



City of Austin
Law Department

301 W. 2nd Street, P.O. Box 1546
Austin, Texas 78767-1546
(512)974-2268

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

2008 DEC 22 PM 3:14
CHIEF CLERKS OFFICE

Writer's Direct Line
(512) 974-2168

Writer's Fax Line
(512) 974-6490

December 22, 2008

LaDonna Castañuela
TCEQ Office of Chief Clerk, MC 105
12100 Park 35 Circle
Building F
Austin, TX 78753

(Via Hand Delivery)

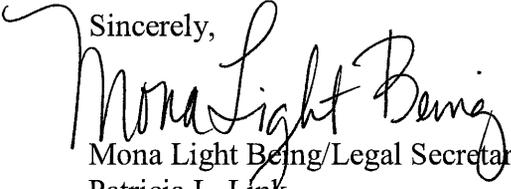
RE: SOAH Docket No. 582-08-0202; TCEQ Docket No. 2007-1426-MWD;
In the Matter of the Application for Permit No. WQ0014293001 of
Hays County Water District No. 1

Dear Clerk:

Enclosed please find the original and 12 copies of the Protestant, City of Austin's Responses to Exceptions to the Proposal for Decision and Order for the above referenced case. Please file the original with the chief clerk's office, give 11 copies to the Commissioners as per the directions of the Administrative Law Judges, and please return one file stamped copy back to this office in the SASE provided.

Thank you for your attention to this matter.

Sincerely,


Mona Light Bering/Legal Secretary to
Patricia L. Link
Assistant City Attorney

Enclosures

cc: **VIA: Hand Delivery**
The Honorable Roy Scudday
State Office Administrative Hearings
PO Box 13025
Austin, TX 78711-3025
300 West 15th Street, Ste. 502
Austin, TX 78701

VIA: Hand Delivery
The Honorable Cassandra Church
State Office Administrative Hearings
PO Box 13025
Austin, TX 78711-3025
300 West 15th Street, Ste. 502
Austin, TX 78701

VIA: CMRRR 7111 0293 8590 0000 5414
Ray Chester
McGinnis, Lochridge & Kilgore, LLP
600 Congress Avenue
Suite 2100
Austin, TX 78701

VIA: CMRRR 7111 0293 8590 0000 5421
Ms. Kathy Humphrey
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, TX 78711-3087

VIA: CMRRR 7111 0293 8590 0000 5438
Ms. Christina L. Mann
Office of Public Interest Counsel
P. O. Box 13087
Austin, TX 78711

VIA: CMRRR 7111 0293 8590 0000 5445
Mr. David Frederick
Lowerre, Frederick, Prales, Allmon, &
Rockwell
707 Rio Grande, Ste 200
Austin, TX 78701

VIA: CMRRR 7111 0293 8590 0000 5452
Mr. Robert M. O'Boyle
Strasburger & Price, LLP
600 Congress Avenue, Suite 1600
Austin, TX 78701-2974

VIA: CMRRR 7111 0293 8590 0000 5469
Mr. Stuart N. Henry
1350 Indian Springs Trace
Dripping Springs, TX 78620

VIA: CMRRR7111 0293 8590 0000 5476
Andrew Backus
HTGCD Board President
P.O. Box 1648
Dripping Springs, TX 78620

VIA: CMRRR 7111 0293 8590 0000 5490
Susan G. Zachos
Law Offices of Susan G. Zachos
P.O. Box 157
Austin, TX 78767

VIA: CMRRR 7111 0293 8590 0000 5506
Fred B. Werkenthin, Jr.
Booth, Arhres & Werkenthin, P.C.
515 Congress Avenue, Suite 1515
Austin, TX 78701

VIA: CMRRR 7111 0293 8590 0000 5513
William D. Dugat III
Bickerstaff Heath Delgado Acosta LLP
816 Congress Avenue, Suite 1700
Austin, TX 78701

VIA: CMRRR 7111 0293 8590 0000 5520
Vic Ramirez
Associate General Counsel
LCRA Legal Services – H424
P.O. Box 220
Austin, TX 78767

VIA: CMRRR 7111 029. 8590 0000 5537
Deborah C. Trejo
Andrew S. "Drew" Miller
Kemp Smith, LLP
816 Congress Ave., Ste. 1150
Austin, TX 78701

SOAH Docket No. 582-08-0202
TCEQ Docket No. 2007-1426-MWD

2008 DEC 22 PM 3:14
CHIEF CLERKS OFFICE

IN THE MATTER OF	§	BEFORE THE STATE OFFICE
THE APPLICATION FOR	§	
PERMIT NO. WQ0014293001 OF	§	OF
HAYS COUNTY WATER	§	
DISTRICT NO. 1	§	ADMINISTRATIVE HEARINGS

**PROTESTANT, CITY OF AUSTIN'S RESPONSE TO
EXCEPTIONS TO THE PROPOSAL FOR DECISION AND ORDER**

COMES NOW, Protestant City of Austin ("City") and files this, its Response to Exceptions, and respectfully shows the following:

I. INTRODUCTION

The parties filed Exceptions to the Proposal for Decision ("PFD") and Order on December 10, 2008. The Executive Director (ED) made exceptions to specific Findings in the Order, while the Applicant made general exceptions to the PFD. In this Response, Protestant City responds to the ED's and the Applicant's Exceptions and re-urges its Exceptions.

II. RESPONSE TO EXCEPTIONS

A. The ED's exception to Finding 41 relating to algal growth.

The ED argues in its Exceptions that an increase in nutrient concentrations will not necessarily result in increased algal growth. However, in this case, the evidence clearly demonstrates that an increase in nutrients will have a corresponding increase in algal growth in Bear Creek. As such Finding 41 is supported by evidence in the record and should remain in the Order.

It is undisputed that this discharge will increase nutrients in the creek.¹ The main nutrients of concern are phosphorus and nitrogen. The EPA recognizes that “[n]itrogen and phosphorus are the main causal agents of enrichment.”² Nutrients are converted into algal biomass, plant biomass, or bacteria.³ Phosphorus is generally in two forms, soluble and non-soluble. The evidence is that the soluble is the form of concern and is also the primary form in effluent.⁴ Soluble nitrogen is readily absorbed by biomass and bacteria.⁵ Nitrogen forms are soluble and gas.⁶

An increase in nutrients is going to increase the growth of algae because nutrients are the building blocks of algae.⁷ Ms. Murphy stated in her prefiled testimony that “you don’t have to add a lot of nutrients to Bear Creek before you start observing algal growth”, an opinion based on her research of the creek.⁸ Dr. Tischler stated in his prefiled testimony that when a water body is oligotrophic “any addition of nutrients (TP and TN) will result in aquatic plant growth.”⁹ Algal growth is influenced by water chemistry.¹⁰ Nutrients are part of that chemistry and are used “to build biomass structure and algal cells.”¹¹ The nutrients that are used to build structures and cells are not removed from the aquatic system; they merely shift from the water column to aquatic

¹ CR V.2, 266:22-25; 268:11-12.

² Memorandum: Development and Adoption of Nutrient Criteria into Water Quality Standards, page 8, WQSP-01-01, by Geoffrey Grubbs (11/14/01).

³ CR V.4, 212:18-21.

⁴ CR V.4, 212:12-22.

⁵ CR V.4, 223:12-22.

⁶ COA-20, 6:22-23.

⁷ COA-20, 4:21-22, 5:1.

⁸ ED-8, 18:1-4.

⁹ LO-1, 10:20-22.

¹⁰ COA-20, 4:17.

¹¹ COA-20, 5:1.

plants.¹² If the nutrients cannot be used for biological uptake then nutrients continue downstream until used.¹³ The City's algae study shows that attached algae (periphytic algae) and floating algae (sestonic) that grow in Bear Creek are co-limited by nitrogen and phosphorus.¹⁴

The increase in nutrients can result in excessive growth of floating and attached algae, as well as nuisance forms of attached algae¹⁵ and cyanobacteria¹⁶ (also known as "blue green algae"). According to the EPA, "early indicators of system over-enrichment for most waters" are "chlorophyll-a and water clarity."¹⁷ Dr. Tischler stated in his prefiled that "[e]ach additional increment of increased nutrients will result in increased plant growth until some other limiting factor, ..., limit growth." A result of excessive growth will be a change in the environment.¹⁸ Dr. Groeger testified at the hearing that effects of the increase in nutrients may be felt in the Davis pond (the first pond downstream of Belterra) "within a year."¹⁹

The increase in nutrients will cause more than *de minimis* degradation. It will increase the growth of algae, aquatic plants, and bacteria. These things will impact the recreational use of the creek, the aesthetic value of the creek, and the aquatic life that live in the creek (and ponds). These consequences will harm the aquatic habitat which violates the antidegradation rule since "maintaining aquatic habitat is an important

¹² COA-20, 5:10-12.

¹³ COA-20, 5:14-15.

¹⁴ COA-4, 6:15-17; 9:4-5.

¹⁵ COA-4, 8:9-10.

¹⁶ COA-20, 4:18-20.

¹⁷ Memorandum, page 8 (11/14/01).

¹⁸ COA-20, 8:10-11.

¹⁹ CR V. 4, 215:9-12.

component of protecting and maintaining aquatic life, which is required.”²⁰ These consequences also violate the general criteria and are more than *de minimis* degradation and therefore, violate the antidegradation rule. For the above reasons, Finding 41 is amply supported by the record and should remain in the Order.

B. The ED’s exceptions to Findings 48, 49, 50, 55, and 56.

The ED argues that Findings 48 – 50, 55, and 56 should be deleted. The ED argues the ALJs cannot evaluate the impact of nutrients on Bear Creek using the percent change in assimilative capacity because the equation does not apply to narrative criteria based on the ED’s reading of the Procedures to Implement Water Quality Standards (“IP manual”) and Kentucky Waterways v. Johnson, 540 F.3d, 466 (6th Cir. 2008). It’s the City’s position that reliance on changes in assimilative capacity is appropriate.

The crux of the ED’s argument is that the percent change in assimilative capacity should not be used for constituents with narrative criteria since it requires numerical data. There is no basis for this argument. First, the narrative standard for nutrients does not preclude the use of numerical data to evaluate impacts.²¹ Second, the IP manual does not limit the application of the assimilative capacity equation to constituents with numerical criteria.²² Third, Kentucky Waterways does not limit analysis of the change in assimilative capacity because it does not address a particular constituent of concern and it cannot be assumed that it only applies to constituents with a numerical standard. The case does support the argument that percent changes in assimilative capacity is an appropriate

²⁰ 25 TEXREG 7722, *7889, Page 264.

²¹ The term “excessive” contemplates that there is a certain amount of algae that will violate the standards, which means that a certain quantity will violate the standard and quantity is usually a number.

²² ED-10, 32. The only limitation on the equation is for evaluation of dissolved oxygen and pH.

approach in the view of the judiciary and the EPA, which has supported a ten percent change in assimilative capacity as a threshold for *de minimis* degradation without reference to numerical criteria.²³

The application of the change in assimilative capacity equation is not limited to constituents with a numerical standard. Reliance on the percent change in assimilative capacity is appropriate. Accordingly, Findings 48, 49, and 50 should remain in the Order. Findings 55 and 56 should be deleted on other grounds.²⁴

C. The ED's exceptions to Findings 44, 45, and 51.

The ED argues that the ALJs should not have relied on Dr. Tischler's testimony concerning the potential change in trophic status for Bear Creek. The basis of the ED's argument appears to be that since this concept is not found within the IP manual, the ALJs cannot rely on it. Further, the ED appears to argue that since the boundaries referenced in Dr. Tischler's testimony are only suggestions by the EPA, the ALJs cannot rely on those boundaries. These arguments are without merit.

A water body's trophic status is not a new concept. Examining the impact of a proposed discharge through its impact on trophic status is grounded in science and none of the experts in this case opined otherwise. Ms. Murphy agreed that an oligotrophic water body that shifts to a eutrophic water body is evidence of degradation.²⁵ Further, there is no mandate that an analysis must be included in the IP manual to be considered a reliable analysis. The IP manual does not hold itself out to be an exhaustive.²⁶ Therefore,

²³ Kentucky Waterways, 486.

²⁴ The City does not support these two Findings for other reasons. See City's Exceptions, pages 5-6.

²⁵ CR V.5, 209:21-25, 210:1-4.

²⁶ ED-10, 34.

there are no grounds to state that this analysis must be included in the IP manual to be legitimate.

The ALJs were correct to rely on the suggested trophic boundaries. Dr. Tischler did not create these boundaries for this proceeding. The boundaries were developed independently by a governmental agency charged with environmental protection. The boundaries were not refuted by the Applicant or TCEQ. Therefore, it is proper to rely on the suggested boundaries. For the above reasons, these Findings should remain in the Order.

D. The ED's exceptions to Findings 52, 67, 68, 69, 73, and 74 relating to degradation.

The ED argues that Findings 52, 67, 68, 69, 73, and 74 should be modified because the ALJs rely on the change in assimilative capacity and the change in trophic status. As discussed above, reliance on those two analyses is proper. Findings 52, 67, 68, and 73 are supported by the undisputed evidence of the connectivity between Bear Creek and the Barton Springs segment of the Edward's Aquifer (hereafter referred to as "BS/EA aquifer").²⁷ It is the City's position that Findings 69 and 74 should be deleted due to a lack of evidentiary support.²⁸

This connectivity makes the quality of Bear Creek's surface water critical to the continued health of the aquifer. The BS/EA aquifer operates like a highway of sorts for groundwater, which moves very quickly through the aquifer.²⁹ Dye studies have shown

²⁷ See testimony of Dr. Kier, Dr. Barrett, and Mr. Machin.

²⁸ See City's Exceptions, pages 7-8.

²⁹ COA-12, 4:14-15.

that water from Bear Creek can reach the Barton Springs pool in as little as three days.³⁰ These dye studies confirm that the water moves quickly.³¹ If the surface water going into BS/EA aquifer is degraded, the groundwater is being degraded.³²

There is little attenuation of a creek's constituents when it enters the BS/EA aquifer, meaning there is little reduction of constituents.³³ The lack of attenuation applies to all creeks that recharge the BS/EA aquifer.³⁴ Nitrate will not be reduced in the aquifer because there is an absence of uptake within the BS/EA aquifer.³⁵ The constituents coming into the BS/EA aquifer will be present in wells along the flow path and in Barton Springs pool.³⁶ Furthermore, the City's algae study demonstrates that floating algae in Barton Springs pool will increase with the introduction of phosphorus.³⁷

E. The Applicant's exceptions to the PFD.

The Applicant made general exceptions to the ALJ's PFD on the grounds that an erroneous standard for nutrients was used. The Applicant essentially argues, just as the ED argues, the narrative standard for nutrients preclude the use of numerical data to determine the impact of nutrients on the receiving stream. As explained above,³⁸ the ALJs reliance on the evidence of the impacts on the receiving stream was correct.

The Applicant's Exceptions state that the ALJs found that the nutrient models were not valid because nutrients have a narrative standard. However, that is a

³⁰ COA-12, 7: 6-10; CR V.5, 60:15-17.

³¹ COA-12, 5: 7-16.

³² COA-18, 5:11-12.

³³ COA-12, 7:12-13.

³⁴ COA-12, 8:1-14.

³⁵ COA-12, 9:13-15.

³⁶ COA-12, 9:15-18.

³⁷ COA-4, 9:16-17.

³⁸ See II B and II C in this pleading.

mischaracterization of the PFD finding. The actual finding was that the models were not validated because of a lack of field data.³⁹ The ALJs fault the lack of field data on the narrative standard, which is not the same as faulting the use of models for constituents that have a narrative standard. If there had been sufficient field data for the models, then it is likely the ALJs would have found that the models were valid.

The Applicant insists that Pond 6B is not part of the wastewater treatment process. The ALJs did not make a finding that Pond 6B is part of the wastewater treatment pond and instead left that finding up to the Commission. The Applicant argues that if Pond 6B is found to be part of the wastewater treatment process then all receiving streams are part of the treatment process. This argument is flawed because the record establishes that Mr. Machin specifically relies on Pond 6B because of its water treatment capabilities, not because it is part of the creek system.⁴⁰ In fact, it is clear from the record that Mr. Machin's opinion about the impact of nutrients to Bear Creek is heavily based on the existence of Pond 6B (and Dry Pond).⁴¹ If Pond 6B is found to be part of the wastewater treatment process the finding would not apply to all receiving streams.

The Applicant argues that nothing in the settlement agreement rises to the level of a major amendment. As a result new notice and hearing is not necessary. It's the City's position that if the Commission deems there is a major amendment, it must be properly noticed in accordance with state law.

³⁹ PFD, 23.

⁴⁰ See generally CR V.2, 256:4-25, 257:1-25; 258:1-10 and Mr. Machin's prefiled testimony, 16:7-12.

⁴¹ CR V.2, 260:4-12.

F. The Applicant's exception to the allocation of costs.

The Applicant argues that the allocation of costs between the Applicant and the Protestants should be divided 50/50. The City requests the allocation recommended by the ALJs be ordered.

III. PRAYER

Protestant City prays that the Exceptions filed by the Applicant and the Executive Director be denied. Protestant City re-urges its Exceptions and requests that Findings 54, 55, 56, 59, 69, 74, 78, 79, and 80 be deleted and that Finding 21 be modified. Protestant City requests that Conclusions of Law 7, 8, 9, 10, and 13 be deleted since these Conclusions can not stand without the applicable Findings. Finally, Protestant City requests that Order Provision No. 2 be modified as requested in the City's Exceptions.

RESPECTFULLY SUBMITTED
DAVID ALLAN SMITH
CITY ATTORNEY



PATRICIA L. LINK
STATE BAR NO. 24041343
ASSISTANT CITY ATTORNEY
P. O. BOX 1546
AUSTIN, TEXAS 78767-1546
PHONE: (512) 974-2173
FAX: (512) 974-6490
ATTORNEYS FOR PROTESTANT
CITY OF AUSTIN

CERTIFICATE OF SERVICE

2008 DEC 22 PM 3:14

CHIEF CLERK'S OFFICE

We hereby certify that a true and complete copy of the above and foregoing has been sent on this the 22nd day of December 2008, to the following counsel of record:

cc: ***VIA: Hand Delivery***

The Honorable Roy Scudday
State Office Administrative Hearings
PO Box 13025
Austin, TX 78711-3025
300 West 15th Street, Ste. 502
Austin, TX 78701

VIA: Hand Delivery

LaDonna Castañuela
TCEQ Office of Chief Clerk, MC 105
12100 Park 35 Circle
Building F
Austin, TX 78753

VIA: CMRRR 7111 0293 8590 0000 5414

Ray Chester
McGinnis, Lochridge & Kilgore, LLP
600 Congress Avenue
Suite 2100
Austin, Texas 78701

VIA: CMRRR 7111 0293 8590 0000 5421

Ms. Kathy Humphrey
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, Texas 78711-3087

VIA: CMRRR 7111 0293 8590 0000 5438

Ms. Christina L. Mann
Office of Public Interest Counsel
P. O. Box 13087
Austin, Texas 78711

VIA: CMRRR 7111 0293 8590 0000 5445

Mr. David Frederick
Lowerre, Frederick, Prales, Allmon, &
Rockwell
707 Rio Grande, Ste 200
Austin, Texas 78701

VIA: CMRRR 7111 0293 8590 0000 5452

Mr. Robert M. O'Boyle
Strasburger & Price, LLP
600 Congress Avenue, Suite 1600
Austin, Texas 78701-2974

VIA: CMRRR 7111 0293 8590 0000 5469

Mr. Stuart N. Henry
1350 Indian Springs Trace
Dripping Springs, Texas 78620

VIA: CMRRR 7111 0293 8590 0000 5476

Andrew Backus
HTGCD Board President
P.O. Box 1648
Dripping Springs, TX 78620

VIA: CMRRR 7111 0293 8590 0000 5490

Susan G. Zachos
Law Offices of Susan G. Zachos
P.O. Box 157
Austin, Texas 78767

VIA: CMRRR 7111 0293 8590 0000 5506
Fred B. Werkenthin, Jr.
Booth, Arhres & Werkenthin, P.C.
515 Congress Avenue, Suite 1515
Austin, Texas 78701

VIA: CMRRR 7111 0293 8590 0000 5513
William D. Dugat III
Bickerstaff Heath Delgado Acosta LLP
816 Congress Avenue, Suite 1700
Austin, Texas 78701

VIA: CMRRR 7111 0293 8590 0000 5520
Vic Ramirez
Associate General Counsel
LCRA Legal Services – H424
P.O. Box 220
Austin, Texas 78767

VIA: CMRRR 7111 029. 8590 0000 5537
Deborah C. Trejo
Andrew S. “Drew” Miller
Kemp Smith, LLP
816 Congress Ave., Ste. 1150
Austin, TX 78701


PATRICIA L. LINK