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| CITY OF MOLALLA WATER  C:\Users\nlennartz\Desktop\Logos for City\2 inch Emblem Spot.jpgTREATMENT PLANT | Dense Soda Ash  Mixing Procedure | DATE UPDATED  JAN-2023 |
| SOP  #11 |

***STANDARD OPERATING PROCEDURE***

**Overview**

The Molalla Water Treatment Plant uses Soda Ash for corrosion control. Soda Ash is mixed with carrier water and injected at the effluent line. Ideal pH on the effluent line is 7.5-8.0 pH. The mixed solution has a pH of approximately 11.50. Soda Ash also raises the alkalinity in the finished water. We receive the Soda Ash form our chemical supplier and is delivered on a pallet stacked with 50lbs bags.

**Location**

The Soda Ash bags are stored in the chemical room next to the mixing tank. The tank directly feeds to the chemical feed pumps.

**Mixing Instructions**

The mixing tank is 515 gallons. Mix 100lbs of Soda Ash with 200 gallons of water.

1. First select the Chemical Room tab on the SCADA, then select the “Toggle on to Add Chemical” button for the Soda Ash Tank.
2. When mixing tank is empty, fill to the 200 gallon mark with water from the supply line, or if adding to the existing volume, add 100lbs to 25.5 inches of water.
3. Place two (2) 50lbs bags of dense soda ash on the top of the mixing tank (always use proper PPE when mixing chemicals).
4. Turn on mixer.
5. Take a razor knife and cut the bag horizontally so that the Soda Ash can empty into the tank, dump slowly, then repeat for the second bag.
6. Mix for at least 20-30 minutes.
7. Mark the proper level on the tank then, select the “Toggle on to Add Chemical” again to reset the tank level on SCADA.

**Supplier**

Cascade Columbia Distribution Company / 503-625-5293 / order 20-40 bags at a time.

**Chemical Name**

Sodium Carbonate

**Safety**

Safety Data Sheets are located in the SDS Binder in the Office/Lab.

PPE Located in the Chemical Room.