

February 19, 2018

Councillor M. Cassidy
City of London
Community and Protective Services Committee
300 Dufferin Avenue
London, Ontario
PO BOX 5035
N6A 4L9

Re. Proposed Public Nuisance By-Law Amendment to Address Odour

Dear Ms. Cassidy:

StormFisher Environmental Ltd. ("StormFisher") located at 1087 Green Valley Road in London, Ontario is submitting this letter to the City of London ("City") in response to the draft public nuisance by-law being proposed to address odour issues. StormFisher has significant concerns with the document as drafted including the fact that certain organizations appear to be targeted by the City including StormFisher. We have provided further information below on StormFisher and our operations, the rationale for our type of business in the low carbon economy, our concerns on the proposed by-law amendment, and recommended next steps for further engagement between StormFisher, the City and key stakeholders in this process.

The major concerns that StormFisher has with the draft by-law include:

- The targeting of private facilities rather than a broad industrial focus that includes municipal facilities;
- Overlap/duplication of efforts with StormFisher and Ministry of the Environment and Climate Change (MOECC) efforts to track and address complaints rather than information sharing;
- 3. Lack of respect for proper zoning and permit compliance;
- 4. Lack of engagement with stakeholders on proper monitoring tools;
- Lack of a clear outcomes-based approach for the trial period and a detailed analysis as the impacts that this proposed by-law would have on long-term business growth in the City; and
- 6. Lack of due process on fines and procedures for determining the cause of the odour and ability to provide appropriate mitigation measures.

The City needs to address the concerns of its residents, however, it also needs to protect its local businesses that employ area residents and promote economic development in the greater London area.



Background on StormFisher

StormFisher provides food waste recycling services in South London. We reacquired the facility from its previous owner in late 2015. Since the acquisition, StormFisher has dramatically improved operations and recycles organics from the industrial, commercial, and institutional ("ICI") sector in Ontario with a specific focus on sources in the greater London area. At this time, StormFisher provides a necessary service to the agri-food companies in the region allowing for the management of their by-products in a sustainable manner. StormFisher is also relied upon by the London Economic Development Corporation ("LEDC") as a marketing tool to attract other food processing businesses to the London area. With this food waste, StormFisher processes the materials through anaerobic digestion ("AD") to produce biogas. Biogas is a methane-rich renewable fuel that is produced through the biological fermentation of food waste. Biogas can be used to generate electricity and/or upgraded into renewable natural gas ("RNG"). RNG is the lowest carbon intense fuel currently available in the marketplace and that can be used to heat homes or more preferably as a transportation fuel replacing diesel fuel.

StormFisher processes the materials to generate 2.85 megawatts (MW) per hour or approximately 22,500 megawatt-hours per year of renewable electricity which powers approximately 3,000 homes in the south London area. StormFisher is also in the midst of planning a facility expansion that would provide for the production of RNG. This means that StormFisher is able to support the *Waste-Free Ontario Act* and meet its goals of diverting food waste from landfills that would result in a reduction of greenhouse gas ("GHG") emissions. The StormFisher facility also captures the nutrients found in the food waste and produces over 1,500 tonnes of an organic-based Canadian Food Inspection Agency ("CFIA") approved fertilizer. This fertilizer is produced by utilizing the exhaust heat from the engines to create a nutrient-rich dried fertilizer that creates a closed loop system where the value of the food waste is recaptured and utilized. These activities support the Province's efforts in realizing a circular economy for food waste as well as meeting the healthy soils initiatives.

As outlined earlier, since the acquisition of the facility, StormFisher has diligently improved its operations to ensure that it can process these materials in an environmentally sustainable manner while mitigating impacts on others including sensitive receptors surrounding the facility. We have gone to great lengths to engage all relevant stakeholders through our public liaison committee ("PLC"). The PLC meets quarterly with local neighbours, businesses, the City, MOECC, City Councillors, and the Middlesex-London Health Unit (Health Unit) among others.

In the past, StormFisher has invited City staff, City Councillors, and other relevant City stakeholders including the Advisory Committee on the Environment for tours of the facility so that stakeholders can better understand the work that is undertaken by StormFisher. StormFisher meets with MOECC staff on a monthly basis and are visited regularly by MOECC field staff to assess our operation in relation to environmental performance. Therefore, we as StormFisher, have and will continue to work with key stakeholders to diligently operate and improve our facility. Our continued diligence will allow us to expand our facility to process more organics in this innovative manner and support the City's, the Province of Ontario's, and Canada's efforts to meet our climate change goals.



In an effort to provide more clarity on the local positive impacts of our operation to the community, StormFisher, from an economic perspective, puts over \$3.5M in economic activity back into the local community through operating costs, property taxes and local wages for direct labour at the facility. StormFisher currently employs over 20 staff ranging from process operators to millwrights and electricians in addition to engineering and administrative support. Indirect, spin-off jobs include truck drivers, mechanical and electrical contractors as well as staff at agri-food companies in the area. StormFisher also provides lower-cost alternatives for organic waste disposal by area food processors and commercial and institutional generators. StormFisher provides free food waste disposal services to the London Food Bank, the Your Turn program and supports food waste diversion initiatives undertaken by the London Environmental Network. StormFisher has also worked with the City on festivals for the diversion of food waste as well as other waste diversion efforts. It is also important to note that StormFisher has also followed the City model and created a Community Action Fund that directs a portion of the inbound processing fees to neighbours located within 1.5 kilometers of the facility. The Community Action Fund relies on the PLC as a means of determining where the funds are utilized.

Municipal/Provincial/Federal Context for Food Waste Recycling in the Low Carbon Economy

StormFisher believes that its operation is a solution to food waste recycling in the new low-carbon economy and addresses the needs of the Canadian and Ontario governments as well as the goals of the City in mitigating climate change and short-lived climate pollutants ("SLCP"). StormFisher has included more details on the programs that are relevant to these efforts in Exhibit A in addition to setting out its thoughts on how it is and can continue to be a partner for the City.

Initial Concerns with the Draft By-Law

StormFisher is aware that the City, MOECC, and residents in South London have been dealing with odour issues as a result of the waste management and industrial facilities located in the area for a considerable period of time. Over the past year, an increased focus by the City, MOECC has been placed on the area, specifically the 12 facilities, that have been identified as potentially causing odour issues not including agricultural operations.

The MOECC monitors these facilities and uses abatement and enforcement tools under the Environmental Protection Act ("EPA") to ensure environmental compliance. The EPA gives the MOECC the authority to respond to and regulate odours. StormFisher follows a number of protocols to address odour-related feedback that it receives from the public.

The first protocol consists of PLC that was established in 2007 at the outset of the project. The
PLC committee meets on a quarterly basis. Since StormFisher took over the facility in late 2015,
the PLC meetings discussed the operations of the facility, modifications that the facility has made,
complaints received from the area residents in addition to any other relevant points that have
been brought up by the public.



- 2. The second protocol consists of responding to complaints received from the community within a specified period. StormFisher has a direct third party telephone line that has been set up to receive calls. The information related to these calls is sent directly to StormFisher as well as the MOECC district office and the MOECC Spills Action Centre. Complaints have also been received in the past by StormFisher directly. All calls are logged by StormFisher and investigated as quickly as possible. Once StormFisher has completed an investigation that may consist of a site visit to the location that the complaint was received from along with an assessment of the weather conditions using StormFisher's on-site weather station, StormFisher then provides a response to the MOECC generally within 24 hours of receiving the complaint to address the following questions:
 - Determination of the activities being undertaken at the Site at the time of the complaint/emission event;
 - Meteorological conditions including, but not limited to the ambient temperature, approximate wind speed and its direction;
 - iii. Determination if the complaint/emission event is attributed to activities being undertaken at the Site and if so, the possible cause(s) of the complaint/emission event; and
 - iv. Determination of the remedial action(s), including but not be limited to those included in the Emergency Response and the Contingency Plan required by Condition 25 of this Approval, to address the cause(s) of the complaint/emission event, and the schedule for the implementation of the necessary remedial action(s).

StormFisher also provides feedback on whether it has detected another facility at the location of the complaint along with any other relevant information that would assist the MOECC in addressing the complaint.

3. The third protocol is that StormFisher then sends out a notification letter to the complainant on a monthly basis acknowledging that it has received the complaint.

Based on a review of the complaints that were received over the past two years, StormFisher has found inconsistent conclusions by various stakeholders. Many of the complaints were unsubstantiated by StormFisher and the MOECC. Having said this, StormFisher does recognize and is sensitive to the residential uses located in proximity to its facility.

StormFisher operates its facility in a heavy industrial zone and complies with the applicable zoning. StormFisher does acknowledge that the residential uses in the area can lead to challenging situations. StormFisher has worked, and continues to work, diligently with the MOECC and the neighbours to remedy any conflicts relating to the different uses. StormFisher is concerned that the City's proposal to hire an additional municipal by-law enforcement officer on a two-year temporary basis is short-sighted and will not effectively resolve the issue. This leads to significant duplication and overlap with the roles and responsibilities of the MOECC. We are also concerned that it would also lead to confusion from others on the appropriate parties that are responding to a complaint/inquiry from a local resident.



In relation to the pilot project for the City to test an odour detection device to enhance its monitoring capabilities, StormFisher has had experience with the tool that is being recommended – the "Nasal Ranger". The "Nasal Ranger" is a qualitative tool that relies on a subjective assessment of odours and doesn't address different sources that may emit similar odour types. Therefore, the validity of the data could easily be challenged. The procedures and protocols for monitoring the presence of odours would require further discussion as the pursuit of the odours from any industrial facility could lead to an officer chasing it around the City or region. Therefore, StormFisher would recommend a meeting to discuss monitoring tools that would be more appropriate and reliable for all key stakeholders.

The pilot period of two years with no clear outcome at the end of this period would lead to uncertainty for our business and negatively impact our current expansion plans as well as investment of other businesses in the local and greater London area. StormFisher is planning on investing over \$10M into the facility including odour mitigation measures; however, this may not be possible under the proposed bylaw as financial institutions would be uncomfortable providing funding to the facility in light of the unclear outcome of the proposed trial period due to its location within the area targeted by the City. The StormFisher facility is zoned appropriately for the use and the proposed by-law would be impacting the growth and viability of our business.

In the discussion section of the City report, it states that the City must act in good faith and pass by-laws that respect the following matters:

- Economic, social, and environmental well-being of the municipality including respecting climate change;
- · Health, safety, and well-being of persons; and
- Protection of persons and property including consumer protection.

Based on these conditions, StormFisher questions how the City is proposing to deal with food waste and lower natural gas usage through the use of this by-law. StormFisher is very concerned that by the City targeting of our business it is not acting in good faith and fails to take into consideration that we have no prior enforcement actions. StormFisher understands that it needs operate its facility in a prudent manner using good engineering practices; however, it asks that the City ensure that it acts as a leader in the health and protection of its people and businesses. StormFisher also requests that the City review and take into consideration its thoughts on municipal efforts in this area as outlined in Exhibit A.

The City staff refer to research undertaken to develop the City's report on the proposed by-law amendment. It would be helpful for StormFisher and others, including our experts, to review the information being relied upon to support the City in its efforts to develop an appropriate by-law that adheres to its intended purpose and is complimentary to current abatement/compliance efforts. It would also be helpful for stakeholders to review the City's data on the testing at the W12A landfill and Dingman pumping station. We are very surprised that the City failed to engage in or undertake any studies or investigation of the wastewater treatment plant that has received numerous complaints from neighbours in the past.



StormFisher attended the City's public participation meeting where City staff presented its report dated August 28, 2017 to the Planning and Environment Committee ("PEC") on this issue. StormFisher also understands the rationale for the City's efforts in this area. However, it was clear at that meeting that the neighbours were concerned with a number of operations including the City's landfill. StormFisher does not agree with the City's report being proposed that appears to target our operation and others in the area. StormFisher believes that it is unreasonable to exempt municipal facilities from its review as the City has received concerns from various stakeholders on its own landfill as well as other odour producing facilities in the City. This is especially surprising given the City's proposal to expand the landfill and the proposed resource recovery park which contemplates an anaerobic digestion facility that would produce RNG similar to what is currently being proposed by the StormFisher facility.

In relation to the "deeming provision", StormFisher would request further clarity on the definition of unreasonable odour. We note that odour levels are regulated by the MOECC through the ECA process. The protocols/procedures that are outlined in the City's report do not appear to be science-based and could lead to challenges related to acute odour incidents versus chronic issues. The MOECC, the appropriate regulatory body, goes to great lengths to provide guidance for design, permitting, compliance and enforcement of these types of facilities.

The draft by-law also contains daily maximum fines that are excessive and unreasonable. We note that these fines are in addition to any fines that may be imposed by the MOECC which is unfair. It is unclear on the rationale relied upon in developing the maximum fines and we are concerned about the lack of a clear procedure for determining the cause of the odour and the ability to mitigate the issue before fines were instituted. The by-law is also unclear as to how the funds acquired from the fines would be used and administered by the City. As currently drafted, the by-law would negatively impact the financing efforts for our facility and others in the area. Our concerns also apply to the City's effort to construct its own organics diversion facility at the landfill despite the unreasonable municipal exemption that is currently included in the draft by-law. StormFisher also that the maximum fines set out in the City's report are not inconsistent throughout the report. We question how the City proposes to reconcile this inconsistency.

Next Steps on Further Engagement

Based on the rationale outlined above, we request the City postpone its review and consideration of the current draft by-law and the public participation meeting. StormFisher believes that the City should meet with key stakeholders in the area and create a small working group to develop a workable solution that addresses the local resident's concerns in relation to a nuisance by-law. The working group should include the public, the greater London business community including businesses in South London as well as relevant agencies such as the MOECC and the Health Unit. StormFisher is concerned about the unintended consequences that may occur due to the current draft by-law as written in London as well as more broadly in Ontario in relation to the low carbon economy future that is being developed.

StormFisher would also proposes that the City work closely with the industrial operations in South London including its own landfill to develop a local association that can communicate information to the local



neighbours and ensure constructive communication to all stakeholders. The pooling of resources can allow for continuous improvement of the facilities in the area, foster growth in the area and allow for the reinvestment of funds back into the local area. This model has been used in other areas of the Province and could be a model for the local area. The funding that was to be allocated for the municipal efforts could be used to initiate this association.

Should you have any questions, please feel free to reach out to me directly. If you would like to set up a tour of our facility, we are amendable to setting up a site visit. We would also like to thank the City for being the home for our operation as StormFisher is viewed as a leader in the diversion of organics from landfills and the production of high end organic-based fertilizers and bioenergy.

Sincerely,

Brandon Moffatt, P.Eng, MBA StormFisher Environmental Ltd.

VP – Development 1087 Green Valley Road London, Ontario 519-573-8719

bmoffatt@stormfisher.com

cc:

Orest Katolyk, City of London George Kotsifas, City of London Jay Stanford, City of London Chris Guillon, StormFisher Pearce Fallis, StormFisher Harold Usher, City of London Jared Zaifman, City of London Matt Brown, City of London



Exhibit A

Municipal/Provincial/Federal Context for Food Waste Recycling in the Low Carbon Economy

Federal Government

Canadians are experiencing the effects of climate change across the country. The continued exposure to air pollution has negative effects on the health of Canadians along with degradation to the natural environment. Canada needs to take action on climate change through the implementation of the Pan-Canadian Framework on Clean Growth and Climate Change (the "Pan-Canadian Framework"). The Pan-Canadian Framework is Canada's plan to grow the economy while reducing greenhouse gas ("GHG") emissions and building resilience to adapt to a changing climate. It was developed in partnership with provinces and territories including Ontario, and in close consultation with Indigenous Peoples. Canada as a whole is committed to advancing measures that lead to cleaner air and healthier communities in partnership with provinces and territories.

Initially, Canada focused its efforts on short-lived climate pollutants (SLCPs) that are potent GHGs and air pollutants. SLCPs have a relatively short atmospheric lifetime as compared to longer-lived GHGs such as carbon dioxide (CO₂) that has a warming impact on the climate. The reduction of SLCPs can help achieve our climate and air quality objectives. SLCPs include methane and hydrofluorocarbons (HFCs), black carbon, which is a component of fine particulate matter (PM_{2.5}), and ground-level ozone. Recent studies indicate that global action on carbon dioxide and SLCPs together is needed to keep average global temperatures to no more than 1.5 to 2°C above pre-industrial levels this century, and to meet the temperature goals in the Paris Agreement. Reducing SLCP emissions can also result in significant air quality benefits. Implementation of black carbon, methane and ozone measures has the potential to reduce global warming in 2050 by approximately 0.5°C and by approximately 0.7°C in the Arctic by 2040. It will also prevent more than two million premature deaths worldwide each year and avoid global crop losses of more than 30 million tonnes annually by 2030. Air quality benefits would be felt mainly within the countries where such measures are implemented. Consequently, SLCP mitigation has garnered significant attention in Canada and internationally.

Methane, is a potent GHG, and estimated to be 86 times more powerful of a warming agent than CO₂ over a 20-year period, and 34 times more potent than CO₂ over a 100-year period. In addition to its significant climate impacts, methane contributes to the formation of ground-level ozone. For clarity on the amount of methane released, in Canada, 4,300 kilotonnes of methane was emitted in 2014, accounting for 108 megatonnes of CO₂e, or 15%, of Canada's total GHG emissions (using the most recent GWP for methane, this is equivalent to 361.2 megatonnes of CO₂ emissions over a 20-year period). The oil and gas sector accounted for 44% of Canada's methane emissions in 2014, largely from oil and natural gas fugitive sources, including venting and flaring, while the remainder of Canada's methane emissions is largely from agriculture and solid waste disposal (e.g. landfills). In an effort, to scope the issue for food waste, methane emissions from the decomposition of organic waste in landfills is 22,000 kilotonnes of CO₂e in emissions in Canada (2017 Canadian National Inventory Report). In terms of mitigation strategies for food waste,



the most effective and economical solution for the disposal of organic waste is anaerobic digestion. Anaerobic digestion converts organic waste into biogas that can subsequently utilized in electricity generation or an offset for fossil fuel natural gas and other fossil fuels. The services provided by StormFisher is integral to support the federal government's efforts to mitigate climate change.

Provincial Government

The Province has also implemented the Waste-Free Ontario Act (WFOA) and the Climate Change Action Plan (CCAP). The WFOA includes a pillar that focused on the diversion of organics from landfills. Food and organic wastes makes up approximately one-third of Ontario's waste stream. This includes organic waste generated at homes, such as food waste and leaf and yard waste in addition to the food waste produced by ICI sector including food processors, wholesalers, grocery stores and restaurants.

The Province has indicated that when food and organic wastes are sent to the landfill, Ontario loses valuable resources that could be used to support healthy soils as well as create opportunities to reduce GHG emissions including enhancing soil carbon storage through the use of organic-based fertilizers. As an example, households are responsible for approximately 47 percent of food waste; food and organic wastes represents a significant threat to our climate change progress.

In 2014, Ontario's waste sector was responsible for 9.4 megatonnes (MT) of GHG emissions – approximately six per cent of the provincial total with 90 percent of these emissions coming from solid waste disposal in landfills – most of which came from organic waste. To address the issue, the province reaffirmed its commitment to develop a plan to reduce the amount of food waste and organic materials going to landfill as part of Ontario's Climate Change Action Plan. StormFisher is an active participant in the development of this framework and the implementation of activities including anaerobic digestion as a solution for these materials. The directive from the Province is that municipalities and the ICI sector must do more to diver materials from landfills and stop siting and expanding landfills. It is clear that the development of infrastructure such as StormFisher's anaerobic digestion is required and must be done in a prudent manner to address appropriate siting, design criteria and standard operating procedures.

City of London

On a municipal level, the City is well aware that London's weather is changing and it is working to adapt to a changing climate that requires municipal government to take action to protect our natural, built and social environments. These planning efforts include pro-actively adopting appropriate strategies that will lead to greater safety and well—being as opposed to simply waiting for climate change to happen. The City has been progressive in implementing an interdisciplinary team from the City of London service areas and London agencies. The purpose of the interdisciplinary team is to inventory climate change risks and analyze the approaches commonly used by municipalities to shape London's approach to Climate Change Adaptation. It is also clear that since 2003, the City has used energy efficiency and conservation practices to tackle air quality and climate change. The City of London has been an active participant within the



Federation of Canadian Municipalities' Partners for Climate Protection program and the International Compact of Mayors program.

In relation to waste management practices, the City has started the development of a long-term Residual Waste Disposal Strategy. The Strategy involves the development of a long-term plan to manage residual waste and involves completion of an Individual Environmental Assessment (EA) in consideration of the following:

- expanding the W12A Landfill Site;
- developing solutions that will manage residual waste until 2050 (25 years beyond the current approved capacity of the W12A Landfill);
- exploring the possibilities for allowing neighbouring municipalities to use any new/expanded waste disposal facilities developed by the City, approved by the Province and under conditions approved by Municipal Council;
- limiting the amount of Residual Waste that will be accepted at any new/expanded waste disposal facilities; and
- committing to increasing the current London residential (household) waste diversion rate to 60% by 2022, from the current rate of 45%.

To plan for the future, the City has started developing a long-term Resource Recovery Strategy. The Resource Recovery Strategy includes a plan to maximize waste reduction, reuse, recycling and resource recovery in an economically viable and environmentally responsible manner. The Resource Recovery Strategy will identify:

- areas of continuous improvement to maximize waste reduction, waste diversion and resource recovery including increasing the current London household waste diversion rate to 60% by 2022 from the current rate of 45%;
- opportunities for advanced resource recovery and increased waste diversion through new, emerging and next generation technologies and where these technologies may play a role in London and area;
- areas to reduce or maintain current costs of City programs;
- ways in which to support local job creation efforts;
- ways in which to maximize program convenience to Londoners; and,
- methods to align with Provincial direction and the Waste Free Ontario Act.

Based on the City's report titled "Organic Materials – Maximizing Resource Recovery from Waste Through Biogas and RNG Production" dated April 2017, StormFisher believes that the City has acknowledged that the processes that StormFisher undertakes at its facility are a necessary service for the businesses of London and can support the City's efforts for organic waste diversion and the production of RNG that is currently planned at the StormFisher facility. Therefore, StormFisher believes that it should be viewed by the City as a partner in the City's efforts to mitigate climate change.