Action Plan and Funding Strategy Options for Required Upgrades to the City of Saskatoon's Fueling Infrastructure

ISSUE

Some of the City of Saskatoon's fueling infrastructure requires control, environmental, regulatory and safety improvements. What action plan and funding strategy option should be implemented to address these deficiencies and associated risks?

BACKGROUND

Multiple City-owned locations with fuel tanks store and dispense gasoline and diesel fuel for corporate fleet vehicles, parks equipment and heavy machinery. Many of the regulatory permits for the fuel infrastructure need to be renewed due to a range of issues including outdated information and an absence of safety and environmental protection measures which are now required by the Ministry of Environment.

History

The Administration initiated a Corporate Fuel Management Project in August 2020 due to the recognition of the fueling infrastructure deficiencies and gaps identified throughout the corporation. The objective of the Corporate Fuel Management Project was to evaluate the current state of the fueling infrastructure and fuel management within the City of Saskatoon (City) and to develop an appropriate plan for addressing all deficiencies and gaps.

In 2021, site inspections were completed at 16 locations by a certified petroleum inspection contractor. Deficiencies were found at 14 locations, including safety and environmental related deficiencies such as, but not limited to, missing safety placards and warning labels, missing or damaged stairs, lack of adequate spill contingency provisions, and lack of protection bollards around the above ground tanks and fuel infrastructure. Equipment defects and code infractions were also found including, but not limited to, improper hose storage, fuel capacity tags, missing fuel filters, improper fuel venting, incorrect fuel dispenser covers, lack of overfill valves, and electrical deficiencies.

Following the 2021 certified petroleum contractor inspection, deficiencies at two fueling sites were addressed by a City Department that identified funding opportunities within their budget to undertake the less costly improvements. Other City Departments that operate on a cost-recovery basis or utility program have identified funding opportunities within their budgets to address deficiencies at an additional seven sites. Currently these improvements remain outstanding, but the Administration plans to bring these sites into compliance within the current calendar year.

The Corporate Fuel Management Project was contingent on the approval of the Corporate Fuel Management Business Plan Option, which was submitted for City Council's consideration and approval as part of the 2022-2023 budget. The option was

considered during budget deliberations but was not prioritized due to other funding pressures.

A risk assessment was completed in December 2022 to evaluate risks associated with the remaining fueling infrastructure where deficiencies have not been addressed. Through this assessment, it was determined that by not addressing the deficiencies, the City would continue to assume health and safety, environmental, financial, operational, and legal risks including:

- Risk of environmental and safety emergencies (potential damage to fueling infrastructure from being hit by vehicles, fuel spills, etc.) due to the lack of proper protection and safety equipment, potentially resulting in significant clean up or repair costs and fines from regulatory bodies;
- Risk of fueling infrastructure potentially becoming unusable due to inaction in addressing current issues, lack of certified inspection, and lack of preventative maintenance;
- Risk of employee injury due to the lack of safety equipment and protection at the sites; and
- Risk of legal action against the City due to non-compliance with regulations at each of the identified sites.

The Fleet Services Audit – Phase 2 report presented by the City Auditor at the April 5, 2023 Standing Policy Committee on Finance found that controls related to fuel management at the City need strengthening due to fraud risks and detailed findings and recommendations were shared in-camera. This project will also address the deficiencies in physical controls identified by the City Auditor.

Current Status

From the 14 sites with deficiencies, two have been addressed since the 2021 inspection. Funding opportunities have been identified for seven additional sites.

There is currently no approved funding to address the remaining five fuel infrastructure management and physical controls deficiencies.

OPTIONS

Potential options for addressing the above ground fueling infrastructure deficiencies are provided below. Options 2 and 3 include adding overfill valves to all sites, whereas Option 4 only includes adding overfill valves at sites required by code. Options 2 through 4 include project management by an internal engineering group for all deficient locations to ensure consistency. Internal project management costs are included in the cost estimates for each option.

Option	Description	Estimated Cost
Option 1 – Do nothing/accept risks.	No action taken.	No funding requirement; the City would incur costs if incidents occurred.
Option 2 – Address all above ground fueling infrastructure deficiencies in 2023.	Address all above ground fueling infrastructure deficiencies, including recommended overfill valves.	$120,000
Option 3 – Address all above ground fueling infrastructure deficiencies in 2023 and 2024.	Address all above ground fueling infrastructure deficiencies including recommended overfill valves.	$135,000
Option 4 – Address all above ground fueling infrastructure deficiencies in 2023; do not include optional overfill valves.	Address only above ground fueling infrastructure deficiencies required by code; do not include optional overfill valves at sites with above ground tanks less than 5000 litres in size.	$105,000

Regardless of option chosen, the City does not have a readily available source of funding or reserve for this purpose. Historically, when these types of corporate infrastructure improvements have been required, the Reserve for Capital Expenditures, reallocated government funding, or one of the City's major capital funding plans have been utilized. With the City's reallocated government funding and major capital funding plans currently depleted, the remaining option to be considered is the Reserve for Capital Expenditures which has a current balance of $450,000.

Option 1 - Do Nothing

Option 1 includes taking no immediate action to address the known above ground fueling infrastructure deficiencies. This option would allow for the work to continue through the Major Capital Project Prioritization process and may result in no action for several years. The City would continue to accept risk associated with the above ground fueling infrastructure being non-compliant and may result in clean up or damage costs in the future. There would be a possibility of monetary fines associated with non-permitted infrastructure.

Option 2 - Address All Above Ground Fueling Infrastructure Deficiencies in 2023

Option 2 includes addressing all above ground fueling infrastructure deficiencies at the 12 sites. This option would bring all above ground fueling infrastructure up to code and would include adding overfill valves to all above ground tanks including those where the overfill valves are not required by code to protect both the safety of employees and the environment from potential fuel spills. Overfill valves close when the fuel tank becomes full to prevent any fuel from being dispensed, therefore preventing spillages from

occurring. The code rule delineation for requiring overfill valves is tank size. Where tanks are less than 5000 litres in size, overfill valves are not required by code. This work would take place in 2023.

Option 3 - Address All Above Ground Fueling Infrastructure Deficiencies in 2023 and 2024

Option 3 includes the same scope of work as Option 2, but the work would be completed over two years. This option would allow for further issues to develop over time at the sites which would be scheduled later. There would also be an extended timeframe in which spills or safety incidents could occur. The locations could be separated into higher and lower priority based on usage to determine which are addressed first; however, every site has both safety and environmental deficiencies. This option may also result in greater administrative and inflation costs due to breaking the work into multiple years. This work would take place in 2023 and 2024.

Option 4 – Address All Above Ground Fueling Infrastructure Deficiencies in 2023, Do Not Include Optional Overfill Valves

Option 4 would address the above ground fueling deficiencies at all sites; however, it would not include the optional overfill valves. This option would bring all above ground fueling infrastructure up to the required regulatory standard and result in a reduced cost compared to Options 2 and 3; however, it would leave some risk on the City with respect to environmental and safety factors at the sites where the overfill valves would not be installed. This work would take place in 2023.

RECOMMENDATION

That the Standing Policy Committee on Transportation recommend to City Council:

That Option 2 – Address All Above Ground Fueling Infrastructure Deficiencies in 2023 to bring all above ground fuel infrastructure up to code and add overfill valves to all above ground fuel tanks be approved and funded from the Reserve for Capital Expenditures.

RATIONALE

Option 2 is recommended because it would mitigate the greatest amount of risk and most urgent deficiencies currently assumed by the City. Some cost savings would be realized in comparison to Option 3 due to less administrative work and potential cost increases due to inflation. It would also minimize the risks and costs related to potential future spill cleanup and damage repairs when compared to Option 1.

Although Option 2 includes adding overfill valves to all above ground tanks rather than only above ground tanks required by code, it is recommended instead of Option 4 due to the safety and environmental risks associated with not installing the valves.

The Corporate Fuel Management Project initiated in August 2020 has been reviewed, updated and renamed the Corporate Fuel and Fueling Infrastructure Management

Project. This project has been included in the 2024-2035 Major Capital Project Prioritization list approved by City Council at the March 2023 Governance and Priorities Committee meeting for use in the development of a future funding plan and is currently ranked as the second priority in the Civic Infrastructure Priorities category. If funding is approved as recommended in this report, the scope and cost estimate of the project will be updated accordingly. The remaining scope of work would include:

- Development of a long-term strategy for the management of corporate fueling infrastructure (assessment of future needs; assessment of the cardlock sites and fueling stations city-wide; alignment with the fleet electrification strategy; how many fuel tanks and pumps will the City need to own in the future; transition plan, etc.) - $75,000 (capital cost).
- Development of an asset management plan for the fueling structure that will be owned by the City by 2030 and beyond - $75,000 (capital cost).
- Replacement of underground fuel tanks that have exceeded their design/service life and are corporate risks due to environmental, safety, and regulatory concerns (Saskatoon Light and Power and Avenue P sites) - $1.6 million (capital cost).
- Approximate costs of additional fuel card lock/reader infrastructure: $5,000-10,000 per site - $100,000 (capital cost).
- Operating impacts $175,000
    - ongoing operating requirements (soils sampling and testing, reporting to Emergency Management Organization (EMO), etc.) – assumed $25,000 annually
    - dedicated corporate fuel management administrator - $100,000 annually. (The responsibilities of this position will include the day-to-day administration of the corporate fuel program including user training and access, providing usage reports to departments, reconciling monthly fuel usage to invoices received, ongoing maintenance and monitoring of internal system controls, working with IT and external fueling software groups to ensure software functionality for all departments, etc. This position would also work with Supply Chain Management (SCM) to update the corporate fuel contract, as required.)
    - annual preventative maintenance required as part of the asset management strategy for the physical fueling infrastructure; estimated annual cost - $50,000
- Total estimated remaining project costs: $1.85 million capital investment and operating impacts $175,000.

FINANCIAL IMPLICATIONS

The Reserve for Capital expenditures currently has a balance of $450,000 for discretionary projects. Through this option, $120,000 would be allocated from this reserve leaving approximately $330,000 for allocation the remainder of the year. It is anticipated that the Reserve for Capital Expenditures will receive approximately $2.0 million in funding in each year of the 2024-2025 Multi-Year Business Plan and Budget deliberations to be allocated to other potential projects.

ADDITIONAL IMPLICATIONS/CONSIDERATIONS

To minimize the possibility of the fueling infrastructure becoming non-compliant again once all the deficiencies have been addressed, a long-term plan for the management of fueling infrastructure across the corporation will be developed. This will include more defined assignment of the ownership and maintenance responsibilities as well as educating owners and user groups on the equipment maintenance and control requirements.

COMMUNICATION ACTIVITIES

There are no required external communication activities required. Internal education and awareness are being undertaken and standard operation procedures will be developed.

Report Approval

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