

Work Experience Form Water and Wastewater Technician

2011 - Provincial Occupational Analysis (POA)

1-877-978-7233

www.manitoba.ca/tradecareers

| Personal | Information | (please print) |
|----------|-------------|----------------|
|----------|-------------|----------------|

| Legal First Name | Middle Initial | Legal Last Name | Birth Date (yy/mm/dd) |
|--------------------|----------------|-----------------|-----------------------|
| Address | | City/Town | Postal Code |
| Home or Cell Phone | Business Phone | E-mail address | Fax # |

Eligibility Requirements

In order for Trades Qualifiers (TQ) to be approved to challenge the certification exam or for Designated Trainers (DT) to be approved to register apprentices, you must have worked both a minimum of 3 years within the last 10 and accumulated 4,800 hours, as well as acquired at least 70% scope of the trade.

Check the box you are applying for

- ☐ Trades Qualifier (Experienced tradesperson being assessed to challenge the certification exam)
- ☐ Designated Trainer (Experienced tradesperson being assessed to register apprentices)
 - * We encourage all Designated Trainers interested in receiving a Certificate of Qualification (trade ticket) to apply to challenge the exam through the Trades Qualification process. The application can be found at: http://www.gov.mb.ca/wdis/apprenticeship/generalinfo/forms.html.
 - * Trades Qualifier's must submit a photocopy of all eight (8) conservation certificates with this application. If the photocopies are not attached, the application will be returned.

Instructions

You are about to complete the Work Experience Form (WEF) which is based on the sub-tasks outlined in the Provincial Occupational Analysis (POA). The POA provides detailed information that will assist you when completing the WEF and is your best source for identifying any training gaps. To access the POA, go to the Trade Profile page at http://www.gov.mb.ca/wdis/apprenticeship/discover/mbtrades/index.html. Follow the link to your trade, and click on the Provincial Occupational Analysis (POA).

Rate your experience for each sub-task based on the scale below. The number of questions in each section of the certification exam is identified next to each Block title. How you assess yourself is an important step to prepare for the certification exam.

Circle #0 if I have no experience doing this.

Circle #1 if I have a little experience doing this.

Circle #2 if I have some experience doing this with help.

Circle #3 if I have some experience doing this alone and unaided.

Circle #4 if I have frequently done this.

Circle #5 if I have extensive experience doing this.

Sign and date the completed Work Experience Form and return it to Apprenticeship Manitoba with either the Trades Qualification or Designated Trainer application form and related documents. Keep one copy of the Work Experience Form for your records.

Rev. 01/15



Block A Occupational Skills And Procedures

| Task | Sub-Tasks | Rating |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Monitors control systems. | 1.01 Monitors electrical systems. | 012345 |
| | 1.02 Utilizes systems such as supervisory control and data acquisition (scada), program logic controller (plc), distributed control system (dcs). | 012345 |
| | 1.03 Applies computer knowledge and skills. | 012345 |
| | 1.04 Monitors generators and back-up systems. | 012345 |
| | 1.05 Ability to perform tests on water and wastewater. | 012345 |

| Task | Sub-Tasks | Rating |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------|--------|
| 2. Applies, follows and conforms with legislation, regulation and by-laws. | 2.01 Complies with water and wastewater legislation, by-laws and codes. | 012345 |
| | 2.02 Complies with operation license and environment license. | 012345 |

| Task | Sub-Tasks | Rating |
|-----------------------------|---------------------------------------------------|--------|
| 3. Performs record keeping. | 3.01 Records data (e.g., daily, monthly, yearly). | 012345 |
| | 3.02 Generates reports. | 012345 |

| Task | Sub-Tasks | Rating |
|-------------------------------------------------------|---------------------------------------------------------------|--------|
| 4. Communicates with internal and external personnel. | 4.01 Accesses computerized management maintenance system. | 012345 |
| | 4.02 Communicates in accordance with policies and procedures. | 012345 |

| Task | Sub-Tasks | Rating |
|------------------------------|---------------------------------------------|--------|
| 5. Maintains safe workplace. | 5.01 Follows provincial safety regulations. | 012345 |

| 5.02 Follows workplace safety policies and procedures. | 012345 |
|--------------------------------------------------------|--------|
| 5.03 Follows standard operating procedures. | 012345 |

| Task | Sub-Tasks | Rating |
|----------------------------------------|---------------------------------------|--------|
| 6. Participates in security protocols. | 6.01 Follows emergency response plan. | 012345 |
| | 6.02 Performs inspections. | 012345 |
| | 6.03 Performs record keeping. | 012345 |
| | 6.04 Maintains security systems. | 012345 |
| | 6.05 Operates security systems. | 012345 |
| | 6.06 Troubleshoots security systems. | 012345 |

Block B Water Treatment

| | Task | Sub-Tasks | Rating |
|-------------|------------------|---------------------------------|--------|
| 7. Monitors | intake facility. | 7.01 Operates intake facility. | 012345 |
| | | 7.02 Maintains intake facility. | 012345 |

| Task | Sub-Tasks | Rating |
|------------------------|------------------------------|--------|
| 8. Receives raw water. | 8.01 Checks influent flow. | 012345 |
| | 8.02 Checks reservoir level. | 012345 |
| | 8.03 Adjusts influent flow. | 012345 |

| Task | Sub-Tasks | Rating |
|--------------------------------|---------------------------------|--------|
| Sampling and testing of water. | 9.01 Collects water samples. | 012345 |
| | 9.02 Performs laboratory tests. | 012345 |

| | 9.03 Adjusts water treatment process. | 012345 | |
|--|---------------------------------------|--------|--|
|--|---------------------------------------|--------|--|

| Task | Sub-Tasks | Rating |
|----------------------|----------------------------|--------|
| 10. Maintains pumps. | 10.01 Operates pumps. | 012345 |
| | 10.02 Maintains pumps. | 012345 |
| | 10.03 Troubleshoots pumps. | 012345 |

| Task | Sub-Tasks | Rating |
|---------------------------------|-----------------------------------------------|--------|
| 11. Operates treatment systems. | 11.01 Operates chemical handling system. | 012345 |
| | 11.02 Maintains chemical handling system. | 012345 |
| | 11.03 Troubleshoots chemical handling system. | 012345 |
| | 11.04 Operates clarification system. | 012345 |
| | 11.05 Maintains clarification system. | 012345 |
| | 11.06 Troubleshoots clarification system. | 012345 |
| | 11.07 Operates sedimentation system. | 012345 |
| | 11.08 Maintains sedimentation system. | 012345 |
| | 11.09 Troubleshoots sedimentation system. | 012345 |
| | 11.10 Monitors coagulation process. | 012345 |
| | 11.11 Maintains coagulation process. | 012345 |
| | 11.12 Troubleshoots coagulation process. | 012345 |
| | 11.13 Operates softening system. | 012345 |
| | 11.14 Maintains softening system. | 012345 |
| | 11.15 Troubleshoots softening system. | 012345 |
| | 11.16 Operates a filtration system. | 012345 |
| | 11.17 Maintains filtration system. | 012345 |
| | 11.18 Troubleshoots filtration system. | 012345 |

| 11.19 Operates disinfection system. | 012345 |
|--------------------------------------------|--------|
| 11.20 Maintains disinfection system. | 012345 |
| 11.21 Troubleshoots disinfection system. | 012345 |
| 11.22 Operates recarbonation system. | 012345 |
| 11.23 Maintains recarbonation system. | 012345 |
| 11.24 Troubleshoots recarbonation system. | 012345 |
| 11.25 Operates solid handling system. | 012345 |
| 11.26 Maintains solid handling system. | 012345 |
| 11.27 Troubleshoots solid handling system. | 012345 |

Block C Water Distribution

| Task | Sub-Tasks | Rating |
|-----------------------------|------------------------------------------------------|--------|
| 12. Receives treated water. | 12.01 Performs point sampling. | 012345 |
| | 12.02 Collects samples for bacteriological analysis. | 012345 |
| | 12.03 Performs chlorines residual tests. | 012345 |
| | 12.04 Performs turbidity tests. | 012345 |

| Task | Sub-Tasks | Rating |
|---------------------------|-----------------------------------------|--------|
| 13. Stores treated water. | 13.01 Operates storage facilities. | 012345 |
| | 13.02 Maintains storage facilities. | 012345 |
| | 13.03 Troubleshoots storage facilities. | 012345 |

| Task | Sub-Tasks | Rating |
|--------------------------------|--------------------------------------------------------|--------|
| 14. Distributes treated water. | 14.01 Operates distribution pumps and/or water tower. | 012345 |
| | 14.02 Maintains distribution pumps and/or water tower. | 012345 |

| | 14.03 Troubleshoots distribution pumps and/or water tower. | 012345 | |
|--|------------------------------------------------------------|--------|--|
|--|------------------------------------------------------------|--------|--|

| Task | Sub-Tasks | Rating |
|-------------------------------------|---------------------------|--------|
| 15. Reads distribution flow meters. | 15.01 Reads meter. | 012345 |
| | 15.02 Interprets results. | 012345 |

| Task | Sub-Tasks | Rating |
|-------------------------------|----------------------------------------|--------|
| 16. Operates pipeline system. | 16.01 Operates valves. | 012345 |
| | 16.02 Maintains valves. | 012345 |
| | 16.03 Maintains fire protection flows. | 012345 |
| | 16.04 Operates hydrants. | 012345 |
| | 16.05 Maintains hydrants. | 012345 |

| Task | Sub-Tasks | Rating |
|--------------------------------|-------------------------------------------|--------|
| 17. Maintains pipeline system. | 17.01 Swabbing pipeline (a.k.a. Pigging). | 012345 |
| | 17.02 Flushing pipeline. | 012345 |
| | 17.03 Maintains meters. | 012345 |
| | 17.04 Intalls cathodic protection system. | 012345 |
| | 17.05 Performs leak protection. | 012345 |

| Task | Sub-Tasks | Rating |
|------------------------------|--------------------------|--------|
| 18. Repairs pipeline system. | 18.01 Repairs leaks. | 012345 |
| | 18.02 Thaws frozen line. | 012345 |
| | 18.03 Replaces pipe. | 012345 |

| | 18.04 Replaces curbstops. | 012345 | |
|--|---------------------------|--------|--|
|--|---------------------------|--------|--|

| Task | Sub-Tasks | Rating |
|----------------------------------------|----------------------------------------------------|--------|
| 19. installs new distribution systems. | 19.01 Installs new distribution piping and valves. | 012345 |
| | 19.02 Installs service lines. | 012345 |

| Task | Sub-Tasks | Rating |
|-----------------------------------|------------------------------------------|--------|
| 20. installs distribution meters. | 20.01 Maintains meters. | 012345 |
| | 20.02 Troubleshoots meters. | 012345 |
| | 20.03 Repairs meters. | 012345 |
| | 20.04 Flushing service line connections. | 012345 |

| Task | Sub-Tasks | Rating |
|---------------------------------|----------------------------------------------|--------|
| 21. Prevents cross connections. | 21.01 Inspects pipeline systems. | 012345 |
| | 21.02 Installs backflow prevention devices. | 012345 |
| | 21.03 Maintains backflow prevention devices. | 012345 |

Block D Wastewater Collection

| Task | Sub-Tasks | Rating |
|--------------------------------------------|------------------------------------------------|--------|
| 22. Operates wastewater collection system. | 22.01 Collects wastewater with gravity system. | 012345 |
| | 22.02 Operates lift stations. | 012345 |
| | 22.03 Maintains lift stations. | 012345 |
| | 22.04 Troubleshoots lift stations. | 012345 |

| 22.05 Operates force main systems. | 012345 |
|---------------------------------------------------|--------|
| 22.06 Maintains force main systems. | 012345 |
| 22.07 Troubleshoots force main systems. | 012345 |
| 22.08 Collects wastewater in low pressure system. | 012345 |

| Task | Sub-Tasks | Rating |
|----------------------------------------------|-----------------------------------------------|--------|
| 23. Maintains wastewater collection systems. | 23.01 Inspects manholes. | 012345 |
| | 23.02 Performs flushing and/or sewer jetting. | 012345 |
| | 23.03 Performs camera inspections. | 012345 |
| | 23.04 Performs root control. | 012345 |
| | 23.05 Cleans bar screens. | 012345 |
| | 23.06 Performs smoke testing. | 012345 |
| | 23.07 Performs mandrel testing. | 012345 |

| Task | Sub-Tasks | Rating |
|-------------------------------------------------|---------------------------------------|--------|
| 24. Installs new wastewater collection systems. | 24.01 Installs new collection piping. | 012345 |
| | 24.02 Installs service lines. | 012345 |

Block E Wastewater Treatment

| Task | Sub-Tasks | Rating |
|--------------------------|----------------------------------|--------|
| 25. Receives wastewater. | 25.01 Monitors wet well levels. | 012345 |
| | 25.02 Maintains wet well levels. | 012345 |
| | 25.03 Troubleshoots wet wells. | 012345 |

| Task | Sub-Tasks | Rating |
|-----------------------------------------|---------------------------------------------|--------|
| 26. Sampling and testing of wastewater. | 26.01 Collects wastewater samples. | 012345 |
| | 26.02 Performs laboratory tests. | 012345 |
| | 26.03 Adjusts wastewater treatment process. | 012345 |

| Task | Sub-Tasks | Rating |
|---------------------|----------------------------|--------|
| 27. Services pumps. | 27.01 Operates pumps. | 012345 |
| | 27.02 Maintains pumps. | 012345 |
| | 27.03 Troubleshoots pumps. | 012345 |

| Task | Sub-Tasks | Rating |
|-------------------------|-------------------------------|--------|
| 28. Services headworks. | 28.01 Operates headworks. | 012345 |
| | 28.02 Adjusts for conditions. | 012345 |

| Task | Sub-Tasks | Rating |
|-----------------------------------------|------------------------------------------------|--------|
| 29. Services primary treatment systems. | 29.01 Operates primary treatment systems. | 012345 |
| | 29.02 Operates sludge removal systems. | 012345 |
| | 29.03 Maintains primary treatment systems. | 012345 |
| | 29.04 Troubleshoots primary treatment systems. | 012345 |

| Task | Sub-Tasks | Rating |
|-------------------------------------------|--------------------------------------------------|--------|
| 30. Services secondary treatment systems. | 30.01 Operates secondary treatment systems. | 012345 |
| | 30.02 Maintains secondary treatment systems. | 012345 |
| | 30.03 Troubleshoots secondary treatment systems. | 012345 |

| Task | Sub-Tasks | Rating |
|------------------------------------------|---------------------------------------------|--------|
| 31. Services tertiary treatment systems. | 31.01 Operates tertiary treatment systems. | 012345 |
| | 31.02 Maintains tertiary treatment systems. | 012345 |
| | 31.03 Maintains tertiary treatment systems. | 012345 |

| Task | Sub-Tasks | Rating |
|------------------------------------------|-------------------------------------------------|--------|
| 32. Services residuals handling systems. | 32.01 Operates residuals handling systems. | 012345 |
| | 32.02 Maintains residuals handling systems. | 012345 |
| | 32.03 Troubleshoots residuals handling systems. | 012345 |

| Task | Sub-Tasks | Rating |
|------------------------------------|-------------------------------------------|--------|
| 33. Services disinfection systems. | 33.01 Operates disinfection systems. | 012345 |
| | 33.02 Maintains disinfection systems. | 012345 |
| | 33.03 Troubleshoots disinfection systems. | 012345 |

| Name (please print) | |
|---------------------|-------|
| | |
| Signature | Date: |

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