



October 20, 2016

Mayor Malcolm Brodie
City Councilors
City of Richmond
6911 No. 3 Road
Richmond, British Columbia
V6Y 2C1 Canada

Dear Mayor Brodie and City Councilors:

Harvest Fraser Richmond has been a member of the City of Richmond community for 20 years. We are proud to have worked with you and most other lower mainland municipalities towards building the best organics recycling programs and the highest diversion rates in North America. We strive to operate our facility in a manner consistent with being a good neighbor, but it is clear that we have let our neighbors and community down. This letter is intended to address the situation and identify the steps that we have – and will continue to take – to remedy the problem and eliminate the odours.

At the General Purposes Committee meeting on October 17, the Committee voted to send a letter to Harvest Fraser Richmond expressing the City's expectation that measures to eliminate odours attributed to Harvest be prioritized and expedited. In its discussion, Committee members expressed several key points, among them:

- Concerns that both the Council and the public be fully informed on what is happening at Harvest's Richmond facility, what actions are being taken, and what results can be expected, by when;
- Desire for some kind of scorecard against which Council and the public could track progress;
- Uncertainty whether the recent rise in odour complaints about Harvest is a temporary phenomenon and/or solvable, or just something that is inevitably a by-product of the compost operation;
- Uncertainty whether Harvest fully understands all the causes of the current difficulties;
- Inquiries as to what standard of performance can reasonably be expected;
- Acknowledgement that the recent spike in odour complaints attributed to Harvest is unacceptable and that if substantial improvement does not occur in a reasonable amount of time, Richmond would expect Metro Vancouver to utilize the provisions in the air emissions permit recently issued to Harvest that allow Metro Vancouver to compel compliance.

Let me assure you: we hear you and are working around the clock to address the situation.

We can understand the frustration that both elected officials and staff of the City of Richmond feel in trying to address concerns of their constituents about a business that is largely regulated by another governmental agency (Metro Vancouver). With this letter, we'd like to improve our communication, and pledge to continue working with you, City staff, and the broader community to keep you informed in the months ahead.



First, we'd like to share some important background. It is **not** inevitable that a compost or organics recycling operation will create unpleasant odours off-site. Many operations exist that do meet that standard on a regular basis. Critical to their ability to perform well consistently is having an up-to-date infrastructure, well-tailored to the specific material flows and environmental conditions of the site. The composting infrastructure at the Harvest site dates to the mid-1990's, when the material being recycled was largely green waste. Now, the City of Richmond and other Metro Vancouver municipalities are sending substantially more food waste, commingled with the green waste. Harvest has determined that to best process this evolving material mix, the current composting infrastructure must be replaced with more modern plant and equipment.

This new infrastructure will cost several millions of dollars. Harvest is, and has been, willing to make that investment. Unfortunately, the delay in Metro Vancouver issuing a renewed air permit created substantial uncertainty for Harvest with respect to whether the proposed upgrades would be acceptable or sufficient from a regulatory perspective. Without that certainty, Harvest could not secure the required funds to begin the infrastructure replacement. Now, with the new air emissions permit in hand as of September 30, Harvest is aggressively moving forward.

Further, our long-term goal is to eliminate the occurrence of unpleasant odours outside our site. To reach that goal, we have to, and will, completely replace the compost aeration system and biofilter infrastructure. Since compost production is a biological process that is sensitive both to the specific types of material being processed and the environmental conditions in which it occurs, a large-scale system of the type Harvest requires must be engineered and field-tested to optimize its performance. Harvest has already issued Requests for Proposal for the system design. We expect to select a vendor in the next few weeks, begin piloting the system in early 2017, and move to full construction in late 2017. This schedule will enable us to make sure that we design and construct a system that assures us, and most importantly, you and the residents of Richmond, that it can handle the region's organics recycling without creating unpleasant odours off-site.

We recognize however, that while that schedule may be prudent in the long-run, it does not address the immediate and pressing concerns of residents. We have therefore embarked on a series of **immediate actions** that we believe will significantly mitigate odour issues in the near-term. These steps are summarized in the attached table. In brief, we are:

- Temporarily curtailing acceptance of the most odourous types of material;
- Significantly reducing the material processed in our Energy Garden anaerobic digester;
- Changing our operating procedures around handling of the remaining materials that run higher on the odour-potential spectrum;
- Bringing in additional equipment and personnel so that we can more rapidly process material and eliminate backlogs.

Some people have questioned whether Harvest favors profits over people, and whether it is willing to spend what it takes to address the problems. As you can see in the attached list, we are not only preparing to spend millions of dollars for capital expenditures, we are taking steps that will reduce our near term revenues and increase our operating expenses. Let me assure you: that is **not** a formula for short-term profit. It is a formula for getting the job done right, to ensure our long-term sustainability as a business and as a good neighbor in Richmond.



When these steps have the intended effects, we believe Richmond residents should be able to detect:

- In the next 30-60 days, a noticeable reduction in both the frequency and strength of the odours attributable to Harvest;
- Through spring and summer of 2017, further odour reductions, to levels roughly comparable to historical averages (when we had many fewer complaints);
- From 2018 and beyond, few if any unpleasant odours attributable to Harvest.

We have communicated these plans to the Community Liaison Committee with whom we are working and will be sharing them with a broader email list of stakeholders we have compiled, as well as posting them on our informational website, <http://richmondairpermit.ca/> and advertising them in the local Richmond newspaper. We are also sharing them with both City of Richmond and Metro Vancouver staff, and encouraging them to share with residents who contact them. We will provide monthly updates of our progress to your Engineering and Public Works Division, whom we trust will keep you informed.

In closing, on behalf of Harvest Power and particularly on behalf of our 50+ Richmond-based employees, we thank the City of Richmond for being our host. We are proud to be doing business here. We hope and trust that as the months unfold, you will once again be proud to have us as your neighbors. Thank you.

Sincerely,

Christian Kasper
President and Chief Executive Officer

Attachment

Harvest Fraser Richmond Organics
UPDATE ON ACTIONS
October 19, 2016

GOAL: Eliminate occurrence of offensive odours outside Harvest's site.

Immediate Actions	Expected Benefit	Impact (3 = best)	Date*
<ul style="list-style-type: none"> Complete overhaul of Covered Aerated Static Pile composting system, including refreshing substrate and repairing/replacing majority of system piping. 	<ul style="list-style-type: none"> Better aeration reduces anaerobic pockets in the composting process, which are a leading cause of odors. 	★ ★	Completed
<ul style="list-style-type: none"> Reduce or eliminate acceptance of very odourous inbound material (e.g., cruise ship waste, sea urchins, chicken hatchery waste). 	<ul style="list-style-type: none"> Reduce original sources of odours and reduce demands on aeration system. 	★	Completed
<ul style="list-style-type: none"> Pretreatment of Energy Garden digestate prior to removal to composting. 	<ul style="list-style-type: none"> Less odorous to begin with; reduce demands on aeration system. 	★ ★ ★	10/14/16
<ul style="list-style-type: none"> Reduce inbound volumes of food waste to Energy Garden by 30+%. 	<ul style="list-style-type: none"> Reduce volume of odourous digestate produced by the Energy Garden, while we experiment with improved treatment options. 	★	10/18/16
<ul style="list-style-type: none"> More equipment: increased from one to three grinders; new scalping plant – combined with increased staffing levels (new hires + overtime). 	<ul style="list-style-type: none"> More thorough mixing before materials placed on compost piles; incorporate materials more quickly and prevent back-ups. 	★ ★	10/16/16
<ul style="list-style-type: none"> Reduce compost pile heights. 	<ul style="list-style-type: none"> Better aeration prevents/reduces odor. 	★ ★	Sept, 16 to May 17
<ul style="list-style-type: none"> Replace/refresh biofilter media. 	<ul style="list-style-type: none"> New media should enhance biofilter performance. 	★ ★	11/15/16
<ul style="list-style-type: none"> Regular assessments and modifications of operating practices with help of outside consultants. 	<ul style="list-style-type: none"> Continuous adjustment of equipment and operating practices to ensure improvements and mitigate risks. 	★	On-going

Near-Term Actions	Expected Benefits	Impact	When*
<ul style="list-style-type: none"> Continue reducing pile heights – by June 2017 to half of prior permitted level. 	<ul style="list-style-type: none"> Better aeration prevents/reduces odor. 	★ ★	6/30/17
<ul style="list-style-type: none"> Volume reductions for more odorous materials during Summer 2017. 	<ul style="list-style-type: none"> Reduced loading allows for better aeration. 	★	6/1/17
<ul style="list-style-type: none"> Run pilot projects on new CASP replacement systems. 	<ul style="list-style-type: none"> Determine optimum configuration to support complete replacement. 	★	Mid-2017

Longer-Term Actions	Expected Benefits	Impact	When*
<ul style="list-style-type: none"> Complete replacement of CASP aeration and biofilter system. 	<ul style="list-style-type: none"> New system optimized to current and projected material make-up and volumes will significantly reduce generation of odor in first place, then capture and treat what is produced. 	★ ★ ★	2018

* **Date of Implementation.** Compost production takes three-to-five months, so changes implemented today will have progressively greater impact over time.