meeting authorizing the submittal of a letter indicating that the proposed water right application, as described above, is not inconsistent with the 2021 Brazos G RWP.

Should you have any further questions regarding the RWP, please feel free to contact the Brazos G consultant, Tony Smith, at 512-799-4511 or

Sincerely,

Wayne Wilson

Wayne Wilson Region G Chair

Cc: Brian Meagher, BASF
Tim Osting, Aqua Strategies, Inc.

Tony Smith, Carollo Engineers, Inc.

Pamela Hannemann, Brazos River Authority





#### REGION H WATER PLANNING GROUP

Senate Bill 1 - Texas Water Development Board

c/o San Jacinto River Authority P. O. Box 329, Conroe, Texas 77305 Telephone 936-588-3111 Facsimile 936-588-3043

Agricultural

Caleb Cooper Danny Pierce

Counties

Mark Evans, Chair Judge Byron Ryder Loyd Smith

**Electric Generating Utilities** 

Carl Burch

Environmental

John R. Bartos, Executive Committee

Groundwater Management Areas

Gary Ashmore David Bailey

Industries

James Comin Glenn Lord

Municipalities

Yvonne Forrest, Executive Committee Robert Istre

Public

Ken Kramer

River Authorities

Brad Burnett Jace Houston, Secretary Kevin Ward

**Small Businesses** 

W.R. Baker Ivan Langford Mike O'Connell

Water Districts

Jun Chang Marvin Marcell, Vice-Chair Mike Turco

Water Utilities Arthur Bredehoft

Brandon Wade

TWDB Liaison Heather Rose February 22, 2023

Kathy Alexander, PhD
Policy and Technical Analyst
Texas Commission on Environmental Quality
Water Availability Division, MC-160
12100 Park 35 Circle
Austin, TX 78753

Re: BASF Water Right Application

Dear Dr. Alexander,

The Region H Water Planning Group (RHWPG) is providing this letter at the request of BASF Corporation. BASF anticipates applying for a new non-firm surface water right to divert up to 9,000 ac-ft/yr from the Brazos River on an interruptible basis for municipal and industrial use in the Brazos River Basin and San Jacinto-Brazos Coastal Basin. As part of this application, TCEQ is requiring that BASF provide a letter from applicable Regional Water Planning Groups (RWPGs) stating that the proposed water right is not inconsistent with the 2021 Regional Water Plans (RWPs).

The Region H Water Planning Group (RHWPG) discussed this topic at its regular public meeting on February 1, 2023. It was noted that Texas Water Development Board (TWDB) rules concerning RWPs require supplies reflected in the plan to be firm, and thus exclusion of the proposed application from the 2021 Region H RWP was appropriate. Further, the project is not expected to require substantial new infrastructure which would warrant inclusion in the plan, nor is the applicant anticipated to seek funding for the project through TWDB. Based upon these factors, the RHWPG took formal action at the meeting authorizing submittal of a letter indicating that the proposed water right application, as described above, is not inconsistent with the 2021 Region H RWP. It is the understanding of the RHWPG that TCEQ will consider input from effected parties and assess potential impacts of the proposed right on other water rights holders.

Should you have any further questions regarding the RWP, please feel free to contact me at 281.440.3924 or \_\_\_\_\_\_ or the Region H consultant, Philip Taucer, at 713.600.6835 or \_\_\_\_\_\_

Sincerely,

Mark Evans Region H Chair

cc: Brian Meagher, BASF

Tim Osting, Aqua Strategies Inc.

#### **STATEMENT 3**

# SUPPLEMENTAL ATTACHMENT TO TECHNICAL INFORMATION REPORT WATER AVAILABILITY ANALYSIS

A draft TCEQ Full Authorization (run3) Brazos River Basin and San Jacinto-Brazos Coastal Basin Water Availability Model (herein WAM) was provided by Kathy Alexander, Policy and Technical Analyst with TCEQ, on 12/19/2022. This WAM was used to conduct a water availability analysis to determine the diversion availability of the proposed new appropriation. The draft WAM includes updates made by TCEQ staff to include recently issued or pending surface water permits. The WAM was updated further for this application to include the City of Abilene's pending Cedar Ridge Reservoir and to correct the maximum diversion rate from the Brazos River into Lake Creek Reservoir for COA 12-4345.

Two WAMs were used to separately represent two proposed diversion locations. The first WAM represents the proposed new appropriation at control point number 532802, which is the location of diversion point no. 3 (see Map 1 and 4). The second WAM represents the proposed appropriation at control point number 434501, which is the location of diversion point no. 8 (see Map 7). An annual diversion target amount of 9,000 acre-feet per year was used, with a junior priority date. The monthly diversion target was set to the maximum diversion rate, allowing either to divert then pass-through directly to users, or to store in an existing reservoir. To ensure the proposed new diversion did not exceed the applicable maximum combined diversion rate, diversions from the new proposed appropriation were constrained to ensure rates were not exceeded from existing water rights located at the same diversion point.

The rows representing the proposed new appropriation at control point 532802 (diversion point no. 3), which was input into the first WAM's bwam3.dat file, is shown below. The maximum combined diversion rate is 630 cfs.

WR532802 9000 NDAYS20221201 1 2 0.0000 C9000_1
TO 15 38010 SET
TO 6
TO6
TO 6
TO 6 SUB C5328_10
TO 6 C5328_11
so 9000. 9000.
PX 2

The rows representing the proposed new appropriation at control point 434501 (diversion point no. 8), which was input into the second WAM's bwam3.dat file, is shown below. The maximum combined diversion rate is 45 cfs.

```
WR434501 9000. NDAYS20221201 1 2 0.0000 C9000_2
TO 15 2716. SET
TO 6 SUB C4345_2
SO 9000. 9000.
PX 2
```

A bwam3.tin file was created to be run in the TCEQ Water Rights Analysis Package (WRAP) to summarize model output data in a table format. A table was specified using the bwam3.tin file to print annual diversion volumes for the proposed new appropriation. The rows representing this table, which

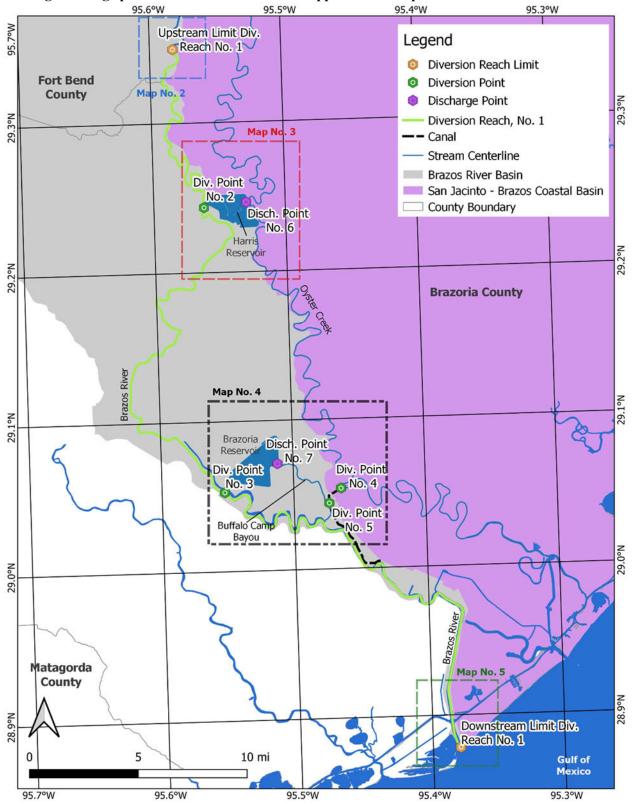
was specified in the bwam3.tin file, is shown below for the new appropriation at control point 532802 (diversion point no. 3).

The TCEQ WRAP was then used to run both sets of WAM input files and to output model results for the proposed new appropriation at each control point defined above. WAM output results show the 9,000 acre-feet per year diversion amount is available in at least 64% of the years modeled at diversion point no. 8, or at diversion point no. 3.

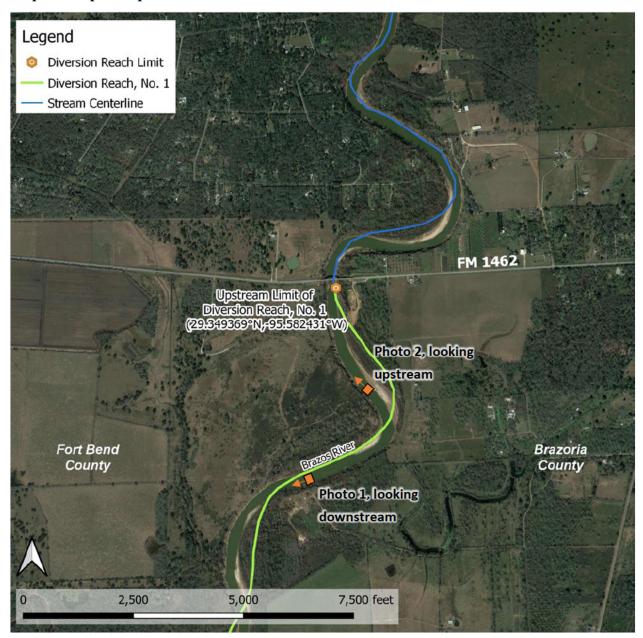
All digital TCEQ WAM files are attached to the submitted application package.



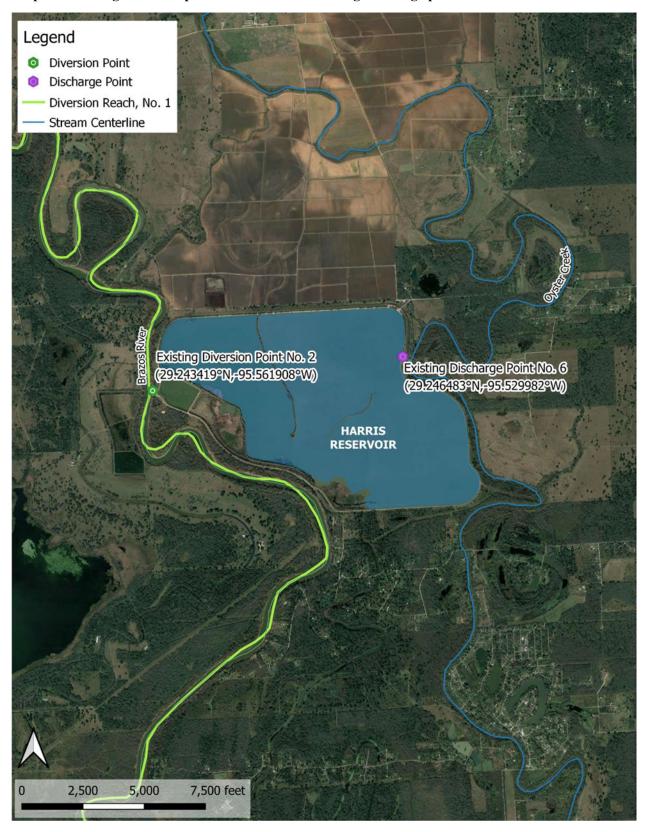
Map #1: Overview of proposed diversion reach no. 1, existing diversion points no. 2, 3, 4, 5, and existing discharge points no. 6 and 7. Insets for Supplemental Maps 2-5 are also shown.



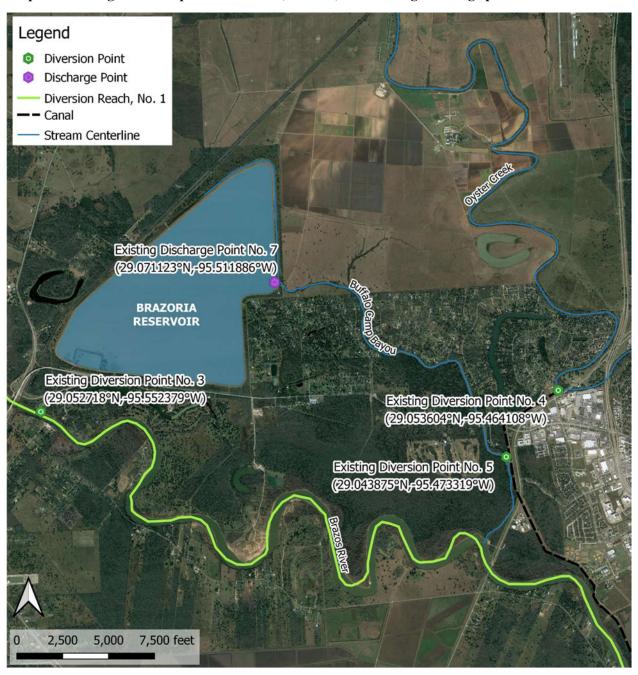
Map #2: Proposed upstream limit of diversion reach no. 1.



Map #3: Existing diversion point number 2 and existing discharge point number 6.



Map #4: Existing diversion points number 3, 4 and 5, and existing discharge point number 7.



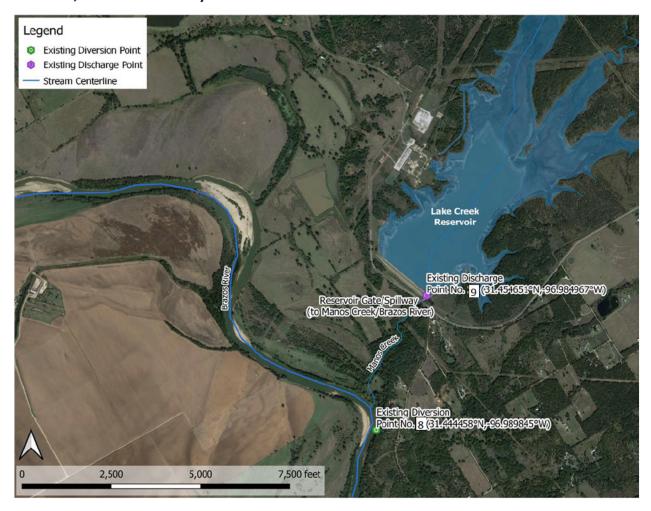
Map #5: Proposed downstream limit of diversion reach no. 1.



Map #6: Overview of Lake Creek Reservoir, proposed diversion reach, existing diversion points, and existing discharge points associated with the application. Freestone 96 W 97°W Legend County Lake Creek Limestone Waco Diversion Point McLennan Reservoir County Limit of Diversion Reach, County Coryell Discharge Point County Leon County Diversion Reach, Falls County Stream Centerline Brazos River Basin San Jacinto - Brazos Coastal Basin Robertson County Boundary Bell County Madison County 31°N County Polk County Walker Milam County County Brazos San Jacinto/ County County Williamson Grimes County County Burleson County Travis County Montgomery County Lee County Liberty County Washington County Bastrop County Waller County Chambers 30°N County Harris Austin Fayette County County Caldwell County County Oyster Creek Houston Colorado County Fort Bend Gonzales County Galvestor County County Lavaca County Wharton Brazoria County County De Witt 95°W County Jackson 299 County Matagorda 25 County County 50 mi **Gulf of** 

Mexico

Map #7: Location of Lake Creek Reservoir, existing diversion point number 8, existing discharge point number 9, in McLennan County in the Brazos River Basin.



# WORKSHEET 1.0 Quantity, Purpose and Place of Use

#### 1. New Authorizations (Instructions, Page. 16)

Submit the following information regarding quantity, purpose and place of use for requests for new or additional appropriations of State Water or Bed and Banks authorizations:

Quantity (acre- feet) (Include losses for Bed and Banks)	or  Alternate Source *each alternate source (and new appropriation based on return flows of others) also requires completion of Worksheet 4.0	Purpose(s) of Use	Place(s) of Use  *requests to move state water out of basin also require completion of Worksheet 1.1 Interbasin Transfer
9,000	Brazos River Basin	Industrial, Municipal	McLennan County, Falls County, Limestone County within Brazos Basin, Robertson County, Brazoria County

9,000	_Total amount	of water (in	n acre-feet)	to be used	annually	(include	losses f	or Bed	and
Banks applica	tions)				•				

If the Purpose of Use is Agricultural/Irrigation for any amount of water, provide:

a.	Location Information Regarding the Lands to be I	rrigated	
	i) Applicant proposes to irrigate a total of	acres in any one	year. This acreage is
	all of or part of a larger tract(s) which is	described in a supplem	ent attached to this
	application and contains a total of	acres in	County, TX.
	ii) Location of land to be irrigated: In the		Original Survey No.

\_\_\_\_\_\_, Abstract No.\_\_\_\_\_\_.

A copy of the deed(s) or other acceptable instrument describing the overall tract(s) with the recording information from the county records must be submitted. Applicant's name must match deeds.

If the Applicant is not currently the sole owner of the lands to be irrigated, Applicant must submit documentation evidencing consent or other documentation supporting Applicant's right to use the land described.

Water Rights for Irrigation may be appurtenant to the land irrigated and convey with the land unless reserved in the conveyance. 30 TAC § 297.81.

## 2. Amendments - Purpose or Place of Use (Instructions, Page. 12)

a. Complete this section for each requested amendment changing, adding, or removing Purpose(s) or Place(s) of Use, complete the following:

Quantity (acre- feet)	Existing Purpose(s) of Use	Proposed Purpose(s) of Use*	Existing Place(s) of Use	Proposed Place(s) of Use**

<sup>\*</sup>If the request is to add additional purpose(s) of use, include the existing and new purposes of use under "Proposed Purpose(s) of Use."

Changes to the purpose of use in the Rio Grande Basin may require conversion. 30 TAC § 303.43.

For any request which adds Agricultural purpose of use or changes the place of use for

Agricu irrigate	ltural rights, provide the following location :	information regarding the lands to be
all c appl	licant proposes to irrigate a total of of or part of a larger tract(s) which is delication and contains a total of	escribed in a supplement attached to this

	County, 1A.		
ii.	Location of land to be irrigated:	In the	_Original Survey No.
	Abstract No		

A copy of the deed(s) describing the overall tract(s) with the recording information from the county records must be submitted. Applicant's name must match deeds. If the Applicant is not currently the sole owner of the lands to be irrigated, Applicant must submit documentation evidencing consent or other legal right for Applicant to use the land described.

Water Rights for Irrigation may be appurtenant to the land irrigated and convey with the land unless reserved in the conveyance. 30 TAC § 297.81.

- c. Submit Worksheet 1.1, Interbasin Transfers, for any request to change the place of use which moves State Water to another river basin.
- d. See Worksheet 1.2, Marshall Criteria, and submit if required.
- e. See Worksheet 6.0, Water Conservation/Drought Contingency, and submit if required.

<sup>\*\*</sup>If the request is to add additional place(s) of use, include the existing and new places of use under "Proposed Place(s) of Use."

# WORKSHEET 1.1 INTERBASIN TRANSFERS, TWC § 11.085

Submit this worksheet for an application for a new or amended water right which requests to transfer State Water from its river basin of origin to use in a different river basin. A river basin is defined and designated by the Texas Water Development Board by rule pursuant to TWC  $\S$  16.051.

Applicant requests to transfer State Water to another river basin within the State? Y / N  $\underline{\underline{Y}}$ 

1.	Interbasin Transfer Request (Instructions, Page. 20)
a. P	rovide the Basin of Origin. Brazos River Basin
	rovide the quantity of water to be transferred (acre-feet). 9000
	rovide the Basin(s) and count(y/ies) where use will occur in the space below: San Jacinto - Brazos Coastal Basin. Brazoria Countv

### 2. Exemptions (Instructions, Page. 20), TWC § 11.085(v)

Certain interbasin transfers are exempt from further requirements. Answer the following:

- a. The proposed transfer, which in combination with any existing transfers, totals less than 3,000 acre-feet of water per annum from the same water right. Y/NN
- b. The proposed transfer is from a basin to an adjoining coastal basin?  $Y/N\underline{Y}$
- c. The proposed transfer from the part of the geographic area of a county or municipality, or the part of the retail service area of a retail public utility as defined by Section 13.002, that is within the basin of origin for use in that part of the geographic area of the county or municipality, or that contiguous part of the retail service area of the utility, not within the basin of origin? Y/NN
- d. The proposed transfer is for water that is imported from a source located wholly outside the boundaries of Texas, except water that is imported from a source located in the United Mexican States? Y/N N

### 3. Interbasin Transfer Requirements (Instructions, Page. 20)

For each Interbasin Transfer request that is not exempt under any of the exemptions listed above Section 2, provide the following information in a supplemental attachment titled "Addendum to Worksheet 1.1, Interbasin Transfer":

- a. the contract price of the water to be transferred (if applicable) (also include a copy of the contract or adopted rate for contract water);
- b. a statement of each general category of proposed use of the water to be transferred and a detailed description of the proposed uses and users under each category;
- c. the cost of diverting, conveying, distributing, and supplying the water to, and treating the water for, the proposed users (example expert plans and/or reports documents may be provided to show the cost);

- d. describe the need for the water in the basin of origin and in the proposed receiving basin based on the period for which the water supply is requested, but not to exceed 50 years (the need can be identified in the most recently approved regional water plans. The state and regional water plans are available for download at this website:

  (<a href="http://www.twdb.texas.gov/waterplanning/swp/index.asp">http://www.twdb.texas.gov/waterplanning/swp/index.asp</a>);
- e. address the factors identified in the applicable most recently approved regional water plans which address the following:
  - (i) the availability of feasible and practicable alternative supplies in the receiving basin to the water proposed for transfer;
  - (ii) the amount and purposes of use in the receiving basin for which water is needed;
  - (iii) proposed methods and efforts by the receiving basin to avoid waste and implement water conservation and drought contingency measures;
  - (iv) proposed methods and efforts by the receiving basin to put the water proposed for transfer to beneficial use:
  - (v) the projected economic impact that is reasonably expected to occur in each basin as a result of the transfer; and
  - (vi) the projected impacts of the proposed transfer that are reasonably expected to occur on existing water rights, instream uses, water quality, aquatic and riparian habitat, and bays and estuaries that must be assessed under Sections 11.147, 11.150, and 11.152 in each basin (*if applicable*). If the water sought to be transferred is currently authorized to be used under an existing permit, certified filing, or certificate of adjudication, such impacts shall only be considered in relation to that portion of the permit, certified filing, or certificate of adjudication proposed for transfer and shall be based on historical uses of the permit, certified filing, or certificate of adjudication for which amendment is sought;
- f. proposed mitigation or compensation, if any, to the basin of origin by the applicant; and
- g. the continued need to use the water for the purposes authorized under the existing Permit, Certified Filing, or Certificate of Adjudication, if an amendment to an existing water right is sought.

## WORKSHEET 1.2 NOTICE. "THE MARSHALL CRITERIA"

This worksheet assists the Commission in determining notice required for certain **amendments** that do not already have a specific notice requirement in a rule for that type of amendment, and *that do not change the amount of water to be taken or the diversion rate*. The worksheet provides information that Applicant **is required** to submit for amendments such as certain amendments to special conditions or changes to off-channel storage. These criteria address whether the proposed amendment will impact other water right holders or the on- stream environment beyond and irrespective of the fact that the water right can be used to its full authorized amount.

This worksheet is **not required for Applications in the Rio Grande Basin** requesting changes in the purpose of use, rate of diversion, point of diversion, and place of use for water rights held in and transferred within and between the mainstems of the Lower Rio Grande, Middle Rio Grande, and Amistad Reservoir. See 30 TAC § 303.42.

This worksheet is **not required for amendments which are only changing or adding diversion points, or request only a bed and banks authorization or an IBT authorization**. However, Applicants may wish to submit the Marshall Criteria to ensure that the administrative record includes information supporting each of these criteria

### 1. The "Marshall Criteria" (Instructions, Page. 21)

Submit responses on a supplemental attachment titled "Marshall Criteria" in a manner that conforms to the paragraphs (a) – (g) below:

- a. <u>Administrative Requirements and Fees.</u> Confirm whether application meets the administrative requirements for an amendment to a water use permit pursuant to TWC Chapter 11 and Title 30 Texas Administrative Code (TAC) Chapters 281, 295, and 297. An amendment application should include, but is not limited to, a sworn application, maps, completed conservation plan, fees, etc.
- b. <u>Beneficial Use.</u> Discuss how proposed amendment is a beneficial use of the water as defined in TWC § 11.002 and listed in TWC § 11.023. Identify the specific proposed use of the water (e.g., road construction, hydrostatic testing, etc.) for which the amendment is requested.
- c. <u>Public Welfare</u>. Explain how proposed amendment is not detrimental to the public welfare. Consider any public welfare matters that might be relevant to a decision on the application. Examples could include concerns related to the well-being of humans and the environment.
- d. <u>Groundwater Effects.</u> Discuss effects of proposed amendment on groundwater or groundwater recharge.

- e. <u>State Water Plan.</u> Describe how proposed amendment addresses a water supply need in a manner that is consistent with the state water plan or the applicable approved regional water plan for any area in which the proposed appropriation is located or, in the alternative, describe conditions that warrant a waiver of this requirement. The state and regional water plans are available for download at:

  <a href="http://www.twdb.texas.gov/waterplanning/swp/index.asp">http://www.twdb.texas.gov/waterplanning/swp/index.asp</a>.
- f. <u>Waste Avoidance.</u> Provide evidence that reasonable diligence will be used to avoid waste and achieve water conservation as defined in TWC § 11.002. Examples of evidence could include, but are not limited to, a water conservation plan or, if required, a drought contingency plan, meeting the requirements of 30 TAC Chapter 288.
- g. <u>Impacts on Water Rights or On-stream Environment</u>. Explain how the proposed amendment will not impact other water right holders or the on-stream environment beyond and irrespective of the fact that the water right can be used to its full authorized amount.

#### **STATEMENT 4**

### SUPPLEMENTAL ATTACHMENT TO WORKSHEET 1.2

### MARSHALL CRITERIA

- a) <u>Administrative Requirements and Fees.</u> This application meets the administrative requirements for a water use permit and a bed and banks authorization. This application includes required items that are listed in the TCEQ Water Rights Permitting Application Administrative Information Checklist. Payment has been submitted with the application for all applicable fees.
- b) Beneficial Use. The proposed appropriation and proposed bed and banks authorization will be used for industrial purposes related to the production of industrial materials, and other uses authorized by the permit. The proposed uses conform to beneficial use as defined in Texas Water Code (TWC) 11.002(4) and purposes for use defined in TWC 11.023. In the future, the requested appropriation of State Water and bed and banks authorization is anticipated to be used for municipal purposes through one or more Water Supply Contracts, if applicable.
- c) <u>Public Welfare</u>. No effects of the proposed appropriation or bed and banks authorization on the public welfare are expected as this water will be put to beneficial use for industrial and municipal purposes, including no effects on the well-being of humans and the environment.
- d) <u>Groundwater Effects.</u> No effects of proposed appropriation or bed and banks authorization on groundwater or groundwater recharge are expected.
- e) State Water Plan. The proposed appropriation of State Water and proposed bed and banks authorization in accordance with the authorization under Certificate of Adjudication No. 12-4345 will address municipal and industrial needs in the proposed places of use and do not conflict with the 2021 Region G and Region H Water Plan, and do not conflict with the 2022 State Water Plan. For example, projected long term municipal needs in Region G Limestone County (Brazos Basin) exceeds 600 acrefeet per year beginning in 2020. Projected long-term municipal and manufacturing needs in Region G McLennan County (Brazos Basin) exceed 900 and 500 acre-feet per year, respectively, beginning in 2020. Projected long-term manufacturing needs in Region H Brazoria County exceed 20,000 acre feet per year beginning in 2020. This requested appropriation can reduce projected water needs by approximately 9,000 acre feet per year within McLennan County, Falls County, Limestone County, Robertson County, and Brazoria County. Exhibit 2 provides a letter from Region G Planning Group and Region H Planning Group, which state this application is not inconsistent with their respective 2021 Regional Water Plans.
- f) Waste Avoidance. A Water Conservation Plan is included describing monitoring and conservation practices that include quantified conservation goals that are applicable to beneficial uses permitted by this proposed appropriation of State Water. A drought contingency plan is also included, which described criteria for initiation and termination of drought stages and corresponding drought response stages.
- g) Impacts on Water Rights or On-stream Environment. The proposed appropriation and bed and banks authorization will ensure no impact to other water right holders through metering and accounting for losses in an accounting plan. As authorized by numerous existing state water rights permits, surface water is frequently diverted within the proposed diversion reach at existing diversion points. For over 50 prior years, that water is discharged into and transmitted along the same waterbodies as described in this application's Plan of Diversion (see Supplemental Attachment Statement 5). Special conditions expected to be included in the water use permit will limit diversions based on TCEQ adopted environmental flow standards, which are considered adequate to support a sound ecological environment and for protecting the on-stream environment. No detrimental impacts to water right holders or to the on-stream environment are expected.

# WORKSHEET 2.0 Impoundment/Dam Information

This worksheet **is required** for any impoundment, reservoir and/or dam. Submit an additional Worksheet 2.0 for each impoundment or reservoir requested in this application.

If there is more than one structure, the numbering/naming of structures should be consistent throughout the application and on any supplemental documents (e.g., maps).

1	. Storage Information (Instructions, Page. 21)
a.	Official USGS name of reservoir, if applicable:
b.	Provide amount of water (in acre-feet) impounded by structure at normal maximum operating level:
С.	The impoundment is on-channelor off-channel(mark one)
	<ul> <li>i. Applicant has verified on-channel or off-channel determination by contacting Surface Water Availability Team at (512) 239-4600? Y / N</li> <li>ii. If on-channel, will the structure have the ability to pass all State Water inflows that Applicant does not have authorization to impound? Y / N</li> </ul>
l.	Is the impoundment structure already constructed? Y/N
	i. For already constructed <b>on-channel</b> structures:
	1. Date of Construction:
	<ul> <li>2. Was it constructed to be an exempt structure under TWC § 11.142? Y / N</li> <li>a. If Yes, is Applicant requesting to proceed under TWC § 11.143? Y / N</li> <li>b. If No, has the structure been issued a notice of violation by TCEQ? Y / N</li> </ul>
	3. Is it a U.S. Natural Resources Conservation Service (NRCS) (formerly Soil Conservation Service (SCS)) floodwater-retarding structure? Y/N a. If yes, provide the Site No and watershed project name; b. Authorization to close "ports" in the service spillway requested? Y/N
	ii. For <b>any</b> proposed new structures or modifications to structures:
	<ol> <li>Applicant must contact TCEQ Dam Safety Section at (512) 239-0326, prior to submitting an Application. Applicant has contacted the TCEQ Dam Safety Section regarding the submission requirements of 30 TAC, Ch. 299? Y/NProvide the date and the name of the Staff Person</li> </ol>
	<ul> <li>2. As a result of Applicant's consultation with the TCEQ Dam Safety Section, TCEQ has confirmed that: <ul> <li>a. No additional dam safety documents required with the Application. Y / N</li> <li>b. Plans (with engineer's seal) for the structure required. Y / N</li> <li>c. Engineer's signed and sealed hazard classification required. Y / N</li> <li>d. Engineer's statement that structure complies with 30 TAC, Ch. 299 Rules required. Y / N</li> </ul> </li> </ul>

		reservoir to be constructed, will be located. (30 TAC § 295.42). Applicant must submit a copy of all the notices and certified mailing cards with this Application. Notices and cards are included? Y / N
	iii.	Additional information required for <b>on-channel</b> storage:
		1. Surface area (in acres) of on-channel reservoir at normal maximum operating level:
		2. Based on the Application information provided, Staff will calculate the drainage area above the on-channel dam or reservoir. If Applicant wishes to also calculate the drainage area they may do so at their option. Applicant has calculated the drainage area. Y/N If yes, the drainage area is sq. miles. (If assistance is needed, call the Surface Water Availability Team prior to submitting the application, (512) 239-4600).
2.	Stru	cture Location (Instructions, Page. 23)
5. Zip	* A c subn inun **If t or w docu	Original Survey No, Abstract No County, Texas.  opy of the deed(s) with the recording information from the county records must be nitted describing the tract(s) that include the structure and all lands to be dated.  the Applicant is not currently the sole owner of the land on which the structure is ill be built and sole owner of all lands to be inundated, Applicant must submit mentation evidencing consent or other documentation supporting Applicant's to use the land described.
d. A p	ooint or annel) i	n the centerline of the dam (on-channel) or anywhere within the impoundment (offs:
	Latit	ude°N, Longitude°W.
	*Pro	vide Latitude and Longitude coordinates in decimal degrees to at least six decimal
	i.	Indicate the method used to calculate the location (examples: Handheld GPS Device, GIS, Mapping Program):
	ii.	Map submitted which clearly identifies the Impoundment, dam (where applicable), and the lands to be inundated. See instructions Page. 15. Y / N

3. Applicants **shall** give notice by certified mail to each member of the governing body of each county and municipality in which the reservoir, or any part of the

This worksheet **is required** for each diversion point or diversion reach. Submit one Worksheet 3.0 for **each** diversion point and two Worksheets for **each** diversion reach (one for the upstream limit and one for the downstream limit of each diversion reach).

1.	Divers	ion Information (Instructions, Page. 24	4)
a.	This Worksh	neet is to add new (select 1 of 3 below):	
	$2. \frac{1}{1}$ Upstr	sion Point No. eam Limit of Diversion Reach No. astream Limit of Diversion Reach No.	
b.		ate of Diversion for <b>this new point</b> 630 gpm (gallons per minute)	_cfs (cubic feet per second)
c.	If yes, su	oint share a diversion rate with other points? <b>Y / I</b> bmit Maximum <b>Combined</b> Rate of Diversion for all eaches 630gpm	
d.	For amendn	nents, is Applicant seeking to increase combined o	diversion rate? <b>Y / N</b>
		rease in diversion rate is considered a new appropon of Section 1, New or Additional Appropriation o	
e. Check ( $$ ) the appropriate box to indicate diversion location and indicate whether diversion location is existing or proposed):		nd indicate whether the	
	Check one		Write: Existing or Proposed
	<b>V</b>	Directly from stream	Proposed
		From an on-channel reservoir	
		From a stream to an on-channel reservoir	
		Other method (explain fully, use additional sheets if necessary)	
f.	above the di	e Application information provided, Staff will calciversion point (or reach limit). If Applicant wishes ea, you may do so at their option.	
	Applicant h	as calculated the drainage area. $Y / N_{\underline{N}}$	
	If yes, th (If assista submittir	e drainage area issq. miles. Ince is needed, call the Surface Water Availability Ing application)	Team at (512) 239-4600, prior to

2.	Diversion Location (Instructions, Page 25)
a.	On watercourse (USGS name): Brazos River
b.	Zip Code: <u>77583</u>
c.	Location of point: In the Andrew Robinson Original Survey No, Abstract No, Erazoria County, Texas.
	A copy of the deed(s) with the recording information from the county records must be submitted describing tract(s) that include the diversion structure.
	For diversion reaches, the Commission cannot grant an Applicant access to property that the Applicant does not own or have consent or a legal right to access, the Applicant will be required to provide deeds, or consent, or other documents supporting a legal right to use the specific points when specific diversion points within the reach are utilized. Other documents may include, but are not limited to a recorded easement, a land lease, a contract, or a citation to the Applicant's right to exercise eminent domain to acquire access.
d.	Point is at:  Latitude  29.349369  N, Longitude  Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places
e.	Indicate the method used to calculate the location (examples: Handheld GPS Device, GIS, Mapping Program): GIS
f.	Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 15.
g.	If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

This worksheet **is required** for each diversion point or diversion reach. Submit one Worksheet 3.0 for **each** diversion point and two Worksheets for **each** diversion reach (one for the upstream limit and one for the downstream limit of each diversion reach).

1.	Divers	ion Information (Instructions, Page. 2	4)
a.	This Worksl	neet is to add new (select 1 of 3 below):	
	2Upstr	sion Point No. ream Limit of Diversion Reach No. astream Limit of Diversion Reach No.	
b.		ate of Diversion for <b>this new point</b> 630 gpm (gallons per minute)	_cfs (cubic feet per second)
c.	If yes, su	oint share a diversion rate with other points? <b>Y</b> / 1 bmit Maximum <b>Combined</b> Rate of Diversion for a caches 630cfs orgpm	
d.	For amendn	nents, is Applicant seeking to increase combined	diversion rate? <b>Y</b> / <b>N</b>
0	completi	crease in diversion rate is considered a new appropon of Section 1, New or Additional Appropriation of	of State Water.
e.		e appropriate box to indicate diversion location a cation is existing or proposed):	ina inaicate whether the
	Check one		Write: Existing or Proposed
	<b>✓</b>	Directly from stream	Proposed
		From an on-channel reservoir	
		From a stream to an on-channel reservoir	
		Other method (explain fully, use additional sheets if necessary)	
f.	above the d	e Application information provided, Staff will cal- iversion point (or reach limit). If Applicant wishes ea, you may do so at their option.	O O
	Applicant h	as calculated the drainage area. Y / $N_{\underline{N}}$	
	If yes, th ( <i>If assista</i> submittir	e drainage area issq. miles. ance is needed, call the Surface Water Availability ng application)	Team at (512) 239-4600, prior to

2.	Diversion Location (Instructions, Page 25)
a.	On watercourse (USGS name): Brazos River
b.	Zip Code: <u>77541</u>
c.	Location of point: In the James P. Caldwell Original Survey No, Abstract No, County, Texas.
	A copy of the deed(s) with the recording information from the county records must be submitted describing tract(s) that include the diversion structure.
	For diversion reaches, the Commission cannot grant an Applicant access to property that the Applicant does not own or have consent or a legal right to access, the Applicant will be required to provide deeds, or consent, or other documents supporting a legal right to use the specific points when specific diversion points within the reach are utilized. Other documents may include, but are not limited to a recorded easement, a land lease, a contract, or a citation to the Applicant's right to exercise eminent domain to acquire access.
d.	Point is at:  Latitude  Latitude 28.878315  Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places
e.	Indicate the method used to calculate the location (examples: Handheld GPS Device, GIS, Mapping Program): GIS
f.	Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 15.
g.	If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

This worksheet **is required** for each diversion point or diversion reach. Submit one Worksheet 3.0 for **each** diversion point and two Worksheets for **each** diversion reach (one for the upstream limit and one for the downstream limit of each diversion reach).

1.	Divers	ion Information (Instructions, Page. 24	<b>l</b> )
a.	. This Worksheet is to add new (select 1 of 3 below):		
	2Upstr	sion Point No. eam Limit of Diversion Reach No. astream Limit of Diversion Reach No.	
b.	. Maximum Rate of Diversion for <b>this new point</b> 630cfs (cubic feet per second) or gpm (gallons per minute)		
c.	In the state of Diversion for all spoints of the state of Diversion for the state of Diversion for all spoints of the state of Diversion for the State of Diver		
d.	For amendn	nents, is Applicant seeking to increase combined d	iversion rate? <b>Y / N</b> _
e.	<ul> <li>** An increase in diversion rate is considered a new appropriation and would require completion of Section 1, New or Additional Appropriation of State Water.</li> <li>c. Check (√) the appropriate box to indicate diversion location and indicate whether the diversion location is existing or proposed):</li> </ul>		
	Check one		Write: Existing or Proposed
	<b>✓</b>	Directly from stream	Existing
		From an on-channel reservoir	
		From a stream to an on-channel reservoir	
		Other method (explain fully, use additional sheets if necessary)	
f.	above the d	e Application information provided, Staff will calciversion point (or reach limit). If Applicant wishes ea, you may do so at their option.	
	Applicant h	as calculated the drainage area. Y / $N_{N}$	
	(If assista	e drainage area issq. miles. ance is needed, call the Surface Water Availability T ag application)	Feam at (512) 239-4600, prior to

2.	Diversion Location (Instructions, Page 25)
a.	On watercourse (USGS name): Brazos River
b.	Zip Code: <u>77515</u>
c.	Location of point: In the William Parker Original Survey No, Abstract No, Erazoria County, Texas.
	A copy of the deed(s) with the recording information from the county records must be submitted describing tract(s) that include the diversion structure.
	For diversion reaches, the Commission cannot grant an Applicant access to property that the Applicant does not own or have consent or a legal right to access, the Applicant will be required to provide deeds, or consent, or other documents supporting a legal right to use the specific points when specific diversion points within the reach are utilized. Other documents may include, but are not limited to a recorded easement, a land lease, a contract, or a citation to the Applicant's right to exercise eminent domain to acquire access.
d.	Point is at:  Latitude 29.243419°N, Longitude -95.561908 _°W.  Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places
e.	Indicate the method used to calculate the location (examples: Handheld GPS Device, GIS, Mapping Program): GIS
f.	Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 15.
g.	If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

This worksheet **is required** for each diversion point or diversion reach. Submit one Worksheet 3.0 for **each** diversion point and two Worksheets for **each** diversion reach (one for the upstream limit and one for the downstream limit of each diversion reach).

1.	Divers	ion Information (Instructions, Page. 24	1)
a.	This Worksh	neet is to add new (select 1 of 3 below):	
	2Upstr	sion Point No. ream Limit of Diversion Reach No. astream Limit of Diversion Reach No.	
b.	. Maximum Rate of Diversion for <b>this new point</b> 630cfs (cubic feet per second) or gpm (gallons per minute)		
c.	If yes, su	oint share a diversion rate with other points? <b>Y / N</b> bmit Maximum <b>Combined</b> Rate of Diversion for al  caches 630 cfs or gpm	
d.	** An inc	nents, is Applicant seeking to increase combined decrease in diversion rate is considered a new appropon of Section 1, New or Additional Appropriation of	riation and would require
e.		e appropriate box to indicate diversion location a cation is existing or proposed):	nd indicate whether the
	Check one		Write: Existing or Proposed
	<b>'</b>	Directly from stream	Existing
		From an on-channel reservoir	
		From a stream to an on-channel reservoir	
		Other method (explain fully, use additional sheets if necessary)	
f.	above the d	e Application information provided, Staff will calc iversion point (or reach limit). If Applicant wishes ea, you may do so at their option.	
	Applicant h	as calculated the drainage area. Y / N $^{\mathbb{N}}$	
	(If assista	e drainage area issq. miles. Ince is needed, call the Surface Water Availability ( Ing application)	Team at (512) 239-4600, prior to

2.	Diversion Location (Instructions, Page 25)
a.	On watercourse (USGS name): Brazos River
b.	Zip Code: <u>77566</u>
C.	Location of point: In the Stephen F. Austin Original Survey No, Abstract No, Erazoria County, Texas.
	A copy of the deed(s) with the recording information from the county records must be submitted describing tract(s) that include the diversion structure.
	For diversion reaches, the Commission cannot grant an Applicant access to property that the Applicant does not own or have consent or a legal right to access, the Applicant will be required to provide deeds, or consent, or other documents supporting a legal right to use the specific points when specific diversion points within the reach are utilized. Other documents may include, but are not limited to a recorded easement, a land lease, a contract, or a citation to the Applicant's right to exercise eminent domain to acquire access.
d.	Point is at:  Latitude 29.052718°N, Longitude -95.552379 _°W.  Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places
e.	Indicate the method used to calculate the location (examples: Handheld GPS Device, GIS, Mapping Program): GIS
f.	Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 15.
g.	If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

This worksheet **is required** for each diversion point or diversion reach. Submit one Worksheet 3.0 for **each** diversion point and two Worksheets for **each** diversion reach (one for the upstream limit and one for the downstream limit of each diversion reach).

1.	Divers	ion Information (Instructions, Page. 24	4)
a.	. This Worksheet is to add new (select 1 of 3 below):		
	2Upstr	sion Point No. eam Limit of Diversion Reach No. astream Limit of Diversion Reach No.	
b.	. Maximum Rate of Diversion for <b>this new point</b> 630cfs (cubic feet per second) orgpm (gallons per minute)		
c.	E. Does this point share a diversion rate with other points? Y / N Y If yes, submit Maximum Combined Rate of Diversion for all points/reaches 740 cfs or gpm		
d.	For amendn	nents, is Applicant seeking to increase combined o	liversion rate? Y / N
	** An increase in diversion rate is considered a new appropriation and would require completion of Section 1, New or Additional Appropriation of State Water.		
e. Check $()$ the appropriate box to indicate diversion location and indicate whether the diversion location is existing or proposed):			na maicate whether the
	Check one		Write: Existing or Proposed
		Directly from stream	
	<b>'</b>	From an on-channel reservoir	Existing
		From a stream to an on-channel reservoir	
		Other method (explain fully, use additional sheets if necessary)	
f.	above the d	e Application information provided, Staff will calc iversion point (or reach limit). If Applicant wishes ea, you may do so at their option.	
	Applicant h	as calculated the drainage area. Y / $N_{N}$	
	(If assista	e drainage area issq. miles. ance is needed, call the Surface Water Availability ( ag application)	Team at (512) 239-4600, prior to

2.	$\cdot$
a.	On watercourse (USGS name): Oyster Creek (Reservoir)
b.	Zip Code: <u>77566</u>
c.	Location of point: In the Jared E. Grace Original Survey No, Abstract No, County, Texas.
	A copy of the deed(s) with the recording information from the county records must be submitted describing tract(s) that include the diversion structure.
	For diversion reaches, the Commission cannot grant an Applicant access to property that the Applicant does not own or have consent or a legal right to access, the Applicant will be required to provide deeds, or consent, or other documents supporting a legal right to use the specific points when specific diversion points within the reach are utilized. Other documents may include, but are not limited to a recorded easement, a land lease, a contract, or a citation to the Applicant's right to exercise eminent domain to acquire access.
d.	Point is at:  Latitude 29.053604°N, Longitude -95.464108 _°W.  Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places
e.	Indicate the method used to calculate the location (examples: Handheld GPS Device, GIS, Mapping Program): GIS
f.	Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 15.
g.	If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

This worksheet **is required** for each diversion point or diversion reach. Submit one Worksheet 3.0 for **each** diversion point and two Worksheets for **each** diversion reach (one for the upstream limit and one for the downstream limit of each diversion reach).

1.	. Diversion Information (Instructions, Page. 24)				
a.	. This Worksheet is to add new (select 1 of 3 below):				
	<ol> <li>5 Diversion Point No.</li> <li>Upstream Limit of Diversion Reach No.</li> <li>Downstream Limit of Diversion Reach No.</li> </ol>				
b.	. Maximum Rate of Diversion for <b>this new point</b> 300cfs (cubic feet per second) orgpm (gallons per minute)				
c.	E. Does this point share a diversion rate with other points? Y / N Y If yes, submit Maximum Combined Rate of Diversion for all points/reaches on gpm				
	<ul> <li>For amendments, is Applicant seeking to increase combined diversion rate? Y / N</li></ul>				
	diversion lo	cation is existing or proposed):			
	Check one	Divactly from atream	Write: Existing or Proposed		
		Directly from stream  From an on-channel reservoir			
			Existing		
		From a stream to an on-channel reservoir			
		Other method (explain fully, use additional sheets if necessary)			
f. Based on the Application information provided, Staff will calculate the drainage a above the diversion point (or reach limit). If Applicant wishes to also calculate the drainage area, you may do so at their option.					
	Applicant h	as calculated the drainage area. Y / N $^{\mathbb{N}}$			
	(If assista	e drainage area issq. miles. ance is needed, call the Surface Water Availability I ng application)	Team at (512) 239-4600, prior to		

2.	
a.	On watercourse (USGS name): Buffalo Camp Bayou (Reservoir)
b.	Zip Code: <u>77566</u>
c.	Location of point: In the Stephen F. Austin Original Survey No, Abstract No, Erazoria County, Texas.
	A copy of the deed(s) with the recording information from the county records must be submitted describing tract(s) that include the diversion structure.
	For diversion reaches, the Commission cannot grant an Applicant access to property that the Applicant does not own or have consent or a legal right to access, the Applicant will be required to provide deeds, or consent, or other documents supporting a legal right to use the specific points when specific diversion points within the reach are utilized. Other documents may include, but are not limited to a recorded easement, a land lease, a contract, or a citation to the Applicant's right to exercise eminent domain to acquire access.
d.	Point is at: Latitude 29.043875 $_{^\circ N, \ Longitude}$ 95.473319 $_{^\circ W}$ .  Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places
e.	Indicate the method used to calculate the location (examples: Handheld GPS Device, GIS, Mapping Program): GIS
f.	Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 15.
g.	If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

This worksheet **is required** for each diversion point or diversion reach. Submit one Worksheet 3.0 for **each** diversion point and two Worksheets for **each** diversion reach (one for the upstream limit and one for the downstream limit of each diversion reach).

1.	Divers	ion Information (Instructions, Page. 2	4)
a.	This Worksl	neet is to add new (select 1 of 3 below):	
	2Upstr	sion Point No. ream Limit of Diversion Reach No. astream Limit of Diversion Reach No.	
b.		ate of Diversion for <b>this new point</b> 45 gpm (gallons per minute)	_cfs (cubic feet per second)
c.	If yes, su	oint share a diversion rate with other points? <b>Y</b> / I bmit Maximum <b>Combined</b> Rate of Diversion for a caches 45cfs orgpm	
d.	For amendn	nents, is Applicant seeking to increase combined	diversion rate? <b>Y</b> / <b>N</b>
e.	completi	crease in diversion rate is considered a new appropon of Section 1, New or Additional Appropriation of appropriate box to indicate diversion location a	of State Water.
	diversion lo	cation is existing or proposed):	
	Check one	D' d' C	Write: Existing or Proposed
		Directly from stream	Existing
		From an on-channel reservoir	
		From a stream to an on-channel reservoir	
		Other method (explain fully, use additional sheets if necessary)	
f.	above the d	e Application information provided, Staff will calciversion point (or reach limit). If Applicant wishes ea, you may do so at their option.	O O
	Applicant h	as calculated the drainage area. Y / $N_{\underline{N}}$	
	If yes, th (If assista submittii	e drainage area issq. miles. ance is needed, call the Surface Water Availability ng application)	Team at (512) 239-4600, prior to

2.	Diversion Location (Instructions, Page 25)
a.	On watercourse (USGS name): Brazos River
b.	Zip Code: <b>76682</b>
c.	Location of point: In the Jose David Sanchez Original Survey No, Abstract No, McLennan County, Texas.
	A copy of the deed(s) with the recording information from the county records must be submitted describing tract(s) that include the diversion structure.
	For diversion reaches, the Commission cannot grant an Applicant access to property that the Applicant does not own or have consent or a legal right to access, the Applicant will be required to provide deeds, or consent, or other documents supporting a legal right to use the specific points when specific diversion points within the reach are utilized. Other documents may include, but are not limited to a recorded easement, a land lease, a contract, or a citation to the Applicant's right to exercise eminent domain to acquire access.
d.	Point is at: Latitude  Latitude  Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places
e.	Indicate the method used to calculate the location (examples: Handheld GPS Device, GIS, Mapping Program): GIS
f.	Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 15.
g.	If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

#### **STATEMENT 5**

### SUPPLEMENTAL ATTACHMENT TO WORKSHEET 3.0

### PLAN OF DIVERSION

Proposed appropriated water would be diverted at existing diversion point number 8 (see Map No. 7) and within diversion reach number 1 (see Map No. 1 and 6). The maximum combined diversion amount for both diversion locations (No. 8 and No. 1) will not exceed the requested appropriation of 9,000 acre-feet per year from the Brazos River.

Proposed appropriated water diverted at existing diversion point number 8 (see Map No. 7) would be used for industrial or municipal beneficial use distributed directly to raw water customers, or be diverted into Lake Creek Reservoir for storage or lakeside diversion. Lake Creek Reservoir is owned and operated by the applicant, BASF Corporation. Impounded water under this proposed appropriation would either be diverted lakeside for industrial or municipal beneficial use, or released from Lake Creek Reservoir at existing discharge point number 9 (see Map No. 7). Released water would be transported downstream using the bed and banks of Manos Creek and the Brazos River to downstream diversion reach number 1 (see Map No. 1). Diversion reach number 1 has an upstream limit at the location of the USGS 08116650 Brazos River near Rosharon, TX streamgage (see Map No. 2) and a downstream limit at the mouth of the Brazos River at the Gulf of Mexico (See Map No. 5).

Through an existing site services agreement with Dow, BASF can divert into the Dow system<sup>1</sup> at two existing diversion points within the proposed diversion reach number 1. Appropriated water released from Lake Creek Reservoir and transported downstream, and water diverted directly from the Brazos River within diversion reach number 1, will be diverted into Harris Reservoir at diversion point number 2 (see Map No. 3) and diverted into Brazoria Reservoir at diversion point number 3 (see Map No. 4).

Proposed appropriated water will then be discharged from Harris Reservoir into Oyster Creek at discharge point number 6 (see Map No. 3), and from Brazoria Reservoir into Buffalo Camp Bayou at discharge point number 7 (see Map No. 4). Proposed appropriated water discharged into Oyster Creek from Harris Reservoir will be transported downstream using the bed and banks of Oyster Creek to the existing downstream diversion point number 4 (see Map No. 3 and 4). Proposed appropriated water discharged into Buffalo Camp Bayou from Brazoria Reservoir will be transported downstream using the bed and banks of Buffalo Camp Bayou to the existing downstream diversion point number 5 (see Map No. 4). Channel losses and travel time along Oyster Creek and Buffalo Camp Bayou are fully described and accounted for in the accounting plan (see STATEMENT 9).

Proposed appropriated water will then be diverted from Oyster Creek into a canal, located at diversion point number 4, and diverted from Buffalo Camp Bayou into the same canal, located at diversion point number 5 (see Map No. 5). Proposed appropriated water diverted into the canal will then be transported downstream for BASF Corporation's beneficial use.

Attached as Exhibit 3 is Dow Chemical Company's Letter of Consent regarding the use of the Dow system including Dow's existing and future facilities to divert, store, discharge, and deliver water under this proposed appropriation.

<sup>&</sup>lt;sup>1</sup> The Dow system is primarily authorized under Certificate of Adjudication 12-5328 with amendments.



### LETTER OF CONSENT

To the Texas Commission on Environmental Quality:

The Dow Chemical Company ("Dow") does hereby consent to BASF Corporation ("BASF") requesting and obtaining TCEQ approval for a proposed surface water right permit that envisions use of Dow's existing and future pumping facilities, as potential diversion points, to divert, store, discharge, and deliver water from the Brazos River to BASF's facilities in Clute, Texas. Dow's existing facilities in Brazoria County currently include the Harris and Brazoria reservoirs, intake facilities, and discharge facilities; facilities on Oyster Creek and Buffalo Camp Bayou; and Dow's canal system.

The proposed diversion at Dow's intake facilities would be contractually facilitated in accordance with and subject to the provisions of Dow's and BASF's Site Services Agreement, dated April 1, 2020 ("Agreement"). Subject to and in accordance with the provisions of the Agreement. Dow has agreed to deliver BASF's owned. leased, or contracted water to BASF.

Further, Dow consents to the inclusion of Dow's diversion, storage, discharge, and conveyance locations and facilities, as a potential delivery point for the proposed water right permit.

For the avoidance of doubt, Dow's consent to the conditional use of Dow's facilities as a potential diversion location for the proposed water right permit does not grant BASF any legal rights to the use of Dow's assets or water conveyance system beyond the rights expressly provided for in the Agreement or in future contractual agreements.

Fernando Signorini, Gulf Coast V.P. of Operations The Dow Chemical Company

### ACKNOWLEDGEMENT

BASF hereby acknowledges that it is only entitled to use Dow's facilities by agreement with Dow, and that the proposed surface water permit will not grant BASF an independent right to use Dow's facilities for the delivery of the water.

BASF Corporation

### WORKSHEET 4.0 DISCHARGE INFORMATION

This worksheet required for any requested authorization to discharge water into a State Watercourse for conveyance and later withdrawal or in-place use. Worksheet 4.1 is also required for each Discharge point location requested. **Instructions Page. 26.** *Applicant is responsible for obtaining any separate water quality authorizations which may be required and for insuring compliance with TWC*, *Chapter 26 or any other applicable law*.

a. The purpose of use for the water being discharged will be Industrial, municipal
b. Provide the amount of water that will be lost to transportation, evaporation, seepage, channel or other associated carriage losses 0.73 (% or amount) and explain the method of calculation: See Statement 6 in the Supplemental Attachment
c. Is the source of the discharged water return flows? Y / $N_{-}$ If yes, provide the following information:
1. The TPDES Permit Number(s)(attach a copy of the current TPDES permit(s))
2. Applicant is the owner/holder of each TPDES permit listed above? Y / N
PLEASE NOTE: If Applicant is not the discharger of the return flows, or the Applicant is not the water right owner of the underlying surface water right, or the Applicant does not have a contract with the discharger, the application should be submitted under Section 1, New or Additional Appropriation of State Water, as a request for a new appropriation of state water. If Applicant is the discharger, the surface water right holder, or the contract holder, then the application should be submitted under Section 3, Bed and Banks.
3. Monthly WWTP discharge data for the past 5 years in electronic format. (Attach and label as "Supplement to Worksheet 4.0").
4. The percentage of return flows from groundwater, surface water?
5. If any percentage is surface water, provide the base water right number(s)
d. Is the source of the water being discharged groundwater? Y / $N_{N}$ If yes, provide the following information:
1. Source aquifer(s) from which water will be pumped:
2. If the well has not been constructed, provide production information for wells in the same aquifer in the area of the application. See <a href="http://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp">http://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp</a> . Additionally, provide well numbers or identifiers
3. Indicate how the groundwater will be conveyed to the stream or reservoir.
4. A copy of the groundwater well permit if it is located in a Groundwater Conservation District (GCD) or evidence that a groundwater well permit is not required.
di. Is the source of the water being discharged a surface water supply contract? Y / $N_{N}$ If yes, provide the signed contract(s).
dii. Identify any other source of the water Surface water discharged from Brazos River diversions

## WORKSHEET 4.1 DISCHARGE POINT INFORMATION

This worksheet is required for **each** discharge point. Submit one Worksheet 4.1 for each discharge point. If there is more than one discharge point, the numbering of the points should be consistent throughout the application and on any supplemental documents (e.g., maps). **Instructions, Page 27.** 

For	water	discharged	at this	location	provide:
IUI	water	discharge a	at ans	locution	provide.

a.	The amount of water that will be discharged at this point is 9,000 acre-feet per year. The discharged amount should include the amount needed for use and to compensate for any losses.
b.	Water will be discharged at this point at a maximum rate of 630 cfs or gpm
c.	Name of Watercourse as shown on Official USGS maps: Oyster Creek
e.	Zip Code 77515  Location of point: In the William Parker Original Survey No, Abstract No. 104, Brazoria County, Texas.
f.	Point is at:  Latitude 29.246483 °N, Longitude -95.529982 °W.  *Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places
g.	Indicate the method used to calculate the discharge point location (examples: Handheld GPS Device, GIS, Mapping Program): GIS

Map submitted must clearly identify each discharge point. See instructions Page. 15.

### WORKSHEET 4.0 DISCHARGE INFORMATION

This worksheet required for any requested authorization to discharge water into a State Watercourse for conveyance and later withdrawal or in-place use. Worksheet 4.1 is also required for each Discharge point location requested. **Instructions Page. 26.** *Applicant is responsible for obtaining any separate water quality authorizations which may be required and for insuring compliance with TWC*, *Chapter 26 or any other applicable law*.

a. The purpose of use for the water being discharged will be Industrial, municipal
b. Provide the amount of water that will be lost to transportation, evaporation, seepage, channel or other associated carriage losses 0.10 (% or amount) and explain the method of calculation: See Statement 6 in the Supplemental Attachment
c. Is the source of the discharged water return flows? Y / $N_{-}$ If yes, provide the following information:
1. The TPDES Permit Number(s)(attach a copy of the current TPDES permit(s))
2. Applicant is the owner/holder of each TPDES permit listed above? Y / N
PLEASE NOTE: If Applicant is not the discharger of the return flows, or the Applicant is not the water right owner of the underlying surface water right, or the Applicant does not have a contract with the discharger, the application should be submitted under Section 1, New or Additional Appropriation of State Water, as a request for a new appropriation of state water. If Applicant is the discharger, the surface water right holder, or the contract holder, then the application should be submitted under Section 3, Bed and Banks.
3. Monthly WWTP discharge data for the past 5 years in electronic format. (Attach and label as "Supplement to Worksheet 4.0").
4. The percentage of return flows from groundwater, surface water?
5. If any percentage is surface water, provide the base water right number(s)
d. Is the source of the water being discharged groundwater? Y / N $_{\!$
1. Source aquifer(s) from which water will be pumped:
2. If the well has not been constructed, provide production information for wells in the same aquifer in the area of the application. See <a href="http://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp">http://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp</a> . Additionally, provide well numbers or identifiers
3. Indicate how the groundwater will be conveyed to the stream or reservoir.
4. A copy of the groundwater well permit if it is located in a Groundwater Conservation District (GCD) or evidence that a groundwater well permit is not required.
di. Is the source of the water being discharged a surface water supply contract? Y / $N_{-}$ If yes, provide the signed contract(s).
dii. Identify any other source of the water Surface water discharged from Brazos River diversions

## WORKSHEET 4.1 DISCHARGE POINT INFORMATION

This worksheet is required for **each** discharge point. Submit one Worksheet 4.1 for each discharge point. If there is more than one discharge point, the numbering of the points should be consistent throughout the application and on any supplemental documents (e.g., maps). **Instructions, Page 27.** 

For water discharged at this location provide	For water	discharged	at this	location	provide
---	-----------	------------	---------	----------	---------

·	witer discharged at this location provide.
a.	The amount of water that will be discharged at this point is 9,000 acre-feet per year. The discharged amount should include the amount needed for use and to compensate for any losses.
b.	Water will be discharged at this point at a maximum rate of 300 cfs or gpm
c.	Name of Watercourse as shown on Official USGS maps: Buffalo Camp Bayou
	Zip Code 77566  Location of point: In the Stephen F. Austin Original Survey No, Abstract No. 19 , Brazoria County, Texas.
f.	Point is at: Latitude 29.071123
	*Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places
g.	Indicate the method used to calculate the discharge point location (examples: Handheld GPS Device, GIS, Mapping Program): GIS
	Map submitted must clearly identify each discharge point. See instructions Page. 15.

### WORKSHEET 4.0 DISCHARGE INFORMATION

This worksheet required for any requested authorization to discharge water into a State Watercourse for conveyance and later withdrawal or in-place use. Worksheet 4.1 is also required for each Discharge point location requested. **Instructions Page. 26.** *Applicant is responsible for obtaining any separate water quality authorizations which may be required and for insuring compliance with TWC*, *Chapter 26 or any other applicable law*.

a. The purpose of use for the water being discharged will be Industrial, municipal .
b. Provide the amount of water that will be lost to transportation, evaporation, seepage, channel or other associated carriage losses <a 4.0").<="" href="mailto:claim of bloom of bloom&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;c. Is the source of the discharged water return flows? Y / &lt;math&gt;N_{-}&lt;/math&gt; If yes, provide the following information:&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;1. The TPDES Permit Number(s)(attach a copy of the current TPDES permit(s))&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;2. Applicant is the owner/holder of each TPDES permit listed above? Y / N&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;PLEASE NOTE: If Applicant is not the discharger of the return flows, or the Applicant is not the water right owner of the underlying surface water right, or the Applicant does not have a contract with the discharger, the application should be submitted under Section 1, New or Additional Appropriation of State Water, as a request for a new appropriation of state water. If Applicant is the discharger, the surface water right holder, or the contract holder, then the application should be submitted under Section 3, Bed and Banks.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;3. Monthly WWTP discharge data for the past 5 years in electronic format. (Attach and label as " supplement="" td="" to="" worksheet=""></a>
4. The percentage of return flows from groundwater, surface water?
5. If any percentage is surface water, provide the base water right number(s)
d. Is the source of the water being discharged groundwater? Y / $N_{-}$ If yes, provide the following information:
1. Source aquifer(s) from which water will be pumped:
2. If the well has not been constructed, provide production information for wells in the same aquifer in the area of the application. See <a href="http://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp">http://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp</a> . Additionally, provide well numbers or identifiers
3. Indicate how the groundwater will be conveyed to the stream or reservoir.
4. A copy of the groundwater well permit if it is located in a Groundwater Conservation District (GCD) or evidence that a groundwater well permit is not required.
di. Is the source of the water being discharged a surface water supply contract? Y / N $_{\underline{\mbox{N}}}$ If yes, provide the signed contract(s).
dii. Identify any other source of the water Surface water discharged from Lake Creek Reservoir

## WORKSHEET 4.1 DISCHARGE POINT INFORMATION

This worksheet is required for **each** discharge point. Submit one Worksheet 4.1 for each discharge point. If there is more than one discharge point, the numbering of the points should be consistent throughout the application and on any supplemental documents (e.g., maps). **Instructions, Page 27.** 

For water discharged at this location provide	For	water	discharged	at this	location	provide
---	-----	-------	------------	---------	----------	---------

. •	water anseminged at time rotation province
a.	The amount of water that will be discharged at this point is 9,000 acre-feet per year. The discharged amount should include the amount needed for use and to compensate for any losses.
b.	Water will be discharged at this point at a maximum rate of 455 cfs or gpm
c.	Name of Watercourse as shown on Official USGS maps: Manos Creek
	Zip Code 76682  Location of point: In the Jose David Sanchez Original Survey No, Abstract No. 36 , McLennan County, Texas.
f.	Point is at: Latitude 31.454651 °N, Longitude -96.984967 °W.
	*Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places
g.	Indicate the method used to calculate the discharge point location (examples: Handheld GPS Device, GIS, Mapping Program): GIS
	Map submitted must clearly identify each discharge point. See instructions Page. 15.

#### STATEMENT 6

### SUPPLEMENTAL ATTACHMENT TO WORKSHEET 4.0

### b. Provide the amount of water that will be lost (...) and explain the method of calculation

Calculated channel loss in Oyster Creek, from discharge point number 6 to diversion point number 4, a National Hydrography Dataset (NHD) flowline river mile length of 26.4 miles, is 0.73%.

Calculated channel losses in Buffalo Camp Bayou, from discharge point number 7 to diversion point number 5, a NHD flowline river mile length of 3.6 miles, is 0.10%.

Fifty percent of proposed appropriated water is expected to be transported through Oyster Creek and fifty percent through Buffalo Camp Bayou.

Channel loss values were calculated from NHD river mile lengths and a channel loss rate of 0.0278% per mile. The channel loss rate of 0.0278% per mile was calculated from the incremental loss value of 1.58% for the adjacent Brazos River for the "Rosharon gage to Gulf of Mexico" reach listed in the Brazos River Authority Water Management Plan (Section 4, Table 4.7, <a href="https://brazos.org/About\_Us/Water-Supply/SysOps">https://brazos.org/About\_Us/Water-Supply/SysOps</a>). NHD river mile length from the "Rosharon gage to Gulf of Mexico" reach was altered to remove a closed Oxbow Lake currently included in the NHD flowline length.

USDA SSURGO data near the Brazos River indicates the Unified Soil Classification System and AASHTO soil classifications are predominantly clay and silty soils (CL and CH, and A-4) with 0 to 1 percent slopes; these local soil and topography characteristics are comparable to adjacent Oyster Creek and Buffalo Camp Bayou. Because local topography and soil characteristics are similar, the channel loss rate expected in the Brazos River reach is used for the expected channel loss rate in Oyster Creek and Buffalo Camp Bayou.

## WORKSHEET 5.0 ENVIRONMENTAL INFORMATION

## 1. Impingement and Entrainment

This section is required for any new diversion point that is not already authorized. Indicate the measures the applicant will take to avoid impingement and entrainment of aquatic organisms (ex. Screens on any new diversion structure that is not already authorized in a water right). **Instructions, Page 28.** 

In order to minimize entrainment and impingement of aquatic organisms, all diversion structures that are not already authorized shall include a screen with a mesh size of 0.25 inches or smaller and shall implement a maximum flow velocity of 0.5 feet per second through the screen.

## 2. New Appropriations of Water (Canadian, Red, Sulphur, and Cypress Creek Basins only) and Changes in Diversion Point(s)

This section is required for new appropriations of water in the Canadian, Red, Sulphur, and Cypress Creek Basins and in all basins for requests to change a diversion point. **Instructions, Page 30.** 

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location),

a. Idei	ntify the appropriate description of the water body.
	■ Stream
	□ Reservoir
	Average depth of the entire water body, in feet:
	□ Other, specify:
b. Flo	w characteristics
	If a stream, was checked above, provide the following. For new diversion locations, check one of the following that best characterize the area downstream of the diversion (check one).
	☐ Intermittent – dry for at least one week during most years
	☐ Intermittent with Perennial Pools – enduring pools
	■ Perennial - normally flowing
	Check the method used to characterize the area downstream of the new diversion location.
	■ USGS flow records
TCEO 1	☐ Historical observation by adjacent landowners

☐ Personal observation
□ Other, specify:
c. Waterbody aesthetics
Check one of the following that best describes the aesthetics of the stream segments affected by the application and the area surrounding those stream segments.
<ul> <li>Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional</li> </ul>
■ Natural Area: trees and/or native vegetation common; some development evident (from fields, pastures, dwellings); water clarity discolored
Common Setting: not offensive; developed but uncluttered; water may be colored or turbid
<ul> <li>Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored</li> </ul>
d. Waterbody Recreational Uses
Are there any known recreational uses of the stream segments affected by the application?
■ Primary contact recreation (swimming or direct contact with water)
$\square$ Secondary contact recreation (fishing, canoeing, or limited contact with water)
□ Non-contact recreation
e. Submit the following information in a Supplemental Attachment, labeled Addendum to

- Worksheet 5.0:
  - 1. Photographs of the stream at the diversion point or dam location. Photographs should be in color and show the proposed point or reservoir and upstream and downstream views of the stream, including riparian vegetation along the banks. Include a description of each photograph and reference the photograph to the mapsubmitted with the application indicating the location of the photograph and the direction of the shot.
  - 2. If the application includes a proposed reservoir, also include:
    - i. A brief description of the area that will be inundated by the reservoir.
    - If a United States Army Corps of Engineers (USACE) 404 permit is ii. required, provide the project number and USACE project manager.
    - iii. A description of how any impacts to wetland habitat, if any, will be mitigated if the reservoir is greater than 5,000 acre-feet.

### 3. Alternate Sources of Water and/or Bed and Banks Applications

This section is required for applications using an alternate source of water and bed and banks applications in any basins. **Instructions**, page 31.

- a. For all bed and banks applications:
  - i. Submit an assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
- b. For all alternate source applications:
  - i. If the alternate source is treated return flows, provide the TPDES permit number N/A
  - ii. If groundwater is the alternate source, or groundwater or other surface water will be discharged into a watercourse provide: Reasonably current water chemistry information including but not limited to the following parameters in the table below. Additional parameters may be requested if there is a specific water quality concern associated with the aquifer from which water is withdrawn. If data for onsite wells are unavailable; historical data collected from similar sized wells drawing water from the same aquifer may be provided. However, onsite data may still be required when it becomes available. Provide the well number or well identifier. Complete the information below for each well and provide the Well Number or identifier.

Parameter	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Sulfate, mg/L			<u>.</u>		,
Chloride,					
mg/L					
Total					
Dissolved					
Solids, mg/L					
pH, standard					
units					
Temperature*,					
degrees					
Celsius					

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

iii.	If groundwater will be used, provide the depth of the well $\frac{NA}{N}$	$\underline{}$ and the name
	of the aquifer from which water is withdrawn	

### **STATEMENT 7**

### SUPPLEMENTAL ATTACHMENT TO WORKSHEET 5.0

## 2. NEW APPROPRIATIONS OF WATER (...) AND CHANGES IN DIVERSION POINT(S) D. WATERBODY RECREATIONAL USES

### **ADDENDUM TO WORKSHEET 5.0**

- 1. Photographs of the stream near the Upstream Limit of Diversion Reach No. 1 (see Supplemental Map 2) are included below. No new diversion point is proposed at this time. Additional information will be submitted at such time an additional diversion point within this diversion reach becomes associated with this permit.
- 2. No new reservoirs are proposed at this time.



Photo 1 – Brazos River near Rosharon, downstream of FM 1462, looking downstream.



Photo 2 – Brazos River near Rosharon, downstream of FM 1462, looking upstream.

### 3. ALTERNATIVE SOURCES OF WATER AND/OR BED AND BANKS APPLICATIONS

# a. ASSESSMENT OF THE ADEQUACY OF THE QUANTITY AND QUALITY OF FLOWS REMAINING AFTER THE PROPOSED DIVERSION TO MEET INSTREAM USES AND BAY AND ESTUARY FRESHWATER INFLOW REQUIREMENTS

The proposed water use permit is expected to include special conditions limiting Brazos River diversions based on TCEQ adopted environmental flow standards. The environmental flow standards are considered by state rule to be adequate to support a sound ecological environment. Diversions made in compliance with environmental flow standards will maintain flows in the Brazos River to meet instream uses and freshwater inflow requirements.

The proposed appropriation of State Water is not expected to affect the flows remaining in Oyster Creek, or Buffalo Camp Bayou to meet instream uses and freshwater inflow requirements. The amount of water transported using the proposed bed and banks authorization, and subsequently diverted at any of the existing diversion points, will not exceed the amount of water diverted, less losses, from Manos Creek, Brazos River, Oyster Creek or Buffalo Camp Bayou. Therefore, there should be no changes to downstream instream flows or freshwater inflows in Manos Creek, Brazos River, Oyster Creek or Buffalo Camp Bayou.

More information on the calculation of the channel loss factor and travel time can be viewed in the STATEMENT 6: SUPPLEMENTAL ATTACHEMENT TO WORKSHEET 4.0 and STATEMENT 9: SUPPLEMENTAL ATTACHMENT TO WORKSHEET 7.0 - ACCOUNTING PLAN.

## WORKSHEET 6.0 Water Conservation/Drought Contingency Plans

This form is intended to assist applicants in determining whether a Water Conservation Plan and/or Drought Contingency Plans is required and to specify the requirements for plans. **Instructions, Page 31.** 

The TCEQ has developed guidance and model plans to help applicants prepare plans. Applicants may use the model plan with pertinent information filled in. For assistance submitting a plan call the Resource Protection Team (Water Conservation staff) at 512-239-4600, or e-mail wras@tceq.texas.gov. The model plans can also be downloaded from the TCEQ webpage. Please use the most up-to-date plan documents available on the webpage.

### 1. Water Conservation Plans

- a. The following applications must include a completed Water Conservation Plan (30 TAC § 295.9) for each use specified in 30 TAC, Chapter 288 (municipal, industrial or mining, agriculture including irrigation, wholesale):
  - 1. Request for a new appropriation or use of State Water.
  - 2. Request to amend water right to increase appropriation of State Water.
  - 3. Request to amend water right to extend a term.
  - 4. Request to amend water right to change a place of use. \*does not apply to a request to expand irrigation acreage to adjacent tracts.
  - 5. Request to amend water right to change the purpose of use. \*applicant need only address new uses.
  - 6. Request for bed and banks under TWC § 11.042(c), when the source water is State Water.

\*including return flows, contract water, or other State Water.

b.		licant is requesting any authorization in section (1)(a) above, indicate each use for Applicant is submitting a Water Conservation Plan as an attachment:			
	1.		_Municipal Use. See 30 TAC § 288.2. **		
	2.	Y	_Industrial or Mining Use. See 30 TAC § 288.3.		
	3.		_Agricultural Use, including irrigation. See 30 TAC § 288.4.		
	4.	Y	_Wholesale Water Suppliers. See 30 TAC § 288.5. **		

\*\*If Applicant is a water supplier, Applicant must also submit documentation of adoption of the plan. Documentation may include an ordinance, resolution, or tariff, etc. See 30 TAC §§ 288.2(a)(1)(J)(i) and 288.5(1)(H). Applicant has submitted such documentation with each water conservation plan? Y /  $N_{-}$ 

c. Water conservation plans submitted with an application must also include data and information which: supports applicant's proposed use with consideration of the plan's water conservation goals; evaluates conservation as an alternative to the proposed

appropriation; and evaluates any other feasible alternative to new water development. See 30 TAC § 288.7. Applicant has included this information in each applicable plan? Y / N  $\underline{\hspace{-0.5cm}Y}$ 

### 2. Drought Contingency Plans

- a. A drought contingency plan is also required for the following entities if Applicant is requesting any of the authorizations in section (1) (a) above indicate each that applies:
  1. \_\_\_\_Municipal Uses by public water suppliers. See 30 TAC § 288.20.
  2. \_\_\_\_Irrigation Use/ Irrigation water suppliers. See 30 TAC § 288.21.
  3. \_\_\_\_Wholesale Water Suppliers. See 30 TAC § 288.22.
- b. If Applicant must submit a plan under section 2(a) above, Applicant has also submitted documentation of adoption of drought contingency plan (*ordinance*, *resolution*, *or tariff*, etc. See 30 TAC § 288.30)  $\mathbf{Y}$  /  $\mathbf{N}$  $\mathbf{Y}$

### **STATEMENT 8**

# SUPPLEMENTAL ATTACHMENT TO WORKSHEET 6.0 WATER CONSERVATION/DROUGHT CONTINGENCY PLAN

BASF Corporation at Freeport has no current wholesale customer. The Wholesale Water Conservation Plan and Drought Contingency Plan will be amended once customer data is available.

Exhibit 4 – Wholesale Water Conservation Plan & Industrial Water Conservation Plan

# Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers

#### **Contact Information**

Name:	Bradley Morrison, Senior Vice President - General Manager Freeport Site			
Address:	602 Cooper Road; Freeport, T	X 77541		
Telephone Number:	(979) 415-6111	Fax: ( )		
Water Right No.(s):	New surface water appropria	tion request		
Regional Water Planning Group:	G and H			
Person responsible for implementing conservation program:	Bradley Morrison	Phone: (979) 415-6111		
Form Completed By:	Brian Meagher			
Title:	Lake Creek Facility Manager			

Bradley Morrison, Senior Vice President with BASF Corporation, with signature authorization as shown in Exhibit 1, implements this Water Conservation Plan for wholesale public water supplier for BASF Corporation at Freeport.

Date:06/12/2023

Signature:

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## **Utility Profile**

#### I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A. Population and Service Area Data:

Authorized water use from the requested appropriation has not yet occurred and BASF Corporation at Freeport has no current wholesale customers for this requested appropriation.

- 1. Service area size (in square miles): Not applicable (N/A)
- 2. Current population of service area: N/A
- 3. Current population served for:

a. Water: N/A

b. Wastewater: N/A

4. Population served for previous five years:

5.	Projected population for service area
	in the following decades:

Year	Population
2018	N/A
2019	N/A
2020	N/A
2021	N/A
2022	N/A

Year	Population	
2020	N/A	
2030	N/A	
2040	N/A	
2050	N/A	
2060	N/A	

- 6. List source or method for the calculation of current and projected population size. N/A
- B. Customer Data

BASF Corporation at Freeport has no current wholesale customers for this requested appropriation.

Wholesale Customer	Contracted Amount (Acre–feet)	Previous Year Amount of Water Delivered (acre– feet)
N/A	N/A	N/A

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#### II. WATER USE DATA FOR SERVICE AREA

Authorized water use from the requested appropriation has not yet occurred. BASF Corporation at Freeport has no current wholesale customers and has not made any water deliveries from this requested appropriation.

#### A. Water Delivery

Indicate if the water provided under wholesale contracts is treated or raw water and the annual amounts for the previous five years (in acre feet):

Year	Treated Water	Raw Water
2018	0	0
2019	0	0
2020	0	0
2021	0	0
2022	0	0
Totals	0	0

#### **B.** Water Accounting Data

1. Total amount of water diverted at the point of diversion(s) for the previous five years (in acre-feet) for all water uses:

Year	2018	2019	2020	2021	2022
Month					
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0

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Totals	0	0	0	0	0

2. Wholesale population served and total amount of water diverted for **municipal use** for the previous five years (in acre-feet):

<u>Year</u>	Total Population Served	Total Annual Water Diverted for Municipal Use
2018	N/A	0
2019	N/A	0
2020	N/A	0
2021	N/A	0
2022	N/A	0

#### C. Projected Water Demands

Projected water demands are not applicable because BASF Freeport Site has no current wholesale customers for this requested appropriation.

#### III. WATER SUPPLY SYSTEM DATA

A. Projected Water Demands

List all current water supply sources and the amounts authorized (in acre feet) with each.

Authorized water use for wholesale customers from the requested appropriation has not yet occurred.

<u> Water Type</u>	Source	Amount Authorized
Surface Water	N/A	0
Groundwater	N/A	0
Other	N/A	0

B. Treatment and Distribution System (if providing treated water)

BASF Lake Creek and BASF Freeport Site have no current treatment or distribution systems for the requested appropriation.

1. Design daily capacity of system (MGD): N/A

2. Storage capacity (MGD): N/A

a. Elevated: N/A

b. Ground: N/A

3. Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks. N/A

#### IV. WASTEWATER SYSTEM DATA

BASF Freeport Site has no current wholesale customer wastewater system for the requested appropriation.

- A. Wastewater System Data (if applicable)
  - 1. Design capacity of wastewater treatment plant(s) (MGD): N/A
  - 2. Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged. N/A
- B. Wastewater Data for Service Area (if applicable)
  - 1. Percent of water service area served by wastewater system: N/A
  - 2. Monthly volume treated for previous five years (in 1,000 gallons):

<u>Year</u>	2018	2019	2020	2021	2022
Month					
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
Totals	0	0	0	0	0

### **Water Conservation Plan**

*C. Specific, Quantified 5 & 10–Year Targets* 

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BASF Corporation at Freeport adopts the following wholesale water conservation goals:

- 5-year goal: 147 gallons per capita per day of wholesale water use
- 10-year goal: 140 gallons per capita per day of wholesale water use
- Encourage wholesale water customers to set specific 5-year and 10-year conservation goals such as gallons per capita per day targets for municipal use, or maximum acceptable water loss rates.
- For wholesale water customers a maximum acceptable water loss goal in distribution systems of 12 percent within five years.
- Encourage wholesale water customers to establish and maintain a leak detection and repair program for identification of distribution system portions with excessive water losses.

#### D. Measuring and Accounting for Diversions

BASF Corporation is required to use meters verified by the Brazos Watermaster Program (Watermaster) prior to diversion of water. Further, all diversions of water by BASF Corporation must be metered or otherwise measured within an accuracy of plus or minus five percent and reported to the Watermaster in a timely manner. Metering devices must be tested and calibrated each year with reports of such testing and calibration results.

#### E. Record Management Program

The requested appropriation's permit language will require BASF Corporation to maintain an accounting and delivery plan that estimates daily water diversions and deliveries by location and use type, while accounting for any applicable conveyance losses and applicable travel times.

#### F. Metering/Leak-Detection and Repair Program

BASF Corporation produces a Responsible Care Report that documents water use, water use categories, and final disposition of water. BASF Corporation will also maintain a program for inspections, maintenance, and repair of existing wholesale customer's water storage, delivery and distribution systems owned by BASF Corporation. This program will support the goal to reduce water loss and to improve the detection and repair of leaks in a timely manner.

#### G. Contract Requirements for Successive Customer Conservation

Any BASF Corporation wholesale customer will be required to either comply with this water conservation plan or develop and implement a water conservation plan that is consistent with the required elements of Title 30 TAC Chapter 288. This requirement will be included in any new, renewed, or amended wholesale contract. Any resale of this water to another customer will also require successive customers to implement similar water conservation measures.

#### H. Reservoir Systems Operations Plan

Since the requested appropriation is only associated with Lake Creek Reservoir, which is the only reservoir owned and operated by BASF Corporation at Freeport, a reservoir systems operations plan is not required.

#### I. Enforcement Procedure and Official Adoption

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This Water Conservation Plan and any future Plan will be required to be followed by wholesale customers in all BASF Corporation at Freeport Site wholesale water agreements. A violation of this Plan will be a violation of the wholesale water agreement between BASF and the customer.

Documentation of adoption of the Plan by BASF Corporation is included in the application package.

#### *J.* Coordination with the Regional Water Planning Group(s)

BASF Corporation has received letters from Region H Water Planning Group and Brazos G Regional Water Planning group indicating this requested appropriation is not inconsistent with the regional water plans. A copy of the Water Conservation Plan is available for review. These planning groups overlap the requested appropriation's places of use.

#### K. Plan Review and Update

BASF Corporation will review and update the Water Conservation Plan, as appropriate, every five years to coincide with the region water planning groups. The revised Plan will include an assessment of the water conservation goals, any new or updated information, and include an implementation report.

#### V. ADDITIONAL CONSERVATION STRATEGIES

BASF Corporation will adopt any other water conservation practice, method, or technique which is shown to be appropriate for achieving the stated goal or goals of the water conservation plan.

# V. WATER CONSERVATION PLANS SUBMITTED WITH A WATER RIGHT APPLICATION FOR NEW OR ADDITIONAL STATE WATER

BASF Corporation has evaluated other feasible alternatives to new state water development, including: desalination, wastewater effluent reuse, aquifer storage and recovery, and brackish groundwater development. These evaluated alternatives are either not currently economically viable, not viable long-term, or do not provide sufficient water quantity to meet BASF Corporation water needs.

BASF Corporation has evaluated and implemented conservation strategies, including: new updates capable of recycling more wastewater, cooling towers, condensate reuse, multiple recovery and reuse production processes, industrial water conservation goals, and optimizing Lake Creek Reservoir operations for evaporation reduction. These conservation strategies reduce water demands but are not a sufficient alternative to the requested appropriation.

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#### **Industrial Water Conservation Plan**

#### **Contact Information**

Name:

Bradley Morrison, Senior Vice President - General Manager Freeport Site

Address:

602 Cooper Road; Freeport, TX 77541

Telephone Number: (979) 415-6111

Fax: ( )

Form Completed By: Brian Meagher

Title:

Lake Creek Facility Manager

Signature:

Date: 06 / 12 /2023

#### BACKGROUND DATA

#### A. Water Use

1. Annual diversion appropriated or requested (in acre-feet):

9,000 acre-feet

2. Maximum diversion rate (cfs):

630 cfs

#### Water Sources

1. Please indicate the maximum or average annual amounts of water currently used and anticipated to be used (in acre-feet) for industrial purposes:

The BASF Freeport Site currently uses multiple existing water sources and source types, and anticipates replacing some future water use with the requested appropriation. Only the requested appropriation's anticipated water use is included in this Water Conservation Plan.

Source	Water Right No.(s)	Current Use	Anticipated Use
Surface Water	Pending	0	9,000
Groundwater	N/A	0	0
Purchased	N/A	0	0
Total		0	9,000

2. How was the surface water data and/or groundwater data provided in B(1) obtained?

Master meter; Customer meter; Estimated X; Other

3. Was purchased water raw or treated?

N/A

#### C. Industrial Information

1. Major product(s) or service(s) produced by applicant:

A variety of organic chemicals, including basic chemicals, raw materials and intermediates used in the manufacturing of Nylon 6, acrylic monomers, alcohols and other specialty chemicals.

2. North American Industry Classification System (NAICS):

325 - Chemical Manufacturing

#### II. WATER USE AND CONSERVATION PRACTICES

#### A. Water Use in Industrial Processes

Authorized water use from the requested appropriation has not yet occurred at the BASF Corporation Freeport Site. Water use amount by production use type and facility use type is estimated based on an anticipated use amount of 9,000 acre-feet.

Production Use	% Groundwater	% Surface Water	% Saline Water	% Treated Water	Water Use (in acre-ft)
Cooling, condensing, & refrigeration	0	100	0	0	1,130
Processing, washing, transport	0	100	0	0	2,404
Boiler feed	0	100	0	0	850
Incorporated into product	0	100	0	0	719
Other	0	0	0	0	0
Facility Use	% Groundwater	% Surface Water	% Saline Water	% Treated Water	Water Use (in acre–ft)
Cooling tower(s)	0	100	0	0	3,897
Pond(s)	0	0	0	0	0

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Once through	0	0	0	0	0
Sanitary & drinking water	0	0	0	0	0
<u> </u>					
Irrigation & dust control	0	0	0	0	0
dust control					
1. Was fresh w	ater recirculated	at this facility?		⊠ Yes	□No

2. Provide a detailed description of how the water will be utilized in the industrial process.

At the BASF Corporation Freeport Site, water undergoes various water treatment steps to gain a higher water quality: clarified surface water and DI water. This water is then used in cooling towers for process cooling, steam generation for process heating, process water incorporated into final products, and cleaning/clearing production units.

3. Estimate the quantity of water consumed in production processes and is therefore unavailable for reuse, discharge, or other means of disposal.

Authorized water use from the requested appropriation has not yet occurred at the BASF Corporation Freeport Site. Using existing water consumption amounts from existing water sources, approximately 4,110 acre-feet per year would be consumed in production processes from 9,000 acre-feet of anticipated future water use from the requested appropriation.

4. Monthly water consumption for previous year (in acre-feet).

Authorized water use from the requested appropriation has not yet occurred at the BASF Corporation Freeport Site. This table does not represent other existing sources currently being used. Existing water sources are anticipated to be replaced in the future with water use from the requested appropriation.

Month	Diversion Amount	% of Water Returned (If Any)	Monthly Consumption
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0

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October	0	0	0
November	0	0	0
December	0	0	0
Totals	0	0	0

5. Projected monthly water consumption for next year (in acre-feet).

Projected monthly water consumption for the next year is based on 9,000 acre-feet of anticipated future water use; actual use and consumption will vary year to year.

Month	Diversion Amount	% of Water Returned (If Any)	Monthly Consumption
January	750	54.33%	342.5
February	750	54.33%	342.5
March	750	54.33%	342.5
April	750	54.33%	342.5
May	750	54.33%	342.5
June	750	54.33%	342.5
July	750	54.33%	342.5
August	750	54.33%	342.5
September	750	54.33%	342.5
October	750	54.33%	342.5
November	750	54.33%	342.5
December	750	54.33%	342.5
Totals	9,000	54.33%	4,110

#### B. Specific and Quantified Conservation Goal

Water conservation goals for the industrial sector are generally established either for (1) the amount of water recycled, (2) the amount of water reused, or (3) the amount of water not lost or consumed, and therefore is available for return flow.

1. Water conservation goal (water use efficiency measure)

Type of goal(s): Reducing gallons of water consumed per pound of product shipped 0.5% per year.

2. Provide specific, quantified 5-year and 10-year targets for water savings and the basis for development of such goals for this water use/facility.

Based on 25 years of available historical data, using a percent reduction of water consumed per product weight (gallon of water consumed per pound of product shipped) is a reasonable measure for water conservation goal.

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Quantified 5-year and 10-year targets for water savings:

- a. 5-year goal: To reduce gallons of water consumed per pound of product shipped by 2.5%
- b. 10-year goal: To reduce gallons of water consumed per pound of product shipped by 4.9%.
- 3. Describe the device(s) and/or method(s) used to measure and account for the amount of water diverted from the supply source, and verify the accuracy is within plus or minus 5%.

BASF Corporation is required to use meters verified by the Brazos Watermaster Program (Watermaster) prior to diversion of water. Further, all diversions of water by BASF Corporation must be metered or otherwise measured within an accuracy of plus or minus five percent and reported to the Watermaster in a timely manner. Metering devices must be tested and calibrated each year with reports of such testing and calibration results.

At this time meters used to measure diversions and discharges from public watercourses are owned and operated by a private entity through an existing water supply contract.

4. Provide a description of the leak-detection and repair, and water-loss accounting measures used.

BASF Corporation produces a Responsible Care Report that documents water use, water use categories, final disposition of water, and evaporative loss of cooling water. Additionally, pressure, water consumption, and storage of water are constantly monitored and inspected.

5. Describe the application of state-of-the-art equipment and/or process modifications used to improve water use efficiency.

Multiple cooling towers are operated for cooling processes to reduce water needs. Condensate is collected and re-used up to 70%. Production waste water is reused as water supply/feed stock in another business unit. The reverse osmosis reject recovery system has an online flow meter for volume monitoring.

6. Describe any other water conservation practice, method, or technique which the user shows to be appropriate for achieving the stated goal or goals of the water conservation plan:

The ISO 50001 and 9001 certifications are established at the BASF Corporation Freeport Site. The Freeport Site participates in the BASF Corporation internal wastewater treatment plant benchmark. Local Wastewater Risk Assessments are available for each production unit. Regular internal Responsible Care audits are conducted and regular internal and external ISO audits are conducted.

# III. Water Conservation Plans submitted with a Water Right Application for New or Additional State Water

BASF Corporation has evaluated other feasible alternatives to new state water development, including: desalination, wastewater effluent reuse, aquifer storage and recovery, and brackish groundwater development. These evaluated alternatives are either not currently economically viable, not viable long-term, or do not provide sufficient water quantity to meet BASF Corporation water needs.

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BASF Corporation has evaluated and implemented conservation strategies, including: new facility updates capable of recycling more wastewater, cooling towers, condensate reuse, multiple recovery and reuse production processes, industrial water conservation goals, and optimizing Lake Creek Reservoir operations for evaporation reduction. These conservation strategies reduce water demands but are not a sufficient alternative to the requested appropriation.

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### Drought Contingency Plan for a Wholesale Public Water Supplier

#### **Contact Information**

Name: Bradley Morrison, BASF Corporation Address: 602 Cooper Road; Freeport, TX 77541 Telephone Number: (979) 415-6111 Fax: ( ) Water Right No.(s): New surface water appropriation request Regional Water Planning Group: G and H Form Completed by: Brian Meagher Title: Lake Creek Facility Manager Person responsible for implementation: Bradley Morrison Phone: (979) 415-6111

Bradley Morrison, Senior Vice President with BASF Corporation, with signature authorization as shown in Exhibit 1, implements this Drought Contingency Plan for wholesale public water supplier for BASF Corporation at Freeport.

Signature:

Date:06/12/2023

#### Section I: Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and/or to protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, BASF Corporation adopts the following Drought Contingency Plan (the Plan).

#### Section II: Public Involvement

The BASF Corporation at Freeport has no current wholesale customers for this requested appropriation and no wholesale water use has occurred. When wholesale water use under this requested appropriation commences, opportunity for the public and wholesale water customers to provide input into the preparation of a revised Plan will be provided by BASF Corporation by means of a public meeting. Evidence of future public notice of a public meeting to accept input on the Plan will be provided to TCEQ.

#### Section III: Wholesale Water Customer Education

The BASF Corporation will periodically provide wholesale water customers with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or

terminated and the drought response measures to be implemented in each stage. This information will be provided directly to wholesale water customers by means of email or mail.

#### Section IV: Coordination with Regional Water Planning Groups

The BASF Corporation does not have any wholesale customers and does not currently have a water service area. The potential water service area of the BASF Corporation is located within the Regional H Water Planning Group within Brazoria County, and within Brazos G Regional Water Planning Group within McLennan, Falls, Robertson and Limestone (portions within Brazos River basin only) Counties. The BASF Corporation has coordinated and received confirmation from Regional H Water Planning Group and Brazos G Regional Water Planning Group that this water use is not inconsistent with the regional water plans.

#### **Section V:** Authorization

Bradley Morrison, or his designee, is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. Bradley Morrison or his designee, shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

#### Section VI: Application

The provisions of this Plan shall apply to all customers utilizing water provided by the BASF Corporation. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.

#### Section VII: Criteria for Initiation and Termination of Drought Response Stages

Bradley Morrison, or his designee, shall monitor water supply and/or demand conditions on a monthly basis and shall determine when conditions warrant initiation or termination of each stage of the Plan. Customer notification of the initiation or termination of drought response stages will be made by mail or telephone.

The triggering criteria described below are based on: Brazos river flow rates and flow restrictions as executed by Brazos WaterMaster.

#### Utilization of alternative water sources and/or alternative delivery mechanisms:

BASF Corporation at Freeport has no current wholesale customers or utilities and no alternative water sources or delivery mechanisms are provided.

#### **Stage 1 Triggers -- MODERATE Water Shortage Conditions**

<u>Requirements for initiation</u> - The BASF Corporation will recognize that a moderate water shortage condition exists when Brazos Water Master begins restricting permit holders from extracting water in Region G and H.

<u>Requirements for termination</u> – Stage 1 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 30 consecutive days. The BASF Corporation will notify its wholesale customers of Stage 1.

#### **Stage 2 Triggers -- SEVERE Water Shortage Conditions**

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<u>Requirements for Initiation</u> - The BASF Corporation will recognize that a sever water shortage condition exists when water permit holders 1960 and junior are restricted from diverting water by Brazos Watermaster.

<u>Requirements for termination</u> – Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 30 consecutive days. Upon termination of Stage 2, Stage 1, or the applicable drought response stage based on the triggering criteria, becomes operative. The BASF Corporation will notify its wholesale customers of the termination of Stage 2.

#### Stage 3 Triggers -- CRITICAL Water Shortage Conditions

<u>Requirements for initiation</u> - The BASF Corporation will recognize that an emergency water shortage condition exists under any of the following conditions:

- 1. Major water line breaks, or pump or system failure occur, which cause unprecedented loss of capacity to provide water service.
- 2. Natural or man-made contamination of the water in storage in the Lake Creek Reservoir or water supply system.

<u>Requirements for termination</u> – Stage 3 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 30 consecutive days. The BASF Corporation notify its wholesale customers and the media of the termination of Stage 3.

#### **Section VIII: Drought Response Stages**

Bradley Morrison, or his designee, shall monitor water supply and/or demand conditions and, in accordance with the triggering criteria set forth in Section VII, shall determine that moderate, severe, or critical water shortage conditions exist or that an emergency condition exists and shall implement the following actions:

#### **Stage 1 Response -- MODERATE Water Shortage Conditions**

<u>Target</u>: Achieve a voluntary 10 percent reduction in the use that would have occurred in the absence of drought contingency measures.

Water Use Restrictions for Reducing Demand:

- (a) Bradley Morrison, or his designee(s), will contact wholesale water customers to discuss water supply and/or demand conditions and will request that wholesale water customers initiate voluntary measures to reduce water use and to implement Stage 1 or appropriate stage of the customer's drought contingency plan.
- (b) Bradley Morrison, or his designee(s), will initiate weekly contact with wholesale water customers to discuss water supply and/or demand conditions and the possibility of pro rata curtailment of water diversions and/or deliveries.
- (c) Bradley Morrison, or his designee(s), will prepare for the implementation of pro rata curtailment of water diversions and/or deliveries by preparing a monthly water usage allocation baseline for each wholesale customer.

Additional measures to be implemented directly by Bradley Morrison, or his designee(s), to manage limited water supplies and/or reduce water demand include:

- Verify the location, depth and operational requirements of intake structures.
- Investigate alternative waters to supply needs that could be implemented if the drought intensifies.

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• Other actions, as deemed appropriate, for the given situation

#### **Stage 2 Response -- SEVERE Water Shortage Conditions**

<u>Target</u>: Achieve a voluntary 20 percent reduction in the use that would have occurred in the absence of drought contingency measures.

Water Use Restrictions for Reducing Demand:

- (a) Bradley Morrison, or his designee(s), will contact wholesale water customers to discuss water supply and/or demand conditions and will request that wholesale water customers initiate mandatory measures to reduce non-essential water use and to implement Stage 2 or appropriate stage of the customer's drought contingency plan.
- (b) Bradley Morrison, or his designee(s), will initiate pro rata curtailment of water diversions and/or deliveries for each wholesale customer.

Additional measures to be implemented directly by Bradley Morrison, or his designee(s), to manage limited water supplies and/or reduce water demand include:

- Implement viable alternative water supply strategies, which may require prior approval from TCEQ.
- Prohibit all outdoor watering, including hand held hoses.
- Other actions, as deemed appropriate, for the given situation

#### **Stage 3 Response -- EMERGENCY Water Shortage Conditions**

Whenever emergency water shortage conditions exist as defined in Section VII of the Plan, Bradley Morrison, or his designee(s), shall:

- 1. Assess the severity of the problem and identify the actions needed and time required to solve the problem.
- 2. Inform the utility director or other responsible official of each wholesale water customer by telephone or in person and suggest actions, as appropriate, to alleviate problems.
- 3. If appropriate, notify city, county, and/or state emergency response officials for assistance.
- 4. Undertake necessary actions, including repairs and/or clean-up as needed.
- 5. Prepare a post-event assessment report on the incident and critique of emergency response procedures and actions.

#### Section IX: Pro Rata Curtailment

In the event that the triggering criteria specified in Section VII of the Plan for Stage 2 – Severe Water Shortage Conditions have been met, Bradley Morrison is hereby authorized to initiate allocation of water supplies on a pro rata basis in accordance with Texas Water Code, §11.039.

#### Section X: Contract Provisions

BASF Corporation will include a provision in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039.

#### **Section XI:** Enforcement

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During any period when pro rata allocation of available water supplies is in effect, wholesale customers shall pay surcharges on excess water diversions and/or deliveries. The surcharges are determined by the BASF Corporation contract with the wholesale customer.

#### Section XII: Variances

Bradley Morrison, or his designee, may, in writing, grant a temporary variance to the pro rata water allocation policies provided by this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the public health, welfare, or safety and if one or more of the following conditions are met:

- (a) Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
- (b) Alternative methods can be implemented which will achieve the same level of reduction in water use

Persons requesting an exemption from the provisions of this Plan shall file a petition for variance with Bradley Morrison within 5 days after pro rata allocation has been invoked. All petitions for variances shall be reviewed by BASF Corporation, and shall include the following:

- (a) Name and address of the petitioner(s).
- (b) Detailed statement with supporting data and information as to how the pro rata allocation of water under the policies and procedures established in the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
- (c) Description of the relief requested.
- (d) Period of time for which the variance is sought.
- (e) Alternative measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
- (f) Other pertinent information.

Variances granted by the BASF Corporation shall be subject to the following conditions, unless waived or modified by the BASF Corporation or its designee:

- (a) Variances granted shall include a timetable for compliance.
- (b) Variances granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

#### Section XIII: Severability

It is hereby declared to be the intention of the BASF Corporation that the sections, paragraphs, sentences, clauses, and phrases of this Plan are severable and, if any phrase, clause, sentence, paragraph, or section of this Plan shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Plan, since the same would not have been enacted by the BASF Corporation without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.

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# WORKSHEET 7.0 ACCOUNTING PLAN INFORMATION WORKSHEET

The following information provides guidance on when an Accounting Plan may be required for certain applications and if so, what information should be provided. An accounting plan can either be very simple such as keeping records of gage flows, discharges, and diversions; or, more complex depending on the requests in the application. Contact the Surface Water Availability Team at 512-239-4600 for information about accounting plan requirements, if any, for your application. **Instructions, Page 34.** 

### 1. Is Accounting Plan Required

Accounting Plans are generally required:

- For applications that request authorization to divert large amounts of water from a single point where multiple diversion rates, priority dates, and water rights can also divert from that point;
- For applications for new major water supply reservoirs;
- For applications that amend a water right where an accounting plan is already required, if the amendment would require changes to the accounting plan;
- For applications with complex environmental flow requirements;
- For applications with an alternate source of water where the water is conveyed and diverted; and
- For reuse applications.

## 2. Accounting Plan Requirements

#### a. A **text file** that includes:

- 1. an introduction explaining the water rights and what they authorize;
- 2. an explanation of the fields in the accounting plan spreadsheet including how they are calculated and the source of the data;
- 3. for accounting plans that include multiple priority dates and authorizations, a section that discusses how water is accounted for by priority date and which water is subject to a priority call by whom; and
- 4. Should provide a summary of all sources of water.

#### b. A **spreadsheet** that includes:

- 1. Basic daily data such as diversions, deliveries, compliance with any instream flow requirements, return flows discharged and diverted and reservoir content;
- 2. Method for accounting for inflows if needed;
- 3. Reporting of all water use from all authorizations, both existing and proposed;
- 4. An accounting for all sources of water:
- 5. An accounting of water by priority date;
- 6. For bed and banks applications, the accounting plan must track the discharged water from the point of delivery to the final point of diversion;
- 7. Accounting for conveyance losses;
- 8. Evaporation losses if the water will be stored in or transported through a reservoir. Include changes in evaporation losses and a method for measuring reservoir content resulting from the discharge of additional water into the reservoir;
- 9. An accounting for spills of other water added to the reservoir; and
- 10. Calculation of the amount of drawdown resulting from diversion by junior rights or diversions of other water discharged into and then stored in the reservoir.

#### **STATEMENT 9**

#### SUPPLEMENTAL ATTACHMENT TO WORKSHEET 7.0

#### **ACCOUNTING PLAN**

The proposed appropriation of State Water is requesting to divert and use up to 9,000 acre-feet of water per year at a maximum diversion rate of 630 cfs from the Brazos River at diversion point number 8 and diversion reach number 1. The maximum combined diversion amount for both diversion locations (No. 8 and Reach No. 1) will not exceed the requested appropriation of 9,000 acre-feet per year from the Brazos River.

The Accounting Plan spreadsheet will be used to record and account for water volume diverted at diversion point number 8, and diversion points within the proposed diversion reach. The Accounting Plan will also be used to track Lake Creek Reservoir stored and released water, the transport of released water using the bed and banks of Manos Creek and the Brazos River, including channel losses and travel time, downstream to multiple diversion locations within diversion reach number 1.

All diversions from BASF Corporation owned and operated diversion points will be recorded using a measuring device which accounts for the quantity of water diverted within an accuracy of plus or minus 5.0%. Some existing authorized diversion points within diversion reach 1 that are included in the Accounting Plan are owned and operated by another entity, as detailed in the Letter of Consent (see Exhibit 3).

Calculated cumulative channel losses from Lake Creek Reservoir to the upstream or downstream limits of the proposed diversion reach range from 8.15 to 9.60%, respectively. Cumulative travel time from Lake Creek Reservoir to the upstream or downstream limit of the proposed diversion reach range from 8.60 to 10.07 days, respectively. Cumulative channel loss values and cumulative travel time values used for this accounting plan are derived from the incremental loss and incremental travel time values in the Brazos River Authority (BRA) Water Management Plan (Section 4, Table 4.7, https://brazos.org/About-Us/Water-Supply/SysOps). To estimate a channel loss and travel time value for a length of river that is shorter than a BRA reach, reach values were proportionately adjusted using National Hydrology Dataset (NHD) flowline river mile lengths. Additionally, the NHD river mile length from the "Rosharon gage to Harris Reservoir Diversion" reach was altered to remove a closed Oxbow Lake currently included in the NHD flowline length. Table 1 below lists calculated cumulative channel loss and cumulative travel time values that will be used in the Accounting Plan spreadsheet.

Through the Letter of Consent, water diverted from diversion points number 2 and 3 will be fully controlled by a private entity. This entity has an existing and approved Accounting Plan for diversions from existing diversion points into Harris Reservoir and Brazoria Reservoir, as well as the subsequent discharges and diversions into and from Oyster Creek and Buffalo Camp Bayou. This entities' Accounting Plan is not discussed herein.

Remaining portions of the accounting plan and spreadsheet will be submitted during technical review.

Table 1. Accounting Plan calculated cumulative travel times and cumulative channel loss values.

Brazos River Authority Reach	Subreach	Brazos River Authority Incremental Travel Time (days)	Brazos River Authority Incremental Channel Loss (%)	National Hydrography Dataset Incremental Length¹ (river miles)	Subreach Incremental Travel Time (days)	Subreach Incremental Losses (%)	Cumulative Travel Time from Lake Creek Reservoir (days)	Cumulative Channel Loss Factor from Lake Creek Reservoir (%)
Waco gage to Highbank gage	Waco gage to Brazos/Manos Creek confluence (Lake Creek Reservoir)	1.39	0.04	13.09	0.32	0.22	-	-
waco gage to nighbank gage	Brazos/Manos Creek confluence (Lake Creek Reservoir) to Highbank gage	1.59	0.94	43.38	1.07	0.72	1.07	0.72%
Highbank gage to Brazos/Little confluence	-	0.90	0.61	-	-	-	1.97	1.33%
Brazos/Little confluence to Bryan gage	-	0.80	0.86	1	-	-	2.77	2.17%
Bryan gage to Brazos/Yegua confluence	-	0.99	1.06	-	-	-	3.76	3.21%
Brazos/Yegua confluence to Brazos/Navasota confluence	-	0.43	0.46	-	-	-	4.19	3.66%
Brazos/Navasota confluence to Hempstead gage	-	0.87	0.93	-	-	-	5.06	4.55%
Hempstead gage to Richmond gage	-	2.62	2.82	-	-	-	7.68	7.24%
Richmond gage to Rosharon gage	-	0.92	0.98	-	-	-	8.60	8.15%
Rosharon gage to Gulf of Mexico	Rosharon gage to Harris Reservoir Diversion	1.47		11.23	0.29	0.31	8.89	8.44%
	Harris Reservoir Diversion to Brazoria Reservoir Diversion		1.58	21.59	0.56	0.60	9.45	8.99%
	Brazoria Reservoir Diversion to Gulf of Mexico			24.01	0.62	0.67	10.07	9.60%

<sup>&</sup>lt;sup>1</sup> The National Hydrography Dataset (NHD) length from the "Rosharon gage to Harris Reservoir Diversion" reach was altered to remove a closed Oxbow Lake included in the NHD flowline length.

# WORKSHEET 8.0 CALCULATION OF FEES

This worksheet is for calculating required application fees. Applications are not Administratively Complete until all required fees are received. **Instructions, Page. 34** 

#### 1. NEW APPROPRIATION

	Description	Amount (\$)
	Circle fee correlating to the total amount of water* requested for any new appropriation and/or impoundment. Amount should match total on Worksheet 1, Section 1. Enter corresponding fee under <b>Amount (\$).</b>	
	<u>In Acre-Feet</u>	
Filing Fee	a. Less than 100 \$100.00	
	b. 100 - 5,000 \$250.00	
	c. 5,001 - 10,000 \$500.00	
	d. 10,001 - 250,000 \$1,000.00	
	e. More than 250,000 \$2,000.00	\$500.00
Recording Fee		\$25.00
Agriculture Use Fee	Only for those with an Irrigation Use.  Multiply 50¢ xNumber of acres that will be irrigated with State Water. **	
	Required for all Use Types, excluding Irrigation Use.	
Use Fee	Multiply \$1.00 x $\underline{^{9000}}$ Maximum annual diversion of State Water in acrefeet. **	\$9,000.00
Degraptional Staroga	Only for those with Recreational Storage.	
Recreational Storage Fee	Multiply \$1.00 xacre-feet of in-place Recreational Use State Water to be stored at normal max operating level.	
	Only for those with Storage, excluding Recreational Storage.	
Storage Fee	Multiply 50¢ xacre-feet of State Water to be stored at normal max operating level.	
Mailed Notice	Cost of mailed notice to all water rights in the basin. Contact Staff to determine the amount (512) 239-4600.	
	TOTAL	\$ 9,525.00

#### 2. AMENDMENT *OR* SEVER AND COMBINE

	Description	Amount (\$)
Filing Foo	Amendment: \$100	
Filing Fee	<b>OR</b> Sever and Combine: \$100 x of water rights to combine	
Recording Fee		\$12.50
Mailed Notice	Additional notice fee to be determined once application is submitted.	
	TOTAL INCLUDED	\$

#### 3. BED AND BANKS

	Description	Amount (\$)
Filing Fee		\$100.00
Recording Fee		\$12.50
Mailed Notice	Additional notice fee to be determined once application is submitted.	
	TOTAL INCLUDED	\$

# Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

New Permit or Registration Application  New Activity - modification, registration, amendment, facility, etc. (see instructions)
If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.
Section 2. Secondary Screening
Requires public notice,  Considered to have significant public interest, <u>and</u>
Located within any of the following geographical locations:  Austin Dallas Fort Worth Houston San Antonio West Texas Texas Panhandle Along the Texas/Mexico Border Other geographical locations should be decided on a case-by-case basis
If all the above boxes are not checked, a Public Involvement Plan is not necessary.  Stop after Section 2 and submit the form.
Public Involvement Plan not applicable to this application. Provide <b>brief</b> explanation.

TCEQ-20960 (02-09-2023)

Section 1. Preliminary Screening

Section 3. Application Information
Type of Application (check all that apply):  Air
Water Quality
Texas Pollutant Discharge Elimination System (TPDES)
Texas Land Application Permit (TLAP)
State Only Concentrated Animal Feeding Operation (CAFO)
Water Treatment Plant Residuals Disposal Permit
Class B Biosolids Land Application Permit
Domestic Septage Land Application Registration
Water Rights New Permit  New Appropriation of Water  New or existing reservoir
Amendment to an Existing Water Right  Add a New Appropriation of Water
Add a New or Existing Reservoir
Major Amendment that could affect other water rights or the environment
Major Amendment that could arrect other water rights of the environment
Section 4. Plain Language Summary
Provide a brief description of planned activities.
BASF Corporation is requesting a new appropriation of 9,000 acre-feet per year of water at a maximum diversion rate of 630 cubic feet per second from the Brazos River, to be diverted on a non-firm basis only when water is available. Water will be used for industrial and municipal purposes in Limestone County, Falls County, Robertson County, McLennan County, and Brazoria County. The applicant is also requesting a bed and banks authorization to transport released water from Lake Creek Reservoir for use in Brazoria County, consistent with BASF Corporation's existing Certificate of Adjudication No. 12-4345.  An Interbasin Transfer is requested to transfer water from the Brazos River Basin into the San Jacinto – Brazos Coastal Basin. This transfer is exempt from additional requirements according to TWC 11.085(v).  In the future, the proposed appropriation and bed and banks authorization may be used for municipal purposes through one or more Water Supply Contracts.

Section 5. Community and Demographic Information
Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.
Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.
(City)
Limestone, Falls, Robertson, McLennan, Brazoria (County)
(Census Tract) Please indicate which of these three is the level used for gathering the following information.  City  Census Tract
(a) Percent of people over 25 years of age who at least graduated from high school Please reference Statement 10 for this information.
(b) Per capita income for population near the specified location
Please reference Statement 10 for this information.
(c) Percent of minority population and percent of population by race within the specified location Please reference Statement 10 for this information.
(d) Percent of Linguistically Isolated Households by language within the specified location
Please reference Statement 10 for this information.
(e) Languages commonly spoken in area by percentage Please reference Statement 10 for this information.
(f) Community and/or Stakeholder Groups
Please reference Statement 10 for this information.
(g) Historic public interest or involvement Please reference Statement 10 for this information.

Section 6. Planned Public Outreach Activities
(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?  Yes No
(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?  Yes No  If Yes, please describe.
If you answered "yes" that this application is subject to 30 TAC Chapter 39,
answering the remaining questions in Section 6 is not required.
(c) Will you provide notice of this application in alternative languages?  Yes No
Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.
If yes, how will you provide notice in alternative languages?
Publish in alternative language newspaper
Posted on Commissioner's Integrated Database Website
Mailed by TCEQ's Office of the Chief Clerk
✓ Other (specify) To be determined
(d) Is there an opportunity for some type of public meeting, including after notice?
Yes No
(e) If a public meeting is held, will a translator be provided if requested?
Yes No
(f) Hard copies of the application will be available at the following (check all that apply):
☐ TCEQ Regional Office
Public Place (specify)
Section 7. Voluntary Submittal
For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.
Will you provide notice of this application, including notice in alternative languages?
Yes No What types of notice will be provided?
Publish in alternative language newspaper  Posted on Commissioner's Integrated Database Website
Posted on Commissioner's Integrated Database Website  Mailed by TCEQ's Office of the Chief Clerk
Other (specify)
out (openly)

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#### **STATEMENT 10**

#### SUPPLEMENTAL ATTACHMENT TO PUBLIC INVOLVEMENT PLAN FORM

#### Section 5. Community and Demographic Information

#### (a) Percent of people over 25 years of age who at least graduated from high school

Limestone County: 35% Falls County: 35% Robertson County: 37% McLennan County: 28% Brazoria County: 25%

#### (b) Per capita income for population near the specified location

Limestone County: 22,808 Falls County: 23,131 Robertson County: 27,245 McLennan County: 26,754 Brazoria County: 35,437

#### (c) Percent of minority population and percent of population by race within the specified location

Limestone County: 57% While Alone, 22% Hispanic, 17% Black Alone, 1% Non-Hispanic Asian

Alone, 2% Two or More Races Alone

Falls County: 51% While Alone, 24% Hispanic, 23% Black Alone, 1% Non-Hispanic Asian

Alone, 2% Two or More Races Alone

Robertson County: 57% While Alone, 21% Hispanic, 20% Black Alone, 1% Two or More Races

Alone

McLennan County: 55% While Alone, 27% Hispanic, 14% Black Alone, 2% Non-Hispanic Asian

Alone, 2% Two or More Races Alone

Brazoria County: 46% While Alone, 31% Hispanic, 14% Black Alone, 7% Non-Hispanic Asian

Alone, 2% Two or More Races Alone

#### (d) Percent of Linguistically Isolated Households by language within the specified location

Limestone County: 80% Spanish, 9% Other Indo-European, 6% Asian-Pacific Island, 5% other

Falls County: 89% Spanish, 11% Asian-Pacific Island

Robertson County: 81% Spanish, 19% Asian-Pacific Island

McLennan County: 94% Spanish, 3% Other Indo-European, 3% Asian-Pacific Island, 1% other Brazoria County: 65% Spanish, 2% Other Indo-European, 31% Asian-Pacific Island, 1% other

#### (e) Languages commonly spoken in area by percentage

Limestone County: 81% English, 18% Spanish, 1% Vietnamese

Falls County: 82% English, 16% Spanish, 1% German or other West Germanic, 1% Other Indo-

European

Robertson County: 85% English, 14% Spanish, 1% Arabic

McLennan County: 81% English, 17% Spanish, 1% Other Indo-European

Brazoria County: 73% English, 20% Spanish, 1% Other Indo-European, 1% Chinese (including Mandarin, Cantonese), 1% Vietnamese, 1% Tagalog (including Filipino), 1% Other Asian and

Pacific Island, 1% Other and Unspecified.

#### (f) Community and/or Stakeholder Groups

Limestone County: Brazos G Regional Water Planning Group

Falls County: Brazos G Regional Water Planning Group Robertson County: Brazos G Regional Water Planning Group McLennan County: Brazos G Regional Water Planning Group

Brazoria County: Region H Water Planning Group

#### (g) Historic public interest or involvement

*Limestone County:* Brazos G Regional Water Planning Group, public notice, presentation, and 03/08/2023 approval of consistency status.

*Falls County:* Brazos G Regional Water Planning Group, public notice, presentation, and 03/08/2023 approval of consistency status.

*Robertson County:* Brazos G Regional Water Planning Group, public notice, presentation, and 03/08/2023 approval of consistency status.

*McLennan County:* Brazos G Regional Water Planning Group, public notice, presentation, and 03/08/2023 approval of consistency status.

*Brazoria County:* Region H Water Planning Group, public notice, presentation, and 02/01/2023 approval of consistency status.