B. Statistical Methods

- **1.** The universe for the sample is owner/operators or food defense decision-makers in the following food industries: growers, packers, processors, warehouses, transporters, retailers, and food service operators.
- **2.** Procedures for the Collection of Information

2.1 <u>Statistical methodology for collection and sample selection</u>

The (CR)² will employ purposive convenience sampling by posting a study announcement on major, national food industry trade association websites, listservs, and publications. We generated a list of US-based food industry, trade associations through the Encyclopedia of Associations database (http://library.dialog.com/bluesheets/pdf/bl0114.pdf), a comprehensive source of detailed information on over 135,000 nonprofit membership organizations worldwide. We selected only food trade associations that are US based and have memberships of more than 100 companies. We deleted the following categories of associations from the generated list: 1) food product-based (e.g., National Tortilla Association), 2) State associations (e.g., California Rare Fruit Growers), 3) non food handling (e.g., Association of Food Journalists), and 4) niche market associations (e.g., Rare Fruit Council International). The culled list contains approximately 100 associations with at least one association representing each of the seven food industries in the sampling universe. Our target is an average of 25 respondents per association. We will contact the trade associations on the list by telephone to request their assistance in providing a link to, or announcement about, the survey.

The study announcement posted by the associations will include a link (for online announcements), a web address (for print announcements), and a name and telephone number of the study principals from which a paper questionnaire can be requested. Participation will be voluntary and information that would associate specific responses to specific businesses will not be accessible to FDA. The purpose of the survey is to help FDA evaluate ALERT informational materials and to gauge the extent that the ALERT principles or ALERT materials has informed food industry, food defense decision-makers about the risk of intentional food contamination and motivated them to engage in protective behaviors.

FDA plans to use the information collected from the survey to learn whether food industries are implementing the food defense practices described in the ALERT initiative materials. The survey results will be used to assess how knowledge and awareness, threat perceptions, attitudes, norms, benefits and barriers affect the implementation of the ALERT initiative or its principles. This is a new, one-time data collection. FDA does not plan to collect this data on an ongoing basis.

2.2 Estimation Procedure

2.3 Degree of accuracy needed for the purpose described in the justification

3. Use of Improved Information Technology and Burden Reduction

The (CR)² will utilize a bi-modal, Internet and mail, data collection methodology. Prior research indicates an extremely small response rate, even with incentives, with establishment surveys. For example, Kaplowitz

and Eyck (2006) obtained a list of nearly 60,000 establishments, and randomly selected 2000 managers to receive a mailed survey. A cover letter accompanying the survey explained the study and offered respondents the chance to win \$100 if they returned a completed survey. Only 144 surveys were returned, yielding a response rate of 7.2%. We suspect that the response rate from food industry, food defense decision-makers will also be low if they are contacted by phone. Therefore, we will contact trade associations by telephone and ask them if they will allow us to advertise the study through their websites, listserves, and other trade publications. We expect this method to yield more survey respondents than can be expected by telephoning companies directly because the notice will reach a wider audience in a less intrusive manner and with the support of trade associations. We realize that this method is subject to self-selection biases found in any other voluntary surveys and that the responses will not be generalizable. Nevertheless, we believe that this method will provide useful data to help us know how the ALERT initiative is functioning in the industries of interest.

(CR)² selected the Internet survey method due to the following considerations: (1) the Internet survey method is the least costly to the agency when compared with other modes of collection and generates the timeliest responses; (2) the Internet survey will impose a relatively modest reporting burden on small entities.

Paper questionnaires will be provided to respondents who request them. Paper questionnaires will be formatted so that skip patterns can be easily identified by the respondent. Respondents requesting paper questionnaires will receive a stamped, self-addressed envelope to return the survey.

We will employ a screener to ensure the respondent is a food-defense decision-maker in the organization. We will ask the respondent 1) for information on the size of their company by number of employees, 2) to identify the industry category based on the list we provide and, 3) to indicate what kind(s) of food products they work with. We will use these items to examine response variations between establishment sizes, industry categories, and product categories.

Kaplowitz, Stan A. and Toby A. Ten Eyck. 2006. "Attitudes of the Food Industry towards Safety Regulations: Descriptive Statistics and Some Major Predictors." Research in Human Ecology. 13(1):11-22.