Dear Ms. Simpson, Mr. Cline, Ms. Hodgert, Mr. Hice, Mr. Memminger, Mr. Engelhaupt and Ms. Pellegrini,

We are writing to express concern with the burn demolition of the Fairfield Harbour Community Center. I manage the Medical Advocates for Healthy Air (MAHA) program, which is a network of more than 700 health professionals (physicians, nurses, pharmacists, public health professionals, etc.) across the state that is knowledgeable concerning the health impacts of air pollution and climate change. MAHA is concerned that burning the community center will cause serious health effect in your community.

Controlled burns can lead to high levels of pollutants, such as particulate matter, volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs), in the air and negatively impact the surrounding community’s health. Particulate matter poses a significant health risk as some of the particles are small enough to evade the body’s respiratory protections, enter deep into the lungs, and pass into the bloodstream impacting the cardiovascular system. Both short-term and long-term exposure to particulate matter has been shown to have adverse health effects. Acute exposure to particulate matter can cause irritation of eyes, nose, throat and lungs; coughing, wheezing, and aggravation of existing respiratory conditions, such as chronic obstructive pulmonary disease (COPD) and asthma; lung inflammation; reduction in lung capacity; nausea and vomiting; neurological effects including headaches, numbness, weakness and dizziness; exacerbation of cardiovascular diseases and stroke; and diabetes. Older adults, pregnant women, children, people with asthma and people with heart disease are more vulnerable to these health effects.

Exposure to VOCs such as benzene, formaldehyde and toluene, has been shown to cause eye, nose and throat irritation; headaches, loss of coordination and nausea; damage to the liver, kidneys and central nervous system; and some have been shown to be carcinogenic. VOCs can be found in paint, varnishes, finishes, caulks, sealants, adhesives, flooring, carpet, and pressed wood products.

PAHs are a group of chemicals that are formed during the incomplete burning of coal, oil, gas, wood, garbage and other organic substances. Exposure to PAHs has been shown to cause DNA modifications leading to mutagenicity and carcinogenicity, decreased fertility, birth defects, decreased body weight, immunosuppression.
The individual and combined health effects of these pollutants can have a substantial impact on the exposed communities health. Burning the Fairfield Harbour Community Center would emit these pollutants and expose your community to considerable risk for adverse health effects. MAHA recommends the Fairfield Harbour Board of Directors not use a burn demolition to remove the structure, but instead use a mechanical demolition with proper containment, disposal and clean-up. This would remove the risk of adverse health effects from the pollutants emitted from the burn.

Sincerely,

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References:


