



Zentox Corporation

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FSIS Docket Clerk
Room 102
Cotton Annex Building
300 12th Street, SW
Washington, DC 20250-3700

98-062P
98-062P-2
Richard Svrluga

Ref: Docket Number 98 – 062P : Performance Standards for On-line Antimicrobial Reprocessing of Pre-Chill Poultry Carcasses

To Whom It May Concern:

This letter is respectfully submitted in response to the request for comments for the referenced Docket Number 98 – 062P.

Zentox Corporation is an industrial and commercial water treatment company that provides products and services to the poultry processing industry. Zentox is working on the development of its PathX™ on-line reprocessing system for the poultry industry. P a t W is the trade name for a chemical and washing process designed as an intervention step to allow for continuous on-line reprocessing of poultry carcasses that may have accidentally become contaminated during the evisceration process. Attached to this letter is a document titled “PATHX™ - an Improved Technique for Continuous On-Line Processing of Poultry Carcasses” dated January 23, 2001 which summarizes data **from** experiments conducted utilizing the PathX™ process. Development efforts on the P a t W process are ongoing. We anticipate providing a report including additional data on the next set of experiments in the near future.

We applaud the proposed **FSIS** Proposed Rule to allow poultry carcasses contaminated with digestive tract contents **during** slaughter to remain on the main processing line along with uncontaminated carcasses for treatment with an antimicrobial agent before the chiller. We strongly believe that well-controlled antimicrobial treatment of pre-chill carcasses can have a significantly positive effect on food safety. The data contained in **our** enclosed report is a testament to the value of well-controlled antimicrobial treatment.

As FSIS considers the final wording of the Proposed Rule including the establishment of specific performance standards, we **ask** that the following points be considered:

1. **Balance of health and safety for consumers with achievable goals that encourage participation** – We believe that food **safety** will be enhanced and consumers will benefit if all poultry plants in the U.S. adapt a program of well-controlled antimicrobial treatment of pre-chill carcasses. We also believe that there

is no one antimicrobial technology that is best suited for the many different poultry plants around the country. There are operational, environmental and economic differences between poultry plants. If the Proposed Rule is too tightly structured in terms of establishment of what are perceived as unrealistically achievable performance standards, we fear that many plants may opt to not use any antimicrobial treatment, which would be harmful to consumers. We urge that the Proposed Rule be made flexible so that it encourages the poultry plant to implement well-controlled antimicrobial treatment while at the same time holding the plant to existing regulations that both protect food **safety** and that are well understood by the industry. The conflicting data submitted by Rhodia on the one hand and the National Chicken Council on the other over the use of TSP highlights the danger of setting specific performance standards where performance results cannot be replicated. Based on the information provided, it is very doubtful if any plant could meet the standards proposed by Rhodia. **Again**, we urge flexible rules that encourage poultry plants to implement well-controlled antimicrobial treatment of pre-chill carcasses.

2. **Effects of freezing on samples and other aspects of the NCC and Rhodia data** – It is well known in the scientific community that freezing samples will impact microbial growth. It would appear based on the information provided that while there may be benefits to TSP treatment the claims made by Rhodia were based on faulty handling of samples and their data cannot be replicated. We believe that it would be entirely inappropriate to set any type of industry standard on such flawed data. As a point of reference, Zentox has conducted experiments with our PathX™ process in which treated carcasses were tested for spoilage after 7 days of refrigeration. Our data showed that there were zero bacteria counts on the carcasses after storage at or near freezing for 7 days.
3. **Should all carcasses be treated with antimicrobial intervention pre-chill** – We strongly believe that all carcasses should be treated with well-controlled antimicrobial treatment pre-chill. The data that we have submitted with this letter supports this point.
4. **What pre-chill standards should establishments using on-line reprocessing with an antimicrobial treatment be required to meet** – We agree with the statement that various antimicrobial treatments have been demonstrated to have differing effects on E. coli and Salmonella and therefore specific pre-chill standards are not appropriate. We also understand that there are operational and other differences between establishments and an industry wide fixed standard could potentially discourage the use of antimicrobial treatment by a number of establishments. We would propose for consideration a system that would acknowledge the variability between plants but still maintain the integrity of the food safety system. For example, if an establishment has documented data on the current level of E. coli for carcasses on the main processing line pre-chill then a baseline can be established. That baseline will vary somewhat plant to plant. If the establishment can then document that it can obtain comparable E. coli numbers for carcasses that otherwise would have been manually reprocessed but are now

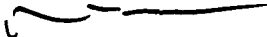
receiving antimicrobial treatment we would propose that the establishment be **allowed** to implement the antimicrobial treatment throughout the plant. In final operation, **all** carcasses would be treated. Food safety integrity would be maintained by established standards for post-chill inspection.

5. **The importance of a well-controlled process** – We strongly believe that antimicrobial treatment of pre-chill carcasses is an area where implementation of process controls is critical. The efficacy of various antimicrobial treatments and chemistries is only maintained if they are well controlled. To be effective an antimicrobial program should be monitored throughout the plant and a plan for corrective actions needs to be in place to address the variances that often occur in a processing facility. For example, Zentox is preparing the next level of experimentation of **our P a t W** process. At this next level hypochlorous acid will be used for disinfection of contaminated carcasses by utilizing a combination of tightly controlled pH and **free** chlorine concentrations. In these experiments we **will** utilize industry accepted control equipment. We believe that the need for established control parameters and industry accepted control equipment coupled with a system of ongoing real time monitoring of those parameters is mandatory to insure proper antimicrobial intervention. We believe that **the** employment of proper control and delivery methods of well-documented antimicrobial agents will insure greater food safety. The ability of the poultry processor to have real time monitoring and automated control of the antimicrobial intervention method **will** place greater confidence in the entire process and help to stimulate the replacement of off-line reprocessing methods. The net effect **will** be enhanced food safety and consumer benefit.

6. **Other data to consider** – In addition to our work on the development of the PathX™ process, Zentox is currently treating and returning process water from the evisceration line of several poultry plants for reuse in pre-chill operations of the plant. Such operations are referred to **as** the Zentox Cascade™ water reuse systems. Zentox uses well-established chemistry for elimination of pathogens in the process water returned to the processing facility. This water is treated using performance standards including turbidity, **free** chlorine residual and oxidation-reduction potential (ORP). We have received verbal reports from plant personnel that since our systems have been installed and carcasses are now being treated in part with reuse water there has been a noted decrease in Salmonella incidence and E. coli counts. We have yet to fully quantify the effect of this process but believe that it offers a potentially exciting opportunity to improve food safety in poultry plants.

We appreciate the opportunity to respond to this Proposed Rule.

Sincerely,


Richard Svrluga
President and
Chief Executive *Officer*