

## Municipal Scan Results

Saskatoon Water conducted a review of Canadian municipal bylaws to benchmark practices related to TKN recovery. The scan examined surcharge programs and bylaw provisions.

- The bylaw review included the following municipalities: Regina, Calgary, Edmonton, Toronto, Region of Durham, Lloydminster, Peel Region, Winnipeg, Guelph, Vancouver, Ottawa. The interview component included Regina, Peel Region, Lloydminster, Medicine Hat, and Toronto.
- The literature review included reviewing the Canadian Council of Ministers of the Environment (CCME) Model Sewer Bylaw.

Results are summarized in Table 1, Municipalities with TKN Recovery in Sewer Surcharge Programs

### Municipal Scan Summary:

The municipal review indicates increasing adaptation of TKN recovery. Eight of thirteen municipalities currently include TKN in their surcharge programs, with an additional two municipalities planning to implement it in 2026.

Table 1: Municipalities with TKN Recovery in Sewer Surcharge Programs

|   | City                          | Population | TKN Limit (mg/L) | TKN Recovery Cost | TKN Rate (¢/100ft <sup>3</sup> ) | Bylaw Last update | Interview Finding  |
|---|-------------------------------|------------|------------------|-------------------|----------------------------------|-------------------|--|
| 1 | Saskatoon                     | 266,141    | 100              | X                 | -                                | 2017              | -  |
| 2 | <b>CCME Sewer Bylaw model</b> | N/A        | 50               | N/A               | -                                |                   | N/A  |
| 2 | Regina                        | 226,404    | 50               | ✓                 | 95.6                             | 2025              | Increase enforcement power, possible new parameters, revise surcharge thresholds |
| 3 | Calgary                       | 1,306,784  | 50               | X                 | -                                | 2023              | Planning to add TKN and TP   |
| 4 | Edmonton (EPCOR)*             | 1,010,899  | 50               | ✓                 | Tier 1: 23.3<br>Tier 2: 46.6     | 2021              | N/A  |
| 5 | Toronto                       | 2,794,356  | 100              | ✓                 | 40.5                             | 2023              | They will be increasing their fee structure                                      |
| 7 | Region of Durham              | 753,090    | 100              | ✓                 | 15.0                             | 2013              | N/A  |
| 8 | Lloydminster**                | 31,582     | 20               | ✓                 | Tier 1: 40.8                     | 2021              |  |

| City      | Population  | TKN Limit (mg/L) | TKN Recovery Cost | TKN Rate (¢/100ft <sup>3</sup> ) | Bylaw Last update | Interview Finding                       |                      |
|-----------|-------------|------------------|-------------------|----------------------------------|-------------------|---|----------------------|
|           |             |                  |                   | Tier 2:<br>122.3                 | 2010              | Looking at probes for hydrocarbon level |                      |
| <b>9</b>  | Peel Region | 1,451,022        | 100               | X                                | -                 | 2024                                    | Add TKN by July 2026 |
| <b>10</b> | Guelph      | 143,740          | 100               | ✓                                | 14.2              | 2018                                    | N/A                  |
| <b>11</b> | Winnipeg    | 749,607          | 60                | ✓                                | 116.4             | 2007                                    | N/A                  |
| <b>12</b> | Vancouver   | 662,248          | -                 | X                                | -                 | 2025                                    | N/A                  |
| <b>13</b> | Ottawa      | 1,017,449        | 100               | ✓                                | 186.9             | 1997                                    | N/A                  |

\* Tier 1 is the rate applied to TKN Concentration [50-200], Tier 2 is the rate applied to TKN Concentration above [200].

\*\* Tier 1 is the rate applied to NH<sub>3</sub> Concentration [20-25], Tier 2 is the rate applied to NH<sub>3</sub> Concentration above [25].

Among the municipalities surveyed, most have TKN limits set at either 100 mg/L or 50 mg/L, with the exception of Lloydminster, which regulates ammonia directly at 20 mg/L. The CCME also recommends a TKN limit of 50 mg/L. Additionally, Municipalities that still permit a higher TKN concentration of 100 mg/L such as, Peel Region (2010), Mississauga (2010), and Vancouver (2007), have not conducted a comprehensive sewer bylaw update in over a decade. In contrast, municipalities that have updated their bylaws in recent years such as Regina (2025), Calgary (2023), and Edmonton (2021) have adopted lower TKN limits, typically around 50 mg/L. Saskatoon's current bylaw: TKN is listed as a restricted substance with a limit of 100 mg/L. Part X, Section 78(2) of Bylaw 9466 states that non-compliance may result, in the case of a corporation, in a fine of up to \$25,000. Industries discharging TKN concentrations above the bylaw limit have not received fines of any amount to date.