

Emptying A Salt Brine Tank, Version 1.0

By R. G. Sparber

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Today I was faced with an awful chore. My water softener was dead and I had to remove it to make room for the new one. The hitch was that the unit was filled with salt and brine. This made it far too heavy to move. I don't think the container would hold up with so much weight inside. If it split, this awful chore just got ten times worse. I could also hurt myself.

Time to think about this from an engineering standpoint: My time and health are valuable, this old water softener is worthless. The salt is of marginal value.

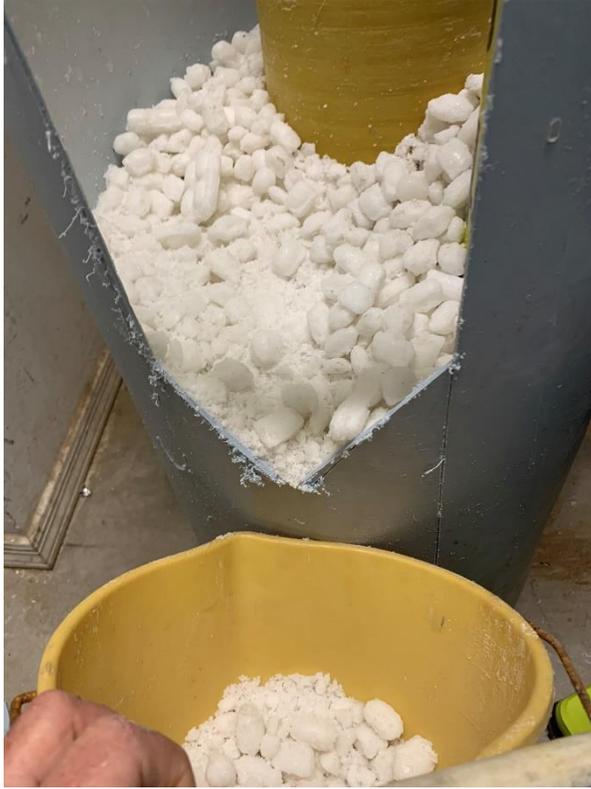
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My first step was to drain as much water out of the tank as possible. At first, I used a siphon but it was too slow plus couldn't reach the water below the salt line. So instead I drilled a hole in the tank a bit higher than my shortest pail. Look closely and you will see a ¼" diameter stream shooting into the yellow pail. Periodically, I would put my finger over the hole, dump the pail into a taller bucket, and repeat. In no time, all water above the hole was out.



So much for the easy part. I still had around 75 pounds of soggy salt pellets in there.



It was time to get “medieval” on this problem. I sawed a slot in the side of the bin with a V at the bottom.

It was also a good excuse to use my new Ryobi Multitool which cut through the plastic with ease.

This big opening made it possible to push pellets into my bucket. I pushed the soft plastic bucket against the bin and formed a good seal. I dumped the wet mess into my new salt bin.

As I emptied down to the bottom of the V, I sawed the slot and V down further.



Eventually, I was at the height of my drain hole. The salt was mostly mush down here. I sawed a much wider opening so I could comfortably reach in and scoop the dissolved pellets out with my hands. This went rather fast.

Almost all of the brine and salt were now gone. The Zeolite tank still had water in it but the unit was now easy to move with a hand truck.

What would have been an endless task took about 20 minutes and was rather satisfying.

I welcome your comments and questions.

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