

APPLICATION INFORMATION FOR DEWATERING PERMITS

APPLICATION PROCESS

- Once you have determined that you require a Dewatering Permit fill out a copy of **The City of Red Deer Dewatering Permit Application – Discharge to Storm Sewer** and send it to:

Environmental Services, Source Control, City of Red Deer
Box 5008, Red Deer, AB T4N 3T4
Fax: 403-342-6022 or by Email: barry.brookes@reddeer.ca

- The required information is contained in Appendix A. As all sites are unique, more information beyond what is already requested may be required. You will be notified if additional information is needed to process your permit.
- If you are not the registered landowner of the property, attach a copy of the landowner's consent to access the property with your application.
- In accordance with provisions of The City of Red Deer **Bylaw No. 3161/96**, if you require the use of any portion of a City street or sidewalk, attach a copy of your Use of Streets Permit from Engineering Services.

Duration

- A dewatering permit is issued for up to 30 days. The permit may be extended, in increments of up to 30 days, to a maximum of **six** months. The City may require further information in order to extend the permit. If the duration of the Dewatering procedure is expected to exceed six months The City will require a copy of your Alberta Environment license. Without a copy of the license, The City of Red Deer will not extend the permit.

Below is an excerpt from the provincial *Water (Ministerial) Regulation* that outlines when a license is not required for dewatering from construction sites. If any of these conditions are not met, the applicant should contact Alberta Environment for assistance in obtaining a license.

Water (Ministerial) Regulation (EXEMPTIONS TO TEMPORARY DIVERSION LICENSE REQUIREMENT)

Schedule 3

- (f) a diversion of water for the purpose of dewatering a sand and gravel site or construction site if
- (i) the water diverted as a result of the dewatering is
 - (A) moved into and retained in an on-site pit, without using the water, or
 - (B) diverted back into a water body without using the water, if the water is equal to or of the same quality as the water that was originally diverted,
 - (ii) the dewatering site, the water body and the on-site pit referred to in subclause (i) are hydraulically connected,
 - (iii) there is no adverse effect on the aquatic environment or on a household user, licensee or traditional agriculture user, and
 - (iv) in the case of a construction site,
 - (A) there is no adverse effect on any parcel of land, and
 - (B) the maximum duration of the dewatering operation is 6 months or less for the entire construction project;

Discharge/Diversion Rate and Pumping Restrictions

- The City of Red Deer will conduct a review for applications submitted with a diversion rate greater than 20L/sec or 316 US GPM. If the Storm Drainage Collection system is capable of handling higher flows, the application will continue to be processed. If the volume is a concern for the capacity of the Storm Drainage Collection System, the applicant will be notified.

ENVIRONMENTAL SERVICES

The City's **Utility Bylaw 3606/2018** applies during discharges to storm sewer system and all conditions must be met during discharge. The City's **Utility Bylaw 3606/2018** may be found on The City's web site, www.reddeer.ca

Water Quality Testing

- As per the *Water (Ministerial) Regulation* a provincial license may be required if the water entering the site is of greater quality than the water leaving the site even if it meets the *Surface Water Quality Guidelines for Use in Alberta*.

<http://aep.alberta.ca/water/education-guidelines/surface-water-quality-guidelines-and-objectives.aspx>

- Even though most permits will not require a license, if the applicant believes there should be one associated with the activity they should contact Alberta Environment & Water for assistance.
- Your site will require water quality results to be submitted with your application – see Appendix C.
- To obtain information about Alberta Environment & Water Restricted Activity Periods, go to their web page and look at the *Code of Practice for Watercourse Crossings Red Deer Management Area Map* at:

<http://www.gp.alberta.ca/documents/codes/CROSSING.PDF>

- Submit several grab samples that are representative of the site. Ensure the data obtained adequately represents the entire site. Sampling procedures and sample chain of custody forms are required by The City and must be attached with the test results. Analytical procedures should be in accordance with most recent edition of the American Water Works Association *Standard Methods for the Examination of Water and Wastewater*. Be certain to use a laboratory that is capable of testing to the required levels.
- If any parameters do not meet the *Surface Water Quality Guidelines for Use in Alberta*, other disposal options must be explored. These include:

Onsite Treatment of Water Prior to Disposal

The applicant can look into onsite treatment to improve water quality. Depending on what type of treatment option is taken, additional testing of may be required (e.g. the use of an aluminum based flocculent may require more frequent testing of aluminum). If the applicant is planning to add chemical to the water it must be allowed for use in Canada. The City may request a copy of the Material Safety Data Sheet (MSDS) for review.

Discharge to City of Red Deer Sanitary Sewer System

An applicant may contact the Wastewater Superintendent who can assist in determining if the water quality and volume are acceptable to enter the sanitary sewer system. The Wastewater Superintendent will require water quality testing data prior to being able to make this decision. **It is important to note that the water quality testing data required to go to the Storm Drainage Collection system does not cover all the parameters that may be needed to determine if the water can go to the sanitary sewer.** If you feel there is a possibility that the water on your site may not qualify to go to the Storm Drainage Collection system, you may be required to test for additional parameters prior to discharge into the sanitary sewer. Example: Antimony, Beryllium, Bismuth, Boron, Cobalt, Fluoride, Iron, Lead, Manganese, Sulphate, Tin, Titanium and Vanadium.

PERMIT CONDITIONS

Appendix B is an example of the permit Conditions that you are likely to have associated with your Dewatering Permit. It is important to note that all dewatering sites are unique. As such, the Inspector has the discretion to revise, add, or omit some of the Conditions in order to ensure that the permit being issued reflects site conditions.

APPENDIX A

Dewatering Permit Application Requirements

The following information must be contained in an application for the purpose of obtaining a Dewatering Permit for a storm sewer system:

- Name, address and telephone number of Applicant
- Name, address and telephone number of the Consultant, Signing Authority, or Applicant's Representative or Agent (if applicable)
- Estimated duration of the water diversion including start and end dates
- If required, written consent from all affected registered land owners to cross their property with equipment/water
- Address or legal land location of the site to be dewatered
- Address, legal land location, or location description of storm sewer system point where water will be diverted to including any treatment structures that the water may flow through (e.g. pond, vortech unit)
- Address, legal land location, name, or location description of storm sewer outfall
- Name of final receiving water body
- Estimated rate of diversion in L/sec
- Estimated volume to be dewatered; when dealing with subsurface water this may require an onsite pump test
- Disclosure that the site does not contain and there is no reason to suspect the site may contain contamination
- A description of the techniques and products used to prevent erosion and removal of sediment from water prior to entry to the storm sewer system
- A detailed description of the method being used to dewater the site
- A sketch showing the dewatering operation in relation to the site including the erosion and sediment control devices
- An outline of contingency measures, including reporting procedures, to be taken in the event of potential problems resulting from adverse conditions such as weather, increased water volumes, delays in carrying out or completing work and/or equipment failure

APPENDIX B

Example of Dewatering Permit Conditions

DEFINITIONS

In this Dewatering Permit:

1. **Conditions** means requirements associated with a Dewatering Permit that must be met in order for the Dewatering Permit to remain valid;
2. **Inspector** means a person authorized, in writing, by the Director to issue a Dewatering Permit;
3. **Dewatering Permit** means a permit issued by an Inspector for the purpose of dewatering a site on an intermittent or continuous basis when the site contains predominantly subsurface water or any type of discharge into a storm system;
4. **Director** means the Director of Development Services of The City of Red Deer or his designate;
5. **Emergency** means a situation which is causing or has a potential of causing a negative impact;
6. **Enforcement Officer** means any person designated as a Bylaw Enforcement Officer;
7. **Interference** means the act or an instance of hindering, obstructing, or impeding;
8. **Negative Impact** means impairment or damage to
 - (a) the Storm Drainage Collection system;
 - (b) human health or safety;
 - (c) property; or
 - (d) the environment
9. **Permit Holder** means someone authorized in writing by a Dewatering Permit to discharge water to the Storm Drainage Collection system;
10. **Storm Drainage Collection System** means the system of catch basins, sewers, valves, fittings, pumping stations and related facilities owned by The City and used to collect storm drainage, but does not include plumbing or service connections in buildings;
11. **Storm Event** means a precipitation event where runoff is entering the Storm Drainage Collection system;
12. **Surface Water** means water which has accumulated from precipitation including water in its solid form;
13. **Suspend** means temporarily or permanently render ineffective.

GENERAL

1. The permit holder will hold harmless The City of Red Deer, its employees and agents for any damage or damage claims arising out of the dewatering operation.
2. The permit holder shall, at all times, retain a copy of this permit at the point of the dewatering operation location.
3. The permit holder will obtain written right-of-way permission to cross all private land.
4. The permit holder is responsible for ensuring that they do not deposit any substance into the storm drainage collection system that may cause a negative impact.
5. The permit holder shall take action to prevent erosion and sedimentation resulting from the diversion of water pursuant to this permit.
6. The permit holder shall not divert water to the storm drainage collection system during and until one hour after a storm event.
7. The permit holder shall apply to the Inspector in writing for any permit amendments.

ENVIRONMENTAL SERVICES

8. The permit holder is responsible for ensuring the discharge pursuant to this permit meets all applicable environmental legislation and that the operation is done in a safe manner.

WATER QUALITY

1. The permit holder shall not dilute the water being removed from the site in order to meet any limits specified by The City of Red Deer.
2. The permit holder will cease diverting water immediately and will notify The City of Red Deer if water quality testing results exceed any limits specified by The City of Red Deer.
3. The permit holder will cease diverting water immediately and will notify The City of Red Deer and any other required agency if they become aware that the water quality at the diversion site does not meet the *Surface Water Quality Guidelines for use in Alberta* for fresh water aquatic life and/or *Canadian Environmental Quality Guidelines*.
4. The permit holder will:
 - (a) monitor the number of pumps pumping, the capacity of each pump, and number of hours the pump was operating;
 - (b) record this data with corresponding dates and times and keep it on-site and/or provide it to an Inspector or other City designate upon request.

COMPLAINT INVESTIGATION

1. The permit holder shall investigate and resolve all complaints relating to allegations of surface water and/or groundwater interference as a result of the water diversion within a distance specified by the Director.
2. Upon request from the Director, the permit holder shall provide all documentation related to any of the above complaints and the resolution thereof.

CITY INSPECTIONS

1. An individual authorized in writing by the Director, an Inspector, or other City designate may inspect any property for the purpose of ensuring compliance in regards to the conditions associated with this Dewatering Permit.
2. An individual authorized in writing by the Director, an Inspector, or other City designate may suspend a Dewatering Permit if there is reason to believe the operation is causing, may cause, or may become capable of causing a negative impact.
3. An individual authorized in writing by the Director, an Inspector, or other City designate may suspend a Dewatering Permit if the permit holder is not complying with the conditions of this permit.
4. The permit holder shall comply with all requests from an individual authorized by the Director, an Inspector, or other City designate relating to the Dewatering Permit. These requests may include but are not limited to:
 - (a) requiring samples of any substance that is relevant to the diversion of water pursuant to this permit;
 - (b) requiring the production of any information, data, or documents that are required under this permit;
 - (c) requiring water quality testing for any parameters the Inspector determines relevant;
 - (d) recording or copying, by any method, any information related to the administration of or ensuring compliance with this permit;
 - (e) making reasonable inquiries of a person, verbally, or in writing;
 - (f) taking photographs and/or recordings of material related to this permit;

APPENDIX C

Example of Water Quality Testing Requirements

This is only an example of the water quality testing requirements and frequency that you may be asked for. Depending on the site, the requirements and frequency may change.

SAMPLING AND ANALYSIS

1. Analytical procedures used to test water quality samples will follow Standard Methods.
2. Sampling procedures shall be in accordance with Standard Methods and transport and handling of samples will follow standard chain of custody requirements.
3. Testing will be conducted by a laboratory accredited to test the required parameters.
4. Water quality testing results should be documented by the laboratory to include the acceptable levels under the Surface Water Quality Guidelines for use in Alberta for fresh water aquatic life.
5. Samples will consist of grab samples and will be of an adequate number to represent the site.
6. Daily samples will be taken during peak activity hours and/or when water quality is expected to be at its worst.
7. Samples will be tested for the parameters listed in Table I.

Table I - Parameters

Aluminum	Mercury (total)
Arsenic	Mercury (methyl)
Biochemical Oxygen Demand (BOD carbonaceous)	Molybdenum
BTEX	Nickel
Cadmium	pH
Chloride	Phenolics
Chromium (III and VI)	PCBs
Conductivity	Selenium
Copper	Silver
Cyanide (as free CN)	Sulphides
Dissolved Oxygen	Tetrachloroethylene
Fecal Coliform	Thallium
Hardness (as CaCO ₃)	Total Coliform
Hydrocarbons (F2)	Total Suspended Solids
Iron	Turbidity (NTU)
Lead	Zinc

RECORD KEEPING

1. The permit holder will document all sampling and water quality testing associated with this permit including but not limited to the date, time, location and person performing testing or sampling.
2. The permit holder will ensure that all water quality analytical reports and testing results are kept at the site of the water diversion.
3. The permit holder will ensure that the most recent copy of the Surface Water Quality Guidelines for use in Alberta is accessible.

The City of Red Deer
Dewatering Permit Application
Discharge to Storm Sewer

Applicant

Contact Name & Company Name:

Telephone:

Fax:

Address:

Emergency Number:

Applicant's representative if not same as above

Contact Name & Company Name:

Telephone:

Fax:

Address:

Emergency Number:

Are you the registered landowner of all property involved? Yes No

If No, attach copies of written consent from all landowners.

Does the site require water quality testing as outlined in the *Dewatering Permits Water Testing Requirements Flow Chart*? Yes No

If Yes, attach copies of your initial water quality tests. See *Water Testing Requirements Flow Chart* document for details on what tests are required.

Address or location description of site to be dewatered

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Address or location description of storm sewer inlet and treatment structures

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Outfall name/location and name of final receiving water body

Estimated volume and rate of diversion

Is the anticipated rate of diversion expected to exceed 20L/sec or 316 GPM (if yes, The City will conduct a review to determine if the Storm Drainage Collection System can accommodate the proposed volume)

Anticipated commencement and completion dates for operation

If greater than 6 months include a copy of AENV License

Provide a detailed history description of the site which outlines

1. If there is reason to believe that the site contains or may contain a substance that could cause a negative impact.
2. All previous construction, buildings, parking lots, storage yards etc. that were located on site.
3. Any history of contamination on or near the location.
4. The presence of any contamination and/or facilities in the area that could have an impact on ground and/or surface water.
5. Provide a detailed description of the method(s) being used to dewater the site, including sediment and erosion control products and set-up. Attach a sketch of the site showing the boundaries of the site, adjacent properties, dewatering equipment, the location where water will enter the storm sewer system, and erosion and sediment control structures.
6. Provide an outline of contingency measures, including emergency phone numbers and reporting procedures
7. Shut down procedures during precipitation events.
8. Procedures that will be followed if water quality testing was not initially required, but the volume of water exceeds predictions and water quality testing is triggered.
9. Measures to be taken in the event of equipment failure.
10. Steps to be taken in the event of an unauthorized release or if the rate of release exceeds permitted rate.

Statement of confirmation

To the best of my knowledge, the information provided in this application is true and accurate and I have signing authority on behalf of my company.

Print name	Signature
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Company	Date
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