TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 8, 2015

Bridget C. Bohac, Chief Clerk
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: **Application by Clear Lake City Water Authority for a Major Amendment to TPDES Permit No. WQ0010539001**
TCEQ Docket No. 2015-0563-MWD

Dear Ms. Bohac:

Please find enclosed for filing the Executive Director's Response to Hearing Request in the above-entitled matter.

Sincerely,

Daniel Ingersoll, *Staff Attorney*
Environmental Law Division
State Bar No. 24062794

Enclosure

TCEQ DOCKET NO. 2015-0563-MWD

APPLICATION BY CLEAR LAKE CITY WATER AUTHORITY FOR A MAJOR AMENDMENT TO TPDES PERMIT NO. WQ0010539001	**§**	**BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

Executive Director's Response to Hearing Request

I. Introduction

The Executive Director of the Texas Commission on Environmental Quality (the TCEQ or Commission) files this Response to Hearing Request (Response) on the application of Clear Lake City Water Authority (CLCWA or Applicant) for a major amendment to Texas Pollutant Discharge Elimination System Permit (TPDES) No. WQ0010539001. Attached for Commission consideration are the following:

Attachment A – GIS Maps and Key
Attachment B – Landowner Maps and Lists
Attachment C – Compliance History
Attachment D – Technical Summary and Proposed Permit
Attachment E – Executive Director's Response to Public Comment

The Office of the Chief Clerk (OCC) received timely hearing requests from the following individuals: Steven Baxter, Anita J. Cooper, Thomas Dorsch, Victoria Dorsch, Raymond Halyard, Daryl Hampton, Carole Henning, Mandy Hess, Charles Howard, Eilene Kenney, Michael Merritt, Zhan Peng, Anthony Joseph Peszko, Cindy Porterfield, Kenneth Proctor, and Tom Reed. The OCC received a request for a hearing from Carole Henning on behalf of the group called Friends of the Old Golf Course (Friends).

The OCC received individual hearing requests from Mary Melissa Daggett and Timothy Daggett after the deadline for submitting hearing requests.

The OCC received six petitions: two on July 12, 2013; and one each on July 26, 2013; August 19, 2013; February 28, 2014; and March 31, 2014. The petitions were all

substantively identical. Each petition requested a contested case hearing, but raised no issues. These petitioners will be referred to as **Group 1** throughout the remainder of the Response. Some individual commenters, above, also signed the petitions. However, the following individuals only signed the petition and made no other individual hearing request:

James W. Ackerman
James Alvarez
Jose Carlos Alvarez
Lori Alvarez
Miranda Anderson
Becky Arunyon
Scott Askew
David Bacque
B.G. Bailey
Dorothy Bailey
Cynthia Jean Bandemer
Ray Banks
Clayton Beard
Deborah Beard
Ray Michael Bernard
Suzanne Marie Bernard
Stacie Burci
Robert Burrows
Gulmira Butler
Herschel Butler
A.J. Caldwell
Peter Chady
Barbara Chase
Ann L. Cook
Kent Cook
Jennifer Crandell
Jack Curtis
Sharon Dahms
LaVonne Daugherty
Julia Dean
Alison Deep
Doyle Del Bosque
Peggy Dorsey
John D. Dotter
Robert D. Eaton
Peggy A. Epps
Ronald C. Epps
Vivian R. Estey
Terry Evard
Daniel Finnegan
David Gace
Gerald Gaff
Maria Godoy
Patricia Goldstein
Lonnie Gonzales
David Green
Mary Green
K.S. Gregg
Ron Gyorfi
Jeffrey Hansen
Brice Hawley
Signe Hawley
D. Kirk Hayes
Mary Ann Hearon
David Henning
Nancy Hiner
Steve Hiner
Patty Hoffman
Ashley Holmes
Vincent Holmes
Robert Horner
Austin Howard
Mary Howard
Logan Jack
Kandy S. Jarvis
Vonetta Berry Jenkins
Gunner Kenney
Jack Kenney
Mike Kenney
Virginia King
Oscar Koehler
Al Lapidus
Marla Lewis
Emily Louviere
Denise Mais
Jeff Mais
Bernard Marcantel
Helen K. Marcantel
Corinne McAlpine
Gregory McAlpine
Denice McCorquodale
Saskia Meadows
Ruben Mendoza
Patti Mikulan
John Mire
Olga Mire
Angela Mitchell
James Mitchell
Bill Miyoshi
Linda Miyoshi
Art Money
Krista Moody
Tristan Moody
Lori O'Brin
Anthony Paradiso
Susan Parker
Stacey Paulson
Jean M. Peszko
Patricia Kay Powell
Cheri Pressley
Lee Rader
John D. Rau
Young Reese
Annalee Rhoades
Leonard Rich
Chris Roberts
Felicia Roberts
Conrado L. Rodriguez
Veronica Rodriguez
Lisa Roth
Linda Sartorius
Sandy Sartorius
Jeff Seavey
Melody Seavey

David Smith
Ruby Smith
Bill Stephens
Sue Stephens
Charles Sterling
Robert C. Stites
Bill Thompson
Paul Wisnoski
Dorothy Yancey
Pat Yokubaitis
Craig Zimmerman
Derek Zimmerman
DonnaLee Zimmerman
Vanee Zimmerman

The OCC also received requests for reconsideration from Steven Baxter, Anita Cooper, Carole Henning, Charles Howard, Kenneth Proctor, Zhan Peng, and Friends of the Old Golf Course (Friends).

The Executive Director recommends that the Commission grant the hearing requests of Anita Cooper, Raymond Halyard, Charles Howard, Zhan Peng, Kenneth Proctor, and Tom Reed, and deny all other hearing requests.

II. Background

A. Description of the Facility

CLCWA applied for a major amendment to Permit No. WQ0010539001 to authorize the addition of two new outfalls. The current permit authorizes the disposal of treated domestic wastewater at a daily average flow not to exceed 10.0 million gallons per day (MGD) from Outfall 001. The proposed permit would authorize the discharge of treated domestic wastewater from Outfall 001 at an annual average flow not to exceed 10.0 MGD; from Outfall 002 at an annual average flow not to exceed 1.08 MGD; and from Outfall 003 at an annual average flow not to exceed 1.08 MGD. The proposed permit authorizes a combined annual average flow not to exceed 10.0 MGD from Outfalls 001, 002, and 003. The existing wastewater treatment facility serves the Clear Lake City service area.

The effluent limitations for Outfall 001, based on a 30-day average, are 5 mg/l Biochemical Oxygen Demand (BOD_5), 12 mg/l total suspended solids (TSS), 2 mg/l ammonia nitrogen (NH_3-N), 0.02 mg/l total copper, 0.08 mg/l total zinc, 4.0 mg/l dissolved oxygen (DO), and 35 Colony Forming Units (CFU) or Most Probable Number (MPN)/100 ml Enterococci. The effluent limitations for Outfalls 002 and 003, based on

a 30-day average, are 5 mg/l BOD_5, 12 mg/l total suspended solids TSS, 2 mg/l NH_3-N, 0.02 mg/l total copper, 0.08 mg/l total zinc, 4.0 mg/l DO, and 126 CFU or MPN/100 ml *E. coli*. The permittee shall utilize an Ultraviolet Light (UV) system for disinfection. During shut-down of the UV disinfection system for occasional maintenance or during periods of stormwater flow that exceed the 2-hour peak flow, the effluent shall be routed to the chlorine contact chamber and shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval by the Executive Director.

The treated effluent is discharged via Outfall 001 to Horsepen Bayou, then to Armand Bayou Tidal. Under the proposed permit, the treated effluent would also be discharged via Outfall 002 to a pond on the west side of El Dorado Boulevard, then to Harris County Flood Control District (HCFCD) ditch B104-03-00, then to Horsepen Bayou, then to Armand Bayou Tidal; and from Outfall 003 to a series of ponds on the east side of El Dorado Boulevard, then to HCFCD ditch B104-02-00, then to Horsepen Bayou, then to Armand Bayou Tidal in Segment No. 1113of the San Jacinto-Brazos Coastal Basin. The unclassified receiving water uses are high aquatic life use for Horsepen Bayou (tidal), HCFCD ditch B104-03-00 (tidal), and HCFCD ditch B104-02-00 (tidal); intermediate aquatic life use for a pond on the west side and a series of ponds on the east side of El Dorado Boulevard; and limited aquatic life use for HCFCD ditch B104-02-00 (above tidal). The designated uses for Segment No. 1113 are primary contact recreation and high aquatic life use.

The plant site is located at 14210 Middlebrook Drive in Houston, approximately one mile northeast of the intersection of Bay Area Boulevard and Space Center Boulevard, southeast of Horsepen Bayou and adjacent to the northernmost part of Lyndon B. Johnson Space Center in Harris County, Texas.

B. Procedural Background

The Application was received on February 26, 2013, and declared administratively complete on April 29, 2013. The Notice of Receipt of Application and Intent to Obtain Permit (NORI) was published on May 24, 2013, in the *Houston Chronicle,* and in Spanish on May 24, 2013, in *Rumbo,* Harris County, Texas. The Executive Director completed the technical review of the application on November 5, 2013, and prepared a draft permit. The combined Notice of Public Meeting and Notice of Application and Preliminary Decision (combined PM/NAPD) was published on April 17, 2014, in the *Houston Chronicle*, and in Spanish on April 27, 2014, in *La Voz de Houston*, in Harris County, Texas. The combined PM/NAPD was also published on April 24, 2014, in the *Bay Area Citizen* in Harris County, Texas. A public meeting was held on May 29, 2014, at the Clear Lake Recreation Center in Houston, Texas. In order to provide mailed notice and an opportunity to comment to additional landowners who were identified after the close of the original comment period, the Chief Clerk mailed a combined NORI/NAPD to the individuals on the updated adjacent landowners list on September 8, 2014, and the Executive Director extended the comment period for this application to October 8, 2014.

The public comment period for this application closed on October 8, 2014. The Executive Director's Response to Public Comment (RTC) was filed on February 27, 2015. The Executive Director's Final Decision Letter was mailed on March 6, 2015, and the period for filing a Request for Reconsideration or Contested Case Hearing ended on April 6, 2015. This application was administratively complete on or after September 1, 1999; therefore, this application is subject to the procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999.

III. Evaluation Process for Hearing Requests

House Bill 801 (HB 801) established statutory procedures for public participation in certain environmental permitting proceedings. For those applications declared administratively complete on or after September 1, 1999, it established new procedures for providing public notice and public comment, and for the Commission's consideration of hearing requests. The Commission implemented House Bill 801 by adopting procedural rules in 30 Texas Administrative Code (30 TAC) Chapters 39, 50, and 55. The Application was declared administratively complete on April 29, 2014; therefore it is subject to the procedural requirement of HB 801.

A. Response to Request

The Executive Director, the Public Interest Counsel, and the Applicant may each submit written responses to a hearing request. 30 TAC § 55.209(d).

Responses to hearing requests must specifically address:

a) whether the requestor is an affected person;
b) whether issues raised in the hearing request are disputed;
c) whether the dispute involves questions of fact or of law;
d) whether the issues were raised during the public comment period;
e) whether the hearing request is based on issues raised solely in a public comment withdrawn by the commenter in writing by filing a withdrawal letter with the chief clerk prior to the filing of the Executive Director's Response to Comment;
f) whether the issues are relevant and material to the decision on the application; and
g) a maximum expected duration for the contested case hearing.

30 TAC § 55.209(e).

B. Hearing Request Requirements

In order for the Commission to consider a hearing request, the Commission must first determine whether the request meets certain requirements. A hearing request must

be in writing, must be filed with the OCC within the time provided, and may not be based on an issue that was raised solely in a public comment withdrawn by the commenter in writing by filing a withdrawal letter with the chief clerk prior to the filing of the Executive Director's Response to Comment. 30 TAC § 55.201(c).

A hearing request must substantially comply with the following:

a) give the name, address, daytime telephone number, and, where possible, fax number of the person who files the request. If the request is made by a group or association, the request must identify one person by name, address, daytime telephone number, and, where possible fax number, who shall be responsible for receiving all official communications and documents for the group;
b) identify the person's personal justiciable interest affected by the application, including a brief, but specific, written statement explaining in plain language the requestor's location and distance relative to the proposed facility or activity that is the subject of the application and how and why the requestor believes he or she will be adversely affected by the proposed facility or activity in a matter not common to members of the general public;
c) request a contested case hearing;
d) list all relevant and material disputed issues of fact that were raised during the public comment period and that are the basis of the hearing request. To facilitate the commission's determination of the number and scope of issues to be referred to hearing, the requestor should, to the extent possible, specify any of the executive director's response to comments that the requestor disputes and the factual basis of the dispute and list any disputed issues of law or policy; and
e) provide any other information specified in the public notice of application.

30 TAC § 55.201(d).

C. "Affected Person" Status

In order to grant a contested case hearing, the Commission must determine that a requestor is an "affected person." Section 55.203 sets out who may be considered an affected person.

a) For any application, an affected person is one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application. An interest common to members of the general public does not qualify as a personal justiciable interest.

b) Except as provided by 30 TAC § 55.103, government entities, including local governments and public agencies, with authority under state law over issues raised by the application,

c) In determining whether a person is an affected person, all factors shall be considered, including, but not limited to, the following:

1) whether the interest claimed is one protected by the law under which the application will be considered;
2) distance restrictions or other limitations imposed by law on the affected interest;
3) whether a reasonable relationship exists between the interest claimed and the activity regulated;
4) likely impact of the regulated activity on the health and safety of the person, and on the use of property of the person;
5) likely impact of the regulated activity on the use of the impacted natural resource by the person; and
6) for governmental entities, their statutory authority over or interest in the issues relevant to the application.

30 TAC § 50.203.

A group or association may also request a contested case hearing. In order for a group or association to request a contested case hearing, the group or association must show that it meets the following requirements:

a) one or more members of the group or association would otherwise have standing to request a hearing in their own right;
b) the interests the group or association seeks to protect are germane to the organization's purpose; and
c) neither the claim asserted nor the relief requested requires the participation of the individual members in the case.

30 TAC § 55.205(a). In addition the Executive Director, Public Interest Counsel, or the Applicant may request that a group or association provide an explanation of how the group or association meets the above requirements. 30 TAC § 55.205(b).

D. Referral to the State Office of Administrative Hearings (SOAH)

When the Commission grants a request for a contested case hearing, they are required to issue an order specifying the number and scope of the issues to be referred to SOAH for a hearing. 30 TAC § 50.115(b). Subsection 50.115(c) sets out the test for determining whether an issue may be referred to SOAH. "The commission may not refer an issue to SOAH for a contested case hearing unless the commission determines that the issue: 1) involves a disputed question of fact; 2) was raised during the public comment period; and 3) is relevant and material to the decision on the application." 30 TAC § 50.115(c).

IV. Analysis of the Requests

The Executive Director has analyzed the hearing requests to determine whether they comply with Commission rules, who qualifies as an affected person, what issues may be referred for a contested hearing, and what is the appropriate length of the hearing.

A. Whether the Requesters Are Affected Persons

The Executive Director has reviewed the hearing requests and recommends finding that Anita Cooper, Raymond Halyard, Charles Howard, Zhan Peng, Kenneth

Proctor, and Tom Reed are affected persons. However, for the reasons cited below, the remaining requesters are either not likely to be affected by the proposed activity in a way not common to the general public, or did not meet the requirements for submitting a hearing request.

Unless otherwise specified, the following analysis assumes that the hearing requests substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d) by being timely submitted, in writing, and by providing: 1) the requestor's name, address, daytime phone number, 2) a request for a contested case hearing, 3) a personal justiciable interest, and 4) relevant and material disputed issues of fact.

1. Steven Baxter

Steven Baxter is not an affected person due to his distance from the proposed activity. Mr. Baxter noted that his property line is less than 100 feet from the proposed discharge route. In his hearing request, Mr. Baxter noted concerns related to the potential for bacteria in the effluent to impact his family and his use of his property due to his proximity to the discharge route. However, Mr. Baxter's property is significantly more than one mile downstream of the discharge route, making it unlikely that he will be impacted by the proposed activity in a way that is not common to members of the general public. Using the address provided by Mr. Baxter, the Executive Director has located Mr. Baxter's property, which is identified in **Attachment A**. Mr. Baxter's property is not identified on the Applicant's landowner map or list because his property is located more than one mile downstream of Outfall 003.

Steven Baxter's hearing requests substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Steven Baxter **is not an affected person** *under 30 TAC § 55.203.*

2. Anita Cooper

Anita Cooper stated a personal, justiciable interest in the Application and should be considered an affected person. In her hearing request, Ms. Cooper noted that her property line is less than 100 feet from the proposed discharge route, approximately 0.1 miles from Outfalls 002 and 003. In her hearing request, Ms. Cooper noted concerns related to the potential for bacteria in the effluent to impact her husband and the use of her property due to her proximity to the discharge route. Issues related to the impact of bacteria on human health are protected by the law under which the Application is being considered, and there is a reasonable relationship between the regulated activity and Ms. Cooper's concerns. Using the address provided by Ms. Cooper, the Executive Director has located Ms. Cooper's property, which is identified in **Attachment A**. Ms. Cooper's property is located downstream of proposed Outfall 003, near the discharge route. Ms. Cooper's property is also indicated on the Applicant's landowner map as property 62, on **Attachment B**. Anita Cooper's hearing request also substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Anita Cooper **is an affected person** *under 30 TAC § 55.203.*

3. Thomas Dorsch

Thomas Dorsch is not an affected person due to his distance from the proposed activity. In his hearing request, Mr. Dorsch noted that his property line is less than 100 feet from the proposed discharge route. In his hearing request, Mr. Dorsch noted concerns related to the potential for bacteria in the effluent to impact his health due to his proximity to the discharge route. However, Mr. Dorsch's property is significantly more than one mile downstream of the discharge route, making it unlikely that he will be impacted by the proposed activity in a way that is not common to members of the general public. Using the address provided by Mr. Dorsch, the Executive Director has located Mr. Dorsch's property, which is identified in **Attachment A**. Mr. Dorsch's property is not identified on the landowner map or list provided as **Attachment B** because his property is located more than one mile downstream of Outfall 003, and the

Applicant was not required to identify property owners more than one mile downstream.

Thomas Dorsch's hearing request substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Thomas Dorsch **is not an affected person** *under 30 TAC § 55.203.*

4. Victoria Dorsch

Victoria Dorsch is not an affected person due to her distance from the proposed activity. In her hearing request, Ms. Dorsch noted that her property line is less than 100 feet from the proposed discharge route. In her hearing request, Ms. Dorsch noted concerns related to the potential for bacteria in the effluent to impact her health due to her proximity to the discharge route. However, Ms. Dorsch's property is significantly more than one mile downstream of the discharge route, making it unlikely that she will be impacted by the proposed activity in a way that is not common to members of the general public. Using the address provided by Ms. Dorsch, the Executive Director has located her property, which is identified in **Attachment A**. Ms. Dorsch's property is not identified on the landowner map or list provided as **Attachment B** because her property is located more than one mile downstream of Outfall 003, and the Applicant was not required to identify property owners more than one mile downstream.

Victoria Dorsch's hearing request substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Victoria Dorsch **is not an affected person** *under 30 TAC § 55.203.*

5. Raymond Halyard

Raymond Halyard stated a personal, justiciable interest in the Application and should be considered an affected person. In his hearing request, Mr. Halyard noted that

his property is across the street and a few hundred feet from the proposed ponds in the discharge route. In his hearing request, Mr. Halyard noted concerns related to the potential for low dissolved oxygen levels to create odors in the discharged effluent. Issues related to dissolved oxygen levels are protected by the law under which the Application is being considered and there is a reasonable relationship between the regulated activity and Mr. Halyard's concerns. Using the address provided by Mr. Halyard, the Executive Director has located his property, which is identified in **Attachment A**. Mr. Halyard's property is located less than one mile downstream of proposed Outfall 003, near the discharge route. Raymond Halyard's hearing requests also substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Raymond Halyard **is an affected person** *under 30 TAC § 55.203.*

6. Daryl Hampton

Daryl Hampton should not be considered an affected person. In his hearing request, Mr. Hampton noted that his property is approximated 1,000 feet from the proposed ponds in the discharge route. In his hearing request, Mr. Hampton noted concerns related to the potential for bacteria in the effluent to impact his health due to his proximity to the discharge route. Issues related to the impact of bacteria on human health are protected by the law under which the Application is being considered. However, because of his distance to the discharge route, Mr. Hampton is not likely to be impacted by the discharge in a way that is uncommon to the general public. Using the address provided by Mr. Hampton, the Executive Director has located his property, which is identified in **Attachment A**. Mr. Hampton is separated by several residential blocks and numerous intervening properties between his property and the proposed discharge route.

Daryl Hampton's hearing request substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Daryl Hampton **is not an affected person** *under 30 TAC § 55.203.*

7. Carole Henning

Carole Henning did not identify a personal, justiciable interest in the Application and should not be considered an affected person. Ms. Henning's hearing request sought party status on behalf of the Friends of the Old Golf Course, and the repeated use of the word "we" indicates that Ms. Henning includes herself as a member of that group. However, while the request attempted to establish associational standing for the group by identifying members who have independent standing, Ms. Henning did not indicate how the facility would impact her in a way that is not common to the general public. Similarly, because she did not describe a personal justiciable interest in the proposed activity, Ms. Henning's hearing request did not substantially comply with the requirements of 30 TAC §§ 55.201(c) and (d)

Ms. Henning also should not be considered an affected person because of her distance from the proposed discharge. In her hearing request, Ms. Henning noted concerns related to the potential for bacteria in the effluent to impact residents living near the proposed outfalls. Issues related to the impact of bacteria on human health are protected by the law under which the Application is being considered. However, because of her distance to the discharge route, Ms. Henning is not likely to be impacted by the discharge in a way that is uncommon to the general public. Using the address provided by Ms. Henning, the Executive Director has located her property, which is identified in **Attachment A**. Ms. Henning's property is separated from the discharge route by several residential blocks, and numerous intervening properties lie between her property and the proposed discharge route.

The Executive Director recommends that the Commission find that Carole Henning **is not an affected person** *under 30 TAC § 55.203 and that her hearing request* **did not substantially comply** *with the requirements of 30 TAC § 55.201(c) and (d).*

8. Mandy Hess

Mandy Hess should not be considered an affected person. In her hearing request, Ms. Hess noted that her property is directly across the street and a hundred feet from the proposed facility. Ms. Hess raised general concerns related to human health and safety from the proposed project. However, using the address provided by Ms. Hess, her property is separated from the discharge route by a road and a row of properties. Because of her distance to the discharge route, Ms. Hess is not likely to be impacted by the discharge in a way that is uncommon to the general public. The Executive Director has located her property, which is identified in **Attachment A**. Ms. Hess's property is not identified on the Applicant's landowner list or map because her property is more than one mile downstream of the outfall location and is not adjacent to the discharge route.

Mandy Hess's hearing request substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Mandy Hess **is not an affected person** *under 30 TAC § 55.203.*

9. Charles Howard

Charles Howard stated a personal, justiciable interest in the Application and should be considered an affected person. In his hearing requests, Mr. Howard noted that his property abuts the old golf course where the effluent will be pumped, that his property line is less than 100 feet from the proposed discharge route, and that his house is within one quarter mile of the proposed outfalls. Mr. Howard raised concerns regarding impacts to human health and safety, degradation of existing uses of the receiving water, and impacts to human health from bacteria in the effluent. These issues are protected by the law under which the Application is being considered, and there is a reasonable relationship between the regulated activity and Mr. Howard's concerns. Using the address provided by Mr. Howard, the Executive Director has located his property, which is identified in **Attachment A**. Mr. Howard's property is located less

than one mile downstream of proposed Outfall 003, near the discharge route. Mr. Howard's property is also identified on the landowner map and list, provided as **Attachment B**, as property 74. Charles Howard's hearing requests also substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Charles Howard **is an affected person** *under 30 TAC § 55.203.*

10. Eilene Kenney

Eilene Kenney should not be considered an affected person. In her hearing request, Ms. Kenney noted that her property abuts the old golf course where the effluent will flow, and that her property line is within 100 feet from the proposed discharge route. Ms. Kenney raised concerns regarding impacts to human health from bacteria in the effluent. However, Ms. Kenney's property is significantly more than one mile downstream of the discharge route, making it less likely she will be impacted by the proposed activity in a way that is not common to members of the general public. Using the address provided by Ms. Kenney, the Executive Director has located her property, which is identified in **Attachment A**. Ms. Kenney's property is not identified on the landowner map and list, provided as **Attachment B**, since her property is farther than one mile downstream of the proposed outfall.

Eilene Kenney's hearing request substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Eilene Kenney **is not an affected person** *under 30 TAC § 55.203.*

11. Michael Merritt

Michael Merritt should not be considered an affected person. In his hearing request, Mr. Merritt noted that the proposed discharge route runs through the middle of "our community." Mr. Merritt raised concerns that members of the community were not

given sufficient notice of the proposed activities. However, using the address provided by Mr. Merritt, his property is separated from the discharge route by a road and a row of properties. Because of his distance to the discharge route, Mr. Merritt is not likely to be impacted by the discharge in a way that is uncommon to the general public. The Executive Director has located his property, which is identified in **Attachment A**. Mr. Merritt's property is not identified on the Applicant's landowner list or map because his property is more than one mile downstream of the outfall location and is not adjacent to the discharge route.

Michael Merritt's hearing request substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Michael Merritt **is not an affected person** *under 30 TAC § 55.203.*

12. Zhan Peng

Zhan Peng stated a personal, justiciable interest in the Application and should be considered an affected person. In his hearing request, Mr. Peng raised issues related to public health and property use that could be impacted by the proposed activity. These issues are protected by the law under which the Application is being considered, and there is a reasonable relationship between the regulated activity and Mr. Peng's concerns. While Mr. Peng did not describe his physical relation to the proposed activity, the Executive Director located Mr. Peng's property using the address provided, which is identified in **Attachment A**. Mr. Peng's property is located near the discharge route in close proximity to proposed Outfall 002. Judging by the address, Mr. Peng's property is identified on the landowner map and list, provided as **Attachment B**, as property 44. Mr. Peng's proximity to the outfall location and discharge route makes it more likely that he will be impacted by the proposed activity in a way that is uncommon to the general public. Zhan Peng's hearing request also substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Zhan Peng **is an affected person** *under 30 TAC § 55.203.*

13. Anthony Joseph Peszko

Anthony Peszko did not state a personal, justiciable interest because he did not identify a legal right, duty, privilege, power, or economic interest affected by the application. In his hearing request letter, Mr. Peszko only raised issues concerning the lack of public participation for the issuance of the bond related to the project. The approval of the bond issuance is separate and apart from the review of the TPDES permit. Issues related to the bond are not protected under the laws related to the TPDES permits, and are therefore not relevant or material. Furthermore, Mr. Peszko did not describe how he would be impacted by the proposed activity in a way not common to the general public. Similarly, because he did not state a personal, justiciable interest, Anthony Peszko's hearing request did not substantially comply with the requirements of 30 TAC §§ 55.201(c) and (d).

Furthermore, Mr. Peszko is not an affected person due to his distance from the proposed activity. The Executive Director located Mr. Peszko's property using the address provided, which is identified in **Attachment A**. Mr. Peszko's property is located more than a mile downstream of the propose discharge and appears to be separated from the discharge route by one or more intervening properties. Mr. Peszko's property is not identified on the landowner map and list because his property is more than one mile downstream of the proposed outfall.

The Executive Director recommends that the Commission find that Anthony Peszko **is not an affected person** *under 30 TAC § 55.203 and that* **Anthony Peszko's** *hearing request did not* **substantially comply** *with the requirements of 30 TAC § 55.201(c) and (d).*

14. Cindy Porterfield

Cindy Porterfield should not be considered an affected person. In her hearing request, Ms. Porterfield noted that her property abuts the old golf course where the effluent will flow. Ms. Porterfield raised concerns regarding impacts to human health from bacteria in the effluent. However, Ms. Porterfield's property is significantly more than one mile downstream of the discharge route, making it less likely that she will be impacted by the proposed activity in a way that is not common to members of the general public. Using the address provided by Ms. Porterfield, the Executive Director has located her property, which is identified in **Attachment A**. Ms. Porterfield's property is not identified on the landowner map and list, provided as **Attachment B**, since her property is farther than one mile downstream of the proposed outfall.

Cindy Porterfield's hearing request substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Cindy Porterfield **is not an affected person** *under 30 TAC § 55.203.*

15. Kenneth Proctor

Kenneth Proctor stated a personal, justiciable interest in the Application and should be considered an affected person. In his hearing requests, Mr. Proctor noted that his property abuts the old golf course where the effluent will be pumped, that his property line is approximately 130 feet from the proposed discharge route, and that his house is approximately 500 feet from the proposed outfalls. Mr. Proctor raised concerns regarding impacts to human health and safety and impacts to human health from bacteria in the effluent. These issues are protected by the law under which the Application is being considered, and there is a reasonable relationship between the regulated activity and Mr. Proctor's concerns. Using the address provided by Mr. Proctor, the Executive Director has located his property, which is identified in **Attachment A**. Mr. Proctor's property is located less than one mile downstream of proposed Outfall 003, near the discharge route. Mr. Proctor's property is also identified

on the landowner map and list, provided as **Attachment B**, as property 112. Kenneth Proctor's hearing requests also substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Kenneth Proctor **is an affected person** *under 30 TAC § 55.203.*

16. Tom Reed

Tom Reed stated a personal, justiciable interest in the Application and should be considered an affected person. In his hearing requests, Mr. Reed noted that his property abuts the old golf course where the effluent will be pumped and that his property line is less than 100 feet from the proposed discharge route. Mr. Reed raised concerns regarding impacts to human health and safety and impacts to human health from bacteria in the effluent. These issues are protected by the law under which the Application is being considered, and there is a reasonable relationship between the regulated activity and Mr. Reed's concerns. Using the address provided by Mr. Reed, the Executive Director has located his property, which is identified in **Attachment A**. Mr. Reed's property is located less than one mile downstream of proposed Outfall 003, near the discharge route. Mr. Reed's property is also identified on the landowner map and list, provided as **Attachment B**, as property 73. Tom Reed's hearing requests also substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

The Executive Director recommends that the Commission find that Tom Reed **is an affected person** *under 30 TAC § 55.203.*

17. Group 1

The signatories of the Group 1 petitions did not state a personal, justiciable interest in the Application and should not be considered to be affected persons based on the contents of the requests. The signatories provided their names and addresses, which are included in **Attachment A**. Several of the signatories reside within close proximity to the proposed discharge routes, as indicated. However, the petitions did not cite an

interest related to a legal right, duty, privilege, power, or economic interest affected by the application. The petitions merely requested a hearing and raised no issues.

Similarly, the hearing requests of Group 1 did not comply with the requirements of 30 TAC §§ 55.201(c) and (d) because the members did not express a personal, justiciable interest or list relevant issues. Group 1 substantially met the other requirements of 30 TAC §§ 55.201(c) and (d). However, the hearing requests failed to identify any relevant or material disputed issues of fact, or describe how the individual signatories would be impacted by the facility in a manner not common to the general public.

The individuals in Group 1, listed above, are only those signatories to the petitions that made no other individual request for a hearing. Several signatories to the petitions also submitted individual requests, but are assessed individually in this Response.

In addition, Suzanne Bernard requested that her name be removed from the petition that she signed in opposition to the project. Ms. Bernard's name appeared on the petition submitted on August 19, 2013, and was included in Group 1, above. Ms. Bernard's request to have her name removed from the petition was included in a comment letter received by the Chief Clerk on October 8, 2014.

The Executive Director recommends that the Commission find that the Group 1 petitioners **are not affected persons** *under 30 TAC § 55.203 and that* **Group 1's** *hearing requests* **did not substantially comply** *with the requirements of 30 TAC §55.201 (c) and (d).*

18. Friends of the Old Golf Course

The Friends of the Old Golf Course did not meet the requirements for associational standing because they did not state whether the interests they seek to protect are germane to the group's purpose. Carole Henning and Kenneth Proctor both submitted hearing requests on behalf of the Friends group. The most thorough request made on behalf of the Friends group was Carole Henning's April 2, 2015, letter. In her

letter, Ms. Henning stated that several members of the Friends group live within 0.2 mile of the proposed outfalls and directly adjacent to the proposed ponds. She included the names of Charles Howard, Kenneth Proctor, and Anita Cooper. As argued above, all three of these members, excluding Ms. Henning herself, are affected by the proposed activity. Therefore, the request by the Friends group complies with the requirement of 30 TAC § 55.205(a)(1) that at least one member of the group or association have standing in their own right.

However, neither Ms. Henning nor Kenneth Proctor described the purpose of the Friends group or why it was formed. Therefore it is not possible to determine whether the interests the Friends group wishes to protect are germane to that purpose, as is required by 30 TAC § 55.205(a)(2). The requests also do not indicate whether the participation of the individual group members is necessary for the claims asserted by the Friends group, as is required by 30 TAC § 55.205(a)(3).

The Friends of the Old Golf Course's hearing requests substantially complied with the requirements of 30 TAC §§ 55.201(c) and (d).

Finally, under 30 TAC § 55.201(d)(1), a group or association must identify one person who shall be responsible for receiving communications on behalf of the association. The hearing request of the Friends of the Old Golf Course was submitted by Carole Henning, whose contact information was provided.

Pursuant to 30 TAC § 55.205(b), the Executive Director recommends that the Commission find that the Friends of the Old Golf Course **did not comply with** *30 TAC §§ 55.205(a) and would request that the group provide an explanation as to how they meet those requirements.*

B. Analysis of the Issues

The Executive Director has analyzed the issues raised in accordance with the regulatory criteria. The issues discussed were raised during the public comment period and addressed in the Executive Director's Response to Public Comment (RTC), unless

otherwise noted. None of the issues were withdrawn. All identified issues in this response are considered disputed, unless otherwise noted.

1. Whether water in the state will be maintained to preclude adverse toxic effects on human health

Some requesters raised concerns that the effluent would have an impact on human health, that it would be carcinogenic, or that it would impact individuals with compromised immune systems. Under the Texas Surface Water Quality Standards (TSWQS), water in the state must be maintained to preclude adverse toxic effects on human health resulting from contact recreation. *See* 30 TAC § 307.6(b)(3). This issue was raised and addressed in the Executive Director's RTC, Comment 1. It involves a question of fact and it is relevant and material to the decision on this application.

The Executive Director concludes that this issue **is appropriate** *for referral to SOAH.*

2. Whether recreation uses will be maintained, as determined by criteria that indicate the potential presence of pathogens

Many requesters were concerned that the proposed effluent would contain bacteria, such as *Legionella*, that could have an impact on human health. Under the TSWQS, existing, designated, presumed, and attainable uses of aquatic recreation must be maintained, as determined by criteria that indicate the potential presence of pathogens. *See* 30 TAC § 307.4(j)(4). Under 30 TAC § 307.7(b), the TSWQS establish bacteria limits designed to indicate potential contamination. This issue was raised and addressed in the Executive Director's RTC, Comment 3. It involves a question of fact and it is relevant and material to the decision on this application.

The Executive Director concludes that this issue **is appropriate** *for referral to SOAH.*

3. Whether the effluent will be disinfected in a manner conducive to the protection of both public health and aquatic life

Related to the issue above, some requesters raised concerns that the Applicant proposes to switch methods of disinfection under certain circumstances outlined in the proposed permit. Under Chapter 309 of the Texas Administrative Code, domestic wastewater that discharges into water in the state must be disinfected in a manner conducive to the protection of both public health and aquatic life. *See* 30 TAC § 309.3(g)(1). This issue was raised and addressed in the Executive Director's RTC, Comment 3. It involves a question of fact and it is relevant and material to the decision on this application.

The Executive Director concludes that this issue **is appropriate** *for referral to SOAH.*

4. Whether the proposed discharge will be protective of human health if the receiving water is effluent dominated

Some requesters were concerned that it is not typical for a permit to authorize discharges into a water body that is or will be comprised mostly of effluent. Under the TSWQS, criteria apply at low flow conditions. This issue was raised and addressed in the Executive Director's RTC, Comment 9. It involves a question of fact and it is relevant and material to the decision on this application.

The Executive Director concludes that this issue **is appropriate** *for referral to SOAH.*

5. Whether the proposed discharge will maintain aquatic life uses

A requester raised a concern that the effluent would not maintain designated aquatic life uses of the receiving water. Under the TSWQS, dissolved oxygen concentrations must be sufficient to support existing, designated, presumed, and attainable aquatic life uses. *See* 30 TAC § 307.4(h). This issue was raised and addressed

in the Executive Director's RTC, Comment 7. It involves a question of fact and it is relevant and material to the decision on this application.

The Executive Director concludes that this issue **is appropriate** *for referral to SOAH.*

6. Whether the proposed discharge will degrade existing uses of the receiving water

Some requesters raised a concern that the proposed discharge will degrade existing uses of the receiving water. Under the TSWQS, existing uses and water quality sufficient to protect those existing uses must be maintained. *See* 30 TAC § 307.5(b). This issue was raised and addressed in the Executive Director's RTC, Comment 2. It involves a question of fact and it is relevant and material to the decision on this application.

The Executive Director concludes that this issue **is appropriate** *for referral to SOAH.*

7. Whether the proposed discharge will cause excessive growth of aquatic vegetation

Some requesters raised the issue that the proposed activity will create pools of stagnant water and algae blooms. Under the TSWQS, nutrients from permitted discharges or other controllable sources must not cause excessive growth of aquatic vegetation that impairs an existing, designated, presumed, or attainable use. *See* 30 TAC § 307.4(e). This issue was raised and addressed in the Executive Director's RTC, Comment 12. It involves a question of fact and it is relevant and material to the decision on this application.

The Executive Director concludes that this issue **is appropriate** *for referral to SOAH.*

8. Whether the proposed discharge will cause odors

Similar to the issue above, some commenters were concerned that stagnant water would create odors, or were concerned about the odors associated with the discharge. Under the TSWQS, concentrations of taste and odor producing substances must not result in offensive odors arising from the waters, or otherwise interfere with the reasonable use of the water in the state. *See* 30 TAC § 307.4(b)(1). This issue was raised and addressed in the Executive Director's RTC, Comment 12. It involves a question of fact and it is relevant and material to the decision on this application.

The Executive Director concludes that this issue **is appropriate** *for referral to SOAH.*

9. Whether the Applicant has provided justification for the proposed discharge

One requester raised an issue that there is no justification for the proposed outfalls. Under Texas Water Code § 26.0282, in considering the issuance, amendment, or renewal of a permit to discharge waste, the commission may deny or alter the terms and conditions of the proposed permit based on consideration of need, including the expected volume of influent. This issue was raised and addressed in the Executive Director's RTC, Comment 17. It involves a question of fact and it is relevant and material to the decision on this application.

The Executive Director concludes that this issue **is appropriate** *for referral to SOAH.*

10. Whether the discharge route has been properly characterized

Some commenters inquired whether the receiving water had been properly characterized, such as whether the receiving water is a pond or a ditch, or whether the tidal boundary was properly determined. Under the TSWQS, the determination of uses and the implementation of standards depend on whether the receiving water is perennial, intermittent, or intermittent with perennial pools. This issue was raised and

addressed in the Executive Director's RTC, Comment 10. It involves a question of fact and it is relevant and material to the decision on this application.

The Executive Director concludes that this issue **is appropriate** *for referral to SOAH.*

11. Whether the Application is premature

One requester was concerned that the proposed permit is premature because the on-channel ponds have not yet been constructed. It is within the discretion of the Commission to determine whether a speculative permit may be issued, but this is a matter of law and policy, and not a question of fact. This issue was raised and addressed in the Executive Director's RTC, Comment 17. It involves a question of law or policy.

The Executive Director concludes that this issue is **not appropriate** *for referral to SOAH.*

12. Whether the downstream landowners were properly notified

One requester was concerned that downstream landowners were not properly notified. In response to this comment, the Executive Director assessed the landowner maps and lists provided, and agreed that the original notice was not provide in accordance with TCEQ policies. However, the Executive Director addressed this concern by requesting updated landowner maps and lists. Additional notice was given to the updated landowners, and the comment period was extended. To the extent that the requester continues to disagree that notice was properly given, that position is based on an interpretation that is in contradiction to established Agency policy (i.e., that all individuals within a ½ mile radius of an outfall require mailed notice, and not just those individuals within ½ mile that are also adjacent to the discharge route). This issue was raised and addressed in the Executive Director's RTC, Comments 34 and 39. It involves a question of law or policy and is not appropriate for referral.

The Executive Director concludes that this issue is **not appropriate** *for referral to SOAH.*

13. Whether the proposed discharge will harbor mosquitos or other pests

Several requesters raised a concern that the proposed activity would create areas of water that would harbor mosquitos and attract other pests, threatening the health of local residents. This issue was raised and addressed in the Executive Director's RTC, Comment 15. As explained in the Executive Director's response, the issue involves a question of fact that is outside the jurisdiction of the TCEQ in the review of a TPDES application.

The Executive Director concludes that this issue is **not appropriate** *for referral to SOAH.*

14. Whether the Application includes sufficient measures to control public access to proposed Outfalls 002 and 003

This issue was raised and addressed in the Executive Director's RTC, Comment 5. As explained in the Executive Director's response, the issue involves a question of fact that is outside the jurisdiction of the TCEQ in the review of a TPDES application.

The Executive Director concludes that this issue is **not appropriate** *for referral to SOAH.*

15. Whether the proposed discharge will cause flooding

Several requesters raised a concern that the proposed activity would cause flooding, and that flood insurance premiums would rise. This issue was raised and addressed in the Executive Director's RTC, Comment 16. As explained in the Executive Director's response, the issue involves a question of fact that is outside the jurisdiction of the TCEQ in the review of a TPDES application.

The Executive Director concludes that this issue is **not appropriate** *for referral to SOAH.*

16. Whether the issuance of the bond will raise taxes on homeowners in the district

Some requesters were concerned that the bond that was issued to fund the project would increase taxes on homeowners. This issue was raised and addressed in the Executive Director's RTC, Comment 26. As explained in the Executive Director's response, the issue involves a question of fact that is outside the jurisdiction of the TCEQ in the review of a TPDES application.

The Executive Director concludes that this issue is **not appropriate** *for referral to SOAH.*

17. Whether proper notice was given for the bond issuance

One requester was concerned that proper notice of the bond was not given. This issue was raised and addressed in the Executive Director's RTC, Comment 26. As explained in the Executive Director's response, the issue involves a question of fact that is outside the jurisdiction of the TCEQ in the review of a TPDES application.

The Executive Director concludes that this issue is **not appropriate** *for referral to SOAH.*

18. Whether the project financed by the bond is feasible

Some requesters were concerned that the project financed by the bond is not feasible. This issue was raised and addressed in the Executive Director's RTC, Comment 26. As explained in the Executive Director's response, the issue involves a question of fact that is outside the jurisdiction of the TCEQ in the review of a TPDES application.

The Executive Director concludes that this issue is **not appropriate** *for referral to SOAH.*

19. Whether the proposed activity will impact property values or the local economy

Numerous requesters raised a concern that the proposed activity would lower their property values, raise their taxes, or impact their flood insurance premiums. This issue was raised and addressed in the Executive Director's RTC, Comment 37. As explained in the Executive Director's response, the issue involves a question of fact that is outside the jurisdiction of the TCEQ in the review of a TPDES application.

The Executive Director concludes that this issue is **not appropriate** *for referral to SOAH.*

20. Whether the construction of the proposed receiving water ponds will cause a nuisance

Several requesters raised the concern that the construction of the receiving water impoundments would create nuisance conditions. This issue was raised and addressed in the Executive Director's RTC, Comment 23. As explained in the Executive Director's response, the issue involves a question of fact that is outside the jurisdiction of the TCEQ in the review of a TPDES application.

The Executive Director concludes that this issue is **not appropriate** *for referral to SOAH.*

21. Whether the Applicant has sufficient legal rights to use the proposed discharge route

Some requesters raised a concern that the Applicant has not yet procured sufficient legal rights to perform certain construction activities. This issue was raised and addressed in the Executive Director's RTC, Comment 21. As explained in the Executive Director's response, the issue involves a question of fact that is outside the jurisdiction of the TCEQ in the review of a TPDES application. Under 30 TAC § 305.122(d), the issuance of a permit does not authorize any injury to persons or

property or an invasion of other property rights, or any infringement of state or local law or regulations.

The Executive Director concludes that this issue is **not appropriate** *for referral to SOAH.*

22. Whether the proposed discharge will impact groundwater

This issue was not raised during the comment period and should not be referred for consideration at a contested case hearing. Charles Howard raised a concern on page five of his March 23, 2015, hearing request that the proposed excavated discharge route will be below the water table, allowing effluent to intermingle with underground water. This issue was raised after the end of the comment period on October 8, 2014, and was therefore not specifically addressed in the Executive Director's RTC. Mr. Howard made a comparable comment on page 12 of his May 29, 2014, letter where he commented that the proposed ponds would have to be excavated below the water table. The Executive Director responded to this comment in the RTC, Comment 23; however, Mr. Howard's May 29, 2014, comment was made in the context of a lengthy analysis of the proposed detention ponds, which are not a part of the Application, and Mr. Howard did not raise a concern that the effluent would impact groundwater. Pursuant to 30 TAC § 55.201(d)(4), a hearing request must list all relevant and material disputed issues of fact that were raised during the public comment period. Also, under 30 TAC § 55.211(b)(3)(A), Commission action on referring issues to SOAH is predicated upon those issues being raised during the comment period.

The Executive Director concludes that this issue is **not appropriate** *for referral to SOAH.*

V. Duration of the Contested Case Hearing

Should the Commission decide to refer this case to SOAH, the Executive Director recommends a nine-month duration for a contested case hearing from the date of the preliminary hearing to the presentation of a proposal for decision.

VI. Requests for Reconsideration

Several individuals filed requests for reconsideration, including Steven Baxter, Anita Cooper, Carole Henning, Charles Howard, Zhan Peng, and Kenneth Proctor. The issues raised in these requests were also raised in timely hearing requests and were analyzed above. These issues were raised during the comment period and addressed in the Executive Director's RTC. For those issues that are relevant and material issues of fact, the Executive Director also recommends referral to SOAH of those issues for full consideration during a contested case hearing. The proposed permit complies with all applicable statutes and regulations, and the requesters did not provide any additional information that would cause the Executive Director to alter his recommendation to issue the permit. Consequently, the Executive Director respectfully recommends denial of the requests for reconsideration.

VII. Executive Director's Recommendation

The Executive Director recommends the following actions by the Commission:

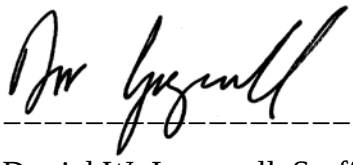
1) Grant the hearing requests of Anita Cooper, Raymond Halyard, Charles Howard, Zhan Peng, Kenneth Proctor, and Tom Reed.
2) Deny the hearing requests of Steven Baxter, Melissa Daggett, Timothy Daggett, Thomas Dorsch, Victoria Dorsch, Daryl Hampton, Carole Henning, Mandy Hess, Eilene Kenney, Michael Merritt, Anthony Peszko, Cindy Porterfield, the Friends of the Old Golf Course, and the members identified as Group 1, above.
3) Refer issues 1 through 10 and deny issues 11 through 22.
4) Deny the requests for reconsideration.
5) Grant a contested case hearing with a nine-month duration.

Respectfully submitted,

Texas Commission on Environmental Quality

Richard A. Hyde, P.E.
Executive Director

Robert Martinez, Director
Environmental Law Division



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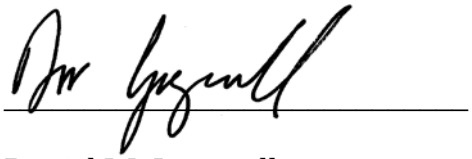
REPRESENTING THE EXECUTIVE
DIRECTOR OF THE TEXAS COMMISSION
ON ENVIRONMENTAL QUALITY

CERTIFICATE OF SERVICE

I certify that on June 8, 2015, the original and seven copies of the "Executive Director's Response to Hearing Request" for the major amendment to Clear Lake City Water Authority's TPDES permit number WQ0010539001, were filed with the TCEQ's Office of the Chief Clerk, and a copy was served to all persons listed on the attached mailing list via hand delivery, facsimile transmission, inter-agency mail, electronic submittal, or by deposit in the U.S. Mail.



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See attached list.

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MRS SUZANNE MARIE BERNARD
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KENT COOK
15127 DIANA LN
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1631 WAVECREST LN
HOUSTON TX 77062-5429

JACK CURTIS
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ALISON DEEP
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DOYLE DEL BOSQUE
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THOMAS DORSCH
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HOUSTON TX 77062-6219

DR. VICTORIA DORSCH
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PEGGY DORSEY
2319 RAMADA DR
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RONALD C EPPS
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MARY GREEN
1609 BEACHCOMBER LN
HOUSTON TX 77062-5408

K S GREGG
1310 EL DORADO BLVD
HOUSTON TX 77062-3403

RON GYORFI
15115 DIANA LN
HOUSTON TX 77062-2801

RAYMOND HALYARD
16204 DIANA LN APT 318A
HOUSTON TX 77062-5327

DARYL HAMPTON
826 LOCHNELL DR
HOUSTON TX 77062-2615

JEFFREY HANSEN
16415 BUCCANEER LN APT 4011D
HOUSTON TX 77062-5703

BRICE HAWLEY
15014 TORRY PINES RD
HOUSTON TX 77062-2903

SIGNE HAWLEY
15014 TORRY PINES RD
HOUSTON TX 77062-2903

D KIRK HAYES
822 PRAIRIE BROOK CT
HOUSTON TX 77062-2198

MARY ANN HEARON
1814 PEACH BROOK CT
HOUSTON TX 77062-2332

CAROLE L HENNING
15718 TORRY PINES RD
HOUSTON TX 77062-4512

CAROLE HENNING
2006 SEAKALE LN
HOUSTON TX 77062-6118

DAVID HENNING
2006 SEAKALE LN
HOUSTON TX 77062-6118

MANDY HESS
1638 BEACHCOMBER LN
HOUSTON TX 77062-5409

NANCY HINER
15026 SAINT CLOUD DR
HOUSTON TX 77062-2826

STEVE HINER
15026 SAINT CLOUD DR
HOUSTON TX 77062-2826

PATTY HOFFMAN
15910 TORRY PINES RD
HOUSTON TX 77062-5422

ASHLEY HOLMES
14931 SAINT CLOUD DR
HOUSTON TX 77062-2823

VINCENT HOLMES
14931 SAINT CLOUD DR
HOUSTON TX 77062-2823

ROBERT HORNER
2011 RAMADA DR
HOUSTON TX 77062-6112

AUSTIN HOWARD
1910 MERMAID LN
HOUSTON TX 77062-6104

CHARLES E HOWARD
16003 DIANA LN
HOUSTON TX 77062-4406

MARY HOWARD
16003 DIANA LN
HOUSTON TX 77062-4406

LOGAN JACK
15519 DIANA LN
HOUSTON TX 77062-4013

KANDY S JARVIS
1419 SEAGATE LN
HOUSTON TX 77062-4505

VONETTA BERRY JENKINS
15711 DIANA LN
HOUSTON TX 77062-4431

EILENE KENNEY
1719 NEPTUNE LN
HOUSTON TX 77062-6107

GUNNER KENNEY
1719 NEPTUNE LN
HOUSTON TX 77062-6107

JACK KENNEY
1719 NEPTUNE LN
HOUSTON TX 77062-6107

MIKE KENNEY
1719 NEPTUNE LN
HOUSTON TX 77062-6107

VIRGINIA KING
1130 MONTOUR DR
HOUSTON TX 77062-2725

OSCAR KOEHLER
1911 SEAKALE LN
HOUSTON TX 77062-6115

AL LAPIDUS
1810 PEACH BROOK CT
HOUSTON TX 77062-2332

MARLA LEWIS
723 BUOY RD
HOUSTON TX 77062-4205

EMILY LOUVIERE
1914 FAIRWIND DR
HOUSTON TX 77062-5435

DENISE MAIS
15131 DIANA LN
HOUSTON TX 77062-2801

JEFF MAIS
15131 DIANA LN
HOUSTON TX 77062-2801

BERNARD MARCANTEL
1715 GUNWALE RD
HOUSTON TX 77062-4539

HELEN K MARCANTEL
1715 GUNWALE RD
HOUSTON TX 77062-4539

CORINNE MCALPINE
1631 BEACHCOMBER LN
HOUSTON TX 77062-5408

GREGORY MCALPINE
1631 BEACHCOMBER LN
HOUSTON TX 77062-5408

DENICE MCCORQUODALE
2019 BONANZA RD
HOUSTON TX 77062-6102

SASKIA MEADOWS
2010 REDWAY LN
HOUSTON TX 77062-6017

RUBEN MENDOZA
16115 SEA LINER DR
HOUSTON TX 77062-5108

MICHAEL MERRITT
1638 BEACHCOMBER LN
HOUSTON TX 77062-5409

PATTI MIKULAN
15823 DIANA LN
HOUSTON TX 77062-4433

JOHN MIRE
1619 BEACHCOMBER LN
HOUSTON TX 77062-5408

OLGA MIRE
1619 BEACHCOMBER LN
HOUSTON TX 77062-5408

ANGELA MITCHELL
2006 FAIRWIND DR
HOUSTON TX 77062-4514

JAMES MITCHELL
15919 DIANA LN
HOUSTON TX 77062-4404

BILL MIYOSHI
4403 REGAL PINE TRL
HOUSTON TX 77059-3283

LINDA MIYOSHI
4403 REGAL PINE TRL
HOUSTON TX 77059-3283

ART MONEY
1622 BEACHCOMBER LN
HOUSTON TX 77062-5409

KRISTA MOODY
1625 BEACHCOMBER LN
HOUSTON TX 77062-5408

TRISTAN MOODY
1625 BEACHCOMBER LN
HOUSTON TX 77062-5408

LORI O'BRIN
16005 DIANA LN
HOUSTON TX 77062-4406

ANTHONY PARADISO
715 RESEDA DR
HOUSTON TX 77062-5026

SUSAN PARKER
1702 GUNWALE RD
HOUSTON TX 77062-4540

STACEY PAULSON
1837 EL DORADO BLVD
HOUSTON TX 77062-3601

ZHAN X PENG
15519 DIANA LN
HOUSTON TX 77062-4013

MR ANTHONY JOSEPH PESZKO
1637 BEACHCOMBER LN
HOUSTON TX 77062-5408

JEAN M PESZKO
1637 BEACHCOMBER LN
HOUSTON TX 77062-5408

CINDY PORTERFIELD
1927 SEAKALE LN
HOUSTON TX 77062-6115

PATRICIA KAY POWELL
1811 RESEDA DR
HOUSTON TX 77062-6018

CHERI PRESSLEY
2002 SEAKALE LN
HOUSTON TX 77062-6118

KENNETH PROCTOR
15718 TORRY PINES RD
HOUSTON TX 77062-4512

LEE RADER
1907 MERMAID LN
HOUSTON TX 77062-6104

JOHN D RAU
15015 SAINT CLOUD DR
HOUSTON TX 77062-2825

TOM REED
15923 DIANA LN
HOUSTON TX 77062-4404

YOUNG REESE
2018 FAIRWIND DR
HOUSTON TX 77062-4514

ANNALEE RHOADES
1922 FAIRWIND DR
HOUSTON TX 77062-5435

LEONARD RICH
1943 RAMADA DR
HOUSTON TX 77062-6111

CHRIS ROBERTS
1646 SEAGATE LN
HOUSTON TX 77062-4510

FELICIA ROBERTS
1646 SEAGATE LN
HOUSTON TX 77062-4510

CONRADO L RODRIGUEZ
15715 DIANA LN
HOUSTON TX 77062-4431

VERONICA RODRIGUEZ
15715 DIANA LN
HOUSTON TX 77062-4431

LISA ROTH
15719 BUCCANEER LN
HOUSTON TX 77062-4420

LINDA SARTORIUS
1650 NEPTUNE LN
HOUSTON TX 77062-4516

SANDY SARTORIUS
1610 BEACHCOMBER LN
HOUSTON TX 77062-5409

JEFF SEAVEY
1823 PEACH BROOK CT
HOUSTON TX 77062-2332

MELODY SEAVEY
1823 PEACH BROOK CT
HOUSTON TX 77062-2332

DAVID & RUBY SMITH
15538 TORRY PINES RD
HOUSTON TX 77062-3420

BILL STEPHENS
14715 EVERGREEN RIDGE WAY
HOUSTON TX 77062-2333

SUE STEPHENS
14715 EVERGREEN RIDGE WAY
HOUSTON TX 77062-2333

CHARLES STERLING
15803 DIANA LN
HOUSTON TX 77062-4433

ROBERT C STITES
1306 EL DORADO BLVD
HOUSTON TX 77062-3403

BILL THOMPSON
1918 FAIRWIND DR
HOUSTON TX 77062-5435

PAUL WISNOSKI
15908 SEAHORSE DR
HOUSTON TX 77062-6224

DOROTHY YANCEY
2346 FAIRWIND DR
HOUSTON TX 77062-6228

PAT YOKUBAITIS
2333 RAMADA DR
HOUSTON TX 77062-6221

CRAIG ZIMMERMAN
1626 BEACHCOMBER LN
HOUSTON TX 77062-5409

DEREK ZIMMERMAN
1626 BEACHCOMBER LN
HOUSTON TX 77062-5409

DONNALEE ZIMMERMAN
1626 BEACHCOMBER LN
HOUSTON TX 77062-5409

VANEE ZIMMERMAN
1626 BEACHCOMBER LN
HOUSTON TX 77062-5409

PUBLIC OFFICIALS - INTERESTED PERSON(S)

THE HONORABLE JOHN E DAVIS
TEXAS HOUSE OF REPRESENTATIVES
PO BOX 2910
AUSTIN TX 78768-2910

INTERESTED PERSON(S)

MR JOSE CARLOS ALVAREZ, JR
15726 TORRY PINES RD
HOUSTON TX 77062-4512

MR BILLY BALLARD
1119 FESTIVAL DR
HOUSTON TX 77062-4403

LEIGH BAXTER
2002 FAIRWIND DR
HOUSTON TX 77062-4514

HEATHER BIBBY
1614 RESEDA DR
HOUSTON TX 77062-5403

JOSEPH BIBBY
1614 RESEDA DR
HOUSTON TX 77062-5403

RON BIMSLAGER
15174 DIANA LN
HOUSTON TX 77062-2802

MS YVETTE BLANCHARD
15815 DIANA LN
HOUSTON TX 77062-4433

KARLA BOWLING
15018 SAINT CLOUD DR
HOUSTON TX 77062-2826

JOHN BRANCH
15846 SCENIC VIEW DR
HOUSTON TX 77062-4777

MR DAVID R BREMER
1915 SEAKALE LN
HOUSTON TX 77062-6115

KEN BROG
1702 SILVERPINES RD
HOUSTON TX 77062-6023

ALLEN BROWN
1703 RAMADA DR
HOUSTON TX 77062-6013

JULIE B CARTER
15543 PENSGATE ST
HOUSTON TX 77062-4024

ANITA COOPER & CHARLES STERLING
15803 DIANA LN
HOUSTON TX 77062-4433

CHARLES DAVIDSON
1911 HUNTRESS LN
HOUSTON TX 77062-6009

MR DOYLTON DAVIS
1706 FAIRWIND DR
HOUSTON TX 77062-5433

ELIZABETH DEL BOSQUE
1302 EL DORADO BLVD
HOUSTON TX 77062-3403

MELISSA & TIMOTHY DAGGETT
15111 DIANA LN
HOUSTON TX 77062-2801

BEVERLY & JACK DEMOSS
1654 NEPTUNE LN
HOUSTON TX 77062-4516

MS MARLYS P DENISON MD & TP LLC
1906 CARRIAGE BROOK WAY
HOUSTON TX 77062-4787

PETER DIMITRIJEVIC
1314 EL DORADO BLVD
HOUSTON TX 77062-3403

BEVERLY DORRINGTON
16707 IVY GROVE DR
HOUSTON TX 77058-2210

JAYNE DOWE
16665 SPACE CENTER BLVD
HOUSTON TX 77058-2253

MARIANNE DYSON
15443 RUNSWICK DR
HOUSTON TX 77062-3310

MARY CAROL EDWARDS
1250 BAY AREA BLVD STE C
HOUSTON TX 77058-2545

DAVID EICHBLATT
2106 HILLSIDE OAK LN
HOUSTON TX 77062-3673

JOHN ELLOR
4523 BEACON HILL DR
SEABROOK TX 77586-5503

JOE EVANS
14930 SAINT CLOUD DR
HOUSTON TX 77062-2824

GENE FISSELER 15906
TURTLE BAY DR
HOUSTON TX 77062-4757

EDRINA FITTING
15815 SCENIC VIEW DR
HOUSTON TX 77062-4723

BETTY FLANDERS
16007 FATHOM LN
HOUSTON TX 77062-4439

JUNE GLISAN
15322 BAYBROOK DR
HOUSTON TX 77062-3408

DEBRA GOODE
3827 PARTRIDGEBERRY CT
HOUSTON TX 77059-4067

MS KAREN GREGORY
16823 BURWOOD WAY
HOUSTON TX 77058-2310

WAYNE HALE
1630 SEAGATE LN
HOUSTON TX 77062-4510

JERRY HAMBY
14114 EL CAMINO REAL
HOUSTON TX 77062-8036

SUSAN HAMBY
14114 EL CAMINO REAL
HOUSTON TX 77062-8036

THOMAS HARRINGTON
18314 HEREFORD LN
HOUSTON TX 77058-3436

AMANDA HIGGINS
14327 SHANNON RIDGE RD
HOUSTON TX 77062-2047

GUS HOMANN
874 SEAMASTER DR
HOUSTON TX 77062-5104

MARION HULEN
15019 PENN HILLS LN
HOUSTON TX 77062-2821

DEBRA & HAYDN HUTSON
835 SEACLIFF DR
HOUSTON TX 77062-5101

JOHN S JACOB
1250 BAY AREA BLVD STE C
HOUSTON TX 77058-2545

GORDON G JOHNSON
2010 FAIRWIND DR
HOUSTON TX 77062-4514

MS NANCY JOHNSON
2010 FAIRWIND DR
HOUSTON TX 77062-4514

NINA JOHNSTON
1402 REDWAY LN
HOUSTON TX 77062-5411

BOB & FRAN JONES
16610 CLIFFROSE LN
HOUSTON TX 77062-5906

MR ROBERT JONES
16610 CLIFFROSE LN
HOUSTON TX 77062-5906

TOM KARTRUDE
ARMAND BAYOU NATURE CENTER
PO BOX 58828
HOUSTON TX 77258-8828

JOHN M KELLER
1710 FAIRWIND DR
HOUSTON TX 77062-5433

GUNNER & MICHAEL KENNEY
1719 NEPTUNE LN
HOUSTON TX 77062-6107

ELLEN GOODRICH KING
15818 TORRY PINES RD
HOUSTON TX 77062-4513

KIMBERLY KOCHNER
2014 FAIRWIND DR
HOUSTON TX 77062-4514

NOEL LAMPAZZI
1215 EL DORADO BLVD
HOUSTON TX 77062-3401

JANE MALIN
1610 WAVECREST LN
HOUSTON TX 77062-5430

JOSEPH MALOY
15534 TORRY PINES RD
HOUSTON TX 77062-3420

MR MANNY MANNY MANNY
1902 FAIRWIND DR
HOUSTON TX 77062-5435

BERNARD & HELEN K MARCANTEL
1715 GUNWALE RD
HOUSTON TX 77062-4539

DAVID MCCORQUODALE
2019 BONANZA RD
HOUSTON TX 77062-6102

MR JAMES C MCLANE, III
1702 FAIRWIND DR
HOUSTON TX 77062-5433

LARRY & MINDY MEEKER
1815 LINFIELD WAY
HOUSTON TX 77058-2250

MARCELLA MENDOZA
15842 SEAHORSE DR
HOUSTON TX 77062-6222

JUAN F MORENO
15226 TORRY PINES RD
HOUSTON TX 77062-3525

PAUL J MORRIS
14922 SUN HARBOR DR
HOUSTON TX 77062-2828

CLAIRE MULES
1907 RESEDA DR
HOUSTON TX 77062-6001

MICHAEL D NEWTON
15207 DIANA LN
HOUSTON TX 77062-2713

DOUGLAS PETERSON
2118 CHERRYTREE RIDGE LN
HOUSTON TX 77062-3651

MR THOMAS F PIOTROWSKI
1906 CARRIAGE BROOK WAY
HOUSTON TX 77062-4787

LONNIE RATER
16204 DIANA LN APT 326A
HOUSTON TX 77062-5328

CHRIS & FELICIA ROBERTS
1646 SEAGATE LN
HOUSTON TX 77062-4510

MR WILLIAM STANLEY RODNEY, JR
15523 TORRY PINES RD
HOUSTON TX 77062-3419

BILL ROSENBAUM
2925 BRIARPARK DR
HOUSTON TX 77042-3720

CARL & MARY ANN SCHATZ
16202 SHADY ELMS DR
HOUSTON TX 77059-5320

BRIAN SCHROCK
1302 EL DORADO BLVD
HOUSTON TX 77062-3403

BILL SCHWRINIR
1400 LOUISIANA ST STE 1400
HOUSTON TX 77002-7306

KAREN SHERRILL SIMIEN PROPERTIES
1035 CLEAR LAKE CITY BLVD
HOUSTON TX 77062-8101

MATTHEW SINGER
GALVESTON BAY FOUNDATION
17330 HIGHWAY 3
WEBSTER TX 77598-4133

RONI SKIRVIN
15910 PARKSLEY DR
HOUSTON TX 77059-4631

ADAM SOCKI
750 SEAFOAM RD
HOUSTON TX 77062-5034

RICK SOCKI
750 SEAFOAM RD
HOUSTON TX 77062-5034

PAIGE SOMMER
1114 DUNHAVEN CT
HOUSTON TX 77062-2229

RICH SOMMER
1114 DUNHAVEN CT
HOUSTON TX 77062-2229

GARY K STENERSON
1707 NEPTUNE LN
HOUSTON TX 77062-6107

GARY K & STACEY STENERSON
1707 NEPTUNE LN
HOUSTON TX 77062-6107

BOB STOKES
GALVESTON BAY FOUNDATION
17330 HIGHWAY 3
WEBSTER TX 77598-4133

DR. ART STRETTON
270 EL DORADO BLVD APT 908
WEBSTER TX 77598-2255

MR FRED SWERDLIN
815 BRADWELL DR
HOUSTON TX 77062-3301

WILLIAM LLOYD SWINGLE
16007 DIANA LN
HOUSTON TX 77062-4406

CANDY TORRES
1239 BAY AREA BLVD APT 1111
HOUSTON TX 77058-2515

JULIET WALL
1939 SEAKALE LN
HOUSTON TX 77062-6124

FRANK G WEARY
EXPLORATION GREEN CONSERVANCY
2323 CLEAR LAKE CITY BLVD STE 180 BOX 265
HOUSTON TX 77062-8070

FRANK G WEARY
14823 TUMBLING FALLS CT
HOUSTON TX 77062-2323

WADE P WEBSTER, SR
15226 SAINT CLOUD DR
HOUSTON TX 77062-3517

SALLY WILLIAMS
15410 PARK ESTATES LN
HOUSTON TX 77062-3654

MARY WOODARD
16110 SEAHORSE DR
HOUSTON TX 77062-6219

Attachment A
GIS Maps and Key

Clear Lake City Water Authority
Major Amendment to TPDES Permit No. WQ0010539001

Map Requested by TCEQ Office of Legal Services
for Commissioners' Agenda

(overview map)

The facility is located in Harris County. The circle (green) in the left inset map represents the approximate location of the facility. The inset map on the right represents the location of Harris County (red) in the state of Texas;

Protecting Texas by Reducing and Preventing Pollution

TCEQ

Texas Commission on Environmental Quality
GIS Team (Mail Code 197)
P.O. Box 13087
Austin, Texas 78711-3087

Date: 6/2/2015

N

0 0.5 1 Mi

Outfall

Requesters

Individual Request

Group 1

1 mile downstream discharge

Watercourse

Source: The location of the facility was provided by the TCEQ Office of Legal Services (OLS). OLS obtained the site location information from the applicant and the requestor information from the requestor. The background imagery of this map is from the current Environmental Systems Research Institute (ESRI) map service, as of the date of this map.

Clear Lake City Water Authority
Major Amendment to TPDES Permit No. WQ0010539001

Map Requested by TCEQ Office of Legal Services
for Commissioners' Agenda

(outfall 003 discharge route)

The facility is located in Harris County. The circle (green) in the left inset map represents the approximate location of the facility. The inset map on the right represents the location of Harris County (red) in the state of Texas;

Protecting Texas by Reducing and Preventing Pollution

TCEQ

Texas Commission on Environmental Quality
GIS Team (Mail Code 197)
P.O. Box 13087
Austin, Texas 78711-3087

Date: 6/2/2015

N

0 500 1,000 Feet

Outfall

1 mile downstream discharge

Requesters

Individual Request

Watercourse

Source: The location of the facility was provided by the TCEQ Office of Legal Services (OLS). OLS obtained the site location information from the applicant and the requestor information from the requestor. The background imagery of this map is from the current Environmental Systems Research Institute (ESRI) map service, as of the date of this map.

This map was generated by the Information Resources Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Information Resource Division at (512) 239-0800.

CRF 451850 003route revised

ID	Requester	Address	City	State	Zip
1	Steven Baxter	2002 Fairwind Dr.	Houston	TX	77062
2	Anita J. Cooper	15803 Diana Ln	Houston	TX	77062
3	Thomas Dorsch	16112 Seahorse Dr	Houston	TX	77062
4	Dr. Victoria Dorsch	16112 Seahorse Dr	Houston	TX	77062
5	Raymond Halyard	16204 Diana Ln. Apt. 318A	Houston	TX	77062
6	Daryl Hampton	826 Lochnell Drive	Houston	TX	77062
7	Carole Henning	2006 Seakale Ln	Houston	TX	77062
8	Mandy Hess	1638 Beachcomber Ln	Houston	TX	77062
9	Charles E. Howard	16003 Diana Ln	Houston	TX	77062
10	Eilene Kenney	1719 Neptune Lane	Houston	TX	77062
11	Michael Merritt	1638 Beachcomber Ln.	Houston	TX	77062
12	Zhan X. Peng	15519 Diana Ln	Houston	TX	77062
13	Anthony Joseph Peszko	1637 Beachcomber Ln	Houston	TX	77062
14	Cindy Porterfield	1927 Seakale Lane	Houston	TX	77062
15	Kenneth Proctor	15718 Torry Pines Rd	Houston	TX	77062
16	Tom Reed	15923 Diana Lane	Houston	TX	77062

Attachment B
Landowner Maps and Lists

ATTACHMENT 4A

ROBERT T. SAVELY WATER RECLAMATION FACILITY

ADJACENT LANDOWNERS MAP
SCALE: 1" = 2000'

0 2000 4000

SCALE: 1" = 2000'

HALF-MILE RADIUS UPSTREAM OF DISCHARGE

OUTFALL 001

PLANT BOUNDARY

BUFFER ZONE

① ② ③ ④ ⑤

DATE: 5/20/14
DRAWN: BTE
APPROVED: WGR
PROJECT NO. 120.00765.000.087

Lockwood, Andrews & Newnam, Inc.

Attachment 4A: Adjacent Landowners (Existing Discharge)

Permit No. 10539-001, Clear Lake City Water Authority

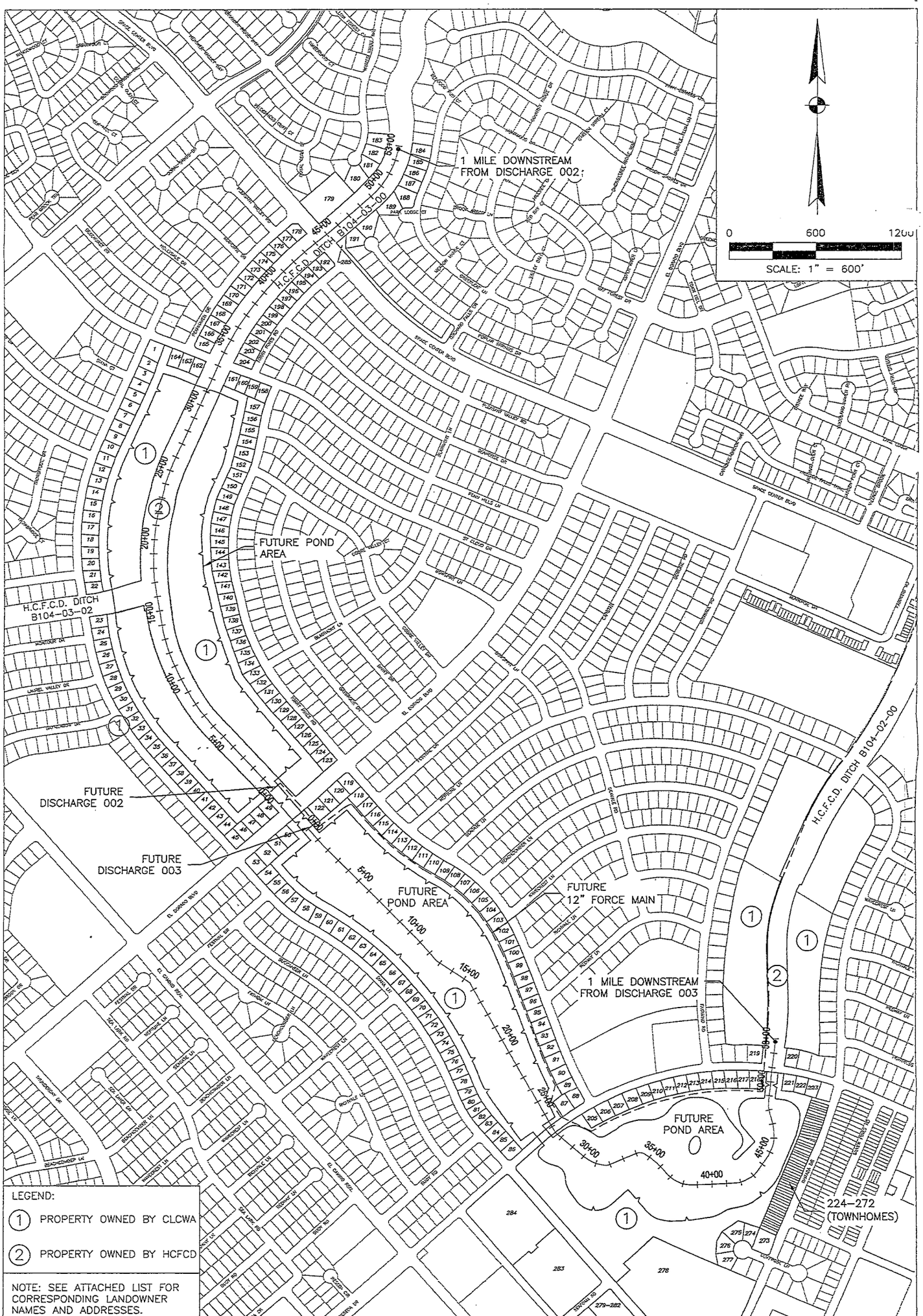
1. UNIVERSITY OF HOUSTON CLEAR LAKE
   2700 BAY AREA BLVD
   HOUSTON TX 77058

2. ARMAND BAYOU PARK
   8500 BAY AREA BLVD
   PASADENA TX 77507

3. HARRIS COUNTY ROW DIVISION
   10555 NORTHWEST FREEWAY
   SUITE 210
   HOUSTON TX 77092

4. NASA JOHNSON SPACE CENTER
   2101 NASA PARKWAY
   HOUSTON TX 77058

5. CENTERPOINT ENERGY HOUSTON
   PROPERTY TAX DEPT 38TH FLOOR
   P.O. BOX 1475
   HOUSTON TX 77251-1475



Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

DATE: 7/23/14
DRAWN: GGG
APPROVED: WGR
PROJECT NO: 120-00765-029-983

RECEIVED
JUL 31 2014
Water Quality Division
Application Team

ROBERT T. SAVELY
WATER RECLAMATION FACILITY
AFFECTED LANDOWNERS MAP
SCALE: 1" = 600'

ATTACHMENT
4B
REVISED: 7/23/14

Domestic Administrative Report 1.1
Reference: Question 1 (c)
Attachment 4B - Affected Landowner Information

LAN Project #: 120-00765-029-983
Date: 7/23/2014
Prepared By: Greg Garner

LOT #	OWNER	ADDRESS	CITY	STATE	ZIP	HCAD_NUM
1	GOOD PAUL L & AVA	15022 PENN HILLS LN	HOUSTON	TX	77062	1092820000022
2	GERMAIN DAVID L	15107 DIANA LN	HOUSTON	TX	77062	1092820000021
3	DAGGETT TIMOTHY M & MARY M	15111 DIANA LN	HOUSTON	TX	77062	1092820000020
4	GYORFI RONALD A & DELAYNE	15115 DIANA LN	HOUSTON	TX	77062	1092820000019
5	ESTEY VIVIAN ROSALIE L	15119 DIANA LN	HOUSTON	TX	77062	1092820000018
6	JACOWAY GREGORY L	15123 DIANA LN	HOUSTON	TX	77062	1092820000017
7	COOK ANN & KENT O	15127 DIANA LN	HOUSTON	TX	77062	1092820000016
8	MAIS JEFF A & DENISE M	15131 DIANA LN	HOUSTON	TX	77062	1092820000015
9	BUTLER HERSCHEL W JR	15135 DIANA LN	HOUSTON	TX	77062	1092820000014
10	DOTTER JOHN T & MICHELLE	15139 DIANA LN	HOUSTON	TX	77062	1092820000013
11	AASENG GORDON B & BARBARA A	15143 DIANA LN	HOUSTON	TX	77062	1092820000012
12	ASKEW ROGER S	15147 DIANA LN	HOUSTON	TX	77062	1092820000011
13	BEARINGER CHARLES E & KAREN	15151 DIANA LN	HOUSTON	TX	77062	1092820000010
14	KIPKETER SALLY J	15155 DIANA LN	HOUSTON	TX	77062	1092820000009
15	MOSLEY MARGO	15159 DIANA LN	HOUSTON	TX	77062	1092820000008
16	SWANSON KURT P & SONIA	15163 DIANA LN	HOUSTON	TX	77062	1092820000007
17	WENGER SHOBBA	15171 DIANA LN	HOUSTON	TX	77062	1092820000006
18	LILLER FAMILY TRUST	15175 DIANA LN	HOUSTON	TX	77062	1092820000005
19	TATE RICHARD	15179 DIANA LN	HOUSTON	TX	77062	1092820000004
20	JIMENEZ PEDRO A & KATINA D	15183 DIANA LN	HOUSTON	TX	77062	1092820000003
21	MARKIEWICZ RICHARD	15187 DIANA LN	HOUSTON	TX	77062	1092820000002
22	NA AND SA FAMILY LP	15191 DIANA LN	HOUSTON	TX	77062	1092820000001
23	TAYLOR CYNTHIA J	15203 DIANA LN	HOUSTON	TX	77062	1001000000001
24	NEWTON NANCY H	15207 DIANA LN	HOUSTON	TX	77062	1001000000002
25	STEPHENSON BRIAN & VERONICA	15211 DIANA LN	HOUSTON	TX	77062	1001000000003
26	MILLER NORMAN	15215 DIANA LN	HOUSTON	TX	77062	1001000000004
27	SWARTWOUT JOHN A JR	15219 DIANA LN	HOUSTON	TX	77062	1001000000005
28	CULLIGAN WALTER W & JUDITH A	15303 DIANA LN	HOUSTON	TX	77062	1001000000006
29	BYRD REBECCA J & LESTER O	15307 DIANA LN	HOUSTON	TX	77062	1001000000007
30	WARD DAVID H	15311 DIANA LN	HOUSTON	TX	77062	1001000000008
31	ENGLAND SCOTT A	15315 DIANA LN	HOUSTON	TX	77062	1001000000009
32	ROSEBROOK GEOFFREY H & JO A	15319 DIANA LN	HOUSTON	TX	77062	1001000000010
33	STEVENSON HAROLD T & ELSIE	15323 DIANA LN	HOUSTON	TX	77062	1001000000011
34	MUSE LAURINDA	15403 DIANA LN	HOUSTON	TX	77062	1001000000012
35	DEBORD MARC V & KATHLEEN M	15407 DIANA LN	HOUSTON	TX	77062	1001000000013
36	ELLIS ANDREW	15411 DIANA LN	HOUSTON	TX	77062	1001000000014
37	BIEKERT ROBERT E ET UX	15415 DIANA LN	HOUSTON	TX	77062	1001000000015
38	DOUGLAS CLAUDE F	15419 DIANA LN	HOUSTON	TX	77062	1001000000016
39	PERKINS DAVID & SUSAN	15423 DIANA LN	HOUSTON	TX	77062	1001000000017
40	EDGINGTON ADAM L	15503 DIANA LN	HOUSTON	TX	77062	1001000000018
41	VALDEZ RICHARD & LYDIA	15507 DIANA LN	HOUSTON	TX	77062	1001000000019
42	LAWRENCE PETER & MONA	15511 DIANA LN	HOUSTON	TX	77062	1001000000020

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43	D'ARCY DANIEL PAUL	15515 DIANA LN	HOUSTON	TX	77062	1001000000021
44	FROCK MICHELLE M	15519 DIANA LN	HOUSTON	TX	77062	1001000000022
45	ERIKSSON JOHN V	1203 EL DORADO BLVD	HOUSTON	TX	77062	1001000000023
46	DESKI JOSEPH A	1207 EL DORADO BLVD	HOUSTON	TX	77062	1001000000024
47	FARMER E JOAN	1211 EL DORADO BLVD	HOUSTON	TX	77062	1001000000025
48	LAMPAZZI HENRY A & AMY	1215 EL DORADO BLVD	HOUSTON	TX	77062	1001000000026
49	ROUBION LAURA A	1219 EL DORADO BLVD	HOUSTON	TX	77062	1001000000027
50	SELF GARY M & LINDA S	1214 EL DORADO BLVD	HOUSTON	TX	77062	0966060000780
51	LANGLEY WELDON A & DOROTHY	1210 EL DORADO BLVD	HOUSTON	TX	77062	0966060000779
52	BURKE DAVID L & BERNADETTE	1206 EL DORADO BLVD	HOUSTON	TX	77062	0966060000778
53	JONES KATHLEEN VLACH	1202 EL DORADO BLVD	HOUSTON	TX	77062	0966060000777
54	ALVAREZ JAMES A & MARY L	15607 DIANA LN	HOUSTON	TX	77062	0966060000776
55	POWELL JAMES W	15611 DIANA LN	HOUSTON	TX	77062	0966060000775
56	EPPS RONALD C	15703 DIANA LN	HOUSTON	TX	77062	0966060000774
57	HANSEN JAMES V & LINDA L	15707 DIANA LN	HOUSTON	TX	77062	0966060000773
58	HARDY DAVID I & LINDA	15711 DIANA LN	HOUSTON	TX	77062	0966060000772
59	CULVER ROBERT D	15715 DIANA LN	HOUSTON	TX	77062	0966060000771
60	ECKENRODE LISA & DENNIS	15719 DIANA LN	HOUSTON	TX	77062	0966060000770
61	BEISERT STEPHEN W & SUSAN	15723 DIANA LN	HOUSTON	TX	77062	0966060000769
62	COOPER ANITA J	15803 DIANA LN	HOUSTON	TX	77062	0966060000768
63	JORDON KEITH L	15807 DIANA LN	HOUSTON	TX	77062	0966060000767
64	WHITAKER NAOMI A	15811 DIANA LN	HOUSTON	TX	77062	0966060000766
65	BLANCHARD YVETTE A	15815 DIANA LN	HOUSTON	TX	77062	0966060000765
66	HANSEN CALVIN R	15819 DIANA LN	HOUSTON	TX	77062	0966060000764
67	MIKULAN PATRICIA E & DALE G	15823 DIANA LN	HOUSTON	TX	77062	0966060000763
68	GWOSDZ BRUCE A & JEANNIE J	15903 DIANA LN	HOUSTON	TX	77062	0966060000784
69	MC SWAIN GRADY GENE	15907 DIANA LN	HOUSTON	TX	77062	0966060000783
70	DEEP ALISON & MISHA GEORGE	15911 DIANA LN	HOUSTON	TX	77062	0966060000782
71	RICHARDSON TOM J	15915 DIANA LN	HOUSTON	TX	77062	0966060000762
72	MITCHELL JAMES N & PATSY	15919 DIANA LN	HOUSTON	TX	77062	0966060000761
73	REED TOMMY LEE	15923 DIANA LN	HOUSTON	TX	77062	0966060000760
74	HOWARD CHARLES E & MARY A	16003 DIANA LN	HOUSTON	TX	77062	0966060000759
75	BURROWS ROBERT D &	16005 DIANA LN	HOUSTON	TX	77062	0966060000758
76	SWINGLE WILLIAM LLOYD	16007 DIANA LN	HOUSTON	TX	77062	0966060000757
77	WALKER PEGGY	16009 DIANA LN	HOUSTON	TX	77062	0966060000756
78	LINDESMITH NICHOLAS & JENNIFER	16011 DIANA LN	HOUSTON	TX	77062	0966060000755
79	GARZA HAYDEE	16015 DIANA LN	HOUSTON	TX	77062	0966060000754
80	JACKLIN JOHN B & REBECCA C	16019 DIANA LN	HOUSTON	TX	77062	0966060000753
81	JOHNSON THOMAS MICHAEL	16021 DIANA LN	HOUSTON	TX	77062	0966060000752
82	ALMANZA JACKIE & SERGIO	16023 DIANA LN	HOUSTON	TX	77062	0966060000751
83	MAY IRA T JR	16027 DIANA LN	HOUSTON	TX	77062	0966060000750
84	MILLER BILLY JOE	16103 DIANA LN	HOUSTON	TX	77062	0966060000749
85	HESER RONALD D	16107 DIANA LN	HOUSTON	TX	77062	0966060000748
86	PAYNE NORMAN & ROBERTA	16111 DIANA LN	HOUSTON	TX	77062	0966060000747
87	BLANCHARD ERIK D	1311 RESEDA DR	HOUSTON	TX	77062	0966060000746
88	MULES THOMAS G & ANNETTE M	1315 RESEDA DR	HOUSTON	TX	77062	0966060000745
89	COOK BEVERLY S	16110 TORRY PINES RD	HOUSTON	TX	77062	0966060000744
90	SVATEK VICTOR A	16106 TORRY PINES RD	HOUSTON	TX	77062	0966060000743
91	CALMELET H D SR & DOROTHY	16102 TORRY PINES RD	HOUSTON	TX	77062	0966060000742
92	KNESEK JOHN	16014 TORRY PINES RD	HOUSTON	TX	77062	0966060000741

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93	GROUNDS ADAM	16010 TORRY PINES RD	HOUSTON	TX	77062	0966060000740
94	JOHNSON GEORGE D JR & JUDITH	16006 TORRY PINES RD	HOUSTON	TX	77062	0966060000739
95	HAHN MICHAEL A & VERONICA J	16002 TORRY PINES RD	HOUSTON	TX	77062	0966060000738
96	PRAT ORGER C	15926 TORRY PINES RD	HOUSTON	TX	77062	0966060000737
97	GANZER ALENE M	15922 TORRY PINES RD	HOUSTON	TX	77062	0966060000736
98	ROBERTSON KASEY	15918 TORRY PINES RD	HOUSTON	TX	77062	0966060000735
99	SIMMONS MARGARET L	15914 TORRY PINES RD	HOUSTON	TX	77062	0966060000734
100	HOFFMAN PATRICIA M	15910 TORRY PINES RD	HOUSTON	TX	77062	0966060000733
101	MARSHALL BRANDON & TIFFANY	15906 TORRY PINES RD	HOUSTON	TX	77062	0966060000732
102	NELSON CALVIN M	15902 TORRY PINES RD	HOUSTON	TX	77062	0966060000731
103	BURR DANIEL BRANDON	15826 TORRY PINES RD	HOUSTON	TX	77062	0966060000730
104	ODONOHOE SAMMIE	15822 TORRY PINES RD	HOUSTON	TX	77062	0966060000729
105	KING ELLEN GOODRICH	15818 TORRY PINES RD	HOUSTON	TX	77062	0966060000728
106	SILLER FRANCISCO J & JOSEFINA	15814 TORRY PINES RD	HOUSTON	TX	77062	0966060000727
107	WALLACE JESSE H & CLAIRE	15810 TORRY PINES RD	HOUSTON	TX	77062	0966060000726
108	GUNDERSON ANGELA M	15806 TORRY PINES RD	HOUSTON	TX	77062	0966060000725
109	GARRISON GERALD W & KELLY	15802 TORRY PINES RD	HOUSTON	TX	77062	0966060000724
110	ALVAREZ JOSE CARLOS	15726 TORRY PINES RD	HOUSTON	TX	77062	0966060000723
111	LESLIE FRANK REED ET UX	15722 TORRY PINES RD	HOUSTON	TX	77062	0966060000722
112	PROCTOR KENNETH M	15718 TORRY PINES RD	HOUSTON	TX	77062	0966060000721
113	ZAAL GEORGE A	15714 TORRY PINES RD	HOUSTON	TX	77062	0966060000720
114	DANIEL WALTER P	15710 TORRY PINES RD	HOUSTON	TX	77062	0966060000719
115	MARTON PATRICIA B	15706 TORRY PINES RD	HOUSTON	TX	77062	0966060000718
116	JENKINSJOHNSON JANNIE L	15702 TORRY PINES RD	HOUSTON	TX	77062	0966060000717
117	AYRES ROBERT	15614 TORRY PINES RD	HOUSTON	TX	77062	0966060000716
118	REEVES JUSTIN & CHRISTI M	15610 TORRY PINES RD	HOUSTON	TX	77062	0966060000715
119	DIMITRIJEVIC PETER JOHN	1314 EL DORADO BLVD	HOUSTON	TX	77062	0966060000714
120	GREGG STEPHEN L	1310 EL DORADO BLVD	HOUSTON	TX	77062	0966060000713
121	STITES ROBERT & MARION	1306 EL DORADO BLVD	HOUSTON	TX	77062	0966060000712
122	DEL BOSQUE ELIZABETH C	1302 EL DORADO BLVD	HOUSTON	TX	77062	0966060000711
123	ORTIZ JUAN H & MARY K	15542 TORRY PINES RD	HOUSTON	TX	77062	1010500000039
124	SMITH DAVID LEE	15538 TORRY PINES RD	HOUSTON	TX	77062	1010500000038
125	MALOY JOSEPH E	15534 TORRY PINES RD	HOUSTON	TX	77062	1010500000037
126	HAKAS TORRY PINES LLC	15530 TORRY PINES RD	HOUSTON	TX	77062	1010500000036
127	BRIDGER BALDWIN JR	15526 TORRY PINES RD	HOUSTON	TX	77062	1010500000035
128	SOMMER KRISTIN	15522 TORRY PINES RD	HOUSTON	TX	77062	1010500000034
129	DELL JAMES D	15518 TORRY PINES RD	HOUSTON	TX	77062	1010500000033
130	DILLON DENNIS NEIL & SHIRLEY	15510 TORRY PINES RD	HOUSTON	TX	77062	1010500000032
131	DEAN ROBERT J & CLARE	15506 TORRY PINES RD	HOUSTON	TX	77062	1010500000031
132	REYES PATRICIA	15502 TORRY PINES RD	HOUSTON	TX	77062	1010500000030
133	REXER BERNARD R & CAROLE B	15438 TORRY PINES RD	HOUSTON	TX	77062	1010500000029
134	WHITE NICHOLAS D & ALLISON R	15434 TORRY PINES RD	HOUSTON	TX	77062	1010500000028
135	CHRISTIAN RANDALL C	15430 TORRY PINES RD	HOUSTON	TX	77062	1010500000027
136	MICHAELS CLAYTON E JR & SUZANNE	15426 TORRY PINES RD	HOUSTON	TX	77062	1010500000026
137	BLACK JOHN H & JUDITH A	15422 TORRY PINES RD	HOUSTON	TX	77062	1010500000025
138	DIMMICK ADAM J	15418 TORRY PINES RD	HOUSTON	TX	77062	1010500000024
139	SMELLEY ROSMARIE	15414 TORRY PINES RD	HOUSTON	TX	77062	1010500000023
140	HORTON MATT & ELIZABETH	15410 TORRY PINES RD	HOUSTON	TX	77062	1010500000022
141	TANG LISA	15406 TORRY PINES RD	HOUSTON	TX	77062	1010500000021
142	BURNETT JEFF J	15402 TORRY PINES RD	HOUSTON	TX	77062	1010500000020

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143	HUTSON JOHN H	15334 TORRY PINES RD	HOUSTON	TX	77062	1010500000019
144	ROOKS CHARLES W	15330 TORRY PINES RD	HOUSTON	TX	77062	1010500000018
145	ADAM CHARLES RAY	15326 TORRY PINES RD	HOUSTON	TX	77062	1010500000017
146	HANNAGAN MARYLAND J	15322 TORRY PINES RD	HOUSTON	TX	77062	1010500000016
147	CHALLENGER MICHAEL T & SHARON M	15318 TORRY PINES RD	HOUSTON	TX	77062	1010500000015
148	PERANTIE NEIL	15314 TORRY PINES RD	HOUSTON	TX	77062	1010500000014
149	GUEST ANTHEA P &	15310 TORRY PINES RD	HOUSTON	TX	77062	1010500000013
150	TURNER FRANK J JR & LORETTA F	15306 TORRY PINES RD	HOUSTON	TX	77062	1010500000012
151	RUCCIUS KAREN L	15302 TORRY PINES RD	HOUSTON	TX	77062	1010500000011
152	MORENO JUAN F	15226 TORRY PINES RD	HOUSTON	TX	77062	1010500000010
153	ALEXANDER TROY	15222 TORRY PINES RD	HOUSTON	TX	77062	1010500000009
154	NEMITZ JAMES E	15218 TORRY PINES RD	HOUSTON	TX	77062	1010500000008
155	NANCE NEIL E	15214 TORRY PINES RD	HOUSTON	TX	77062	1010500000007
156	CARADEC PAUL A	15210 TORRY PINES RD	HOUSTON	TX	77062	1010500000006
157	TAYLOR BETTY J	15206 TORRY PINES RD	HOUSTON	TX	77062	1010500000005
158	MORRISON JOHN A	15114 PENN HILLS LN	HOUSTON	TX	77062	1010500000004
159	GAZIS M V	15110 PENN HILLS LN	HOUSTON	TX	77062	1010500000003
160	HERSOL REAL ESTATE LLC	15106 PENN HILLS LN	HOUSTON	TX	77062	1010500000002
161	DUNLAP WILLIAM M	15102 PENN HILLS LN	HOUSTON	TX	77062	1010500000001
162	VILARREAL GILBERT JR ET AL	15034 PENN HILLS LN	HOUSTON	TX	77062	1092820000025
163	NORRIS JOHN D & DEWANNA	15030 PENN HILLS LN	HOUSTON	TX	77062	1092820000024
164	JOHNSON SCOTT & JENNIFER	15026 PENN HILLS LN	HOUSTON	TX	77062	1092820000023
165	STANLEY LEROY	15055 PEARHAVEN DR	HOUSTON	TX	77062	1092790000014
166	BOEHM PAUL & DEBBIE	15051 PEARHAVEN DR	HOUSTON	TX	77062	1092790000013
167	RODRIGUEZ LUIS E & MARIA D	15047 PEARHAVEN DR	HOUSTON	TX	77062	1092790000012
168	HELSEL JAMES E & CHERYL W	15043 PEARHAVEN DR	HOUSTON	TX	77062	1092790000011
169	BLANCO AGUSTIN & CARRIE D	15039 PEARHAVEN DR	HOUSTON	TX	77062	1092790000010
170	DEAN BIDWELL NED	15035 PEARHAVEN DR	HOUSTON	TX	77062	1092790000009
171	JAAX JAMES R	15031 PEARHAVEN DR	HOUSTON	TX	77062	1092790000008
172	BRITT WILLIAM E	15027 PEARHAVEN DR	HOUSTON	TX	77062	1092790000007
173	TALIAFERRO J D JR & KIMBERLY	15023 PEARHAVEN DR	HOUSTON	TX	77062	1092790000006
174	THORNELL RONALD G & JAN C	15019 PEARHAVEN DR	HOUSTON	TX	77062	1092790000005
175	JARRETT WARREN & DEBORAH	15015 PEARHAVEN DR	HOUSTON	TX	77062	1092790000004
176	SPENCE LISA A	15011 PEARHAVEN DR	HOUSTON	TX	77062	1092790000003
177	URQUIAGA MARK & TERESA L	15007 PEARHAVEN DR	HOUSTON	TX	77062	1092790000002
178	JACKSON RANDOLPH S	15003 PEARHAVEN DR	HOUSTON	TX	77062	1092790000001
179	HOUSTON FIRE DEPARTMENT -STATION 71	15200 SPACE CENTER BLVD	HOUSTON	TX	77062	
180	KOENIG JOSEPH A & LAURIE	1802 WINTER KNOLL WAY	HOUSTON	TX	77062	1168830010019
181	MCKIGNEY G JAMES & SUE	1806 WINTER KNOLL WAY	HOUSTON	TX	77062	1168830010020
182	FORCIER RICHARD H	1810 WINTER KNOLL WAY	HOUSTON	TX	77062	1168830010021
183	DEWEY JOHN & ROEMEHL S	1814 WINTER KNOLL WAY	HOUSTON	TX	77062	1168830010022
184	THOMAS JAMES B	15118 GREENLEAF LN	HOUSTON	TX	77062	1167330020083
185	PACIFICO ANTHONY JR	15122 GREENLEAF LN	HOUSTON	TX	77062	1167330020084
186	GAMBLE LARRY E & CHLOTHILDE	15126 GREENLEAF LN	HOUSTON	TX	77062	1167330020085
187	GRAHAM-GETTY LESLIE M	15202 GREENLEAF LN	HOUSTON	TX	77062	1167330020086
188	WILCOX MATTHEW T	1907 PARK LODGE CT	HOUSTON	TX	77062	1167330020087
189	HUDSON KENNETH G & SUSANNA	1903 PARK LODGE CT	HOUSTON	TX	77062	1167330020088
190	KING ROBERT J & KATHRYN C	15203 POPLAR SPRINGS LN	HOUSTON	TX	77062	1167330020110
191	DUHON ACY B JR & GWEN P	15202 POPLAR SPRINGS LN	HOUSTON	TX	77062	1167330020111
192	MULLER ALBERT FRANKLIN	15002 TORRY PINES RD	HOUSTON	TX	77062	1023290000013

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193	MULLER MARK F	15006 TORRY PINES RD	HOUSTON	TX	77062	1023290000012
194	GESSNER TIMOTHY M	15010 TORRY PINES RD	HOUSTON	TX	77062	1023290000011
195	HAWLEY BRICE C & SIGNE	15014 TORRY PINES RD	HOUSTON	TX	77062	1023290000010
196	SAXENA RENUM	15018 TORRY PINES RD	HOUSTON	TX	77062	1023290000009
197	GULILAT KIFLE P	15022 TORRY PINES RD	HOUSTON	TX	77062	1023290000008
198	FALLS SAMMIE J & TIMOTHY W	15026 TORRY PINES RD	HOUSTON	TX	77062	1023290000007
199	MCMICHAEL ERIC & PATRICIA	15030 TORRY PINES RD	HOUSTON	TX	77062	1023290000006
200	POLITTE THOMAS G	15102 TORRY PINES RD	HOUSTON	TX	77062	1023290000005
201	DUSTON LUCY	15106 TORRY PINES RD	HOUSTON	TX	77062	1023290000004
202	HEBERT KAREN CECILE	15110 TORRY PINES RD	HOUSTON	TX	77062	1023290000003
203	STICH HOWARD L II & CHARLENE A	15114 TORRY PINES RD	HOUSTON	TX	77062	1023290000002
204	SERPAS RICHARD S JR & MELISSA	15118 TORRY PINES RD	HOUSTON	TX	77062	1023290000001
205	BUNDE MERLE O	1402 RESEDA DR	HOUSTON	TX	77062	0962750000033
206	COOK STANLEY E & KATHLEEN A	1406 RESEDA DR	HOUSTON	TX	77062	0962750000032
207	GAYLE EDWIN F & JANE J	1410 RESEDA DR	HOUSTON	TX	77062	0962750000031
208	NGO SUOUAY	1502 RESEDA DR	HOUSTON	TX	77062	0962750000030
209	ATTAR WAHIB M & BARBARA J	1506 RESEDA DR	HOUSTON	TX	77062	0962750000029
210	PEARL FREDERIC & KATHLEEN	1510 RESEDA DR	HOUSTON	TX	77062	0962750000028
211	SENNEFF JOHN S & PAMALA W	1602 RESEDA DR	HOUSTON	TX	77062	0962750000027
212	WHITMORE THOMAS D &	1606 RESEDA DR	HOUSTON	TX	77062	0962750000026
213	LOWRY JASON B & YVETTE C	1610 RESEDA DR	HOUSTON	TX	77062	0962750000025
214	BIBBY JOSEPH A & HEATHER D	1614 RESEDA DR	HOUSTON	TX	77062	0962750000024
215	ALIKOYA HARRIS T	1702 RESEDA DR	HOUSTON	TX	77062	0962750000023
216	INGERSOLL FLOYD J	1706 RESEDA DR	HOUSTON	TX	77062	0962750000022
217	MIDDAUGH RONALD D & JULIE L	1710 RESEDA DR	HOUSTON	TX	77062	0962750000021
218	IRVIN PAUL M	1714 RESEDA DR	HOUSTON	TX	77062	0962750000020
219	AYRES ROBERT D & ROBIN R	1715 RESEDA DR	HOUSTON	TX	77062	0962900000378
220	MCLAUGHLIN HEIDI	1803 RESEDA DR	HOUSTON	TX	77062	0962900000440
221	MULES ANNETTE M & THOMAS G	1802 RESEDA DR	HOUSTON	TX	77062	0962750000019
222	BROTT CATHERINE	1806 RESEDA DR	HOUSTON	TX	77062	0962750000018
223	BROG KEN	1810 RESEDA DR	HOUSTON	TX	77062	0962750000017
224	WHITMORE MIHRIBAN	1541 RAMADA DR	HOUSTON	TX	77062	0962780010541
225	BRADLEY DARRYL C & JANET	1539 RAMADA DR	HOUSTON	TX	77062	0962780010539
226	BROWN GARY L	1537 RAMADA DR	HOUSTON	TX	77062	0962780010537
227	HALL JAY CLINTON	1535 RAMADA DR	HOUSTON	TX	77062	0962780010535
228	HUYNH PHUONGMAI N	1533 RAMADA DR	HOUSTON	TX	77062	0962780010533
229	ANN E CHAVARRIA TRUST	1531 RAMADA DR	HOUSTON	TX	77062	0962780010531
230	AGUIRRE MARCUS & ANNA M	1529 RAMADA DR	HOUSTON	TX	77062	0962780010529
231	SULLIVAN TERESA R	1527 RAMADA DR	HOUSTON	TX	77062	0962780010527
232	PAGEL KERMIT L & ALESYA	1525 RAMADA DR	HOUSTON	TX	77062	0962780010525
233	HALVORSEN KELLY R	1523 RAMADA DR	HOUSTON	TX	77062	0962780010523
234	BROOKS MARILYN B	1521 RAMADA DR	HOUSTON	TX	77062	0962780010521
235	LISARELLI DANIAL & LEDA	1519 RAMADA DR	HOUSTON	TX	77062	0962780010519
236	MIKULICZ NEVA W	1517 RAMADA DR	HOUSTON	TX	77062	0962780010517
237	SALAZAR LUIS	1515 RAMADA DR	HOUSTON	TX	77062	0962780010515
238	GARMROODI FATHMEH ABDOLLAHI	1513 RAMADA DR	HOUSTON	TX	77062	0962780010513
239	CAVE ELENA	1511 RAMADA DR	HOUSTON	TX	77062	0962780010511
240	ROSEN DAVID J & KIMBERLY K	1509 RAMADA DR	HOUSTON	TX	77062	0962780010509
241	FLACK SEAN N	1507 RAMADA DR	HOUSTON	TX	77062	0962780010507
242	LIVINGSTON JOE D	1505 RAMADA DR	HOUSTON	TX	77062	0962780010505

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243	ONEAL RONALD R & GAY M	1503 RAMADA DR	HOUSTON	TX	77062	0962780010503
244	ROSS RICHARD J	1501 RAMADA DR	HOUSTON	TX	77062	0962780010501
245	HAAS MELINDA ANNETTE	1445 RAMADA DR	HOUSTON	TX	77062	0962780010445
246	CHEATHAM ROXANNE	1443 RAMADA DR	HOUSTON	TX	77062	0962780010443
247	VACULIK ALFRED J JR	1441 RAMADA DR	HOUSTON	TX	77062	0962780010441
248	PHILLIPS HANNAH M	1439 RAMADA DR	HOUSTON	TX	77062	0962780010439
249	TRAVIS LOIS ANN	1437 RAMADA DR	HOUSTON	TX	77062	0962780010437
250	LAFFIN REV DILLON	1435 RAMADA DR	HOUSTON	TX	77062	0962780010435
251	MACKENNA CONNIE K	1433 RAMADA DR	HOUSTON	TX	77062	0962780010433
252	GREENWOOD GEORGE G &GLORIA	1431 RAMADA DR	HOUSTON	TX	77062	0962780010431
253	WILSON ROSEMARY H	1429 RAMADA DR	HOUSTON	TX	77062	0962780010429
254	MULLER ERIKA	1427 RAMADA DR	HOUSTON	TX	77062	0962780010427
255	DANSBERRY BRYAN	1425 RAMADA DR	HOUSTON	TX	77062	0962780010425
256	BAIAMONTE FRANK L	1423 RAMADA DR	HOUSTON	TX	77062	0962780010423
257	COLTER ALICIA S	1421 RAMADA DR	HOUSTON	TX	77062	0962780010421
258	CAMPBELL GRETCHEN K	1419 RAMADA DR	HOUSTON	TX	77062	0962780010419
259	MULES THOMAS G & ANNETTE M	1417 RAMADA DR	HOUSTON	TX	77062	0962780010417
260	GOEBEL MARK L & SHIRLEY D	1415 RAMADA DR	HOUSTON	TX	77062	0962780010415
261	KENNEDY LAWRENCE A	1413 RAMADA DR	HOUSTON	TX	77062	0962780010413
262	LANCASTER DEBBIE	1411 RAMADA DR	HOUSTON	TX	77062	0962780010411
263	STORY ANNETTE & JAMES	1409 RAMADA DR	HOUSTON	TX	77062	0962780010409
264	BORKOWSKI ANDRZEJ A	1407 RAMADA DR	HOUSTON	TX	77062	0962780010407
265	CHIDESTER EDMUND G	1405 RAMADA DR	HOUSTON	TX	77062	0962780010405
266	GEASLIN DAVID L	1403 RAMADA DR	HOUSTON	TX	77062	0962780010403
267	JOHANSON JANE WELCH	1401 RAMADA DR	HOUSTON	TX	77062	0962780010401
268	KIGHT KATHERINE E	1359 RAMADA DR	HOUSTON	TX	77062	0962780010359
269	MIKULICZ WILLIAM	1357 RAMADA DR	HOUSTON	TX	77062	0962780010357
270	GOLDSTEIN SHARON	1355 RAMADA DR	HOUSTON	TX	77062	0962780010355
271	ARGUELLES FRANCISCO	1353 RAMADA DR	HOUSTON	TX	77062	0962780010353
272	MORRISON CHARLOTTE	1351 RAMADA DR	HOUSTON	TX	77062	0962780010351
273	BAXTER MARY ANN	16511 CLIFFROSE LN	HOUSTON	TX	77062	0962750000015
274	SOLOMON FRED W JR ET UX	16507 CLIFFROSE LN	HOUSTON	TX	77062	0962750000014
275	DAVIS JANE MARIE SCOT	16503 CLIFFROSE LN	HOUSTON	TX	77062	0962750000013
276	HENDERSON ELLA J	16502 CLIFFROSE LN	HOUSTON	TX	77062	0962750000012
277	BOCK ROBERT R & SCHERRY A	16506 CLIFFROSE LN	HOUSTON	TX	77062	0962750000011
278	CLEAR LAKE CITY RECREATION CENTER	16511 DIANA LN	HOUSTON	TX	77062	0962750000037
279	BROWN BARBARA	1106 SEAFOAM RD	HOUSTON	TX	77062	1102480000001
280	LOPPNOW HEINZ	1108 SEAFOAM RD	HOUSTON	TX	77062	1102480000002
281	MITTLEFEHLDT DAVID & NURIT	1110 SEAFOAM RD	HOUSTON	TX	77062	1102480000003
282	NAGEL ERIC M	1112 SEAFOAM ROAD	HOUSTON	TX	77062	1102480000004
283	CLEAR LAKE UNITED METHODIST CHURCH	16301 BUCCANEER LN	HOUSTON	TX	77062	0962690000001
284	CRP TBG ST ANDREWS LP	16201 BUCCANEER LN	HOUSTON	TX	77062	0962690000004
285	BAY FOREST COMMUNITY ASSOCIATION	15715 LAKE LODGE DR	HOUSTON	TX	77062	1167330020124

Attachment C
Compliance History

The TCEQ is committed to accessibility.
To request a more accessible version of this report, please contact the TCEQ Help Desk at (512) 239-4357.

Compliance History Report

PUBLISHED Compliance History Report for CN600270102, RN101440485, Rating Year 2014 which includes Compliance History (CH) components from September 1, 2009, through August 31, 2014.

Customer, Respondent, or Owner/Operator:	CN600270102, Clear Lake City Water Authority	**Classification:** SATISFACTORY	**Rating:** 1.06
Regulated Entity:	RN101440485, ROBERT T SAVELY WATER RECLAMATION FACILITY	**Classification:** SATISFACTORY	**Rating:** 1.60
Complexity Points:	10	**Repeat Violator:** NO	
CH Group:	08 - Sewage Treatment Facilities		
Location:	14210 MIDDLEBROOK DR HOUSTON, TX 77058-1200, HARRIS COUNTY		
TCEQ Region:	REGION 12 - HOUSTON		

ID Number(s):

UTILITIES REGISTRATION 99048
WASTEWATER PERMIT WQ0010539001
WASTEWATER EPA ID TX0022543
WASTEWATER AUTHORIZATION R10539001
AIR NEW SOURCE PERMITS ACCOUNT NUMBER HG2579H
STORMWATER PERMIT TXR05Q524

Compliance History Period: September 01, 2009 to August 31, 2014 **Rating Year:** 2014 **Rating Date:** 09/01/2014

Date Compliance History Report Prepared: May 26, 2015

Agency Decision Requiring Compliance History: Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.

Component Period Selected: February 26, 2008 to May 26, 2015

TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.

Name: John O. Onyenobi, P.E., NSPE **Phone:** (512) 239-6707

Site and Owner/Operator History:

1) Has the site been in existence and/or operation for the full five year compliance period? YES
2) Has there been a (known) change in ownership/operator of the site during the compliance period? NO
3) If **YES** for #2, who is the current owner/operator? N/A
4) If **YES** for #2, who was/were the prior owner(s)/operator(s)? N/A
5) If **YES**, when did the change(s) in owner or operator occur? N/A

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:

1 Effective Date: 03/25/2009 ADMINORDER 2005-2018-MWD-E (Findings Order-After Hearing/Trial)
Classification: Moderate
Citation: 30 TAC Chapter 305, SubChapter F 305.125(1)
TWC Chapter 26 26.121(a)
Rqmt Prov: Effluent Limits PERMIT
Description: Failure to comply with permit effluent limits as documented by a TCEQ record review of self-reported data.

B. Criminal convictions:

N/A

C. Chronic excessive emissions events:

N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):

Item 1	March 18, 2008	(672514)
Item 2	April 21, 2008	(690467)
Item 3	April 28, 2008	(690470)
Item 4	May 20, 2008	(690468)
Item 5	January 19, 2010	(806015)
Item 6	February 22, 2010	(806014)
Item 7	March 18, 2010	(831347)
Item 8	April 08, 2010	(831348)
Item 9	June 21, 2010	(846415)
Item 10	July 01, 2010	(860993)
Item 11	August 23, 2010	(867001)
Item 12	September 22, 2010	(874054)
Item 13	October 22, 2010	(881666)
Item 14	December 20, 2010	(896423)
Item 15	January 11, 2011	(896422)
Item 16	February 17, 2011	(909243)
Item 17	March 21, 2011	(916499)
Item 18	April 13, 2011	(925207)
Item 19	May 20, 2011	(938183)
Item 20	June 21, 2011	(945560)
Item 21	July 14, 2011	(936973)
Item 22	August 26, 2011	(959467)
Item 23	September 21, 2011	(965499)
Item 24	November 21, 2011	(977708)
Item 25	February 21, 2012	(998134)
Item 26	March 19, 2012	(1003651)
Item 27	June 21, 2012	(1024343)
Item 28	July 20, 2012	(1031726)
Item 29	August 20, 2012	(1038101)
Item 30	September 21, 2012	(1046844)
Item 31	November 19, 2012	(1061513)
Item 32	December 19, 2012	(1061514)
Item 33	February 21, 2013	(1079308)
Item 34	March 25, 2013	(1089471)
Item 35	May 17, 2013	(1106791)
Item 36	June 25, 2013	(1110463)
Item 37	July 19, 2013	(1117347)
Item 38	August 21, 2013	(1125112)
Item 39	September 24, 2013	(1129700)
Item 40	September 25, 2013	(1135438)
Item 41	December 23, 2013	(1147295)
Item 42	February 21, 2014	(1160695)
Item 43	October 13, 2014	(1230995)
Item 44	November 21, 2014	(1218629)
Item 45	February 26, 2015	(1242444)
Item 46	March 20, 2015	(1248776)

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

1 Date: 05/31/2014 (1187565) CN600270102
Self Report? YES Classification: Moderate
Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)
Description: Failure to meet the limit for one or more permit parameter

2 Date: 06/30/2014 (1198829) CN600270102
Self Report? YES Classification: Moderate
Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)
Description: Failure to meet the limit for one or more permit parameter

3 Date: 07/31/2014 (1198830) CN600270102
Self Report? YES Classification: Moderate
Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)
Description: Failure to meet the limit for one or more permit parameter

4 Date: 08/31/2014 (1205963) CN600270102
Self Report? YES Classification: Moderate
Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)
Description: Failure to meet the limit for one or more permit parameter

5 Date: 09/30/2014 (1212379) CN600270102
Self Report? YES Classification: Moderate
Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)
Description: Failure to meet the limit for one or more permit parameter

6 Date: 11/30/2014 (1224409) CN600270102
Self Report? YES Classification: Moderate
Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)
Description: Failure to meet the limit for one or more permit parameter

7 Date: 04/24/2015 (1241331) CN600270102
Self Report? NO Classification: Moderate
Citation: 30 TAC Chapter 305, SubChapter F 305.125(1)
Monitoring and Reporting Requirements PERMIT
Description: Failed to provide notification of any effluent violation which deviates from the permitted effluent limitation by more than 40%. Specifically, during the record review period of March 2014 to February 2015, nine violations which exceeded the permitted limit by more than 40% were noted. Notification of seven of those violations was not provided. See the attached tables.

F. Environmental audits:
N/A

G. Type of environmental management systems (EMSs):
N/A

H. Voluntary on-site compliance assessment dates:
N/A

I. Participation in a voluntary pollution reduction program:
N/A

J. Early compliance:
N/A

Sites Outside of Texas:
N/A

Attachment D
Technical Summary and Proposed Permit

FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010539001, TX0022543 to discharge to water in the State.

Issuing Office:	Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087
Applicant:	Clear Lake City Water Authority 900 Bay Area Boulevard Houston, Texas 77058
Prepared By:	John O. Onyenobi, P.E., NSPE Municipal Permits Team Wastewater Permitting Section (MC 148) Water Quality Division (512) 239-6707
Date:	November 14, 2013; Revised June 4, 2015
Permit Action:	Major Amendment with Renewal

1. EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit includes an expiration date of **September 1, 2018** according to 30 Texas Administrative Code (TAC) § 305.71, Basin Permitting.

2. APPLICANT ACTIVITY

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for an amendment of the existing permit to authorize the establishment of two new additional outfalls and the discharge of treated domestic wastewater from Outfall 001 at an annual average flow not to exceed 10,000,000 gallons per day; from Outfall 002 at an annual average flow not to exceed 1,080,000 gallons per day and from Outfall 003 at an annual average flow not to exceed 1,080,000 gallons per day. The draft permit authorizes a combined annual average flow not to exceed 10,000,000 gallons per day from Outfalls 001, 002 and 003. The existing wastewater treatment facility serves the Clear Lake City service area.

3. FACILITY AND DISCHARGE LOCATION

The plant site is located at 14210 Middlebrook Drive in Houston, approximately one mile northeast of the intersection of Bay Area Boulevard and Space Center Boulevard, southeast of Horsepen Bayou and adjacent to the northernmost part of the Lyndon B. Johnson Space Center in Harris County, Texas 77058.

The treated effluent is discharged via Outfall 001 to Horsepen Bayou; thence to Armand Bayou Tidal; and via Outfall 002 to a pond on the west side of El Dorado Boulevard;

thence to Harris County Flood Control District (HCFCD) ditch B104-03-00; thence to Horsepen Bayou; thence to Armand Bayou Tidal; and via Outfall 003 to a series of ponds on the east side of El Dorado Boulevard; thence to HCFCD ditch B104-02-00; thence to Horsepen Bayou; thence to Armand Bayou Tidal in Segment No. 1113 of the San Jacinto-Brazos Coastal Basin. The unclassified receiving water uses are high aquatic use for Horsepen Bayou (tidal), HCFCD ditch B104-03-00 (tidal) and HCFCD ditch B104-02-00 (tidal), intermediate aquatic life use for a pond on the west side and a series of ponds on the east side of El Dorado Boulevard, and limited aquatic life use for HCFCD ditch B104-02-00 (above tidal). The designated uses for Segment No. 1113 are primary contact recreation and high aquatic life use.

4. TREATMENT PROCESS DESCRIPTION AND SEWAGE SLUDGE DISPOSAL

The Robert T. Savely Water Reclamation Wastewater Treatment Facility is an activated sludge process plant operated in the conventional mode. Treatment units include a lift station, bar screens and grinder, aeration basins, final clarifiers, gravity sand filter, UV disinfection chamber, chlorine contact chamber and dechlorination chambers. The facility is in operation.

Sludge generated from the treatment facility is hauled by a registered transporter and disposed of at a TCEQ permitted landfill, Galveston County B.F.I. Landfill, Permit No. 1149A, in Galveston County. The draft permit also authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill.

5. INDUSTRIAL WASTE CONTRIBUTION

The draft permit includes pretreatment requirements that are appropriate for a facility of this size and complexity. The Robert T. Savely Water Reclamation Facility does receive industrial wastewater contributions from significant industrial users. The industrial wastewater contributions are significant; they total at least 11% of the actual flow (Sept. 2012 – Aug. 2013) from the permittee's wastewater treatment facility.

6. SUMMARY OF SELF-REPORTED EFFLUENT ANALYSES

The following is a summary of the applicant's Monthly Effluent Report data for the period February 2008 through October 2013. The average of Daily Avg value is computed by the averaging of all 30-day average values for the reporting period for each parameter.

Parameter	Average of Daily Avg
Flow, MGD	5.38
BOD_5, mg/l	2.91
TSS, mg/l	2.73
NH_3-N, mg/l	0.99
Total Copper, mg/l	0.01
Total Zinc, mg/l	0.06
Enterococci, CPU or MPN/100 ml	1.95
Dissolved Oxygen, mg/l	4.3 (minimum)
pH, standard units (SU)	Between 6.29 – 8.3

7. DRAFT PERMIT CONDITIONS AND MONITORING REQUIREMENTS

The effluent limitations and monitoring requirements for those parameters that are limited in the draft permit are as follows:

A. OUTFALL 001 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 10.0 million gallons per day (MGD); nor shall the average discharge during any two-hour period (2-hour peak) exceed 21,528 gallons per minute (gpm). A combined flow of all three outfalls shall not exceed 10 MGD.

Parameter	30-Day Average		7-Day Average	Daily Maximum
	mg/l	lbs/day	mg/l	mg/l
BOD_5	5	417	10	20
TSS	12	1001	20	40
NH_3-N	2	167	5	10
Total Copper	0.02	1.7	N/A	0.04
Total Zinc	0.08	6.8	N/A	0.17
DO (minimum)	4.0	N/A	N/A	N/A
Enterococci, CFU or MPN/100 ml	35	N/A	N/A	104
Sublethal Whole Effluent Toxicity (WET) limit 37% (Parameter 22414) *Mysidopsis bahia* (7-day chronic NOEC[1]) 37%		N/A	N/A	37%

1. The sublethal NOEC is here defined as the greatest effluent dilution at which no significant sublethal effect is demonstrated. A significant sublethal effect is defined as a statistically significant difference between a specified effluent dilution and the control.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. During shut-down of the UV disinfection system for occasional maintenance or during periods of stormwater flow which exceed the 2-hour peak flow, the effluent shall be routed to the chlorine contact chamber and shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

Parameter	Monitoring Requirement
Flow, MGD	Continuous
BOD_5	One/day
TSS	One/day
NH_3-N	One/day
Total Copper	Two/week
Total Zinc	Two/week
DO	One/day
Enterococci	Daily

B. OUTFALLS 002 and 003 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 1.08 million gallons per day (MGD); nor shall the average discharge during any two-hour period (2-hour peak) exceed 3,000 gallons per minute (gpm). A combined flow of all three outfalls shall not exceed 10 MGD.

Parameter	30-Day Average		7-Day Average	Daily Maximum
	mg/l	lbs/day	mg/l	mg/l
BOD_5	5	45	10	20
TSS	12	108	20	40
NH_3-N	2	18	5	10
Total Copper	0.02	0.18	N/A	0.04
Total Zinc	0.08	0.72	N/A	0.17
DO (minimum)	4.0	N/A	N/A	N/A
E. coli, CFU or MPN/100 ml	126	N/A	N/A	399

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. During shut-down of the UV disinfection system for occasional maintenance or during periods of stormwater flow which exceed the 2-hour peak flow, the effluent shall be routed to the chlorine contact chamber and shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

Parameter	Monitoring Requirement
Flow, MGD	Continuous
BOD_5	One/day

TSS	One/day
NH_3-N	One/day
Total Copper	Two/week
Total Zinc	Two/week
DO	One/day
E. coli	Daily

C. PRETREATMENT REQUIREMENTS

Permit requirements for pretreatment are based on TPDES regulations contained in 30 TAC Chapter 315 which references 40 Code of Federal Regulations (CFR) Part 403, "General Pretreatment Regulations for Existing and New Sources of Pollution." [*rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798*] The permit includes specific requirements that establish responsibilities of local government, industry, and the public to implement the standards to control pollutants which pass through or interfere with treatment processes in publicly owned treatment works or which may contaminate the sewage sludge. This permit has appropriate pretreatment language for a facility of this size and complexity.

The Executive Director has determined that the permittee will be required to update its inventory of industrial users by conducting a formal industrial user survey to determine if a full pretreatment program must be developed to ensure the quality of the sewage sludge and prevent interference and pass through. If the permittee is required to continue development of a new pretreatment program and completes Activity Nos. 1-7, then a new pretreatment program will proceed through the approval process in accordance with 40 CFR §§403.9 and 403.11 *[rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798].* The submission will become effective upon approval by the Executive Director in accordance with 40 CFR §403.11.

D. WHOLE EFFLUENT TOXICITY (BIOMONITORING) REQUIREMENTS

Outfall – 001

(1) The draft permit includes Outfall 001 - 7-day chronic saltwater biomonitoring requirements as follows. The permit requires five dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 16%, 21%, 28%, 37%, and 49%. The low-flow effluent concentration (critical dilution) is defined as 37% effluent.

(a) Chronic static renewal 7-day survival and growth test using the mysid shrimp (*Mysidopsis bahia*). The frequency of the testing is once per quarter for at least the first year of testing.

(b) Chronic static renewal 7-day larval survival and growth test using the inland silverside (*Menidia beryllina*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.

The draft permit includes Outfalls 002 and 003 - 7-day chronic freshwater

biomonitoring requirements as follows. Since it is the same effluent, one or the other outfall will need to be tested, but not both. The permit requires five dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 30%, 40%, 53%, 71%, and 94%. The low-flow effluent concentration (critical dilution) is defined as 94% effluent.

(a) Chronic static renewal 7-day survival and reproduction test using the water flea (*Ceriodaphnia dubia*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.

(b) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.

(2) The draft permit includes the following minimum 24-hour acute Outfall 001 – saltwater biomonitoring requirements at a frequency of once per six months:

(a) Acute 24-hour static toxicity test using the mysid shrimp (*Mysidopsis bahia*).

(b) Acute 24-hour static toxicity test using the inland silverside (*Menidia beryllina*).

The draft permit includes the following minimum 24-hour acute Outfalls 002 and 003 - freshwater biomonitoring requirements at a frequency of once per six months:

(a) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*).

(b) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*).

E. BUFFER ZONE REQUIREMENTS

The draft permit includes a requirement for the permittee to maintain legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC § 309.13(e)(3).

F. SUMMARY OF CHANGES FROM APPLICATION

The permittee requested authorization to establish two additional Outfalls 002 and 003. The combined wastewater flow for all Outfalls 001, 002 and 003 will be the same as currently permitted via Outfall 001. The combined flow from Outfall 001, 002 and 003 will be combined annual flow not to exceed 10 million gallons per day (MGD).

To be consistent with the Clear Lake Watershed Rule, the effluent characteristic for Carbonaceous Biochemical Oxygen Demand (5-day) ($CBOD_5$) was deleted

and was replaced with Biochemical Oxygen Demand (5-day) (BOD_5) in the draft permit.

See the next section for additional changes based on the existing permit.

G. SUMMARY OF CHANGES FROM EXISTING PERMIT

The single grab or daily maximum bacteria limits have been changed from 89 CFU or MPN per 100 ml Enterococci to 104 CFU or MPN per 100 ml Enterococci, based on the EPA approved portions of the 2010 Texas Surface Water Quality Standards (TSWQS).

The Standard Permit Conditions, Sludge Provisions, Other Requirements, and Biomonitoring sections of the draft permit have been updated. Pretreatment requirements have been added to the draft permit.

The existing permit authorizes an annual average flow of 10.0 MGD. The permittee is currently operating.

Outfall 001: The effluent limitations in the existing permit, based on a 30-day average, are 5 mg/l $CBOD_5$, 12 mg/l TSS, 2 mg/l NH_3-N, 0.02 mg/l Total Copper, 0.08 mg/l Total Zinc, 35 CFU or MPN of Enterococci per 100 ml and 4.0 mg/l minimum dissolved oxygen (DO). The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. During shut-down of the UV disinfection system for occasional maintenance or during periods of stormwater flow which exceed the 2-hour peak flow, the effluent shall be routed to the chlorine contact chamber and shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

Outfall 001 The effluent limitations in the draft permit, based on a 30-day average, are 5 mg/l BOD_5, 12 mg/l TSS, 2 mg/l NH_3-N, 0.02 mg/l Total Copper, 0.08 mg/l Total Zinc, 35 CFU or MPN of Enterococci per 100 ml and 4.0 mg/l minimum dissolved oxygen (DO). The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. During shut-down of the UV disinfection system for occasional maintenance or during periods of stormwater flow which exceed the 2-hour peak flow, the effluent shall be routed to the chlorine contact chamber and shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

The draft permit has been updated with the addition of Whole Effluent Toxicity

limit for mysid shrimp based on EPA objection to the draft permit in a letter dated May 6, 2014.

Outfall 002 and 003: The effluent limitations in the draft permit, based on a 30-day average, are 5 mg/l BOD_5, 12 mg/l TSS, 2 mg/l NH_3-N, 0.02 mg/l Total Copper, 0.08 mg/l Total Zinc, 126 CFU or MPN of *E. coli* per 100 ml and 4.0 mg/l minimum dissolved oxygen (DO). The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. During shut-down of the UV disinfection system for occasional maintenance or during periods of stormwater flow which exceed the 2-hour peak flow, the effluent shall be routed to the chlorine contact chamber and shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

8. DRAFT PERMIT RATIONALE

A. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated in Title 40 of the Code of Federal Regulations (CFR) require technology-based limitations be placed in wastewater discharge permits based on effluent limitations guidelines, where applicable, and/or on best professional judgment (BPJ) in the absence of guidelines.

Effluent limitations for maximum and minimum pH are in accordance with 40 CFR § 133.102(c) and 30 TAC § 309.1(b).

B. WATER QUALITY SUMMARY AND COASTAL MANAGEMENT PLAN

(1) WATER QUALITY SUMMARY

The treated effluent is discharged via Outfall 001 to Horsepen Bayou; thence to Armand Bayou Tidal; via Outfall 002 to a pond on the west side of El Dorado Boulevard; thence to Harris County Flood Control District (HCFCD) ditch B104-03-00; thence to Horsepen Bayou; thence to Armand Bayou Tidal; and via Outfall 003 to a series of ponds on the east side of El Dorado Boulevard; thence to HCFCD ditch B104-02-00; thence to Horsepen Bayou; thence to Armand Bayou Tidal in Segment No. 1113 of the San Jacinto-Brazos Coastal Basin.

The unclassified receiving water uses are high aquatic use for Horsepen Bayou (tidal), HCFCD ditch B104-03-00 (tidal) and HCFCD ditch B104-02-00 (tidal), intermediate aquatic life use for a pond on the west side and a series of ponds on the east side of El Dorado Boulevard, and limited aquatic life use for HCFCD ditch B104-02-00 (above tidal). The designated uses for Segment No. 1113 are primary contact recreation and high aquatic life use.

The effluent limitations in the draft permit will maintain and protect the existing instream uses. In accordance with 30 TAC § 307.5 and the TCEQ implementation procedures (January 2003) for the Texas Surface Water Quality Standards, an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in the Horsepen Bayou (tidal), a pond on the west side of El Dorado Boulevard, HCFCD ditch B104-03-00 (tidal), a series of ponds on the east side of El Dorado Boulverd, and HCFCD ditch B104-02-00 (tidal), which have been identified as having high, intermediate, high, intermediate and high aquatic life uses, respectively. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES, September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Segment 1113 is currently listed on the State's inventory of impaired and threatened waters (the 2010 Clean Water Act Section 303(d) list). The listing is specifically for depressed dissolved oxygen as well as dioxin and PCBs in edible tissue. The dissolved oxygen impairment is restricted to a reach extending from the confluence with Horsepen Bayou to the upper end of the Segment (AUs 1113_02, 1113_03) and the dioxin and PCB impairment applies to the entire Segment (AUs 1113_01, 1113_02, 1113_03). In addition, Horsepen Bayou (AU 1113B_01) and an unnamed tributary (aka HCFCD B104-03-00, AU 1113C_01) are listed for elevated bacteria levels.

New Outfalls 002 and 003 will redistribute some of the existing authorized load of oxygen-demanding constituents within the watershed of Segment 1113. Because the new outfalls will not increase the total permitted load of oxygen-demanding constituents, but will distribute their loads farther from the dissolved oxygen impaired region than the existing Outfall 001, this amendment is not anticipated to further contribute to the dissolved oxygen impairment of Segment 1113.

Information contained in the application does not show that this facility is

a source of dioxin and PCBs, therefore, this amendment is not anticipated to contribute to the dioxin and PCB impairment of the receiving water body.

This facility is designed to provide adequate disinfection and when operated properly should not add to the bacterial impairment of the segment. In addition, in order to ensure that the proposed discharge meets the stream bacterial standard, an effluent limitation of 126 CFU or MPN of *E. coli* per 100 ml has been included with new outfalls 002 and 003: 35 CFU or MPN of Enterococci is continued from the existing permit.

The effluent limitations and conditions in the draft permit comply with the Texas Surface Water Quality Standards, 30 TAC §§ 307.1 - 307.10, effective August 17, 2000. The effluent limitations and/or conditions in the draft permit comply with the requirements in Watershed Protection, 30 TAC Chapter 311, Subchapter C: Water Quality Management in the Clear Lake Watershed.

(2) CONVENTIONAL PARAMETERS

Effluent limitations for the conventional effluent parameters (i.e., Biochemical Oxygen Demand or Carbonaceous Biochemical Oxygen Demand, Ammonia Nitrogen, etc.) are based on stream standards and waste load allocations for water quality limited streams as established in the Texas Surface Water Quality Standards and the State of Texas Water Quality Management Plan (WQMP).

The effluent limitations in the draft permit have been reviewed for consistency with the State of Texas Water Quality Management Plan (WQMP). The proposed limitations are not contained in the approved WQMP. However, these limits will be included in the next WQMP update. A Waste Load Evaluation has not been prepared for Segment 1113.

The effluent limitations in the draft permit meet the requirements for secondary treatment and the requirements for disinfection according to 30 TAC Chapter 309, Subchapter A: Domestic Wastewater Effluent Limitations.

(3) COASTAL MANAGEMENT PLAN

The Executive Director has reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in accordance with the regulations of the General Land Office (GLO) and has determined that the action is consistent with the applicable CMP goals and policies.

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

(1) GENERAL COMMENTS

The Texas Surface Water Quality Standards (30 TAC Chapter 307) state that "surface waters will not be toxic to man, or to terrestrial or aquatic life." The methodology outlined in the "Procedures to Implement the Texas Surface Water Quality Standards, January 2003" is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.

(2) AQUATIC LIFE CRITERIA

(a) SCREENING

Water quality-based effluent limitations are calculated from marine aquatic life criteria found in Table 1 of the Texas Surface Water Quality Standards (30 TAC Chapter 307).

Outfall 001 - Acute marine criteria are applied at the edge of the zone of initial dilution (ZID) and chronic marine criteria are applied at the edge of the aquatic life mixing zone. The ZID for this discharge is defined as 10.25 feet from the point where the discharge enters Horsepen Bayou. The aquatic life mixing zone for this discharge is defined as a radius of 41 feet from the point where the discharge enters Horsepen Bayou.

TCEQ uses the EPA horizontal jet plume model to estimate dilution at the edges of the ZID and aquatic life mixing zone for discharges greater than 10 MGD into bays, estuaries, or wide tidal rivers and discharges into sections of bays, estuaries, and wide tidal rivers that are less than 400 feet wide. General assumptions used in the horizontal jet plume model are: a non-buoyant discharge, a submersed pipe, and no cross flow. Based on this analysis, the following critical effluent percentages are calculated based on the permitted flow of 10.0 MGD:

Acute Effluent %:	100%	Chronic Effluent %:	37%

Outfall 002 - Acute freshwater criteria are applied at the edge of the zone of initial dilution (ZID) and chronic freshwater criteria are applied at the edge of the aquatic life mixing zone. The ZID for this discharge is defined as 20 feet upstream and 60 feet downstream from the point where the discharge enters Horsepen Bayou. The aquatic life mixing zone for this discharge is defined as 100 feet upstream and 300 feet downstream from the point where the discharge enters the proposed pond.

TCEQ uses the mass balance equation to estimate dilutions at the edges of

the ZID and aquatic life mixing zone during critical conditions. The estimated dilution at the edge of the aquatic life mixing zone is calculated using the final permitted flow of 1.08 MGD and the 7-day, 2-year (7Q2) flow of 0.10 cfs for the proposed pond. The estimated dilution at the edge of the ZID is calculated using the final permitted flow of 1.08 MGD and 25% of the 7Q2 flow. The following critical effluent percentages are being used:

Acute Effluent %: 98.53% Chronic Effluent %: 94.35%

Outfall 003 - Acute freshwater criteria are applied at the edge of the zone of initial dilution (ZID) and chronic freshwater criteria are applied at the edge of the aquatic life mixing zone. The ZID for this discharge is defined as 20 feet upstream and 60 feet downstream from the point where the discharge enters the Horspen Bayou. The aquatic life mixing zone for this discharge is defined as 100 feet upstream and 300 feet downstream from the point where the discharge enters the proposed series of ponds.

TCEQ uses the mass balance equation to estimate dilutions at the edges of the ZID and aquatic life mixing zone during critical conditions. The estimated dilution at the edge of the aquatic life mixing zone is calculated using the final permitted flow of 1.08 MGD and the 7-day, 2-year (7Q2) flow of 0.10 cfs for the proposed series of ponds. The estimated dilution at the edge of the ZID is calculated using the final permitted flow of 1.08 MGD and 25% of the 7Q2 flow. The following critical effluent percentages are being used:

Acute Effluent %: 98.53% Chronic Effluent %: 94.35%

Outfall 001 - Wasteload allocations (WLAs) are calculated using the above estimated effluent percentages, criteria outlined in the Texas Surface Water Quality Standards, and partitioning coefficients for metals (when appropriate and designated in the implementation procedures). The WLA is the end-of-pipe effluent concentration that can be discharged, when after mixing in the receiving stream instream numerical criteria will not be exceeded. From the WLA, a long term average (LTA) is calculated using a log normal probability distribution, a given coefficient of variation (0.6), and a 99th percentile confidence level. The lower of the two LTAs (acute and chronic) is used to calculate a daily average and daily maximum effluent limitation for the protection of aquatic life using the same statistical considerations with the 99th percentile confidence level and a standard number of monthly effluent samples collected (12). Assumptions used in deriving the effluent limitations include segment values for hardness, chlorides, pH and Total Suspended Solids (TSS) according to the segment-specific values contained in the TCEQ guidance document, "Procedures to Implement the Texas Surface Water Quality Standards, January 2003." The segment values are 902 mg/l Chlorides, 7.4 standard units for pH, and 18 mg/l for TSS. For additional details on the calculation of water quality-based effluent limitations, refer to the TCEQ guidance document.

Outfall 002 and 003 - Wasteload allocations (WLAs) are calculated using the above estimated effluent percentages, criteria outlined in the Texas Surface Water Quality Standards, and partitioning coefficients for metals (when appropriate and designated in the implementation procedures). The WLA is the end-of-pipe effluent concentration that can be discharged, when after mixing in the receiving stream, instream numerical criteria will not be exceeded. From the WLA, a long term average (LTA) is calculated using a log normal probability distribution, a given coefficient of variation (0.6), and a 90th percentile confidence level. The LTA is the long term average effluent concentration for which the WLA will never be exceeded using a selected percentile confidence level. The lower of the two LTAs (acute and chronic) is used to calculate a daily average and daily maximum effluent limitation for the protection of aquatic life using the same statistical considerations with the 99th percentile confidence level and a standard number of monthly effluent samples collected (12). Assumptions used in deriving the effluent limitations include segment values for hardness, chlorides, pH and Total Suspended Solids (TSS) according to segment 1102 values contained in the TCEQ guidance document, "Procedures to Implement the Texas Surface Water Quality Standards, January 2003." Segment 1102 values are 126 mg/l $CaCO_3$ for hardness, 125 mg/l Chlorides, 7.4 standard units for pH, and 15 mg/l for TSS. For additional details on the calculation of water quality-based effluent limitations, refer to the TCEQ guidance document.

TCEQ practice for determining significant potential is to compare the reported analytical data against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are required when analytical data reported in the application exceeds 85% of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceeds 70% of the calculated daily average water quality-based effluent limitation.

(b) PERMIT ACTION

Outfall 001 - Analytical data reported in the application was screened against calculated water quality-based effluent limitations for the protection of aquatic life. Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitation for aquatic life protection for Outfall 001. Effluent limitations for Total Copper and Total Zinc are continued from the existing permit.

Outfalls 002 and 003 - Analytical data reported in the application from Outfall 001 was screened against calculated water quality-based effluent limitations for the protection of aquatic life. Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitation for aquatic life protection for Outfalls 002 and 003.

(3) AQUATIC ORGANISM BIOACCUMULATION CRITERIA

(a) SCREENING

Outfall 001 - Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of marine fish tissue found in Table 3 of the Texas Surface Water Quality Standards (30 TAC Chapter 307). Marine fish tissue bioaccumulation criteria are applied at the edge of the human health mixing zone for discharges into bays, estuaries and wide tidal rivers. The human health mixing zone for this discharge is defined as a 41-foot radius from the point where the discharge enters Horsepen Bayou. TCEQ uses the EPA horizontal jet plume model to estimate dilution at the edge of the human health mixing zone for discharges greater than 10 MGD into a bay, estuary, or wide tidal river and discharges into sections of bays, estuaries, or wide tidal rivers that are less than 400 feet wide. General assumptions used in the horizontal jet plume model are: a non-buoyant discharge, a submersed pipe, and no cross flow. Based on this analysis, the following critical effluent percentage is calculated based on the permitted flow of 10.0 MGD:

Human Health Effluent %: 18%

Outfalls 001 and 002 - Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of freshwater fish tissue found in Table 2 of the Texas Surface Water Quality Standards (30 TAC Chapter 307). Freshwater fish tissue bioaccumulation criteria are applied at the edge of the human health mixing zone. The human health mixing zone for this discharge is identical to the aquatic life mixing zone. TCEQ uses the mass balance equation to estimate dilution at the edge of the human health mixing zone during average flow conditions. The estimated dilution at the edge of the human health mixing zone is calculated using the final permitted flow of 10.0 MGD and the harmonic mean flow of 0.20 cfs for the proposed ponds. The following critical effluent percentage is being used:

Human Health Effluent %: 89.31%

Water quality-based effluent limitations for human health protection against the consumption of fish tissue are calculated using the same procedure as outlined for calculation of water quality-based effluent limitations for aquatic life protection. A 99th percentile confidence level in the long term average calculation is used with only one long term average value being calculated.

Significant potential is again determined by comparing reported analytical data against 70% and 85% of the calculated daily average water quality-based effluent limitation.

(b) PERMIT ACTION

Outfall 001 - Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitation for human health protection. Total Copper and Total Zinc limits from the existing permit are continued in the draft permit.

Outfalls 002 and 003 - Reported analytical data from Outfall 001 does not exceed 70% of the calculated daily average water quality-based effluent limitation for human health protection.

(4) DRINKING WATER SUPPLY PROTECTION

(a) SCREENING

Water Quality Segment No. 1113, which receives the discharge from this facility, is not designated as a public water supply. Screening reported analytical data of the effluent against water quality-based effluent limitations calculated for the protection of a drinking water supply is not applicable.

(b) PERMIT ACTION

None

(5) WHOLE EFFLUENT TOXICITY (BIOMONITORING) CRITERIA

(a) SCREENING

TCEQ has determined that there may be pollutants present in the effluent that may have the potential to cause toxic conditions in the receiving stream. Whole effluent biomonitoring is the most direct measure of potential toxicity that incorporates the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity.

The existing permit includes Outfall 001 - 7-day chronic saltwater biomonitoring requirements. A summary of the biomonitoring testing for the facility indicates in the past five years, the permittee performed forty-two (42) chronic tests, with two demonstrations of significant toxicity (that is, two failures) by mysid shrimp and zero failures by the inland silverside.

REASONABLE POTENTIAL (RP) DETERMINATION

Species	Date of Failure	Result (NOEC)	Endpoint
Mysid shrimp	7/20/2010	20%	Sublethal
Mysid shrimp	10/19/2010	20%	Sublethal
Inland silverside	n/a		

A reasonable potential (RP) determination was performed in accordance with 40 CFR § 122.44(d)(1)(ii) to determine whether the discharge will reasonably be expected to cause or contribute to an exceedance of a state water quality standard or criterion within that standard. Each test species is evaluated separately. The RP determination is based on representative data from the previous five years of chronic WET testing. The table below identifies the thresholds for the number of failures required to necessitate that a WET limit be placed in the permit or the consideration of additional Best Professional Judgment (BPJ) factors, such as the duration and magnitude of the failures.

WET REASONABLE POTENTIAL DETERMINATION THRESHOLDS
More than 3 failures in the past five years = WET limit
3 failures with 2 or 3 occurring in the past 3 years = WET limit
1 to 3 failures in the past five years but 1 or less in last 3 years = BPJ
0 failures = No limit

With two failures by the mysid shrimp, BPJ was used to make an RP determination (see below). RP is demonstrated if the point total is 7 or greater. With a point total of 4, a determination of no RP was made. With zero failures by the inland silverside, a determination of no RP was made. With no RP, WET limits are not required and both test species are eligible for the testing frequency reduction.

However, in a letter dated May 16, 2014, EPA objected to the draft permit not including a WET limit for the mysid shrimp due to those two test failures. The permittee has accepted the sublethal WET limit, without a compliance period, in an email dated June 6, 2015.

All valid test data results were used for this determination.

(b) PERMIT ACTION

The test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge. This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body.

(6) WHOLE EFFLUENT TOXICITY CRITERIA (24 - HOUR ACUTE)

(a) SCREENING

The existing permit includes 24-hour acute Outfall 001 – saltwater biomonitoring language. A summary of the biomonitoring testing for the facility indicates in the past five years, the permittee has performed eighteen 24-hour acute tests, with no demonstrations of significant mortality by either test species.

(b) PERMIT ACTION

The draft permit includes 24-hour 100% acute biomonitoring tests for the life of the permit.

9. WATER QUALITY VARIANCE REQUESTS

No variance requests have been received.

10. PROCEDURES FOR FINAL DECISION

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application, and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application. This notice sets a deadline for public comment.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment, and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's Response to Comments and Final Decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the Executive Director's Response to Comments and Final Decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application, contact John O. Onyenobi, P.E., NSPE at (512) 239-6707.

11. ADMINISTRATIVE RECORD

The following items were considered in developing the draft permit:

A. PERMIT(S)

TPDES Permit No. WQ0010539001 issued December 1, 2009.

B. APPLICATION

Application received February 26, 2013 and additional information received April 9, 2013.

C. MEMORANDA

Interoffice memoranda from the Water Quality Assessment Section of the TCEQ Water Quality Division. Interoffice memorandum from the Storm Water & Pretreatment Team of the TCEQ Water Quality Division.

D. MISCELLANEOUS

Federal Clean Water Act, § 402; Texas Water Code § 26.027; 30 TAC Chapters 305, 309, 312, 319, 30; Commission policies; and EPA guidelines.

Texas Surface Water Quality Standards, 30 TAC §§ 307.1 - 307.10.

Procedures to Implement the Texas Surface Water Quality Standards (IP), Texas Commission on Environmental Quality, June 2010, as approved by EPA and the IP, January 2003, for portions of the 2010 IP not approved by EPA.

Texas 2010 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, August 25, 2010; approved by the EPA November 18,

2011.

TNRCC Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits, Document No. 98-001.000-OWR-WQ, May 1998.

TPDES PERMIT NO. WQ0010539001
[For TCEQ office use only - EPA I.D. No. TX0022543]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

This amendment supersedes and replaces TPDES Permit No. WQ0010539001 issued December 1, 2009.

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

Clear Lake City Water Authority

whose mailing address is

900 Bay Area Boulevard
Houston, Texas 77058

is authorized to treat and discharge wastes from the Robert T. Savely Water Reclamation Wastewater Treatment Facility, SIC Code 4952

located at 14210 Middlebrook Drive in Houston, approximately one mile northeast of the intersection of Bay Area Boulevard and Space Center Boulevard, southeast of Horsepen Bayou and adjacent to the northernmost part of the Lyndon B. Johnson Space Center in Harris County, Texas 77058

via Outfall 001 to Horsepen Bayou; thence to Armand Bayou Tidal; via Outfall 002 to a pond on the west side of El Dorado Boulevard; thence to Harris County Flood Control District (HCFCD) ditch B104-03-00; thence to Horsepen Bayou; thence to Armand Bayou Tidal; and via Outfall 003 to a series of ponds on the east side of El Dorado Boulevard; thence to HCFCD ditch B104-02-00; thence to Horsepen Bayou; thence to Armand Bayou Tidal in Segment No. 1113 of the San Jacinto-Brazos Coastal Basin (See Attachment A)

only according to effluent limitations, monitoring requirements and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight, **September 1, 2018.**

ISSUED DATE:

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

   The annual average flow of effluent shall not exceed 10.0 million gallons per day (MGD)*; nor shall the average discharge during any two-hour period (2-hour peak) exceed 21,528 gallons per minute (gpm).

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Biochemical Oxygen Demand (5-day)	5 (417)	10	20	30	One/day	Composite
Total Suspended Solids	12 (1001)	20	40	60	One/day	Composite
Ammonia Nitrogen	2 (167)	5	10	15	One/day	Composite
Total Copper	0.02 (1.7)	N/A	0.04	N/A	Two/week	Composite
Total Zinc	0.08 (6.8)	N/A	0.17	N/A	Two/week	Composite
Enterococci, CFU or MPN/100 ml	35	N/A	104	N/A	Daily	Grab
Sublethal Whole Effluent Toxicity (WET) limit 37% (Parameter 22414)						
Mysidopsis bahia (7-day chronic NOEC[1])	37%	N/A	37%	N/A	1/quarter	Composite

[1] The sublethal NOEC is here defined as the greatest effluent dilution at which no significant sublethal effect is demonstrated. A significant sublethal effect is defined as a statistically significant difference between a specified effluent dilution and the control.

* The combined annual average flow from Outfalls 001, 002 and 003 shall not exceed 10.0 MGD.

2. The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. During a shut-down of the UV disinfection system for occasional maintenance or during periods of stormwater flow which exceed the 2-hour peak flow, the effluent shall be routed to the chlorine contact chamber; the effluent shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample at each chlorination chamber. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per day by grab sample.
7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 002

1. During the period beginning upon the completion of the outfall construction and lasting through the date of expiration the permittee is authorized to discharge subject to the following effluent limitations:

   The annual average flow of effluent shall not exceed 1.08 million gallons per day (MGD)*; nor shall the average discharge during any two-hour period (2-hour peak) exceed 3,000 gallons per minute (gpm).

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Biochemical Oxygen Demand (5-day)	5 (45)	10	20	30	One/day	Composite
Total Suspended Solids	12 (108)	20	40	60	One/day	Composite
Ammonia Nitrogen	2 (18)	5	10	15	One/day	Composite
Total Copper	0.02 (0.18)	N/A	0.04	N/A	Two/week	Composite
Total Zinc	0.08 (0.72)	N/A	0.16	N/A	Two/week	Composite
E. coli, CFU or MPN/100 ml	126	N/A	399	N/A	Daily	Grab

   * The combined annual average flow from Outfall 001, 002 and 003 shall not exceed 10.0 MGD.

2. The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. During a shut-down of the UV disinfection system for occasional maintenance or during periods of stormwater flow which exceed the 2-hour peak flow, the effluent shall be routed to the chlorine contact chamber; the effluent shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample at each chlorination chamber. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per day by grab sample.
7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 003

1. During the period beginning upon the completion of the outfall construction and lasting through the date of expiration the permittee is authorized to discharge subject to the following effluent limitations:

   The annual average flow of effluent shall not exceed 1.08 million gallons per day (MGD)*; nor shall the average discharge during any two-hour period (2-hour peak) exceed 3,000 gallons per minute (gpm).

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Biochemical Oxygen Demand (5-day)	5 (45)	10	20	30	One/day	Composite
Total Suspended Solids	12 (108)	20	40	60	One/day	Composite
Ammonia Nitrogen	2 (18)	5	10	15	One/day	Composite
Total Copper	0.02 (0.18)	N/A	0.04	N/A	Two/week	Composite
Total Zinc	0.08 (0.72)	N/A	0.16	N/A	Two/week	Composite
E. coli, CFU or MPN/100 ml	126	N/A	399	N/A	Daily	Grab

   * The combined annual average flow from Outfall 001, 002 and 003 shall not exceed 10.0 MGD.

2. The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. During a shut-down of the UV disinfection system for occasional maintenance or during periods of stormwater flow which exceed the 2-hour peak flow, the effluent shall be routed to the chlorine contact chamber; the effluent shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample at each chlorination chamber. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per day by grab sample.
7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC § 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§ 5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in TWC § 26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

   a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.

   b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.

   c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.

   d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.

   e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.

   f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

   a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.

      i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.

b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.

c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.

d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

e. Bacteria concentration (*E. coli* or Enterococci) - Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).

g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

3. Sample Type

a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

b. Grab sample - an individual sample collected in less than 15 minutes.

4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.

5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.

6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12. Unless otherwise specified, a monthly effluent report shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be reported on an approved self-report form that is signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act (CWA); TWC §§ 26, 27, and 28; and THSC § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.

b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period

of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.

c. Records of monitoring activities shall include the following:

i. date, time and place of sample or measurement;

ii. identity of individual who collected the sample or made the measurement.

iii. date and time of analysis;

iv. identity of the individual and laboratory who performed the analysis;

v. the technique or method of analysis; and

vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:

i. Unauthorized discharges as defined in Permit Condition 2(g).

ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.

iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.

c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.

d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.

8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. One hundred micrograms per liter (100 µg/L);

ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or

iv. The level established by the TCEQ.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. Five hundred micrograms per liter (500 µg/L);

ii. One milligram per liter (1 mg/L) for antimony;

iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or

iv. The level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

11. All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Executive Director of the following:

a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;

b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and

c. For the purpose of this paragraph, adequate notice shall include information on:

i. The quality and quantity of effluent introduced into the POTW; and

ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

1. General

a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

i. Violation of any terms or conditions of this permit;

ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.

c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.

e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.

h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.

i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

3. Inspections and Entry

a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.

b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:

i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or

ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;

iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.

c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.

d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.

e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.

b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to TWC Chapter 11.

8. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy

a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:

i. the permittee;

ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or

iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.

b. This notification must indicate:

i. the name of the permittee and the permit number(s);

ii. the bankruptcy court in which the petition for bankruptcy was filed; and

iii. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.

3. Domestic wastewater treatment facilities shall comply with the following provisions:

   a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.

   b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.

4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.

6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).

7. Documentation

   For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not

confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.

   a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

      If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 169) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

   b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.

   c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and

related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.

10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.

11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:

    a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.

    b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.

    c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Environmental Cleanup Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.

    d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Registration, Review, and Reporting Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.

    e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.

    f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:

        i. Volume of waste and date(s) generated from treatment process;
        ii. Volume of waste disposed of on-site or shipped off-site;

iii. Date(s) of disposal;
iv. Identity of hauler or transporter;
v. Location of disposal site; and
vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

12. For industrial facilities to which the requirements of 30 TAC § 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC § 361.

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SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site or co-disposal landfill. **The disposal of sludge by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of sludge. This provision does not authorize land application of Class A Sludge. This provision does not authorize the permittee to land apply sludge on property owned, leased or under the direct control of the permittee.**

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.

2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.

3. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

B. Testing Requirements

1. Sewage sludge shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I Toxicity Characteristic Leaching Procedure (TCLP) or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 12) within seven (7) days after failing the TCLP Test.

   The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to:

Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 12) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

2. Sewage sludge shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C.

TABLE 1

Pollutant	Ceiling Concentration (Milligrams per kilogram)*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following methods to ensure that the sludge meets either the Class A or Class B pathogen requirements.

a. Six alternatives are available to demonstrate compliance with Class A sewage sludge. The first 4 options require either the density of fecal coliform in the sewage sludge be less than 1000 Most Probable Number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. Below are the additional requirements necessary to meet the definition of a Class A sludge.

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(2)(A) for specific information.

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%.

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information.

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of shall be treated in one of the processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion.

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of shall be treated in a process that has been approved by the U.S. Environmental Protection Agency as being equivalent to those in Alternative 5.

b. Three alternatives are available to demonstrate compliance with Class B criteria for sewage sludge.

Alternative 1

i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.

ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;

iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and

v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U.S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;

iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition, the following site restrictions must be met if Class B sludge is land applied:

i. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.

ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.

iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.

iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.

v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.

vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn.

vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.

viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

ix. Land application of sludge shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

i. Sewage sludge shall be injected below the surface of the land.

ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.

iii. When sewage sludge that is injected below the surface of the land

is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10- i. Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

ii. When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test	- annually
PCBs	- annually

All metal constituents and fecal coliform or Salmonella sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

Amount of sewage sludge (*) metric tons per 365-day period	Monitoring Frequency
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(*) *The amount of bulk sewage sludge applied to the land (dry weight basis).*

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

A. Pollutant Limits

Table 2

Pollutant	Cumulative Pollutant Loading Rate (pounds per acre)*
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

Table 3

Pollutant	Monthly Average Concentration (milligrams per kilogram)*
Arsenic	41
Cadmium	39
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel	420
Selenium	36
Zinc	2800

*Dry weight basis

B. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A or Class B pathogen reduction requirements as defined above in Section I.B.3.

C. Management Practices

1. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.

2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with the Management Requirements in accordance with 30 TAC § 312.44.

3. Bulk sewage sludge shall be applied at or below the agronomic rate of the cover crop.

4. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:

   a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.

   b. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instruction on the label or information sheet.

   c. The annual whole sludge application rate for the sewage sludge application rate for the sewage sludge that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

D. Notification Requirements

1. If bulk sewage sludge is applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:

   a. The location, by street address, and specific latitude and longitude, of each land application site.

   b. The approximate time period bulk sewage sludge will be applied to the site.

   c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.

2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

E. Record keeping Requirements

The sludge documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a

period of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.

2. A description of how the pathogen reduction requirements are met (including site restrictions for Class B sludge, if applicable).

3. A description of how the vector attraction reduction requirements are met.

4. A description of how the management practices listed above in Section II.C are being met.

5. The following certification statement:

   "I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:

   a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.

   b. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.

   c. The number of acres in each site on which bulk sludge is applied.

   d. The date and time sludge is applied to each site.

   e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.

   f. The total amount of sludge applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 12) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30 of each year the following information:

1. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
2. The frequency of monitoring listed in Section I.C. that applies to the permittee.
3. Toxicity Characteristic Leaching Procedure (TCLP) results.
4. Identity of hauler(s) and TCEQ transporter number.
5. PCB concentration in sludge in mg/kg.
6. Date(s) of disposal.
7. Owner of disposal site(s).
8. Texas Commission on Environmental Quality registration number, if applicable.
9. Amount of sludge disposal dry weight (lbs/acre) at each disposal site.
10. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
11. Level of pathogen reduction achieved (Class A or Class B).
12. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met.
13. Vector attraction reduction alternative used as listed in Section I.B.4.
14. Annual sludge production in dry tons/year.
15. Amount of sludge land applied in dry tons/year.
16. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge treatment activities, shall be attached to the annual reporting form.
17. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.

a. The location, by street address, and specific latitude and longitude.

b. The number of acres in each site on which bulk sewage sludge is applied.

c. The date and time bulk sewage sludge is applied to each site.

d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.

e. The amount of sewage sludge (i.e., dry tons) applied to each site.

The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

A. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

B. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.

C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

D. Sewage sludge shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 12) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 12) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

E. Sewage sludge shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.

F. Record keeping Requirements

The permittee shall develop the following information and shall retain the information for five years.

1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.

2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 12) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year the following information:

1. Toxicity Characteristic Leaching Procedure (TCLP) results.

2. Annual sludge production in dry tons/year.

3. Amount of sludge disposed in a municipal solid waste landfill in dry tons/year.

4. Amount of sludge transported interstate in dry tons/year.

5. A certification that the sewage sludge meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

6. Identity of hauler(s) and transporter registration number.

7. Owner of disposal site(s).

8. Location of disposal site(s).

9. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

OTHER REQUIREMENTS

1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

   This Category B facility must be operated by a chief operator or an operator holding a Category B license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

2. The Executive Director has reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in accordance with the regulations of the General Land Office (GLO) and has determined that the action is consistent with the applicable CMP goals and policies.

3. Outfall 001 - The mixing zone is defined as a volume within a radius of 41 feet from the point of discharge. Chronic toxic criteria apply at the edge of the mixing zone.

   Outfall 002 - The mixing zone is defined as 300 feet downstream and 100 feet upstream from the point of discharge. Chronic toxic criteria apply at the edge of the mixing zone.

   Outfall 003 - The mixing zone is defined as 300 feet downstream and 100 feet upstream from the point of discharge. Chronic toxic criteria apply at the edge of the mixing zone.

4. The permittee is hereby placed on notice that this permit may be reviewed by the TCEQ after the completion of any new intensive water quality survey on Segment No. 1113 of the San Jacinto-Brazos Coastal Basin and any subsequent updating of the water quality model for Segment No. 1113, in order to determine if the limitations and conditions contained herein are consistent with any such revised model. The permit may be amended, pursuant to 30 TAC §305.62, as a result of such review. The permittee is also hereby placed on notice that effluent limits may be made more stringent at renewal based on, for example, any change to modeling protocol approved in the TCEQ Continuing Planning Process.

5. The permittee shall maintain sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC § 309.13(e)(3). The evidence of legal restrictions shall be submitted to the Executive Director in care of the TCEQ Wastewater Permitting Section (MC 148).The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). (See Attachment "B")

6. The permittee shall provide facilities for the protection of its wastewater treatment facilities from a 100-year flood.

7. In accordance with 30 TAC §319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is

protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, daily may be reduced to 5/week for all outfalls. **A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148).** The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.

8. The permittee shall operate the parallel peak flow treatment system in accordance with the following provisions:

   A. Influent to the wastewater treatment facility will be diverted to the peak flow clarifiers only when wet weather causes the influent flowrate to the treatment plant to exceed 14,292 gallons per minute (20.58 MGD);

   B. The average discharge during any two-hour (2-hour peak) from the peak flow clarifiers shall not exceed 5,208 gpm (7.5 MGD). Subsequently, the total two-hour flow (2-hour peak from the peak flow clarifiers and the wastewater treatment system shall not exceed 19,500 gpm (28.08 MGD);

   C. When the peak flow clarifiers are treating influent due to wet weather, the combined effluent concentration shall meet all limitations on page 2 of the permit;

   D. If the peak flow clarifiers are removed from service, these units shall be drained and the supernatant and sludge returned to the head of the treatment plant;

   E. Provisions shall be made to allow for influent testing by grab or composite sampling at the head of the treatment plant for BOD_5 and TSS at the same frequency listed on page 2 of this permit; and

   F. A flow measurement device shall be installed at the final treatment unit.

   G. Each time raw influent is diverted directly to the peak flow clarifiers, the permittee shall keep records which include the following information:

   i. Date(s) of operation and length of time of diversion;
   ii. Flow data during operation and total volume treated by both the peak flow and wastewater treatment systems;
   iii. Composite or grab sample analysis results for BOD_5 and TSS for total combined effluent;
   iv. Date and time when the peak flow clarifier is totally drained, as applicable; and
   v. The requirements found in Item 2 of page 2 of this permit are met for flows from the peak flow clarifiers and wastewater treatment system.

The above records shall be maintained on a monthly basis and be available at the plant site for inspection by authorized representative of the Commission for at least three years.

CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The following pollutants may not be introduced into the treatment facility:

   a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit (60 degrees Celsius) using the test methods specified in 40 CFR §261.21;

   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case shall there be discharges with pH lower than 5.0 standard units, unless the works are specifically designed to accommodate such discharges;

   c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in interference;

   d. Any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;

   e. Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case shall there be heat in such quantities that the temperature at the POTW treatment plant exceeds 104 degrees Fahrenheit (40 degrees Celsius) unless the Executive Director, upon request of the POTW, approves the alternate temperature limit;

   f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

   g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

   h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

The permittee shall comply with the pretreatment requirements in 40 CFR Part 403, as amended, and as specified in the following schedule of compliance. If the permittee is required to develop a pretreatment program, the final complete submission is due two (2) months from the date the permittee receives notification from the TCEQ Stormwater & Pretreatment Team (MC148) of the Water Quality Division indicating completion of the permittee's Activity Nos. 1- 6. (See Activity No. 7)

   a. If the permittee does not complete any of the activities according to the following schedule, the permittee shall submit a letter signed by the permittee [according to 40 CFR §122.41(k)] to the TCEQ Stormwater & Pretreatment Team (MC 148) of the Water Quality Division within 14 days of the activity due date, including, at a minimum, the date on which the required activity will be submitted, the reason for the delay, and the steps taken to return to the established schedule. The permittee may request one 60-day extension of the due date for Activity Nos. 1 and 7. These requests for extensions shall be made in writing to the Executive Director, care of the Stormwater & Pretreatment Team (MC 148), no later than 14 days prior to the due date. The Executive Director may grant an extension of the deadlines of Activity Nos. 1 and 7 submitted pursuant to these permit requirements, upon a written and substantiated showing of good cause. The determination of what constitutes good cause rests solely with the Executive Director. Extensions are not effective until the permittee receives written approval from the Executive Director.

b. If after review of the submission, the Executive Director determines that the submission does not comply with the applicable requirements of 40 CFR §§403.8 and 403.9, the Executive Director will notify the permittee in writing. The notification will identify any defects in the submission and advise the permittee of the means by which the permittee can comply with the applicable requirements of 40 CFR §§403.8 and 403.9. In such a case, revised information will be necessary for the Executive Director to make a determination on whether to approve or deny the permittee's submission.

c. A new pretreatment program will proceed through the approval process in accordance with 40 CFR §§403.9 and 403.11 *[rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798].* The submission will become effective upon approval by the Executive Director in accordance with 40 CFR §403.11. Upon approval of a pretreatment program by the Executive Director, this permit will be modified or amended to incorporate that pretreatment program.

d. The permittee may develop and submit a complete pretreatment program at any time before the deadline established in Activity No. 7.

e. The permittee may apply for authority to revise categorical pretreatment standards to reflect POTW removal of pollutants in accordance with the requirements of 40 CFR §403.7 *[rev. 10/14/05]* at any time.

f. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under 40 CFR Part 403.

g. The permittee shall provide adequate written notification to the Executive Director, care of the Stormwater & Pretreatment Team (MC148) of the Water Quality Division, within 30 days subsequent to the permittee's knowledge of the following:

(1) Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and

(2) Any substantial change in the volume or character of pollutants being introduced into the treatment works.

Adequate notice shall include information on the quality and quantity of effluent to be introduced into the treatment works, and any anticipated impact of such change in the quality or quantity of effluent to be discharged from the POTW.

Revised November 2007

SCHEDULE OF COMPLIANCE FOR PRETREATMENT PROGRAM DEVELOPMENT

ACTIVITY NUMBER	ACTIVITY	DATE
	Submissions required by the Activity Nos. 2-6 listed below shall be made to the TCEQ Stormwater & Pretreatment Team (MC 148) of the Water Quality Division. Initially, Activity Nos. 3, 4, 5, and 6 should be submitted in draft form.	
1.	Submit an industrial user (IU) survey which consists of a qualitative analysis of pollutants being contributed by IUs in its entire municipal system (including all treatment plants). In accordance with 40 Code of Federal Regulations (CFR) §§403.8(f)(2)(i)-(ii) and 403.12(i)(1), the IUs should be asked to provide, the names, addresses, contact person, and information on the type and approximate quantity of pollutants discharged into the system. For guidance on the procedures see the U.S. Environmental Protection Agency's *Guidance Manual for POTW Pretreatment Program Development*, October 1983, Chapter 2 and Appendix H. This information may be derived from knowledge of the facility's process and should not require any sampling at the source. The IU survey must identify significant industrial users (SIUs), including those categorical industrial users (CIUs) subject to categorical pretreatment standards under 40 CFR Chapter I, Subchapter N, and specifying the citations, categories, and subcategories from the 40 CFR which are applicable to such CIUs. The permittee should submit the information in tabular form, using the example table format provided. The TCEQ Stormwater & Pretreatment Team will notify the permittee regarding the results of the IU survey, and whether the permittee will be required to continue the program development beyond Activity No. 1. If pretreatment program development is necessary, the permittee will be required to continue the program development upon receiving notification from the TCEQ. If notified that a TPDES pretreatment program is not necessary, the permittee will submit an update of its IU survey with Worksheet 6.0 of the Domestic Technical Report, as part of the TCEQ Domestic Wastewater Permit Application, when next reapplying for this TPDES permit. The IU survey must include documented changes in industrial flow and/or characteristics of existing industries and any new contributing industries.	2 months from the issued date of the permit

SCHEDULE OF COMPLIANCE FOR PRETREATMENT PROGRAM DEVELOPMENT

ACTIVITY NUMBER	ACTIVITY	DATE
2.	Submit a sampling plan describing the monitoring to take place at the influent and effluent (and other points, as applicable) of each wastewater treatment plant to be covered under the TPDES pretreatment program, domestic/commercial background, and sewage sludge for the technically based local limits (TBLLs) development. Submit the analytical results and related quality assurance/quality control (QA/QC) information of an influent pollutant scan of a 24-hour composite sample to determine all pollutants being contributed to the system. The type of scan to be performed is the initial priority pollutant scan of the 126 pollutants from 40 CFR Part 122, Appendix D, Tables II and III plus any other additional pollutants designated in the TCEQ Texas Surface Water Quality Standards, 30 TAC Chapter 307. Submit information derived from Items (a) and (b) in this section below. All sampling, analyses, and method detection limits must be performed in accordance with 40 CFR Part 136, as amended; as approved by the EPA through the application for alternate test procedures; or as suggested in Tables E-1 and E-2 of the *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), as amended and adopted by the TCEQ. This initial pollutant scan will be used by the permittee for developing the TBLLs as specified in Activity No. 5. (a) Using the qualitative information supplied by the IUs in Activity No. 1, and the quantitative information collected in the initial pollutant scan, the permittee shall determine which IUs may be discharging pollutants of concern which may affect the operation of the POTW(s) or pass through untreated. (b) Sampling and analyses shall be completed to quantify the pollutants of concern discharged by the IUs identified in the investigation of (a) above.	3 months from the effective date of notification to continue pretreatment program development

SCHEDULE OF COMPLIANCE FOR PRETREATMENT PROGRAM DEVELOPMENT

ACTIVITY NUMBER	ACTIVITY	DATE
3.	Submit a design of a sampling, inspection, permitting, reporting, and data management program which will implement the requirements of 40 CFR §§403.8 and 403.12, including all proposed forms. The permittee is required to design the program in order to inspect and sample the effluent from each SIU at least once per year, except as specified in 40 CFR §403.8(f)(2)(v). The permittee shall design the program in order to control through permit, order, or similar means, the contribution to the POTW by each IU to ensure compliance with applicable pretreatment standards and requirements. In the case of SIUs (identified as significant under 40 CFR §403.3(v)), this control shall be achieved through individual or general control mechanisms, in accordance with 40 CFR §403.8(f)(1)(iii).	5 months from the effective date of notification to continue pretreatment program development
4.	Submit a description of the financial programs, revenue sources, equipment, staffing, and organizational chart of those positions which will be employed to implement the pretreatment program (as required by 40 CFR §§403.8(f)(3) and 403.9(b)(3) and (b)(4)).	6 months from the effective date of notification to continue pretreatment program development
5.	Submit a complete TBLLs submission as required by 40 CFR §§403.5(c) and 403.8(f)(4). The technical development of the TBLLs should be developed in accordance with the EPA's *Local Limits Development Guidance*, July 2004, and EPA Region 6's Technically Based Local Limits Development Guidance, October 12, 1993. Include the results of a current Texas Toxicity Modeling Program (TexTox) report for each wastewater treatment plant. This report must be run subsequent to the effective date of the TCEQ notification to continue TPDES pretreatment program development. The technical development must demonstrate that the TBLLs attain the Texas Surface Water Quality Standards [30 TAC Chapter 307] in water in the state and are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination. This submission must include the TBLLs certification statement signed by the permittee [according to 40 CFR §122.41(k)].	9 months from the effective date of notification to continue pretreatment program development

SCHEDULE OF COMPLIANCE FOR PRETREATMENT PROGRAM DEVELOPMENT

ACTIVITY NUMBER	ACTIVITY	DATE
6.	The POTW is required to apply and enforce the pretreatment standards and requirements established by §§307(b) and (c), and 402(b)(8) and (9) of the Clean Water Act and any regulations implementing those sections, including 40 CFR §403.9(b). Submit the following: (a) a statement from the City Solicitor, a city official acting in a comparable capacity, or the city's independent counsel, that the POTW has the adequate authority to carry out the program; (b) a copy of any statute, ordinance, regulation, contract, agreement, or other authority that will be relied on by the POTW to administer the program; (c) a statement reflecting the endorsement of or approval by the local boards or bodies responsible for supervising and/or funding the program; (d) additional documents and agreements required in multi-jurisdictional situations for administration of the program; and (e) an enforcement response plan (ERP) that shall contain detailed procedures indicating how the POTW will investigate and respond to instances of IU noncompliance. The ERP, enforcement response guide (ERG), and other documents and forms shall, at a minimum, contain the aspects defined in 40 CFR §403.8(f)(5).	10 months from the effective date of notification to continue pretreatment program development
7.	Upon notification by the TCEQ Stormwater & Pretreatment Team of a completeness determination of the submitted program in accordance with 40 CFR §403.9, the permittee is required to submit an official request to the Executive Director care of the Stormwater & Pretreatment Team (MC148) of the Water Quality Division for program approval, including four (4) copies (three (3) bound and one (1) unbound) of the program deemed by the Executive Director to be complete. Submit a complete pretreatment program as required by 40 CFR §403.9. The complete pretreatment program shall include the final compilation of all previously submitted pretreatment program activities as amended and supplemented (*e.g.* Activity Nos. 1- 6).	The Executive Director will notify the permittee of the due date of Activity No. 7 with the notification of completion of the permittee's Activity Nos. 1 - 6.

TABLE A: INDUSTRIAL USER SURVEY RESULTS SUMMARY TABLE

Company Name	SIC Code	Description of Business Activities/ Manufacturing Processes	Business Address	Water Usage/ Wastewater Flow (GPD)	Specify the type of wastewater discharged to the publicly owned treatment works (POTW) specify with a check mark			Response Received (Y or N)	Classification SIU / CIU
					Zero Discharge To POTW	Domestic Wastewater Only	Process Wastewater Discharge		
	(1)	(2)		(3)				(4)	(5)

(1) Provide the Standard Industrial Classification (SIC) Codes for the company. If the company has multiple SIC codes, please provide them all.
(2) Provide a brief description of the company's business and/or manufacturing process.
(3) Provide water usage data or process wastewater flow data in gallons per day (gpd). When measured data is not available, provide an estimate.
(4) Specify whether or not the company responded to the industrial user survey conducted by the POTW. If the company did not respond, please explain what follow-up action occurred.
(5) Specify whether the company is a significant industrial user (SIU – 40 CFR §403.3) or a categorical industrial user (CIU – 40 CFR Parts 405 to 471). If the company is a CIU, then include the exact categorical citation, for example 40 CFR §433.15 for Metal Finishing Point Source category pretreatment standards for existing sources.

CHRONIC BIOMONITORING REQUIREMENTS: MARINE

The provisions of this section apply to Outfall 001 for whole effluent toxicity (WET) testing.

1. Scope, Frequency and Methodology

a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival or growth of the test organisms.

b. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified below and in accordance with "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms," third edition (EPA-821-R-02-014) or its most recent update:

1) Chronic static renewal 7-day survival and growth test using the mysid shrimp (*Mysidopsis bahia*) (Method 1007.0). A minimum of eight replicates with five organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

2) Chronic static renewal 7-day larval survival and growth test using the inland silverside (*Menidia beryllina*) (Method 1006.0). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 16%, 21%, 28%, 37%, and 49% effluent. The critical dilution, defined as 37% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.

d. This permit may be amended to require a WET limit, a chemical-specific limit, a best management practice, or other appropriate actions to address inland silverside toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

e. Testing Frequency Reduction

1) If none of the first four consecutive quarterly inland silverside tests demonstrates significant toxicity, the permittee may submit this information in writing and, upon approval, reduce the testing frequency to once per year.

2) If one or more of the first four consecutive quarterly inland silverside tests demonstrates significant toxicity, the permittee shall continue quarterly testing until this permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant toxicity, the permittee will resume a quarterly testing frequency for that species until this permit is reissued.

f. The sublethal No Observed Effect Concentration (NOEC) effluent limitation of not less than 37% is effective for mysid shrimp (see the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section) at the permit issue date.

g. If a mysid shrimp test fails to pass the sublethal endpoint at the 37% effluent concentration, the testing frequency will increase to monthly until such time compliance with the NOEC effluent limitation is demonstrated for a period of three consecutive months, at which time the quarterly testing frequency may be resumed.

2. Required Toxicity Testing Conditions

a. Test Acceptance - The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fails to meet any of the following criteria:

1) a control mean survival of 80% or greater;

2) a control mean dry weight of surviving mysid shrimp of 0.20 mg or greater;

3) a control mean dry weight for surviving unpreserved inland silverside of 0.50 mg or greater and 0.43 mg or greater for surviving preserved inland silverside.

4) a control coefficient of variation percent (CV%) between replicates of 40 or less in the growth and survival tests;

5) a critical dilution CV% of 40 or less in the growth and survival endpoints for either growth and survival test. However, if statistically significant lethal or nonlethal effects are exhibited at the critical dilution, a CV% greater than 40 shall not invalidate the test;

6) a percent minimum significant difference of 37 or less for mysid shrimp growth; and

7) a percent minimum significant difference of 28 or less for inland silverside growth.

b. Statistical Interpretation

1) For the mysid shrimp and the inland silverside larval survival and growth tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in

accordance with the manual referenced in Part 1.b.

2) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The document entitled "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.

3) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the survival in the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 80% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.

4) The NOEC is defined as the greatest effluent dilution at which no significant effect is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which a significant effect is demonstrated. A significant effect is herein defined as a statistically significant difference between the survival, reproduction, or growth of the test organism in a specified effluent dilution compared to the survival, reproduction, or growth of the test organism in the control (0% effluent).

5) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 2.

6) Pursuant to the responsibility assigned to the permittee in Part 2.b.2), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The guidance manual referenced in Part 1.b. will be used when making a determination of test acceptability.

7) TCEQ staff will review test results for consistency with rules, procedures, and permit requirements.

c. Dilution Water

1) Dilution water used in the toxicity tests must be the receiving water collected as close to the point of discharge as possible but unaffected by the discharge.

2) Where the receiving water proves unsatisfactory as a result of preexisting instream toxicity (i.e., fails to fulfill the test acceptance criteria of Part 2.a.), the permittee may substitute synthetic dilution water for the

receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of Part 2.a;

b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days); and

c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3.

3) The synthetic dilution water shall consist of standard, reconstituted seawater. Upon approval, the permittee may substitute other dilution water with chemical and physical characteristics similar to that of the receiving water.

d. Samples and Composites

1) The permittee shall collect a minimum of three composite samples from Outfall 001. The second and third composite samples will be used for the renewal of the dilution concentrations for each toxicity test.

2) The permittee shall collect the composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.

3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the first composite sample. The holding time for any subsequent composite sample shall not exceed 72 hours. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

4) If Outfall 001 ceases discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with renewal of the effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report.

5) The effluent samples shall not be dechlorinated after sample collection.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required in this

section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated whether carried to completion or not.

b. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit.

1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12-month period.

2) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.

3) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th, for biomonitoring conducted during the previous calendar quarter.

4) Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.

c. Enter the following codes for the appropriate parameters for valid tests only:

1) For the mysid shrimp, Parameter TLP3E, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

2) For the mysid shrimp, Parameter TOP3E, report the NOEC for survival.

3) For the mysid shrimp, Parameter TXP3E, report the LOEC for survival.

4) For the mysid shrimp, Parameter TWP3E, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."

5) For the mysid shrimp, Parameter TPP3E, report the NOEC for growth.

6) For the mysid shrimp, Parameter TYP3E, report the LOEC for growth.

7) For the inland silverside, Parameter TLP6B, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

8) For the inland silverside, Parameter TOP6B, report the NOEC for survival.

9) For the inland silverside, Parameter TXP6B, report the LOEC for survival.

10) For the inland silverside, Parameter TWP6B, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."

11) For the inland silverside, Parameter TPP6B, report the NOEC for growth.

12) For the inland silverside, Parameter TYP6B, report the LOEC for growth.

d. Enter the following codes for inland silverside retests only:

1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

e. The permittee shall report the sublethal WET value for the 30-day average and the 7-day minimum under Parameter No. 22414 for the mysid shrimp. If more than one valid test was performed during the reporting period, the NOECs will be averaged arithmetically and reported as the daily average NOEC. The data submitted should reflect the lowest sublethal value during the reporting period.

4. Persistent Toxicity

The requirements of this part apply only to the inland silverside and only when a test demonstrates a significant effect at the critical dilution. Significant effect and significant lethality were defined in Part 2.b. Significant sublethality is defined as a statistically significant difference in growth at the critical dilution when compared to the growth of the test organism in the control.

a. The permittee shall conduct a total of 2 additional tests (retests) for any test that demonstrates a significant effect (lethal or sublethal) at the critical dilution. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test.

b. If the retests are performed due to a demonstration of significant lethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5. The provisions of Part 4.a. are suspended upon completion of the two retests and submittal of the TRE Action plan and schedule defined in Part 5.

If neither test demonstrates significant lethality and the permittee is testing under the reduced testing frequency provision of Part 1.e., the permittee shall return to a quarterly testing frequency for that species.

c. If the two retests are performed due to a demonstration of significant sublethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall again perform two retests as stipulated in Part 4.a.

d. If the two retests are performed due to a demonstration of significant sublethality, and neither test demonstrates significant lethality, the permittee shall continue testing at the quarterly frequency.

e. Regardless of whether retesting for lethal or sublethal effects or a combination of the two, no more than one retest per month is required for a species.

5. Toxicity Reduction Evaluation

a. Within 45 days of the retest that demonstrates significant lethality, or within 45 days of being so instructed due to multiple toxic events, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

b. Within 90 days of the retest that demonstrates significant lethality, or within 90 days of being so instructed due to multiple toxic events, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall describe an approach for the reduction or elimination of lethality for both test species defined in Part 1.b. At a minimum, the TRE Action Plan shall include the following:

1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled, "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;

3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;

2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

3) any data and substantiating documentation which identifies the pollutant and source of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and

6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.

Copies of the TRE activities report shall also be submitted to the U.S. EPA Region 6 office.

e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are herein defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond their control stalled the toxicity identification evaluation/TRE. The report shall provide information pertaining to the specific control mechanism selected that will, when implemented, result in the reduction of effluent toxicity to no significant lethality at the critical dilution. The report shall also provide a specific corrective action schedule for implementing the selected control mechanism. A copy of the TRE final report shall also be submitted to the U.S. EPA Region 6 office.

h. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and to specify a chemical-specific limit.

TABLE 1 (SHEET 1 OF 4)

MYSID SHRIMP SURVIVAL AND GROWTH

Dates and Times Composites Collected

Date Time

No. 1 FROM: _____ TO: _____

No. 2 FROM: _____ TO: _____

No. 3 FROM: _____ TO: _____

Test initiated: _____am/pm _____date

Dilution water used: _____ Receiving water _____ Synthetic dilution water

MYSID SHRIMP SURVIVAL

Percent Effluent	Percent Survival in Replicate Chambers								Mean Percent Survival			CV%*
	A	B	C	D	E	F	G	H	24h	48h	7 day	
0%												
16%												
21%												
28%												
37%												
49%												

* Coefficient of Variation = standard deviation x 100/mean

DATA TABLE FOR GROWTH OF MYSID SHRIMP

Replicate	Mean dry weight in milligrams in replicate chambers					
	0%	16%	21%	28%	37%	49%
A						
B						
C						
D						
E						

TABLE 1 (SHEET 2 OF 4)

MYSID SHRIMP SURVIVAL AND GROWTH

DATA TABLE FOR GROWTH OF MYSID SHRIMP (Continued)

Replicate	Mean dry weight in milligrams in replicate chambers					
	0%	16%	21%	28%	37%	49%
F						
G						
H						
Mean Dry Weight (mg)						
CV%*						
PMSD						

1. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean survival at 7 days significantly less than the control survival for the % effluent corresponding to lethality?

   CRITICAL DILUTION (37%): _____ YES _____ NO

2. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean dry weight (growth) at 7 days significantly less than the control's dry weight (growth) for the % effluent corresponding to non-lethal effects?

   CRITICAL DILUTION (37%): _____ YES _____ NO

3. Enter percent effluent corresponding to each NOEC\LOEC below:

   a.) NOEC survival = _____% effluent

   b.) LOEC survival = _____% effluent

   c.) NOEC growth = _____% effluent

   d.) LOEC growth = _____% effluent

TABLE 1 (SHEET 3 OF 4)

INLAND SILVERSIDE MINNOW LARVAL SURVIVAL AND GROWTH TEST

		Date Time		Date Time
Dates and Times Composites Collected	No. 1 FROM:	_____	TO:	_____
	No. 2 FROM:	_____	TO:	_____
	No. 3 FROM:	_____	TO:	_____

Test initiated: _____am/pm _____date

Dilution water used: _____ Receiving water _____ Synthetic Dilution water

INLAND SILVERSIDE SURVIVAL

Percent Effluent	Percent Survival in Replicate Chambers					Mean Percent Survival			CV%*
	A	B	C	D	E	24h	48h	7 days	
0%									
16%									
21%									
28%									
37%									
49%									

* Coefficient of Variation = standard deviation x 100/mean

TABLE 1 (SHEET 4 OF 4)

INLAND SILVERSIDE LARVAL SURVIVAL AND GROWTH TEST

INLAND SILVERSIDE GROWTH

Percent Effluent	Average Dry Weight in milligrams in replicate chambers					Mean Dry Weight (mg)	CV%*
	A	B	C	D	E		
0%							
16%							
21%							
28%							
37%							
49%							
PMSD							

Weights are for: ____ preserved larvae, or ____ unpreserved larvae

1. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean survival at 7 days significantly less than the control survival for the % effluent corresponding to lethality?

   CRITICAL DILUTION (37%): _____ YES _____ NO

2. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean dry weight (growth) at 7 days significantly less than the control's dry weight (growth) for the % effluent corresponding to non-lethal effects?

   CRITICAL DILUTION (37%): _____ YES _____ NO

3. Enter percent effluent corresponding to each NOEC/LOEC below:

   a.) NOEC survival = _____% effluent

   b.) LOEC survival = _____% effluent

   c.) NOEC growth = _____% effluent

   d.) LOEC growth = _____% effluent

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: MARINE

The provisions of this section apply to Outfall 001 for WET testing.

1. Scope, Frequency, and Methodology

a. The permittee shall test the effluent for lethality in accordance with the provisions in this Section. Such testing will determine compliance with Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.

b. The toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms," fifth edition (EPA-821-R-02-012) or its most recent update:

1) Acute 24-hour static toxicity test using the mysid shrimp (*Mysidopsis bahia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

2) Acute 24-hour static toxicity test using the inland silverside (*Menidia beryllina*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

A valid test result must be submitted for each reporting period. The permittee must report, then repeat, an invalid test during the same reporting period. The repeat test shall include the control and all effluent dilutions and use the appropriate number of organisms and replicates, as specified above. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. Except as discussed in Part 2.b., the control and dilution water shall consist of standard, synthetic, reconstituted seawater.

d. This permit may be amended to require a WET limit, a best management practice, a chemical-specific limit, additional toxicity testing, and other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

2. Required Toxicity Testing Conditions

a. Test Acceptance - The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.

b. Dilution Water - In accordance with Part 1.c., the control and dilution water shall consist of standard, synthetic, reconstituted seawater.

c. Samples and Composites

1) The permittee shall collect one composite sample from Outfall 001.

2) The permittee shall collect the composite sample such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.

3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the composite sample. The sample shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

4) If Outfall 001 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report.

5) The effluent sample shall not be dechlorinated after sample collection.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required of this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated.

b. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit.

1) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.

2) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.

c. Enter the following codes for the appropriate parameters for valid tests only:

1) For the mysid shrimp, Parameter TIE3E, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

2) For the inland silverside, Parameter TIE6B, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

d. Enter the following codes for retests only:

1) For retest number 1, Parameter 22415, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."

2) For retest number 2, Parameter 22416, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."

4. Persistent Mortality

The requirements of this part apply when a toxicity test demonstrates significant lethality, here defined as a mean mortality of 50% or greater to organisms exposed to the 100% effluent concentration after 24-hours.

a. The permittee shall conduct 2 additional tests (retests) for each species that demonstrates significant lethality. The two retests shall be conducted once per week for 2 weeks. Five effluent dilution concentrations in addition to an appropriate control shall be used in the retests. These additional effluent concentrations are 6%, 13%, 25%, 50% and 100% effluent. The first retest shall be conducted within 15 days of the laboratory determination of significant lethality. All test results shall be submitted within 20 days of test completion of the second retest. Test completion is defined as the 24th hour.

b. If one or both of the two retests specified in item 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5 of this Section.

5. Toxicity Reduction Evaluation

a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall lead to the successful elimination of significant lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:

1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;

3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly TRE activities reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;

2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

3) any data and substantiating documentation that identifies the pollutant and source of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and

6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.

Copies of the TRE activities report shall also be submitted to the U.S. EPA Region 6 office.

e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 18 months from the last test day of the retest that demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances

beyond its control stalled the toxicity identification evaluation/TRE. The report shall specify the control mechanism that will, when implemented, reduce effluent toxicity as specified in Part 5.h. The report shall also specify a corrective action schedule for implementing the selected control mechanism. A copy of the TRE final report shall also be submitted to the U.S. EPA Region 6 office.

h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE.

The permittee may be exempted from complying with 30 TAC § 307.6(e)(2)(B) upon proving that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g., metals) form a salt compound. Following the exemption, the permit may be amended to include an ion-adjustment protocol, alternate species testing, or single species testing.

i. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and to specify a chemical specific limit.

TABLE 2 (SHEET 1 OF 2)

MYSID SHRIMP SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent

TABLE 2 (SHEET 2 OF 2)

INLAND SILVERSIDE SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent

CHRONIC BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 002 or 003 for WET testing.

1. Scope, Frequency, and Methodology

a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival, reproduction, or growth of the test organisms.

b. Within 90 days of commencement of discharge from either outfall, the permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this part of this permit and in accordance with "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," fourth edition (EPA-821-R-02-013) or its most recent update:

1) Chronic static renewal survival and reproduction test using the water flea (*Ceriodaphnia dubia*) (Method 1002.0). This test should be terminated when 60% of the surviving adults in the control produce three broods or at the end of eight days, whichever occurs first. This test shall be conducted once per quarter.

2) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*) (Method 1000.0). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 30%, 40%, 53%, 71%, and 94% effluent. The critical dilution, defined as 94% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.

d. This permit may be amended to require a WET limit, a chemical-specific effluent limit, a best management practice, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

e. Testing Frequency Reduction

1) If none of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee may submit this information in writing and, upon approval, reduce the testing frequency to once per six months

for the invertebrate test species and once per year for the vertebrate test species.

2) If one or more of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee shall continue quarterly testing for that species until this permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant toxicity, the permittee shall resume a quarterly testing frequency for that species until this permit is reissued.

2. Required Toxicity Testing Conditions

a. Test Acceptance - The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fail to meet the following criteria:

1) a control mean survival of 80% or greater;

2) a control mean number of water flea neonates per surviving adult of 15 or greater;

3) a control mean dry weight of surviving fathead minnow larvae of 0.25 mg or greater;

4) a control coefficient of variation percent (CV%) of 40 or less in between replicates for the young of surviving females in the water flea test; and the growth and survival endpoints in the fathead minnow test;

5) a critical dilution CV% of 40 or less for the young of surviving females in the water flea test; and the growth and survival endpoints for the fathead minnow test. However, if statistically significant lethal or nonlethal effects are exhibited at the critical dilution, a CV% greater than 40 shall not invalidate the test;

6) a percent minimum significant difference of 47 or less for water flea reproduction; and

7) a percent minimum significant difference of 30 or less for fathead minnow growth.

b. Statistical Interpretation

1) For the water flea survival test, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be the Fisher's exact test as described in the manual referenced in in Part 1.b.

2) For the water flea reproduction test and the fathead minnow larval survival and growth tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in accordance with the manual referenced in Part 1.b.

3) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The document entitled "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.

4) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the survival in the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 80% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.

5) The NOEC is defined as the greatest effluent dilution at which no significant effect is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which a significant effect is demonstrated. A significant effect is defined as a statistically significant difference between the survival, reproduction, or growth of the test organism in a specified effluent dilution when compared to the survival, reproduction, or growth of the test organism in the control.

6) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 3.

7) Pursuant to the responsibility assigned to the permittee in Part 2.b.3), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The guidance manual referenced in Item 3 will be used when making a determination of test acceptability.

8) TCEQ staff will review test results for consistency with rules, procedures, and permit requirements.

c. Dilution Water

1) Dilution water used in the toxicity tests must be the receiving water collected at a point upstream of the discharge point as close as possible to the discharge point but unaffected by the discharge. Where the toxicity tests are conducted on effluent discharges to receiving waters that are classified as intermittent streams, or where the toxicity tests are conducted on effluent discharges where no receiving water is available due to zero flow conditions, the permittee shall:

a) substitute a synthetic dilution water that has a pH, hardness, and alkalinity similar to that of the closest downstream perennial

water unaffected by the discharge; or

b) use the closest downstream perennial water unaffected by the discharge.

2) Where the receiving water proves unsatisfactory as a result of pre-existing instream toxicity (i.e. fails to fulfill the test acceptance criteria of Part 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of Part 2.a;

b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days); and

c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3.

3) The synthetic dilution water shall consist of standard, moderately hard, reconstituted water. Upon approval, the permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water.

d. Samples and Composites

1) The permittee shall collect a minimum of three composite samples from Outfall 002 or 003, whichever one is being sampled. The second and third composite samples will be used for the renewal of the dilution concentrations for each toxicity test.

2) The permittee shall collect the composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.

3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the first composite sample. The holding time for any subsequent composite sample shall not exceed 72 hours. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

4) If both outfalls cease discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with renewal of the effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate

days if the discharge occurs over multiple days. The sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report.

5) The effluent samples shall not be dechlorinated after sample collection.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required in this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated whether carried to completion or not.

b. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit.

1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12-month period.

2) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.

3) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.

4) Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.

c. Enter the following codes for the appropriate parameters for valid tests only:

1) For the water flea, Parameter TLP3B, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

2) For the water flea, Parameter TOP3B, report the NOEC for survival.

3) For the water flea, Parameter TXP3B, report the LOEC for survival.

4) For the water flea, Parameter TWP3B, enter a "1" if the NOEC for reproduction is less than the critical dilution; otherwise, enter a "0."

5) For the water flea, Parameter TPP3B, report the NOEC for reproduction.

6) For the water flea, Parameter TYP3B, report the LOEC for reproduction.

7) For the fathead minnow, Parameter TLP6C, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

8) For the fathead minnow, Parameter TOP6C, report the NOEC for survival.

9) For the fathead minnow, Parameter TXP6C, report the LOEC for survival.

10) For the fathead minnow, Parameter TWP6C, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."

11) For the fathead minnow, Parameter TPP6C, report the NOEC for growth.

12) For the fathead minnow, Parameter TYP6C, report the LOEC for growth.

d. Enter the following codes for retests only:

1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

4. Persistent Toxicity

The requirements of this Part apply only when a test demonstrates a significant effect at the critical dilution. Significant lethality and significant effect were defined in Part 2.b. Significant sublethality is defined as a statistically significant difference in growth/reproduction at the critical dilution when compared to the growth/reproduction in the control.

a. The permittee shall conduct a total of 2 additional tests (retests) for any species that demonstrates a significant effect (lethal or sublethal) at the critical dilution. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test.

b. If the retests are performed due to a demonstration of significant lethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5. The provisions of Part 4.a. are suspended upon completion of the two retests and submittal of the TRE action plan and schedule defined in Part 5.

If neither test demonstrates significant lethality and the permittee is testing under the reduced testing frequency provision of Part 1.e., the permittee shall return to a quarterly testing frequency for that species.

c. If the two retests are performed due to a demonstration of significant sublethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall again perform two retests as stipulated in Part 4.a.

d. If the two retests are performed due to a demonstration of significant

sublethality, and neither test demonstrates significant lethality, the permittee shall continue testing at the quarterly frequency.

e. Regardless of whether retesting for lethal or sublethal effects, or a combination of the two, no more than one retest per month is required for a species.

5. Toxicity Reduction Evaluation

a. Within 45 days of the retest that demonstrates significant lethality, or within 45 days of being so instructed due to multiple toxic events, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

b. Within 90 days of the retest that demonstrates significant lethality, or within 90 days of being so instructed due to multiple toxic events, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall describe an approach for the reduction or elimination of lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:

1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA/600/6-91/005F) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a specific pollutant and source of effluent toxicity, the permittee shall

conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;

3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;

2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

3) any data and substantiating documentation which identifies the pollutant(s) and source of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and

6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.

Copies of the TRE activities report shall also be submitted to the U.S. EPA Region 6 office.

e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of

intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall provide information pertaining to the specific control mechanism selected that will, when implemented, result in the reduction of effluent toxicity to no significant lethality at the critical dilution. The report shall also provide a specific corrective action schedule for implementing the selected control mechanism. A copy of the TRE final report shall also be submitted to the U.S. EPA Region 6 office.

h. Based on the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.

TABLE 1 (SHEET 1 OF 4)

BIOMONITORING REPORTING

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

Dates and Times Composites Collected

No. 1 FROM: Date Time _____ TO: Date Time _____

No. 2 FROM: _____ TO: _____

No. 3 FROM: _____ TO: _____

Test initiated: _____ am/pm _____ date

Dilution water used: _____ Receiving water _____ Synthetic Dilution water

NUMBER OF YOUNG PRODUCED PER ADULT AT END OF TEST

REP	Percent effluent					
	0%	30%	40%	53%	71%	94%
A						
B						
C						
D						
E						
F						
G						
H						
I						
J						
Survival Mean						
Total Mean						
CV%*						
PMSD						

*Coefficient of Variation = standard deviation x 100/mean (calculation based on young of the surviving adults)

Designate males (M), and dead females (D), along with number of neonates (x) released prior to death.

TABLE 1 (SHEET 2 OF 4)

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION TEST

1. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean number of young produced per adult significantly less than the number of young per adult in the control for the % effluent corresponding to significant nonlethal effects?

   CRITICAL DILUTION (94%): _____ YES _____ NO

PERCENT SURVIVAL

	Percent effluent					
Time of Reading	0%	30%	40%	53%	71%	94%
24h						
48h						
End of Test						

2. Fisher's Exact Test:

   Is the mean survival at test end significantly less than the control survival for the % effluent corresponding to lethality?

   CRITICAL DILUTION (94%): _____ YES _____ NO

3. Enter percent effluent corresponding to each NOEC\LOEC below:

   a.) NOEC survival = _____% effluent

   b.) LOEC survival = _____% effluent

   c.) NOEC reproduction = _____% effluent

   d.) LOEC reproduction = _____% effluent

TABLE 1 (SHEET 3 OF 4)

BIOMONITORING REPORTING

FATHEAD MINNOW LARVAE GROWTH AND SURVIVAL

Dates and Times Composites Collected

Date Time

No. 1 FROM: _____ TO: _____ Date Time

No. 2 FROM: _____ TO: _____

No. 3 FROM: _____ TO: _____

Test initiated: _____ am/pm _____ date

Dilution water used: _____ Receiving water _____ Synthetic dilution water

FATHEAD MINNOW GROWTH DATA

Effluent Concentration	Average Dry Weight in replicate chambers					Mean Dry Weight	CV%*
	A	B	C	D	E		
0%							
30%							
40%							
53%							
71%							
94%							
PMSD							

* Coefficient of Variation = standard deviation x 100/mean

1. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean dry weight (growth) at 7 days significantly less than the control's dry weight (growth) for the % effluent corresponding to significant nonlethal effects?

   CRITICAL DILUTION (94%): _____ YES _____ NO

TABLE 1 (SHEET 4 OF 4)

BIOMONITORING REPORTING

FATHEAD MINNOW GROWTH AND SURVIVAL TEST

FATHEAD MINNOW SURVIVAL DATA

Effluent Concentration	Percent Survival in replicate chambers					Mean percent survival			CV%*
	A	B	C	D	E	24h	48h	7 day	
0%									
30%									
40%									
53%									
71%									
94%									

* Coefficient of Variation = standard deviation x 100/mean

2. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean survival at 7 days significantly less than the control survival for the % effluent corresponding to lethality?

   CRITICAL DILUTION (94%): _____ YES _____ NO

3. Enter percent effluent corresponding to each NOEC\LOEC below:

   a.) NOEC survival = _____% effluent

   b.) LOEC survival = _____% effluent

   c.) NOEC growth = _____% effluent

   d.) LOEC growth = _____% effluent

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfalls 002 and 003 for whole effluent toxicity (WET) testing.

1. Scope, Frequency, and Methodology

a. The permittee shall test the effluent for lethality in accordance with the provisions in this section. Such testing will determine compliance with Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.

b. Within 90 days of commencement of discharge from either outfall, the toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms," fifth edition (EPA-821-R-02-012) or its most recent update:

1) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

2) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

A valid test result must be submitted for each reporting period. The permittee must report, and then repeat, an invalid test during the same reporting period. The repeat test shall include the control and the 100% effluent dilution and use the appropriate number of organisms and replicates, as specified above. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. The control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.

d. This permit may be amended to require a WET limit, a best management practice, a chemical-specific limit, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

2. Required Toxicity Testing Conditions

a. Test Acceptance - The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.

b. Dilution Water - In accordance with Part 1.c., the control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.

c. Samples and Composites

1) The permittee shall collect one composite sample from Outfall 002 and 003.

2) The permittee shall collect the composite sample such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged.

3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the composite sample. The sample shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

4) If Outfall 002 and 003 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report.

5) The effluent sample shall not be dechlorinated after sample collection.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required in this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated.

b. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit.

1) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.

2) Quarterly biomonitoring test results are due on or before April 20th, July 20th, and October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.

c. Enter the following codes for the appropriate parameters for valid tests only:

1) For the water flea, Parameter TIE3D, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean

survival is less than or equal to 50%, enter a "1."

2) For the fathead minnow, Parameter TIE6C, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

d. Enter the following codes for retests only:

1) For retest number 1, Parameter 22415, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

2) For retest number 2, Parameter 22416, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

4. Persistent Mortality

The requirements of this part apply when a toxicity test demonstrates significant lethality, which is defined as a mean mortality of 50% or greater of organisms exposed to the 100% effluent concentration for 24 hours.

a. The permittee shall conduct 2 additional tests (retests) for each species that demonstrates significant lethality. The two retests shall be conducted once per week for 2 weeks. Five effluent dilution concentrations in addition to an appropriate control shall be used in the retests. These effluent concentrations are 6%, 13%, 25%, 50% and 100% effluent. The first retest shall be conducted within 15 days of the laboratory determination of significant lethality. All test results shall be submitted within 20 days of test completion of the second retest. Test completion is defined as the 24th hour.

b. If one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5.

5. Toxicity Reduction Evaluation

a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall lead to the successful elimination of significant lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:

1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;

3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE Action Plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly TRE activities reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;

2) results and interpretation of any characterization, identification, and

confirmation tests performed during the quarter;

3) any data and substantiating documentation that identifies the pollutant and source of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and

6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.

Copies of the TRE activities report shall also be submitted to the U.S. EPA Region 6 office.

e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 18 months from the last test day of the retest that demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit

of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall specify the control mechanism that will, when implemented, reduce effluent toxicity as specified in Part 5.h. The report shall also specify a corrective action schedule for implementing the selected control mechanism. A copy of the TRE final report shall also be submitted to the U.S. EPA Region 6 office.

h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE.

The permittee may be exempted from complying with 30 TAC § 307.6(e)(2)(B) upon proving that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g., metals) form a salt compound. Following the exemption, this permit may be amended to include an ion-adjustment protocol, alternate species testing, or single species testing.

i. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.

TABLE 2 (SHEET 1 OF 2)

WATER FLEA SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent

TABLE 2 (SHEET 2 OF 2)

FATHEAD MINNOW SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

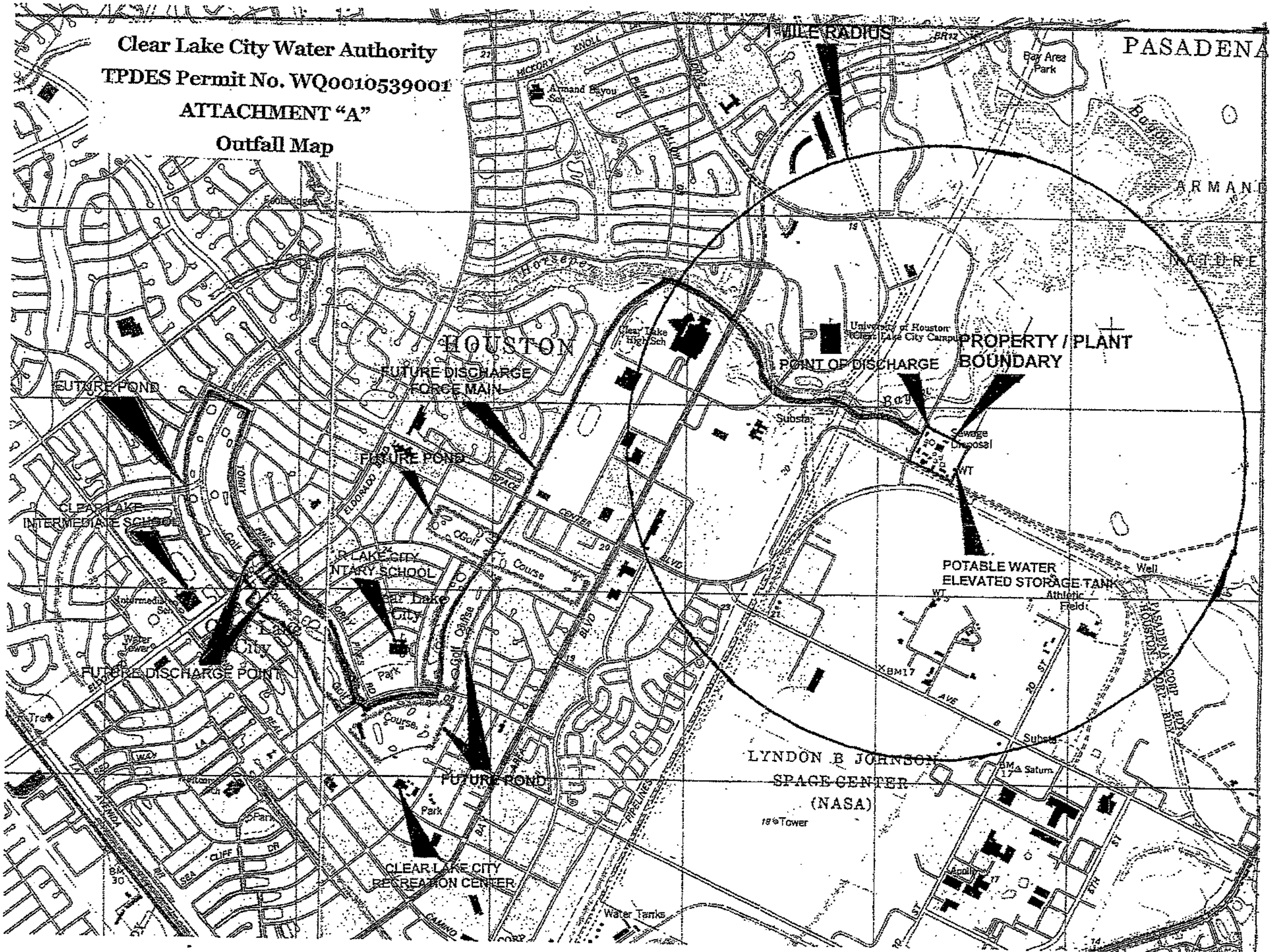
24 hour LC50 = _____% effluent

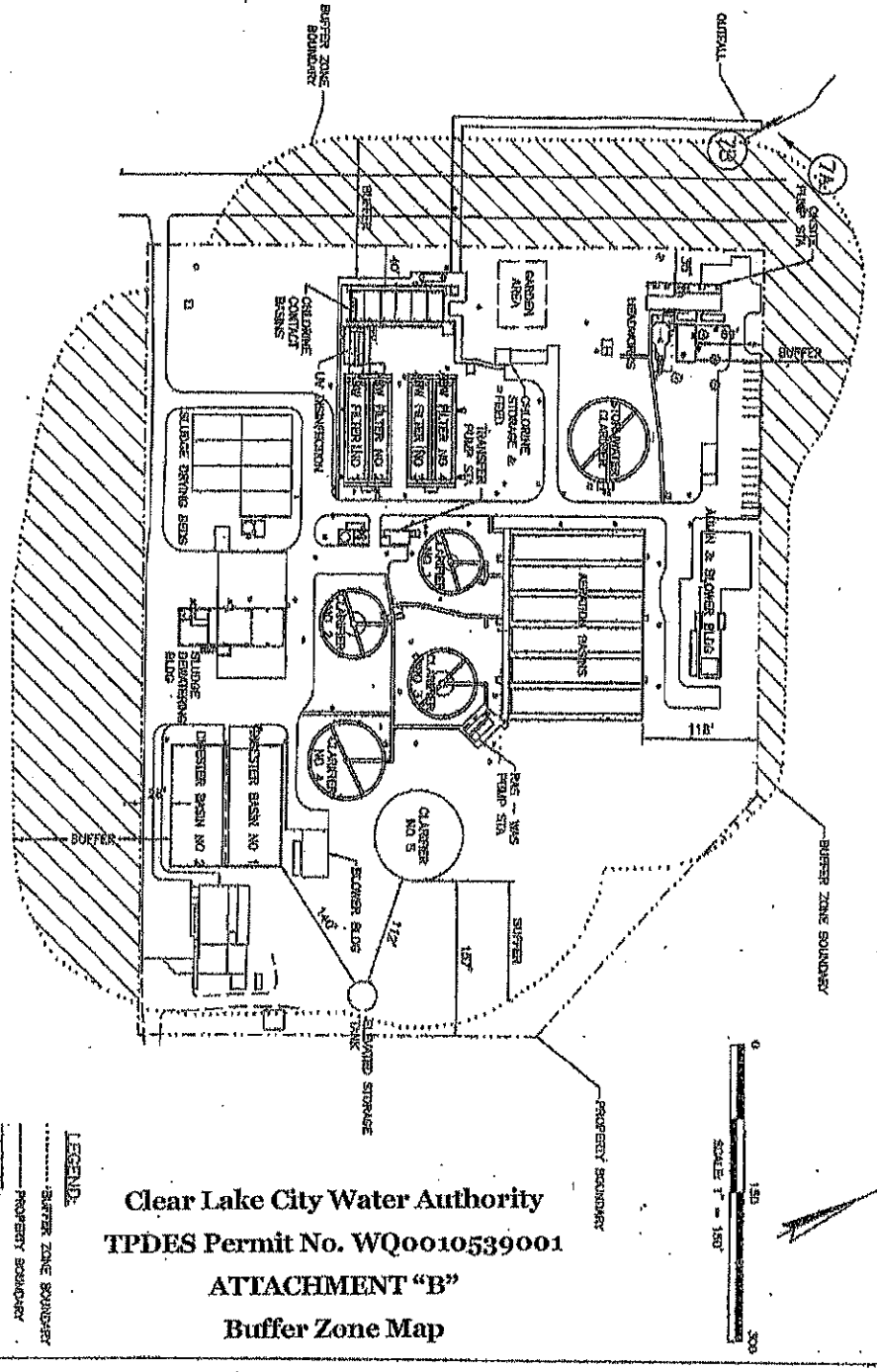
Clear Lake City Water Authority

TPDES Permit No. WQ0010539001

ATTACHMENT "A"

Outfall Map





Clear Lake City Water Authority

TPDES Permit No. WQ0010539001

ATTACHMENT "B"

Buffer Zone Map

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

ROBERT T. SAVELY
WATER RECLAMATION FACILITY
PHOTOGRAPH LOCATIONS

ATTACHMENT
7

Attachment E

Executive Director's Response to Public Comment

TCEQ INTRA-AGENCY TRANSMITTAL MEMO

DATE: February 27, 2015

TO: FINAL DOCUMENTS TEAM LEADER
OFFICE OF THE CHIEF CLERK
BUILDING F, MC-105

FROM: DAN INGERSOLL
ENVIRONMENTAL LAW DIVISION
BUILDING A, MC-173

Attached: Executive Director's Response to Comments

Application Information
Program Area (Air, Water or Waste): **Water**
Permit No. **WQ0010539001**
Name: **CLEAR LAKE CITY**
Docket/CID Item # (if known): _____

OCC Action Required *(check applicable boxes)*
Date stamp and return copy to above-noted ELD Staff Attorney and:

FOR ALL PROGRAM AREAS: *(required only when changes needed to official agency mailing list)*

☐ **Update** the mailing list in your file with the attached contact names and addresses
Include corrected or additional names and addresses for mailing list

FOR WASTE & WATER:

X Send Response to Comments Letter which solicits hearing requests and requests for reconsideration to the mailing list in your files
For Waste and Water this would occur in all circumstances when comments have been received for 801 applications
Or

☐ Send Response to Comments Letter and Motion to Overturn Letter which solicits motions to overturn to the mailing list in your files
For Waste and Water this may occur when all comments have been withdrawn for 801 applications or when comments are received for applications that will not be set for agenda.

FOR AIR (NSR only):

☐ Send RTC with response to comments letter which solicits contested case hearing requests and requests for reconsideration to the mailing list in your files
For Air NSR applications this would occur only when there are pending contested case hearing requests (except no-increase renewals)

☐ Set for commission agenda and send RTC with agenda setting letter
This would occur when there are pending contested case hearing requests on a no-increase renewal and technical review is complete.

☐ Hold until a commission agenda date is requested and then send RTC with the Agenda Setting Letter
For Air applications this would occur when there are pending hearing requests on a no-increase renewal; but technical review is NOT complete.
If this box is checked, ED staff must call the OCC Agenda Team Leader to arrange a specific agenda date.

☐ Place RTC in File - no further action required by OCC
For Air NSR applications this would occur when the matter is uncontested but comments were received, APD will send a copy with MTO letter

☐ Other Instructions: _____

TCEQ PERMIT NO. WQ0010539001

APPLICATION BY CLEAR LAKE CITY WATER AUTHORITY FOR TPDES PERMIT NO. WQ0010539001	§ § § § §	BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Executive Director's Response to Public Comment

The Executive Director of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment (Response) on the application by Clear Lake City Water Authority (CLCWA or Applicant), for a major amendment to Texas Pollutant Discharge Elimination System (TPDES) Permit Number WQ0010539001 and on the Executive Director's preliminary decision. As required by 30 Texas Administrative Code (TAC) Section 55.156, before an application is approved, the Executive Director prepares a response to all timely, relevant and material, or significant comments. The Office of the Chief Clerk received timely comment letters from the following individuals:

Jose Alvarez
Scott Askew
Billy Ballard
Cynthia Bandemer
Leigh Baxter
Steven Baxter
Ray Bernard
Suzanne Bernard
Heather Bibby
Joseph Bibby
Yvette Blanchard
Elizabeth del Bosque
Karla Bowling
John Branch
David Bremer
Allen Brown
Herschel Butler
Anita Cooper
Timothy Daggett
Doylton Davis
Rep. John Davis
Beverly Dorrington
Victoria Dorsch
Jayne Dowe
Beverly Demoss
Jack Demoss
Maryls Denison
Marianne Dyson
David Eichblatt
Daniel Finnegan
Gene Fisseler
Debra Goode
Karen Gregory
Raymond Halyard
Jerry Hamby
Susan Hamby

Kirk Hayes
Carole Henning
Mandy Hess
Gus Homann
Charles Howard
Mary Howard
Gordon Johnson
Nancy Johnson
Nina Johnston
Robert Jones
John Keller
Eilene Kenney
Gunner Kenney
Michael Kenney
Ellen King
Kimberly Kochner
Noel Lampazzi
Emily Louviere
Manny
David McCorquodale
James McLane
Marcella Mendoza
Michael Merritt
Paul Morris
Susan Parker
Jean Peszko
Anthony Peszko
Douglas Peterson
Thomas Piotrowski
Patricia Powell
Kenneth Proctor
Chris Roberts
Felicia Roberts
William Rodney
Brian Schrock
Karen Sherrill
Roni Skirvin
Paige Sommer
Gary Stenerson
Stacey Stenerson
Charles Sterling
Art Stretton
Fred Swerdlin
William Swingle
Bill Thompson
Candy Torres
Frank Weary

The Office of the Chief Clerk received timely oral comments from the following individuals during the May 29, 2014 public meeting:

Leigh Baxter
Allen Brown
Herschel Butler
Anita Cooper
Doylton Davis
Victoria Dorsch
Mary Edwards
Jerry Hamby
Carole Henning
Charles Howard
Gordon Johnson
Paul Morris
Jean Peszko
Douglas Peterson
Kenneth Proctor
Roni Skirvin
Adam Socki
Paige Sommer
Gary Stenerson
Frank Weary

The Office of the Chief Clerk received six petitions: two on July 12, 2013; and one on July 26, 2013; August 19, 2013; February 28, 2014; and March 31, 2014. The petitions all identified the same issues. The signatories to the petitions are listed below and will be referred to as Group 1 throughout the remainder of the Response:

James Ackerman
James Alvarez
Jose Alvarez
Lori Alvarez
Miranda Anderson
Becky Arunyon
Scott Askew
David Bacque
B.G. Bailey
Dorothy Bailey
Cindy Bandemer
Ray Banks
Clayton Beard
Deborah Beard
Ray Bernard
Suzanne Bernard
Vonetta Berry Jenkins
Stacie Burcl
Robert Burrows
Gulmira Butler
Herschel Butler
A.J. Caldwell
Peter Chady
Barbara Chase
Ann Cook
Kent Cook
Anita Cooper
Jennifer Crandell
Jack Curtis
Melissa Daggett
Timothy Daggett
Sharon Dahms
LaVonne Daugherty
Julia Dean
Alison Deep
Doyle Del Bosque
Thomas Dorsch
Victoria Dorsch
Peggy Dorsey
John Dotter
Robert Eaton
Peggy Epps
Ronald Epps
Vivian Estey
Terry Evard
Daniel Finnegan
David Gace
Gerald Gaff
Maria Goday
Patricia Goldstein
Lonnie Gonzales
David Green
Mary Green
K.S. Gregg
Ron Gyorfi
Jeffrey Hansen
Brice Hawley
Signe Hawley
Kirk Hayes
Mary Ann Hearon
Carole Henning
David Henning
Mandy Hess
Nancy Hiner
Steve Hiner
Patty Hoffman
Ashley Holmes
Vincent Holmes
Robert Horner
Austin Howard
Charles Howard
Mary Howard
Kandy Jarvis
Eilene Kenney
Gunner Kenney
Jack Kenney
Mike Kenney
Virginia King
Oscar Koehler
Al Lapidus
Marla Lewis
Jack Logan
Emily Louviere
Denise Mais
Jeff Mais
Bernard Marcantel
Helen Marcantel
Corinne McAlpine
Gregory McAlpine
Denise McCorquodale
Sasika Meadows
Ruben Mendoza
Patti Mikulan
John Mire
Olga Mire
Angela Mitchell

James Mitchell
Bill Miyoshi
Linda Miyoshi
Art Money
Krista Moody
Tristan Moody
Lori O'Brin
Anthony Paradiso
Susan Parker
Stacey Paulson
Anthony Peszko
Jean Peszko
Patricia Powell
Cheri Pressley
Kenneth Proctor
Lee Rader
John Rau
Tom Reed
Young Reese
Annalee Rhoades
Leonard Rich
Chris Roberts
Felicia Roberts
Conrad Rodriguez
Veronica Rodriguez
Lisa Roth
Linda Sartorius
Sandy Sartorius
Jeff Seavey
Melody Seavey
Ruby Smith
Charles Sterling
Bill Stevens
Sue Stevens
Robert Stites
Bill Thompson
Paul Wisnoski
Dorothy Yancey
Pat Yokubaitis
Craig Zimmerman
Derek Zimmerman
DonnaLee Zimmerman
Vanee Zimmerman

This response addresses all such public comments received, whether or not withdrawn. If you need more information about this permit application or the wastewater permitting process, please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at our website at www.tceq.state.gov.

I. Background

A. Description of Facility

CLCWA has applied for a major amendment to Permit No. WQ0010539001 to authorize the establishment of two additional outfalls. The current permit authorizes the disposal of treated domestic wastewater at a daily average flow not to exceed 10.0 million gallons per day (MGD) from Outfall 001. The proposed permit would authorize the discharge of treated domestic wastewater from Outfall 001 at an annual average flow

not to exceed 10.0 MGD; from Outfall 002 at an annual average flow not to exceed 1.08 MGD; and from Outfall 003 at an annual average flow not to exceed 1.08 MGD. The proposed permit authorizes a combined annual average flow not to exceed 10.0 MGD from Outfalls 001, 002, and 003. The existing wastewater treatment facility serves the Clear Lake City service area.

The effluent limitations for Outfall 001, based on a 30-day average, are 5 mg/l Biochemical Oxygen Demand (BOD_5), 12 mg/l total suspended solids (TSS), 2 mg/l ammonia nitrogen (NH_3-N), 0.02 mg/l total copper, 0.08 mg/l total zinc, 4.0 mg/l dissolved oxygen (DO), and 35 CFU or MPN/100 ml Enterococci. The effluent limitations for Outfalls 002 and 003, based on a 30-day average, are 5 mg/l BOD_5, 12 mg/l total suspended solids TSS, 2 mg/l NH_3-N, 0.02 mg/l total copper, 0.08 mg/l total zinc, 4.0 mg/l DO, and 126 CFU or MPN/100 ml *E. coli*. The permittee shall utilize an Ultraviolet Light (UV) system for disinfection. During shut-down of the UV disinfection system for occasional maintenance or during periods of stormwater flow that exceed the 2-hour peak flow, the effluent shall be routed to the chlorine contact chamber and shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval by the Executive Director.

The treated effluent is discharged via Outfall 001 to Horsepen Bayou, then to Armand Bayou Tidal. Under the proposed permit, the treated effluent would also be discharge via Outfall 002 to a pond on the west side of El Dorado Boulevard, then to Harris County Flood Control District (HCFCD) ditch B104-03-00, then to Horsepen Bayou, then to Armand Bayou Tidal; and from Outfall 003 to a series of ponds on the east side of El Dorado Boulevard, then to HCFCD ditch B104-02-00, then to Horsepen Bayou, then to Armand Bayou Tidal in Segment No. 1113of the San Jacinto-Brazos Coastal Basin. The unclassified receiving water uses are high aquatic life use for Horsepen Bayou (tidal), HCFCD ditch B104-03-00 (tidal), and HCFCD ditch B104-02-00 (tidal); intermediate aquatic life use for a pond on the west side and a series of ponds

on the east side of El Dorado Boulevard; and limited aquatic life use for HCFCD ditch B104-02-00 (above tidal). The designated uses for Segment No. 1113 are primary contact recreation and high aquatic life use.

The plant site is located at 14210 Middlebrook Drive in Houston, approximately one mile northeast of the intersection of Bay Area Boulevard and Space Center Boulevard, southeast of Horsepen Bayou and adjacent to the northernmost part of Lyndon B. Johnson Space Center in Harris County, Texas.

B. Procedural Background

The application was received on February 26, 2013, and declared administratively complete on April 29, 2013. The Notice of Receipt of Application and Intent to Obtain Permit (NORI) was published on May 24, 2013 in the *Houston Chronicle,* and in Spanish on May 24, 2013 in *Rumbo*, Harris County, Texas. The Executive Director completed the technical review of the application on November 5, 2013, and prepared a draft permit. The combined Notice of Public Meeting and Notice of Application and Preliminary Decision (combined PM/NAPD) was published on April 17, 2014 in the *Houston Chronicle*, and in Spanish on April 27, 2014 in *La Voz de Houston*, in Harris County, Texas. The combined PM/NAPD was also published on April 24, 2014 in the *Bay Area Citizen* in Harris County, Texas. A public meeting was held on May 29, 2014 at the Clear Lake Recreation Center in Houston, Texas. In order to provide mailed notice and an opportunity to comment to additional landowners who were identified after the close of the original comment period, the Chief Clerk mailed a combined NORI/NAPD to the individuals on the updated adjacent landowners list on September 8, 2014 and the Executive Director extended the comment period for this application to October 8, 2014. This application was administratively complete on or after September 1, 1999; therefore, this application is subject to the procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999.

C. Access to Rules, Laws, and Records

Please consult the following websites to access the rules and regulations applicable to this permit:

- to access the Secretary of State website: www.sos.state.tx.us;
- for TCEQ rules in Title 30 of the Texas Administrative Code: www.sos.state.tx.us/tac/ (select "TAC Viewer" on the right, then "Title 30 Environmental Quality");
- for Texas statutes: www.statutes.legis.state.tx.us;
- to access the TCEQ website: www.tceq.texas.gov/ (for downloadable rules in Adobe PDF format, select "Rules" then "Download TCEQ Rules");
- for Federal rules in Title 40 of the Code of Federal Regulations: www.gpoaccess.gov/cfr/index.html; and
- for Federal environmental laws: www.epa.gov/epahome/laws.htm.

The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at the Clear Lake City Water Authority Office, 900 Bay Area Boulevard, Houston, Texas.

II. Comments and Responses

Comment 1:

Many commenters raised a general concern related to potential human health impacts from prolonged exposure to treated effluent, or were concerned that the effects of prolonged exposure are unknown. Many commenters also noted that the proposed outfalls will discharge into a highly populated residential area. These commenters included Billy Ballard, Steven Baxter, Mary Daggett, Timothy Daggett, Charles Howard, Anthony Peszko, Patricia Powell, Anita Cooper, Hershel Butler, Carole Henning, Leigh Baxter, Eilene Kenney, Bill Thompson, Chris and Felicia Roberts, Dan Finnegan, Victoria Dorsch, Emily Louviere, and Kenneth Proctor.

Kenneth Proctor commented that he is concerned that no one knows what the health risks are of the pools of effluent water evaporating and becoming more concentrated with the pathogens in the water.

Carole Henning commented that she is concerned about the level of endocrine altering pharmaceutical by-products that are untested, unmonitored, and unfiltered by current wastewater treatment practices. Ms. Henning commented further that allowing the project as currently designed, hundreds of acres of pathogenic and possibly pharmaceutical contaminated soils will be created.

Some commenters raised concerns that state laws and statutory and regulatory requirements are not strong enough to protect residents at such close proximity, especially the elderly and those who have or have had serious ailments such as cancer or Parkinson's Disease. The commenters expressed concerns that there are not any guarantees the people will not get sick and that they do not want to be guinea pigs. These commenters included Leigh Baxter, Herschel Butler, Anita Cooper, Dan Finnegan, Carole Henning, Kenneth Proctor, and Bill Thompson.

Response 1:

The proposed permit was developed to protect aquatic life and human health in accordance with the Texas Surface Water Quality Standards (TSWQS). The requirements in the proposed draft permit were established to be protective of human health and the environment as long as the Applicant operates and maintains the facility according to TCEQ rules and the requirements in the proposed draft permit. As part of the permit application process, the TCEQ must determine the uses of the receiving water and set effluent limits that are protective of those uses. In this case, the receiving stream uses are primary contact recreation and high aquatic life use. The Texas Surface Water Quality Standards (30 TAC Chapter 307) state that "surface waters will not be toxic to man, or to terrestrial or aquatic life." The procedure of deriving permit limits outlined in the *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010) ("*Implementation Procedures*") is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health. The Executive

Director determined that these uses will be protected if the facility is operated and maintained as required by the proposed permit and regulations.

As for pharmaceutical byproducts in wastewater, the U.S. Environmental Protection Agency is investigating Pharmaceutical and Personal Care Products (PPCPs), but have expressed that their experts have not found an evidentiary link between adverse human health effects and PPCPs in the environment. Examples of pharmaceuticals in water bodies are antibiotics and analgesics, and examples of personal care products in water bodies are cosmetics and fragrances. PPCP removal during municipal wastewater treatment, including processes using membrane bioreactor (MBR), have been documented in scientific literature (*see* Lee, Howe and Thompson, 2009; Oulton, Kohn and Cuiertny, 2012; EPA-820-R-10-002, 2010). However, the science on PPCPs is currently evolving, and while the EPA and other agencies continue to study the presence of PPCPs, there is currently no clear regulatory regime available to address the treatment of PPCPs in domestic wastewater. Accordingly, neither the TCEQ nor the EPA has rules on the treatment of contaminants such as pharmaceuticals in domestic wastewater.

Comment 2:

Some commenters asserted that the proposed pond will be unsuitable or undesirable for boating, fishing, or other forms of recreation. These commenters include Scott Askew, Charles Howard, James McLane, Michael Merritt, Chris and Felicia Roberts, Leigh Baxter, and Victoria Dorsch.

Scott Askew and Charles Howard asked whether the review of the application took into account human recreational use, including the risk of incidental ingestion of effluent while recreating in the water. Scott Askew, Mary Daggett, and Timothy Daggett were concerned about the dangers associated with consuming or handling the fish in the receiving waters. Scott Askew asked if the water will be safe for consuming fish.

Some commenters including Anthony Peszko, and Patricia Powell raised a concern that the effluent will contain constituents that will be toxic to humans or that

the effluent will be contaminated. Herschel Butler asked if there is any guarantee that the effluent will not contain cancer-causing carcinogens.

Response 2:

As specified in the TSWQSs, water in the state must be maintained to preclude adverse toxic effects on aquatic life, terrestrial life, livestock, and domestic animals resulting from contact, consumption of aquatic organisms, consumption of water, or any combination of the three. Water in the state must be maintained to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water, or any combination of the three. The proposed permit has been designed to ensure that these quality standards would be maintained.

The effluent limitations in the draft permit will maintain and protect the existing instream uses. In accordance with 30 TAC § 307.5 and the TCEQ *Implementation Procedures*, an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in the Horsepen Bayou (tidal), a pond on the west side of El Dorado Boulevard, HCFCD ditch B104-03-00 (tidal), a series of ponds on the east side of El Dorado Boulverd, and HCFCD ditch B104-02-00 (tidal), which have been identified as having high, intermediate, high, intermediate and high aquatic life uses, respectively. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

Comment 3:

Many commenters raised a concern that the effluent will expose local residents to bacteria or other pathogens. These commenters included Billy Ballard, Steven Baxter,

Anita Cooper, Mandy Hess, Charles Howard, Victoria Dorsch, Leigh Baxter, and Emily Louviere.

Steven Baxter was concerned that the effluent will transmit disease. Billy Ballard, Mandy Hess, and Charles Howard expressed concerns related to the possibility of germs in the wastewater.

Anthony Peszko commented that half of all effluent wastewater samples taken in the United State tested positive for the superbug Methicillin-Resistant Staphylococcus (MRSA), which Mr. Peszko asserts are borne in sewage treatment plants like the Robert T. Savely Wastewater Treatment plant. Mr. Peszko believes that MRSA currently exists in the Robert T. Savely Wastewater Treatment plant and is concerned about the Water Authority discharging infected water via outfalls 002 and 003.

Carole Henning commented that Texas' bacteria standards are among the weakest in the nation because Texas only uses a single indicator method. Ms. Henning commented that Texas' wastewater effluent can contain up to 10 to 20 times the fecal bacteria levels allowed by neighboring states. By using the single indicator method, the levels of hundreds of other human fecal transported pathogens in Texas' wastewater is unknown. Carole Henning commented that many highly chlorine-resistant pathogens would continue to flourish in the undiluted effluent.

Response 3:

In accordance with the TCEQ rules found at 30 TAC § 309.3(g)(1), the proposed permit requires the treated effluent to be disinfected prior to discharge in a manner conducive to protect both the public health and aquatic life. The Commission is authorized to consider and approve any appropriate process for disinfection on a case-by-case basis.[1] Likewise, the Commission, on a case-by-case basis, will allow chlorination or disinfection alternatives to the specific criteria of time and detention that achieves equivalent water quality protection. The alternatives will be considered

[1] 30 TAC § 309.3(g)(1) ("Except as provided in this subsection, disinfection in a manner conducive to the protection of both public health and aquatic life shall be achieved on all domestic wastewater which discharges into waters in the state. Any appropriate process may be considered and approved on a case-by-case basis.")

and their performance standards determined based upon supporting data submitted in an engineering report, prepared and sealed by a registered, professional engineer. The report should include supporting data, performance data, or field tracer studies, as appropriate. The Commission will establish effluent limitations as necessary to verify if disinfection is adequate, including chlorine residual testing, other chemical testing, and bacteria testing as specified.

In this case, the Applicant has chosen to utilize a UV system for disinfection purposes, and must comply with the design requirements in 30 TAC Chapter 217, Subchapter L. Specifically, 30 TAC, Sections 217.291-300, specify the requirements for the sizing, configuration, dosage, system details, controls, cleaning, safety, and minimum replacement parts for UV light disinfection units. During a shut-down of the UV disinfection system for occasional maintenance or during periods of stormwater flow that exceed the 2-hour peak flow, the effluent shall be routed to the chlorine contact chamber. Chlorination of the treated effluent is required to provide adequate disinfection and reduce pathogenic organisms. The effluent must be chlorinated in a chlorine contact chamber to a chlorine residual of 1.0 mg/l with a minimum detention time of 20 minutes. The chlorine residual must be monitored five times per week by grab sample according to the proposed draft permit requirements.

Beginning in February 2007, the United States Environmental Protection Agency (EPA) took the position that bacteria limits are required in TPDES permits. This resulted in the EPA objecting to a subset of TCEQ draft permits because the TCEQ had typically included chlorine exposure time and residual concentration requirements as the bacteria control mechanism for disinfection by chlorination in TPDES domestic discharge permits. The Executive Director and EPA reached an agreement in July 2008 regarding bacteria effluent limitations and monitoring requirements in TPDES domestic wastewater permits. The agreement included an interim approach to require bacteria limitations and/or monitoring for selected facilities that met certain criteria for discharges to bacteria impaired water bodies. The agreement also included a long-term approach in which the TCEQ would propose rulemaking to establish requirements for bacteria limitations in all TPDES domestic wastewater permits. Conditions in the agreement stated that an adopted rule must be effective by December 31, 2009, and all

TPDES domestic wastewater draft permits for which Notice of Application and Preliminary Decision is published on or after January 1, 2010 will have the new requirements as part of the permit language or EPA objections would begin again.

On November 4, 2009, the Commission adopted rules amending 30 TAC §§ 210.33 (Use of Reclaimed Water); 309.3 (Domestic Wastewater Effluent Limitations); and 319.9 (General Regulations Incorporated into Permits). The rulemaking added bacteria limits to TPDES domestic permits in Chapter 309 for *E. coli* in fresh water discharges or *Enterococci* in saltwater discharges. The rulemaking also set the frequency of testing for bacteria in Chapter 319, and amended Chapter 210 to allow reuse water providers to choose *E. coli, Enterococci,* or fecal coliform bacteria testing to verify disinfection.

Comment 4:

Scott Askew asked whether the TCEQ requires backup pumping equipment to maintain flow, as in the event of a power outage caused by a hurricane. Charles Howard raised a concern that the facility would discharge sewer water or grey water into the proposed ponds. James McLane asserted that the facility would discharge partially treated or incompletely treated sewage.

Response 4:

The Applicant is required to take certain steps to minimize the possibility of an accidental discharge of untreated wastewater. For example, under *Operational Requirement No. 4*, the Applicant must maintain adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, or retention of inadequately treated wastewater. In addition, the plans and specifications for domestic wastewater collection and treatment works associated with any domestic permit must be approved by TCEQ.

Also, under 30 TAC 305.126(a), a permittee must plan for the expansion of the facility when the treatment facility approaches design capacity. Accordingly,

Operational Requirement No. 8 of the proposed draft permit states that when the flow reaches 75 percent of the permitted daily average flow for three consecutive months, the Applicant must initiate engineering and financial planning for expansion or upgrade for the domestic wastewater treatment or collection facilities. When the flow reaches 90 percent of the permitted daily average flow for three consecutive months, the Applicant must obtain authorization from TCEQ to begin constructing the necessary additional treatment or collection facilities. These permit provisions are designed to help prevent unauthorized discharges of raw wastewater.

If an unauthorized discharge occurs, the Applicant is required to report it to TCEQ within 24 hours. Finally, the Applicant is subject to potential enforcement action for failure to comply with TCEQ rules or the permit.

Comment 5:

Scott Askew asked whether there are requirements for signs or other methods to control public access and human contact with the effluent in the proposed ponds.

Herschel Butler asked how the Water Authority plans to prevent the tendency of neighborhood children to run and play in the water, and how children drowning or becoming sick could be prevented.

Response 5:

TCEQ's rules require wastewater treatment facilities to be completely fenced and have a lockable gate at each access point in order to control public access. *See* 30 TAC § 217. However, this rule only applies to the wastewater treatment plant and not to the receiving waters. The TSWQSs require that the effluent be treated to be protective of the recreational uses of the receiving water. An antidegradation review of the receiving water was conducted and determined that existing recreational uses will be maintained.

Comment 6:

Scott Askew asked why the effluent is not allowed for irrigation purposes on a community garden.

Response 6:

Section 26.027 of the Texas Water Code authorizes TCEQ to issue permits to control the discharge of wastes or pollutants into state waters and to protect the water quality of the state's rivers, lakes, and coastal waters. This permitting process is limited to controlling the discharge of pollutants into state waters and protecting the state's water quality of the state's rivers, lakes, and coastal waters. Clear Lake City Water Authority has applied for a major amendment to TPDES Permit No. WQ0010539001 to authorize the establishment of two new additional outfalls and the discharge of treated domestic wastewater from Outfall 001 at an annual average flow not to exceed 10,000,000 gallons per day; from Outfall 002 at an annual average flow not to exceed 1,080,000 gallons per day and from Outfall 003 at an annual average flow not to exceed 1,080,000 gallons per day. The draft permit authorizes a combined annual average flow not to exceed 10,000,000 gallons per day from Outfall 001, 002 and 003. In order to use the treated effluent for irrigation purposes at a community garden, the Applicant would be required to apply for a separate authorization for reuse under Chapter 210 of the Texas Administrative Code.

Comment 7:

Charles Howard asked whether the Application was reviewed to determine whether the discharge is protective of a limited aquatic life use. Scott Askew asked how the increased flow in the receiving waters at Outfalls 002 and 003 will impact aquatic life.

Response 7:

Under the Texas Surface Water Quality Standards, water in the state must not be acutely toxic to aquatic life, nor chronically toxic in waters with designated or existing

aquatic life uses of limited or greater. 30 TAC § 307.6(b). The Texas Surface Water Quality Standards and the *Implementation Procedures* designate criteria for the protection of aquatic life in waters of the state. For this Application, all receiving waters were assessed to have an aquatic life use of limited or greater. The aquatic life uses for the pond on the west side of El Dorado and the HCFCD ditch B104-03-00 are designated as intermediate aquatic life use and high aquatic life use, respectively. The aquatic life use for the series of ponds on the east side of El Dorado Boulevard and HCFCD ditch B104-02-00 are intermediate aquatic life use and high aquatic life use, respectively.

The proposed permit was drafted in accordance with 30 TAC, Section 307, and the *Implementation Procedures* and should be protective of the aquatic life in the receiving stream when the Applicant operates and maintains the facility according to the requirements of the draft permit. TCEQ practice for determining significant potential is to compare the reported analytical data against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are required when analytical data reported in the application exceed 85% of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceed 70% of the calculated daily average water quality-based effluent limitation. Analytical data reported in the Application were screened against calculated water quality-based effluent limitations for the protection of aquatic life. The reported analytical data did not exceed 70% of the calculated daily average water quality-based effluent limitation for aquatic life protection for Outfall 001. Effluent limitations for Total Copper and Total Zinc are continued from the existing permit. Analytical data reported in the Application from Outfall 001 were screened against calculated water quality-based effluent limitations for the protection of aquatic life. The reported analytical data did not exceed 70% of the calculated daily average water quality-based effluent limitation for aquatic life protection for Outfalls 002 and 003. There are no analytical data for Outfalls 002 and 003 in the Application because they have not yet discharged.

Comment 8:

Emily Louviere raised a concern that the effluent will expose domestic animals (pets) and wildlife to bacteria or other pathogens.

Response 8:

Wildlife would not be negatively impacted by the discharge from this facility if the Applicant maintains and operates the proposed facility in accordance with TCEQ rules and the provisions in the proposed permit. Under the Texas Surface Water Quality Standards, water in the state must be maintained to preclude adverse toxic effects on terrestrial life, livestock, or domestic animals, resulting from contact, consumption of aquatic organisms, consumption of water, or any combination. 30 TAC § 307.6(b)(4). In addition, water in the state must be maintained to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water, or any combination of the three. The proposed permit has been drafted to ensure that these quality standards would be maintained. As part of the application process, TCEQ must determine the uses of the receiving water and set effluent limits that are protective of those uses, including aquatic life and contact recreation. The Commission does not have specific water-quality based effluent limitations for water consumed by livestock or wildlife. However, the TCEQ Water Quality Assessment Section has determined that the proposed permit for the facility meets the requirements of TSWQS, which are established to protect human health, terrestrial and aquatic life. Aquatic organisms are more sensitive to water quality components than terrestrial organisms.

Comment 9:

Scott Askew asked for the Executive Director to provide examples of similar situations where the receiving water is a pond or lake that is primarily composed of treated effluent. Carole Henning expressed concern that this type of project has never been done before and as a result there are no studies on the feasibility of this type of project. Mary Ann Howard commented that effluent water use in Texas is legally limited

to only spraying fairways, lawns, and instances when the effluent mixes with naturally flowing waterways.

Response 9:

The TCEQ does not maintain a database of issued water quality permits that is searchable for the criteria described by the commenter. However, it is relatively common for discharges to be permitted into otherwise dry streams and ditches that contain pools, stock ponds, and other impoundments. Protection of aquatic life and human health is evaluated consistent with the character of the receiving waters whether they are effluent dominated or contain substantial amounts of base flow.

Comment 10:

Charles Howard asserted that the receiving water was misclassified as a "future pond" and that the HCFCD ditches should have been evaluated as flowing streams. Anita Cooper raised the concern that the receiving water is not a series of ponds but rather a series of deep, wide ditches.

Response 10:

The TCEQ evaluated the discharge and receiving water as proposed in the Applicant's permit application. At the request of the TCEQ reviewer, the Applicant confirmed that the details in the Applicant's detention facilities and associated open space and park plan provided the most accurate estimates of pond size and depth. Based on the information in the Application, the park plan, and existing conditions, the TCEQ reviewer characterized the immediate receiving waters as perennial streams with large on-channel ponds.

Comment 11:

Charles Howard asserted that the method for determining the tidal/fresh water boundary for Outfall 002 was faulty. He noted that the reviewer used current, site-

specific data to determine the boundary as 0.62 miles downstream from Outfall 002. Mr. Howard noted that this condition will not exist in the future when the Outfall is discharging and water is flowing over the monitoring station. Mr. Howard contended that the reviewer should have used the 5-foot contour line, as was used for Outfall 003, which would have placed the tidal boundary near the intersection of Horsepen Bayou. Using this method would also identify more landowners.

Response 11:

Tidal delineations are made based on site-specific information when this information is available. If site specific information is unavailable, TCEQ defaults to making a tidal delineation at the 5-foot contour line based on the USGS topographic map. In this case, site-specific information indicates that HCFCD ditch B104-03-00 is tidal downstream of Penn Hills Lane. This site-specific information includes frequent large changes in specific conductivity that correlate with changes in chlorides levels. Based on the relatively small proposed discharge for Outfall 002 and the Park Plan which shows the proposed pond in the Outfall 002 discharge route will be constructed entirely upstream of Penn Hills Lane. TCEQ expects that HCFCD ditch B104-03-00 will continue to be tidally influenced downstream of Penn Hills Lane.

Comment 12:

Jose Alvarez, Scott Askew, and Raymond Halyard raised a concern that the low flow rate of the discharge from Outfalls 002 and 003 will create stagnant water with low dissolved oxygen, which will promote bad odors, algae blooms, and mosquito breeding.

Raymond Halyard noted that the treated waste water annual average flow rate of 1,080,000 or less per day into the detention facility corresponds to about 1.67 cubic feet or less per second. This flow rate will result in extremely low flow velocities in the facility's ponds where the flow cross-sectional area will be a few hundred square feet, and may result in stagnation causing mosquito infestation and algal growth. The live algae can cause low dissolved oxygen and the dead algae can cause increased biological oxygen demand (BOD) and noxious odors. A new treatment plant may be needed at the

facility's exit to return the BOD to the proper level. Mr. Halyard expressed concern that the ponds will expose him to mosquitoes and noxious odors.

Some commenters including Billy Ballard, Steven Baxter, Mandy Hess, and Charles Howard raised a concern that the proposed ponds will have stagnant water that will create nuisance odors.

Scott Askew asked whether the TCEQ has an estimation or requirement for the amount of flow that is needed to pass through the proposed ponds in order to prevent stagnation and the propagation of mosquitos.

Response 12:

The proposed discharges from Outfalls 002 and 003 were analyzed using numerical models specifically designed to estimate potential negative effects on dissolved oxygen in the proposed ponds. The flow from these alternative outfalls relative to the size of the ponds was an important element of the model analysis and was accounted for in the evaluation. At the effluent limits contained in the draft permit, model predictions suggest that dissolved oxygen in the ponds will not be lowered to a point where odors would be produced due to deficient oxygen levels.

Comment 13:

Kenneth Proctor raised a concern that the treatment methods will vary depending on the turbidity of the effluent during rain events (i.e., chlorination versus ultraviolet disinfection). Mr. Proctor was concerned that the difference in treatment methods would affect the safety of the effluent.

Response 13:

The proposed permit would authorize the Applicant to utilize a UV system for disinfection purposes. During a shut-down of the UV disinfection system for occasional maintenance or during periods of stormwater flow that exceed the 2-hour peak flow and high turbidity, the effluent shall be routed to the chlorine contact chamber; the effluent

shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample at each chlorination chamber. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director. The following are indicator bacteria measured for outfalls 001, 002, and 003 in all conditions.

Outfall 001:

Effluent Characteristic	Discharge Limitation		Min. Self-Monitoring Requirements	
	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Enterococci, CFU or MPN/100 ml	35	104	Daily	Composite

Outfalls 002 and 003:

Effluent Characteristic	Discharge Limitation		Min. Self-Monitoring Requirements	
	Daily Avg	Daily Max	Measurement Frequency	Sample Type
E. coli, CFU or MPN/100 ml	126	399	Daily	Composite

Under the terms of the proposed permit, the Applicant would be required to comply with the bacteria limits under both methods of disinfection.

Comment 14:

Steven Baxter raised a concern that the proposed ponds will have little flow or mixing, and that they will have to be drained out periodically in order to remove oil, fertilizers, and other pollutants that have settled to the bottom.

Response 14:

The Application is for the discharge of treated domestic effluent only and the draft permit is limited to controlling the quality of the effluent from the wastewater treatment facility. The draft permit would not apply to nonpoint source pollutants that may be discharged to the proposed ponds. The draft permit states that there shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

Comment 15:

Several commenters raised a concern that the proposed detention ponds will harbor mosquitos and other pests. These commenters included Billy Ballard, Anita Cooper, Victoria Dorsch, Raymond Halyard, Carole Henning Charles Howard, Anthony Peszko, Jean Peszko, Kenneth Proctor, and Bill Thompson. Anthony Peszko raised a concern that the applicant has not proposed a mechanism to control the mosquito population.

Charles Howard noted that the proposed project will ultimately include 39 acres of wetlands that will attract mosquitos, but that wetlands are legally protected against spraying pesticides to control mosquito populations. Anthony Peszko and Jean Peszko commented that wetlands are the perfect environment for mosquitos that carry the West Nile virus, and there is no natural or biological control of mosquito populations.

Steven Baxter, Anthony Peszko, and Bill Thompson raised a concern that the proposed ponds would harbor alligators, snakes, and other dangerous pests.

Response 15:

TCEQ rules contain minimum design requirements for constructed wetlands that include protections against vectors, such as mosquitos, nutria, and muskrats. See 30 TAC § 217.210(j). However, these rules only apply to the creation of constructed wetlands as a part of a treatment system. The proposed on-channel ponds in the Application are considered water in the State, and therefore the discharge from Outfalls 002 and 003 must be treated to meet the Texas Surface Water Quality Standards.

It is possible to apply pesticides to wetlands for the purpose of pest control under the Pesticides General Permit (TXG870000). Under the general permit, a permittee may apply certain types of pesticides to waters of the United States, which can include wetlands. A permittee may apply pesticides for the purposes of controlling mosquito populations if covered under the general permit. The TCEQ website provides more information about the Pesticides General Permit on the Agency website: http://www.tceq.texas.gov/permitting/wastewater/general/pestgpair.

Comment 16:

Several commenters raised a concern that the effluent will be a potential flooding hazard to nearby residents. These commenters included Anita Cooper, Charles Howard, James McLane, Patricia Powell, and Kenneth Proctor.

Anita Cooper and Kenneth Proctor were also concerned about the flooding that may be caused by storm events, especially if the project changes current drainage patterns. James McLane questioned whether the project was truly needed in order to address flooding, since the area around the Old Golf Course rarely floods. Anita Cooper and Charles Howard raised a concern that the creation of the detention ponds will create a flooding risk that will raise FEMA flood insurance rates. Charles Howard raised a concern that the discharge will raise the level of Horsepen Bayou and increase the potential for flooding.

Charles Howard raised a concern that the discharge would cause erosion.

Response 16:

The Commission does not have jurisdiction to regulate flooding or erosion in the context of a wastewater discharge permit. However, to the extent that an issue related to flooding also involves water quality, the Applicant is required to comply with all the numeric and narrative effluent limitations and other conditions in the proposed permit at all times, including during flooding conditions.

The TCEQ does require an applicant to indicate whether wastewater treatment units are within the 100-year flood plain. A wastewater treatment unit must not be

located within the 100-year flood plain unless it is protected from inundation and damage that may occur during a flooding event. 30 TAC § 309.13(a). The Applicant indicated in Item 5 of Domestic Technical Report 1.1 that the facility is located above the 100-year floodplain. Furthermore, the proposed draft permit includes *Other Requirements No. 6*, which requires the Applicant to provide protection for the facility from a 100-year flood.

Comment 17:

Some commenters, including Anita Cooper, Victoria Dorsch, and Charles Howard, raised a concern that the Applicant is seeking the amendment for the purpose of providing additional capacity to prospective developers. Charles Howard raised a concern that there is no justification for the proposed amendment to the discharge location. Mr. Howard asked whether the Applicant has submitted a request or justification for increased capacity. Mr. Howard noted the treated effluent, under the current permit, is discharged into a nature preserve that is unpopulated, and that the Applicant should locate the new discharge point along that route if they can justify a need for more capacity.

Herschel Butler questioned the purpose behind dumping the large amount of treated effluent in or near his backyard when the Water Authority has always discharged it directly to Horsepen Bayou.

Response 17:

The Applicant has applied to the TCEQ for an amendment of the existing permit to authorize the establishment of two new additional outfalls and the discharge of treated domestic wastewater from Outfall 001 at an annual average flow not to exceed 10,000,000 gallons per day; from Outfall 002 at an annual average flow not to exceed 1,080,000 gallons per day and from Outfall 003 at an annual average flow not to exceed 1,080,000 gallons per day. The draft permit authorizes a combined annual average flow not to exceed 10,000,000 gallons per day from Outfalls 001, 002 and 003. The capacity

of the wastewater treatment facility remains the same. There is no proposed increase in flow and no need for justification for more capacity.

Comment 18:

Charles Howard raised a concern that this Application is untimely because the ponds have not yet been constructed. Mr. Howard indicated that the ponds do not exist at this time, and that they are not scheduled to be available for 12 years, making the discharge physically impossible. Mr. Howard also noted that installing the new outfalls now would cause them to deteriorate before they are ready to be used.

Response 18:

The Executive Director cannot confirm whether the ponds will be constructed in 12 years because that information is not included or required as a part of the Application. The discharge is not physically impossible at this time since 100 percent of the discharge is currently permitted from existing Outfall 001, and the proposed permit would continue to authorize 100 percent of the discharge from existing Outfall 001. The issuance of the proposed permit would not grant the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in the permit. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

Comment 19:

Victoria Dorsch, Michael Merritt, and Anthony Peszko, raised a concern that the Applicant is proposing to discharge the entire capacity of the facility (10 MGD) into the proposed ponds. Victoria Dorsch raised a concern that the amendment would allow CLCWA to discharge up to 10 MGD of effluent into the Old Golf Course.

Response 19:

The proposed permit would not authorize the discharge of 10 MGD to the proposed ponds. As stated in Response No. 17, the Applicant applied to the TCEQ for an amendment of the existing permit to authorize the establishment of two new additional outfalls and the discharge of treated domestic wastewater from Outfall 001 at an annual average flow not to exceed 10,000,000 gallons per day; from Outfall 002 at an annual average flow not to exceed 1,080,000 gallons per day and from Outfall 003 at an annual average flow not to exceed 1,080,000 gallons per day. The draft permit authorizes a combined annual average flow not to exceed 10,000,000 gallons per day from Outfalls 001, 002 and 003.

Comment 20:

Charles Howard raised a question about the final proposed flow of Outfalls 002 and 003. The notice documents stated that the outfalls had a proposed flow of 1,080,000 gallons per day. Mr. Howard wanted to know if this was cumulative between the two outfalls, or separate for each outfall. Mr. Howard also wanted to know if the flow from Outfall 001 would be reduced by the proposed flow rate of the new outfalls.

Response 20:

The discharge of treated domestic wastewater from Outfall 001 is at an annual average flow not to exceed 10,000,000 gallons per day; from Outfall 002 will be at an annual average flow not to exceed 1,080,000 gallons per day and from Outfall 003 will be at an annual average flow not to exceed 1,080,000 gallons per day. The proposed permit authorizes a combined annual average flow not to exceed 10,000,000 gallons per day from Outfalls 001, 002, and 003.

Comment 21:

Charles Howard raised a concern regarding other necessary approvals required for the proposed discharge route. Mr. Howard noted that the Application does not contain information that addresses which authorizations would be required before

issuance of the permit. For instance, Mr. Howard noted that the proposed pipeline will be a modification to property in the Oakbrook subdivision of Clear Lake City, and that any modification would require approval by the Clear Lake City Community Association Architectural Committee prior to any action. Mr. Howard asserted that the lack of this information in the application makes the Application incomplete, and that the Application should be returned.

Charles Howard raised a concern that the Applicant has not secured approval from the Harris County Flood Control District (HCFCD) for the use and alteration of the ditches that will become the proposed ponds at Outfalls 002 and 003. Charles Howard noted that the Applicant does not own the ditches into which they propose to discharge at Outfalls 002 and 003. Charles Howard raised a concern that there is no need or justification for piping effluent over 14,000 feet to the new outfalls. Charles Howard noted the piping would have to cross over several busy streets and asked who will issue the permit for that activity.

Response 21:

The issuance of this permit would not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

Comment 22:

Charles Howard raised a concern that there is no evidence to suggest that the Application was prepared by a hydrologist. Mr. Howard stated that this is necessary in order to ensure that the proposed ponds are designed for flood control purposes.

Response 22:

Under Chapter 217 of the Texas Administrative Code, the plans and specifications for the treatment facility must be prepared, signed, and sealed by an engineer. 30 TAC § 217.6(c)(10). However, the TCEQ does not require that a TPDES permit application be prepared by a hydrologist. The TCEQ has no jurisdiction to address flooding issues in the wastewater permitting process. The permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes and coastal waters. The draft permit includes effluent limits and other requirements that the Applicant must meet even during rainfall events and periods of flooding.

Comment 23:

Several commenters raised concerns related to the construction of the proposed ponds, or a concern related to the proposed construction of a neighborhood park adjacent to the discharge route. Several commenters including Victoria Dorsch, Kirk Hayes, Charles Howard, Michael Merritt, Patricia Powell, and Kenneth Proctor raised a concern that the construction related to the new project will destroy trees, walkways, bike paths, duck ponds, and other features in the area.

Charles Howard raised some concerns related to the construction of the proposed retention and detention ponds in the discharge route. Mr. Howard submitted an analysis indicating that the proposed ponds are located in series below each new outfall, and some of the proposed ponds will experience positive elevation changes from upstream ponds to downstream ponds. The rise in elevation will require the use of dams and lift stations, neither of which is proposed in the Application. Mr. Howard made this determination by comparing the proposed retention volume against the maps and figures provided CLCWA in their Master Plan.

Scott Askew asked whether the water level of the ponds will be higher than the existing water level in the channel. Scott Askew also asked how the discharge will affect flow through the ponds.

Charles Howard was also concerned that CLCWA would not be able to achieve the proposed 2,080 acre feet of retention and detention volume associated with the proposed ponds. Using the maps provided in the Master Plan, Mr. Howard estimated the volume of the proposed ponds and determined that the CLCWA would either not be able to achieve the proposed 2,080 acre feet of retention and detention volume, or would have to excavate the ponds to an excessive depth that would necessarily dip below the existing water table. Because of this, CLCWA should be required to obtain core samples to analyze soil stability.

Raymond Halyard raised a concern that specific plans have not been submitted to TCEQ regarding the future retention ponds. Mr. Halyard asserted that the proposed retention ponds will be treatment units, and accordingly should conform to the best management practices (BMPs) established by EPA in the publication *Storm Water Wet Pond and Wetland Management Guidebook*, EPA No. 833B09001. Mr. Halyard stated that without the BMPs established by EPA, the ponds can cause mosquito infestation, noxious odors, and water quality degradation. Mr. Halyard also noted that the EPA guidance does not recommend constructing wet detention ponds in urban areas.

Scott Askew asked what requirements TCEQ has regarding aerators in detention ponds, and specifically whether there are setback requirements to avoid human contact with the mists produced.

Raymond Halyard raised a concern that the removal of dirt for the proposed ponds will create dust and traffic.

Chris Roberts and Felicia Roberts asked who is responsible for the costs associated with moving the underground high pressure gas line that is below one of the ditches that the Water Authority plans to enlarge. Charles Howard noted that there is a buried industrial pipeline that runs four feet underground under the entire length of one of the proposed ponds. Mr. Howard asked if CLCWA has obtained permission to relocate the pipe.

Response 23:

Issues relate to the construction of the proposed ponds along the discharge route below Outfalls 002 and 003 are outside the scope of the review of this Application. The Wastewater Permitting Section of the TCEQ reviewed the Application to ensure that the proposed discharge from Outfalls 002 and 003 will meet the requirements of the Texas Surface Water Quality Standards. Under Section 26.121 of the Texas Water Code, no person may discharge a pollutant into water in the state without an authorization. For this Application, the HCFCD ditches and the proposed ponds are considered water in the state and not treatment units. The effluent limits and conditions of the draft permit were designed to be protective of the aquatic and human health uses of the HCFCD ditches, the proposed ponds, and Horsepen Bayou. All treatment to attain those effluent limits must occur prior to discharge from Outfalls 002 and 003. The EPA document *Storm Water Wet Pond and Wetland Management Guidebook* is a guidance document intended to assist communities in maintaining BMPs under an integrated stormwater management system. The guidance document would not apply to the review of the proposed discharge for compliance with the TSWQSs.

Comment 24:

Charles Howard and Kenneth Proctor raised a concern that the proposed project in the Old Golf Course is controversial, ill-conceived, or improperly funded. Mr. Howard raised a concern about the funding available for the project. Charles Howard asked what the excavation costs for the ponds will be. Charles Howard asked whether money would be better spent on maintaining the current Old Golf Course in its current state.

Kenneth Proctor commented that the proposed project will destroy the natural beauty in an around the Old Golf Course.

Response 24:

Section 26.027 of the Texas Water Code authorizes the TCEQ to issue permits to control the discharge of wastes or pollutants into state waters and to protect the water quality of the state's rivers, lakes and coastal waters. The water quality permitting

process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. The TCEQ does not have jurisdiction under the Texas Water Code to assess the cost or conception of the development project within the context of a wastewater discharge permit.

Comment 25:

Charles Howard raised a concern that the application does not contain sufficient information related to the modification of two HCFCD canals, which transport water from the Old Golf Course to Horsepen Bayou. Mr. Howard asserted that installing a new pipe in the canals and changing the configuration of the canals requires HCFCD approval, a 404 Army Corps of Engineers permit, and a TCEQ formal environmental impact study/report. Mr. Howard asked whether an environmental impact statement had been completed for this proposed activity.

Response 25:

The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

Furthermore, the TCEQ does not require an environmental impact statement in permitting wastewater treatment facilities. The National Environmental Policy Act (NEPA) requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. To meet this requirement, federal agencies must prepare detailed statements known as an Environmental Assessment, Finding of No Significant Impact or Environmental Impact Statements. Neither Chapter 26 of the Texas Water Code nor TCEQ rules require an applicant for a wastewater discharge

permit to submit an environmental impact study or an Environmental Impact Statement.

Comment 26:

Charles Howard and Anthony Peszko raised a concern over the bond issuance for the proposed project. Anthony Peszko raised a concern that there was no public notice for the issuance of the bond. Charles Howard raised a concern that TCEQ's approval of CLCWA's bond constituted a tacit approval of the discharge permit.

Response 26:

The authority of the TCEQ regarding the issuance of district bonds is limited to determining whether the project financed by the bonds is feasible. Section 49.181(a) of the Texas Water Code states that before a district can issue bonds to finance a project for which the TCEQ has adopted rules requiring review and approval, the TCEQ must determine that the project is feasible and issue an order approving the issuance of the bonds. Under Texas Water Code §§ 49.181(b)-(f), a district seeking TCEQ approval of its bonds may submit to the TCEQ a written application for investigation of feasibility, which must include an engineer's report describing the project, including the data, profiles, maps, plans, and specifications prepared in connection with the report. The Executive Director must then examine the application, the engineer's report, inspect the project area, and then prepare a written report on the project to submit to the Commission. The Commission must then determine whether the project to be financed by the bonds is feasible and issue an order either approving or disapproving the issuance of the bonds.

The approval of the issuance of bonds to fund a project by the Commission is limited to determining that the project is feasible only. It is not a tacit approval of a discharge permit. An application for a TPDES permit undergoes a separate review process under different commission rules, and the approval of the issuance of a bond is unrelated to the issuance of a TPDES permit.

Finally, the Texas Water Code, Chapter 49, Subchapter F (Issuance of Bonds) does not require public notice for issuance of the type of bonds contemplated in the above mentioned project.

Comment 27:

Kirk Hayes asked that the TCEQ consider the alternative proposal developed by Steve Baxter, which is available at http://www.savetheogc.org/our-plan.html. Kimberly Kochner had questions about the alternative plan, and asked whether an architect could design a plan for flood control, or if a special certification is needed.

Response 27:

The review of the Wastewater Permitting Section of the TCEQ is limited to determining whether the contents of a TPDES application are sufficient to meet the Texas Surface Water Quality Standards and other applicable rules. While the TCEQ considers public comment during the review process of a TPDES permit, the review does not include a determination as to whether an alternative proposal should be issued over what has been proposed in an application.

Comment 28:

Jayne Dowe raised a concern about a dog park that is proposed for the new project area. Ms. Dowe was concerned about the odors associated with the dogs and their feces. Ms. Dowe was also concerned about fecal coliform bacteria and parasites contained in dog feces and their ability to contaminate soils and surface waters.

Response 28:

The TCEQ has no jurisdiction to address the impacts associated with a potential dog park during the review of a wastewater discharge permit application. The permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters.

Comment 29:

Charles Howard raised a concern that control of the park area will be transferred over to the Exploration Green Conservancy, who will not be able to maintain the outfalls due to their lack of taxing authority. Herschel Butler asked when the Water Authority grants ownership of the project to a third party, will that third party be required to apply for any TCEQ permit.

Manny stated that there should be a staff that is responsible for maintaining the park areas. Anita Cooper asked how the receiving ditches be maintained when they are surrounded by wetlands.

Response 29:

Under *Operational Requirement No. 1* of the draft permit, the Applicant shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years. Furthermore, under *Permit Condition No. 5*, the Applicant must obtain approval before transferring the permit to any other entity, pursuant to 30 TAC § 305.64. Upon transfer, the terms and conditions of the draft permit would apply to the new owner or operator. However, the terms of the draft permit only apply to the treatment and discharge of effluent and do not include terms and conditions related to the maintenance of the proposed park development.

Comment 30:

Patricia Powell raised a concern that the developer is violating a covenant or agreement with adjacent property owners to maintain the greenbelt for the use and enjoyment of the adjacent landowners.

Response 30:

The public health concerns of property owners, as well as those of the public are considered in reviewing an application for a domestic wastewater discharge permit. The Commission takes the concerns and comments expressed by property owners and members of the general public relating to water quality and protecting the State's rivers and lakes into consideration in deciding whether to issue a wastewater discharge permit. The Commission encourages the participation of all citizens in the environmental permitting process. However, there are certain concerns of property owners that the Commission cannot address in the review of a wastewater discharge permit. The Commission does not have jurisdiction under the Texas Water Code or its regulations to address or consider the covenant of the local property owners in relation to the park developer in its determination of whether or not to issue a water quality permit.

Comment 31:

Susan Parker commented that she would like to know how Mr. Savely is related to the company that will be putting water on the Old Golf Course.

Response 31:

Under TCEQ, it is the responsibility of the owner of a facility to apply for a TPDES permit. *See* 30 TAC § 305.43(a). In their application, CLCWA indicated that the owner of the facility is Clear Lake City Water Authority. The name of the facility is the Robert T. Savely Water Reclamation Facility. The TCEQ is not aware of any relationship between the owner of the facility and the namesake of the facility.

Comment 32:

Charles Howard indicated that he was unable to view or obtain from the CLCWA a copy of the maps and data that were submitted with the application. Mr. Howard indicated that he was able to obtain copies from the TCEQ Regional office in Houston.

Response 32:

TCEQ rules require an applicant to provide a copy of the application for the public to review and copy at a public place in the county in which the facility is located or proposed to be located in accordance with 30 TAC § 39.405(g). The Applicant submitted a Public Notice Verification Form to the Chief Clerk on June 6, 2013, which indicated that a copy of the Application was available at the Clear Lake City Water Authority Office at 900 Bay Area Boulevard, Houston.

Comment 33:

Charles Howard noted that the notice of public meeting contained ambiguous language regarding the final flow of outfalls 002 and 003, as well as the description of the discharge route, and that the notice should be reissued to clarify the ambiguity. Mr. Howard noted this in a letter on April 10, 2014, and again in a comment on June 6, 2014. Because these comments came after the public meeting, Mr. Howard stated that the notice should be reissued and another public meeting should possibly be held.

Response 33:

The commenter raised questions regarding the accuracy of the following language in the public meeting notice document related to the description of the discharge route: "via proposed Outfall 002 through a pipe; then into a future pond ..." (the description for the discharge route for Outfall 003 is similarly phrased). The commenter asserted that the language was ambiguous because it implied that the proposed outfalls will discharge into a pipe before feeding into the future ponds, whereas the pipes come before the proposed outfall structure. Also, the commenter thought the following language related to the flow from Outfalls 002 and 003 was ambiguous: "from Outfall

002 and Outfall 003 both at an annual average flow not to exceed 1,080,000 gallons per day." The commenter asserted that the language was confusing and did not specifically state whether each outfall would be authorized for 1,080,000 gallons per day, or if the outfalls would split that total flow.

The Executive Director acknowledges that the language identified in the public meeting notice can be subject to different understandings, depending on the reader. However, the language in the notice document was not inaccurate, and the document served its intended purpose of informing members of the public of the time, place, and subject of the public meeting, as well as other methods of public participation, including instructions for requesting a contested case hearing. TCEQ notice rules generally require that the public notice contain a "brief description of the location and nature of the proposed activity." 30 TAC § 39.411(b)(3). The language in the notice document satisfied this rule. The notice document also indicated the time and place of the public meeting where members of the public could ask questions regarding the discharge route and flow, as well as provided the location where the individuals could view the application for further information.

Comment 34:

Charles Howard raised a concern that several adjacent landowners did not receive proper mailed notice before the public meeting on May 29, 2014, and that new notice should be given and another public meeting held, if necessary. Mr. Howard noted that he communicated these concerns to the attorney assigned. Mr. Howard submitted this comment on June 7, 2014, after the public meeting was held. Mr. Howard also raised a concern that not all of the landowners within a ½ mile radius of outfalls 002 and 003 were given mailed notice of the NAPD.

Response 34:

The Executive Director agrees that some of the landowner information in the Application required correction and new mailed notice; however, the Executive Director came to this conclusion for different reasons than the commenter. The correction to the

landowner map and list stems from the difference between how notice is provided to landowners near outfalls into tidally-influenced receiving waters as opposed to receiving waters that are not tidally-influenced.

The TCEQ notice rules require the Chief Clerk to provide mailed notice of an application to the "landowners named on the application map or supplemental map." 30 TAC § 39.413(1). The applicant provides the landowner map according to 30 TAC §§ 305.45(a)(6)(D) and 305.48(a)(2), as well as mailing labels to assist the Chief Clerk in the mailing. The rule requirement for the landowner map is rather simple, and requires the applicant to provide a map showing "ownership of the tracts of land adjacent to the treatment facility and *for a reasonable distance along the watercourse* from the proposed point of discharge." 30 TAC § 305.48(a)(2).

To comply with 30 TAC § 305.48(a)(2), and to provide more detail on the term "reasonable distance," the Wastewater Permitting Section developed the document *Instructions for Completing the Domestic Wastewater Permit Application*, which provides more specific information related to landowner maps. First, an applicant must identify all points of discharge covered by the application. For outfalls into non-tidally influenced streams, an applicant must provide a map with the discharge route highlighted for one mile downstream from the point of discharge, and all property boundaries of all landowners surrounding the point of discharge and on both sides of the discharge route for one full stream mile downstream of the point of discharge. If the point of discharge is to a lake, bay, estuary, or water body that is affected by the tides, then the applicant must identify the property boundaries of landowners along the shoreline for a ½ mile radius from the point of discharge.

This Application has three points of discharge: the existing Outfall 001, and proposed Outfalls 002 and 003. Outfall 001 discharges into Horsepen Bayou, which is tidally influenced. This means that the landowner map should indicate all property boundaries of landowners along the shoreline for a ½ mile radius from the point of discharge. This method ensures that landowners both upstream and downstream of the point of discharge are identified, as opposed to merely the landowners on the discharge route for one mile downstream. CLCWA initially provided a landowner map showing landowners adjacent to Horsepen Bayou for one mile downstream of Outfall 001. This

was discovered shortly before the May 29, 2014 public meeting. The Executive Director requested that CLCWA provide an updated map showing landowners upstream of Outfall 001. CLCWA provided an updated landowner map, which indicated one additional landowner – Centerpoint Energy. In response, on May 22, 2014 the Executive Director requested that the Chief Clerk add Centerpoint Energy to the mailing list and mail notice of the application and public meeting to the landowner. The Executive Director also extended the comment period beyond the public meeting to June 30, 2014 in order to allow further comment.

After the public meeting, the commenter raised the issue of the landowners near Outfalls 002 and 003. The Executive Director disagrees with the commenter's assertion that *all* landowners within ½ mile of each outfall must receive notice under the application instructions. Rather the Executive Director notes that only those landowners within ½ mile of Outfalls 002 and 003 who own property *along the shoreline* are required to be identified. Nevertheless, while responding to this comment, the Executive Director noted that the landowner list should have indicated landowners adjacent to the discharge route for one mile downstream of Outfalls 002 and 003. CLCWA originally indicated that the receiving waters for Outfalls 002 and 003 are tidally-influenced. While this is true, the receiving waters are not tidally-influenced at the outfall location. Accordingly, the Executive Director again requested CLCWA to provide an updated landowner map and list. The Applicant provided the revised landowner map and list to the Chief Clerk, a combined NORI/NAPD was mailed to the newly-identified landowners, and the Executive Director extended the comment period to October 8, 2014.

The Chief Clerk only received two public meeting requests after the May 29, 2014 public meeting. Both of these requests were from the commenter, above (on June 6, 2014 and June 7, 2014), who received notice of the public meeting and was in attendance. Therefore, the Executive Director determined that there was not a substantial or significant degree of public interest to warrant a second public meeting under 30 TAC § 55.154(c)(1).

Comment 35:

Charles Howard noted that the representatives of the CLCWA did not speak or answer questions during the recorded, formal portion of the public meeting.

Response 35:

When the Executive Director holds a public meeting on an application, the public meeting is divided into two parts: the informal discussion portion, and the formal comment portion. During the informal portion, members of the public can ask questions and receive answers from either the Executive Director's staff or the applicant. However, the formal portion of the public meeting is reserved for recording comments from members of the public. During this portion of the public meeting, neither the Executive Director nor the applicant will answer questions. Rather the Executive Director will respond to those comments in writing with the response to comments. This information is provided in the public meeting notice, which states the following:

> The public meeting will consist of two parts, an Informal Discussion Period and a Formal Comment Period. A public meeting is not a contested case hearing under the Administrative Procedure Act. During the Informal Discnssion Period, the public is encouraged to ask questions of the applicant and TCEQ staff concerning the application and the Executive Director's preliminary decision, but these informal comments made during the informal period will not be considered by the Commissioners before reaching a decision on the permit and no formal response will be made. During the Formal Comment Period, members of the public may state their formal comments into the official record. A written response to all timely, relevant and material, or significant formal comments will be prepared by the Executive Director and considered by the Commissioners before they reach a decision on the permit.

This information was also repeated during the public meeting by the moderator.

Comment 36:

Steven Baxter raised a concern that CLCWA is adopting their proposal without public input. Michael Merritt was concerned at the lack of public discourse and disclosure related to the project.

Response 36:

It is not clear whether the commenters are referring to the development project in general or the TPDES application, and the Executive Director is uncertain as to what level of public participation was required or provided by CLCWA in the creation of the development project. Nevertheless, members of the public have had significant opportunities to provide input for the Commissioners' consideration of this application. As described in Section I.B, above, the Chief Clerk and CLCWA provided mailed and published notice, respectively, of the application (NORI), the draft permit (NAPD), and the public meeting in accordance with TCEQ rules. The TCEQ held a public meeting on May 29, 2014, during which time members of the public were provided an opportunity to ask questions related to the TPDES application and provide public comment. The Commissioners will consider the comments and this Response before granting or denying the application pursuant to 30 TAC § 55.211(b). Furthermore, members of the public who request a hearing and show that they are affected by the application have an opportunity to engage in the contested case hearing process after the issuance of this Response.

Comment 37:

Several commenters raised a concern that the proposed discharge will affect property values. These commenters included Jose Alvarez, Anita Cooper, Mary Daggett, Timothy Daggett, Victoria Dorsch, Mandy Hess, and Charles Howard.

Charles Howard and Victoria Dorsch raised a concern that the proposed project was a waste or misuse of taxpayer dollars.

Response 37:

Section 26.027 of the Texas Water Code authorizes the TCEQ to issue permits to control the discharge of wastes or pollutants into state waters and to protect the water quality of the state's rivers, lakes and coastal waters. The water quality permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. The TCEQ

does not have jurisdiction under the Texas Water Code or its regulations to address or consider property values, taxes, or the marketability of adjacent property in its determination of whether or not to issue a water quality permit.

However, nothing in the draft permit limits the ability of nearby landowners to use common law remedies for trespass, nuisance, or other causes of action in response to activities that may or do result in injury or adverse effects on human health or welfare, animal life, vegetation, or property, or that may or actually do interfere with the normal use and enjoyment of animal life, vegetation, or property.

Nor does the draft permit limit the ability of a nearby landowner to seek relief from a court in response to activities that may or do interfere with the use and enjoyment of their property. If the Applicant's activities create any nuisance conditions, the TCEQ may be contacted to investigate whether a permit violation has occurred. Potential permit violations may be reported to the TCEQ Region 12 Office in Houston at (713)767-3500, or by calling the statewide toll-free number at 1-888-777-3186. Citizen complaints may also be filed online at the following website:

http://www.tceq.state.tx.us/enforcement/complaints/index.html.

Comment 38:

David McCorquodale noted that he is against the issuance of the permit.

Response 38:

The Executive Director acknowledges this comment.

Comment 39:

Many commenters expressed support for the project or requested that the TCEQ issue the permit. These commenters included Cynthia Bandemer, Heather Bibby, Joseph Bibby, Michal Bernard, Suzanne Bernard, Yvette Blanchard, Karla Bowling, John Branch, David Bremer, Allen Brown, Doylton Davis, Elizabeth del Bosque, Maryls Denison, Beverly Dorrington, Marianne Dyson, David Eichblatt, Gene Fisseler, Karen

Gregory, Gus Homann, Gordon Johnson, Nancy Johnson, Robert Jones, Ellen King, Kimberly Kochner, Paul Morris, Sommer Paige, Douglas Peterson, Thomas Piotrowski, Stanley Rodney, Karen Sherrill, Art Stretton, Fred Swerdlin, William Swingle, and Candy Torres.

Response 39:

The Executive Director acknowledges these comments.

Comment 40:

Suzanne Bernard requested that her name be removed from the petition that she signed in opposition to the project. Ms. Bernard's name appeared on the petition submitted on August 19, 2013 and was included in Group 1, above.

Response 40:

The Executive Director has noted the commenter's intention to withdraw her affiliation with the petition submitted on August 19, 2013.

Comment 41:

Many commenters requested a public meeting. These commenters included Billy Ballard, Steven Baxter, Anita Cooper, Mary Daggett, Timothy Daggett, Representative John Davis, Victoria Dorsch, Carole Henning, Mandy Hess, Charles Howard, David McCorquodale, Marcella Mendoza, Anthony Peszko, and the commenters in Group 1.

Response 41:

The Executive Director will hold a public meeting when there is substantial or significant public interest in an application, or when a member of the legislature who represents the area in which the facility is proposed to be located makes a request. In this case, the Chief Clerk received 153 requests for a public meeting, including a request from Representative John Davis. Accordingly, the Executive Director and the Chief

Clerk held a public meeting on May 29, 2014 at the Clear Lake Recreation Center in Houston.

Comment 42:

Many commenters requested a contested case hearing. These commenters included Steven Baxter, Raymond Halyard, Mandy Hess, Charles Howard, Michael Merritt, Anthony Peszko, Kenneth Proctor, and the commenters in Group 1.

Response 42:

The cover letter transmitting this Response provides instructions on how to request a contested case hearing, along with a deadline before which requests for a contested case hearing must be filed. The TCEQ will process the requests for a contested case hearing already received by the Office of the Chief Clerk, as well as any other requests for a contested case hearing that are timely filed. The hearing requests will be considered under the requirements of Title 30 Texas Administrative Code, Chapter 50, Subchapter F. All requests for a contested case hearing must comply with the requirements of 30 TAC § 55.201.

Changes Made to the Draft Permit in Response to Comments

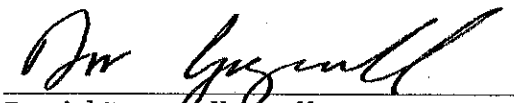
No changes were made to the draft permit in response to comments.

Respectfully submitted,

Texas Commission on Environmental Quality

Richard A. Hyde, P.E.
Executive Director

Robert Martinez, Director
Environmental Law Division



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REPRESENTING THE EXECUTIVE
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ON ENVIRONMENTAL QUALITY