

William Lee Robinson Architect

1212 Kenilworth Ave. Charlotte, NC 28204 Office: 704-370-6000 Mobile: 704-953-6422

bill@childreyrobinson.com

August 30th, 2024

Take 5 3271 Lancaster Dr NE

Salem, OR 97305

Project Name: Take 5 Oil Change

The following information is in response to plan review comments regarding the sizing calculations for the proposed oil separator at the Take 5 Oil Change building.

Take 5 Oil Change operational systems are divided into 2 separate processes.

1. Used Oil Collection System

The used oil collection system consists of a drain pan in each bay, 3 steel tanks (330 gallons each), and a transfer pump. A Take 5 technician directs and guides the customer over a shallow trench in the bay. The used oil is then drained into a rolling drain pan that is positioned under the vehicle. The oil filter is also changed above the rolling drain pan. When necessary, the drain pans are emptied to the designated oil tanks via a ¾" steel-braided, gasoline rated hose, routed through chases to the storage tanks. The hoses are connected to the tanks via an air-operated, vacuum diaphragm pump so the system is totally non-pressurized and hands-free. 100% of Take 5's used oil and oil filters are reclaimed and recycled by OSHA certified used oil recycling companies.

Secondary Containment

Steel tanks are placed in a separate room adjacent to the bay area, on the floor, within containment dykes. The tanks are single walled, UL Rated, industry standard. This area is connected via 3" chases to the shallow trenches (the same chase that the hose described above is running through), providing secondary containment. The Secondary Containment System can handle 100% of the system's storage capacity, as each trench measures 10' x 3' x 30", yielding a total volume of 1,683 gallons.

2. Oil Separator

The oil separator will be located in the same room as the used oil tanks mentioned above. It will be connected directly to the shop utility sink. The oil separator will be a 10-gpm unit, more than adequate capacity for the single sink. The sink will be used for hand washing and mop rinsing.

Notes:

- 1. Type of liquids being stored are Class IIIB lubricants only.
- 2. All used oil tanks are above ground, steel, single wall, UL Certified.
- 3. Take 5 does not incorporate drains in their shop, shallow trench, or storage areas. The only drain in a Take 5 is located in the restroom.
- 4. Take 5 mops their floors, rinsing the mop in a sink that is connected directly to an oil separator.
- 5. The oil separator is cleaned/emptied/maintained by the OSHA certified recycling company that collects and recycles the used oil and filters.
- 6. The standard oil separator specified for Take 5 Oil Change is a Striem model OS-25.5 with a 10-

gpm flow rate. Please let us know if you need any additional information on this at this time. William Robinson William Lee Robinson Architecture 704-370-6000 bill@childreyrobinson.com Best regards,

Bill Robinson

Principal