

Control Number: 46077



Item Number: 15

Addendum StartPage: 0

#### **DOCKET NO. 46077**

# RECEIVED

APPLICATION OF BRUSHY CREEK	§	PUBLIC HTHEFTY COMMISSION
MUNICIPAL UTILITY DISTRICT AND	§	
AQUA TEXAS, INC. FOR SALE,	§	PUB <b>OF TEXAS</b> OS HIS SKON FILLOG CLEAK
TRANSFER, OR MERGER OF	§	I ICING OCCIM
FACILITIES AND CÉRTIFICATE	§	
RIGHTS IN WILLIAMSON COUNTY	§	

# AQUA TEXAS, INC.'S RESPONSE TO ORDER NO. 2 AND SUPPLEMENTAL APPLICATION INFORMATION

TO THE HONORABLE ADMINISTRATIVE LAW JUDGE:

COMES NOW, Aqua Texas, Inc. d/b/a Aqua Texas ("Aqua") and files this Response to Order No. 2 ("Response") and provides supplemental application information to address certain deficiencies identified by Commission Staff in the application filed by Aqua and Brushy Creek Municipal Utility District ("Brushy Creek MUD") (collectively "Applicants"). In support thereof, Aqua would show the following on behalf of the Applicants.

#### I. BACKGROUND

On June 17, 2016, Applicants filed an Application for Sale, Transfer, or Merger of Facilities and Certificate Rights in Williamson County ("Application") with the Public Utility Commission of Texas ("Commission"). On July 22, 2016, Order No. 2 was issued which provided Aqua an opportunity to cure certain Application deficiencies identified by Commission Staff with their recommendation filed July 15, 2016. Since then, Aqua has visited with Commission Staff about the identified deficiencies and responds to Order No. 2 with the following supplemental Application information in an effort to cure same. Order No. 4 established September 8, 2016 as the deadline for Applicants to respond. Therefore this pleading is timely filed.

#### II. SUPPLEMENTAL APPLICATION INFORMATION

Commission Staff's Memorandum attached to its July 15, 2016 recommendation requests three categories of supplemental application information items:

- 1. Response to Part B, Question 5, Regarding Deposits: Aqua has filed a Motion for Protective Order that upon entry will permit Applicants to file a responsive customer deposit information list as a confidential filing using the commission's procedures for same. The Application explains that all deposits held by Brushy Creek MUD, if any, will be refunded prior to closing. However, Commission Staff is requesting a complete responsive list. The list requested in the Commission's STM application form requires submission of confidential customer name/address information.
- 2. Response to Part B, Question 11, Regarding Enforcement Actions: Per discussions with Commission Staff, Aqua is providing available non-privileged responsive supplemental information and documents limited to the past five years for systems owned by Aqua's affiliate Aqua Utilities, Inc. d/b/a Aqua Texas under CCN No. 11157 and located within Aqua's Southwest Region. Exhibit A.
- 3. Any projected losses from the acquired system in the first 5 years: Per discussions with Commission Staff, please see the attached Pro Forma document including responsive supplemental information regarding the Application project. **Exhibit B**. Aqua is also filing its most recent depreciation study. **Exhibit C**.

#### III. CONCLUSION

Applicants respectfully request that the ALJ issue an order deeming the Application administratively complete and requiring further processing. Applicants further request that the Commission ultimately approve the Application.

# Respectfully submitted,

## TERRILL & WALDROP

Paul M. Terrill III

State Bar No. 00785094 Geoffrey P. Kirshbaum State Bar No. 24029665

810 West 10<sup>th</sup> Street Austin, Texas 78701 Tel: (512) 474-9100

Fax: (512) 474-9888

# ATTORNEYS FOR AQUA TEXAS, INC. D/B/A AQUA TEXAS

& A Kurshlaun

# **CERTIFICATE OF SERVICE**

I certify that a copy of this document will be served on all parties of record on September 8, 2016 in accordance with P.U.C. Procedural Rule 22.74.

Geoffrey P. Kirshbaum

EXHIBIT A
Enforcement Action Information - Aqua Utilities, Inc. (SW Region/CCN No. 11157 Only)

Case #	Docket #	Status	CN#**	RN#	RN Name	Compliance
ا سور	۳ هو . ع ۳ ش		***	the so		Status**
44405	2012-1296-	Effective	CN602787509	RN101721702	BEAR CREEK	Closed
	PWS-E				PARK	•
48526	2014-0511-	Effective	CN602787509	RN102682341	CHAPARRAL	Closed
	PWS-E				WATER	
					SYSTEM HAYS	
47915	2013-2043-	Effective	CN602787509	RN102678950	FALLING	Closed
	PWS-E				WATER	-
					SUBDIVISION	
47982	2013-2123-	Effective	CN602787509	RN102671880	GOLDEN	On Track*
	PWS-E				ACRES WATER	
52318	2016-0669-	Proposed	CN602787509	RN101502730	HILL	N/A
	PWS-E				COUNTRY	*
				•	NORTHWEST	
		ľ			CHERRY	
					HOLLOW	
52558	2016-0939-	Proposed	CN601570773	RN102689163	INGRAM	N/A
	PWS-E				WATER	
				*	SUPPLY	
42885	2011-2022-	Effective	CN601570773	RN102691771	MOUNTAIN	Closed
	PWS-E				CREST WATER	
52090	2016-0445-	Proposed	CN602787509	RN101250306	SAN GABRIEL	N/A
	PWS-E				RIVER	
		<u>.</u>			RANCHES	
43756	2012-0569-	Effective	CN601570773	RN100843143	SANDY CREEK	On Track*
	PWS-E				RANCHES	
			,		SUBDIVISION	
50737	2015-0954-	Effective	CN602787509	RN100843143	SANDY CREEK	On Track*
	PWS-E				RANCHES	
	· · · · · · · · · · · · · · · · · · ·				SUBDIVISION	4

<sup>\*</sup>Compliance schedule is contained within TCEQ Agreed Order and Aqua is on path to compliance within agreed schedule parameters.

Golden Acres: Remaining outstanding order item is to comply with the TTHM MCL by August 6, 2017. Water is supplied to the Golden Acres water system solely by the Nueces Water Supply Corporation. Elevated levels of TTHM are supplied by the Nueces Water Supply Corporation which is exasperated by disinfection level boosting by the corporation and required storage within the Golden Acres water system. Currently Aqua is seeking an alternative water source and has made inquiry with the City of Bishop about purchasing water. App. 000110 - 000117.

Hill Country NW Cherry Hollow: The proposed order relates to alleged exceedance of the Gross Alpha particle maximum contaminant limit (MCL). Aqua has already contracted with Collier Consulting to design treatment and obtain approval from TCEQ for same. Collier Consulting has completed the initial site assessment and is currently seeking proposals and bids from treatment equipment manufactures.<sup>1</sup>

Ingram: The proposed Ingram order relates primarily to alleged minor tank leaks and source capacity issues. The tanks are concrete tanks with minor seeps that do not represent a health risk. Aqua has decided it is prudent to replace the noncompliant tanks as repairs would only be temporary. Site limitations have complicated the ability to construct new tanks while maintaining the existing facilities in operation. Though neither pressure or flow issues have resulted from the noncompliance well capacity due to low customer demand, Aqua has one well already drilled that we intend to place into service in 2017 and is reviewing the system needs to properly place additional well(s) to best serve our customers. Aqua is currently negotiating with TCEQ on this order as it relates to the ordering provisions and associated due dates.<sup>2</sup>

San Gabriel River Ranches: The proposed order is currently draft but relates to alleged deficiencies in the quantity of source water. Aqua is negotiating with a local developer to provide land for at least two new wells. Once property is secured wells well be drilled to increase supply. Aqua notes it initially purchased this system out of a temporary managership situation. App. 000118 - 000131.

Sandy Creek (2012): Construction is underway and expected to be completed before the end of 2016 allowing Aqua to certify compliance with the remaining items within the order. App. 000132-000137.

Sandy Creek (2015): The order relates to deficiencies in the quantity of source water. Aqua is currently seeking approval to drill a new well at one of its plant sites. Well should be drilled by the end of the year. App. 000138-000143.

<sup>&</sup>lt;sup>1</sup> Documents responsive to this request are confidential and will be provided once a Protective Order is in place.

<sup>&</sup>lt;sup>2</sup> Documents responsive to this request are confidential and will be provided once a Protective Order is in place.

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director

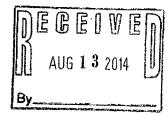


Gelen acres

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 12, 2014



## **CERTIFIED MAIL**

Robert L. Laughman, President Larry Mitchell, Compliance Manager Aqua Utilities, Inc. 1106 Clayton Lane, Suite 400W Austin, Texas 78723-2476

RE: Aqua Utilities, Inc.

TCEQ Docket No. 2013-2123-PWS-E; Registration No. 1780019
Agreed Order Assessing Administrative Penalties and Requiring Certain Action

Enclosed is a copy of an order issued by the Commission.

Questions regarding the order should be directed to the Enforcement Coordinator or the Staff Attorney. If there are questions pertaining to the mailing of the order, then please contact Leslie Gann of the Texas Commission on Environmental Quality's Office of the Chief Clerk (MC 105) at (512) 239-3319.

Sincerely,

Bridget C. Bohac Chief Clerk

Budget C. Bohon

BCB/lg

**Enclosure** 

cc: Jim Fisher, Enforcement Coordinator, TCEQ Enforcement Division

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY





IN THE MATTER OF AN § BEFORE THE
ENFORCEMENT ACTION §
CONCERNING \$ TEXAS COMMISSION ON
AQUA UTILITIES, INC. §
RN102671880 § ENVIRONMENTAL QUALITY

## AGREED ORDER DOCKET NO. 2013-2123-PWS-E

At its \_\_\_\_AUG\_\_0\_6\_2014 agenda, the Texas Commission on Environmental Quality ("the Commission" or "TCEQ") considered this agreement of the parties, resolving an enforcement action regarding Aqua Utilities, Inc. (the "Respondent") under the authority of Tex. Health & Safety Code ch. 341. The Executive Director of the TCEQ, through the Enforcement Division, and the Respondent presented this agreement to the Commission.

The Respondent understands that it has certain procedural rights at certain points in the enforcement process, including, but not limited to, the right to formal notice of violations, notice of an evidentiary hearing, the right to an evidentiary hearing, and a right to appeal. By entering into this Agreed Order, the Respondent agrees to waive all notice and procedural rights.

It is further understood and agreed that this Order represents the complete and fully-integrated settlement of the parties. The provisions of this Agreed Order are deemed severable and, if a court of competent jurisdiction or other appropriate authority deems any provision of this Agreed Order unenforceable, the remaining provisions shall be valid and enforceable. The duties and responsibilities imposed by this Agreed Order are binding upon the Respondent.

The Commission makes the following Findings of Fact and Conclusions of Law:

#### I. FINDINGS OF FACT

1. The Respondent owns and operates a public water supply at 779 County Road 77 in Nucces County, Texas (the "Facility") that has approximately 60 service connections and serves at least 25 people per day for at least 60 days per year.

- 2. During a record review conducted on October 28, 2013, TCEQ staff documented that the locational running annual average concentrations of total trihalomethanes ("TTHM") for Stage 2 Disinfectant Byproducts at Site 1 were 0.107 milligrams per liter ("mg/L") for the fourth quarter of 2012, 0.148 mg/L for the first quarter of 2013, 0.135 mg/L for the second quarter of 2013, and 0.117 mg/L for the third quarter of 2013.
- 3. The Respondent received notice of the violations on or about November 19, 2013.

## II. CONCLUSIONS OF LAW

- 1. The Respondent is subject to the jurisdiction of the TCEQ pursuant to Tex. Health & Safety Code ch. 341 and the rules of the Commission.
- 2. As evidenced by Findings of Fact No. 2, the Respondent failed to comply with the maximum contaminant level ("MCL") of 0.080 mg/L for TTHM, based on the locational running annual average, in violation of 30 Tex. ADMIN. CODE § 290.115(f)(1) and Tex. HEALTH & SAFETY CODE § 341.0315(c).
- 3. Pursuant to Tex. Health & Safety Code § 341.049, the Commission has the authority to assess an administrative penalty against the Respondent for violations of the Texas Water Code and the Texas Health and Safety Code within the Commission's jurisdiction; for violations of rules adopted under such statutes; or for violations of orders or permits issued under such statutes.
- 4. An administrative penalty in the amount of Three Hundred Sixty-Six Dollars (\$366) is justified by the facts recited in this Agreed Order, and considered in light of the factors set forth in Tex. Health & Safety Code § 341.049(b). Three Hundred Sixty-Six Dollars (\$366) of the administrative penalty is deferred contingent upon the Respondent's timely and satisfactory compliance with all the terms of this Agreed Order and shall be waived only upon full compliance with all the terms and conditions contained in this Agreed Order. If the Respondent fails to timely and satisfactorily comply with any requirement contained in this Agreed Order, the deferred amount of the administrative penalty shall become immediately due and payable without demand or notice, and the Executive Director may require the Respondent to pay all or part of the deferred administrative penalty.

#### III. ORDERING PROVISIONS

NOW, THEREFORE, THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY ORDERS that:

1. The Respondent is assessed an administrative penalty in the amount of Three Hundred Sixty-Six Dollars (\$366) as set forth in Section II, Paragraph 4 above, for violations of TCEQ rules and state statutes. The payment of this administrative penalty and the Respondent's compliance with all the terms and conditions set forth in this Agreed Order

completely resolve the violations set forth by this Agreed Order in this action. However, the Commission shall not be constrained in any manner from requiring corrective actions or penalties for other violations that are not raised here. Administrative penalty payments shall be made payable to "TCEQ" and shall be sent with the notation "Re: Aqua Utilities, Inc., Docket No. 2013-2123-PWS-E" to:

Financial Administration Division, Revenue Operations Section Attention: Cashier's Office, MC 214 Texas Commission on Environmental Quality P.O. Box 13088 Austin, Texas 78711-3088

- 2. The Respondent shall undertake the following technical requirements:
  - a. Within 90 days after the effective date of this Agreed Order, begin negotiating a water purchase contract that will enable the Facility to comply with the MCL for TTHM within 1,095 days of the effective date of this Agreed Order, in accordance with 30 TEX. ADMIN. CODE § 290.45;
  - b. Within 105 days after the effective date of this Agreed Order, submit written certification as described in Ordering Provision 2.k. below to demonstrate compliance with Ordering Provision No. 2.a.;
  - c. Within 1,095 days after the effective date of this Agreed Order, return to compliance with the MCL for TTHM, in accordance with 30 Tex. ADMIN. CODE § 290.115; and
  - d. Within 1,110 days after the effective date of this Agreed Order, submit written certification as described in Ordering Provision No. 2.k. below, and include detailed supporting documentation including photographs, receipts, and/or other records to demonstrate compliance with Ordering Provision No. 2.c.

In lieu of Ordering Provision Nos. 2.a. through 2.d:

e. Within 120 days after the effective date of this Agreed Order, complete a feasibility study, or update an existing feasibility study, and submit a written report or engineering study conducted by a Texas registered professional engineer regarding the results of the feasibility study to evaluate the necessary corrective actions designed to achieve compliance with the MCL for TTHM. The report shall include a tentative schedule describing additional studies, tests, or other methods that may be utilized for the completion of necessary corrective actions within 1,095 days after the effective date of this Agreed Order. If the Respondent purchases or sells water, a copy of the puchase water contract must be submitted with the feasibility study report or engineering study. The evaluation shall be sent to the addresses listed in Ordering Provision No. 2.k.;

- f. Within 135 days after the effective date of this Agreed Order, submit written certification as described in Ordering Provision No. 2.k. below to demonstrate compliance with Ordering Provision No. 2.e.;
- g. Within 180 days after the effective date of this Agreed Order, submit an acceptable written plan, including a proposed schedule, to the Executive Director that provides for the completion of an alternate water source or treatment technology to the addresses listed in Ordering Provision No. 2.k.;
- h. Within 180 days after the effective date of this Agreed Order, and on a semiannual basis thereafter, submit progress reports to the addresses listed in Ordering Provision No. 2.k. below. These reports shall include information regarding actions taken to provide water which meets the MCL for TTHM;
- i. Within 195 days after the effective date of this Agreed Order, submit written certification as described in Ordering Provision No. 2.k. below to demonstrate compliance with Ordering Provision No. 2.g.;
- j. Within 1,095 days after the effective date of this Agreed Order, return to compliance with the MCL for TTHM, in accordance with 30 Tex. ADMIN. CODE § 290.115; and
- k. Within 1,110 days after the effective date of this Agreed Order, submit written certification as described below, and include detailed supporting documentation including photographs, receipts, and/or other records to demonstrate compliance with Ordering Provision No. 2.j. The certification shall be notarized by a State of Texas Notary Public and include the following certification language:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

The certification shall be submitted to:

Order Compliance Team
Enforcement Division, MC 149A
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

with a copy to:

Public Drinking Water Section Manager Water Supply Division, MC 155 Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087

and to:

Technical Review and Oversight Team Water Supply Division, MC 159 Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087

- 3. The provisions of this Agreed Order shall apply to and be binding upon the Respondent. The Respondent is ordered to give notice of the Agreed Order to personnel who maintain day-to-day control over the Facility operations referenced in this Agreed Order.
- 4. The Executive Director may grant an extension of any deadline in this Agreed Order or in any plan, report, or other document submitted pursuant to this Agreed Order, upon a written and substantiated showing of good cause. All requests for extensions by the Respondent shall be made in writing to the Executive Director. Extensions are not effective until the Respondent receives written approval from the Executive Director. The determination of what constitutes good cause rests solely with the Executive Director.
- 5. The Executive Director may refer this matter to the Office of the Attorney General of the State of Texas ("OAG") for further enforcement proceedings without notice to the Respondent if the Executive Director determines that the Respondent has not complied with one or more of the terms or conditions in this Agreed Order.
- 6. This Agreed Order shall terminate five years from its effective date or upon compliance with all the terms and conditions set forth in this Agreed Order, whichever is later.
- 7. This Agreed Order, issued by the Commission, shall not be admissible against the Respondent in a civil proceeding, unless the proceeding is brought by the OAG to: (1) enforce the terms of this Agreed Order; or (2) pursue violations of a statute within the Commission's jurisdiction, or of a rule adopted or an order or permit issued by the Commission under such a statute.
- 8. This Agreed Order may be executed in separate and multiple counterparts, which together shall constitute a single instrument. Any page of this Agreed Order may be copied, scanned, digitized, converted to electronic portable document format ("pdf"), or otherwise reproduced and may be transmitted by digital or electronic transmission,

including but not limited to facsimile transmission and electronic mail. Any signature affixed to this Agreed Order shall constitute an original signature for all purposes and may be used, filed, substituted, or issued for any purpose for which an original signature could be used. The term "signature" shall include manual signatures and true and accurate reproductions of manual signatures created, executed, endorsed, adopted, or authorized by the person or persons to whom the signatures are attributable. Signatures may be copied or reproduced digitally, electronically, by photocopying, engraving, imprinting, lithographing, electronic mail, facsimile transmission, stamping, or any other means or process which the Executive Director deems acceptable. In this paragraph exclusively, the terms "electronic transmission", "owner", "person", "writing", and "written" shall have the meanings assigned to them under Tex. Bus. Org. Code § 1.002.

9. The Chief Clerk shall provide a copy of this Agreed Order to each of the parties. By law, the effective date of this Agreed Order is the third day after the mailing date, as provided by 30 Tex. Admin. Code § 70.10(b) and Tex. Gov't Code § 2001.142.

# SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL Q	YTLIAU
Buyan W Shaw	
For the Commission	
Remo Mark = s	614114
For the Executive Director	Date
I, the undersigned, have read and understand the Utilities, Inc. I am authorized to agree to the attached, and do agree to the specified terms and concin accepting payment for the penalty amount, is make the specified terms.	ched Agreed Order on behalf of Aqua Utilities ditions. I further acknowledge that the TCEQ
I understand that by entering into this Agreed procedural rights, including, but not limited to, the by this Agreed Order, notice of an evidentiary her the right to appeal. I agree to the terms of the A This Agreed Order constitutes full and final adjudition of this Agreed Order.	e right to formal notice of violations addressed aring, the right to an evidentiary hearing, and greed Order in lieu of an evidentiary hearing
additional penalties, and/or attorney fees, Increased penalties in any future enforcem	nay result in: s submitted; neral's Office for contempt, injunctive relief or to a collection agency; nent actions; al's Office of any future enforcement actions
Signature  Robert Laughmen  Name (Printed or typed)	Date Date Prisident
Authorized Representative of	TIME
Aqua Utilities, Inc.	

Instructions: Send the original, signed Agreed Order with penalty payment to the Financial Administration Division, Revenue Operations Section at the address in Section III, Paragraph 1 of this Agreed Order.

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director

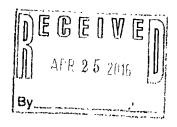


# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 21, 2016

Mr. Robert Laughman, President Aqua Utilities, Inc. 1106 Clayton Lane Austin, Texas 78723



Re:

Proposed Agreed Order

Aqua Utilities, Inc.; RN101250306; TCEQ PWS ID No. 2460046 Docket No. 2016-0445-PWS-E; Enforcement Case No. 52090

FOR SETTLEMENT PURPOSES ONLY

Dear Mr. Laughman:

The Executive Director of the Texas Commission on Environmental Quality ("Commission" or "TCEQ") is pursuing an enforcement action against Aqua Utilities, Inc. for violations of the Texas Health & Safety Code and/or Commission Rules. These violations were discovered during an investigation conducted on March 10, 2016, and documented in a letter dated March 24, 2016, from the TCEQ Austin Regional Office.

Please find enclosed a proposed agreed order which we have prepared in an attempt to expedite this enforcement action. The order assesses an administrative penalty of One Hundred Fifty-Seven Dollars (\$157). We are proposing a one-time offer to defer Thirty-One Dollars (\$31) of the administrative penalty if you satisfactorily comply with all the ordering provisions within the time frames listed. Therefore, the administrative penalty to be paid is One Hundred Twenty-Six Dollars (\$126). The order also identifies the violations that we are addressing and identifies specific technical requirements necessary to resolve them.

If you have any questions regarding this matter, we are available to discuss them in a conference in Austin or over the telephone. If we reach agreement in a timely manner, the TCEQ will then proceed with the remaining procedural steps to settle this matter. These steps include publishing notice of the proposed order in the *Texas Register*, and scheduling the matter for approval by the Commission. We believe that handling this matter expeditiously could save Aqua Utilities, Inc. and the TCEQ a significant amount of time, as well as the expense associated with litigation.

Enclosed for your convenience is a return envelope. If you agree with the order as proposed, please sign and return the original order **and** the penalty payment (check payable to "TCEQ" and referencing Aqua Utilities, Inc., Docket No. 2016-0445-PWS-E) to:

Mr. Robert Laughman Page 2 April 21, 2016

> Financial Administration Division, Revenue Operations Section Attention: Cashier's Office, MC 214 Texas Commission on Environmental Quality P.O. Box 13088 Austin, Texas 78711-3088

Should you believe you are unable to pay the proposed administrative penalty, you may claim financial inability to pay part or all of the penalty amount. In order to qualify for financial inability to pay, the penalty must exceed \$3,600 and be greater than 1% of annual gross revenues. If this is the case, please contact us immediately to obtain a list of financial disclosure documents that must be submitted within 30 days of the receipt of this letter. These documents, once properly completed and submitted, will be thoroughly reviewed to determine if we agree with the claim of financial inability. Please be aware that if financial inability is proven to the satisfaction of staff, discussions pertaining to the penalty amount adjustment will focus only on deferral and not on waiver of the penalty amount.

You may be able to perform or contribute to a Supplemental Environmental Project ("SEP"), which is a project that benefits the environment, to offset a portion of your penalty. If you are interested in performing a SEP, you must agree to the penalty amount and submit a SEP proposal within 30 days of receipt of this proposed order.

For additional information about the types of SEPs available and eligibility criteria, please go to the TCEQ's web site link at <a href="http://www.tceq.texas.gov/legal/sep/">http://www.tceq.texas.gov/legal/sep/</a> or contact the Enforcement Coordinator listed below.

Please note that any agreements we reach are subject to final approval in accordance with 30 Tex. Admin. Code § 70.10(a).

If we cannot reach a settlement of this enforcement action or you do not wish to participate in this expedited process, we will proceed with enforcement under the Commission's Enforcement Rules, 30 Tex. Admin. Code ch. 70. Specifically, if the signed order and penalty are not mailed and postmarked within 60 days from the date of this letter, your case will be forwarded to the Litigation Division and this settlement offer, including the penalty deferral, will no longer be available. The enforcement process described in 30 Tex. Admin. Code ch. 70 requires the staff to prepare and issue an Executive Director's Preliminary Report and Petition to the Commission. If you would like to obtain a copy of 30 Tex. Admin. Code ch. 70, or any other TCEQ rules, the rules themselves and the agency brochure entitled Obtaining TCEQ Rules (GI-032) are located on our agency website at <a href="http://www.tceq.texas.gov">http://www.tceq.texas.gov</a> for your reference. If you would like a hard copy of this brochure mailed to you, you may call and request one from the Central Office Publications Ordering Team at (512) 239-0028.

Mr. Robert Laughman Page 3 April 21, 2016

For any questions or comments about this matter or to arrange a meeting, please contact Ms. Abigail Lindsey of my staff at (512) 239-2576.

Sincerely,

James Gradney, Manager Enforcement Division

Texas Commission on Environmental Quality

JG/al

Enclosures: Proposed Agreed Order, Return Envelope, Penalty Calculation Worksheet, Site

Compliance History

cc: Mr. Larry Mitchell, Manager, Aqua Utilities, Inc. 1106 Clayton Lane, Suite 400W, Austin,

Texas 78723

# Texas Commission on Environmental Quality



## AGREED ORDER DOCKET NO. 2016-0445-PWS-E

#### I. JURISDICTION AND STIPULATIONS

On	, the Texas Commission on Environmental Quality ("the
Commission" or "TC	EQ") considered this agreement of the parties, resolving an enforcement
action regarding Aqu	a Utilities, Inc. (the "Respondent") under the authority of TEX. HEALTH &
SAFETY CODE ch. 341	. The Executive Director of the TCEQ, through the Enforcement Division,
and the Respondent	together stipulate that:

- The Respondent owns and operates a public water supply located 3 miles north of Texas State Highway 29 on County Road 214 in Liberty Hill, Williamson County, Texas (the "Facility"). The Facility provides water for human consumption, has approximately 241 service connections, and serves at least 25 people per day for at least 60 days per year. As such, the Facility is a public water system as defined in 30 Tex. ADMIN. CODE § 290.38(69).
- 2. The Executive Director and the Respondent agree that the TCEQ has jurisdiction to enter this Order pursuant to Tex. Water Code § 7.002 and Tex. Health & Safety Code § 341.049 and that the Respondent is subject to TCEQ's jurisdiction. The TCEQ has jurisdiction in this matter pursuant to Tex. Water Code § 5.013 and Tex. Health & Safety Code § 341.031 because it alleges violations of Tex. Health & Safety Code ch. 341 and the rules of the TCEQ.
- 3. The occurrence of any violation is in dispute and the entry of this Order shall not constitute an admission by the Respondent of any violation alleged in Section II ("Allegations"), nor of any statute or rule.
- 4. An administrative penalty in the amount of \$157 is assessed by the Commission in settlement of the violations alleged in Section II ("Allegations"). The Respondent paid \$126 of the penalty and \$31 is deferred contingent upon the Respondent's timely and satisfactory compliance with all the terms of this Order. The deferred amount shall be waived only upon full compliance with all the terms and conditions contained in this Order. If the Respondent fails to timely and satisfactorily comply with any of the terms or requirements contained in this Order, the Executive Director may demand payment of all or part of the deferred penalty amount.

- 5. The Executive Director and the Respondent agree on a settlement of the matters alleged in this enforcement action, subject to final approval in accordance with 30 TEX. ADMIN. CODE § 70.10(a). Any notice and procedures, which might otherwise be authorized or required in this action, are waived in the interest of a more timely resolution of the matter.
- 6. The Executive Director may, without further notice or hearing, refer this matter to the Office of the Attorney General of the State of Texas ("OAG") for further enforcement proceedings if the Executive Director determines that the Respondent has not complied with one or more of the terms or conditions in this Order.
- 7. This Order represents the complete and fully-integrated agreement of the parties. The provisions of this Order are deemed severable and, if a court of competent jurisdiction or other appropriate authority deems any provision of this Order unenforceable, the remaining provisions shall be valid and enforceable.
- 8. This Order shall terminate five years from its effective date or upon compliance with all the terms and conditions set forth in this Order, whichever is later.

#### II. ALLEGATIONS

During an investigation conducted on March 10, 2016, an investigator documented that the Respondent failed to provide a minimum well capacity of 0.6 gallon per minute ("gpm") per connection, in violation of 30 Tex. Admin. Code § 290.45(b)(1)(C)(i) and Tex. Health & Safety Code § 341.0315(c). Specifically, the Facility has 241 connections and should have a minimum well capacity of 144.6 gpm. However, the Facility was providing 104 gpm, which is a 28% deficiency.

#### III. DENIALS

The Respondent generally denies each allegation in Section II ("Allegations").

#### IV. ORDERING PROVISIONS

NOW, THEREFORE, THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY ORDERS that:

1. The Respondent is assessed a penalty as set forth in Section I, Paragraph 4. The payment of this penalty and the Respondent's compliance with all of the requirements set forth in this Order resolve only the allegations in Section II. The Commission shall not be constrained in any manner from requiring corrective action or penalties for violations which are not raised here. Penalty payments shall be made payable to "TCEQ" and shall be sent with the notation "Re: Aqua Utilities, Inc., Docket No. 2016-0445-PWS-E" to:

Financial Administration Division, Revenue Operations Section Attention: Cashier's Office, MC 214 Texas Commission on Environmental Quality P.O. Box 13088 Austin, Texas 78711-3088

- 2. The Respondent shall undertake the following technical requirements:
  - a. Within 180 days after the effective date of this Order, provide a minimun well capacity of 0.6 gpm per connection, in accordance with 30 Tex. ADMIN. CODE § 290.45; and
  - b. Within 195 days after the effective date of this Order, submit written certification, and include detailed supporting documentation including photographs, receipts, and/or other records to demonstrate compliance with Ordering Provision No.
     2.a. The certification shall be signed by the Respondent and shall include the following certification language:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

The certification shall be submitted to:

Order Compliance Team Enforcement Division, MC 149A Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087

with a copy to:

Water Section Manager Austin Regional Office Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087

- 3. All relief not expressly granted in this Order is denied.
- 4. The duties and provisions imposed by this Order shall apply to and be binding upon the Respondent. The Respondent is ordered to give notice of this Order to personnel who maintain day-to-day control over the Facility operations referenced in this Order.
- 5. The Executive Director may grant an extension of any deadline in this Order or in any plan, report, or other document submitted pursuant to this Order, upon a written and

- substantiated showing of good cause. All requests for extensions by the Respondent shall be made in writing to the Executive Director. Extensions are not effective until the Respondent receives written approval from the Executive Director. The determination of what constitutes good cause rests solely with the Executive Director. Extension requests shall be sent to the Order Compliance Team at the address listed above.
- 6. This Order, issued by the Commission, shall not be admissible against the Respondent in a civil proceeding, unless the proceeding is brought by the OAG to: (1) enforce the terms of this Order; or (2) pursue violations of a statute within the Commission's jurisdiction, or of a rule adopted or an order or permit issued by the Commission under such a statute.
- This Order may be executed in separate and multiple counterparts, which together shall 7. constitute a single instrument. Any page of this Order may be copied, scanned, digitized, converted to electronic portable document format ("pdf"), or otherwise reproduced and may be transmitted by digital or electronic transmission, including but not limited to facsimile transmission and electronic mail. Any signature affixed to this Order shall constitute an original signature for all purposes and may be used, filed, substituted, or issued for any purpose for which an original signature could be used. The term "signature" shall include manual signatures and true and accurate reproductions of manual signatures created, executed, endorsed, adopted, or authorized by the person or persons to whom the signatures are attributable. Signatures may be copied or reproduced digitally, electronically, by photocopying, engraving, imprinting, lithographing, electronic mail, facsimile transmission, stamping, or any other means or process which the Executive Director deems acceptable. In this paragraph exclusively, the terms: electronic transmission, owner, person, writing, and written, shall have the meanings assigned to them under TEX. BUS. ORG. CODE § 1.002.
- 8. The effective date of this Order is the date it is signed by the Commission. A copy of this fully executed Order shall be provided to each of the parties.

#### SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY For the Commission Date For the Executive Director Date I, the undersigned, have read and understand the attached Order. I am authorized to agree to the attached Order, and I do agree to the terms and conditions specified therein. I further acknowledge that the TCEQ, in accepting payment for the penalty amount, is materially relying on such representation. I also understand that failure to comply with the Ordering Provisions, if any, in this order and/or failure to timely pay the penalty amount, may result in: A negative impact on compliance history; Greater scrutiny of any permit applications submitted; Referral of this case to the Attorney General's Office for contempt, injunctive relief, additional penalties, and/or attorney fees, or to a collection agency; Increased penalties in any future enforcement actions; Automatic referral to the Attorney General's Office of any future enforcement actions; TCEQ seeking other relief as authorized by law. In addition, any falsification of any compliance documents may result in criminal prosecution. Signature Date Title Name (Printed or typed) Authorized Representative of Aqua Utilities, Inc. Instructions: Send the original, signed Order with penalty payment to the Financial Administration Division, Revenue Operations Section at the address in Section IV, Paragraph 1 of this Order. ☐ If mailing address has changed, please check this box and provide the new address below:

	<b>D</b> -		1 - 4		(DC)(A)	
		naity Calcu	llation	n Worksheet		W Rovinian March 35, 3014
Policy Revision 4 (Ap	oril 2014)				. PC	V Revision March 26, 2014
	28-Mar-2016 30-Mar-2016	Screening 29-M	ar-2016	EPA Due		, ,
RESPONDENT/FACILI						
Respondent Reg. Ent. Ref. No.	Aqua Utilities, Inc	<u>.                                    </u>				
Facility/Site Region		·	<u> </u>	Major/Minor S	Source Major .	* '
		4				
CASE INFORMATION	E2000			No of Min	lation à l	
Enf./Case ID No.	2016-0445-PWS-	F			ations 1	
Media Program(s)				Government/Non	* *	
Multi-Media					linator Abigail Linds	
	::* **:-:	- AFO			Team Enforcemen	t Team 6
Admin. Penalty \$ 1	rimit wililmam	\$50 Maxii	առա [	\$1,000		
		Penalty C	alculat	tion Section		
TOTAL BASE PENA	LTY (Sum of	•			Subtotal	1 \$150
ADJUSTMENTS (+	/-) TO SUBTO	TAL 1				•
Subtotals 2-7 are of	otained by multiplying	the Total Base Penalty		by the indicated percenta		
Compliance Hi	story	ŧ	5.0%	Adjustment	Subtotals 2, 3, &	7 . \$7
Notes	Enhance	ement for one NOV	with sam	e/similar violations.		• •
Culpabilitý	No .		0.0%	Enhancement	Subtotal	4 . \$0
Notes	The Re	spondent does not	meet the	culpability criteria.		
Good Faith Eff	ort to Comply T	otal Adjustments			Subtotal	5 \$0
Economic Ben	efit Total EB Amounts Cost of Compliance	\$568 \$5,000		Enhancement* d at the Total EB \$ Amount	Subtotal	6 \$0
Estinaced	Cost of Compliance	\$5,000	•			
SUM OF SUBTOTA	LS 1-7		•		Final Subtot	al \$157
OTHER FACTORS A			[	0.0%	Adjustme	nt\$0
Notes				5		1
, acces			,	F	inal Penalty Amou	nt \$157
CTATUTODY LIMIT	T ADJUCTMEN	17			·	
STATUTORY LIMI	I ADJUSIMEN	11		Fin ,	al Assessed Penal	ty \$157
<b>DEFERRAL</b> Reduces the Final Assessed Pe	enalty by the indicated	percentage. (Enter ni.	ımber onlv:		uction <b>Adjustme</b>	nt -\$31
Notes *		Deferral offered for	,			
ivotes		Jeremai oliereu IVI	expedite	a sectioniett.	*	
PAYABLE PENALT	Υ					\$126

Docket No. 2016-0445-PWS-E

PCW

Policy Revision 4 (April 2014) PCW Revision March 26, 2014

Respondent Aqua Utilities, Inc.

Case ID No. 52090

Reg. Ent. Reference No. RN101250306 Media [Statute] Public Water Supply Enf. Coordinator Abigail Lindsey

## **Compliance History Worksheet**

>> Compliance History Site Enhancement (Subtotal 2) Component Number of... Number Adjust. Written notices of violation ("NOVs") with same or similar violations as those in 1 5% the current enforcement action (number of NOVs meeting criteria) NOVs Other written NOVs 0 0% Any agreed final enforcement orders containing a denial of liability (number of 0 0% orders meeting criteria) Orders Any adjudicated final enforcement orders, agreed final enforcement orders without a denial of liability, or default orders of this state or the federal 0% ٥ government, or any final prohibitory emergency orders issued by the commission Any non-adjudicated final court judgments or consent decrees containing a denial of liability of this state or the federal government (number of judgments or O 0% Judgments consent decrees meeting criteria) and Consent Any adjudicated final court judgments and default judgments, or non-adjudicated Decrees final court judgments or consent decrees without a denial of liability, of this state 0 0% or the federal government Any criminal convictions of this state or the federal government (number of Convictions 0 0% **Emissions** Chronic excessive emissions events (number of events) 0 0% Letters notifying the executive director of an intended audit conducted under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 0 0% 1995 (number of audits for which notices were submitted) **Audits** Disclosures of violations under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 1995 (number of audits for which violations were 0% Ω disclosed) Environmental management systems in place for one year or more No 0% Voluntary on-site compliance assessments conducted by the executive director No 0% under a special assistance program Other Participation in a voluntary pollution reduction program 0% No Early compliance with, or offer of a product that meets future state or federal No 0% government environmental requirements Adjustment Percentage (Subtotal 2) 5% >> Repeat Violator (Subtotal 3) N/A Adjustment Percentage (Subtotal 3) >> Compliance History Person Classification (Subtotal 7) Satisfactory Performer Adjustment Percentage (Subtotal 7) >> Compliance History Summary Compliance History Enhancement for one NOV with same/similar violations. Notes Total Compliance History Adjustment Percentage (Subtotals 2, 3, & 7) >> Final Compliance History Adjustment

5%

Final Adjustment Percentage \*capped at 100%

This violation Final Assessed Penalty (adjusted for limits)

\$158

## **Economic Benefit Worksheet**

Respondent Aqua Utilities, Inc. Case ID No. 52090 Reg. Ent. Reference No. RN101250306 Media Public Water Supply Years of Percent Interest Depreciation Violation No. 1 5.0 **EB Amount** Item Cost Date Required Final Date Yrs Interest Saved Onetime Costs **Item Description Delayed Costs** \$0 \$0 0.00 \$0 Equipment Buildings 0.00 \$0 \$0 Other (as needed) \$5.000 17-Sep-2015 1-May-2017 1,62 \$27 \$541 \$568 Engineering/Construction 0.00 \$0 \$0 \$0 Land 0.00 \$0 n/a Record Keeping System 0.00 \$0 n/a Training/Sampling 0.00 \$0 n/a Remediation/Disposal 0.00 \$0 n/a \$0 **Permit Costs** 0.00 \$0 n/a Other (as needed) 0.00 The delayed cost includeds the estimated amount to provide a minimum well capacity of 0.6 gpm per connection, calculated from the date the violation was initially documented to the estimated date of Notes for DELAYED costs compliance. ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs) **Avoided Costs** 0.00 \$0 Disposal \$0 0.00 \$0 Personnel \$0 \$0 Inspection/Reporting/Sampling 50 \$0 0.00 \$0 Supplies/Equipment 0.00 \$0 \$0 \$0 \$0 0.00 \$0 Financial Assurance [2] \$0 ONE-TIME avoided costs [3] \$0 \$0 \$ D Other (as needed) Notes for AVOIDED costs

\$5,000

TOTAL

Approx. Cost of Compliance

\$568

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 CN602787509, RN101250306, Rating Year 2015 which includes Compliance History (CH) components from September 1, 2010, through August 31, 2015.

Customer, Respondent, CN602787509, Aqua Utilities, Inc.

Classification: SATISFACTORY

Rating: 5.94

or Owner/Operator:

Regulated Entity:

RN101250306, SAN GABRIEL RIVER

Classification: NOT APPLICABLE

Rating: N/A

**Complexity Points:** 

**RANCHES** 

Repeat Violator: N/A

CH Group:

14 - Other

Location:

3 miles north of Texas State Highway 29 on County Road 214 in Liberty Hill, Williamson County, Texas

**TCEQ Region:** 

**REGION 11 - AUSTIN** 

ID Number(s):

PUBLIC WATER SYSTEM/SUPPLY REGISTRATION

2460046

Compliance History Period: September 01, 2010 to August 31, 2015

Rating Year: 2015

Rating Date: 09/01/2015

Date Compliance History Report Prepared: March 31, 2016

Agency Decision Requiring Compliance History: Enforcement Component Period Selected: March 30, 2011 to March 30, 2016

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

Phone: (512) 239-2576 Name: Abigail Lindsey

#### 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?

4) If YES for #2, who was/were the prior

N/A

owner(s)/operator(s)?

5) If **YES**, when did the change(s) in owner or operator

occur?

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

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

N/A

**B.** Criminal convictions:

N/A

C. Chronic excessive emissions events:

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

N/A

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 App. 000130

regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

1 Date: 09/30/2015 (1274902) CN602787509

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 290, SubChapter D 290.45(b)(1)(C)(i)

30 TAC Chapter 290, SubChapter D 290.45(b)(1)(D)(i)

Description: Failure to have two or more wells with a total capacity of 0.6 gpm per connection.

On the day of the investigation the wells were tested at 49 gpm and 55 gpm for a total of 104 gpm. The system has 241 connections and needs at least 144.6 gpm

combined well capacity to meet the minimum requirement.

#### 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

Sandy Creek Rouches 2270054

明年の定置**V**E 則。OCT 1 1 2012

Bryan W. Shaw, Ph.D., Chairman Carlos Rubinstein, Commissioner Toby Baker, Commissioner Zak Covar, Executive Director



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 10, 2012

## CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Robert L. Laughman, President Aqua Texas, Inc. 1106 Clayton Lane, Suite 400W Austin, Texas 78723

Re:

**TCEQ Enforcement Action** 

Aqua Texas, Inc.

Docket No. 2012-0569-PWS-E

Dear Mr. Laughman:

Enclosed for your records is a fully-executed copy of the Agreed Order for the above-referenced matter.

Should you have any questions, please contact Abigail Lindsey, the Enforcement Coordinator assigned to this matter, at (512) 239-2576.

Sincerely,

Debra Barber

**Enforcement Division** 

Welva Barber

Enclosure

cc:

Abigail Lindsey, Enforcement Division

Public Water Supply Section Manager, Region 11

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



IN THE MATTER OF AN	§	BEFORE THE
ENFORCEMENT ACTION	§	
CONCERNING	§	TEXAS COMMISSION ON
AQUA TEXAS, INC.	§	
RN100843143	§	ENVIRONMENTAL QUALITY

## AGREED ORDER DOCKET NO. 2012-0569-PWS-E

#### I. JURISDICTION AND STIPULATIONS

On SEP 27 2012 , the Texas Commission on Environmental Quality ("the Commission" or "TCEQ") considered this agreement of the parties, resolving an enforcement action regarding Aqua Texas, Inc. ("the Respondent") under the authority of TEX. HEALTH & SAFETY CODE ch. 341. The Executive Director of the TCEQ, through the Enforcement Division, and the Respondent together stipulate that:

- 1. The Respondent owns and operates a public water supply at 23350 Big Sandy Drive in Travis County, Texas (the "Facility") that has approximately 203 service connections and serves at least 25 people per day for at least 60 days per year.
- 2. The Executive Director and the Respondent agree that the Commission has jurisdiction to enter this Agreed Order, and that the Respondent is subject to the Commission's jurisdiction.
- 3. The Respondent received notice of the violations alleged in Section II ("Allegations") on March 5, 2012.
- 4. The occurrence of any violation is in dispute and the entry of this Agreed Order shall not constitute an admission by the Respondent of any violation alleged in Section II ("Allegations"), nor of any statute or rule.
- An administrative penalty in the amount of Six Hundred Sixty-Five Dollars (\$665) is assessed by the Commission in settlement of the violations alleged in Section II ("Allegations"). The Respondent has paid Five Hundred Thirty-Two Dollars (\$532) of the administrative penalty and One Hundred Thirty-Three Dollars (\$133) is deferred contingent upon the Respondent's timely and satisfactory compliance with all the terms of this Agreed Order. The deferred amount will be waived upon full compliance with the

terms of this Agreed Order. If the Respondent fails to timely and satisfactorily comply with all requirements of this Agreed Order, the Executive Director may require the Respondent to pay all or part of the deferred penalty.

- 6. Any notice and procedures, which might otherwise be authorized or required in this action, are waived in the interest of a more timely resolution of the matter.
- 7. The Executive Director and the Respondent agree on a settlement of the matters alleged in this enforcement action, subject to final approval in accordance with 30 Tex. ADMIN. CODE § 70.10(a).
- 8. The Executive Director may, without further notice or hearing, refer this matter to the Office of the Attorney General of the State of Texas ("OAG") for further enforcement proceedings if the Executive Director determines that the Respondent has not complied with one or more of the terms or conditions in this Agreed Order.
- 9. This Agreed Order shall terminate five years from its effective date or upon compliance with all the terms and conditions set forth in this Agreed Order, whichever is later.
- 10. The provisions of this Agreed Order are deemed severable and, if a court of competent jurisdiction or other appropriate authority deems any provision of this Agreed Order unenforceable, the remaining provisions shall be valid and enforceable.

## II. ALLEGATIONS

As owner and operator of the Facility, the Respondent is alleged to have failed to provide an elevated storage capacity of 100 gallons per connection or a pressure tank capacity of 20 gallons per connection, in violation of 30 Tex. Admin. Code § 290.45(b)(1)(D)(iv) and Tex. Health & Safety Code § 341.0315(c), as documented during an investigation conducted on May 20, 2011 and a record review conducted on February 24, 2012: Specifically, it was documented that with 203 connections in the Big Sandy pressure plane, the Facility is required to provide 20,300 gallons of elevated storage capacity. The elevated storage available at the Facility was 10,000 gallons, which is 51% deficient.

#### III. DENIALS

The Respondent generally denies each allegation in Section II ("Allegations").

#### IV. ORDERING PROVISIONS

1. It is, therefore, ordered by the TCEQ that the Respondent pay an administrative penalty as set forth in Section I, Paragraph 5 above. The payment of this administrative penalty and the Respondent's compliance with all the terms and conditions set forth in this

Aqua Texas, Inc. DOCKET NO. 2012-0569-PWS-E Page 3

Agreed Order resolve only the allegations in Section II. The Commission shall not be constrained in any manner from requiring corrective action or penalties for violations which are not raised here. Administrative penalty payments shall be made payable to "TCEQ" and shall be sent with the notation "Re: Aqua Texas, Inc., Docket No. 2012-0569-PWS-E" to:

Financial Administration Division, Revenues Section Attention: Cashier's Office, MC 214 Texas Commission on Environmental Quality P.O. Box 13088 Austin, Texas 78711-3088

- 2. It is further ordered that the Respondent shall undertake the following technical requirements:
  - a. Within 240 days after the effective date of this Agreed Order, provide an elevated storage capacity of 100 gallons per connection, in accordance with 30 Tex. ADMIN. CODE § 290.45.
  - b. Within 255 days after the effective date of this Agreed Order, submit written certification as described below, and include detailed supporting documentation including photographs, receipts, and/or other records to demonstrate compliance with Ordering Provision No. 2.a. The certification shall be notarized by a State of Texas Notary Public and include the following certification language:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

The certification shall be submitted to:

Order Compliance Team
Enforcement Division, MC 149A
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

with a copy to:

Water Section Manager Austin Regional Office Texas Commission on Environmental Quality 2800 South IH 35, Suite 100 Austin, Texas 78704-5712

- 3. The provisions of this Agreed Order shall apply to and be binding upon the Respondent. The Respondent is ordered to give notice of the Agreed Order to personnel who maintain day-to-day control over the Facility operations referenced in this Agreed Order.
- 4. The Executive Director may grant an extension of any deadline in this Agreed Order or in any plan, report, or other document submitted pursuant to this Agreed Order, upon a written and substantiated showing of good cause. All requests for extensions by the Respondent shall be made in writing to the Executive Director. Extensions are not effective until the Respondent receives written approval from the Executive Director. The determination of what constitutes good cause rests solely with the Executive Director.
- 5. This Agreed Order, issued by the Commission, shall not be admissible against the Respondent in a civil proceeding, unless the proceeding is brought by the OAG to: (1) enforce the terms of this Agreed Order; or (2) pursue violations of a statute within the Commission's jurisdiction, or of a rule adopted or an order or permit issued by the Commission under such a statute.
- 6. This Agreed Order may be executed in separate and multiple counterparts, which together shall constitute a single instrument. Any page of this Agreed Order may be copied, scanned, digitized, converted to electronic portable document format ("pdf"), or otherwise reproduced and may be transmitted by digital or electronic transmission, including but not limited to facsimile transmission and electronic mail. Any signature affixed to this Agreed Order shall constitute an original signature for all purposes and may be used, filed, substituted, or issued for any purpose for which an original signature could be used. The term "signature" shall include manual signatures and true and accurate reproductions of manual signatures created, executed, endorsed, adopted, or authorized by the person or persons to whom the signatures are attributable. Signatures may be copied or reproduced digitally, electronically, by photocopying, engraving, imprinting, lithographing, electronic mail, facsimile transmission, stamping, or any other means or process which the Executive Director deems acceptable. In this paragraph exclusively, the terms "electronic transmission", "owner", "person", "writing", and "written" shall have the meanings assigned to them under TEX. BUS. ORG. CODE § 1.002.
- 7. Under 30 Tex. ADMIN. CODE § 70.10(b), the effective date is the date of hand-delivery of the Order to the Respondent, or three days after the date on which the Commission mails notice of the Order to the Respondent, whichever is earlier.

Aqua Texas, Inc.

# SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

	For the Commission
	By Sile $\frac{g}{27/2012}$ For the Executive Director
	I, the undersigned, have read and understand the attached Agreed Order. I am authorized to agree to the attached Agreed Order on behalf of the entity indicated below my signature, and I do agree to the terms and conditions specified therein. I further acknowledge that the TCEQ, in accepting payment for the penalty amount, is materially relying on such representation.
	<ul> <li>I also understand that failure to comply with the Ordering Provisions, if any, in this order and/or failure to timely pay the penalty amount, may result in:</li> <li>A negative impact on compliance history;</li> <li>Greater scrutiny of any permit applications submitted; Referral of this case to the Attorney General's Office for contempt, injunctive relief, additional penalties, and/or attorney fees, or to a collection agency; Increased penalties in any future enforcement actions; Automatic referral to the Attorney General's Office of any future enforcement actions; and</li> </ul>
	<ul> <li>TCEQ seeking other relief as authorized by law.</li> <li>In addition, any falsification of any compliance documents may result in criminal prosecution.</li> </ul>
P	Signature  Signature  Rohert L. Laughman  Name (Printed or typed)  Authorized Representative of

Instructions: Send the original, signed Agreed Order with penalty payment to the Financial Administration Division, Revenues Section at the address in Section IV, Paragraph 1 of this Agreed Order.

Sanly Creek

Bryan W. Shaw, Ph.D., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 8, 2015

Mr. Robert L. Laughman President Aqua Utilities, Inc. 762 West Lancaster Avenue Bryn Mawr, PA 19010-3489

RECEIVED

JAN 07 2016

TX ADMIN-AUSTIN

Re:

**TCEQ Enforcement Action** 

Aqua Utilities, Inc.

Docket No. 2015-0954-PWS-E

Dear Mr. Laughman:

Enclosed for your records is a fully-executed copy of the Agreed Order for the above-referenced matter.

Please review the enclosed Agreed Order, particularly the "Ordering Provisions" section, to determine if further action will be required of you, such as the completion of technical requirements to achieve compliance. When technical requirements are listed (usually Ordering Provision No. 2 or 3), a deadline will be provided based on a specific number of days after the effective date. The effective date is as stated in the enclosed Agreed Order.

Should you have any questions, please contact Yuliya Dunaway, the Enforcement Coordinator assigned to this matter, at (210) 403-4077.

Sincerely,

Candice Garrett

**Enforcement Division** 

Candie Ganett

Enclosure

cc: Yuliya Dunaway, Enforcement Division

Public Water Supply Section Manager, Region 11

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



IN THE MATTER OF AN	§	BEFORE THE
ENFORCEMENT ACTION	§	
CONCERNING	§	TEXAS COMMISSION ON
AQUA UTILITIES, INC.	<b>§</b>	
RN100843143	§	ENVIRONMENTAL QUALITY

## AGREED ORDER DOCKET NO. 2015-0954-PWS-E

## I. JURISDICTION AND STIPULATIONS

On <u>DEC 0 4 2015</u>, the Texas Commission on Environmental Quality ("the Commission" or "TCEQ") considered this agreement of the parties, resolving an enforcement action regarding Aqua Utilities, Inc. ("Respondent") under the authority of TEX. HEALTH & SAFETY CODE ch. 341. The Executive Director of the TCEQ, through the Enforcement Division, and the Respondent together stipulate that:

- 1. The Respondent owns and operates a public water supply located at 14503 Round Mountain Road near Leander, Travis County, Texas (the "Facility") that has approximately 577 service connections and serves at least 25 people per day for at least 60 days per year.
- 2. The Executive Director and the Respondent agree that the Commission has jurisdiction to enter this Agreed Order, and that the Respondent is subject to the Commission's jurisdiction.
- 3. The Respondent received notice of the violations alleged in Section II ("Allegations") on June 15, 2015.
- 4. The occurrence of any violation is in dispute and the entry of this Agreed Order shall not constitute an admission by the Respondent of any violation alleged in Section II ("Allegations"), nor of any statute or rule.
- 5. An administrative penalty in the amount of Two Hundred Ten Dollars (\$210) is assessed by the Commission in settlement of the violations alleged in Section II ("Allegations"). The Respondent has paid One Hundred Sixty-Eight Dollars (\$168) of the administrative penalty and Forty-Two Dollars (\$42) is deferred contingent upon the Respondent's timely and satisfactory compliance with all the terms of this Agreed Order. The deferred

amount will be waived upon full compliance with the terms of this Agreed Order. If the Respondent fails to timely and satisfactorily comply with all requirements of this Agreed Order, the Executive Director may require the Respondent to pay all or part of the deferred penalty.

- 6. Any notice and procedures, which might otherwise be authorized or required in this action, are waived in the interest of a more timely resolution of the matter.
- 7. The Executive Director and the Respondent agree on a settlement of the matters alleged in this enforcement action, subject to final approval in accordance with 30 TEX. ADMIN. CODE § 70.10(a).
- 8. The Executive Director may, without further notice or hearing, refer this matter to the Office of the Attorney General of the State of Texas ("OAG") for further enforcement proceedings if the Executive Director determines that the Respondent has not complied with one or more of the terms or conditions in this Agreed Order.
- 9. This Agreed Order shall terminate five years from its effective date or upon compliance with all the terms and conditions set forth in this Agreed Order, whichever is later.
- 10. The provisions of this Agreed Order are deemed severable and, if a court of competent jurisdiction or other appropriate authority deems any provision of this Agreed Order unenforceable, the remaining provisions shall be valid and enforceable.

#### II. ALLEGATIONS

As owner and operator of the Facility, the Respondent is alleged to have failed to provide two or more wells having a total capacity of 0.6 gallons per minute ("gpm") per connection, in violation of 30 Tex. Admin. Code § 290.45(b)(1)(D)(i) and Tex. Health & Safety Code § 341.0315(c), as documented during a record review conducted on May 27, 2015. Specifically, the Facility's 577 connections require a minimum production capacity of 346 gpm. However, it was documented that only 252 gpm was provided, which is a 27% deficiency.

#### III. DENIALS

The Respondent generally denies each allegation in Section II ("Allegations").

#### IV. ORDERING PROVISIONS

1. It is, therefore, ordered by the TCEQ that the Respondent pay an administrative penalty as set forth in Section I, Paragraph 5 above. The payment of this administrative penalty and the Respondent's compliance with all the terms and conditions set forth in this Agreed Order resolve only the allegations in Section II. The Commission shall not be constrained in any manner from requiring corrective action or penalties for violations which are not raised here. Administrative penalty payments shall be made payable to

Aqua Utilities, Inc. DOCKET NO. 2015-0954-PWS-E Page 3

"TCEQ" and shall be sent with the notation "Re: Aqua Utilities, Inc., Docket No. 2015-0954-PWS-E" to:

Financial Administration Division, Revenue Operations Section Attention: Cashier's Office, MC 214 Texas Commission on Environmental Quality P.O. Box 13088 Austin, Texas 78711-3088

- 2. It is further ordered that the Respondent shall undertake the following technical requirements:
  - a. Within 540 days after the effective date of this Agreed Order, provide a minimum well capacity of 0.6 gpm per connection, in accordance with 30 Tex. ADMIN. CODE § 290.45; and
  - b. Within 555 days after the effective date of this Agreed Order, submit written certification as described below, and include detailed supporting documentation including photographs, receipts, and/or other records to demonstrate compliance with Ordering Provision No. 2.a. The certification shall be notarized by a State of Texas Notary Public and include the following certification language:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

The certification shall be submitted to:

Order Compliance Team Enforcement Division, MC 149A Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087

with a copy to:

Water Section Manager Austin Regional Office Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087

3. The provisions of this Agreed Order shall apply to and be binding upon the Respondent.

The Respondent is ordered to give notice of the Agreed Order to personnel who maintain day-to-day control over the Facility operations referenced in this Agreed Order.

Aqua Utilities, Inc. DOCKET NO. 2015-0954-PWS-E Page 4

- 4. The Executive Director may grant an extension of any deadline in this Agreed Order or in any plan, report, or other document submitted pursuant to this Agreed Order, upon a written and substantiated showing of good cause. All requests for extensions by the Respondent shall be made in writing to the Executive Director. Extensions are not effective until the Respondent receives written approval from the Executive Director. The determination of what constitutes good cause rests solely with the Executive Director.
- 5. This Agreed Order, issued by the Commission, shall not be admissible against the Respondent in a civil proceeding, unless the proceeding is brought by the OAG to: (1) enforce the terms of this Agreed Order; or (2) pursue violations of a statute within the Commission's jurisdiction, or of a rule adopted or an order or permit issued by the Commission under such a statute.
- This Agreed Order may be executed in separate and multiple counterparts, which 6. together shall constitute a single instrument. Any page of this Agreed Order may be copied, scanned, digitized, converted to electronic portable document format ("pdf"), or otherwise reproduced and may be transmitted by digital or electronic transmission, including but not limited to facsimile transmission and electronic mail. Any signature affixed to this Agreed Order shall constitute an original signature for all purposes and may be used, filed, substituted, or issued for any purpose for which an original signature could be used. The term "signature" shall include manual signatures and true and accurate reproductions of manual signatures created, executed, endorsed, adopted, or authorized by the person or persons to whom the signatures are attributable. Signatures may be copied or reproduced digitally, electronically, by photocopying, engraving, imprinting, lithographing, electronic mail, facsimile transmission, stamping, or any other means or process which the Executive Director deems acceptable. In this paragraph exclusively, the terms "electronic transmission", "owner", "person", "writing", and "written" shall have the meanings assigned to them under TEX. BUS. ORG. CODE § 1.002.
- 7. The effective date of this Order is the date it is signed by the Commission or the Executive Director. A copy of this fully executed Order shall be provided to each of the parties.

Aqua Utilities, Inc. DOCKET NO. 2015-0954-PWS-E Page 5

For the Commission

Aqua Utilities, Inc.

#### SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

1/100 Suckan 12/4/2015	
For the Executive Director  Date  12/4/2015	<del>:</del>
I, the undersigned, have read and understand the attached Agreed Order. I am authorized agree to the attached Agreed Order on behalf of the entity indicated below my signature, are do agree to the terms and conditions specified therein. I further acknowledge that the TCE accepting payment for the penalty amount, is materially relying on such representation.	ıd I
<ul> <li>I also understand that failure to comply with the Ordering Provisions, if any, in this order and/or failure to timely pay the penalty amount, may result in:</li> <li>A negative impact on compliance history;</li> <li>Greater scrutiny of any permit applications submitted; Referral of this case to the Attorney General's Office for contempt, injunctive relief, additional penalties, and/or attorney fees, or to a collection agency; Increased penalties in any future enforcement actions; Automatic referral to the Attorney General's Office of any future enforcement action and</li> </ul>	ıs;
TCEQ seeking other relief as authorized by law.	•
In addition, any falsification of any compliance documents may result in criminal prosecuti	on.
Signature $\frac{9/32/20/5}{\text{Date}}$	
Robert L. Waughman President	
Name (Printed or typed) Title	

Instructions: Send the original, signed Agreed Order with penalty payment to the Financial Administration Division, Revenue Operations Section at the address in Section IV, Paragraph 1 of this Agreed Order.

Target Information Customers Purchase price Close Costs		Water 205 50,000		-	Assumptions re based on th		gion per custome	er costs.
Location:  Description of Service Area Small water only distrib	State County		Abus customs	purchased system ad Pleases no That is, ca	I water and bi dition. ote that this sy sh from custo	lling are the ystem addition mer billings v	only marginal cos	essary. Meter reading, sts we expect for this in any cash shortages. to cover operations ations.
	ution system tocate	•	Aqua systems.					
Type of System:		Water only						
Proximity to nearest Aqua Syst	em:		er					
, , ,	[	: Less than 100 y		1				
	1	-		;				
	;							
Capital:	!	ussion: Meters						
			and the second of the text of the second of					
Number of Customers:		Start	Year 2 add	Year 3 add	Year 4 add	Year 5 add	Total	
	Water:	205					205	500
	Total	205	0	0	0	0	205	
Rates:			MUD Rate					
	Water							
	Base	4	4 37.42	数型		Brushy Rates		
	Per	,	2.32			2.10	8 months	
*	Per	_	•••			2.75	4 months	
	Per	•				27.80		
						12.00		
Average Consumption:		11,000.00	11,000			2.32	Average	
Average Monthly Water Average Annual Bill: 1 Average Annual Total Re		2000 1000 1000 1000 1000 1000 1000 1000	62.94 755.28 154,832.40 August					

11,000 Average Monthly use per customer
2,255,000 per month at 205 customers
12
27,060,000 Annual Water usage
2,706,000 Purchased Water
2.12 Per gallon
63,104 \$ usage charge
57,000 Annual Base Fee (4,750 \* 12)
120,104 Annual Purchased water cost

#### **Water Pro Forma**

$\Box$	Ā	В	T c T	D	E	F	G	Н
1	<del></del>	Capital per Customer	<u> </u>	604	711	817	919	1,020
2				Year 1	Year 2	Year 3	Year 4	Year 5
3		Purchase Price		50,000				
4		Closing costs		0				
5		Intitial Investment		50,000				
5 6								,
7								
		Conital		76,250	25,000	25,000	25,000	25,000
10		Capital		76,230	25,000	23,000	23,000	23,000
11		Rate Base (on investment)		126,250	148,788	170,839	192,402	213,478
臣		Danasiation	2.0%	(2.462)	(2.040)	(2.427)	(2.024)	(4.412)
14		Depreciation	2.0%	(2,462)	(2,949)	(3,437)	(3,924)	(4,412)
7 8 9 10 11 1z 13 14 15 10		Rate Base at Year End		123,788	145,839	167,402	188,478	209,066
10 17		Initial Contains Count	205	205	205	205	205	205
18		Initial Customer Count	205	205	205 0	205	205	205
19		Total Customers		205	205	205	205	205
20		Total Customers		203	203	203	203	203
21		Customer Charge	37.42	37.42	37.42	37.42	37.42	37.42
22		Rate per 1000 Gallons	2.32	2.32	2.32	2.32	2.32	2.32
23		nate per 2000 canons	2.02					
24								
24 23 26 27 28 29								
26		Average Monthly Billing per Customer	11,000	62.94	62.94	62.94	62.94	62.94
28		Monthly Expected per customer billing		12,903	12,903	12,903	12,903	12,903
29				,	,			·
30 31		Total Annual Billing		154,832	154,832	154,832	154,832	154,832
31								
32		Revenue		154,832	154,832	154,832	154,832	154,832
33		Annual Per customer		755.28	755.28	755.28	755.28	755.28
34		Expenses:						
35		Operational		(131,247)	(131,581)	(131,925)	(132,280)	(132,645)
36		Depreciation		(2,462)	(2,949)	(3,437)	(3,924)	(4,412)
37								!
38								
39		Operating Income		21,124	20,302	19,470	18,628	17,775
40		Operating Income		21,124	20,302	13,470	10,020	17,773
33 34 35 36 37 38 39 40 41 42 43		Interest on LT Debt	5.1%	3,219	3,794	4,356	4,906	5,444
42		interest off Li Debt	3.170	3,213	3,, 34	4,550	7,500	5,111
44		Income tax Fed	35.00%	6,267	5,778	5,290	4,803	4,316
45		Income tax state	2.23%	399	368	337	306	275
46							-	
47		Net Income		11,239	10,362	9,487	8,613	7,740

#### **Water Capital**

Distribution system cost	
Number of customers per y	/ear

205	0	0	0	ô	205
-----	---	---	---	---	-----

Scenario		Year 1	Year 2	Year 3	Year 4	Year 5
	New Meters	51,250				
	Line replacement	25,000	25,000	25,000	25,000	25,000

76,250 25,000 25,000 25,000 25,000

### **Exhibit C**

AQUA TEXAS, INC.

Austin, Texas

#### **DEPRECIATION STUDY**

# CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO UTILITY PLANT AS OF DECEMBER 31, 2010

GANNETT FLEMING, INC. - VALUATION AND RATE DIVISION

Harrisburg, Pennsylvania



#### Excellence Delivered As Promised

January 3, 2012

Aqua Texas, Inc. 1106 Clayton Lane, Suite 400W Austin, TX 78723

Attention Stan F. Szczygiel

Manager of Rates and Planning

Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the water plant of Aqua Texas, Inc. as of December 31, 2010. The attached report presents a description of the methods used in the estimation of depreciation, the summary of annual and accrued depreciation, the statistical support for the life and net salvage estimates and the detailed tabulations of annual and accrued depreciation.

Respectfully submitted,

GANNETT FLEMING, INC.

JOHN J. SPANOS

Vice President

Valuation and Rate Division

JJS:krm

054668

Gannett Fleming, Inc. Valuation and Rate Division



#### **CONTENTS**

#### PART I. INTRODUCTION

Scope		1-2
Plan of Report		1-2
Basis of Study		1-3
Depreciation		1-3
Survivor Curve Estimates		1-3
Calculation of Depreciation		1-4
PART II. METHODS USED IN THE		
ESTIMATION OF DEPRECIATION		
Depreciation		11-2
Service Life and Net Salvage Estimation		11-2
Average Service Life		11-2
Survivor Curves	•	11-3
Iowa Type Curves		11-3
Retirement Rate Method of Analysis		11-7
Schedules of Annual Transactions in Plant Records		11-10
Schedule of Plant Exposed to Retirement		11-14
Original Life Table		II-1€
Smoothing the Original Survivor Curve		11-18
Service Life Considerations		11-23
Salvage Analysis		11-24
Net Salvage Considerations		11-24
Calculation of Annual and Accrued Depreciation		11-26
Single Unit of Property		11-26
Group Depreciation Procedures		11-27
Remaining Life Annual Accruals		11-27
Average Service Life Procedure		11-27
Calculation of Annual and Accrued Amortization		11-28
PART III. RESULTS OF STUDY		
Qualification of Results		111-2
Description of Statistical Support		111-2
Description of Depreciation Tabulations		111-3

#### CONTENTS, cont.

### PART III. RESULTS OF STUDY, cont.

Estimated Survivor Curve, Net Salvage, Original Cost, Book Reserve,		
and Calculated Annual Depreciation Accruals Related to Utility Plan	t	
as of December 31, 2010		III-4
Service Life Statistics		III-6
Net Salvage Statistics		111-70
Depreciation Calculations		III-87

PART I. INTRODUCTION

1-1

#### AQUA TEXAS, INC.

#### **DEPRECIATION STUDY**

# CALCULATED ANNUAL DEPRECIATION ACCRUALS: RELATED TO UTILITY PLANT AS OF DECEMBER 31, 2010

#### PART'I. INTRODUCTION

#### SCOPE

This report presents the results of the depreciation study prepared for Aqua Texas, Inc. as applied to water plant in service as of December 31, 2010. It relates to the concepts, methods, and basic judgments which underlie recommended annual depreciation accrual rates related to current utility plant in service.

The service life and net salvage estimates resulting from the study were based on informed judgment which incorporated analyses of historical plant retirement data as recorded through 2010; a review of Company practice and outlook as they relate to plant operation and retirement; and consideration of current practice in the water industry, including knowledge of service life and salvage estimates used for other water properties.

#### PLAN OF REPORT

Part I, Introduction, includes brief statements of the scope and basis of the study. Part II presents descriptions of the methods used in the service life and salvage studies and the methods and procedures used in the calculation of depreciation. Part III presents the results of the study, including summary tables, survivor curve charts and life tables resulting from the retirement rate method of analysis, tabular results of the historical net salvage analyses, and detailed tabulations of the calculated remaining lives and annual accruals.

#### BASIS OF STUDY

#### Depreciation

For most accounts, the annual depreciation was calculated by the straight line method, using the average service life procedure and the remaining life basis. For certain General Plant accounts, the annual depreciation was based on amortization accounting. The calculated remaining lives and annual depreciation accrual rates were based on attained ages of plant in service and the estimated service life and salvage characteristics of each depreciable group.

#### Survivor Curve Estimates

The procedure for estimating survivor curves, which define service lives and remaining lives, consisted of compiling historical service life data for the plant accounts or other depreciable groups, analyzing the historical data base through the use of accepted techniques, and forecasting the survivor characteristics for each depreciable account or group. These forecasts were based on interpretations of the historical data analyses and the probable future. The combination of the historical data and the estimated future trend yields a complete pattern of life characteristics, i.e., a survivor curve, from which the average service life and remaining service life are derived.

The historical data analyzed for life estimation purposes were compiled through 2010 from the Company's plant accounting records. Such data included plant additions, retirements, transfers and other activity recorded by the Company for each of its plant accounts and subaccounts.

The estimates of net salvage incorporated a review of experienced costs of removal and salvage related to plant retirements, and considerations of trends exhibited by the historical data. Each component of net salvage, i.e., cost of removal and salvage was

stated in dollars and as a percent of retirement for purposes of estimating average future levels of the components, as well as of net salvage.

An understanding of the function of the plant and information with respect to the reasons for past retirements and the expected causes of future retirements was obtained through field trips and discussions with operating and management personnel. The supplemental information obtained in this manner was considered in the interpretation and extrapolation of the statistical analyses.

#### Calculation of Depreciation

The depreciation accrual rates were calculated using the straight line method, the remaining life basis, and the average service life depreciation procedure. The change to amortization accounting for certain accounts is recommended because of the disproportionate plant accounting effort required when compared to the minimal original cost of the large number of items in these accounts. An explanation of the calculation of annual and accrued amortization is presented on page II-28 of the report.

11-1

# PART II. METHODS USED IN THE ESTIMATION OF DEPRECIATION

# PART II. METHODS USED IN THE ESTIMATION OF DEPRECIATION

#### **DEPRECIATION**

Depreciation, in public utility regulation, is the loss in service value not restored by current repairs or covered by insurance.

Depreciation as used in accounting is a method of distributing fixed capital costs, less net salvage, over a period of time by allocating annual amounts to expense. Each annual amount of such depreciation expense is part of that year's total cost of providing utility service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight line method of depreciation.

The calculation of annual depreciation based on the straight line method requires the estimation of average life and salvage. These subjects are discussed in the sections which follow.

#### SERVICE LIFE AND NET SALVAGE ESTIMATION

#### Average Service Life

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units, or by constructing a survivor curve by plotting the number of units which survive at successive ages. A discussion of the general concept of survivor curves is presented. Also, the lowa type survivor curves are reviewed.

#### Survivor Curves

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1 a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1 the remaining life at age 30 years is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval and is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

<u>lowa Type Curves</u>. The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the lowa type curves. There are four families in the lowa system, labeled in accordance with the location of the modes of the retirements in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves,

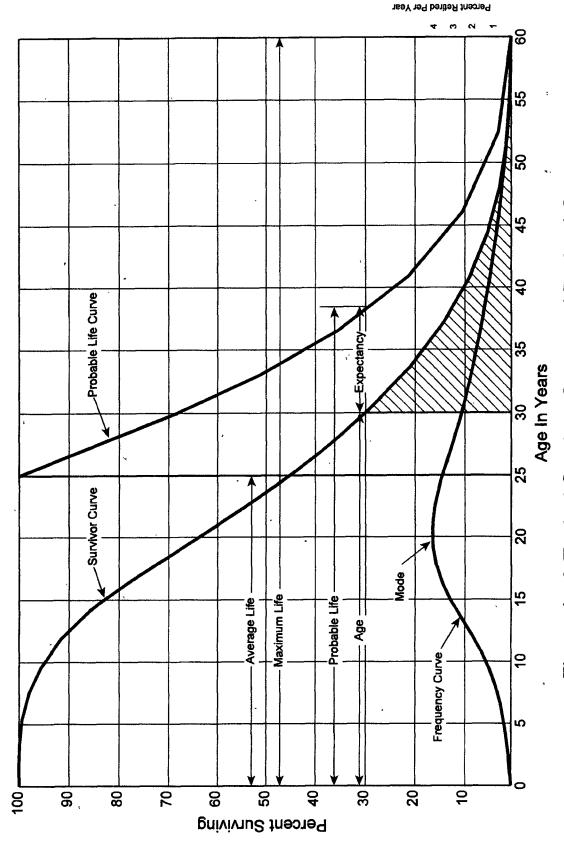


Figure 1. A Typical Survivor Curve and Derived Curves

App. 000158

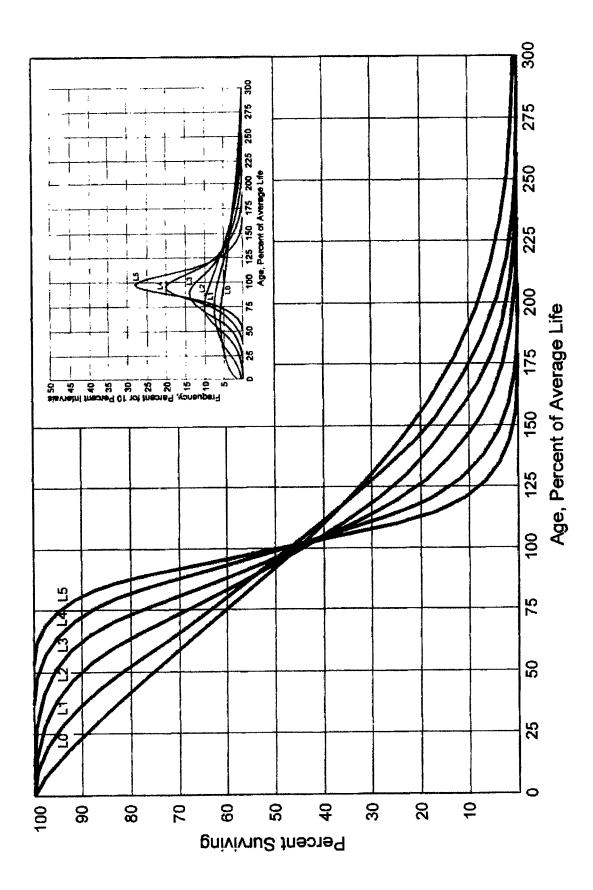


Figure 2. Left Modal or "L" lowa Type Survivor Curves

II-5 App. 000159

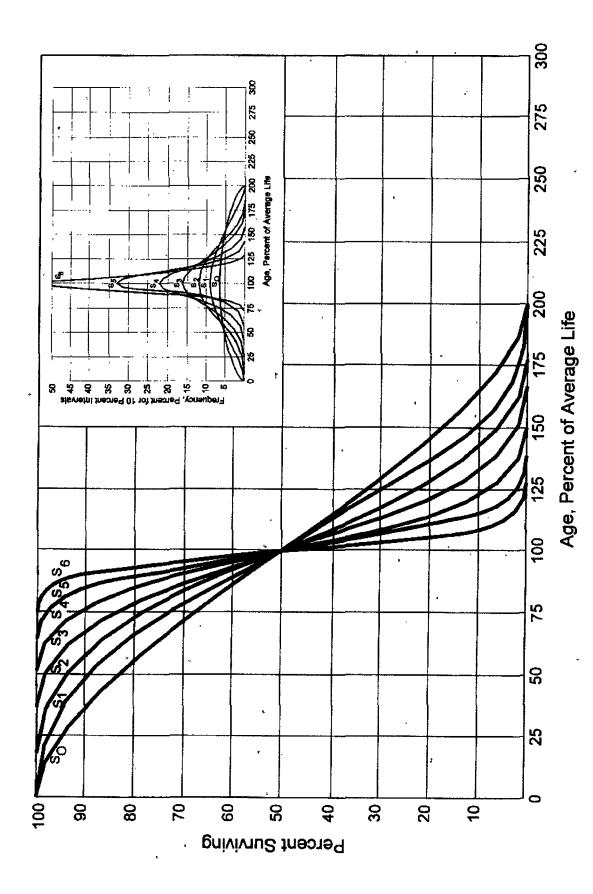


Figure 3. Symmetrical or "S" lowa Type Survivor Curves

App. 000160

presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family.

The lowa curves were developed at the lowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.¹ These type curves have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."² In 1957, Frank V. B. Couch, Jr., an lowa State College graduate student, submitted a thesis³ presenting his development of the fourth family consisting of the four O type survivor curves.

#### Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to

II-7 App. 000161

<sup>&</sup>lt;sup>1</sup>Winfrey, Robley. <u>Statistical Analyses of Industrial Property Retirements</u>. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

<sup>&</sup>lt;sup>2</sup>Marston, Anson, Robley Winfrey and Jean C. Hempstead. <u>Engineering Valuation</u> and <u>Depreciation</u>, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

<sup>&</sup>lt;sup>3</sup>Couch, Frank V. B., Jr. "Classification of Type O Retirement Characteristics of Industrial Property." Unpublished M.S. thesis (Engineering Valuation). Library, Iowa State College, Ames, Iowa. 1957.

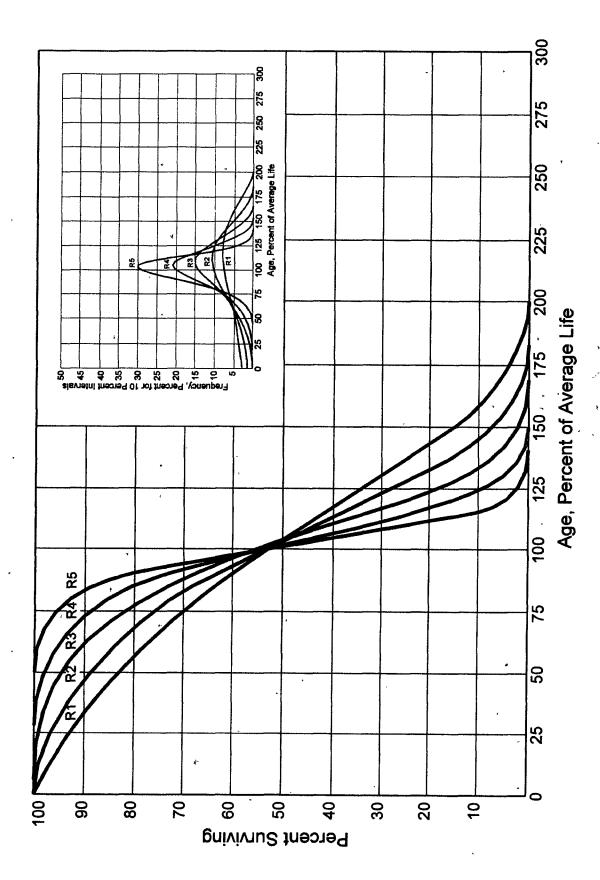


Figure 4. Right Modal or "R" lowa Type Survivor Curves

ll-8 , App. 000162

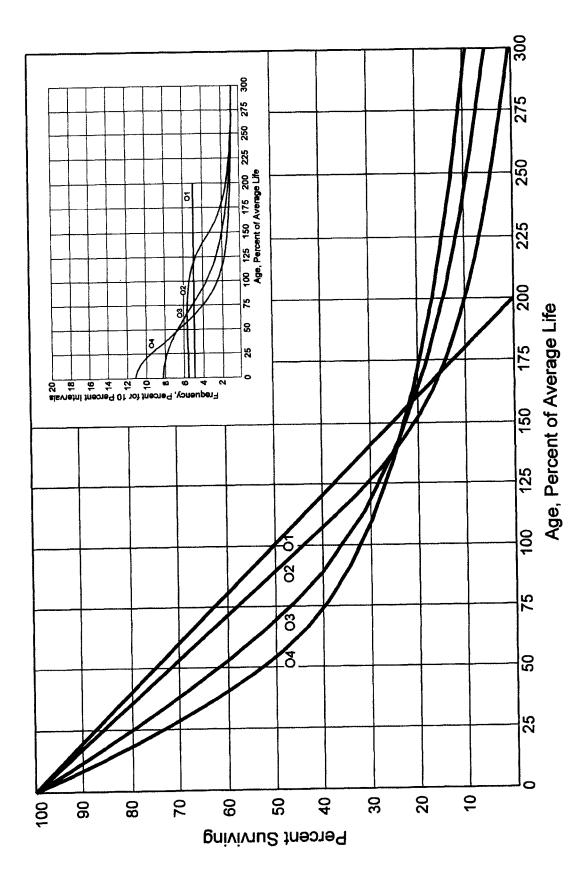


Figure 5. Origin Modal or "O" lowa Type Survivor Curves

II-9 App. 000163

property groups for which aged accounting experience is available or for which aged accounting experience is developed by statistically aging unaged amounts and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text, and is also explained in several publications, including "Statistical Analyses of Industrial Property Retirements," "Engineering Valuation and Depreciation," and "Depreciation Systems."

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginnings of the age intervals during the same period. The period of observation is referred to as the <u>experience band</u>, and the band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the <u>placement band</u>. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table, and illustrations of smoothing the stub survivor curve.

Schedules of Annual Transactions in Plant Records. The property group used to illustrate the retirement rate method is observed for the experience band 2001-2010 during which there were placements during the years 1996-2010. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner

II-10 App. 000164

<sup>&</sup>lt;sup>4</sup>Winfrey, Robley, Supra Note 1.

<sup>&</sup>lt;sup>5</sup>Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 2.

<sup>&</sup>lt;sup>6</sup>Wolf, Frank K. and W. Chester Fitch. <u>Depreciation Systems</u>. Iowa State University Press. 1994

presented in Tables 1 and 2 on pages II-12 and II-13. In Table 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, \$10,000 of the dollars invested in 1996 were retired in 2001. The \$10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of \$143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Table 1 immediately above the stairstep line drawn on the table beginning with the 2001 retirements of 1996 installations and ending with the 2010 retirements of the 2005 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

$$10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20$$

In Table 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are

II-11 App. 000165

TABLE 1. RETIREMENTS FOR EACH YEAR 2001-2010 SUMMARIZED BY AGE INTERVAL

d 1996-2010		Age	Interval	(cl)	131/2-141/2	121/2-131/2	111/2-12/2	101/2-111/2	912-1012	81/2-91/2	71/2-81/2	612-712	5%-6%	41/2-51/2	31/2-41/2	21/2-31/2	11/2-21/2	12-112	%-0	
Placement Band 1996-2010		Total During	Age Interval	(71)	26	44	64	83	93	105	113	124	131	143	146	150	151	153	80	1,606
			2010		26	19	18	17	20	20	20	19	19	20	23	25	25	24	13	308
			2009	6	25	22	22	16	19	16	<b>.</b>	19	19	19	. 22	, 22	. 23	7		273
	ollars		2008	(e)	24	21	21	15	17	15	16	17	17	17	20	20	7		į	231
	Inds of [		2007	2	23	20	19	14	16	4	15	16	16	16	18	6				196
	Thouse	<b>During Year</b>	2006	E	16	18	17	13	14	13	<del>1</del>	15	15	14	œ					157
tirement	Retirements, Thousands of Dollars	Duri	2005 (6)	2	4	16	16.	<del>-</del>	13	12	13	13	13	7			-			128
4	Ret		2004	2	13	15	4	7	12	=	12	12	9							106
0			<u>2003</u> (4)	E	12	13	13	10.	7	10	7	9							1	98
001-201			2002	2	<del>-</del>	12	12	ئ	10	တ	2								1	<del>68</del>
Band 2			2001	j	10	7	11	∞	6	4,								,	1	53
Experience Band 2001-2010		Year	Placed (1)		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total

TABLE 2. OTHER TRANSACTIONS FOR EACH YEAR 2001-2010 SUMMARIZED BY AGE INTERVAL

Experie	Experience Band 2001-2010	d 2001-2	2010 Acquis	itions. T	ransfers	and Sale	es. Thous	10 Acquisitions, Transfers and Sales, Thousands of Dollars	ollars	<u>a</u>	Placement Band 1996-2010	996-2010
Year					وا	During Year	3.				Total During	Age
Placed (1)	2001	2002	2003	2004	2005	2006	2007	2008 (9)	2009	2010 (11)	Age Interval (12)	Interval (13)
1006				i	i	1	<sub>E</sub> O <sub>B</sub>	,	ı	,	1	131/2-141/2
1990	1	1	•		1	,	3	,			ı	121/2-131/2
7881							ı	1				111/2 101/2
1998							•	ı			1	1 1 /2- 1 2 /2
1999								(2)			90	10%-11%
2000								ီ့မှ				9½-10½
2001								,			(2)	81/2-91/2
2002								•			9	71/2-81/2
2003								i	ı		i	61/2-71/2
2007								(12) <sup>b</sup>	ı		,	512-612
2005									22ª		,	41/2-51/2
2006								(19) <sup>b</sup>	•	•	10	31/2-41/2
2007								` '	r	•	1	21/2-31/2
2008										(102)	(121)	11/2-21/2
2009									ı	` '	, ,	1/2-11/2
2010											1	0-1/2
2	1	1	1	1	1	1	l	Į	ļ			
Total	۰ ۱	۱	۱ )	. ]	- 1	- ]	00	(30)	22	(102)	(20)	
a T	a T. C. C. Affect of	و مناور		, of D	Voor	700						

<sup>&</sup>lt;sup>a</sup> Transfer Affecting Exposures at Beginning of Year <sup>b</sup> Transfer Affecting Exposures at End of Year <sup>c</sup> Sale with Continued Use

App. 000167 11-13

Parentheses denote Credit amount.

not totaled with the retirements but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement. The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Table 3 on page II-15.

The surviving plant at the beginning of each year from 2001 through 2010 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year."

The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Table 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Tables 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2006 are calculated in the following manner:

```
Exposures at age 0 = amount of addition = $750,000 Exposures at age \frac{1}{2} = $750,000 - $8,000 = $742,000 Exposures at age \frac{1}{2} = $742,000 - $18,000 = $724,000 Exposures at age \frac{2}{2} = $724,000 - $20,000 - $19,000 = $685,000 Exposures at age \frac{3}{2} = $685,000 - $22,000 = $663,000
```

For the entire experience band 2001-2010, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing

II-14 App. 000168

TABLE 3. PLANT EXPOSED TO RETIREMENT JANUARY 1 OF EACH YEAR 2001-2010 SUMMARIZED BY AGE INTERVAL

Experience Band 2001-2010	e Band 20	001-2010	0	כ		SOMMANIZED BI AGE INTENVAL				ш.	Placement Band 1996-2010	1996-2010
				Annial	Exposures, Thousands of Dollars at the Beginning of the	S. Thouse	ands of [ Reginnin	Exposures, Thousands of Dollars	ear		Total at	
ä					5						Beginning of	Age
ged	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Age Interval	Interval
(1)	(2)	(3)	4)	(2)	(9)	6	(8)	(6)	(10)	(11)	(12)	(13)
1996	255	245	234	222	209	195	239	216	192	167	167	131/2-141/2
266	279	268	256	243	228	212	194	174	153	131	323	12½-13½
966	307	296	284	271	257	241	224	205	184	162	531	111/2-121/2
666	338	330	321	311	300	289	276	262	242	226	823	101/2-111/2
000	376	367	357	346	334	321	307	297	280	261	1,097	9%-10%
201	420ª	416	407	397	386	374	361	347	332	316	1,503	81/2-91/2
202		460ª	455	444	432	419	405	390	374	356	1,952	71/2-81/2
003			$510^{a}$	504	492	479	464	448	431	412	2,463	61/2-11/2
904				580ª	574	561	546	530	501	482	3,057	51/2-61/2
305					ee0 <sub>a</sub>	653	639	623	628	609	3,789	41/2-51/2
900						750ª	742	724	685	663	4,332	31/2-41/2
200							850ª	841	821	799	4,955	21/2-31/2
2008								960	949	926	5,719	11/2-21/2
2009									1,080ª	1,069	6,579	1/2-11/2
2010										1,220ª	7,490	0-1/2
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

<sup>a</sup> Additions during the year.

of the retirements during an age interval (Table 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

Original Life Table. The original life table, illustrated in Table 4 on page II-17, is developed from the totals shown on the schedules of retirements and exposures, Tables 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

```
Percent surviving at age 4\frac{1}{2} = 88.15

Exposures at age 4\frac{1}{2} = 3,789,000

Retirements from age 4\frac{1}{2} to 5\frac{1}{2} = 143,000 = 0.0377

Survivor Ratio = 1.000 - 0.0377 = 0.9623

Percent surviving at age 5\frac{1}{2} = (88.15) x (0.9623) = 84.83
```

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Tables 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

## TABLE 4. ORIGINAL LIFE TABLE CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2001-2010

Placement Band 1996-2010

#### (Exposure and Retirement Amounts are in Thousands of Dollars)

		<b>5</b>			Percent
Age at	Exposures at	Retirements			Surviving at
Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
<u>Interval</u>	Age Interval	<u>Interval</u>	Ratio	_Ratio_	Age Interval
(1)	(2)	(3)	(4)	(5)	(6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	12 <b>4</b>	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	167	<u>26</u>	0.1557	0.8443	42.24
					35.66
Total	<u>44,780</u>	<u>1,606</u>			

Column 2 from Table 3, Column 12, Plant Exposed to Retirement.

Column 3 from Table 1, Column 12, Retirements for Each Year.

Column 4 = Column 3 divided by Column 2.

Column 5 = 1.0000 minus Column 4.

Column 6 = Column 5 multiplied by Column 6 as of the Preceding Age Interval.

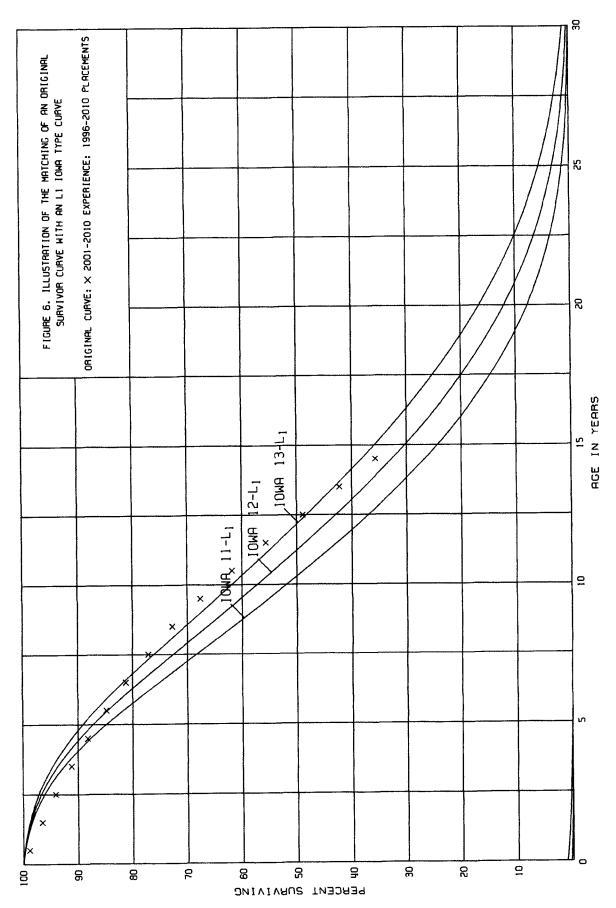
The original survivor curve is plotted from the original life table (column 6, Table 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

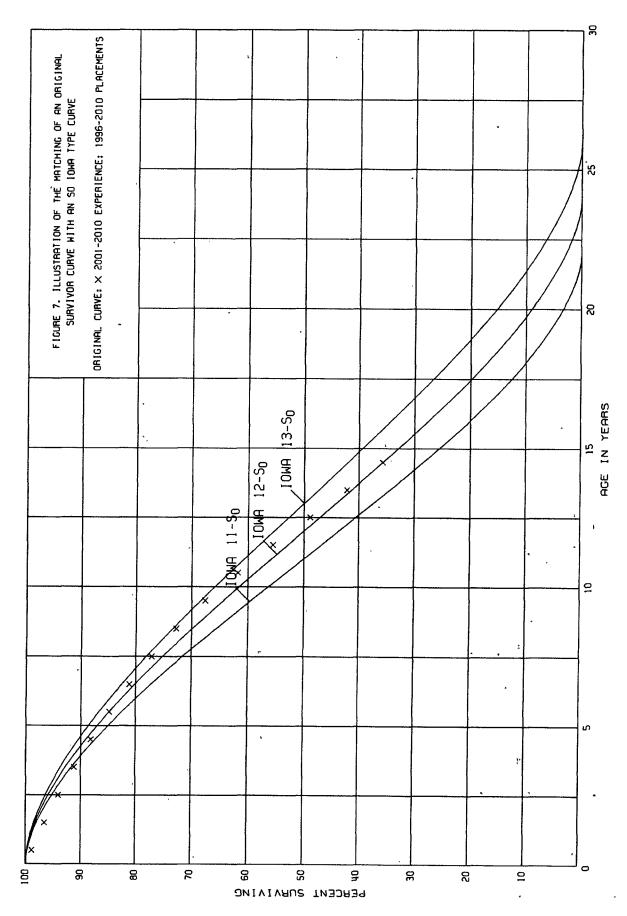
Smoothing the Original Survivor Curve. The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

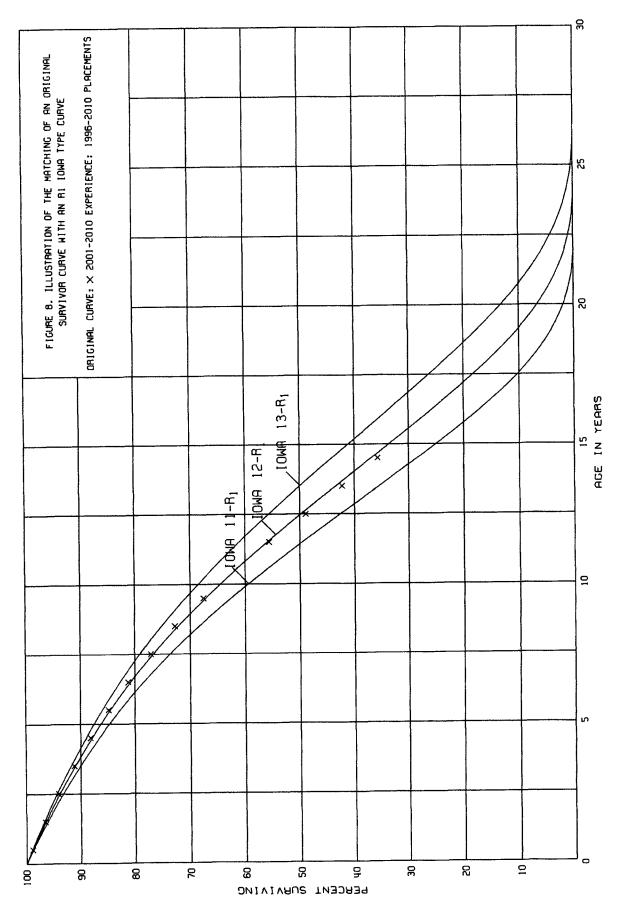
The lowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the lowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8 the original curve developed in Table 4 is compared with the L, S, and R lowa type curves which most nearly fit the original survivor curve. In Figure 6 the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7 the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8 the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0. In Figure 9 the three fittings, 12-L1, 12-S0, and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 lowa curve would be selected as the most representative of the plotted survivor characteristics of the group, assuming no contrary relevant factors external to the analysis of historical data.

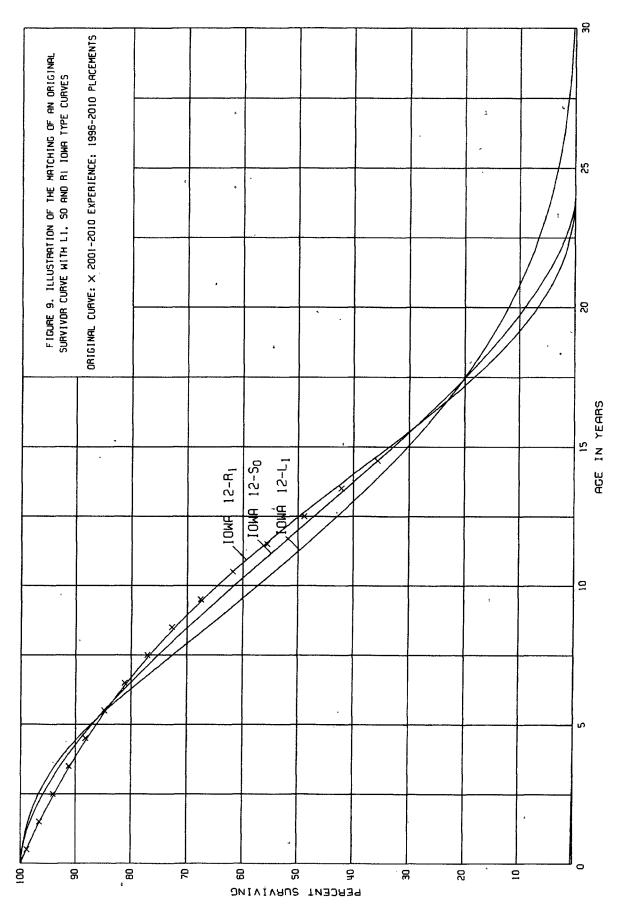
II-18

App. 000172









#### Service Life Considerations

The service life estimates were based on judgment which considered a number of factors. The primary factors were the statistical analyses of data; current company policies and outlook as determined during field reviews of the property and other conversations with management; and the survivor curve estimates from previous studies of this company and other water companies.

For some of the plant accounts and subaccounts, the statistical analyses resulted in good to excellent indications of significant survivor patterns. Generally, the information external to the statistics led to no significant departure from the indicated survivor curves for the accounts listed below.

Account No.	Account Description
304.30	Structures and Improvements - Water Treatment
311.20	Pumping Equipment - Source of Supply and Pumping
320	Water Treatment Equipment
330	Distribution Reservoirs and Standpipes
331	Transmission and Distribution Mains
333	Services
334	Meters and Meter Installations
335	Fire Hydrants

Accounts 333.0, Services, is used to illustrate the manner in which the study was conducted for the accounts in the preceding list. Aged plant accounting data have been compiled for the years through 2010. These data have been coded according to account or property group, type of transaction, year in which the transaction took place, and year in which the utility plant was placed in service. The retirements, other plant transactions and plant additions were analyzed by the retirement rate method.

The survivor curve estimate for this account is the 27-S1.5 and is based on the statistical indication for the period 1998 through 2010. The 27-S1.5 is an excellent fit of the significant portion of the original survivor curve as set forth on page III-49, is consistent

with management outlook for a continuation of the historical experience and is within the typical service life range of 25 to 40 years for water services.

Amortization accounting is proposed for certain General Plant accounts that represent numerous units of property, but a small portion of the depreciable plant in service. These accounts represent approximately 4 percent of total utility plant. A discussion of the basis for the amortization periods is presented in the section "Calculation of Annual and Accrued Amortization".

Generally, the estimates for the remaining accounts were based on judgments which considered the nature of the plant and equipment, the previous estimate for this company and a general knowledge of service lives for similar equipment in other utility companies.

#### Salvage Analysis

The estimates of net salvage were based in part on historical data compiled for the years 2005 through 2010. Cost of removal and salvage were expressed as percents of the original cost of plant retired; both on annual and three-year moving average bases. The most recent five-year average also was calculated for consideration. The net salvage estimates are expressed as a percent of the original cost of plant retired.

### **Net Salvage Considerations**

The estimates of salvage were based primarily on judgment which considered a number of factors. The primary factors were the analyses of historical data; a knowledge of management's plans and operating policies; and net salvage estimates from previous studies of this company and other water companies. The accounts for which the historical analyses were representative of expectations for future net salvage levels are presented below:

304.2	Structures and Improvements - Source of Supply and Pumping
304.3	Structures and Improvements - Water Treatment
304.5	Structures and Improvements - General
307	Wells and Springs
309	Supply Mains
341	Transportation Equipment

Account 307, Wells and Springs, is used to illustrate the manner in which the study was conducted for the accounts in the preceding list. Depreciation reserve accounting data were compiled for the years 2005 through 2010. These data include the retirements, cost of removal and gross salvage.

The net salvage estimate for this account is negative 5 percent and is based in part on the cost of removal and salvage percents shown in the tabulation on page III-75. Cost of removal as a percent of the original cost retired has been minimal during the experience as a percentage of plant retired. The overall and most recent five-year bands averaged 1 and 3 percent removal cost, respectively. Gross salvage has been zero during the six-year period. The negative 5 percent net salvage estimate is based on the overall cost of removal and gross salvage percent and the net salvage percent of other water companies.

Generally, the net salvage estimates for the remaining accounts were based on judgments which considered the nature of the plant and equipment, reviews of available historical data, and a general knowledge of net salvage percents for similar equipment in other water companies.

II-25 App. 000179

#### CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

After the survivor curve and salvage are estimated, the annual depreciation accrual rate can be calculated. In the average service life procedure, the annual accrual rate is computed by the following equation:

Annual Accrual Rate, 
$$Percent = \frac{(100\% - Net Salvage, Percent)}{Average Service Life}$$
.

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which will not be allocated to expense through future depreciation accruals, if current forecasts of life characteristics are used as a basis for straight line depreciation accounting.

The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each account, based upon the attained age and the estimated survivor curve. The accrued depreciation ratios are calculated as follows:

Ratio = 
$$(1 - \frac{Average \ Remaining \ Life \ Expectancy}{Average \ Service \ Life})$$
  $(1 - Net \ Salvage, \ Percent)$ .

The application of these procedures is described for a single unit of property and a group of property units. Salvage is omitted from the description for ease of application.

# Single Unit of Property

The calculation of straight line depreciation for a single unit of property is straightforward. For example, if a \$1,000 unit of property attains an age of four years and has a life expectancy of six years, the annual accrual over the total life is:

$$\frac{\$1,000}{(4+6)}$$
 = \\$100 per year.

The accrued depreciation is:

$$$1,000 (1 - \frac{6}{10}) = $400.$$

# **Group Depreciation Procedures**

When more than a single item of property is under consideration, a group procedure for depreciation is appropriate because normally all of the items within a group do not have identical service lives, but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group.

Remaining Life Annual Accruals. For the purpose of calculating remaining life accruals as of December 31, 2010, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of December 31, 2010, are set forth in the Results of Study section of the report.

Average Service Life Procedure. In the average service life procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the average remaining life of the vintage. The average remaining life is a directly weighted average derived from the estimated future survivor curve in accordance with the average service life procedure.

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which would not be allocated to expense through future depreciation accruals, if current forecasts of life characteristics are used as the basis for such accruals. The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each account, based upon

the attained age and service life. The straight line accrued depreciation ratios are calculated as follows for the average service life procedure:

# CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION

Amortization is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. Normally, the distribution of the amount is in equal amounts to each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will render most of their service, the amortization period and service lives used by other utilities, and the service life estimates previously used for the asset under depreciation accounting.

Amortization accounting is proposed for certain General Plant accounts that represent numerous units of property, but a very small portion of depreciable utility plant in service. The accounts and their amortization periods are as follows:

	Account	Amortization Period, Years
340.00	Office Furniture and Equipment	10
343.00	Tools, Shop and Garage Equipment	20
344.00	Laboratory Equipment	15
346.00	Communication Equipment	15
347.00	Miscellaneous Equipment	15
348.00	Other Tangible Property	20

The calculated accrued amortization is equal to the original cost multiplied by the ratio of the vintage's age to its amortization period. The annual amortization amount is determined by dividing the original cost by the period of amortization for the account.

II-29 App. 000183

III-1 PART III. RESULTS OF STUDY

#### PART III. RESULTS OF STUDY

#### QUALIFICATION OF RESULTS

The calculated annual depreciation accrual rates are the principal results of the study. Continued surveillance and periodic revisions are normally required to maintain continued use of appropriate annual depreciation accrual rates. An assumption that accrual rates can remain unchanged over a long period of time implies a disregard for the inherent variability in service lives and salvage and for the change of the composition of property in service. The annual accrual rates were calculated in accordance with the straight line remaining life method of depreciation using the average service life procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

The annual depreciation accrual rates are applicable specifically to the water plant in service as of December 31, 2010. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to December 31, 2010, is reasonable for a period of three to five years.

#### DESCRIPTION OF STATISTICAL SUPPORT

The service life and salvage estimates were based on judgment which incorporated statistical analyses of retirement data, discussions with management and consideration of estimates made for other water utility companies. The results of the statistical analyses of service life are presented in the section titled "Service Life Statistics".

The estimated survivor curves for each account are presented in graphical form.

The charts depict the estimated smooth survivor curve and original survivor curve(s), when

applicable, related to each specific group. For groups where the original survivor curve was plotted, the calculation of the original life table is also presented.

The analyses of salvage data are presented in the section titled, "Net Salvage ... Statistics". The tabulations present annual cost of removal and salvage data, three-year moving averages and the most recent five-year average. Data are shown in dollars and as percentages of original costs retired.

#### **DESCRIPTION OF DEPRECIATION TABULATIONS**

A summary table of the results of the study, as applied to the original cost of utility plant as of December 31, 2010, are presented on pages III-4 and III-5 of this report. The schedule sets forth the original cost, the book reserve, future accruals, the calculated annual depreciation rate and amount, and the composite remaining life related to water plant.

The tables of the calculated annual depreciation accruals are presented in account sequence in the section titled "Depreciation Calculations." The tables indicate the estimated survivor curve and salvage percent for the account and set forth for each installation year the original cost, the calculated accrued depreciation, the allocated book reserve, future accruals, the remaining life and the calculated annual accrual amount.

AQUA TEXAS, INC.

ESTIMATED SURVIVOR CURVE, NET SALVAGE, ORIGINAL COST, BOOK RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO UTILITY PLANT AS OF DECEMBER 31, 2010

	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	NET SALVAGE (3)	ORIGINAL COST AS OF DECEMBER 31, 2010 (4)	BOOK RESERVE (5)	FUTURE ACCRUALS (6)	ANNUAL ACCRUAL AMOUNT (7)	COMPOSITE REMAINING LIFE (8)	ANNUAL ACCRUAL RATE PERCENT (9)=(7)/(4)
	DEPRECIABLE PLANT								
	STRUCTURES AND IMPROVEMENTS	į	ű	20 000 103 0	959 065	2 811 582	72,224	38.9	201
304 20	SOURCE OF SUPPLY AND PUMPING	45 Y. Y.	(g)	5,381,092,02	1 979 920	3.413.295	74,202	46.0	141
304 30	WATER TREATMENT	32-K3	<u>(</u> )	2.090.208.13	410.184	1,784,535	51,903	34	2.48
304 40 304 50	TRANSMISSION AND DISTRIBUTION GENERAL	45-R3	0 0	3,197,518 54	650,916	2,546,603	66,597	38.2	2 08
	TOTAL STRUCTURES AND IMPROVEMENTS			14,015,213 55	4,000,085	10,556,015	264,926	39.8	189
	SOLOVOSSIA CHARAILLOGA ANA CHITCHES	60. <b>B</b> 2.5	c	6,982 99	817	6,166	114	54.1	163
305 00	COLLECTING AND IMPOUNDING RESERVOINS	60-515	0	32,946.32	4,108	28,838	522	55.2	1 58
306 00	LANE, KIVER AND OTHER INTENES	50-R3	· ( <u>6</u> )	33,721,767.87	10,392,615	25,015,241	608,365	411	180
304 00	STIPPLY MAINS	60-52 5	(0)	2,340,694 42	440,315	2,134,449	39,762	53.7	170
310 20	POWER GENERATION EQUIPMENT	30-82 5	0	1,397,288 25	228,755	1,168,533	45,864	25 5	3.28
	PUMPING EQUIPMENT		•		100 000	7 000 744	214 674	32.7	1 82
31120	SOURCE OF SUPPLY AND PUMPING	36-R0 5	(2)	11,766,290 01	5,333,804	242 710	A 481	286	2 63
31130	WATER TREATMENT	35-R2 5	<u>(</u>	321,934 91 8 004 478 18	2 792 591	3.407.111	115,108	296	1 95
311 40	TRANSMISSION AND DISTRIBUTION	35-K2	<u>(</u> )	0.01.06.0					
	TOTAL PUMPING EQUIPMENT			17,992,723 10	8,221,798	10,670,562	338,263	315	188
000	THE TOTAL TRANSPORT COLUMNATION TO THE TAXABLE TO T	45-R2 5	(10)	3,053,199 14	1,000,911	2,357,508	61,467	384	201
320 00		50-51	(£)	24,372,987 25	6,766,639	20,043,647	515,426	389	2.11
330.00		75-R4	(15)	65,666,383.93	20,752,080	54,764,262	921,731	59.4	1.40
333.00		27-515	(52)	7,307,917 94	253,943	8,880,954	429,642	20.7	5 68 5 7 7 7
334 00	METERS AND METER INSTALL ATIONS	30-51	0	15,493,732 37	7,489,337	8,004,395	335,943	222	
335 00		70-R3	(10)	1,246,583 87	443,788	927,454	16,869	25 U	g -
	OTHER PLANT AND MISCELLANEOUS EQUIPMENT	1		70000	2,660	c	a	ı	•
339 10		20-R4	0 (	12.809.21	125,544	585.00	4.060	23 8	183
339 20		30-R3	> c	241 617 03	159.310	82,307	3,495	23 5	145
339 30	WATER TREATMENT TRANSMISSION AND DISTRIBUTION	35-R3	0	216,733.28	128.562	88,171	3,138	28.1	1,45
956				683.251.25	416,185	267,066	10,693	250	157
	JOIAL OTHER PLANT AND MISCELLANGOUS EQUIPMENT						000	Ġ	50 24
340 00	OFFICE FURNITURE AND EQUIPMENT	10-50	0	6,029,849 28	584,567	5,445,282	904,435	O 4	2001
341 00	•	10-S0	'n	1,435,284 89	9,016	1,354,505	14 705	- 6	50.5
343 00	•	20-80	0	166,431 36	912,61	212,161	55.	5.05	851
344 00		15-SQ	0 '	1,362.70	0.00	171 480	12 015	14.3	597
345 00		20-L3	0 (	201,413 33	29,933 48 670	203 228	22.530	0 6	<b>8</b> 0
346 00		15-80	0 0	20,1697,037	92,000	244 887	21,397	11.4	8 01
347 00	MISCELLANEOUS EQUIPMENT	79-80 20-80		1,502,982 94	490,095	1,012,868	119,481	85	7.95
340 00		 					1	;	•
	TOTAL DEPRECIABLE PLANT			197,188,020.55	61,611,255	153,409,895	4,903,045	31.3	2,4

AQUA TEXAS, INC.

ESTIMATED SURVIVOR CURVE, NET SALVAGE, ORIGINAL COST, BOOK RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO UTILITY PLANT AS OF DECEMBER 31, 2010

	DEPRECIABLE GROUP	SURVIVOR CURVE	NET SALVAGE (3)	ORIGINAL COST AS OF DECEMBER 31, 2010 (4)	BOOK RESERVE (5)	FUTURE ACCRUALS (6)	ANNUAL ACCRUAL AMOUNT (7)	COMPOSITE REMAINING LIFE (8)	ACCRUAL RATE PERCENT (9)=(7)(4)
	NONDEPRECIABLE PLANT								
301 00 302 00 303 20 303 30 303 40 303 50	ORGANIZATION FRANCHISES LAND AND LAND RIGHTS - SOURCE OF SUPPLY AND PUMPING LAND AND LAND RIGHTS - WATER TREATMENT LAND AND LAND RIGHTS - TRANSMISSION AND DISTRIBUTION LAND AND LAND RIGHTS - GENERAL			639,444 B7 425,151.40 6,572,147.79 269,319.74 720,971 55.	85,190 00 56,040.00 48,367 00 0.00 12,571 00 (18,676.00)				
	TOTAL NONDEPRECIABLE PLANT			11,673,692.12	183,492				
	TOTAL WATER PLANT			208,861,712.67	61,794,747	153,409,895	4,903,045		

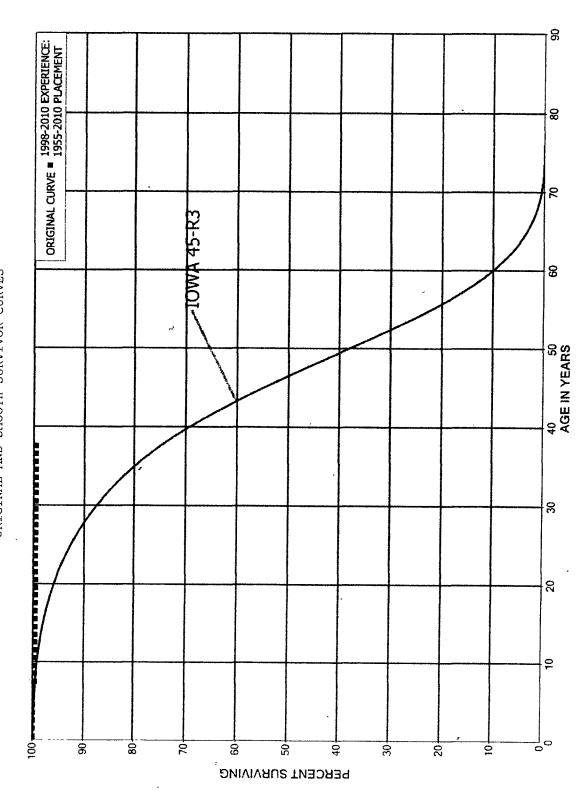
<sup>\*</sup> ACCRUAL RATES FOR ADDITIONS AS OF JANUARY 1, 2011 SHOULD BE 5.00%

III-5 App. 000188

111-6

SERVICE LIFE STATISTICS

ACCOUNT 304.2 STRUCTURES AND IMPROVEMENTS - SOURCE OF SUPPLY AND PUMPING ORIGINAL AND SMOOTH SURVIVOR CURVES AQUA TEXAS, INC.



III-7 App. 000190

#### ACCOUNT 304.2 STRUCTURES AND IMPROVEMENTS - SOURCE OF SUPPLY AND PUMPING

#### ORIGINAL LIFE TABLE

PLACEMENT	BAND 1955-2010		EXPE	RIENCE BAN	D 1998-2010
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5	3,968,242 4,038,253 3,979,070 3,939,324 3,502,537	2,632	0.0000 0.0000 0.0000 0.0007 0.0000	1.0000 1.0000 1.0000 0.9993 1.0000	100.00 100.00 100.00 100.00 99.93
4.5 5.5 6.5 7.5 8.5	3,134,047 2,673,105 2,458,309 1,239,321 872,472	10,465	0.0000 0.0000 0.0043 0.0000 0.0000	1.0000 1.0000 0.9957 1.0000	99.93 99.93 99.93 99.51
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5	446,907 155,516 61,122 53,854 84,768 84,768 84,768 88,630		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	99.51 99.51 99.51 99.51 99.51 99.51 99.51
17.5 18.5 19.5 20.5 21.5 22.5 23.5	83,889 95,411 100,082 100,082 100,082 103,934 103,536		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	99.51 99.51 99.51 99.51 99.51 99.51
24.5 25.5 26.5 27.5 28.5	97,926 80,085 28,847 28,847 28,847		0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000	99.51 99.51 99.51 99.51 99.51
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	26,110 14,940 11,465 6,794 6,794 2,942 2,942 1,125 1,125		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	99.51 99.51 99.51 99.51 99.51 99.51 99.51 99.51 99.51

III-8 App. 000191

ACCOUNT 304.2 STRUCTURES AND IMPROVEMENTS - SOURCE OF SUPPLY AND PUMPING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT	BAND 1955-2010		EXPE	RIENCE BAN	D 1998-2010
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE ÌNTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	1,125 1,125 1,125 78 78 78 78 78 78		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	99.51 99.51 99.51 99.51 99.51 99.51 99.51 99.51
49.5 50.5 51.5 52.5 53.5 54.5 55.5	78 78 78 78 78 78		0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	99.51 99.51 99.51 99.51 99.51 99.51

III-9 App. 000192

ORIGINAL CURVE - 1954-2010 EXPERIENCE: AQUA TEXAS, INC. ACCOUNT 304.3 STRUCTURES AND IMPROVEMENTS - WATER TREATMENT ORIGINAL AND SMOOTH SURVIVOR CURVES **IOWA 55-R3** 

III-10 App. 000193

РЕВСЕИТ ЗИВУІЛІИС

AGE IN YEARS

<del>\$</del>

AQUA TEXAS, INC.

# ACCOUNT 304.3 STRUCTURES AND IMPROVEMENTS - WATER TREATMENT

#### ORIGINAL LIFE TABLE

PLACEMENT	BAND 1954-2010		EXPE	RIENCE BAN	D 1998-2010
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV *	PCT SUŔV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5	4,603;205 4,731,098 4,590,359 4,571,876 4,507,211 4,321,395 4,026,036 2,196,888 2,016,823 1,407,259	1,904 4,679 5,271	0.0000 0.0000 0.0000 0.0004 0.0000 0.0000 0.0000 0.0000 0.0023 0.0037	1.0000 1.0000 1.0000 0.9996 1.0000 1.0000 1.0000 0.9977 0.9963	100.00 100.00 100.00 100.00 99.96 99.96 99.96 99.96 99.73
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	873;220 761,613 775,071 758,514 799,132 856,559 850,381 874,837 904,608 978,773	500 426 7,634 1,215	0.0000 0.0000 0.0006 0.0005 0.0089 0.0014 0.0000 0.0004	1.0000 1.0000 0.9994 1.0000 0.9995 0.9911 0.9986 1.0000 0.9996	99.35 99.35 99.35 99.29 99.24 98.35 98.21 98.21 98.17
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	1,019,375 980,180 943,260 914,380 881,639 821,879 693,137 601,936 515,525 481,329	8,723 3,997 497 4,891 15,702 2,876 4,205 173	0.0086 0.0000 0.0042 0.0005 0.0000 0.0060 0.0227 0.0048 0.0082 0.0004	0.9914 1.0000 0.9958 0.9995 1.0000 0.9940 0.9773 0.9952 0.9918 0.9996	98.17 97.33 97.33 96.92 96.86 96.29 94.11 93.66 92.89
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	421,042 351,732 268,354 243,650 219,643 209,918 185,857 164,431 116,445 103,931	7,353 3,613 2,346 119 4,636	0.0000 0.0209 0.0135 0.0096 0.0005 0.0221 0.0000 0.0082 0.0000	1.0000 0.9791 0.9865 0.9904 0.9995 0.9779 1.0000 0.9918 1.0000	92.86 92.86 90.92 89.69 88.83 88.78 86.82 86.81 86.11

III-11 App. 000194

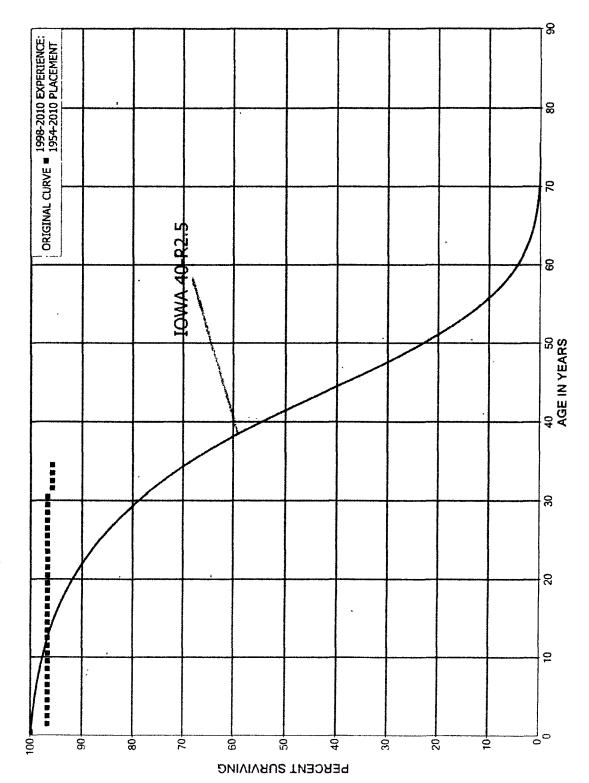
# ACCOUNT 304.3 STRUCTURES AND IMPROVEMENTS - WATER TREATMENT

# ORIGINAL LIFE TABLE, CONT.

PLACEMENT :	BAND 1954-2010		EXPE	RIENCE BAN	D 1998-2010
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	47,530 34,084 31,935 13,893 9,743 9,743 5,275 4,092 881 881	119	0.0000 0.0035 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 0.9965 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	86.11 86.11 85.81 85.81 85.81 85.81 85.81 85.81 85.81
49.5 50.5 51.5 52.5 53.5 54.5 55.5 56.5	881 621 621 621 621 74 74		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	85.81 85.81 85.81 85.81 85.81 85.81 85.81

III-12 App. 000195

ACCOUNT 304.4 STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION ORIGINAL AND SMOOTH SURVIVOR CURVES AQUA TEXAS, INC.



III-13 App. 000196

AQUA TEXAS, INC.

# ACCOUNT 304.4 STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION ORIGINAL LIFE TABLE

PLACEMENT E	BAND 1954-2010		EXPE	RIENCE BAN	D 1998-2010
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5	2,524,031 2,683,628 2,545,649 2,296,657	89,603	0.0000 0.0334 0.0000 0.0000	1.0000 0.9666 1.0000 1.0000	100.00 100.00 96.66 96.66
3.5 4.5 5.5 6.5 7.5 8.5	1,996,339 1,463,990 1,257,474 1,233,863 891,717 579,727		0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000	96.66 96.66 96.66 96.66 96.66
9.5 10.5 11.5 12.5 13.5 14.5 15.5	343,425 139,227 49,971 35,989 47,880 47,880 48,185		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	96.66 96.66 96.66 96.66 96.66 96.66
16.5 17.5 18.5	49,387 55,510 55,826 62,464		0.0000 0.0000 0.0000	1.0000 1.0000 1.0000	96.66 96.66 96.66 96.66
20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	59,773 62,130 69,945 59,166 61,428 55,885 40,133 41,874 41,569		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	96.66 96.66 96.66 96.66 96.66 96.66 96.66
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5	41,576 30,274 29,302 22,664 22,664 17,348 6,953 6,953 4,691 4,691	308	0.0000 0.0102 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 0.9898 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	96.66 96.66 95.68 95.68 95.68 95.68 95.68 95.68

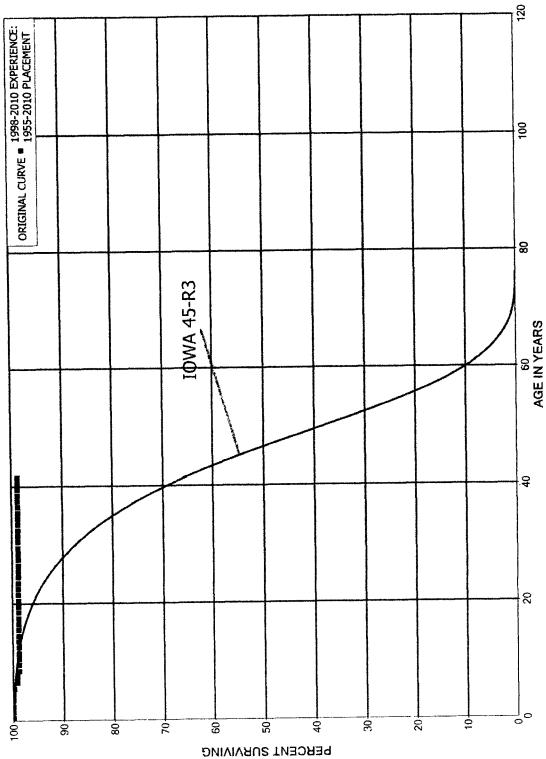
**III-14** App. 000197

AQUA TEXAS, INC.

ACCOUNT 304.4 STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION . ORIGINAL LIFE TABLE, CONT.

PLACEMENT I	BAND 1954-2010		EXPE	RIENCE BAN	D 1998-2010
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	2,950		0.0000	1.0000.	95.68
40.5	1,209		0.0000	1.0000	95.68
41.5	1,209		0.0000	1.0000	95.68
42.5		*			95.68
43.5	835	•	0.0000		
44.5	835		0.0000		
45.5	835		0.0000 -		
46.5	835		0.0000		
47.5	835		0.0000		
48.5	835		0.0000		
49.5	835		0.0000		
50.5	835		0.0000		
51.5	835		0.0000		
52.5	835		0.0000		
53.5	835		0.0000		
54.5	835		0.0000		
55.5	835		0.0000		
56.5					

AQUA TEXAS, INC.
ACCOUNT 304.5 STRUCTURES AND IMPROVEMENTS - GENERAL ORIGINAL AND SMOOTH SURVIVOR CURVES



# ACCOUNT 304.5 STRUCTURES AND IMPROVEMENTS - GENERAL

#### ORIGINAL LIFE TABLE

PLACEMENT :	BAND 1955-2010		EXPE	RIENCE BAN	D 1998-2010
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5	3,431,153 3,361,812 3,542,773 3,459,301 3,388,244 2,952,294 2,399,416 .1,909,693	1,752 5,935 16,308	0.0000 0.0000 0.0005 0.0000 0.0000 0.0020 0.0068 0.0000	1.0000 1.0000 0.9995 1.0000 1.0000 0.9980 0.9932 1.0000	100.00 100.00 100.00 99.95 99.95 99.95 99.75
7.5 8.5	1,626,266 941,316	5,957	0.0037	0.9963	99.07 98.71
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5 19.5 20.5 21.5 22.5 23.5	528,666 328,761 98,986 32,431 33,174 34,703 37,454 37,929 47,356 47,677 48,665 48,332 39,667 39,437 27,297		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	98.71 98.71 98.71 98.71 98.71 98.71 98.71 98.71 98.71 98.71 98.71 98.71 98.71
24.5 25.5 26.5 27.5 28.5	22,926 23,888 19,681 21,567 20,216		0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000	98.71 98.71 98.71 98.71 98.71
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	20,934 10,946 10,625 9,258 9,258 9,258 8,489 8,447 8,447		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	98.71 98.71 98.71 98.71 98.71 98.71 98.71 98.71 98.71

III-17 App. 000200

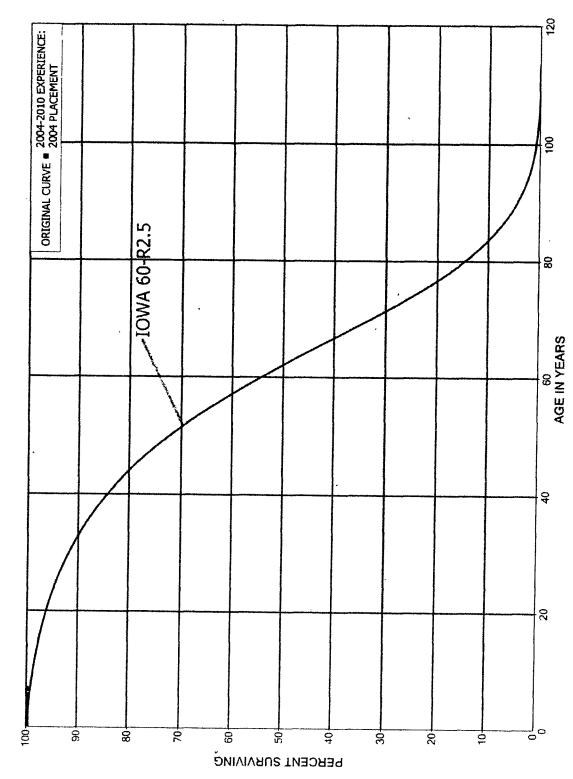
# ACCOUNT 304.5 STRUCTURES AND IMPROVEMENTS - GENERAL

#### ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1955-2010 EXPERIENCE BAND 1998-201						
AGE AT	EXPOSURES AT	RETIREMENTS			PCT SURV	
BEGIN OF	BEGINNING OF	DURING AGE	RETMT	SURV	BEGIN OF	
INTERVAL	AGE INTERVAL	INTERVAL	RATIO	RATIO	INTERVAL	
39.5	6,009		0.0000	1.0000	98.71	
40.5	2,594		0.0000	1.0000	98.71	
41.5	1,194		0.0000	1.0000	98.71	
42.5	144		0.0000	1.0000	98.71	
43.5	144		0.0000	1.0000	98.71	
44.5	144		0.0000	1.0000	98.71	
45.5	144		0.0000	1,0000	98.71	
46.5	144		0.0000	1.0000	98.71	
47.5	144		0.0000	1.0000	98.71	
48.5	144		0.0000	1.0000	98.71	
49.5	144		0.0000	1.0000	98.71	
50.5	144		0.0000	1.0000	98.71	
51.5	144		0.0000	1.0000	98.71	
52.5	144		0.0000	1.0000	98.71	
53.5	144		0.0000	1.0000	98.71	
54.5	144		0.0000	1.0000	98.71	
55.5					98.71	

III-18 App. 000201

AQUA TEXAS, INC.
ACCOUNT 305.0 COLLECTING AND IMPOUNDING RESERVOIRS
ORIGINAL AND SMOOTH SURVIVOR CURVES



# ACCOUNT 305.0 COLLECTING AND IMPOUNDING RESERVOIRS

#### ORIGINAL LIFE TABLE

PLACEMENT I	RIENCE BAN	D 2004-2010			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5	6,983 6,983 6,983 6,983 6,983 6,983		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00

III-20 App. 000203