SMOKY LAKE COUNTY

Minutes of **Utilities Meeting: Environmental Operations (**Water, Wastewater and Waste Management) held on Tuesday, **March 1, 2016** at 12:45 P.M. in the County Council Chambers.

The meeting was called to Order by the Chairperson Dareld Cholak in the presence of the following persons:

		ATTENDANCE
Div. No.	Councillor(s)	Tuesday, March 1, 2016
1	Dareld Cholak	Present
2	Ron Bobocel	Present
3	Craig Lukinuk	Present
4	Cary Smigerowsky	Present
5	Randy Orichowski	Present
CAO	Cory Ollikka	Present
Asst CAO	Lydia Cielin	Absent
Finance Manager	Brenda Adamson	Present
Env. Oper. Manager	Dave Franchuk	Present
GIS/Communications	Paul Miranda	Absent
Legislative Svcs/R.S.	Angela Bilski	Present

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1 Member of the Public in attendance.

468-16: Lukinuk **2. Agenda:**

That the Utilities: Environmental Operations Meeting Agenda for Tuesday, March 1, 2016 be adopted, as presented.

Carried Unanimously.

3. Minutes:

469-16: Bobocel That the Minutes of the Utilities Meeting: Environmental Operations held on Tuesday, January 12, 2016, be adopted.

Carried.

Action List: January 12, 2016

470-16: Orichowski That the Action List of the Utilities Meeting: Environmental Operations dated January 12, 2016, be filed for information.

Carried.

4. Request for Decision:

Policy Statement No. 04-08-01: Water Facility Standard Operating Procedures

471-16: Bobocel That **Policy Statement No. 04-08-01** entitled "Water Facility Standard Operating Procedures", be adopted:

Title: Water Facility Standard Operating Procedures			**Policy No.: 08-01**
Section: 04	**Code: P-R**	**Page No.: 1 of 37**	
Legislation Reference:	Alberta Water and Wastewater Guidelines		
Purpose:	To establish procedures to be followed by water plant operators for the facilities at the Hamlets of Spedden, Bellis, Warspite, and the Smoky Lake Booster Station.		
Policy Statement and Guidelines:			
Statement 1. The Water Facility Standard Operating Procedure is a tool to assist the water operators to proactively identify the routine procedures to operate the Water distribution station in an efficient and safe manner.			

Procedures

2. The Water Facility Standard Operating Procedures as outlined in **Schedule "A"** includes:

2.1 Bellis

1. Facility Overview
2. Daily Inspections of facility and surrounding area
3. Daily logging of pumps, gauges and meters
4. Testing of reservoir water
5. Weekly bacteriological sampling and logging
6. Basic operation and calibration of equipment
7. Guidelines for water chemistry
8. Maintenance schedule
9. Water operation logbook
10. Exiting site checklist
11. MSDS

2.2 Warspite

1. Facility Overview
2. Daily Inspections of facility and surrounding area
3. Daily logging of pumps, gauges, flow meters and analyzers
4. Daily testing of reservoir and distribution water
5. Weekly bacteriological sampling and logging
6. Basic operation and calibration of equipment
7. Guidelines for water chemistry
8. Maintenance schedule
9. Water operation logbook
10. Exiting site checklist
11. MSDS

2.3 Spedden

1. Facility Overview
2. Daily Inspections of facility and surrounding area
3. Daily logging of pumps, gauges, meters and chloramination system
4. Daily testing of reservoir and distribution water
5. Weekly bacteriological sampling and logging, chlorine analyzer caibration
6. Basic operation and calibration of equipment
7. Guidelines for water chemistry
8. Maintenance schedule
9. Water operation logbook
10. Exiting site checklist
11. MSDS

2.4 Smoky Lake

1. Facility Overview
2. Daily inspections of Facility and surrounding area
3. Daily logging of pumps, gauges and meters and chloramination system
4. Testing of regional water
5. Basic operation and calibration of equipment
6. Maintenance schedule
7. Water operation logbook
8. Exiting facility checklist
9. MSDS

Schedule "A"

Bellis Fill Station Procedures

1) Facility Overview

1) Infrastructure Location

Bellis Fill Station. SE-34-59-15-W4

2) Facility type

Regional water supply, Truck Fill

3) Design Flow

10 m3 per hour

4) Capacity

60 m3 underground fiberglass tank

5) Registration

6) Staff list

a) Manager Dave Franchuk (780)650-1800
b) Operator Terry Bodnar (780)656-8856
c) Operator Lorne Fedirchuk (780)656-5200
d) County Office (780)656-3730

7) Service area

Potable truck and barrel fill for Bellis area

8) Infrastructure

a) 1 - 35 m3 potable water holding tank
b) 1 – 7.5 hp submersible truck fill pump
c) 1 - 1 hp submersible barrel fill pump
d) 3 – magnetic flow meters
e) 1 – 3” back flow preventer
f) 1 – 1.5” back flow preventer
g) 2 – combination air/water release valves
h) 1 – air release valve
i) 1 – municipal solutions access terminal/plc unit

2) Daily inspection of plant and surrounding area

Outside

1) Walk around building looking for damage and leaks; note them down so they can be repaired.
2) Check holding tank cover and vents so all are secured; note and correct any problems.

3) Ensure main valve covers are on
4) Listen to pumps for unusual noises; note and repair.

Inside

1) Check all piping for leaks and cracks; note and correct problems.
2) Check pressure control valves and backflow preventers for proper operation.
3) Check all gauges and valves for proper operation.
4) Inspect walls and ceiling of building for leaks; note and repair.

3) Daily logging of pumps, gauges, meters

Gauges

1) Note and record the pressures on facility log sheets.
   a) Regional incoming pressure before PRV, gauge PE-0406 on south wall.

   b) Regional incoming pressure after PRV, gauge PE-0417 on south wall.

2) Read and record reservoir level off plc panel located on east wall of building.

Meters

1) Read and record incoming regional water meter FE-0422 reading located on south wall in log sheets.

2) Calculate daily usage by subtracting today's reading from yesterday's reading and record
3) Read and record plant truck fill reading from meter on north wall pump in log sheets.

4) Calculate daily usage by subtracting today's reading from yesterday's reading and record.
5) Read and record barrel fill meter FE-0455 reading located on north wall in log sheets.

6) Calculate daily usage by subtracting today's reading from yesterday's reading and record.
7) Add truck fill and barrel fill totals and record in distribution total column.

4) Daily testing of reservoir water

Reservoir water

1) Activate barrel fill line to get grab sample from flow point screen

Chlorine testing

A) Rinse out the two 25 ml covets with tap water twice.
B) Fill two 25 ml covets with treated water to 10 ml mark.
C) Clean and dry one covet with chem. wipes.
D) Turn on colorimeter and make sure it is on program 9 for total chlorine.
E) Insert Covet into colorimeter and press zero.
F) In other Covet add contents of one total dpd package and shake until all powder is dissolved.
G) Press timer for 3 minute countdown and press enter.
H) When countdown is ended insert covet with reagent and press read.
I) Record reading in reservoir water column on water plant daily log.

5) Weekly bacteriological sampling and recording

A) Obtain required number of sample bottles and requisition forms from hospital.
B) Have all supply location labels for week accessible.
C) Return sample bottles and requisition forms to hospital before noon.

Distribution water (weekly)

1) Run water from collection site for 5 to 10 minutes so stale water is purged.

2) From distribution sample bottle fill sample bottle to full mark.
3) Dry bottle and detach identification label from requisition form and affix to bottle.
4) Attach location label to requisition form.
5) Fill out requisition form and location label.
6) Record location, time, ID number and chlorine concentration on daily log sheet.
7) Place requisition form around bottle and secure with rubber band.
8) Secure for transport to hospital.

Regional Chlorine testing (weekly)
Run water from regional line for 5 to 10 minutes (best to do when holding tank is filling to ensure accurate result).

A) Rinse out the two 25 ml covets with tap water twice.
B) Fill two 25 ml covets with treated water to 10 ml mark.
C) Clean and dry one covet with chem. wipes.
D) Turn on colorimeter and make sure it is on program 9 for total chlorine.
E) Insert Covet into colorimeter and press zero.
F) In other Covet add contents of one total dpd package and shake until all powder is dissolved.
G) Press timer for 3 minute countdown and press enter.
H) When countdown is ended insert covet with reagent and press read.
I) Record reading in regional chlorine water column on water plant daily log.

6) Basic operation and Calibration of lab equipment

Pocket Colorimeter
1) Used for testing chlorine.
2) Calibration is not needed.
3) Refer to pocket colorimeter manual

All manuals are kept in file cabinet.

7) Guidelines for water chemistry
1) Guidelines for Canadian Drinking Water Quality located in facility operations manual
2) Weekly bacterial tests can be located in water department office.

8) Maintenance schedule
1) Valves should be checked for proper operation twice a year.
2) Gauges and meters should be checked annually.
3) Back flow preventers should be certified annually.

9) Water operations logbook
1) Logbook should contain date and time of recordings
2) Indicate that facility check was done.
3) Equipment repair or replacement should be recorded.
4) Note anything not operating properly or needing repair.
5) Condition of facility and area should be recorded.
6) Building, reservoir and surrounding area problems should be noted.
7) Repairs to these areas should be noted.

10) Exiting Plant Checklist

1) This information should be placed in an area so workers can view it before Leaving facility for the day.

a) Insure all switches are in proper position
b) Barrel Fill distribution pump switch in auto position.
c) Truck Fill pump switch in auto position.
d) No taps or water hoses left on.
e) Insure all doors closed and locked.

Warspite Facility Procedures

1) Facility Overview

1) Infrastructure Location
Warspite Water Works - NW-10-59-18-W4

2) Regional supply
Highway 28/63 Regional Water System

3) Design Flow
15 m3/hour

4) Capacity
170 m3 clear well

6) Registration
Registration #: 311325

7) Staff list

a) Manager	Dave Franchuk	(780)650-1800
b) Operator	Terry Bodnar	(780)656-8856
c) Operator	Lorne Fedirchuk	(780)656-5200
c) County Office		(780)656-3730

8) Service area
Hamlet of Warspite

9) Infrastructure
a) App. 2500 M of 6" distribution pipe
b) 89 service connections
c) 9 fire hydrants
d) 170 m3 reservoir
e) 2- 5 hp distribution pumps
f) 1 – 15 hp fire pump

2) Daily inspection of plant and surrounding area

Outside

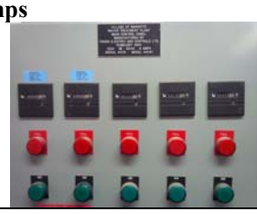
1) Walk around building looking for damage and leaks; note them down so they can be repaired.
2) Inspect fence for breaks open gates and unlocked gates; note down and fix any problems.
3) Check well covers, storage tank lids and vents so all are secured; note and correct any problems.

Inside

1) Check all piping for leaks and cracks; note and correct problems.
2) Listen to pumps for unusual noises; note and repair.
3) Check all gauges and valves for proper operation.
4) Inspect walls and ceiling of building for leaks; note and repair.

3) Daily logging of pumps, gauges and reverse osmosis plant

Pumps



a) Distributions pump 1 reading.

b) Calculate daily run time by subtracting reading from day before from today's reading and record.
c) Distributions pump 2 reading.
d) Calculate daily run time by subtracting reading from day before from today's reading and record.
e) Fires pump reading.
f) Calculate daily run time by subtracting reading from day before from today's reading and record.

Gauges And Meters

1) In truck fill room record the following on water treatment log sheet.
   a) Read and record regional inlet pressure PIT-3029 before pressure reducing valve.

   b) Read and record regional inlet pressure PIT-3032 after pressure reducing valve.

   c) Read and record regional inlet meter usage off of flow meter.

   d) Calculate daily usage by subtracting previous days reading from today's reading.
   e) Read and record reading off of regional chlorine analyzer.

2) In water distribution pump room record the following on water treatment log sheet.
   a) Read and record distribution water off of flow meter west of steps.

b) Calculate daily usage by subtracting previous days reading from today's reading.
c) Read and record reservoir level off multi-ranger in center of building.

d) Read and record distribution pressure off digital gauge located east of steps.

4) Daily testing of plant and distribution water
Treated water

1) Turn on cold water tap in water facility and run for 5 minutes so stale water in piping is purged.
2) Rinse out the two 25 ml covets with tap water twice.
3) Fill the two 25 ml covets with treated water to 10 ml mark.
   a) Clean and dry one covet with chem wipes.
   b) Turn on colorimeter and make sure it is on program 9 for total chlorine.
   c) Insert covet into colorimeter and press zero.
   d) In other covet add contents of one total dpd package and shake until all powder is dissolved.
   e) Press timer for 3 minute countdown and press enter.
   f) When countdown is ended insert covet with reagent and press read.
   g) Record reading in reservoir grab column on waterworks daily log.

5) Weekly bacteriological sampling and recording

A) Obtain required number of sample bottles and requisition forms from hospital.

B) Have all supply location labels for week accessible.
C) Return sample bottles and requisition forms to hospital before noon.

Distribution water (weekly)

1) Run water from collection site for 5 to 10 minutes so stale water is purged.
2) Fill distribution sample bottle to full mark.
3) Dry bottle and detach identification label from requisition form and affix to bottle.
4) Attach location label to requisition form.
5) Fill out requisition form and location label.
6) Record location, time, ID number and chlorine concentration on daily log sheet.
7) Place requisition form around bottle and secure with rubber band and return to hospital.

6) Basic operation and Calibration of lab equipment

Colorimeter DR/890

1) Used for testing total chlorine program 9 (page 133 in manual).
2) Calibration is not needed.
3) For accurate results refer to manual section 1 (reagent blank correction).
4) Refer to colorimeter DR/890 manual.

Chlorine Analyzer calibration

A) Compare analyzer reading to grab sample result from drain of analyzer if numbers do not match calibrate analyzer.
B) Refer to instructions on analyzer board or manual in file cabinet.
All manuals are kept in file cabinet located in office.

7) Guidelines for water chemistry

1) Guidelines for Canadian Drinking Water Quality found in this manual located in top right drawer of office file cabinet located in desk office.
2) Code of practice can be found in this manual located in top right drawer of office file cabinet.
3) Weekly bacterial tests can be located in water department office.

8) Maintenance schedule

1) Greasing of distribution and fire pumps should be done every month.
2) Valves should be checked for proper operation once a month.
3) Solenoids should be checked for proper operation annually.
4) Gauges and meters should be checked annually.
5) Check pressure relief/pressure sustaining valves for proper operation monthly.
6) Flow meters should be calibrated annually.

9) Water operations logbook

1) Logbook should contain date and time of recordings
2) Indicate that facility check was done.
3) Equipment repair or replacement should be recorded.
4) Note anything not operating properly or needing repair.
5) Condition of facility and area should be recorded.
6) Building, reservoir and surrounding area problems should be noted.
7) Repairs to these areas should be noted.
8) Lift station condition should be recorded.
9) Work or repairs done to water and sewer systems in hamlet should be noted.

10) Exiting Plant Checklist

1) This information should be placed in an area so workers can view it before leaving facility for the day.
   a) Insure all switches are in proper position
   b) Fire pump switch in off position.
   c) Distribution pump switch in auto position.
   d) No taps or water hoses left on.
   e) Insure all doors closed and locked.

Spedden Facility Procedures

1) Facility Overview

1) Infrastructure Location
Spedden Water Works Facility - 12368 TP 595A SW33 -59 -12 W4

2) Facility type
Regional water supply

3) Design Flow
10 m3 per hour

4) Capacity
45 m3 in three holding tanks

5) Facility Registration
a) Registration # 262203-00-00
b) In file cabinet

6) Staff list

a) Manager	Dave Franchuk	(780)650-1800
b) Operator	Terry Bodnar	(780)656-8856
c) Operator	Lorne Fedirchuk	(780)656-5200
d) County Office		(780)656-3730

7) Service area
Hamlet of Spedden truck fill, Spedden Inn and Garner Lake Provincial Park (summer only).

8) Infrastructure
a) App. 2.6 Km of 4” distribution water pipe
b) App. 6.2 Km of 2” distribution water pipe
c) 1 service connection to Spedden Inn
d) 3 - 15 m3 potable water holding tanks
e) 1 – 5 hp truck fill pump
f) 2 - 5 hp distribution pumps for Spedden
g) 1 -3 hp distribution pump for Garner Lake
h) 2 - 121 L pressure tanks
I) 2 - 8000 L holding tanks for wastewater

2) Daily inspection of plant and surrounding area

Outside

1) Walk around building looking for damage and leaks; note them down so they can be repaired.
2) Check holding tank covers and vents so all are secured; note and correct any problems.
3) Ensure main valve covers are on

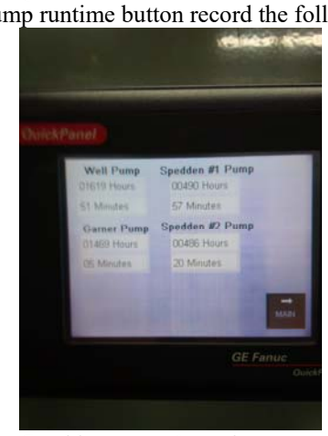
Inside

1) Check all piping for leaks and cracks; note and correct problems.
2) Listen to pumps for unusual noises; note and repair.
3) Check all gauges and valves for proper operation.
4) Inspect walls and ceiling of building for leaks; note and repair.
5) Make sure chemical metering pumps are working and note.

3) Daily logging of pumps, gauges, meters and chloramination system

Pumps

1) On Quickview touch screen located on east wall of plant under pump runtime button record the following on pump log sheet.



a) Spedden pump 1 runtime.
b) Calculate daily run time by subtracting reading from day before from today's reading and record.
c) Spedden pump 2 runtime.
d) Calculate daily run time by subtracting reading from day before from today's reading and record.
e) Garner Lake pump runtime.
f) Calculate daily run time by subtracting reading from day before from today's reading and record.

Gauges

1) Note and record the pressures on facility log sheets.
   a) Regional incoming pressure gauge PIT 8005 before PRV, gauge on west wall.

   b) Regional incoming pressure guage PIT 8029 after PRV, gauge on west wall.

   c) Spedden pump water pressure on quickview hmi

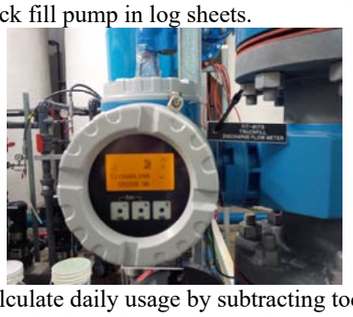
d) Garner Lake pump water pressure on quickview hmi

2) In water plant on water treatment plant log. Read and record reservoir level off wonderware touch screen on east wall of building.

Meters

1) Read and record incoming regional water meter FIT 8033 reading located on west wall in log sheets.

2) Calculate daily usage by subtracting today's reading from yesterday's reading and record
3) Read and record plant truck fill reading from meter FIT 8173 above truck fill pump in log sheets.



4) Calculate daily usage by subtracting today's reading from yesterday's reading and record.

5) Read and record garner lake meter reading located on west wall in log sheets.

6) Calculate daily usage by subtracting today's reading from yesterday's reading and record.
7) Read and record spedden inn meter reading from hamlet truck fill building and record.

8) Calculate daily usage by subtracting today's reading from yesterday's reading and record.
9) Read and record truck fill meter reading from hamlet truck fill building and record.

10) Calculate daily usage by subtracting today's reading from yesterday's reading and record.
11) Add plant truck fill, garner lake, spedden inn and spedden truck fill usages and record in distribution total column.

Analyzer

1) Record reading on water facility log sheets.

Chloramination system

1) Read and record chlorine tank weight off of scale located by chemical tanks on log sheet.

2) To get daily usage subtract today's result from yesterday's result and record on log sheet.
3) Read and record ammonia tank weight off of scale located by chemical tanks on log sheet.
4) To get daily usage subtract today's result from yesterday's result and record on log sheet.
5) Check chemical pump settings and pressures to ensure proper operation.


6) Check chemical lines for leaks and airlocks.
7) Ensure adequate chemical in tanks.


4) Daily testing of reservoir and distribution water

Reservoir water

Turn on tap above Spedden distribution pump and flush line for two minutes.


Chlorine testing

A) Rinse out the two 25 ml covets with tap water twice.
B) Fill two 25 ml covets with treated water to 10 ml mark.
C) Clean and dry one covet with chem. wipes.
D) Turn on colorimeter and make sure it is on program 9 for total chlorine.
E) Insert Covet into colorimeter and press zero.
F) In other Covet add contents of one total dpd package and shake until all powder is dissolved.
G) Press timer for 3 minute countdown and press enter.
H) When countdown is ended insert covet with reagent and press read.
I) Record reading in tanks water column on water plant daily log.

Distribution water

Activate barrel fill line at hamlet truck fill and flush for 2 minutes before sampling.


Chlorine testing

A) Rinse out the two 25 ml covets with tap water twice.
B) Fill two 25 ml covets with treated water to 10 ml mark.
C) Clean and dry one covet with chem. wipes.
D) Turn on colorimeter and make sure it is on program 9 for total

chlorine.
E) Insert Covet into colorimeter and press zero.
F) In other Covet add contents of one total dpd package and shake until all powder is dissolved.
G) Press timer for 3 minute countdown and press enter.
H) When countdown is ended insert covet with reagent and press read.
I) Record reading in distribution water column on water plant daily log.

5) Weekly bacteriological sampling and logging, chlorine analyzer calibration

A) Obtain required number of sample bottles and requisition forms from hospital.
B) Have all supply location labels for week accessible.
C) Return sample bottles and requisition forms to hospital before noon.

Distribution water (weekly)

1) Run water from collection site for 5 to 10 minutes so stale water is purged.
2) From distribution sample bottle fill sample bottle to full mark.
3) Dry bottle and detach identification label from requisition form and affix to bottle.
4) Attach location label to requisition form.
5) Fill out requisition form and location label.
6) Record location, time, ID number and chlorine concentration on daily log sheet.
7) Place requisition form around bottle and secure with rubber band.
8) Secure for transport to hospital.

Analyzer water sample
Chlorine testing

A) Rinse out the two 25 ml covets with tap water twice.
B) Fill two 25 ml covets with treated water to 10 ml mark from analyzer test line.
C) Clean and dry one covet with chem. wipes.
D) Turn on colorimeter and make sure it is on program 9 for total chlorine.
E) Insert Covet into colorimeter and press zero.
F) In other Covet add contents of one total dpd package and shake until all powder is dissolved.
G) Press timer for 3 minute countdown and press enter.
H) When countdown is ended insert covet with reagent and press read.
I) Record reading in water analyzer grab sample column in daily log.

Chlorine Analyzer calibration

A) Compare analyzer reading to grab sample result from drain of analyzer if numbers do not match calibrate analyzer.
B) Refer to instructions on analyzer board or manual in file cabinet.

6) Basic operation and Calibration of lab equipment

Colorimeter DR/890

1) Used for chlorine testing and numerous other testing parameters.
2) For accurate results refer to manual section 1 (reagent blank correction).
3) Refer to colorimeter DR/890 manual.

Pocket Colorimeter

1) Used for testing chlorine.
2) Calibration is not needed.
3) Refer to pocket colorimeter manual.

All manuals are kept in file cabinet.

7) Guidelines for water chemistry

1) Guidelines for Canadian Drinking Water Quality located in facility operations manual.
2) Weekly bacterial tests can be located in water department office.

8) Maintenance schedule

1) Valves should be checked for proper operation twice a year.
2) Gauges and meters should be checked annually.

9) Water operations logbook

1) Logbook should contain date and time of recordings
2) Indicate that facility check was done.
3) Equipment repair or replacement should be recorded.
4) Note anything not operating properly or needing repair.

5) Condition of facility and area should be recorded.
6) Building, reservoir, holding tank and surrounding area problems should be noted.
7) Repairs to these areas should be noted.

10) Exiting Plant Checklist

1) This information should be placed in an area so workers can view it before leaving facility for the day.
   a) Insure all switches are in proper position
   b) Spedden distribution pump switch in auto position.
   c) Garner lake pump set to auto during operational season.
   d) Truck fill pump switch in auto position.
   e) No taps or water hoses left on.
   f) Insure all doors closed and locked.

Smoky Lake Booster Station Procedures

1) Facility Overview

1) Infrastructure Location

a) Smoky Lake Booster Station. NW-16-59-17-W4

2) Facility type

a) Regional water booster station.

3) Staff list

a) Manager	Dave Franchuk	(780)650-1800
b) Operator	Terry Bodnar	(780)656-8856
c) Operator	Lorne Fedirchuk	(780)656-5200
d) County Office		(780)656-3730

4) Service area

a) Supplying town of Smoky Lake, Hamlet of Bellis truck fill, Village of Vilna, Hamlet of Spedden

5) Infrastructure

a) 2 – 10 hp inline booster pumps
b) 2 – magnetic flow meters
c) DR6000 colorimeter
d) Schneider plc
e) Wonderware human machine interface

2) Daily inspection of plant and surrounding area

Outside

1) Walk around building looking for damage and leaks; note them down so they can be repaired.
2) Ensure main valve covers are on.

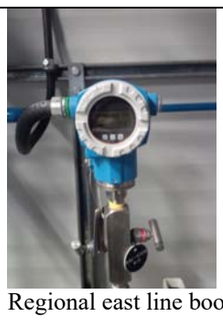
Inside

1) Check all piping for leaks and cracks; note and correct problems.
2) Check pressure control valves and backflow preventers for proper operation.
3) Check all gauges and valves for proper operation.
4) Inspect walls and ceiling of building for leaks; note and repair.

3) Daily logging of pumps, gauges, meters

Gauges

1) Note and record the pressures on facility log sheets.
   a) Regional incoming pressure before PRV, gauge PE-4031 on west wall.



b) Regional east line boost pressure after PRV, gauge PE-4544 on north wall.

2) Read and record Smoky Lake reservoir level off multiranger LIT-4021 located on north wall of building.

Meters

1) Read and record incoming regional water meter FIT-4029 reading located on east wall in log sheets. Also record flow rate in appropriate column on log sheet.

2) Calculate daily usage by subtracting today's reading from yesterday's reading and record

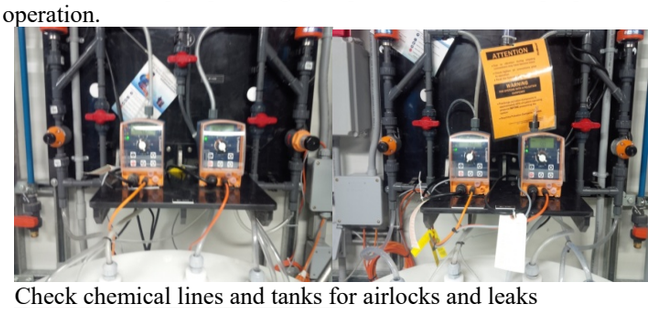
3) Read and record east line reading from meter FIT-4537 on north wall in log sheets. Also record flow rate in appropriate column on log sheet.

4) Calculate daily usage by subtracting today's reading from yesterday's reading and record.

Chloramination System

1) Read and record chlorine tank weight off of scale located beside door on south wall in appropriate column on log sheet.

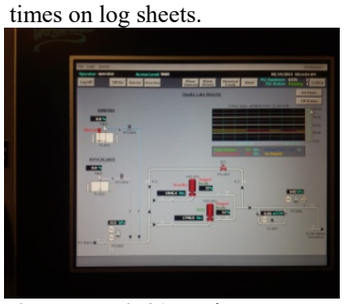
2) To get daily usage subtract today's reading from yesterday's reading and record on log sheet.
3) Read and record amonnia tank weight off of scale located beside door on south wall in appropriate column on log sheet.
4) To get daily usage subtract today's reading from yesterday's reading and record on log sheet.
5) Check chemical pump settings and pressures to ensure proper operation.



6) Check chemical lines and tanks for airlocks and leaks

Pumps

1) On wonderware touch screen located in north east corner of building record pump status (duty/standby, online/offline) and run times on log sheets.



a) PWP-4501 runtime.
b) Calculate daily runtime by subtracting from day before with today's reading and record.
c) PWP-4502 runtime.
d) Calculate daily runtime by subtracting from day before with today's reading and record.

4) Daily testing of regional water

1) Chlorine Analyzer

a) Read and record reading off of chlorine analyzer AIT-4030 on north wall.

2) Grab sample locations

a) Incoming regional water sample from waste line exciting incoming chlorine analyzer

b) Smoky Lake Town outgoing to reservoir from tap on west wall

e) East line boost outgoing to Bellis, Vilna, Spedden from tap on North wall

Chlorine testing

A) Rinse out the two 25 ml covets with tap water twice.
B) Fill two 25 ml covets with treated water to 10 ml mark.
C) Clean and dry one covet with chem. wipes.
D) Turn on colorimeter and make sure it is on program 9 for total chlorine.
E) Insert Covet into colorimeter and press zero.
F) In other Covet add contents of one total dpd package and shake until all powder is dissolved.
G) Press timer for 3 minute countdown and press enter.
H) When countdown is ended insert covet with reagent and press read.
I) Record reading in reservoir water column on water plant daily log.

5) Basic operation and Calibration of lab equipment

Pocket Colorimeter
1) Used for testing chlorine.
2) Yearly outsourced calibration is needed.
3) Refer to pocket colorimeter manual


DR 6000 Colorimeter
1) Used for monochloramine, free ammonia, nitrate testing as well as numerous other tests.
2) Yearly outsourced calibration is needed.
3) Refer to DR6000 manual.

Chlorine Analyzer calibration
A) Compare analyzer reading to grab sample result from drain of analyzer if numbers do not match calibrate analyzer.
B) Refer to instructions on analyzer board or manual in file cabinet.

All manuals are kept in manual holders on east wall.

6) Maintenance schedule
1) Valves should be checked for proper operation monthly.
2) Gauges and meters should be checked annually.
Refer to maintenance manual for further information.

7) Water operations logbook
1) Logbook should contain date and time of recordings
2) Indicate that facility check was done.
3) Equipment repair or replacement should be recorded.
4) Note anything not operating properly or needing repair.
5) Condition of facility and area should be recorded.
6) Building and surrounding area problems should be noted.
7) Repairs to these areas should be noted.

8) Exiting Facility Checklist
1) This information should be placed in an area so workers can view it before leaving facility for the day.
a) Insure all switches are in proper position
b) No taps or water hoses left on.
c) Insure all doors closed and locked.
d) Activate alarm system.

Carried.

Policy Statement No. 04-07-01: Spedden Plant Procedures

472-16: Lukinuk That **Policy Statement No. 04-07-01** entitled "Spedden Plant Procedures" be rescinded.

Carried.

Policy Statement No. 04-05-01: Warspite Plant Procedures

473-16: Orichowski That **Policy Statement No. 04-05-01** entitled "Warspite Plant Procedures" be rescinded.

Carried.

5. Issues for Information:

Environmental Operations: Manager's Report

474-16: Bobocel That the Environmental Operations Manager's report received for the period January 5, 2016 to February 23, 2016, be accepted and filed for information.

Carried.

Evergreen Regional Waste Management Services Commission

475-16: Orichowski That the Agenda Package dated January 14, 2016 received from the Evergreen Regional Waste Management Services Commission Regular Meetings held at the County of St. Paul, be filed for information.

Carried.

Evergreen Regional Waste Management Services Commission

476-16: Smigerowsky That the Agenda Package dated February 11, 2016 received from the Evergreen Regional Waste Management Services Commission Regular Meetings held at the County of St. Paul, be filed for information.

Carried.

Next Meeting

477-16: Orichowski That the next **Utilities Meeting: Environmental Operations** be scheduled for Friday, **May 6, 2016** at 9:00 a.m. to be held at the County Council Chambers.

Carried.

ADJOURNMENT:

478-16: Cholak That this meeting be adjourned, time 1:15 p.m.

Carried.

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CHAIRMAN

S E A L

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CHIEF ADMINISTRATIVE OFFICER