

GSI PROGRESS REPORT – FOOD SAFETY PANEL



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SCOPE OF WORK UPDATE

- 90-95% of the original scope of work is unchanged
- Most changes clarified and/or expanded the existing proposed scope of work
- Significant changes included:
 - **Task 1: Identify Chemicals of Interest**
 - Outlining available data previously collected with Dr. Stringfellow, et al.
 - Expanded description of the scoring approach to identify Chemicals of Interest, based on EPA's methods to identify chemicals for the Contaminant Candidate List (CCL)
 - Expanding the description of methods used to evaluate chemical additives for inclusion in the list of Chemicals of Interest, using a multi-criteria decision analysis framework
 - **Task 2: Literature Review of Chemicals of Interest**
 - Proposed using a systematic approach to review literature on the Chemicals of Interest based on the process used to write a Cochrane Review
 - Identify detection limits based on consumption for the Chemicals of Interest
 - **Task 3: Sampling of Crops**
 - Unchanged

EXPANDED LIST OF ANALYTES

- Total of 305 additives identified by oil companies (June 2018 list)
- GSI reviewed the list of 305 additives to address concerns that toxicologically prominent analytes were missing from the list of analytes used for crop sampling
- The list of analytes was compared against the list of additives
- Chemicals additives—not currently sampled—were reviewed against the key toxicological literature to determine if there were any conspicuous chemicals that should be sampled for, based on:
 - High oral toxicity
 - Health relevant dose levels in line with the magnitude of other contaminants found in crops
 - Typically associated with chronic effects (acute effects are unlikely)

EXPANDED LIST OF ANALYTES

The list of chemical additives can be broken down into four general groups:

1. Those chemicals already tested
 - 14 of 305 of the chemical additives currently tested
2. Those chemicals that are not of concern
 - For example: walnut shells, water, quartz crystalline silica, krypton, wood dust, xanthum gum
3. Those chemicals that may be of concern and should be added to the list of analytes
 - Based on review of toxicological literature
 - a. Bis (2-chloroethyl) ether: *CAS 111-44-4*
 - b. Benzyl Chloride: *CAS 100-44-7*
 - c. 2-Napthalamine: *CAS 91-59-8*
 - d. Cyclohexylamine: *CAS 108-91-8*
 - e. Acrylamide: *CAS 79-06-1*
4. Chemicals that need further evaluation to determine their status