



Microvi

Unprecedented Results Demonstrated with Microvi's Chromium Removal Technology

Hexavalent chromium (Cr(VI)) is widely used in paints, metal production, and manufacturing processes and can be naturally occurring in the environment in certain minerals. Pollution of natural water bodies used as drinking water sources with toxic and carcinogenic Cr(VI) is an emerging concern as significant impacts on public health surface. Exorbitant chromium treatment costs limit utilities ability to treat this contaminant effectively.

Current federal standards for total chromium is 100 parts per billion (ppb). Some areas, like California, have proposed limits as low as 10 ppb. Microvi MNE Technology successfully removes hexavalent chromium from drinking water with the ability to meet the current and potential future regulatory limits.

Microvi MNE consistently removes chromium from water with levels of 50 ppb to less than 5 ppb, far surpassing existing regulatory limits.

The Microvi MNE process is based on a one-pass bioreactor and requires limited chemical and energy inputs as compared to standard technologies. The former feature gives significant capital savings over traditional treatment (i.e. ion exchange and reduction-coagulation-filtration), while the latter significantly reduces the required O&M costs. Taken together, the MNE process is expected to provide a breakthrough for low-cost Cr(VI) treatment.

Project Details

Issue: Economically feasible treatment of Hexavalent Chromium in Drinking Water

Solution: Microvi MNE™

Key Results:

- Water treatment of chromium to within regulatory limits
- Up to 7 times reduction in CAPEX costs compared to conventional Cr(VI) removal technologies
- Up to 10 times reduction in O&M costs compared to conventional Cr(VI) removal technologies
- Low chemical input

CONTACT US TO LEARN MORE →

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