Third Party Review of Odour Assessment



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RE: Sofina Foods, Inc. Odour Assessment for Development Permit

The Odour Assessment dated October 3, 2018 prepared by Stantec Consulting, Ldt. for Sofina Foods, Inc. presents a comprehensive analysis for mitigation of anticipated odours from a proposed poultry processing plant on a 12-hectar property at 6202, 106th Avenue SE in Dufferin II (North) Industrial area of Calgary, Alberta.

The Stantec Odour Assessment uses existing data from the Sofina poultry processing facility at 2126 Hurst Road SE in Calgary, new odour emission data collected in accordance with practices of the Ontario Mistry of the Environment, and analysis unitizing the US EPA AERMOD dispersion modeling system.

Five (5) odorous processing areas are identified at the existing Sofina Food poultry processing plant included: live shed, scalder, kill floor, live receiving area, and gut room. The Stantec added the proposed wastewater pretreatment process area to the Odour Assessment

The Odour Assessment for the proposed facility of 195,800 vs 130,000 birds per day for the existing Sofina Foods facility, incorporated scaling the odour emission data using a normalizing methodology that incorporates process rate scaling, room size scaling, and exposed material (offal) area scaling.

The dispersion modeling demonstrated several odour mitigation practices and stack dispersion methods to reduce ground level odour concentration to a target of 5-OU/M3. The Stantec Odour Assessment used carbon filtration as the exemplar odour mitigation practice with plans to evaluate additional options in the facility design phase as well as evaluate fugitive emissions.

The use of the 99.5th percentile of the one-hour predicted odour averages from the AERMOD analysis maintained a conservative approach for the overall Odour Assessment.

Based on my review of the October 3, 2018 Stantec Odour Assessment, it is my professional opinion that the Sofina Foods proposed poultry processing facility design demonstrate that public welfare will be protected, specifically with regards to the management of odours.

Respectfully submitted,

Charles McGinley

Odour Management Consultant