Noise Study – Dorval Organic Material Processing Facility (Composting)

FINAL REPORT

Work team: Mathieu Lessard, Ing. Jr Philippe Lintz, techn.

Verified and approved by:

Marc Deshaies, ing., M. Ing. Technical Director

Translated by: Ville de Montréal

GENIVAR INC. 1600, boul. René-Lévesque Ouest, Bureau 1600, Montréal (Québec) H3H 1P9 Phone: 514 340-0046 ~ Fax: 514 340-1337 ~ <u>www.genivar.com</u>



Note to the reader: This document is a partial translation of the original French report. Only the conclusion has been translated. For more details, please refer to the original document.

8.0 CONCLUSION

Environmental noise measurements were conducted on July 27 and 28, 2011, at three receiving points, continuously over 24 hours at the boundary of the organic material processing facility.

The criteria for noise compliance of the organic material processing facility were established, taking into account City of Dorval by-laws RCM-20-2007 and 1391-A-91, as well as guidelines from the Ministère du développement durable, de l'environnement et des parcs du Québec (MDDEP), entitled "Lignes directrices pour l'encadrement des activités de compostage". Simulations of truck movement involving the delivery of organic material on the site were carried out at three periods of the year. The noise simulation results were used to assess compliance of the organic material processing facility. These indicate that the noise levels generated by the trucking operations at the site exceed the noise criteria of the City of Dorval by 6 dBA, but meet the MDDEP criteria.

The installation of an opaque fence with a minimum height of three metres, placed at the edge of the property near the truck path, is expected to provide compliance with City of Dorval noise criteria. The fence must be sealed over its entire surface and have a surface density of 10 kg/m².

We set maximum noise levels for stationary sources of noise. In addition, if these noise sources are placed near the truck paths, they will have to be subject to additional noise level verifications and, if necessary, additional noise-reduction measures.

The noise impact generated by additional trucks delivering organic material near the processing facility was evaluated using simulation techniques and Traffic Noise Model (TNM v. 2.5) software. The results indicate that the noise impact generated by increased truck traffic at the facility is weak (increase of 1.4 dBA) at rush hour during the busiest months of the year (October and November).

