



### Challenge Statement/Synopsis:

Walker is seeking solutions to valorize fat, oil and grease (FOG) collected from food service establishments to produce low carbon alternative fuels or/and other marketable by-products. Through this effort, Walker will continue to close the loop on organic waste and support Canada's transition to a circular economy.

Walker Grease Trap Services (Walker) is the largest national provider of vacuum truck services for the collection, processing and recycling of grease interceptor residuals. Fat, Oil and Grease (FOG), also referred to as Brown Grease, from restaurant interceptor pump outs in Southern Ontario equates to about 11,000,000 gl per year. Currently, FOG is pre-processed at Walker's facilities to yield an energy-rich feedstock, which is transported to anaerobic facilities for the generation of clean renewable gas.

### Context

Walker services over 10,000 customers nation-wide with seven grease trap and liquid organic waste collection and processing facilities (Toronto, Woodstock, Ottawa, Montreal, Nisku, Calgary and Vancouver), which produce feedstock for renewable energy through anaerobic digestion and biofuel facilities.

In Toronto, Ontario, where our largest facility is located, ~130,000 gl per month of FOG is dewatered through a decanting process. The resulting material contain a higher amount of total solids and more energy content on a volumetric basis in comparison to the FOG that arrives to the facility for processing. While opportunities exist to market the material to third parties such as biofuel feedstock providers, we learned that the material that exists our facilities would need to be transported over long distances to arrive to upgrading/treatment facilities. The logistics of these opportunities are not in line with Walker's Sustainability, Economic, and Environmental Model that permeates every aspect of our business. As such, we intend to derive the value of FOG in-house at our facilities in Ontario. As Walker continues to expand its grease trap servicing operations across Canada, we would like to be able to utilize FOG to create valuable, marketable products at our facilities.

### FOG characteristics:

pH: 3.79 – 3.9

Total Solids: 23-35%

Total Oil & Grease (ug/g): 140,000 – 190,000

Total Oil & Grease (%): 14 -19

### Response Criteria

- Unit should fit in enclosed facility (27ft height)
- Preference for low maintenance systems that can operate with minimum oversight
- Preference is given to solutions with small footprint
- The process should be able to handle certain levels of chloride, phosphorus and metals



## The Opportunity

Walker Grease Trap Services (Walker) is a division of Walker Environmental Group Inc., a wholly owned subsidiary of Walker Industries Holdings Limited (Walker Industries), a company known for its philanthropy and service to its customers and communities for over 130 years. Passed down through five generations of the Walker family, it has remained committed to doing the right thing for employees, customers, the environment and the communities we are proud to call home.

At Walker Environmental, we have set ourselves apart in the waste management sector by putting a heavy focus on maximizing greenhouse gas reduction opportunities. The waste sector accounts for 7% of Canada's emissions, and our employees see this as a unique opportunity to play a vital role in reducing GHGs. Walker provides environmental solutions to both public and private sector customers. We are developing long-term solutions that will result in quantifiable, permanent greenhouse gas reductions in Canada. Our projects will have a long-lasting positive impact, with projected emission reductions and environmental, social, and economic benefits for years to come.

As the parent company, Walker Industries provides corporate services to Walker, including finance, accounting, human resource services as well as health & safety and environmental performance management. This ensures all subsidiaries of Walker Industries – including the grease trap service division – has access to an extensive pool of project resources, expert consultants, contractors, suppliers and many other assets.

We use proven technologies to develop and operate infrastructure that helps our customers reduce their environmental impacts, improve energy efficiency and achieve higher performance. We seek out opportunities, whether through technological advancements or sustainable business practices, to contribute to the circular economy that ensures our projects are truly sustainable. Our extended reach and vast footprint in Canada provides an ideal advantage for solution providers to proliferate in the North American markets.

## About Walker Environmental

Walker Environmental Group Inc. (Walker Environmental) is a wholly owned subsidiary of Walker Industries Holdings Limited (Walker Industries), a family-owned company known for its service to its customers and communities for over 130 years. Walker Environmental is a leading waste and resource recovery company producing long-term value through innovation. With operations from coast-to-coast in Canada we provide environmental solutions to public and private sector customers.

Walker takes a long term, generational view to evaluate opportunities. Whether it is through technological advancement or business practices, Walker operates through a Social-Economic-Environmental (SEE) Model that ensures their projects are truly sustainable. Walker believes that product quality is key to the successful recovery of organics within the circular economy. The company operates two landfills, a waste transfer facility, six biosolids stabilization plants, two composting facilities, six trap grease processing facilities, several landfill gas renewable energy projects, and a waste haulage company. Through these operations Walker is now the largest fully integrated organics recovery



company in Canada, as well as the largest disturber of organic amendment products in the country – managing and recovering over 1,000,000 tonnes of organics annually.

Our businesses in Canada include:

- 1 - GORE® Cover Composting System, static pile and open windrow compost facility producing AA compost from SSO, food waste, digestate and yard waste. Licensed for up to 170,000 tonnes of in process waste. (Arthur, ON)
- 1 - GORE® Cover Composting System and open windrow compost facility producing AA compost from SSO, food waste and yard waste. Licensed for up to 90,000 tonnes annually. (Thorold, ON)
- Multiple leaf and yard waste open windrow composting facilities, producing soils, mulch, growing media and potting mixes. (Multiple locations across Ontario)
- 6 alkaline stabilization biosolids facilities processing over 100,000 wet tonnes/year to produce fertilizers. (Thorold, Sarnia, Leamington, Sudbury, Halifax and Summerside)
- 7 grease trap and liquid organic waste processing facilities. (Toronto, Woodstock, Ottawa, Saint-Hyacinthe, Nisku, Calgary and Vancouver) to produce feedstock for anaerobic digestion and renewable energy production
- 2 landfills with disposal capacity of 1.1m tonnes annually (Niagara Falls, ON)
- 1 - 1,000 tonne/day transfer station (Burlington)
- 4 - Multi-Mega Watt landfill gas recovery projects (Niagara, Ottawa, Winnipeg, Brandon)
- 2 - Municipal Recycling Depots (Niagara, Burlington)
- Internal Fleet of highway tractors and various types of trailers

\*\*\*Only non-confidential information should be included in your response \*\*\*

