

August 29, 2019

Re: Northern Standard  
2220 Mercury Way  
Santa Rosa, CA 95407  
Cannabis Manufacturing, Retail and Distribution  
City of Santa Rosa – Conditional Use Permit Application

As required by the City of Santa Rosa's Cannabis – Conditional Use Permit Application, the Owner has hired TEP Engineering to address three items regarding HVAC filtration and noise. These three items are "Storage of Cannabis Products/Inventory", "Odor Control – Engineering Controls" and "Noise".

### **Cannabis Manufacturing, Retail and Distribution - Storage of Cannabis Products/Inventory**

The project as proposed shall comply with the City of Santa Rosa's storage of cannabis products/inventory standards set forth in Zoning Code Chapter 20-46. Northern Standard will store packaged edible cannabis goods in spaces that have temperature and humidity controlled heating, ventilation and air conditioning (HVAC) systems. The outside and recirculated air for these HVAC systems will include filters that mitigate environmental contaminants such as smoke and dust. These filtration systems must be specified and sized properly by a Professional Mechanical Engineer and maintained by the Owner per the manufacturer's instructions. The area in which edible medical cannabis goods are stored also may not be exposed to direct sunlight.

### **Cannabis Manufacturing, Retail and Distribution - Odor Control – "Engineering Controls"**

The project as proposed shall comply with the City of Santa Rosa's odor mitigation standards set forth in Zoning Code Chapter 20-46. The industry accepted method to remove cannabis odors for airstreams is carbon filtration. Northern Standard will install activated carbon filter canisters or inline filters on their exhaust systems serving spaces at risk for emitting cannabis odors. Northern Standard will also install activated carbon inline filters on their recirculating air systems serving spaces at risk for emitting cannabis odors. These carbon filters are designed for the control of VOC's, odors and other gaseous contaminants. The spaces at risk for emitting cannabis odors are noted on the odor-control floor plan provided by Northern Standard; these spaces include the Retail 1-101, Fulfillment 2-109, Gummy 3-121, Chocolate 3-114, Packing 3-120, Biomass Storage 5-226, CO2 Extract 5-223, Distillation 5-224, Bulk Storage 5-222, Ethanol Extraction 5-219, Work Room 5-218 & Hall 5-221 spaces. The exhaust and recirculated air for these spaces will pass through an activated carbon filter, which uses chemical adsorption to remove organic compounds from the airstream. These organic compounds carrying the cannabis odor are captured through a process of adsorption in the microporous carbon. The activated carbon filtration systems must be sized properly by a Professional Mechanical Engineer and maintained by the Owner per the manufacturer's instructions. Suitable activated carbon filters manufacturers include: Camfil, Purafil or approved equivalent by a Professional Engineer.

### **HVAC Equipment Noise**

HVAC equipment shall comply with the City of Santa Rosa's Chapter 17- 16 (Noise) requirements. These HVAC systems must be specified and sized properly by a Professional Mechanical Engineer and maintained by the Owner per the manufacturer's instructions.

Sincerely,



TEP Engineering  
Andrew Souza, P.E., CPD, GPD, LEED AP BD+C

