| Customer # | Account # | Name | Service Address | Billing Code | Deposits Balance | Date Received |
|---|---|---|---|---|---|---|
| 00401562 | 00429020 | HECTOR COSTILLA | 303 W LAMPASAS | Lometa - Residential Wastewater | ($50.00) | 6/9/1999 |
| 00610718 | 00429438 | KRISTEN CRAIN | 220 N 8TH | Lometa - Residential Wastewater | ($100.00) | 9/23/2011 |
| 00401624 | 00429084 | JOHN DAVIS | 203 S 5TH | Lometa - Residential Wastewater | ($50.00) | 6/7/1999 |
| 00401508 | 00428964 | DOC DEARING | 402 W MAIN ST | Lometa - Residential Wastewater | ($100.00) | 4/18/2000 |
| 00411519 | 00428955 | DENIM ANGELS | 112 W MAIN ST | Lometa - Non-Residential Wastewater | ($100.00) | 4/12/2007 |
| 00611591 | 00429011 | FRANK DEWITT | 303 E MULBERRY | Lometa - Residential Wastewater | ($100.00) | 12/27/2011 |
| 00608651 | 00429036 | JUSTIN DIXON | 201 N 2ND ST | Lometa - Residential Wastewater | ($100.00) | 9/9/2010 |
| 00405461 | 00432051 | SANFORD J DOGGETT | 407 S 5TH ST | Lometa - Residential Wastewater | ($150.00) | 12/23/2003 |
| 00408570 | 00428828 | KATHLEEN M DREZEK | 521 N 5TH ST | Lometa - Residential Wastewater | ($150.00) | 11/30/2004 |
| 00614549 | 00428942 | SONIA EDMONDSON | 511 N 5TH ST | Lometa - Residential Wastewater | ($100.00) | 11/5/2012 |
| 00606925 | 00428793 | DAVID FAIR | 220 W SENTERFITT | Lometa - Residential Wastewater | ($100.00) | 11/16/2009 |
| 00614513 | 00428422 | KEVIN W FARR | 514 W MAIN ST | Lometa - Residential Wastewater | ($100.00) | 10/12/2012 |
| 00401352 | 00428807 | RAY FAUBION | 320 S 5TH ST | Lometa - Residential Wastewater | ($50.00) | 6/8/1999 |
| 00401524 | 00428980 | JIM FELAN JR | 119 W CHERRY | Lometa - Residential Wastewater | ($50.00) | 6/2/1999 |
| 00401618 | 00429077 | RAY FELAN | 202 S 5TH ST | Lometa - Residential Wastewater | ($50.00) | 6/9/1999 |
| 00611289 | 00428799 | VICKIE FELAN | 211 W SENTERFITT | Lometa - Residential Wastewater | ($100.00) | 11/10/2011 |
| 00608613 | 00428985 | OLIVIA FLORES | 305 N 3RD ST | Lometa - Residential Wastewater | ($100.00) | 8/26/2010 |
| 00409082 | 00437409 | NORMA D FREEMAN | 206 N 3RD | Lometa - Residential Wastewater | ($150.00) | 6/1/2005 |
| 00614568 | 00428988 | KENNETH FRIEND | 617 W MAIN ST | Lometa - Residential Wastewater | ($100.00) | 11/15/2012 |
| 00614542 | 00429005 | JACOB GARCIA | 319 W LAMPASAS | Lometa - Residential Wastewater | ($100.00) | 10/29/2012 |
| 00615043 | 00429041 | MICHELLE GARZA | 218 N 1ST | Lometa - Residential Wastewater | ($100.00) | 5/3/2013 |
| 00608381 | 00428545 | GLENN & CATHY GIBSON | 505 S 4TH ST | Lometa - Residential Wastewater | ($100.00) | 7/20/2010 |
| 00605662 | 00428937 | BONNIE GOMEZ | 400 W MAIN | Lometa - Residential Wastewater | ($100.00) | 9/9/2008 |
| 00609214 | 00429170 | MARIA GOMEZ | 221 W LAMPASAS | Lometa - Residential Wastewater | ($100.00) | 3/3/2011 |

| Customer # | Account # | Name | Service Address | Billing Code | Deposits Balance | Date Received |
|---|---|---|---|---|---|---|
| 00611315 | 00428423 | JOE GONZALES | 510 S 7TH ST | Lometa - Residential Wastewater | ($100.00) | 11/17/2011 |
| 00401592 | 00432615 | GOOD SHEPHERD CATHOLIC CHURCH | 414 W MAIN | Lometa - Non-Residential Wastewater | ($150.00) | 11/29/2005 |
| 00401984 | 00429433 | MARY GOTTFREDSON | 109 N 6TH | Lometa - Residential Wastewater | ($100.00) | 9/8/2008 |
| 00604902 | 00501167 | MICHAEL & REBECCA GRIFFITH | 512 N 5TH ST | Lometa - Residential Wastewater | ($100.00) | 4/4/2008 |
| 00606163 | 00428855 | PEGGY HALLAM | 504 S 6TH ST | Lometa - Residential Wastewater | ($100.00) | 12/30/2008 |
| 00605842 | 00429060 | JOHN W HARRIS | 501 S 6TH | Lometa - Residential Wastewater | ($100.00) | 9/23/2008 |
| 00613281 | 00429255 | DEIDRA HERNANDEZ | 203 N 7TH | Lometa - Residential Wastewater | ($100.00) | 4/8/2013 |
| 00401336 | 00428791 | FRANCISCO HERNANDEZ | 501 N 8TH ST | Lometa - Residential Wastewater | ($50.00) | 6/9/1999 |
| 00614904 | 00428997 | GABINA HERNANDEZ | 418 W MAIN | Lometa - Residential Wastewater | ($100.00) | 4/1/2013 |
| 00408771 | 00428426 | JUAN HERNANDEZ | 208 S 9TH | Lometa - Residential Wastewater | ($150.00) | 2/15/2005 |
| 00606810 | 00429070 | MARISOL HERNANDEZ | 210 S 1ST ST | Lometa - Residential Wastewater | ($100.00) | 7/13/2010 |
| 00615006 | 00432892 | ROBERT HULBERT | 512A E WALNUT | Lometa - Residential Wastewater | ($100.00) | 4/26/2013 |
| 00409049 | 00437369 | DAVID R IVEY | 605 N 7TH ST | Lometa - Residential Wastewater | ($150.00) | 5/23/2005 |
| 00606558 | 00429048 | BOBBY JACKSON | 311 W MAIN | Lometa - Residential Wastewater | ($100.00) | 5/29/2009 |
| 00608340 | 00428662 | LUIS JIMINEZ | 303 N 8TH ST | Lometa - Residential Wastewater | ($100.00) | 7/20/2010 |
| 00405931 | 00429057 | CYNTHIA PARCIANY KIRBY | 412 E MULBERRY | Lometa - Residential Wastewater | ($150.00) | 6/16/2004 |
| 00409047 | 00428797 | MEL LANDERS | 806 E LAMPASAS | Lometa - Residential Wastewater | ($100.00) | 8/22/2012 |
| 00402162 | 00429009 | BEN LEGGETT | 604 E LAMPASAS | Lometa - Residential Wastewater | ($150.00) | 5/2/2002 |
| 00612096 | 00428977 | DANIEL C LIDSTER | 410 E MAIN ST | Lometa - Residential Wastewater | ($100.00) | 2/24/2012 |
| 00607863 | 00429032 | LOMETA EXPRESS LLC | 201 N 4TH ST | Lometa - Non-Residential Wastewater | ($200.00) | 4/20/2010 |
| 00609697 | 00429071 | HEATH LUSTY | 413 S 7TH ST | Lometa - Residential Wastewater | ($100.00) | 6/8/2011 |
| 00401708 | 00429169 | M & M MALDONADO | 402 S 4TH ST | Lometa - Non-Residential Wastewater | ($100.00) | 3/28/2001 |
| 00410501 | 00430889 | PAUL MAPLES | 602 W RAILWAY | Lometa - Residential Wastewater | ($100.00) | 11/19/2012 |
| 00410357 | 00430101 | MAXIMINO CASO MARTINES | 215 HWY 183 S | Lometa - Non-Residential Wastewater | ($100.00) | 2/7/2013 |

| Customer # | Account # | Name | Service Address | Billing Code | Deposits Balance | Date Received |
|---|---|---|---|---|---|---|
| 00607253 | 00428866 | ROJELIO MARTINEZ | 313 E LOCUST | Lometa - Residential Wastewater | ($100.00) | 11/20/2009 |
| 00410051 | 00429114 | WILLIAM HAROLD MASON | 219 S 6TH ST | Lometa - Non-Residential Wastewater | ($150.00) | 4/14/2006 |
| 00410485 | 00428450 | DIXIE MATHIS | 515 W MAIN | Lometa - Residential Wastewater | ($100.00) | 8/9/2006 |
| 00401496 | 00428952 | ARVIL MAYNARD | 901 W LAMPASAS ST | Lometa - Residential Wastewater | ($100.00) | 11/10/2000 |
| 00606852 | 00429247 | ALESIA (KIM) MCCORKLE | 528 N 7TH | Lometa - Residential Wastewater | ($100.00) | 1/18/2013 |
| 00609527 | 00428601 | CHERYL MCMAHAN | 120 S ESTER RESA | Lometa - Residential Wastewater | ($100.00) | 5/6/2011 |
| 00402127 | 00429563 | SHAWNA MEDDERS | 115 S 6TH | Lometa - Residential Wastewater | ($150.00) | 4/17/2002 |
| 00614691 | 00428728 | DUSTIN MEIER | 501 N 5TH | Lometa - Residential Wastewater | ($100.00) | 1/23/2013 |
| 00606832 | 00428798 | MIGUEL MELENDEZ | 618 E LIVE OAK ST | Lometa - Residential Wastewater | ($100.00) | 7/31/2009 |
| 00608586 | 00506174 | MILAM PROPERTIES | 100 E LAMPASAS ST | Lometa - Non-Residential Wastewater | ($200.00) | 8/26/2010 |
| 00404803 | 00428990 | JUAN MOLINA | 307 S 9TH ST | Lometa - Residential Wastewater | ($150.00) | 3/16/2011 |
| 00401344 | 00428772 | JOSE MORENO | 623 E MAGNOLIA | Lometa - Residential Wastewater | ($150.00) | 3/16/2011 |
| 00401597 | 00429056 | MIKE MYRICK | 106 S 4TH ST | Lometa - Residential Wastewater | ($175.00) | 9/28/2001 |
| 00401497 | 00428953 | NORTH AMERICAN COACH | 107 W MAIN ST | Lometa - Non-Residential Wastewater | ($100.00) | 6/12/2000 |
| 00610048 | 00429393 | DOMINIQUE NSABIMANA | 803 W LAMPASAS | Lometa - Residential Wastewater | ($100.00) | 7/14/2011 |
| 00401719 | 00429179 | ELVIS ONEAL | 208 N HIGH ST | Lometa - Residential Wastewater | ($100.00) | 12/19/2000 |
| 00403484 | 00429411 | TERESA PACHECO | 516 E MAIN ST | Lometa - Residential Wastewater | ($100.00) | 8/4/2006 |
| 00610163 | 00429012 | MARCUS PATTERSON | 310 E MULBERRY | Lometa - Residential Wastewater | ($100.00) | 2/4/2013 |
| 00401437 | 00442421 | MARIA PEREZ | 419 N 6TH ST | Lometa - Residential Wastewater | ($100.00) | 3/6/2008 |
| 00410075 | 00429079 | RONALD W PHELPS | 301 S 6TH | Lometa - Residential Wastewater | ($100.00) | 4/21/2006 |
| 00614427 | 00428643 | CHANTEE POTEAT | 232 N 8TH | Lometa - Residential Wastewater | ($100.00) | 9/12/2012 |
| 00614620 | 00428796 | MALOREE RAMOS | 605 E FM 581 | Lometa - Residential Wastewater | ($100.00) | 12/7/2012 |
| 00401577 | 00428824 | SAINT RANGEL | 100 W LAMPASAS | Lometa - Residential Wastewater | ($100.00) | 8/31/2010 |
| 00614592 | 00428928 | LORENZO RESA | 802 N 7TH ST | Lometa - Residential Wastewater | ($100.00) | 11/29/2012 |

| Customer # | Account # | Name | Service Address | Billing Code | Deposits Balance | Date Received |
|---|---|---|---|---|---|---|
| 00614855 | 00428806 | RITA RESA | 337 S 9TH ST | Lometa - Residential Wastewater | ($100.00) | 3/13/2013 |
| 00608351 | 00512934 | TINA RESA | 609 A STREET | Lometa - Residential Wastewater | ($100.00) | 7/16/2010 |
| 00608935 | 00429037 | PAUL ROBERTS | 114 E SENTERFITT | Lometa - Residential Wastewater | ($100.00) | 3/25/2013 |
| 00401357 | 00431660 | JOSE ALBERTO ROMERO | 404 E PECAN | Lometa - Residential Wastewater | ($100.00) | 7/13/2006 |
| 00606382 | 00428981 | BERTHA ROSALES | 506 S 3RD ST | Lometa - Residential Wastewater | ($100.00) | 7/15/2009 |
| 00605114 | 00428295 | CHRIS RUBIO | 205 W SENTERFITT | Lometa - Residential Wastewater | ($100.00) | 10/18/2010 |
| 00611858 | 00432194 | ISABEL RUFF | 507 E MAIN | Lometa - Residential Wastewater | ($100.00) | 2/6/2012 |
| 00608861 | 00514329 | MARIA SANTELLANO | 307 E LAMPASAS ST | Lometa - Residential Wastewater | ($100.00) | 3/9/2011 |
| 00615000 | 00432894 | EDWARD SEIFERT | 512 B E WALNUT | Lometa - Residential Wastewater | ($100.00) | 4/16/2013 |
| 00409603 | 00428777 | LEON F SHINELDECKER | 121 N 6TH ST | Lometa - Residential Wastewater | ($150.00) | 11/3/2005 |
| 00614359 | 00429249 | JULIUS SIMMONE | 222 ESTER RESA | Lometa - Residential Wastewater | ($100.00) | 8/21/2012 |
| 00610067 | 00428946 | JESSICA SKIPPER | 502 E MAIN | Lometa - Residential Wastewater | ($100.00) | 7/15/2011 |
| 00400852 | 00429003 | RONDA SKIPPER | 200 E MAIN | Lometa - Residential Wastewater | ($150.00) | 4/1/2005 |
| 00605042 | 00432647 | JESSICA SMAILUS | 517 S 3RD | Lometa - Residential Wastewater | ($100.00) | 5/15/2008 |
| 00400855 | 00428298 | LARRY SMART | 526 S 3RD | Lometa - Residential Wastewater | ($25.00) | 6/2/1999 |
| 00614978 | 00428913 | JAMES SMITH | 216 W LAMPASAS | Lometa - Residential Wastewater | ($100.00) | 4/10/2013 |
| 00607652 | 00428934 | FRED SNYDER SR | 101 S 4TH ST | Lometa - Residential Wastewater | ($100.00) | 3/11/2010 |
| 00401658 | 00429117 | JAMES STEWART | 539 S 3RD | Lometa - Residential Wastewater | ($50.00) | 6/3/1999 |
| 00409213 | 00429564 | JANIS STEWART | 520 W RAILWAY | Lometa - Residential Wastewater | ($150.00) | 6/29/2005 |
| 00411326 | 00428603 | LEE STITT | 716 W LAMPASAS | Lometa - Residential Wastewater | ($100.00) | 2/19/2007 |
| 00614609 | 00429410 | JAMES R TAYLOR | 517 N 7TH ST | Lometa - Residential Wastewater | ($100.00) | 12/4/2012 |
| 00608413 | 00513114 | AMADO TORRES | 412 E OAK ST | Lometa - Residential Wastewater | ($100.00) | 10/26/2011 |
| 00410085 | 00429168 | CRYSTAL TORRES | 309 S 6TH | Lometa - Residential Wastewater | ($100.00) | 4/26/2006 |
| 00401311 | 00428765 | LUIS TORRES | 519 E MAGNOLIA | Lometa - Residential Wastewater | ($10.00) | 6/3/1999 |

| Customer # | Account # | Name | Service Address | Billing Code | Deposits Balance | Date Received |
|---|---|---|---|---|---|---|
| 00401198 | 00428649 | CATHY TOWER | 248 N 8TH | Lometa - Residential Wastewater | ($50.00) | 6/3/1999 |
| 00405201 | 00429072 | JOHNNY TOWERTON | 415 E CHERRY | Lometa - Residential Wastewater | ($150.00) | 8/14/2003 |
| 00401418 | 00428872 | JOHN VASQUEZ | 611 N 6TH ST | Lometa - Residential Wastewater | ($25.00) | 6/7/1999 |
| 00401504 | 00428960 | MONICA VASQUEZ | 310 W MAIN ST | Lometa - Residential Wastewater | ($100.00) | 4/27/2000 |
| 00401436 | 00428889 | WAGON WHEEL RANCH | 602 E PECAN ST | Lometa - Non-Residential Wastewater | ($50.00) | 6/9/1999 |
| 00408796 | 00436329 | BRADLEY S WATSON | 17 MCANELLY LN | Lometa - Residential Wastewater | ($150.00) | 2/25/2005 |
| 00401588 | 00429047 | JERRY WEST | 319 S 9TH ST | Lometa - Residential Wastewater | ($25.00) | 6/7/1999 |
| 00609275 | 00428299 | JOHN WILLIAMS | 104 N 2ND | Lometa - Residential Wastewater | ($100.00) | 3/15/2011 |
| 00401563 | 00429021 | LEONARD WILLIAMS | 403 N 3RD ST | Lometa - Residential Wastewater | ($110.00) | 6/17/2010 |
| 00401701 | 00429162 | WILLIAMS HOUSE EMERGENCY | 201 W RAILWAY N | Lometa - Non-Residential Wastewater | ($75.00) | 6/1/1999 |
| 00614860 | 00428891 | PATRICK WINDHAM | 104 N 5TH ST | Lometa - Residential Wastewater | ($100.00) | 3/21/2013 |
| 00610168 | 00429045 | CURTIS WOODWARD | 504 E WALNUT | Lometa - Residential Wastewater | ($100.00) | 8/3/2011 |
| 00401576 | 00429035 | LOUIS ZILINSKI | 405 S 6TH ST | Lometa - Residential Wastewater | ($50.00) | 6/9/1999 |

# EXHIBIT C: CERTIFICATE OF ACCOUNT STATUS

Please refer to the following page for Exhibit C.

Certificate of Account Status - Letter of Good Standing



# TEXAS COMPTROLLER OF PUBLIC ACCOUNTS

SUSAN COMBS • COMPTROLLER • AUSTIN, TEXAS 78774

August 14, 2012

## CERTIFICATE OF ACCOUNT STATUS

THE STATE OF TEXAS
COUNTY OF TRAVIS

I, Susan Combs, Comptroller of Public Accounts of the State of Texas, DO HEREBY CERTIFY that according to the records of this office

**CORIX UTILITIES (TEXAS) INC.**

is, as of this date, in good standing with this office having no franchise tax reports or payments due at this time. This certificate is valid through the date that the next franchise tax report will be due May 15, 2013.

This certificate does not make a representation as to the status of the entity's registration, if any, with the Texas Secretary of State.

This certificate is valid for the purpose of conversion when the converted entity is subject to franchise tax as required by law. This certificate is not valid for any other filing with the Texas Secretary of State.

GIVEN UNDER MY HAND AND
SEAL OF OFFICE in the City of
Austin, this 14th day of
August 2012 A.D.

Susan Combs
Texas Comptroller

Taxpayer number: 32048021474
File number: 0801600117 ← charter No.

Form 05-304 (Rev. 12-07/17)

# EXHIBIT D: EXPERIENCE AND QUALIFICATIONS

## *Corix Utilities (Texas) Inc.*

Corix Utilities (Texas) Inc. (the "applicant") is a newly formed, wholly-owned subsidiary of Corix Infrastructure (US) Inc. The Company was established to acquire the assets and operations of 18 small utility systems from LCRA and to undertake additional utility operations and activities in the State of Texas. On July 1, 2012, Corix Utilities (Texas) Inc. assumed day-to-day operations, maintenance and asset management responsibility for the 18 utility systems subject to this transaction under contract with LCRA. Corix Utilities (Texas) Inc. has hired many of the utility operating staff from LCRA and so there has not been loss of system knowledge arising from the transition of operations. Corix Utilities (Texas) Inc. has been providing high quality operation, maintenance and asset management services, as well as customer care and billing services, on an on-going basis. Corix Utilities (Texas) Inc. is part of the Corix Group which provides utility services to small and medium sized communities across North America. As such, Corix Utilities (Texas) Inc. has access to organizational support and technical expertise in order to provide a continuing level of quality services.

## *Corix Group*

Corix is a recognized leader in the implementation of sustainable water, wastewater and energy infrastructure solutions for communities across North America. Corix designs, supplies, builds, installs, finances and manages utility infrastructure on behalf of municipal, institutional, military and private-sector customers.

Corix currently has over 2,500 employees, in three business groups, dedicated to providing high quality utilities, services and products across North America. Combined with its subsidiaries, Corix brings 70 years of experience, financial stability and cost effective, efficient approaches to operating and maintaining community utility infrastructure. The combination of operations and maintenance expertise, in-house management capabilities, financial resources, and vertical integration of products, systems and services all together guarantees sustainable solutions to almost any multi-utility project. The Corix team also offers a wide range of professional, qualified operators and technicians in all fields of sustainable energy, potable and non-potable water and wastewater. With its national operational governance, technical supervision and training, Corix assures high quality operational performance and safety in the systems it operates.

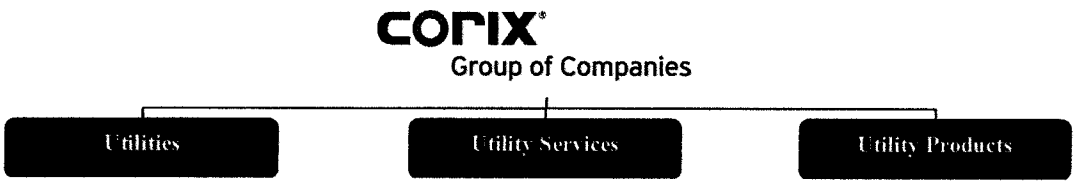
Corix has a history of stable revenue generation and operating cash flow. We have the benefits of strong management, focused governance, and financial conservatism that have served us well over the past decade. Corix has a diversified revenue base across various regions in the United States and Canada and across three core business divisions: utility operations, utility services, and utility products.

This integrated business model allows Corix to bring unique benefits to our utility operations by leveraging our in-house utility services and products, and manufacturing and control solutions capacity. In the United States, Corix now operates in 30 States, *(refer map following)*, with large operations in southern California, on the East Coast, and in the Midwest. Our Corix Water Products Group also maintains a network of branch offices in California. "Corix Utility" operations currently has over 500 staff in the United States serving over 350,000 people with water, wastewater and multi-utility systems. We operate utilities in 18 States, through seven regional offices and over 80 subsidiary companies. On March 30, 2012 Corix also announced its agreement to acquire 20 small water and wastewater utility systems in Central Texas from the Lower Colorado River Authority. These acquisitions significantly bolstered our water and wastewater holdings and overall institutional capacity.

## *Lines of Business*

Corix has a unique "economies of scope" business model that integrates three distinct but highly complementary lines of business: Utilities, Utility Services and Utility Products as noted in the chart below:

## Operational Focus and Expertise




**Corix Utilities**

Corix focus is placed on providing utility ownership and management across multiple utilities at the local level. Utilities under management by Corix include water treatment and distribution, wastewater collection and treatment, combined heat & power (CHP) plants & heat distribution systems, natural gas and electricity distribution, and chilled water plants and distribution systems.

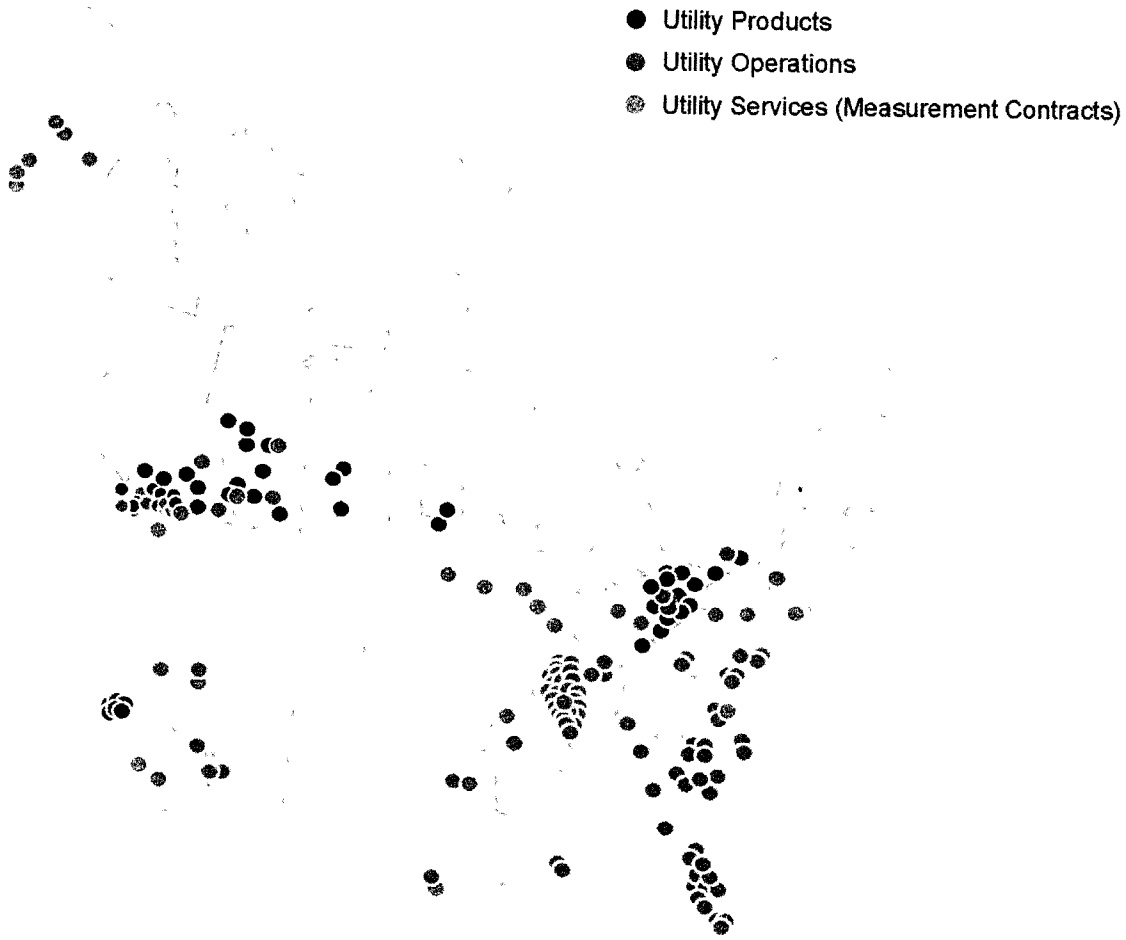
**Utility Services**

Corix provides measurement and metering services to municipalities, utilities, and cooperatives throughout North America. The services provided include automated meter reading deployment, maintenance and support, meter changes and retrofits, contract meter reading, code compliance, utility field installation services and other special field services. Corix also provides water & wastewater contract operations and turnkey design-build water systems and fire hydrant leak detection, maintenance, and repair.

**Utility Products**

Corix operates 38 utility products branches across North America, distributing a full line of pipes, valves, meters, pumps, irrigation equipment, service, and repair products and other components that are used to transport clean water and wastewater. Corix also serves the oil, gas, and industrial products sector by providing measurement and flow control equipment.

### *Corix Operational Locations Map*




### *Key Staff*

The following offers a brief overview of Corix Utilities (Texas) Inc. personnel qualifications and experience (also refer to the staff organizational chart in *Exhibit E):*

- Kevin G. Meagher - Vice President and Chief Operating Officer - Corix Utilities (US) Inc.

  Kevin Meagher is Vice President and Chief Operating Officer for Corix Utilities (US) Inc. Drawing on over 30 years of utility experience, Kevin is responsible for the overall US operations of Corix Utilities, Oklahoma, Texas and Infrastructure (US) Inc. with more than 1,100 employees and currently over twenty utility and municipal projects that continue to expand. Under Kevin's leadership and guidance, Corix Utilities (US) has evolved to become one of the leading Infrastructure, Automated Meter Installation/Automated Meter Reading (AMI/AMR) project management and services contractors in the country. Kevin has played a major role in the development of Corix's systems and processes while continuing to build on the founding principles of employee safety, high quality value added services and customer satisfaction. He has also played a key role in the transition and integration of the Oklahoma University utility project.

- Edward T. Yanoshita, P.Eng., JD, General Manager, Corix Utilities (Texas) Inc.

  Edward Yanoshita is a professional engineer and also a lawyer. Prior to attending law school where he earned a business law degree, Ed had a 25 year career in business, engineering and technical sales of process equipment, specializing in water and wastewater treatment equipment. Ed is currently utilizing his range of skills and experience overseeing the transition of multi-utility operations to Corix in the southwest US.

- R. Darrin Barker, MBA, Utilities Operations Manager, Corix Utilities (Texas) Inc.

  Darrin Barker is the Utility Operations Manager for Corix in Texas. He was hired by Corix in July of 2012. Prior to that, Darrin was the Operations Manager for LCRA's water and wastewater utilities. Following three years as City Manager for the City of San Saba, Darrin was employed by LCRA where he remained for 18 years. Darrin has also served as a rate design analyst and management analyst for the Public Utility Commission of Texas from 1989 to 1992. Darrin has a BSc. in Agriculture Economics and MBA (Texas A&M University).

- Gloria L. Broussard, Senior Environmental Coordinator, Corix Utilities (Texas) Inc,

  Gloria Broussard has been involved in the water and wastewater industry since 1974, holding Water Operator, Lab Analyst, Laboratory Supervisor, Wastewater Superintendent and Water Quality (pretreatment program) Administrator positions. With 11 years experience as a Senior Environmental Coordinator, and a Wastewater Operations License, Gloria is responsible for the regulatory compliance of water and wastewater facilities at Corix, including all regulatory reporting to state agencies such as the Texas Commission on Environmental Quality, Texas Water Development Board, and local groundwater conservation districts. Current duties at Corix also involve addressing public water quality enquiries and training water and wastewater operators on new regulations.

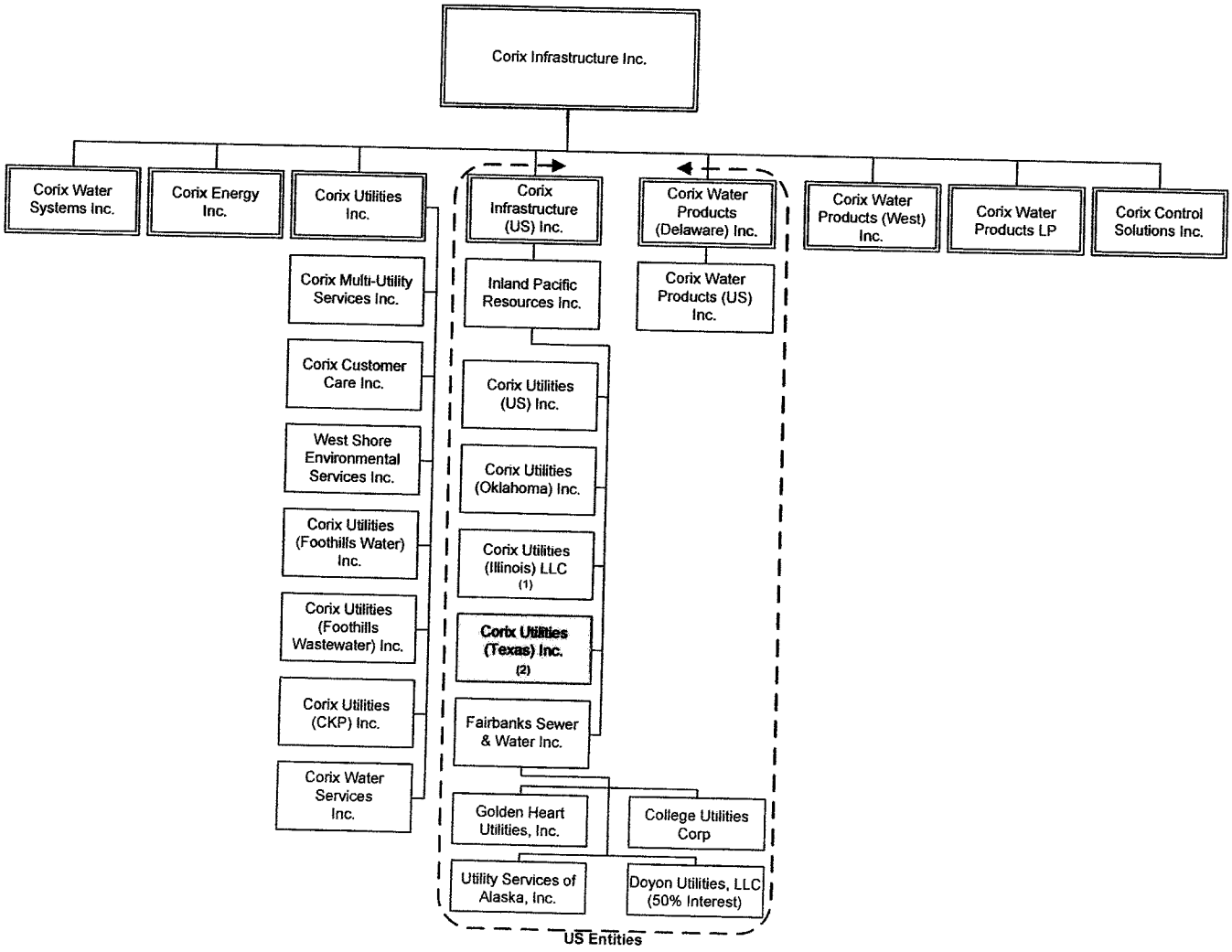
- Gregg Goldsmith, Supervisor, Corix Utilities (Texas) Inc.

  Gregg Goldsmith has both Surface Water License and B Wastewater license. Gregg began his water and wastewater career in1992 at LBJ MUD in Horseshoe Bay, working in all areas of field and plant operations. In 1999, Gregg accepted a job offer for employment with the LCRA to operate the Uplands water system in Bee Caves. In 2000 he was promoted to Area Supervisor for the Hill Country Region. He began his position with Corix in 2012 as a Hill Country Supervisor, overseeing numerous surface and ground water plants, water systems, wastewater plants and a composting facility.

- Jason Murry, Supervisor, Corix Utilities (Texas) Inc.

  Jason Murry is currently Operations Supervisor for Corix Utilities (Texas) Inc. for the Southeast Region which includes water and wastewater utility systems in the Bastrop, Camp Swift, Alleyton and Matagorda areas. Jason has more than 10 years supervisory experience in the operation, repair and construction of water/wastewater distribution systems, leak repair and new service connections/extensions.

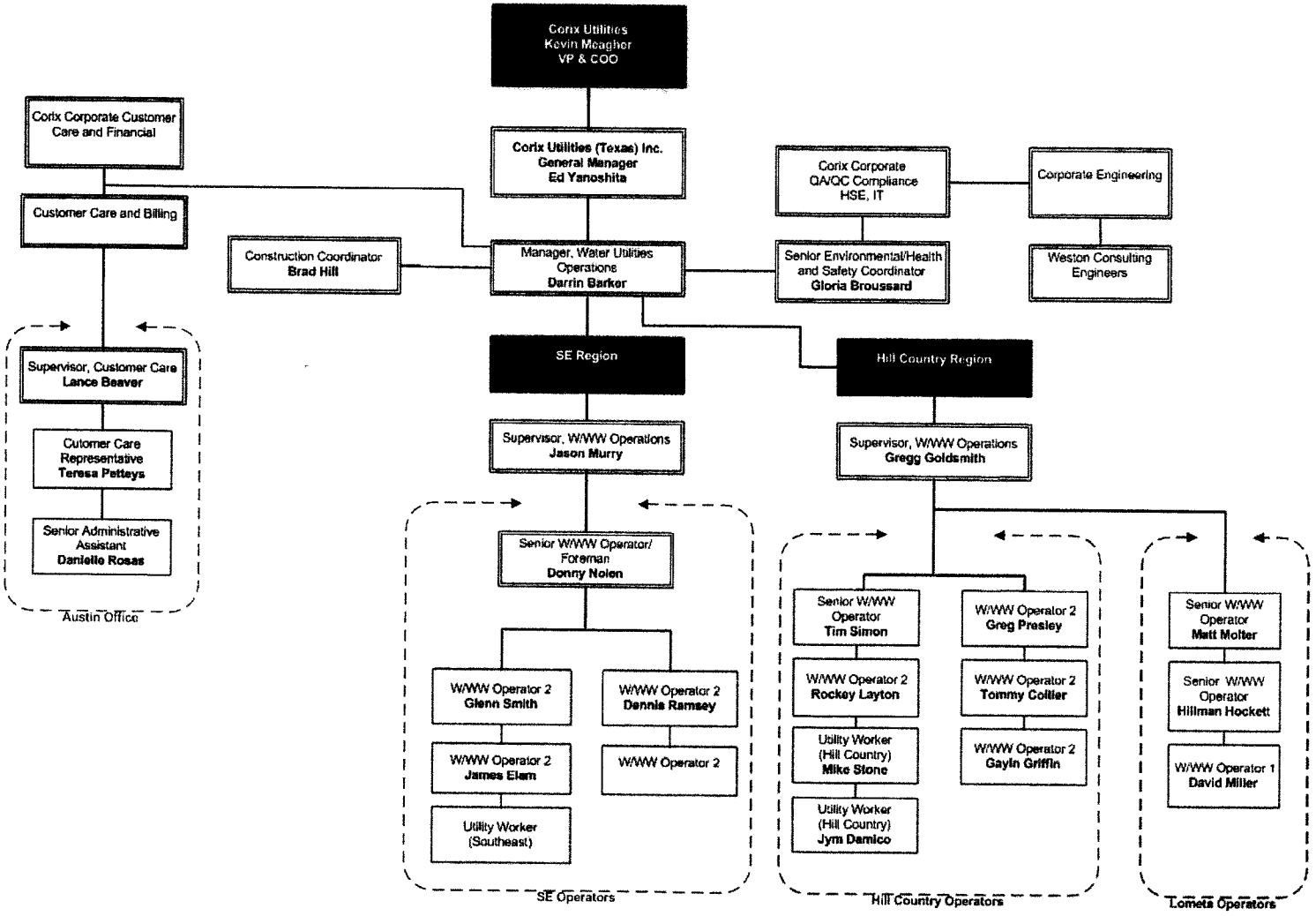
# EXHIBIT E: CORIX ORGANIZATIONAL CHART




**Corix Corporate Organizational Chart**
Note: Reflects material operating subsidiaries only and is not the full or legal organization structure. December 2012

Below is an overview of Corix Utilities (Texas) Inc. and staff structure.

**CORIX UTILITIES (TEXAS) INC.**
**Organizational Structure**



# EXHIBIT F: UTILITY SERVICE QUALITY

Please refer to the following page for Exhibit F for Corix's Operating Plan and Quality Management Plan.

# CORIX OPERATING PLAN AND QUALITY MANAGEMENT PLAN

FOR

LOWER COLORADO RIVER AUTHORITY

| | |
|---|---|
| **SUBMITTED TO:** | **LOWER COLORADO RIVER AUTHORITY**<br>3700 LAKE AUSTIN BOULEVARD<br>AUSTIN, TX 78703<br><br>ATTENTION: **MONICA MASTERS**<br>TEL: 512.473.3541<br>EMAIL: Monica.Masters@lcra.org |
| **SUBMITTED BY:** | **CORIX UTILITIES (TEXAS) INC.**<br>6836 BEE CAVES ROAD, SUITE 209<br>AUSTIN, TX 78746<br><br>CONTACT: **ED YANOSHITA**<br>GENERAL MANAGER<br>OFFICE: 512 306 4003<br>CELL: 512 659 2942<br>EMAIL: ed.yanoshita@corix.com |
| **DATE:** | **DECEMBER 2012** |

CORIX® Utilities

Building a World of Sustainable Communities

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# Operations and Maintenance Plan

## 1 Water and Wastewater Operations and Maintenance Plan

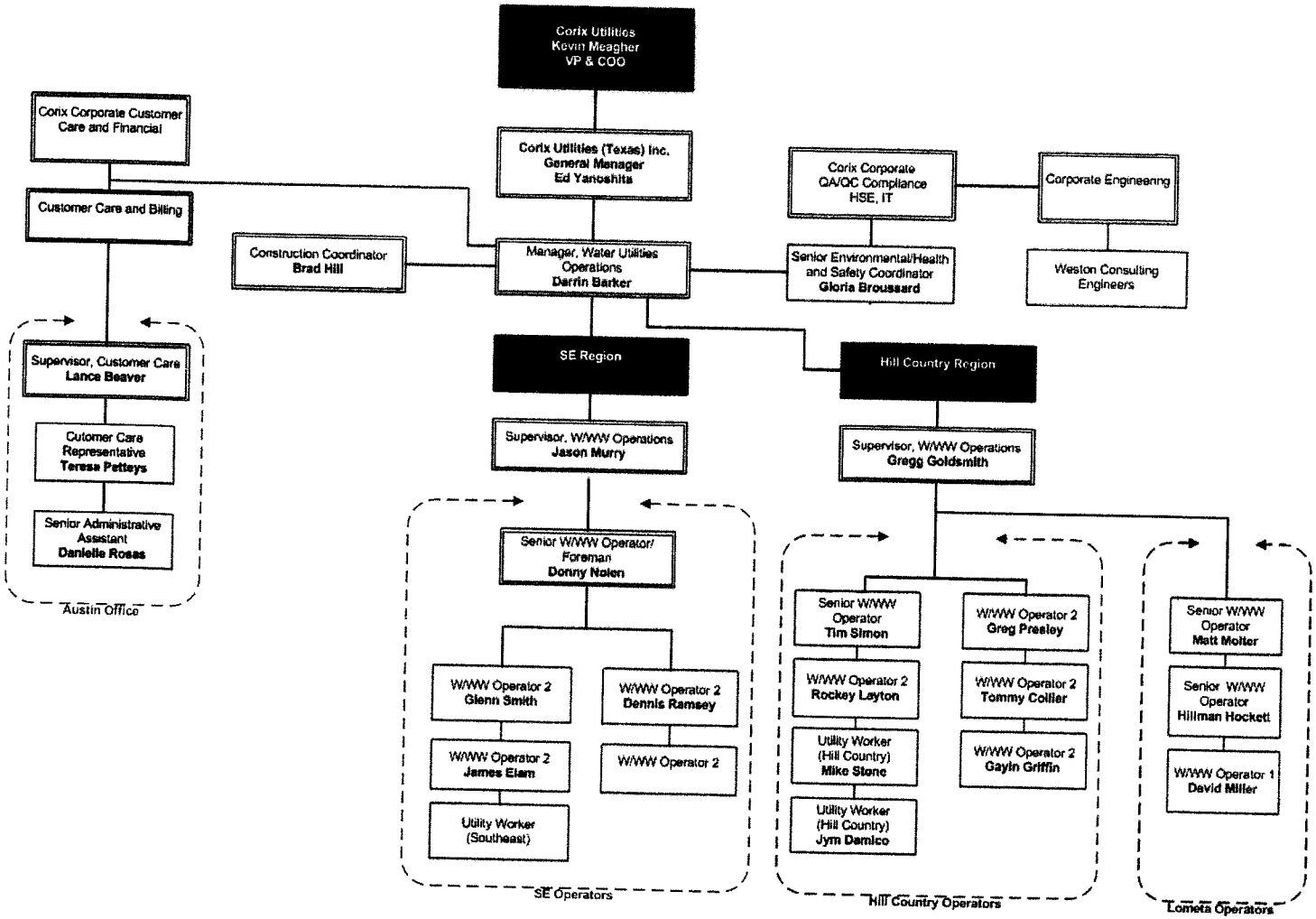
Corix will maintain or increase system performance and ensure the provision of reliable, cost effective, and compliant services over the term of the contract. Our approach includes strategies that guarantee a significant increase in value of services provided.

### 1.1 Staffing Plan that Optimizes Cross Training and Certification

Corix owns and operates both regulated and non-regulated utilities using a cost of service tariff approach. Corix has the skill sets to operate the water treatment and distribution, wastewater treatment and collection systems in Central Texas.

The multi-utility operations will have employees located permanently up and down the Colorado River Basin so that they are available to respond and support the O&M of the utility systems with many cross trained so as to have capacity to provide services on all of the systems. Corix may have supplemental on-site labor through contractors working under the direction of the Manager of Water Utilities Operations.

Figure 1: Corix Utilities Staffing Organization Chart



## 1.2 PROCESS OPTIMIZATION OVERVIEW

Corix's primary process control objective is to consistently meet or exceed current standards for quality imposed by Federal and State regulatory agencies. We will meet this objective by using the following established process control strategies:

- **Process Control Strategy** - All process control strategies will be in written format. Monitoring, control parameters, and target values will be established for each process and each utility system will be electronically recorded.
- **Process Data Management** - All data will be maintained electronically.
- **Maintenance Management** - As part of the system inventory, Corix will develop a Master Equipment List (Asset List) and maintain it within the MIS. Problems and trends that cause failures can be tracked and responded to accordingly.
- **Information** - Information will be collected, this data can be used to develop measurement tools such as Key Performance Indicators (KPI's) to determine the effectiveness of the process.

Corix will optimize utility processes by developing an operating plan for each utility which will include:

- Standard Operating Procedures (SOPs)
- Trend Charts for Process Control

To ensure efficient operation of the water and wastewater systems and compliance with regulatory requirements, Corix has established process optimization goals for the LCRA facilities. Table 1 presents these goals.

**Table 1: Process Optimization Actions**

| FUNCTION | IMPROVEMENT ACTION(S) |
|---|---|
| **Compliance** | Comply with all federal, state, and local water quality requirements: 100% compliance, 100% of the time. |
| **Reliability and Redundancy** | Ensure redundancy of critical processes and reliability of all electromechanical equipment by implementing comprehensive predictive and process maintenance programs. |
| **Chemical** | Develop Chemical Management Plan to track and optimize treatment chemical usage. Implement necessary safety improvements and complete a Process Safety Plan. |
| **Energy** | Reduce pumping and process energy demand by tracking usage and optimizing pump/motor efficiencies and hydraulic profile especially at water pump stations and lift stations. Use variable speed drive equipment where possible to reduce electrical usage. Develop measurement system to identify overloaded components and insulators breaking down and replacement plans to reduce system losses through these replacements. |
| **O&M Cost** | Reduce O&M cost through best management practices of labor and resources. |

| FUNCTION | IMPROVEMENT ACTION(S) |
|---|---|
| **Staffing** | Train and utilize qualified existing staff for available positions to the full benefit of the utilities.<br>Cross-train staff for multiple functions. |
| **Conservation** | Strive for less than 10% unaccounted for water (UAW).<br>Strive for less than 15% wastewater inflow & Infiltration (I&I) |

## 1.3 STANDARD OPERATING PROCEDURES

These SOPs will be based on operating the utility at an optimum performance level, and therefore cannot be fully developed in advance. To the extent that there are existing SOPs, these will serve as the starting point for Corix's review and establishment of appropriate SOPs. Typically, the O&M Manual is developed at three levels - the individual component level, the systems level, and the utility level. The component level data, which is provided by manufacturers and equipment vendors, will be assembled and organized in a consistent, indexed format for easy reference. Upon reviewing this information on equipment and systems and developing a basic understanding of their operation, as well as studying the LCRA facility designs, our operations specialists will extract pertinent data developed by the various disciplines (e.g., operating limits, warnings, notes) and integrate them into an overall, system-wide and utility-wide O&M Manual.

The purpose of the O&M Manual is to consolidate data on the background, principles, and purpose of each process in the facilities and utility. The manual will provide the staff with a clear understanding of the utility facilities goals and process objectives, and will serve as a single reference for locating all the information and approaches necessary to successfully operate the utilities.

For the management team, the O&M Manual will provide a single document to record and list the process goals, objectives, and basic operating parameters for each facility process.

The facility's O&M Manual includes SOPs, which will be updated annually if necessary or whenever the process or equipment is modified or changed. We will retain the SOPs electronically within our secure data center to provide ready access for reference, field use, and updating.

SOPs are the backbone of any facility operation strategy. Operators create process SOPs to explain the operations of an entire process. Equipment SOPs detail the operation of a single piece of equipment, such as a pump. Whether the SOP is for a process or for a piece of equipment, the SOP is a basic guideline to be followed to ensure proper operation. SOPs are written in a form that reduces each step of the process or equipment operation to action words or phrases. A secondary use of SOPs includes training a new operator on the proper operation of the process or equipment. SOPs are not intended to replace well-organized and prepared training programs used for new operators.

SOPs include instructive guidelines for start-up, shutdown, and emergency operations. Each SOP includes safety notes, warnings, and cautions. For clarity and to facilitate comprehension, SOPs also include tables, diagrams, and drawings as appropriate. Corix will refine and expand current SOPs as needed for all aspects of the LCRA facilities.

SOPs provide operators with a quick reference to verify proper procedures. They will be placed in key areas to be easily accessible.

SOPs are useful in training new operators to operate specific pieces of equipment or perform testing procedures and in reminding operators of the specific procedures to follow before they start a task that they may not have performed recently.

Table 2: Dependability and Operation & Maintenance of WTS and WDS Utilities

| Water Treatment and Distribution System (WTS & WDS) Standard Operating Procedures |
|---|
| 1. Water operators inspect critical equipment and facilities on a recurring basis. |
| 2. Routine monitoring of water system pressures to immediately detect any pressure drops that would indicate a distribution system leak. |
| 3. Operate all water treatment filters, chemical systems and related equipment according to the operating plan. |
| 4. Routine monitoring of chlorine residuals in the system. |
| 5. Routine flushing of hydrants ensures proper functioning of valves and adequate flows. |
| 6. Periodic exercising of all valves in the water distribution system. |
| 7. Continuous monitoring of pump operating conditions. Pumps that exhibit over-heating, seal failures or leakage or high vibrations are pulled off line and repaired or replaced. |
| 8. Circulating pumps are regularly serviced and inspected. |
| 9. Water meters are used to monitor water usage and loss in the utility systems. |
| 10. Water systems maintained by Corix will strive to have built in redundancy. |
| 11. Use of MIS to record routine maintenance and testing in accordance with the published maintenance program. |
| 12. An inventory of water related repair parts is maintained allowing timely response to problem situations. |
| 13. Maintain vendor accounts with parts suppliers both statewide and regionally. |
| 14. All water distribution operators are licensed by the Texas Commission on Environmental Quality (TCEQ) and part of their continuing licensing is obtaining continuing education credits. |
| 15. Corix may use subcontractors in Texas as augmentation of the workforce when needed. |

Table 3: Dependability and Operation & Maintenance of WWTS and WWCS Utilities

| Wastewater Treatment and Collections System (WWTS & WWCS) Standard Operating Procedures |
|---|
| 1. Wastewater operators inspect critical equipment and facilities on a recurring basis. |
| 2. Routine monitoring of wastewater system pressures where force mains are used to immediately detect any backups that would indicate a collection system capacity issue or blockage within the sewer. |
| 3. Operate the treatment plants, residual handling facilities and related equipment according to the operating plan |
| 4. Periodic exercising of all valves in the wastewater collection system. |
| 5. Continuous monitoring of treatment and lift station pumps operating conditions. Treatment and lift station pumps that exhibit over-heating, seal failures or leakage or high vibration are pulled off line and repaired. |
| 6. Use SCADA, hour meters and data loggers to monitor the efficiency of treatment and lift station pumps and related equipment. |
| 7. Inflow and infiltration studies will be used to monitor water inflow into the wastewater treatment plants and collection system. |
| 8. Use of MIS to record routine maintenance and testing in accordance with the published maintenance program. |
| 9. An inventory of wastewater related repair parts is maintained allowing timely response to problem situations. |
| 10. Maintain vendor accounts with parts suppliers both statewide and regionally. |
| 11. All wastewater treatment and collection system operators are licensed by the TCEQ and part of their continuing licensing is obtaining continuing education credits. |
| 12. Corix may use subcontractors in Texas as augmentation of the workforce when needed. |

## 1.4 Trend Charts for Process Control

Trend charts will be prepared which will allow operators to follow the trends in these parameters and anticipate what is happening in the unit process. This allows operators to be proactive to operational problems rather than reactive when the process is in trouble. Corix staff will develop trend charts for all relevant operational parameters. Typical trend chart parameters include power consumption, raw water quality, treated water quality, plant loading, and chemical usage. Control limits will be established with identified links to the related SOP.

## 1.5 New Meter Installations and Replacements

Corix will install new meters as requests for new service are processed and payment for service received.

The new meters will be installed in accordance with AWWA standards. However, meters will be continually added or removed from the system as needed. Corix will work with the LCRA to

optimize the meter reading system as well as use that information to enhance conservation efforts.

## 1.6 Comprehensive Management Information System (MIS)

Corix proposes to use a computer software system to maximize quality of the O&M of the LCRA utilities.

Our goals for implementation of the MIS work order program include:

- Install a full-featured MIS that is easy to use
- Maintain the integrity of the existing equipment data for future use
- Integrate with other plant functions such as operations, inventory, laboratory and administration
- Enable access to plant operations and MIS data

As part of this implementation, we will gather any additional information which will be necessary in order to achieve maximum system benefit. The MIS will have the capability, at a minimum, of:

- Maintaining repair records for each piece of Master Equipment List (MEL) equipment within the utility
- Scheduling and monitoring Preventive Maintenance (PM) activities
- Issuing work orders and purchase order requisitions
- Maintaining spare parts inventories
- Tracking repair warrantees
- Issuing exception reports, equipment status reports, and equipment repair priority reports

The MIS will provide concise, easy-to-read equipment reports that provide specific information based on manufacturer, type, location, or operating system and subsystem. This information can include life cycle costs, maintenance frequencies and histories, and status reports on all maintenance functions. Reports can focus on issues such as job completion, work order status, and manpower utilization.

The operation and maintenance staff will be responsible for obtaining the following kinds of data for entry in the MIS:

- All existing nameplate data and other pertinent information such as in-service date, and equipment specifications for each piece of equipment
- Equipment identification number, equipment description (name), and location.

The MIS will be maintained through the corporate Information Technology (IT) office. The database will be populated during the O&M phase of the project as part of the system-wide surveys and assessments and will continue until all major elements of the utilities are incorporated once the users are trained on the program. The database will be continuously updated.

## 1.7 Water Treatment and Distribution System Operations

Corix provides operations, maintenance, and management for all components of the water treatment and distribution systems including chlorine dosing systems, pumps, valves, existing and future meters, control systems, air release valves, fire hydrants, cathodic protection systems, and all piping. Corix has responsibility for the system, up to the point of demarcation. Corix will maintain volume and pressure in the system to meet required codes.

The first step to developing a strategy to operate the water facilities will be to evaluate the current status of operations. Benefits of our strategy are highlighted in Table 4. Maintenance needs will be catalogued and prioritized at all facilities according to the following requirements:

A. Maintaining required water quality

B. Maintaining service to LCRA customers

C. Cost

Table 4: Operational & Maintenance Strategy for Water Treatment and Distribution System

| Operational Conditions | Corix | Benefits |
|---|---|---|
| **Operator Quality Assurance/Quality Control (QA/QC)** | Perform distribution system testing. Perform lab functions at the treatment facilities. Focused QA/QC targets; targeted to process optimization and regulatory scrutiny. | Lower operating costs and complete adherence to regulatory requirements imposed by Federal and State agencies. |
| **Preventive Maintenance (PM) Scheduling** | Condition-based scheduling of PM tasks. | Lower life-cycle equipment costs; increased reliability of water system. |
| **Predictive Maintenance (PDM)** | Use predictive maintenance schedule to preclude unplanned failure of critical equipment | Establish baseline equipment condition and set up proper PM. |
| **Inventory Management** | Automated order point and expense analysis. | Lower inventory costs; increased reliability of critical systems. |
| **Water Balance Calculation** | Conduct annual water balance for the water distribution system. | Assess water loss and identify sources. |
| **Remote Monitoring** | Evaluate existing monitoring system<br>Evaluate remote terminal unit at critical locations. | Optimize operations and detect problems proactively |

Corix will staff the water treatment and distribution systems 5 days a week. Additionally these employees will be available for emergency call out 24/7. As part of our standard approach to water distribution system maintenance, we will:

- Respond to trouble calls 24/7 to investigate distributions.
- Track the locations of service calls and high-maintenance areas to prioritize repair and PM activities on the systems.

## 1.8 Wastewater Treatment and Collection Operations

Corix will be operating and maintaining the wastewater treatment and collection systems. The Manager, Utility Operations will guide the efforts of the staff. Corix will apply the operational strategies shown in Table 5. The wastewater operations plan will emphasize:

- Implementation of proven, documented systems for process control and optimization. Documentation of strategies and procedures.
- Electrical conservation to ensure cost effective operation in compliance with standards and regulations.
- Optimization of existing processes to ensure compliance in the short term.
- Working with engineers and construction contractors to commission new equipment and transition to new processes.

**Table 5: Operational & Maintenance Strategies of Wastewater Collection**

| Operational Conditions | Corix | Benefits |
|---|---|---|
| **Operator Quality Assurance/Quality Control (QA/QC)** | Perform lab functions at treatment plants. Focused QA/QC targets; targeted to process optimization and regulatory scrutiny. | Lower operating costs, and complete adherence to regulatory requirements imposed by Federal and State agencies. |
| **Preventive Maintenance (PM) Scheduling** | Condition-based scheduling of PM tasks. | Lower life-cycle equipment costs; increased reliability of wastewater collection systems |
| **Predictive Maintenance (PDM)** | Pump hour meter monitoring.<br>Use PDM schedule to preclude unplanned failure of critical equipment. | Establish baseline equipment condition and set up proper PM. |
| **Inventory Management** | Automated order point and expense analysis. | Lower inventory costs; increased reliability of critical systems. |
| **I/I Investigation** | Identify trouble areas in the collection system in need of immediate attention as well as sources of likely infiltration. | Periodically assess collection system integrity, and mitigate stoppages as well as infiltration of the system. |
| **Remote Monitoring** | Evaluate existing monitoring system. | Optimize operations and detect problems proactively. |

As part of our standard approach to wastewater treatment and collection system maintenance, we will:

- Respond to trouble calls 24/7 to investigate and clear blockages and plant alarms.
- Investigate all sewer main backups and take the necessary steps to alleviate the problem.
- Track the locations of service calls and high-maintenance areas to prioritize repair and PM activities on the systems.
- Temporary connections, if required, will be provided in a safe manner in the most timely and most cost effective manner as determined by the operator.

## 2 Preventive Maintenance

Corix's maintenance program has the following objectives:

- Maintain the facilities and systems to the highest standard of care to protect against deterioration.
- Maintain equipment and appurtenances in a manner that maximizes operational life and endeavor to prevent unexpected repairs due to untimely failure.
- Provide timely and cost-effective response to both typical and emergency conditions.
- Ensure system performance through equipment reliability, uninterrupted service, and maximum uptime.
- Protect capital investments.
- Ensure the safety of personnel and equipment.
- Enforce equipment warranties.
- Control overall maintenance costs by reducing corrective and emergency/reactive maintenance costs.
- Corix will utilize the MIS to monitor the condition of the facilities and schedule routine inspections, maintenance, and repairs. The MIS will allow us to track performance, service history, and repair costs. The data generated will be used to evaluate the need to replace or rehabilitate any portion of the system.

The maintenance strategy for equipment will be based on three levels of maintenance:

- **Preventive Maintenance (PM)** is defined as routine and/or repetitive activities required or recommended by the equipment or facility manufacturer or Corix to maximize the service life and reliability of the system components. Proper PM is the all-important first line of defense against deterioration and failure.
- **Corrective Maintenance (CM)** encompasses activities required for operational continuity, safety, and performance. The status of CM work orders will be maintained in the MIS and work will be scheduled to the extent possible with groups of equipment to save time and reduce labor requirements. Upon completion of Corix's maintenance evaluation, critical spare parts will be stocked onsite or at a Corix operations warehouse to ensure that downtime is minimal. Each type of maintenance will be scheduled and its completion monitored using the MIS.

- **Predictive Maintenance (PDM)** virtually eliminates unexpected equipment failure because of normal wear. PDM activities will range from simple, periodic inspections to sophisticated condition measurements. The baseline condition for each critical piece of equipment will be identified and the equipment will be monitored against selected critical performance criteria.

The following outlines the basic components of Corix's maintenance approach. It provides an overview of our plan for maintenance as well as the implementation of the MIS.

## 2.1 Preventive Maintenance Plan (PM)

Corix's approach to minor (routine) maintenance focuses on PM. Proper PM decreases the total lifecycle cost of equipment or facilities. The lifecycle cost of equipment and facilities that have been properly maintained is a fraction of that which has been poorly maintained.

Corix will create a Master Equipment List (MEL). All equipment identified in the MEL will be assigned a unique asset number and location code and entered into the MIS. Once this is completed, the detailed nameplate data will be entered for each asset. We will then enter PM tasks and frequencies.

Specific tasks, frequencies and PM procedures will be based on the manufacturer's O&M manual, and standards developed by Corix.

Each PM task will be assigned an identification number that will be unique to the task being performed. This unique PM task will describe the procedure needed, tools required, materials needed, and all safety requirements.

Each individual PM task will contain the date of the last revision, drawing reference numbers, O&M manual number, and location as well as any other documents that relate to the operation or maintenance of the equipment requiring maintenance.

## 2.2 Corrective Maintenance Plan (CM)

CM is defined as those non-repetitive activities necessary to correct a malfunction or replace a failing component of the facilities for operational continuity, safety, and performance. Planned CM is the result of proactive PM and PDM processes that identify the equipment's needs before a failure occurs. There are many reasons why planned CM is preferred to unplanned. For example, it provides:

- Increased process reliance due to decreased critical equipment failure.
- Reduced manpower costs due to improved job planning and scheduling.
- Reduced overall repair costs due to proactive repairs of minor issues before they cause more equipment damage.
- Reduced capital improvement costs due to increased equipment life spans.

## 2.3 Predictive Maintenance Plan (PDM)

Corix proposes to provide a level of PDM services that can considerably reduce unexpected equipment failure due to normal "wear and tear" or improper repair. The benefits of PDM include:

- Increased process reliability due to decreased equipment failure.
- Improved job planning and scheduling.
- Reduced overall repair costs.
- Reduced capital improvement costs.

Corix will establish a baseline condition for each critical piece of equipment identified, and periodically monitor the equipment for critical performance criteria. The information provided on the following pages defines these elements in detail.

As described, we will perform the initial evaluation to establish equipment condition and provide specific, detailed recommendations for any remedial repair needed. Monitoring will be performed, with additional performance criteria added, and at a frequency that will be dictated by the condition of equipment as monitoring occurs. In every case, this approach will improve the predictability of equipment performance and quality of service.

## 2.4 Initial Equipment Condition Evaluation

The equipment condition evaluation will establish a baseline for PDM service. It will define what actions need to be taken immediately to avoid immediate and expensive failure, as well as prescribe when monitoring levels must be adjusted to protect equipment. The results will be entered into the MIS for tracking and modeling.

To provide a continual baseline for all pieces of equipment at the plants, special inspections will be conducted similar to the initial evaluations performed. These follow-up inspections are recommended whenever a new piece of equipment is installed or when existing equipment is overhauled. This policy has the advantage of identifying equipment or facility repair problems early in the warranty periods. Alignment inspection may be provided for the initial evaluation as a method to pinpoint vibration or cause of premature bearing/seal failure.

All data, measurements, remarks, and conditions for each piece of equipment will be entered into the MIS as field data or text (as appropriate). Equipment needing repairs will automatically be assigned a work order with the appropriate priority level.

Run time meters can be installed and monitored in order to generate more precise data on equipment operation between monitoring periods. Data can be collected on run time and compared with readings on equipment; this information can also be useful in PM programs.

## 2.5 The Asset Guardian (CMMS)

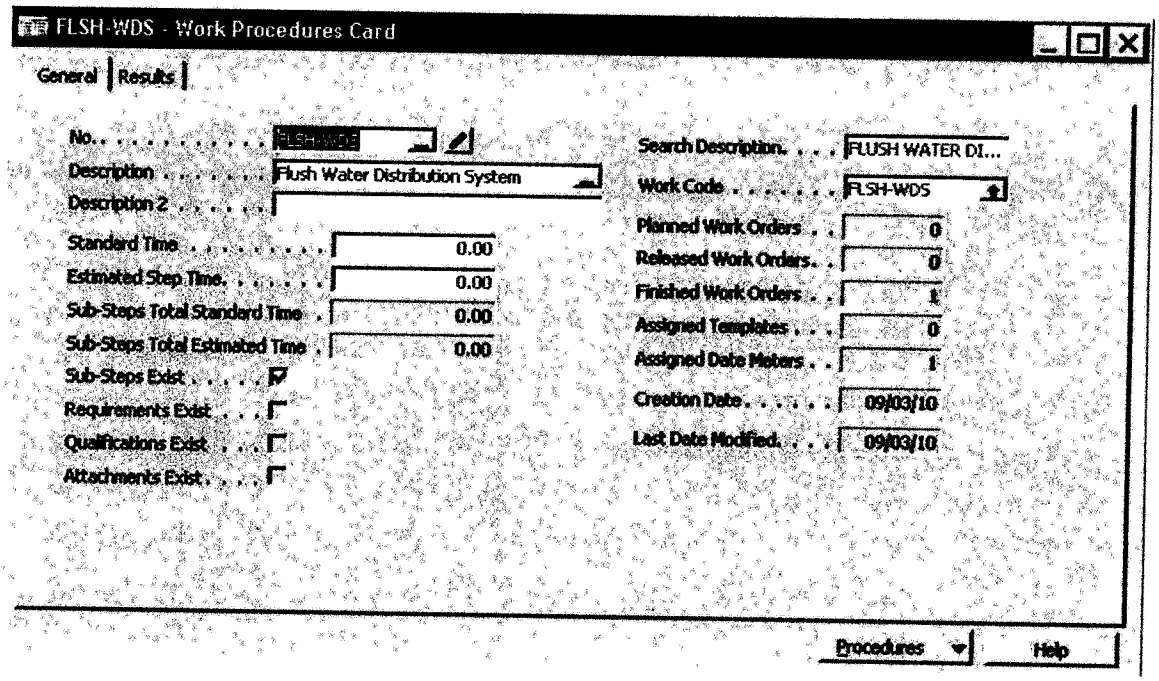
Corix has a wealth of experience with Asset Management and preventive maintenance solutions, including recent experience with projects such as the US Army, Fairbanks Sewer & Water and the University of Oklahoma. One of our strong "learnings" with starting to manage existing facilities is that to successfully achieve operational efficiencies requires close cooperation and a team approach with the existing operational professionals and the owner's design team combined with the expertise and knowledge of the Corix professionals.

This 'transition' project team then leverages all the available data and information as well as reviewing and auditing the processes. This is done to determine where opportunities may be achieved through changes to operational activities, upgrades to systems with capital investments or added technology.

On the Alaska project, Corix reviewed the operational efficiency of each utility and found that the lack of investment in things like basic SCADA technology resulted in poor operational efficiency. At the wastewater treatment plant, operators needed to manually undertake operations in the primary sludge treatment area, which would normally have been automated. Our business plan entails the systematic upgrade to system control and data acquisition functions to both improve overall efficiency, but also to improve employee safety and quality on job.

Corix utilizes a Microsoft-based software business solution tool for our Computerized Maintenance Management Software (CMMS) called Dynamics NAV. Our CMMS software, "The Asset Guardian" (TAG), an add-on module for Dynamics NAV, is ideal for managing assets that require scheduled maintenance, unscheduled repairs and inspection as part of a facilities life cycle. TAG can also be utilized for key personnel to manage technicians and customized on a day to day basis with required work orders. The following figures show typical screen captures of the TAG system.

**Figure 2: TAG Work Procedures Card incl. Validation Results Card**



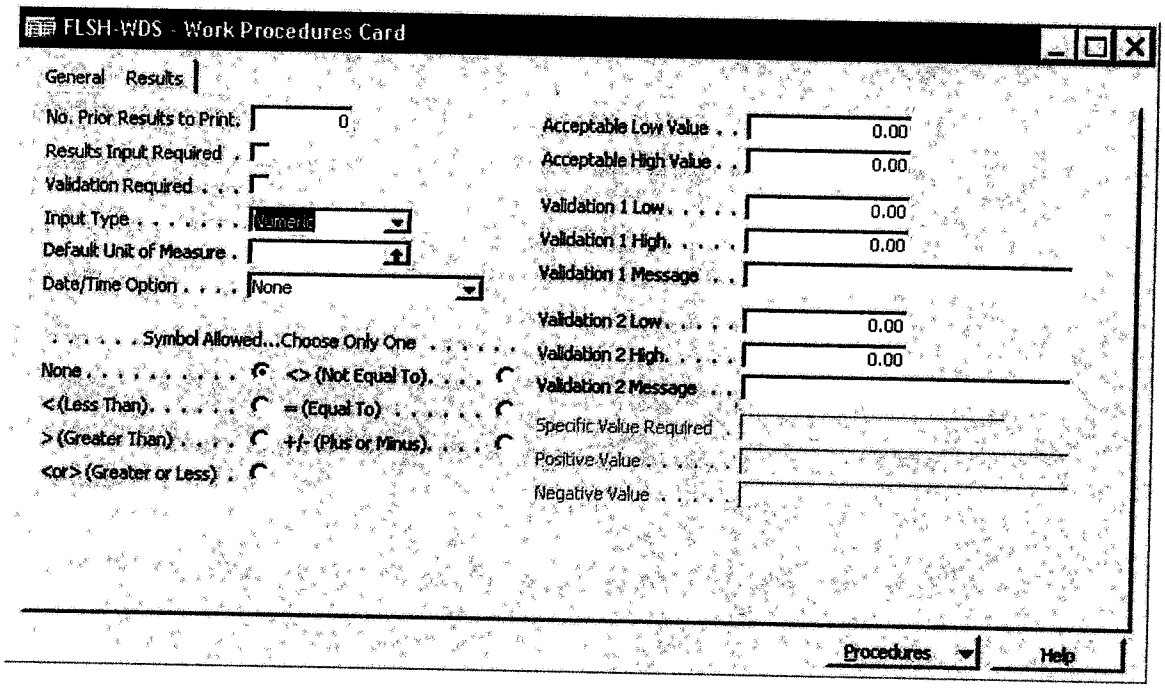



Figure 3: TAG Typical Supervisor Menu

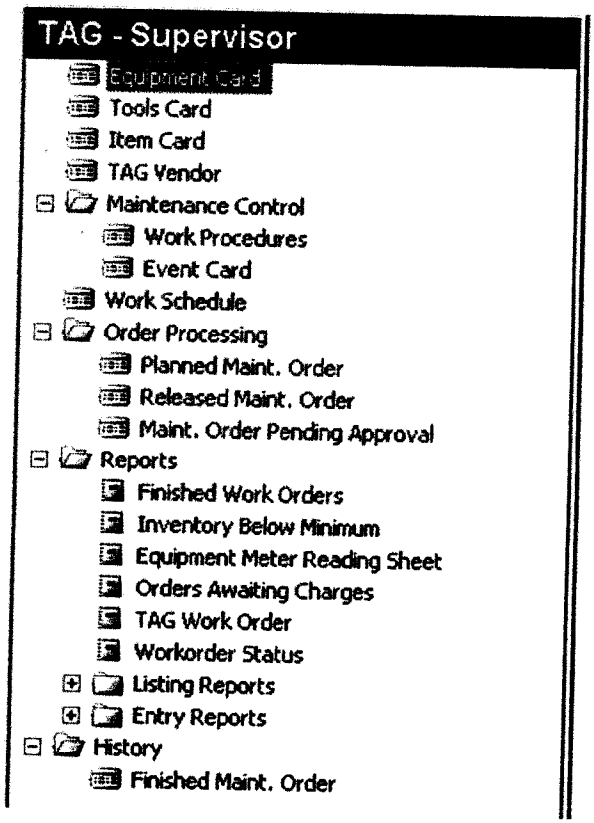


Figure 4: TAG Typical Administrator Menu

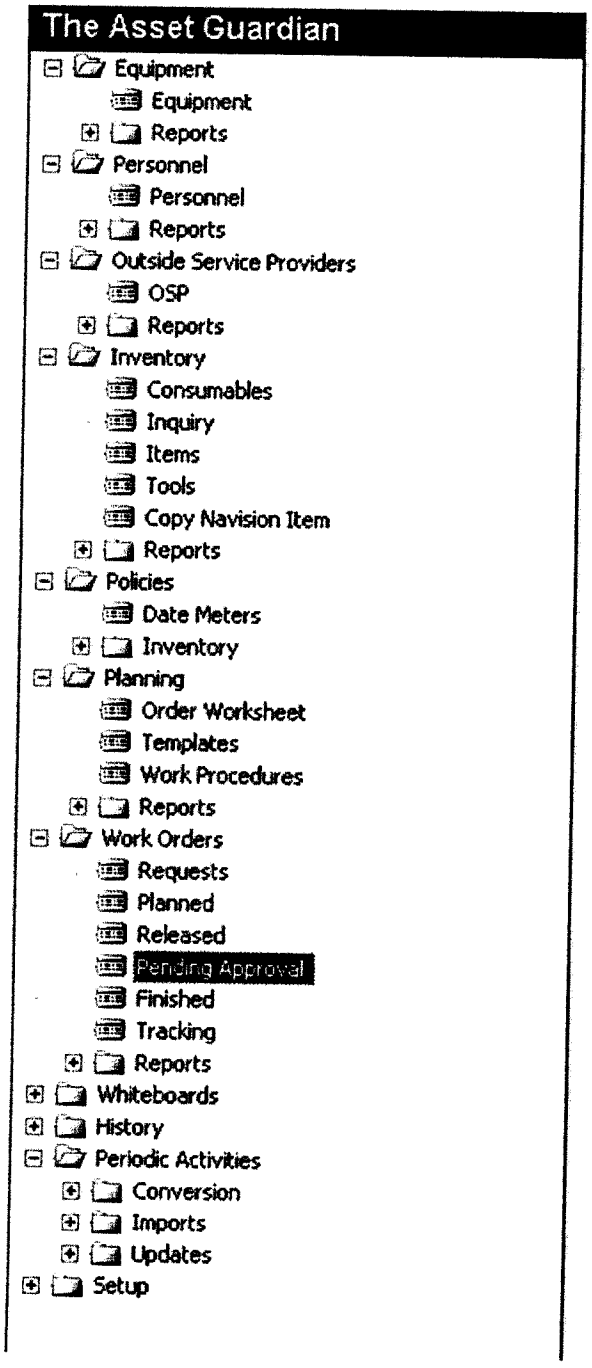
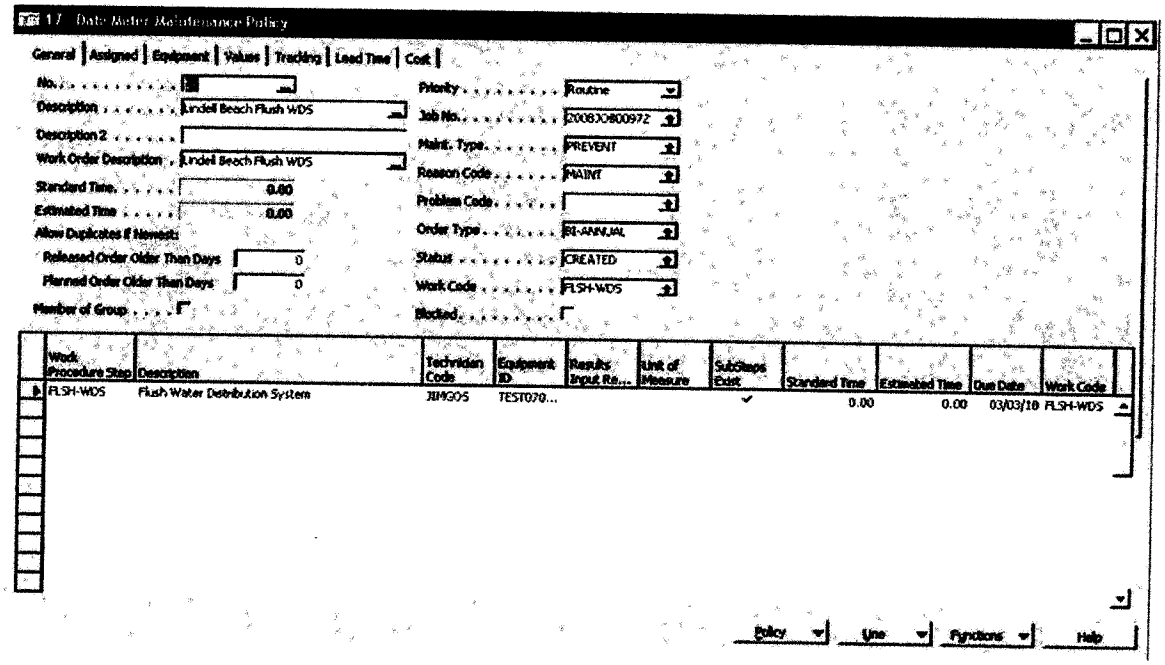


Figure 5: TAG Date Meter Maintenance Policy Card



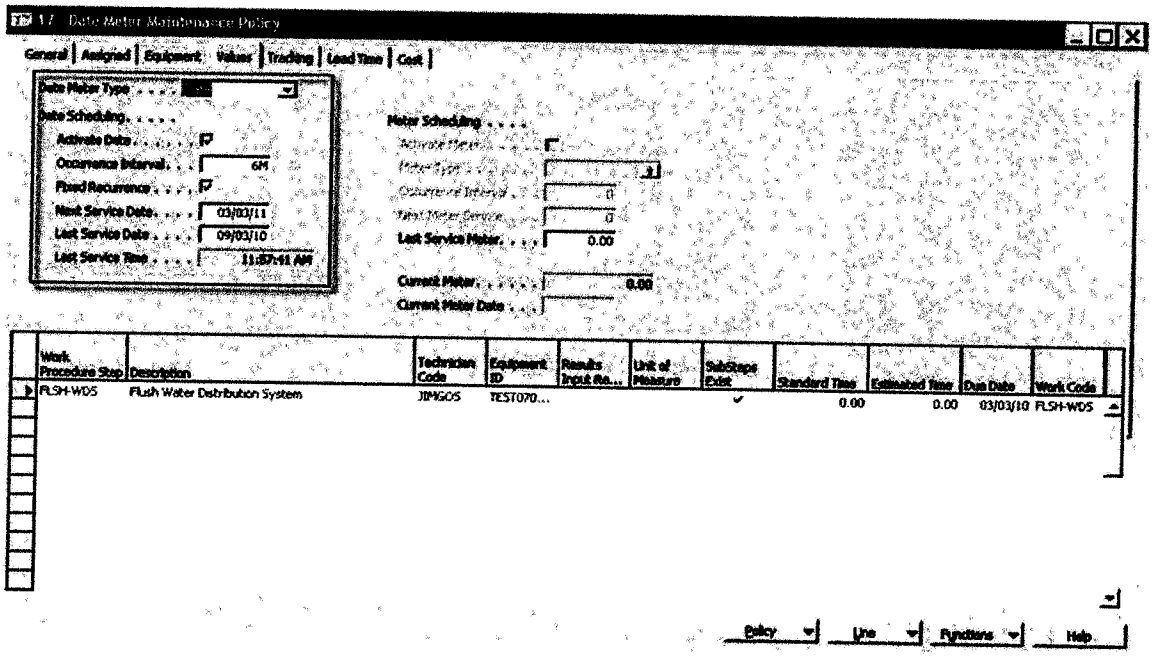



Figure 6: TAG Technician Whiteboard

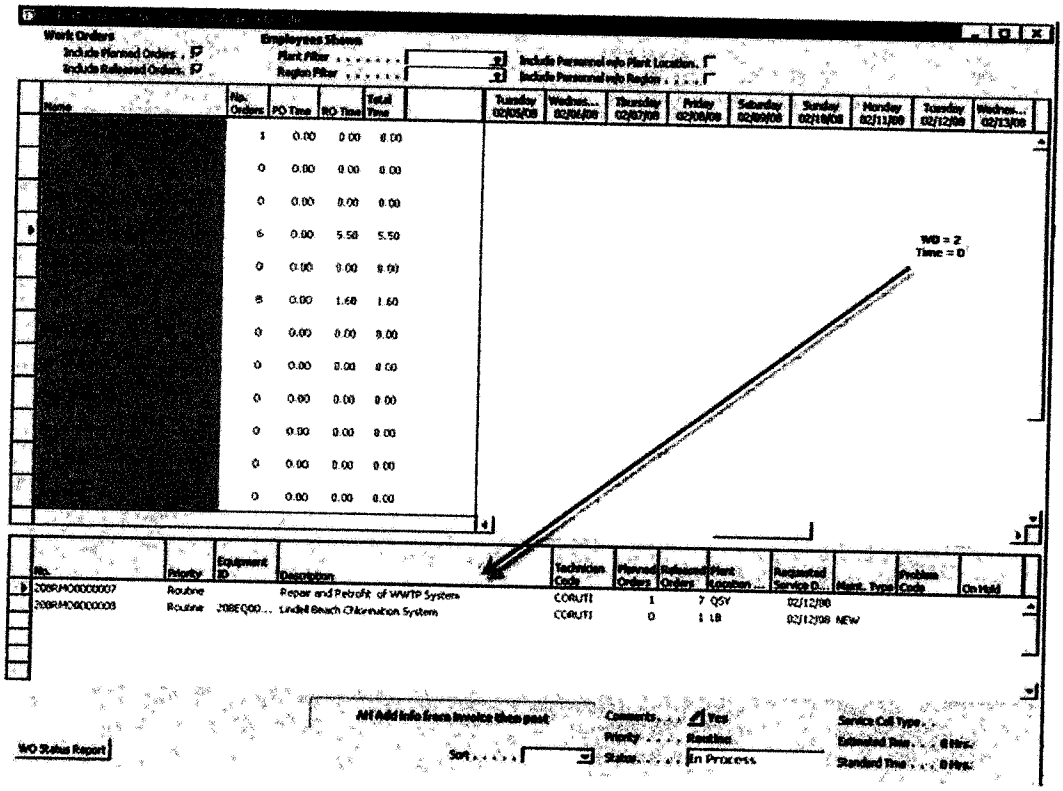



Figure 7: TAG Released Work Order

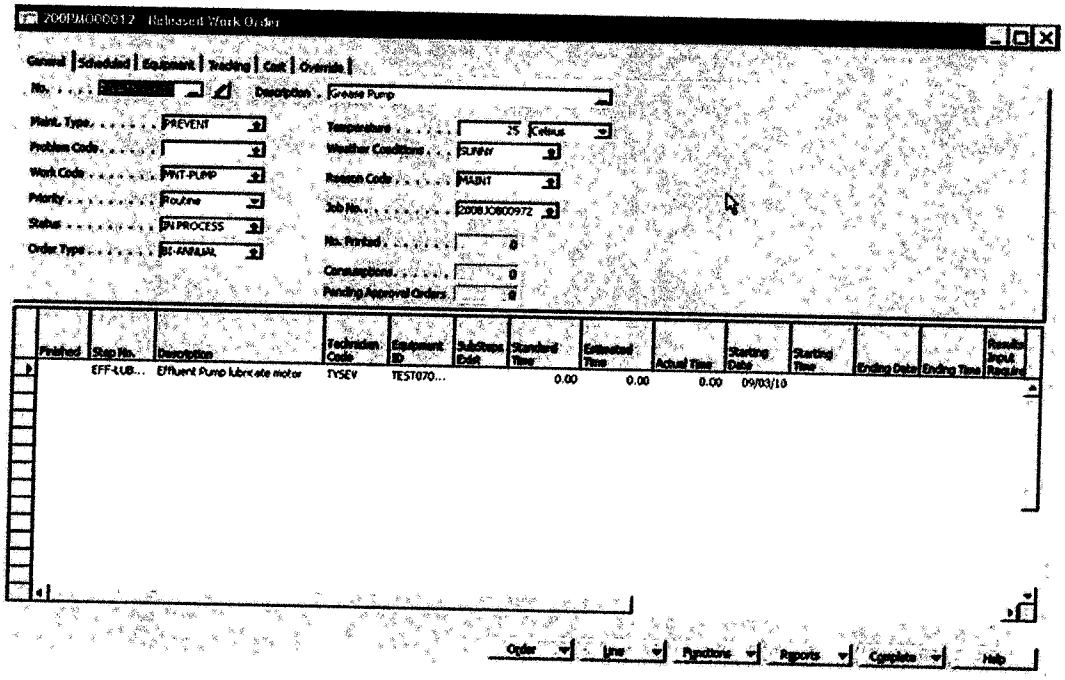


Figure 8: TAG Pending Approval Maintenance Work Order

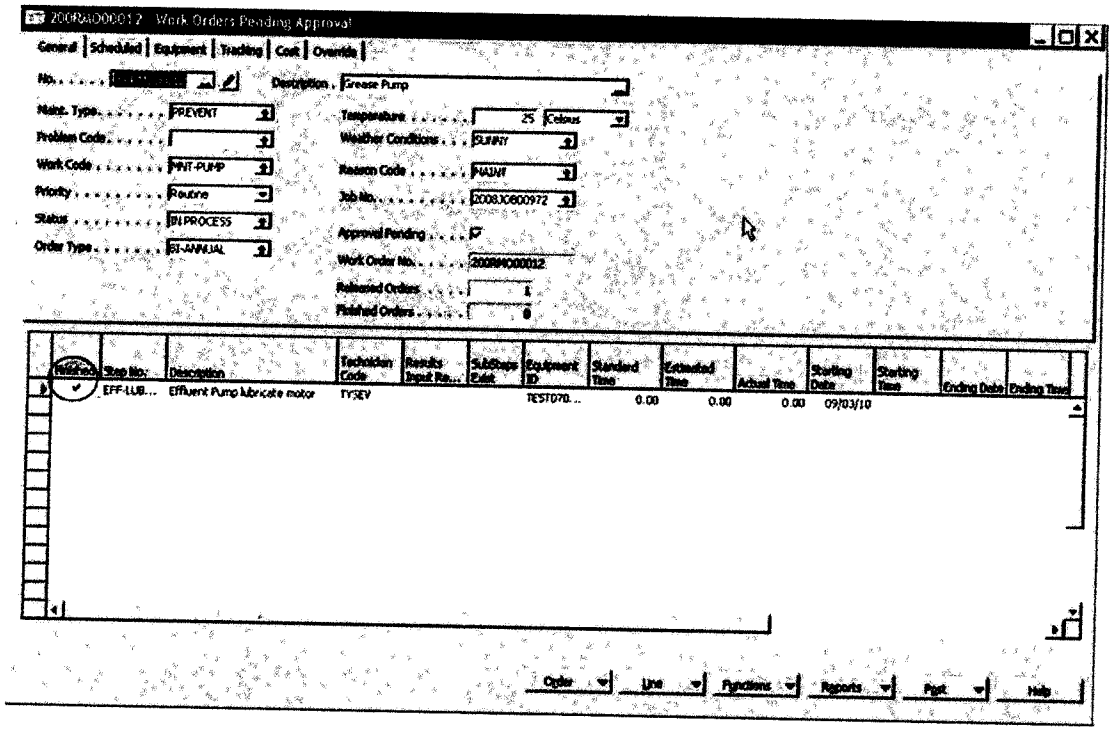



Figure 9: TAG Printable Work Order

## Maintenance Work Order

DESCRIPTION: Grease Pump
ADDRESS: Lindel Beach
1975 Vera Road

Lindell Beach BC V2R 4X1
SUPERVISOR: Unassigned Work Orders
VENDOR:

WORK ORDER NO.: 200RMO00012
JOB NO.: 2008JOB00972
WORK ORDER DATE: 09/03/10
PAGES/PRINTED BY: 1 tsevrens
DATE PRINTED: September 7, 2010 10:37 AM
UDN: 200AGEVE00016

PRIORITY: Routine
STATUS: IN PROCESS
ORDER TYPE: BI-ANNUAL
MAINT. TYPE: PREVENT
TECHNICIAN CODE: TYSEV
STANDARD TIME: 0.00
DUE BY DATE: 09/03/10
REQUESTED SERVICE DATE: 08/27/10
ESTIMATED TIME: 0.00

EQUIPMENT ID: TEST070246 / Well Pump /
LOCATION: 1975 Vera Road, Lindell Beach, BC, V2R 4X1
SERIAL NO:
ENTERPRISE: REG: BC-COA FAC: LB AREA:
MANUFACTURER:
COMPANY ID:
LINE:

| STEP | Finished | Description | Technician Code | Starting Date | Standard Time | Estimated Time | Actual Time | Test Results | Unit of Measure |
|---|---|---|---|---|---|---|---|---|---|
| 1 | No | Effluent Pump lubricate motor | TYSEV | 09/03/10 | 0.00 | 0.00 | | | |

TAG allows Corix to create a central database to store and manage capital assets through their entire life cycle, once we pre-define the maintenance and/or inspection schedules in TAG. It allows us to understand what is required in terms of tools, manpower and instruction on how to complete the predefined task. More importantly on events that are unpredictable such as a

breakdown repair or emergency intervention we can predefine who to call, what course of action needs to be taken, and step by step instruction on how to repair the equipment and resolve the emergency as efficiently as possible. All the required prerequisites in terms of resource skills, equipment and documentation are all stored within the system.

The Asset Guardian can be as simple as managing a single piece of equipment through its entire lifecycle by following the seven essential life cycle steps. It does this by initiating work orders, once it reaches a given meter (i.e., date, run time, revolutions) TAG will then dispatch a plan of action and a suggested schedule for the right combination of personnel/stakeholder to follow. The personnel/stakeholder then goes out and accomplished the field work or task. To help the personnel/stakeholder accomplish the task, it tells them the plan and all equipment needed in order to accomplish the tasks. Once the work order is closed it can then be analyzed to see how to more efficiently manage the assets in question.

**Figure 10: Operational and Maintenance Strategies Work Order Process from TAG System**


It can also be more complex, to have an interactive schedule matrix showing technicians' schedules by calendar day through the dispatch board. This allows all to see what tasks are expected in the week and the amount of hours they are estimated to spend.

TAG, is part of a thorough preventive maintenance process that will include periodic lubrication of bearings, calibrating of sensors, and visual monitoring of components. These preventive maintenance procedures and schedules will be documented and provided in maintenance manuals.

TAG will also include a maintenance schedule for each major piece of equipment which will be designed to provide the best overall life cycle costs while preventing major breakdowns.

Corix can utilize the commissioning period and the time available during Construction of new assets to develop a numbering convention based on the CES design Process Instrumentation Drawings (PID) for all equipment and instrumentation or during the "transition phase" for existing facilities. In addition, assets can be linked to cost centers, their original valuation tracked, and changes due to work orders or projects can be traced through the system. The Asset Guardian will be used to manage the maintenance activities for all identified capital assets requiring asset management and preventive maintenance.

This allows Corix to efficiently schedule and track all work orders, perform predictive maintenance analysis, assign maintenance priorities, track and analyze maintenance costs, and evaluate staff performance.

Corix ensures that our Operators are fully trained and conversant on the standard maintenance procedures for major maintenance activities and are familiar with TAG functions, scheduling and reporting and logging tasks.

TAG is configurable to allow us to schedule regular maintenance on equipment as well as including a Corix-initiated enhancement to schedule regulatory compliance activity, such as collection and validation of samples at locations in water or wastewater systems. For example, record fecal samples or perform and validate pH tests.

# 3 Operations and Management/Quality Management Plan and Health Safety and Environmental (HSE) Plan

Corix has developed a Quality Management Plan to meet internal/external regulatory and compliance requirements. This Quality Management Plan includes the following sections:

- Operating and Maintaining the Utility Systems
- Summary of Operation and Maintenance Practices

The quality management system proposed is composed of programs and processes that together ensure the elements that are central to the LCRA's satisfaction. These include:

- Management Responsibility
- Resource Management
- Product and Service Controls
- Measurement, Analysis, and Improvement

The components of each of these elements are described below.

## 3.1 Management Responsibility

- ***Establishing vision, mission and organization.*** Management that demonstrates its commitment to the development and improvement of the system quality.
- ***Conducting reviews of the system's performance and providing direction for improvement.*** Management reviews the quality management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness.

- ***Quality Planning.*** Ensuring that change is conducted in a controlled manner and that the integrity of the quality management system is maintained during change.
- ***Document Control.*** Ensuring that the correct versions of reviewed and approved procedures are available for use by project staff, including SOPs for repetitive activities.
- ***Control of Records.*** Ensure that records required for the quality management system are controlled and are maintained to provide evidence of conformance to requirements and of effective operation of the system.

### 3.1.1 Resource Management

- **Assignment of resources necessary for system quality.** Needed to implement and improve the processes of the quality management system.
- **Establish training.** Identify competency needs for personnel performing activities affecting quality and provide training to satisfy these needs.
- **Providing facilities and an adequate work environment.** Identify, provide and maintain or manage the facilities and the human or physical factors of the work environment needed to achieve system quality.

### 3.1.2 Product and Service Controls

- **Planning to Ensure the System Quality.** Identifying and performing the sequence of processes and sub-processes required to achieve the system quality.
- **Identifying LCRA Requirements.** Determine product requirements specified by the LCRA, those not specified but necessary for the intended or specified use and obligations related to system quality and compliance, including regulatory and legal requirements.
- **Control of Engineering Designs.** Includes determining responsibilities and authorities for design and/or development activities and the review, verification and validation activities appropriate to each design and/or development stage.
- **Purchasing.** Control of purchasing processes to ensure purchased product conforms to requirements. Evaluate and select suppliers based on their ability to supply products in accordance with our requirements. Ensure supply economy by monitoring purchases and prevention of unnecessary transactions.
- **Operations Control.** Control of production and service operations through the availability of information that specifies the characteristics of the product, where needed the availability of work instructions, use and maintenance of suitable equipment, monitoring activities and the implementation of defined processes for release, delivery and applicable system delivery activities.
- **Laboratory Certification and Quality Audits.** Quantifying, where appropriate, the products used, throughout production and service operations.

### 3.1.3 Measurement, Analysis and Improvement

- **Internal Audits.** Audits are performed to determine if the quality management system is implemented and effective. Audits are planned and scheduled based on importance and risk of processes. Auditors are trained and audits are conducted and reported.

- **Inspection Program.** Inspection of product and services will be conducted in accordance with written procedures. Contract requirements will be used as the basis for establishing inspection criteria. Non-conformances will be documented and defect percentages determined. Corrective action will be taken and effectiveness evaluated.

## 3.2 Operating and Maintaining the Utility Systems

In the Operating Plan, the procedures were described that Corix proposes to implement in the O&M of the utility systems in accordance with all applicable Federal, State, and local laws/regulations. Our proposed operational strategies are presented in the following sections.

### 3.2.1 Operational Strategies

- **Recurring and Preventive Maintenance** – All maintenance will be completed in accordance with manufacturer and industry standards. Preventive maintenance is the key to reliability and quality of the utility systems. The maintenance system is designed to remind staff what work to do and track system results so they can be used to better predict future requirements. The operations plan will explain the computerized software used to manage the preventive maintenance program. This system is also used to track and notify staff of all types of routine requirements such as motor maintenance at the plant or a well.
- **Sampling and Analysis** – The sampling will be performed in accordance with State, Federal and industry standards. The analysis will be split between the on-site staff and a contract laboratory. The on-site staff will handle bench tests, while an outside lab will be used for all compliance testing. The use of an outside lab provides a degree of separation of duties and independent verification of performance and is consistent with the requirements of the QMP. All lab testing will follow standard guidelines and the Quality Assurance/Quality Control program outlined in the Quality Control Plan.
- **Meter and Equipment Calibration** – The maintenance records for equipment, including meters, are put into MIS, which helps track preventive maintenance. This program is discussed in the Operations Plan and the meters are likewise regulated under the governing tariffs.
- **Service Interruption Frequency** – The object is to eliminate any service interruptions and, if one occurs, minimize its affect on the operation of the utilities. A service interruption plan will be implemented to track the number, cause, and severity of any service outages, and in conjunction with regular line cleaning, will be a key part of reducing the number of recurring problems.
- **Operating Permits** – The primary operating permits will be the State or Federal issued compliance permits. Other permits will involve many of the LCRA requirements, from security to prior notification of digging and plans.
- **Employee Certifications** – Corix Team will staff the utility operations with appropriately certified employees as required by the State of Texas. Security clearances will be obtained where required.
- **Operating Approach** – The operation of the combined systems will involve a number of activities, including:
  - Utility Plant Operation
  - Water Treatment and Distribution Systems
  - Wastewater Treatment and Collection Systems

- Local Metering and Remote Monitoring
- GIS (Geographical Information System) Mapping
- Equipment Maintenance
- Risk Management
- Health and Safety
- Community Outreach

### 3.2.2 General Environmental Compliance

A major factor in the operation of the utilities is environmental regulation. The State of Texas requires permitting, monitoring and reporting of activities that are part of the terms and conditions of this contract and includes the following:

- Wastewater treatment and collection system;
- Water treatment and distribution system; and
- Environmental conditions associated with operations and/or modifications of the utility system.

Corix has developed a regulatory and contracting strategy to address the above issues. The overall goal of this strategy is to comply with the regulatory requirements, while achieving contract terms and conditions that are mutually acceptable to the LCRA and Corix. Corix has developed a comprehensive regulatory strategy plan that identifies all state and local regulatory and policy issues that may impact the utility privatization, along with the specific approaches to effectively address and manage these issues. Table 6 summarizes the environmental regulatory programs that may apply, including program applicability and regulating agency.

Table 6: Transition of Permits

| REGULATORY PERMITTING PROGRAM | WATER | WASTEWATER |
|---|---|---|
| Contract Operator Certification | X | X |
| Drinking Water Standard | X | |
| Hazardous Waste | X | X |
| Solid Waste | | |
| SARA Title III | X | X |
| Construction (and Industrial) Stormwater Permits | X | X |
| Natural Resources | X | X |
| Historical Resources | X | X |
| Air Quality – PSD/NESHAPS, construction and operating permits. | X | X |
| Toxic Substances Control Act (TSCA) | X | X |

The following describes our approach to comply with the requirements, and address and manage the influences the regulatory agencies may exert on these operations.

### 3.2.3 Other Environmental Conditions

Other environmental conditions, such as asbestos containing materials (ACMs), lead-based paint (LBP), solid waste management units (SWMUs), unexploded ordnance (UXO), oil/water (O/W) separators, and other wastewater 'pre-treatment' units, and spills and releases, are also addressed to demonstrate our commitment to effective and safe O&M performance.

- **Asbestos Containing Materials and Lead-based Paints.** Any ACM or LBP contained in the buildings, structures, equipment and appurtenances designated for transfer under this contract will be addressed in accordance with personnel Safety and Health requirements. The ACM and LBP abatement activities and the management of wastes generated during the abatement activities will be conducted in accordance with the applicable regulations.
- **Solid Waste Management Units (SWMU).** Corix understand that the LCRA will retain the responsibility and liability for investigation, response, remediation, and compliance actions to address past contamination and environmental conditions. Corix will coordinate with the LCRA for activities associated with utility components located within SWMUs or areas of past contamination such that planning and execution of contamination assessment and remediation actions by the LCRA can be accomplished with full compliance with the applicable regulations and reduced disruption of utility services.
- **Spills and Releases.** Corix will take precautions to prevent oil and hazardous material spills or releases due to our activities associated with the operation and maintenance of the utilities. We will also conduct any response action and reporting in accordance with the Corix Spill Prevention, Control and Countermeasures Plan (SPCC) and applicable regulations. We will comply with all Emergency Planning and Public Communication requirements.

### 3.2.4 Long-Term Monitoring Procedures

The following list of activities provides a methodology of how Corix plans to ensure long-term quality services of the utility systems in a manner that will satisfy the issued contract requirements.

- Obtaining LCRA Feedback and Process Improvements
- System Inspections and Quality Assessment Procedures and Techniques
- Recordkeeping Processes
- Environmental Compliance Plan
- Performance Standards and/or Specifications
- Other Standards and Specifications

Figure 11: Feedback and Process Improvements Built into the Corix Quality Assurance Process

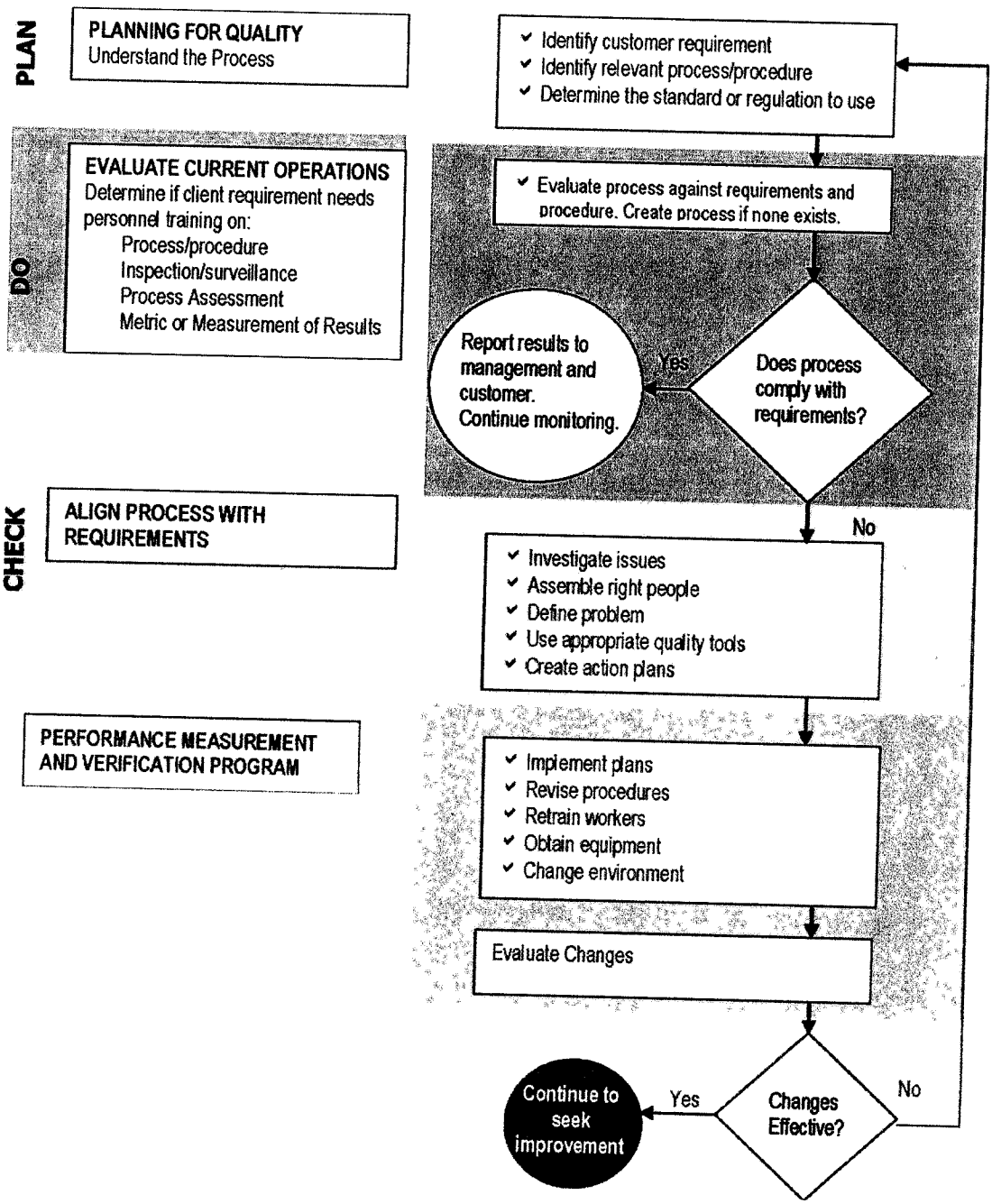


Table 7: Types and Formats of Information

| Type Information | Typical Format of Information |
|---|---|
| Utility System Maps | Electronic |
| GIS Data | Electronic |
| Construction Drawings | Electronic |
| As-Built Drawings | Electronic, Hardcopy |
| Construction Specifications | Electronic |
| Shop Drawings | Hardcopy |
| Maintenance Schedule | Electronic |
| Utility System Reports and Studies | Electronic |
| Hydraulic And Flow Models | Electronic |
| Cost Records And Reports | Electronic |
| Invoices | Electronic, Hardcopy |
| Purchase Orders | Electronic, Hardcopy |
| Correspondence With Regulators | Electronic, Hardcopy |
| Monthly Operations Reports | Electronic |
| Surveys and Feedback | Electronic |
| Contract Documents, Modifications | Electronic, Hardcopy |
| Correspondence | Electronic, Hardcopy |
| Inspection/Assessment Reports | Electronic, Hardcopy |

## 3.3 Summary of Operation and Maintenance Practices

All water utility activities will be governed by the relevant professional standards of the AWWA and the United States Environmental Protection Agency (EPA) as well as State requirements and Regulations issued by TCEQ. These references are available at Corix offices and are used routinely by the operations and engineering staff.

The following is a summary of the operation and maintenance practices that will be utilized achieve the standards and requirements. Water utilities are governed by the professional standards of performance listed in the M series references of the AWWA. WEF standards are also used for wastewater. These references are available at Corix offices and are used routinely by the operations and engineering staff. Water quality standards will be maintained in accordance with EPA and TCEQ established standards for drinking and wastewater. Testing of the water will be performed by the on-site utility operator and periodic verification testing will be performed by a TCEQ certified non-affiliated testing lab. Results of the testing will be maintained by Corix at the project office and program office. Testing results will be reported to the TCEQ. These testing and reporting procedures are already in place and are used by Corix affiliates.

Water quality testing and reporting will be added as a separate component to the existing programs.

The operation of the water treatment and distribution systems will involve a number of activities, including:

- Water Treatment and Distribution System
- Local Metering and Remote Monitoring
- GIS Mapping
- Equipment Maintenance
- Risk Management
- Health and Safety
- Customer Service
- Community Outreach

## 3.4 Water Treatment and Distribution System – Maintenance Strategies

- **Maintenance Work Orders and Records** - The operations center will be the focal point for planning, scheduling, and tracking maintenance work orders and for maintaining maintenance records. The operations center will utilize a MIS to maintain an inventory of all plant assets. The MIS will generate, track, and close out all maintenance work orders and maintenance related actions. A complete history of all maintenance performed on each asset will be kept in the MIS database.
- **Maintenance Procedures** - SOPs will establish responsibilities, schedules, equipment requirements, maintenance action checklists (MACs), and recordkeeping requirements for all maintenance tasks. The SOP will reference manufacturer's instruction sheets, parts information, drawings, maintenance manuals, and applicable regulations and standards such as ASME and AWWA codes, etc. as needed to clarify procedures and system information. The operations center will maintain SOPs and referenced information for all installed systems and equipment in the plant technical library. The library will have provisions for printing or duplicating copies of reference information for use by water system maintenance personnel.
- **Maintenance Philosophy** - Corix will employ a Reliability Centered Maintenance (RCM) approach for accomplishing maintenance requirements. Using the RCM approach, each utility system and equipment asset is analyzed to determine the most appropriate levels and types of maintenance, including preventive, predictive, or breakdown, based on asset criticality, impact of failure, and costs/benefits that are needed to meet performance and reliability requirements. In addition, we will optimize reliability by performing systematic condition assessments of all systems to evaluate not only physical conditions, but also system age with respect to life cycle costs, service call histories, operating environment, and criticality to Water System operations. The data gathered in condition assessments are analyzed and recommendations emerge for a planned maintenance program. An asset maintenance program may employ a pre-emptive predictive testing and inspection maintenance approach, a time interval maintenance approach such as scheduled preventive maintenance, a run to failure breakdown maintenance approach, or a combination of these maintenance strategies.

The realization of the RCM approach is accomplished through a knowledgeable and experienced team of (PM/PDM) mechanics and technicians, coupled with the technical assistance of utility engineering. Our experience has shown that a planned RCM approach not only significantly improves maintenance work order completion rates, but also reduces the number of urgent and emergency service calls, keeping maintenance personnel from being in a constant "fire-fighting" mode.

- **PM** - Preventive maintenance is the systematic and periodic inspection and servicing of plant assets based on elapsed time or hours of service required to keep assets in proper operating condition. MACs for PMs are typically based on manufacturer's recommendations, industry standards, and conditions unique to the operating environment of the plant asset.
- **PDM** - Predictive maintenance is a pro-active approach to maintenance where equipment conditions are monitored along with data tracking and trending to predict failures and avoid equipment breakdowns. Condition monitoring information is gathered from vibration analysis, ultrasound detection, visual inspections, and other non-destructive testing. A PDM technician and utility engineer track the severity of problems, order necessary parts, and schedule maintenance, usually during the next scheduled maintenance period or immediately, depending on the severity of the problem. PDM is also used in commissioning new or replaced equipment to detect problems prior to returning equipment to service or accepting contracted services.

  A properly balanced program of preventive and predictive maintenance avoids costly breakdowns, reduces maintenance requirements, helps reduce excessive spare parts inventories, and results in longer equipment life.
- **Housekeeping** - Good housekeeping is essential for safe and efficient plant operations. Corix will implement a systematic program to organize stores and clean all plant areas, dispose of unneeded equipment and materials, and designate storage locations for tools and equipment so that they can be readily located when needed. We will ensure that all hazardous materials are properly labeled and stored in approved containers and quantities are limited to those required to meet work requirements.

## 3.5 Water Treatment and Distribution System – Operational Strategies

The water treatment and distribution systems consist of treatment plants, source wells, potable water mains and customer service connections.
The age of the water system components varies with location. The Operation Plan for the water treatment and distribution systems includes the following main objectives.

- Regular operation and maintenance of the treatment plants
- Regular maintenance and inspection of pipelines and valve boxes.
- Perform an annual replacement program.

These objectives will be achieved by first concentrating on a study of the system and collecting data, comparing and learning from current operations and only then introducing more effective or more efficient processes that have been beneficial elsewhere.

### 3.6 WATER TREATMENT AND DISTRIBUTION SYSTEMS – INITIAL ACTIVITIES

A critical element in operating and maintaining the water treatment and distribution systems will be the review of the LCRA's GIS mapping of the system and the initial repairs to be completed as part of the initial capital improvements and enhancements.

### 3.7 WATER TREATMENT AND DISTRIBUTION SYSTEMS – WORK CREW ACTIVITIES

A field crew will be tasked with performing construction related water utility work. This group will work in conjunction with plant personnel to carry out the O&M responsibilities. The field crew will be responsible for handling service responses such as line locates or emergency watermain breaks along with implementing a line inspection and repair program.

### 3.8 WATER TREATMENT AND DISTRIBUTION SYSTEMS – NEW TAPS AND CUSTOMERS

Corix will routinely make new taps and install small line extensions.

### 3.9 FEEDBACK AND PROCESS IMPROVEMENTS

An overview of Corix feedback and process improvement is presented in Table 1.

The LCRA can provide feedback to us by e-mail, telephone, or fax. Customer complaints or any other issue communicated by the LCRA requires documentation and tracking and will also be entered into the corrective and preventive action system.

Key features of this process described in Table 1 are based on the following principles:

- Identifying issues, non-conformances and deficiencies wherever they are found, including processes to input complaints into the system.
- Investigating and determining the root cause of the issue.
- Initiating actions designed to permanently correct the issue.
- Evaluating the effectiveness of the actions implemented.

The issue will be forwarded to the responsible supervisor for research and resolution as outlined above and the results forwarded to the Manager of Utility Operations for review. The completed investigation and action plan will be forwarded to the LCRA. The Manager of Utility Operations will conduct a follow up on corrective action to ensure that the actions stated were implemented and effective in alleviating the issue.

These surveys will be available for review. Standard compliance will be measured by inspection and periodic testing of the distribution system, review of outage and other maintenance records as well as a customer survey that will be conducted annually.

Feedback will be a daily consideration in that Corix will staff a Customer Care center during regular business hours (8 am – 5 pm), Monday to Friday, to receive service call requests and customer complaints. Every request will be handled and responded to in accordance with Corix/LCRA requirements and established policies. The MIS will provide the tool for creating work orders with priorities to set response times. Each work order will be tracked to completion. Corix management will review work orders on a periodic basis and initiate corrective actions if required.

Annually, EPA requires the preparation and mailing of a Consumer Confidence Report (CCR) to the users of a public water system. This single report provides a snapshot of the previous year regarding water quality, results of testing during the year and any other items of interest to customers. Included in the CCR are not only results of water quality tests, but, a section regarding information on the parameters used in the testing, a section informing the customers who to call in the event of a problem and water conservation tips. The reports have been well received by customers as well as the regulatory agencies that have received copies. The CCR is an effective communication tool.

All processes utilized by Corix will be documented by SOPs. Process improvement will be continuous and based upon all feedback including feedback from all employees of Corix, subcontractors and third party sources, including LCRA staff.

## 3.10 WATER SYSTEMS – INSPECTIONS AND QUALITY ASSESSMENT PROCEDURES AND TECHNIQUES

Inspection schedules and surveillance checklists will be developed for each utility system maintenance and operations element described in the Operating Plan and for each major capital improvement project. The Manager of Utility Operations or designee will conduct a 10% surveillance inspection to ensure that all performance requirements are met. Performance requirements will be determined by the utility system or the characteristics of the item to be inspected.

Inspections schedules and checklist criteria will be reviewed and approved by the Manager of Utility Operations prior to implementation. The completion of scheduled inspections will be conducted by the assigned inspector and tracked by the responsible supervisor. Inspections not completed within the timeframe indicated will be reassigned and the reason for not being completed researched and resolved.

Inspectors will be trained and qualified to perform the inspections they are assigned. Qualifications include having the knowledge and experience regarding the equipment or operation they are inspecting, being familiar with the inspection procedure, and having the maturity to perform their tasks in a professional manner. They will review inspection and surveillance schedules and perform assigned inspections accordingly, reporting any discrepancies or non-conformance to the responsible supervisor who will review findings and initiate corrective action as required. O&M inspectors have the authority to stop activities if they feel they violate the health, safety of plant personnel or the efficiency of operations.

Periodic audits and assessments of the utility operations and administrative functions to evaluate the level of effectiveness and implementation of procedures and processes will be established to satisfy requirements. This includes project procedures and plans developed and approved in accordance with contract requirements. Inspectors that serve as auditors will be trained in the audit process and reports of their activities and findings will be provided to the Manager of Utility Operations. Corrective action will be taken on any findings of non-conformance. Inspectors will also have the authority to stop any activity that they feel may threaten the health and safety of utility personnel or the efficiency of operations.

Major capital improvement projects inspection plans will be reviewed and approved by the Manager of Utility Operations with input from the LCRA as to the inspection criteria prior to being implemented.

For each definable feature of work established by the Manager of Utility Operations or designee, the following events could be included in the inspection/quality assessment:

1. Confirmation that the appropriate technical specifications are incorporated into the project delivery plan and review said specifications.
2. Confirmation that the appropriate contract drawings are incorporated into the project plan and review said drawings.
3. Verify that all shop drawings and submittals have been approved by the proper approving authority (including factory test results, when required).
4. Confirm that the testing plan coincides with the delivery plan and that adequate testing is called for to assure quality delivery.
5. Confirm definition of preliminary work required at the work site and examine the work area to confirm required preliminary work has been properly completed.
6. Confirm availability of required materials and equipment. Examine same to confirm compliance with approved submittals. Examine mock-ups and any sample work product to confirm compliance with approved submittals.
7. Review the site safety plan and activity hazard analysis to ensure that safety concerns are adequately addressed and applicable safety requirements have been incorporated into the plan. Confirm that the appropriate material safety data sheets (MSDSs) have been identified and properly submitted.
8. Discuss construction methods to be employed during the remedial action. Identify checkpoints and areas of evaluation that will allow determination that the appropriate quality of construction is being achieved.

The Manager of Utility Operations will monitor performance of all utility systems under his purview through a review of reports, operating parameters of equipment, work order status and accomplishment of Repair and Replacement projects.

### 3.11 WATER TREATMENT AND DISTRIBUTION SYSTEMS MAINTENANCE REQUIREMENTS

Corix intends to employ a RCM approach for accomplishing Water Treatment and Distribution System maintenance requirements. Using the RCM approach, each treatment distribution system and equipment asset is analyzed to determine the most appropriate levels and types of maintenance, i.e. preventive, predictive, or breakdown, based on asset criticality, impact of failure, and costs/benefits, that are needed to meet performance and reliability requirements. In addition, we will optimize reliability by performing systematic condition assessments of all systems to evaluate not only physical conditions, but also system age with respect to lifecycle costs, service call histories, operating environment, and criticality to operations. While Corix recognizes the diverse weather conditions in Central Texas, the data gathered during the condition assessments will take into consideration the local operating conditions, and then provide the analyzed recommendations for the planned maintenance program. An asset maintenance program may employ a pre-emptive predictive testing and inspection maintenance approach, a time interval maintenance approach such as scheduled preventive maintenance, a run to failure breakdown maintenance approach, or a combination of these maintenance strategies.

The realization of the RCM approach is accomplished through a knowledgeable and experienced team of (PM/PDM) mechanics and technicians, coupled with the technical

assistance of plant engineering. Our experience has shown that a planned RCM approach not only significantly improves maintenance work order completion rates, but also reduces the number of urgent and emergency service calls, keeping maintenance personnel from being in a constant reactive mode.

### 3.12 WATER SYSTEM – RECORDKEEPING PROCESSES

Corix, the LCRA, regulators, and other parties need timely access to specific utility information. Corix will implement effective tools and processes to manage information in a variety of formats and media to ensure that accurate, complete and accessible records are maintained. Table 7 shows the types and formats of information retained. The types of information will evolve and grow from contract award as capital improvement and renewal and replacement projects are designed, constructed, and operated.

As a general rule, data will be archived electronically and kept indefinitely. We will maintain compact disks, DVDs or other similar media at a secure offsite location. Records will be kept a minimum of 2 years, and then archived at an offsite storage area. As system upgrades and expansion activities take place, the system inventory and asset valuation will be updated and kept current with renewal or depreciation of the assets. Corix will maintain this database electronically so that the asset value can be tracked on an annual basis, or more often if required.

It is anticipated that our continued maintenance and service of the utility systems will provide additional information on the location of utilities. This information will be input to the GIS and the resultant maps will be updated periodically so our maintenance crews will have up-to-date information in the field and ensure that the documented system configuration is as accurate as possible. Corix will also provide information to allow for updates to the Municipality GIS on an annual basis.

Corix will maintain record drawings for all existing and new facilities installed by Corix within its service area. The LCRA will have access to use and copy such drawings. Corix will provide available drawings to the LCRA in the form of Computer Aided Design-Computer Aided Manufacturing (CAD-CAM) disks using the latest release software compatible with LCRA systems.

A water treatment and distribution utility produces substantial amounts of data and information in various formats. These records will be used for day-to-day O&M management needs as well as other issues ranging from regulatory reporting to client reporting. Permanent records will be kept as part of the Operating Plan, including:

- Asset inspections
- Asset condition
- Networks drawings
- Manufacturers' manuals
- Test and inspection sheets
- Commissioning reports
- O&M procedures