Packaging Corporation of America Salem Packaging 2121 Madrona Ave SE Salem, OR 97302 Brent Wagner General Manager



January 29, 2021

Delivered Electronically by E-mail

Kenzie Billings CAO Project Manager Oregon Department of Environmental Quality 700 NE Multnomah St., Suite 600 Portland Oregon 97232

Subject: CAO Submittal for PCA Salem Box Plant, AQ Source No. 24-8061

Dear Ms. Billings,

The Packaging Corporation of America's (PCA) Salem Box Plant was notified by letter dated September 1, 2020 that in accordance with OAR 340-245-0050, it had been called into the Cleaner Air Oregon program. This letter is PCA's response to your letter dated December 30, 2020 requesting additional information, corrections and updates to the 2019 inventory submission in advance of the January 31, 2021 deadline.

Responses:

- 1. Sun Ink has reviewed and provided additional information concerning DEQ's request regarding non-HAP/SARA VOCs from our "2019 Ink HAP and Toxics Calculations.xls". They have identified 9 potentially volatile chemical impurities (maximum impurity range used) in small amounts (less than 20 lbs. total) that are listed as toxic air contaminants in OAR 340-245-8020 Table 2. Use of the maximum range for the impurity represents a worst case estimate which is potentially a gross overstatement of the potential weight of these compounds in the product. Sun Chemical has not measured or confirmed the presence of these impurities in the products delivered to the PCA Salem box plant. PCA does not believe it would be appropriate to use the vendor's impurity specification to calculate an emissions inventory for these compounds, given the lack of any analytical confirmation that the purchased inks actually contain these compounds, compounds that are not intentionally added.
 - a. Reference: "PCA Salem DEQs 10899 Jan 26 2021 CBI"
- PCA requested additional information regarding the 2018 NCASI corrugator study originally used to determine corrugator VOC emissions in the PCA Salem Box Plant air permit.
 - a. It should be noted that the focus of NCASI's corrugator study and testing was not to fully identify and quantify all components of VOC but rather to quantify the key organic HAPs that yield low instrument responses in Method 25A measurements. For both single and double wall production, approximately half of the measured non-methane carbon measurement can be attributed to methanol with the balance unidentified. As shown in the report, the Method 25A concentrations for

the corrugator Plant B are quite low, with the unattributed portion ranging from 0.5 to 2 ppm on a carbon basis. NCASI presently has no information on the chemical composition of the unattributed portion.

Reference: "Memo to PCA Salem on estimates of TAP 01-27-21 CBI"

- b. PCA requested that NCASI review possible air emission factors for the industry's use of sodium hydroxide. NCASI reported that there were no factors for the industry and none in the literature search that they conducted for industries similar to the corrugated box plant industry. NCASI further indicated that they'd expect emissions to be trivial or de minimis given the low vapor pressure of caustic soda in solution. PCA believes that air emissions of caustic soda would not be expected present in the starch make-down application where it is used and applied for the purpose of adhering linerboard to corrugated medium paper. It is expected that all sodium hydroxide solution applied would be completely reacted and entirely bound within the adhesive and paper fiber matrix.
- 3. The "IFS Industrial Salem CBI.xlsx" listed cumene (CAS# 98-82-8). The inventory has been updated to reflect the cumene emissions.
 - a. Reference: "Salem Emissions Inventory 2019 Updated Jan 2021"

PCA has worked cooperatively with Oregon DEQ to conduct a preliminary emissions inventory review and complete its initial air toxics inventory using 2019 production and emissions data. Along with this letter, the updated emissions inventory forms and requested supporting information is being provided to DEQ electronically via email prior to the requested January 31st deadline. PCA requests that the information provided by IFS Industries Inc and Sun Ink be treated as Confidential Business Information (CBI) since it provides a detailed formulation for the chemical purchased and used by PCA at the Salem box plant. PCA also requests the information provided by NCASI be treated as Confidential Business Information (CBI) since it is only available to members of the trade association. The information is not otherwise publicly available.

PCA will continue to work with DEQ and its technical resources to provide additional information as it becomes available in support of the review process.

If you have questions or need additional information please contact Erica Frey-Hoyer at (503) 315-2335.

Sincerely,

Bulyan

Brent Wagner General Manager

Cc: Erica Frey Hoyer