We have reviewed the information which has been submitted regarding chemicals and compounds used by taxpayer in the manufacture of paper products.

Busan 90 is a bromohydroxy acetophenone product which is injected into wood pulp slurries, processing waters and paper coatings, to prevent the growth of bacteria and the formation of slime on the pulp and on finished paper. In our opinion, Busan 90 is purchased for use in the process of manufacturing paper and not for the purpose of resale.

Zinc Hydrosulphite and Sodium Hydrosulphite are chemicals which are used as bleaching agents in the process of manufacturing paper from wood pulp. On the basis of our understanding that their constituents do not become incorporated into the finished product, it is our opinion that they are purchased for consumption and not for resale.

Caustic Soda (Sodium Hydroxide), Limestone (Calcium Carbonate), and Sodium Sulphate are chemicals which are used to charge and alkaline cooking liquor. The liquor digests wood chips leaving cellulose pulp which is made into paper products.

In our opinion, Sodium Hydroxide, Calcium Carbonate and Sodium Sulphate, so used, are purchased for consumption and not for resale.

Taxpayer manufactures Sodium Hypochlorite from Chlorine and Sodium Hydroxide. The Sodium Hypochlorite is used to bleach kraft pulp. Although their components remain in the pulp in residual amounts, it is our opinion that the Sodium Hydroxide and Sodium Sulphate are purchased for use as manufacturing aids and not for the purpose of resale.

Chlorine is introduced into a multi-stage kraft bleaching process. It combines with lignin and renders it reactive for subsequent bleaching operations. In our opinion, chlorine so used is purchased for use as a manufacturing aid and not for resale.
Hydrogen Peroxide is combined with Sodium Silicate, Magnesium Sulphate, Trisodium Phosphate and Versenek 80 (Diethylenetriamine-Penta-Acetic Acid) to form a solution which is used to bleach ground wood pulp. The Hydrogen Peroxide is the active agent and the other chemicals are stabilizers which prevent premature dissociation of the Hydrogen Peroxide by impurities in the pulp. In our opinion, these chemicals are purchased for use as manufacturing aids and not for the purpose of resale.

Mistron Talc is a Magnesium Silicate compound which is added to wood pulp to control the deposition of pitch. It remains in the paper as a component thereof, presumably imparting desirable characteristics thereto. On the basis of the foregoing, it is our opinion that Mistron Talc is purchased for the purpose of incorporation in finished paper products manufactured by taxpayer.

Ammonium Hydroxide is used in solution as a mineral dispersant and becomes a part of the waterproof surface coating of finished paper products. The sale thereof for such purpose is an exempt nontaxable sale for resale.

Defoamers, including NOPCO DF-120, DF-160 and DF-303, are detergent compounds which inhibit foaming in the process of manufacturing paper. They also serve as retention aids, preventing fine pulp particles from being washed away. The major portion of such products are flushed away with other process effluents. Defoamers so used are manufacturing aids, and are not purchased for resale.

Sodium Hydroxide is used in the caustic-extraction stage of kraft pulp bleaching operations. It serves to remove water insoluble chlorinated lignin material. In our opinion, it is purchased for use as a manufacturing aid and not for resale.

Sodium Hydroxide and Sulpher Dioxide are used to control reaction rates in peroxide bleaching of ground wood pulp. No washing of the pulp is done after bleaching and Sodium and Sulpher from these compounds remain in the pulp and the paper products made therefrom [for a beneficial purpose]. In our opinion, sales of Sodium Hydroxide and Sulpher Dioxide for such purposes are exempt nontaxable sales for resale.

Sulphuric Acid, Sodium Chlorate and Sulphur Dioxide are combined by taxpayer to make a chlorine dioxide bleaching solution which is used as a bleach for kraft pulp. In our opinion, such chemicals are purchased for use as manufacturing aids and not for resale.

Vanzak 112 is a liquid product which is used to disperse pitch in kraft and ground wood pulps. Most of the Vanzak and pitch are eventually washed out of the pulp. In our opinion, Vanzak 112 is a taxable manufacturing aid.

GAT: cw [1b]