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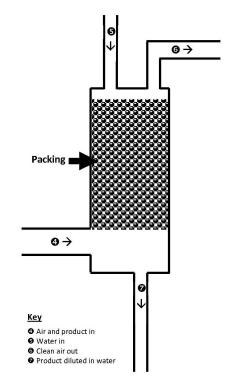
## WET SCRUBBER

In the previous installment, we discussed a bag house, and here we continue with a device that has a similar role.

Another device used to filter air before it leaves the factory is a wet scrubber. In contrast to a bag house which physically filters the product from the air, a wet scrubber mixes the air into water in a way that encourages the fines or odor to transfer into the water. The product-laden water drains out of the bottom of the scrubber ( $\circ$ ) and the product-free air escapes out of the top ( $\circ$ ).

This mixing occurs in the bed of "packing" that is at the heart of the wet scrubber. "Packing", are small, oddly shaped pieces of metal, plastic, or ceramic, and thousands of pieces of packing sit randomly in a large column. As the liquid pours through, it is broken into dozens of "streams" in a way that increases the surface area.

Water pouring into the scrubber  $(\bullet)$  is divided into multiple streams so there is ample surface area for contact with the air rising through the scrubber  $(\bullet)$ . The odor or fines which were previously carried in the air flow become diluted in the water, such that the air becomes fine-free and all residue is in the water. In turn, the air can be released outside the plant, and the water sent to a drain for disposal. In many cases, a wet scrubber operates at ambient temperature, in which case it can be switched from non-kosher to kosher service with a mere flush of all remaining product from it. If the water (or air flow) is hot, then *hag'alah* would be required. Assuming the packing is not *cheress*, the *kashering* would presumably be accomplished by mimicking the way the scrubber was used.



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This drawing was created by the author when he worked at OU Kosher and is used here with gracious permission from OU Kosher.