

**Standard Recovery Procedures**

<b>Procedure Name</b>	<b>Created Version</b>
SRP 01 Alarm System	January 1, 2009
SRP 02 Chlorination Pumps	January 1, 2009
SRP 03 Chlorine Residual Analyzers	January 1, 2009
SRP 04 High Lift Pumps	January 1, 2009
SRP 05 Turbidity Meters	January 1, 2009
SRP 06 Water Main Breaks	January 1, 2009
SRP 07 Well Pumps	January 1, 2009

# Dundalk Drinking Water System

Version 2018-1 Release Date: January 18, 2018 MECP Version 2.0

Standard Recovery Procedure		
SRP #: <b>01</b>	Title: <b>Alarm System</b>	
Page: 1 of 1	Created: January 1, 2009	Revised: January 18, 2018

## Purpose:

Use this procedure for maintenance, troubleshooting and repair of the alarm system.

## Procedure:

Follow the Raco Verbation manual. A copy is kept at each well.

For additional support:

Supplier: Summa Engineering      Phone: 905-678-3388

Service: H2O (Brian Melan)      Phone: 519-581-6657

## Related Procedures:

None

# Dundalk Drinking Water System

Version 2018-1 Release Date: January 18, 2018 MECP Version 2.0

Standard Recovery Procedure		
SRP #: <b>02</b>	Title: <b>Chlorination Pumps</b>	
Page: 1 of 1	Created: January 1, 2009	Revised: January 25, 2021

## **Purpose:**

Use this procedure for maintenance, troubleshooting and repair of the chlorination pumps.

## **Procedure:**

Well D3: Watson Marlow 520V

Well D4: Watson Marlow 520V

Well D5: Watson Marlow 520V

There is a spare pump at each well as well as repair parts.

Follow the US Filter manuals. A copy is kept at each well.

For additional support:

Supplier: Metcon

Dave Howes

Phone:

905-738-2355

## **Related Procedures:**

None

# Dundalk Drinking Water System

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Standard Recovery Procedure		
SRP #: <b>03</b>	Title: <b>Chlorine Residual Analyzers</b>	
Page: 1 of 1	Created: January 1, 2009	Revised: January 18, 2018

## Purpose:

Use this procedure for maintenance, troubleshooting and repair of the chlorine residual analyzers.

## Procedure:

Depolox 3 Plus Residual Analyzer.

Follow the US Filter manuals. A copy is kept at each well.

Additional grit is kept at each well to support ongoing maintenance as well as a pH meter and Portable Chlorine Colorimeter to make calibration adjustments to the analyzer.

For additional support:

Supplier: US Filter - Wallace & Tiernan

Derek Proulx or Paul Dolan Phone: 905-944-2800

## Related Procedures:

None

# Dundalk Drinking Water System

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Standard Recovery Procedure		
SRP #: <b>04</b>	Title: <b>High Lift Pumps</b>	
Page: 1 of 1	Created: January 1, 2009	Revised: January 25, 2021

## Purpose:

Use this procedure when it is necessary to maintain or repair high lift pumps.

## Procedure:

Well D3 – Maintenance Manual Volume #3 Section 11C Vertical Turbine High Lift Pumps

Well D4 –Maintenance Manual Volume #3 Section 11C Vertical Turbine High Lift Pumps

Well D5 - Maintenance Manual Volume #3 Section 11C Vertical Turbine High Lift Pumps

Follow the manufacturer's manual. A copy is kept at each well.

For additional support:

Electrical: D V Electric

Phone: 519-923-6220

Cell: 519-375-5824

Pumps: Interpump,

Phone: 800-265-9355

Home: 519-843-4232

International Pumps

Phone 519-843-4232

## Related Procedures:

None

# Dundalk Drinking Water System

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Standard Recovery Procedure		
SRP #: <b>05</b>	Title: <b>Turbidity Meters</b>	
Page: 1 of 1	Created: January 1, 2009	Revised: January 25, 2021

## Purpose:

Use this procedure for maintenance, troubleshooting and repair of the turbidity meter at Wells D3, D4, and D5.

## Procedure:

US Filter TMS-561 On-Line Turbidity Meter

Follow the US Filter manuals. A copy is kept at the well.

For additional support:

Supplier: US Filter - Wallace & Tiernan

Derek Proulx or Paul Dolan Phone: 905-944-2800

## Related Procedures:

None

# Dundalk Drinking Water System

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Standard Recovery Procedure		
SRP #: <b>06</b>	Title: Water Main Breaks	
Page: 1 of 4	Created: January 1, 2009	Revised: March 4, 2022

## **Purpose:**

Use this procedure when there is a suspected or confirmed water main break.

## **Procedure:**

1. Print off Form # 24, fill out during the process to ensure accurate information.
2. Call for emergency utility locates.
  - Locates- Ontario One Call - 800-400-2255 (Contractor identification #: 02346).
  - Hydro One Locates - 888-664-9376.
3. Notify Public Works Manager and Public Works Admin Assistant of information such as location, area affected, traffic control plan, road closure, etc
  - Public Works Manger, Jim Ellis, 519-378-3777, [jellis@southgate.ca](mailto:jellis@southgate.ca)
  - Public Works Admin Assistant, Lisa Wilson, 519-923-2110 ext. 252, [lwilson@southgate.ca](mailto:lwilson@southgate.ca)
4. Arrange for a backhoe and gravel if necessary.
  - Glen Irwin - B & M – Phone: 519-923-2433 - Cell 519-372-5434
  - Jerry Jack - Eskerlee – Phone: 519-923-2194 – Cell: 519-373-7999
5. Locate valves to isolate break. Do not close valves completely so that positive pressure is maintained until an air gap is created to prevent contamination of the water main.
6. Contact Ministry of Labour for number - 800-265-2468 (Employer #: 12271). A trench notification can also be made online at <https://www.labour.gov.on.ca/english/hs/forms/>
7. Make a traffic control plan, closure of the road is the safest option if possible.
8. If closing a road is necessary, the following emergency services should be notified. The most efficient way is to send an email including OPP, EMS and Fire Chief.
  - Ontario Provincial Police, Central dispatch - 888-310-1122
  - Ontario Provincial Police, Chatsworth - 519-794-7827 [opp.grey.bruce@opp.ca](mailto:opp.grey.bruce@opp.ca)
  - E.M.S. - 519-379-4616 [duty.supervisor@grey.ca](mailto:duty.supervisor@grey.ca)
  - Dundalk Fire Department - 519-923-2402
  - Fire Chief– Cell: 519-373-1139 [firechief@southgate.ca](mailto:firechief@southgate.ca)
9. If the road closure is on Grey Road # 9 notify Grey County Roads

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- Dispatch - Phone: 519-376-7337, press #1.
  - Foreman - Phone: 519-924-2630 Cell: 519-372-6227.
  - After hours - Patrol – Phone: 519-372-5438.
10. Excavate in accordance with Ministry of Labour regulations for trench excavations.
  11. Maintain positive pressure until an air gap is created between the main and trench/water.
  12. When the break is located and air gap created, disinfect pipe and repair clamp. Lube repair clamp and install.
  13. Backfill with A-gravel, ensure good compaction and support of the water main.
  14. Open a valve to allow water to flow through the repair and out a hydrant. Flush hydrant for 10 – 15 minutes and obtain a chlorine residual near typical for the area.
  15. The OIC should decide if there is any evidence or suspicion of contamination. No = Category 1, Yes = Category 2. **Take necessary steps (refer to below steps with Category 1 or Category 2).**

## **Steps for Watermain Break**

1. Watermain break is detected
2. Maintain flow (if possible) and excavate to below break
3. OIC visually inspects excavated main to determine nature of break
4. Is contamination evident or suspected? No = Category 1, Yes = Category 2

## **Category 1**

1. Notification to Ministry and local MOH is not required (unless MOH provides direction to do so).
2. Disinfect pipe and repair parts with minimum 1% sodium hypochlorite solution.
3. Install repair parts such that the watermain remains free of contaminants.
4. Conduct post-repair flushing through location of repair.
5. Continue to flush until at least 0.2 mg/L (free) or 1.0 mg/L (combined) chlorine residual is achieved
6. Return system to normal service
7. Document Repair

## **Category 2**

1. Was contaminated water directed to users? **Yes** = immediately report as an observation of improper disinfection as per Section 16-4 of Schedule 16 of O. Reg. 170/03. Take corrective action as per Schedule 17 or 18 of O. Reg. 170/03.



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2. **No** – Is there evident or suspected sewage or chemical contamination? **Yes = Continue to Evident or suspected sewage or chemical contamination below.** **No** = Notification to local ministry office is not require for Category 2 main breaks (unless a BWA/DWA is issued by the local MOH).
3. Take additional steps to remove contaminants from watermain.
4. Disinfect pipe and repair parts with minimum 1% sodium hypochlorite solution.
5. Use additional disinfection procedures as appropriate.
6. Install repair parts such that the watermain remains free of contaminants.
7. Conduct post-repair flushing through location of repair.
8. Continue to flush until at least 0.2 mg/L (free) or 1.0 mg/L (combined) chlorine residual is achieved.
9. Take at least one microbiological sample.
10. Return system to normal service.
11. Document repair.

## **Evident or Suspected Sewage or Chemical Contamination**

1. Special Case – Sewage or Chemical Contamination
2. Notify local Ministry office and MOH as soon as reasonably possible.
3. Develop and implement site-specific sampling/disinfection/decontamination plan.
4. If chemical contamination, finalize plan in agreement with the local ministry Office and MOH.
5. Complete corrective actions and sampling plan to the satisfaction of local Ministry office and MOH.
6. If sewage contamination, take minimum two sets of microbiological samples at least 24 hours apart.
7. Return system to normal service.
8. Document repair.

## **Related Procedures:**

- SOP 04 – Hydrants
- SOP 06 – Isolate and Flush
- SOP 08 – Low Pressure
- SOP 16 – Super Chlorinate and Flush
- SOP 21 – Water Sampling and Testing
- SOP 29 – Traffic Control Plan
- SOP 40 – Boil Water Advisory

# Dundalk Drinking Water System

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EOP 01 – Adverse Water

Form 24 – Water Main Break Report

# Dundalk Drinking Water System

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Standard Recovery Procedure		
SRP #: <b>07</b>	Title: <b>Well Pumps</b>	
Page: 1 of 1	Created: January 1, 2009	Revised: January 18, 2018

## **Purpose:**

Use this procedure when it is necessary to maintain or repair well pumps.

## **Procedure:**

Well D4 – Maintenance Manual Volume #3 Section 11E Goulds Submersible Well Pump

Follow the manufacturer's manual. A copy is kept at each well.

For additional support:

Electrical: DV Electric, Daryl Verbeek

Phone: 519-923-6220

Cell: 519-375-5824

Pumps: Interpump,

Phone: 800-265-9355

Home: 519-843-4232

Weitzel Pumps

Phone: 519-625 8825

## **Related Procedures:**

None