CITY OF PORT HUENEME WILL EXPERIENCE CHANGES IN

WATER QUALITY DURING DROUGHT

Dear Customer, in August 2015 the City of Port Hueneme (City) informed their customers of the changing water quality conditions. Due to California's extended drought condition, our region has not been able to produce an adequate amount of recharge of local groundwater supplies.

The Port Hueneme Water Agency (PHWA) is proud to have been able to deliver the City the best water quality available in the county for nearly 20 years. PHWA uses Reverse Osmosis (RO) and Nano-Filtration (NF) membrane treatment to provide the high quality water that you have been accustomed to. Unfortunately, PHWA is being challenged by the drought and must make operational changes in order to supply enough potable water to the City's customers and at the most reasonable price.

When water demands increase (typically April through November) suppliers must run deep groundwater wells which have higher levels of iron and manganese. Water coming from these deep wells may appear colorless initially but orange-brown (iron) or black (manganese) stains or particles quickly appear as the water is exposed to oxygen. Both iron and manganese will be readily apparent and may impart a strong metallic taste to the water and both may cause staining of plumbing fixtures (sinks, tubs, showers and toilets).

When this type of water quality is supplied to the PHWA, then PHWA must shut down its membrane treatment process in order to protect the membranes from extensive and possibly irrevocable damage. The shutdown of the membranes will be temporary and will be returned to service once lower demand periods are available and the deep groundwater wells are shut down (typically November through April).

IS THE WATER SAFE TO DRINK?

Yes! Iron and manganese are not health concerns in drinking water. Instead, they both have secondary or recommended drinking water standards because they are aesthetic in nature that make the water undesirable and produce a bitter metallic taste that can make the water unpleasant to drink.

CAN IRON AND MANGANESE BE REMOVED FROM THE WATER?

Yes! Iron and manganese can be effectively removed from water using a number of treatment processes depending on both the form and concentration of the metals. However, it is very costly and is most effective to treat at the source. It is not practical for the homeowner to treat these metals. PHWA has asked the water supplier to study the cost associated with a large scale treatment process. If a capital improvement project is approved, it will take three years to build and become operational.

HOW CAN THE HOMEOWNWER HELP?

The homeowner can help in the following ways:

Things **TO** do:

- Be understanding and patient. We are in a DROUGHT.
- Know that this is a temporary operation. Better water quality will return in time.
- If concerned about hard water, consider an Ion Exchange type of softening unit such as Culligan, Rayne, Harris or Pureteck for delivery service. Cost to the customer will vary depending on personal preference of softness and amount of water used.
- Purchase a spot free rinse product or vinegar in the rinse cycle for the dishwasher or wash and dry dishes by hand.
- Purchase a fabric softener such as "Downy" for the clothes washer and/or dryer.
- Please understand that the drought has impacted the water quality for everyone. The City is trying to identify a cost effective treatment option. We will do our best to limit the impacts to our customers, control our operational cost and strive to provide you the best water quality available.

Things **NOT** to do:

- Please do not purchase or install a salt pellet type of water softener. This type of unit requires a concentrated brine solution to be discharged into the sewer and becomes very difficult to treat for disposal.