November 18, 2011

NIOSH Docket Office
Robert A. Taft Laboratories
MS-C34
4676 Columbia Parkway
Cincinnati OH 45226

Re: Criteria for a Recommended Standard: Occupational Exposure to Diacetyl and 2,3-Pentanedione Docket Number NIOSH-245

Dear Sir or Madam:

The UFCW International Union supports the draft document “Criteria for a Recommended Standard: Occupational Exposure to Diacetyl and 2,3-pentanedione.” The Union has been involved almost from the beginning of NIOSH’s seminal work on flavorings. NIOSH researchers and scientists, clinicians and industrial hygienists have conducted site investigations of cases and exposures and have developed methods and materials for both measuring and controlling exposures. This is exactly the role for the agency charged with researching workplace hazards.

**History**

In 2001, NIOSH contacted my office to inquire if we represented workers in the microwave popcorn industry. They informed us of lung disease among workers and they were investigating the link to butter flavoring. We found no microwave popcorn companies among our represented plants. However, later, we found plants that used butter flavoring - cooking, snack foods, frosting, flavored oils. We obtained MSDSs and examined OSHA 300 log data and held meetings with officials from companies we identified who were using butter flavorings to discuss our concerns. Throughout this process, we were working closely with NIOSH, asking and answering questions and reviewing our information. They conducted research. They worked closely with California, the OSHA state-plan state that took this occupational hazard very seriously. We found almost no Diacetyl used in our food manufacturing plants and we found no sick workers. However, it did raise our awareness specifically of the thousands of food manufacturing workers who were potentially exposed.
There was important press on the issue during this time. There were law suits on behalf of injured workers. CalOSHA began its work, partnering with NIOSH. But Federal OSHA was doing almost nothing.

In 2006, the UFCW and the IBT along with the support of 40 occupational doctors and scientists filed a petition with OSHA for an Emergency Temporary Standard. The petition called on OSHA to require employers to:

- Control airborne exposure to diacetyl to below 0.05 ppm, averaged over an eight-hour work period;
- Provide air-purifying respirators to all exposed employees above 0.05 ppm;
- Provide medical surveillance to all employees exposed to diacetyl;
- Conduct monitoring of airborne exposure to diacetyl.

In addition, we asked that OSHA immediately issue a bulletin to all employers and employees potentially exposed to diacetyl stating that exposure may result in severe illness; conduct inspections at facilities where workers are exposed to Diacetyl; and begin rule-making proceedings to establish a permanent standard to protect workers from exposure to all flavorings that should include a permissible exposure limit that protects workers against a significant risk, methods of compliance, a detailed medical surveillance program, appropriate exposure monitoring, training and information. OSHA denied our petition and but under the Obama Administration, OSHA has finally begun rulemaking.

**Cal/OSHA and FISHEP**

Cal/OSHA aggressively pursued investigations and standard setting for butter flavorings. They identified California-based manufacturers of flavorings, conducted investigations, pursued cases of flavorings-related lung disease, working closely with NIOSH and the Department of Health. In 2006, the unions similarly petitioned Cal/OSHA for an Emergency Temporary Standard. In 2010, they promulgated the first standard, which covers diacetyl and substitute butter flavorings where a case

**RELS, STELS and AL**

NIOSH has conducted an extensive review and quantitative assessment of human exposures for these recommended levels. Based on the science to date on these chemicals, the UFCW supports the recommended exposure limit, the action level and the short-term exposure limit for diacetyl proposed in the criteria document. As outlined in their recommendation for exposure limits to 2,3-pentanedione and based on the limitations of the analytical method, the UFCW also supports the EL and STEL recommended in the criteria document.
Prevention and control, training, medical surveillance and monitoring

With the exceptions listed below, we support the recommendations in these sections.

Issues of concern in the document

The picture of a worker wearing a respirator on the cover of the document should be replaced with engineering control technology.

Further investigations should be conducted in food manufacturing facilities that use flavorings. One example is the use of slurries sprayed on snack foods tumbled in drums. To date, the research has been limited.

Medical Removal Protection. We believe this document should provide a stronger recommendation that workers who are found to have health effects from exposure to flavorings be removed from work.

The food manufacturing industries are high turnover workplaces. Workers in these industries are paid low wages, they are often new immigrants and may be temporary workers. Any document recommending a standard that will impact this sector of manufacturing must stress the importance of follow-up for workers who have exposures to these flavorings. We would like to see in this document the recommendation that OSHA include specific steps companies must take, follow-up medical evaluation, and recordkeeping as to how that was done to follow up with exposed workers who develop health effects. This should be done for a minimum of 12 months.

For over 11 years, NIOSH has done preeminent work on this issue. Research scientists across multiple divisions have been involved. This criteria document amasses the data and research as well as that of other institutions and organizations, including National Jewish Health and FEMA and goes beyond our petition to reduce or eliminate significant risk of health impairment from exposure to not only diacetyl but 2,3-pentanedione and prevent flavorings-related lung disease. NIOSH also recommends that exposures to other flavoring substitutes with structural similarities to diacetyl or moieties that are biologically active and capable of producing similar toxic effects as diacetyl be considered and controlled to as low as reasonably achievable. This document is based on sound science. It serves as a basis for an OSHA standard.

Thank you for the opportunity to comment on the recommended standard.

Sincerely,

Jacqueline Nowell
Director, Occupational Safety and Health Office