Dear Grace-Mar Farms Ltd.

Re: Warning Letter, Pollution Abatement Order #108389

On July 17, 2017, Ministry of Environment, Environmental Protection Division staff conducted an inspection under Environmental Management Act (EMA), against Pollution Abatement Order #108389. The inspection determined that Grace-Mar Farms Ltd. is out of compliance with sections identified below. This Warning Letter lists the compliance verification information contained below.

Failure to comply with the requirements set out in your registration under Environmental Management Act is an offence under the Environmental Management Act (EMA).

If you fail to take the necessary actions to restore compliance, you may be subject to escalating enforcement action. This Warning Letter and the alleged violations and circumstances to which it refers, will form part of the compliance history of the registration and will be taken into account in the event of future violations.

Finally, I request that Grace-Mar Farms Ltd. immediately implement the necessary changes or modifications to address these non-compliances with Pollution Abatement Order #108389. Further, I request that Grace-Mar Farms Ltd. notify this office in writing by email or letter within 30 days of this letter, advising what corrective measures have been taken, and what else is being done, to prevent similar non-compliances in the future.

Inspection Details:

<table>
<thead>
<tr>
<th>Requirement Description:</th>
<th>Details/Findings:</th>
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<tbody>
<tr>
<td>2: Immediately upon approval of the terms of reference and work plan by the Director, cause a Qualified Professional to implement the comprehensive monitoring program and complete the comprehensive EIA according to the work plan and terms approved by the Director, but subject to any further directions or amendments to the work plan or terms of reference made by the Director.</td>
<td>As the EIA was submitted within the timelines dictated by requirement #1, this requirement will be deemed as fulfilled.</td>
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<tr>
<td>Compliance:</td>
<td>In</td>
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<tr>
<td>Actions to be taken:</td>
<td>No further action required.</td>
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<tr>
<td>Requirement Description:</td>
<td>5: Upon approval by the Director, implement the Action Plan referred to in section 4 in accordance with any amendments to the Action Plan required or approved by the Director, or any further directions of the Director.</td>
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</table>
Details/Findings: After requested revisions had been made to the initial version of the Action Plan and a final version was submitted on April 6, 2017, the Director approved the Action Plan on April 10, 2017.

The Action Plan contained 15 points to be addressed. Some of these points have completion dates in the future and therefore compliance cannot be verified at this time. (Items #5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 15)

Compliance: Not Determined

Actions to be taken: Continue to meet the deadlines for all Action Plan items.

Requirement Description: 5: Upon approval by the Director, implement the Action Plan referred to in section 4 in accordance with any amendments to the Action Plan required or approved by the Director, or any further directions of the Director.

Details/Findings: After requested revisions had been made to the initial version of the Action Plan and a final version was submitted on April 6, 2017, the Director approved the Action Plan on April 10, 2017.

The Action Plan contained 15 points to be addressed. Based on the Annual summary which was submitted on June 29, 2017, Action plan items 1, 2, 3 and 4 have been completed.

Compliance: In

Actions to be taken: No further action required.

Requirement Description: 6: Submit to the Director a formal written summary by November 30, 2016 and annually for the next two years including:
   i) summarizing in reasonable detail what actions from the Action Plan were undertaken;
   ii) identification of all agriculture operational changes that occurred;
   iii) summarizing in reasonable detail monitoring results;
   iv) summarizing environmental impact assessment (first year only); and
   v) recommending additional mitigation and restoration measures, if appropriate.

Details/Findings: On July 29, 2016 an amendment to Order #108389 was issued changing the submission date of the first annual summary from November 30, 2016 to June 30, 2017.

On June 29, 2017, Ministry staff received an annual summary from Doug Macfarlane on behalf of Grace-Mar Farms. In addition, Associated Environmental submitted a groundwater summary letter on behalf of Grace-Mar Farms.

The points to be addressed under requirement #6 of Order #108389 have been addressed between the two submitted documents referenced here for the 2017 annual summary.

Until the remaining two annual summaries are submitted, compliance with this requirement cannot be determined.

Compliance: Not Determined

Actions to be taken: Continue to submit annual summaries for the next two years. Submissions expected on June 29 of 2018 and 2019.

Requirement Description: 7: Publically post the Action Plan required by this order by August 15, 2016 and publicly post the annual summary required by this order by November 30, 2016, including physically posting the Action Plan and Annual Summary at the Hullcar Community Hall. Any updates to the Action Plan and future Annual Summaries must be posted at Hullcar Community Hall annually for the next two years, by November 30 of each year.

Details/Findings: On July 12, 2017, Doug Macfarlane submitted a photo on behalf of Grace-Mar Farms, showing the annual summary and the Action Plan posted at Hullcar Hall.
| Compliance: | In |
| Actions to be taken: | No further action required. |
| Requirement Description: | **March 3, 2017 amendment** 1(1): By March 1, 2017 cease any and all applications of agricultural waste and fertilizer to the Lands until such time that a nutrient management plan has been developed as described under requirement #4. Agricultural waste must not be applied to frozen land (including snow covered land), in diverting winds, on areas having standing water, nor on saturated soils. |
| Details/Findings: | Ministry staff received a nutrient management plan (NMP) on April 17, 2017. Edits were suggested and a revised NMP was submitted on May 8, 2017. Grace-Mar Farms had previously been found out of compliance with this requirement (IR 51040). As such, they will not be found out of compliance twice for the same event. As the NMP has now been submitted, this requirement is deemed as completed. |
| Compliance: | In |
| Actions to be taken: | No further action required. |
| Requirement Description: | **March 1, 2017 amendment** 2(1): By March 3, 2017 secure alternative liquid manure storage and/or disposal as the current capacity at Grace-Mar Farms is insufficient to store all the agricultural waste produced or used on the farm. |
| Details/Findings: | On June 21, 2017, Ministry staff received (from John Kampman) a photo of an email between Mr. Kampman and Doug Macfarlane discussing the alternative disposal location. My interpretation of the email is that alternative disposal was provided by Mr. Ken Netzel who used the liquid manure on his lands for crop production. The location of the alternate storage was given as 3790 Highway 97A in Spallumcheen. As the timeliness of this action cannot be verified, compliance with this requirement cannot be determined. |
| Compliance: | Not Determined |
| Actions to be taken: | No further action required. |
| Requirement Description: | **March 1, 2017 amendment** 3(1): By March 31, 2017, ensure that existing manure effluent lagoons: i) have 45 cm of freeboard; ii) cannot leak, overflow or permit the escape of the solids, effluent or particulate matter; and iii) clean rain water or storm water flowing along the ground is diverted away from any effluent lagoon. |
| Details/Findings: | On April 24, 2017, Devan Oldfield, Environmental Protection Officer with the Ministry of Environment, conducted an inspection of the Grace-Mar farm facilities specifically to look at the available freeboard in the two lagoons. While the primary lagoon was near empty, the secondary lagoon had approximately 10 cm of freeboard. The farm manager (Jason Benjamin) showed me some infrastructure which allowed him to gravity drain from the secondary pond back into the primary pond, however those were not working at that time. Jason also informed me that his pump system was under repair so he could not at that time remove effluent from the secondary lagoon to apply to the fields. |
| Compliance: | Out |
| Actions to be taken: | Ensure that a minimum of 45 cm of freeboard is available in both lagoons at any given time. |
March 1, 2017 amendment

4(1): By March 31, 2017, submit to the Director a nutrient management plan (NMP) for the Lands, prepared by a QP for the 2017 crop year. The NMP must be designed to meet an agronomic nitrogen balance of zero (0) for each field receiving nutrient application. The NMP must account for all nutrient sources (generated, imported and exported including compost) for Grace-Mar Farm Ltd operations. The NMP must incorporate the recommendations made by the Ministry of Agriculture in its 2016 Post Harvest Nitrate Study. In this order “agronomical nitrogen balance” in relation to the application of agricultural waste to crop land means a rate and timing of application that does not exceed the theoretical level of uptake of nitrate from all sources in or applied to the soil by the relevant crops and minimizes the introduction of nitrate found in or applied to the soil into ground or surface waters.

Ensure all applications of agricultural waste to the Lands meet the following requirements:

i) Are limited to providing soil conditioner or fertilizer necessary for crop production: the application of agricultural waste to fields must not exceed the amounts required to supply the agronomic balance of nutrients required by the crop as per the guidance provided by the NMP;

ii) Are recorded (actual amounts of agricultural waste applied to lands, and dates of such applications), such records to be kept and provided to the Director on request;

iii) Are set back a minimum of 3.5 metres from the high water mark of a watercourse;

iv) Are set back a minimum of 3.5 metres from all property lines;

v) Are set back a minimum of 3.5 metres from any industrial wells; and

vi) Are set back a minimum of 30 metres from any drinking water wells.

Details/Findings:

On April 17, 2017, Ministry staff received the 2017 Nutrient Management Plan (NMP) from Ruth McDougall on behalf of Grace-Mar Farms. Edits were suggested and a revised NMP was submitted on May 8, 2017. The NMP appears to be designed to meet a net zero application of nitrogen to Grace-Mar lands.

While the NMP does appear to cover all the points dictated in the Order amendment, the submission did not fall within the timelines set out and therefore Grace-Mar Farms is found to be out of compliance with this requirement.

Compliance: Out

Actions to be taken: Continue to document the dates, rates and volumes of manure to Grace-Mar lands. This information may be requested by Ministry staff at anytime.

The purpose of this inspection record is to assess compliance status with Order 108389 as of July 18, 2017. An earlier Order compliance assessment was issued on March 13, 2017 at which time Sections 1, 3, and 4 were deemed as in compliance and are therefore not being re-assessed as part of this inspection.

If you have any questions about this letter, please contact the undersigned.

Yours truly,

Devan Oldfield
Environmental Protection Officer

cc: