

SANCTUARY MEDICINALS
PROJECT NARRATIVE
(Revised January 11, 2024)

Existing Conditions:

Sanctuary Medicinals has been operating a marijuana cultivation, processing and manufacturing business at their facility since 2017. At that time, modifications to the existing building were primarily interior of the building with the upgrade of the HVAC systems as necessary for the cultivation of marijuana. A locked dumpster and the installation of a large generator were also a requirement for the operation of the facility.

The site has 44 parking spaces which was sufficient for the projected 30 employees. Currently, there are approximately 90 employees over the course of the two shifts. Sanctuary has leased 30 parking spaces from the adjacent site to accommodate the demand.

The septic system failed and was upgraded to a 1650 gallon per day system in November 2022. This system can accommodate 110 employees and will result in a loading rate of 5.97 gallons per day per 1000 s.f. and did not trigger a Water Protection District Special Permit for sewage flows.

During the supply chain disruptions, Sanctuary purchased packaging supplies in bulk, necessitating the use of storage containers on site for this bulk storage of packaging equipment. These containers will be eliminated with the construction of the building addition.

Proposed Project:

The proposed building addition is approximately 14,346 s.f. and will be connected to the existing building with a sloped hallway as the building floor elevation will be 4' lower than the existing building to minimize grading/disturbance to the site. This building is being designed to house packaging for various manufactured products as well as the packaging necessary for shipping the product. There will be a larger secured storage area, area to prepare for transportation and small staff lounge/conference room. Two at grade garage doors with a limited paved driveway are provided to load product for distribution.

There will be no increase in the number of employees or product being grown and manufactured as the addition will alleviate the overcrowding in the current building, and allow for automatic equipment in the manufacturing of the product. The additional storage space will allow product to be in specific closed rooms, minimizing storage in the hallways which may help with odor control.

The total number of parking spaces will increase slightly to 67 on site (with 3 handicap spaces) and the 30 leased spaces on the abutting property. The total number of employees (110 by septic capacity). Littleton Zoning requires 1 space per every 1.25 employees on the largest shift which would equate to 88 spaces if there were only one shift. This site provides 97 spaces which allows for shift changes.

The addition of roof area and the paved loading area will result in an increase in the impervious surfaces on the site. The lot coverage by buildings will increase to 17.7% and the overall lot coverage of impervious surfaces will be 33.0%. The HVAC system components, air handlers and condensers, require concrete pads and are more extensive than a typical industrial building and are included in these calculations.

Drainage has been provided to recharge the clean roof runoff from the addition as well as the runoff from the new impervious loading area, after 80% of the TSS has been removed with a hydrodynamic separator. The runoff is discharged into an infiltration system comprised of 48 infiltration chambers. These chambers attenuate and recharge the runoff from the new impervious surfaces resulting in no increase in the rate of runoff from the site for the 2-, 10-, 25- and 100-year storm (see Stormwater Analysis)

Water Resource Protection District- Supplemental Information

Storage of Petroleum in quantities greater than 500 gallons (previously approved)

The site will require an emergency generator. The cultivation of the marijuana plants is done in a controlled environment with electrical loads larger than can be provided by a single natural gas generator. The proposed generator will be diesel fueled with an attached tank below the generator (belly tank). This tank will be double walled and will have the state of the art monitoring devices as typically provided within the Town of Littleton. This fuel tank will have sufficient capacity to provide 48 hours of operating time. This remains unchanged.

173-62(B) Toxic or Hazardous Materials: (previously approved)

Toxic or Hazardous materials used in the processing the marijuana includes the use of ethanol or butane propane for the extraction in the laboratory and the use of isopropanol (rubbing alcohol) to clean surfaces in the lab. The ethanol comes in 5 gallon containers and there is one container on site. The isopropanol is generally quart to half gallon size. These are all stored in a fire proof cabinet that has secondary containment in the bottom. Hydrogen peroxide is also used in very small quantities for the sanitizing of surfaces in the cultivation areas. The maximum amount of these alcohols/solvents is 50 gallons.

The butane propane is a gas and is stored in a pressurized tank containing 125 lbs. Because it is pressurized, any release would be in a gaseous state and pose no risk to the groundwater.

In the preparation area for the plant cultivation, there are organic compounds and plant additives stored in a similar fire proof cabinet. The materials include pH adjustments, fertilizers and other plant supplements (minerals, beneficial microbes, root additives etc.) and are all organic and are not considered toxic or hazardous. This remains unchanged.

Ethanol is recovered and recycled in the extraction process, minimizing the amount of ethanol delivered to the site. All of the above materials are utilized in small quantities and are generally carried in by personnel through the main entrance. Spill cleanup materials are readily available in the facility.

Impervious Cover:

The existing As-built lot coverage is 27%, reflective of the concrete pads for the HVAC equipment and generator. The proposed building will increase the total impervious surfaces to 33% and the building coverage to 17.7%. Roof runoff from proposed addition will be recharged in an infiltration system.

173-63 Design and Operation Guidelines

The cultivation and processing system has been designed to recycle the process water, recovering water from dehumidifiers/chillers and floor drains. Any waste process water is stored in a holding tank and removed from the site.

The emergency generator is located at the front of the site, near the primary power source which is the most efficient location. Natural gas does not provide sufficient electrical output for the loading needed by the facility in the event of an outage.