Zoning Bylaw Amendments - Aquifer Protection Overlay Zone

Date	September 8, 2021
To	Regina Planning Commission
From	City Planning & Community Development
Service Area	Planning & Development Services
Item No.	RPC21-55

RECOMMENDATION

Regina Planning Commission recommends that City Council:

1. Amend *The Regina Zoning Bylaw, 2019-19* to allow for industrial development in the high sensitivity area of the Aquifer Protection Overlay Zone to be considered as a discretionary use in conjunction with the submission by the applicant of an Aquifer Protection Plan, where such development is otherwise prohibited.

2. Instruct the City Solicitor to prepare the necessary bylaws to give effect to the recommendations and as further described in the report, to be brought forward to a meeting of the City Council following approval of the recommendations and the required public notice.

3. Approve these recommendations at its meeting on September 15, 2021, following the required public notice.

ISSUE

The Regina Zoning Bylaw 2019-19 (Zoning Bylaw) contains regulations intended to protect the City's aquifers, which are sub-surface geological formations that hold ground water. Protection of aquifers is required by provincial legislation and *Design Regina, The Official Community Plan Bylaw No. 2013-48* (OCP), and the implementing regulations contained in the Zoning Bylaw. The current regulations prohibit all industrial development in the high sensitivity Aquifer Protection Overlay Zone (AP Overlay Zone).

The Administration has reviewed this provision and recommends that industrial development should be reviewed on a case-by-case basis to determine the appropriateness of a specific proposal through submission of detailed technical information and an Aquifer Protection Plan. Approved developments would be subject to conditions of approval by which the industrial development must operate including strict compliance with the approved Aquifer Protection Plan and related development agreement.

IMPACTS

Financial Impacts

The proposed recommendations will allow industrial development to be considered within areas of the City where they are currently prohibited. Tax benefits will be realized by any development accommodated following the bylaw amendment. However, there may some administrative costs associated with reviewing and monitoring developments to ensure conditions of approval are being followed.

Environmental Impact

City Council set a community goal for the City of Regina of achieving net zero emissions and sourcing of net zero renewable energy by 2050. In support of this goal, City Council asked Administration to provide energy and greenhouse gas implications of recommendations so that Council can evaluate the climate impacts of its decisions. The recommendations in this report have limited direct impacts on energy consumption and greenhouse gas emissions.

By considering on a case-by-case basis the details of a potential industrial development, and following through to implement any conditions of approval, including mitigation measures, the integrity of the aquifers will continue to be maintained.

Policy/Strategic Impact

The recommendations in this report are supported by the following policies in the OCP:

- Goal 3 – Water Protection: Maintain the integrity of Regina's aquifers, surface and groundwater resources.
    - 4.8 Develop strategies to protect the quality and quantity of surface and groundwater resources from contamination and impacts.
    - 4.9 Work with stakeholders to establish an aquifer management framework that protects aquifer water quality.

- Goal 1 – Economic Vitality and Competitiveness – Foster an environment conducive to economic vitality and competitiveness which supports the standards of living of residents in Regina and the surrounding region.

- 12.2 Minimize regulatory barriers to economic growth to the greatest possible extent while balancing the needs and aspirations of all Regina residents, fee-and taxpayers, and the sustainability of the city.

The proposed changes to the AP Overlay Zone will continue to protect the City's vital aquifer resources while allowing the development of industrial land uses.

OTHER OPTIONS

The Administration recommends that the Aquifer Protection Overlay be amended to allow for industrial development in the high-sensitivity Aquifer Overlay Zone on a case-by-case basis. Other options include:

1. Deny the recommendations and maintain the status quo. This will result in continued protection of the City's aquifer through strict prohibitions of industrial development in locations covered by the Aquifer Protection Overlay Zone. New or expansions to existing industrial development would be required to locate in locations that are not constrained by aquifer regulations.

2. Refer the proposal back to the Administration with directions to consider alternate approaches or address specific concerns. This will result in delay to any bylaw amendments.

COMMUNICATIONS

There are no applicants or interested parties for this report as it is a city led text amendment. Public notice of the public hearing required when Council considers the proposed bylaw will be given in accordance with *The Public Notice Policy Bylaw, 2020.*

DISCUSSION

Aquifers in the Regina region are an important secondary water source (the primary being Buffalo Pound Lake). The City may draw from this source during hot, dry summers. Thus, it is vitally important that this resource is protected for the welfare of the citizens of Regina. An aquifer is a body of rock or sediment that holds groundwater that has infiltrated the soil below the surface and has collected underground and contained in geologic formations. The city and its region are situated above aquifers of varying sensitivity as shown in Appendix A. The factors that determine aquifer sensitivity are the thickness of the clay overlying the aquifers, which prevents downward movement of water more effectively than other glacial deposits like silt, sand, or gravel, and the overall depth of the aquifer.

All municipalities in the province of Saskatchewan are required through the *Statements of Provincial Interest Regulations* to protect aquifer resources. The aquifers in the Regina region are protected

through zoning regulations in their respective municipal jurisdiction. The City of Regina collaborates with the R.M. of Sherwood on planning matters affecting both jurisdictions.

The AP Overlay Zone intends to protect the Regina aquifer system from contamination from development activities and to protect groundwater resources. An overlay zone is a zoning tool that augments the development regulations in the underlying zone to achieve a specific purpose. Properties within the City's AP Overlay Zone are subject to additional regulations by restricting potentially hazardous uses and industrial activities, below-ground structures such as pipelines and tanks, and the depth of excavations and pilings.

Analysis of Aquifer Regulations

The City's AP Overlay Zone is an effective method of protecting the City's aquifer resources. However, the Zoning Bylaw prohibits all-new industrial development within the high-sensitivity zone, which significantly limits the development potential of those lands. Industrial land uses include a wide range of land uses, some of which may pose a risk to the aquifer, and others which do not. For example, a chemical manufacturing plant may not be appropriate or may require extensive mitigation measures before it may be considered of little or no risk to the aquifer. Conversely, an assembly plant with little or no use of liquids or hazardous materials would be less or no concern. Despite the differing risks, since both activities are considered industrial uses, both are currently prohibited from locating in the high-sensitivity AP Overlay. In this regard, the AP Overlay Zone is unnecessarily restrictive to suit its intended purpose.

Existing industrial development that falls within the AP Overlay Zone that was approved before regulations existed continue to be allowed, but modifications are subject to performance standards to mitigate potential aquifer impacts. The landfill, parts of the Co-op Refinery Complex including pipeline and petroleum storage tanks, and Evraz Steel are all within the high-sensitivity zone. Mitigation measures have been added to more recent modifications to these and other pre-existing industrial operations. It is important to note that the City's AP Overlay Zone largely coincides with existing industrial lands and future planned employment lands in the north and west parts of the city. This is illustrated in Appendix A. Therefore, while the City's current approach to protecting the City's aquifer is effective, it also comes at an economic cost to potential new or expanded industrial development. The proposed regulatory framework strikes a balance between both needs.

Proposed Changes to AP Overlay Zone

Administration recommends changes to the AP Overlay Zone to offer flexibility to accommodate appropriate industrial development which is currently prohibited in the high sensitivity zone. To determine appropriateness, the applicant will need to confirm the aquifer can be properly protected by adherence to an engineered plan specific to the development. The application process would require the following:

- Consideration through a discretionary use process, subject to appropriate underlying zoning.

- Submission of an Aquifer Protection Plan by a qualified engineer, which would include as necessary: baseline geological data, a description of the industry type, processes involved, materials involved in industrial processes, and a mitigation and monitoring plan.

- Options to approve developments for a limited duration after which time the development would be required to resubmit an updated application for approval.

- Registration of a development agreement on title, which may reference the approved development conditions, ongoing obligations, securities or assurances as may be required by the Development Officer

The proposed regulations will allow the City to assess industrial development on a case-by-case basis, allowing for approval where there is little or no concern, assigning of conditions and other obligations as necessary for those developments which may be of some concern and continue to restrict those developments that would cause significant impact on the aquifer. Administration has consulted with the Water Security Agency (of Saskatchewan) regarding the proposed changes and they did not have any concerns. Surrounding municipalities, R.M. of Sherwood and R.M. of Edenwold, also consider developments on a case-by-case basis to assess the aquifer sensitivity in consultation with the Water Security Agency.

DECISION HISTORY

City Council's approval is required pursuant to Part V of *The Planning and Development Act, 2007.*

Respectfully Submitted,

Yves Richard, Manager 8/30/2021

Respectfully Submitted,

Autumn Lawson, Director of Planning & Development Services 8/31/2021

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ATTACHMENTS

Appendix A