

Class V: Water Treatment Residuals and Car Washes

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USEPA Region 8

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Region 8 – Class V

- Primacy States – North Dakota, Utah, Wyoming
- Direct Implementation (DI) – Colorado, Montana, South Dakota, Indian Country

Water Treatment Types

- Reverse Osmosis (RO)
- Ultra-Micro-Nano Filtration
- Chlorination
- Ion exchange

40 CFR 144.81

- **(9)** Septic system wells used to inject the waste or effluent from a multiple dwelling, business establishment, community or regional business establishment septic tank. The *UIC requirements do not apply to single family residential septic system wells*, nor to non-residential septic system wells which are used solely for the disposal of sanitary waste and have the capacity to serve fewer than 20 persons a day.

MCLs and Background

- R8 Class V uses degradation evaluation
- R8 uses health-based risk levels
- R8 generally defers to state limits for secondary standards if stricter

Water Treatment Issues in R8

- Background exceeds MCLs
- Point of Discharge
- Point of Use
- Filter/treatment media

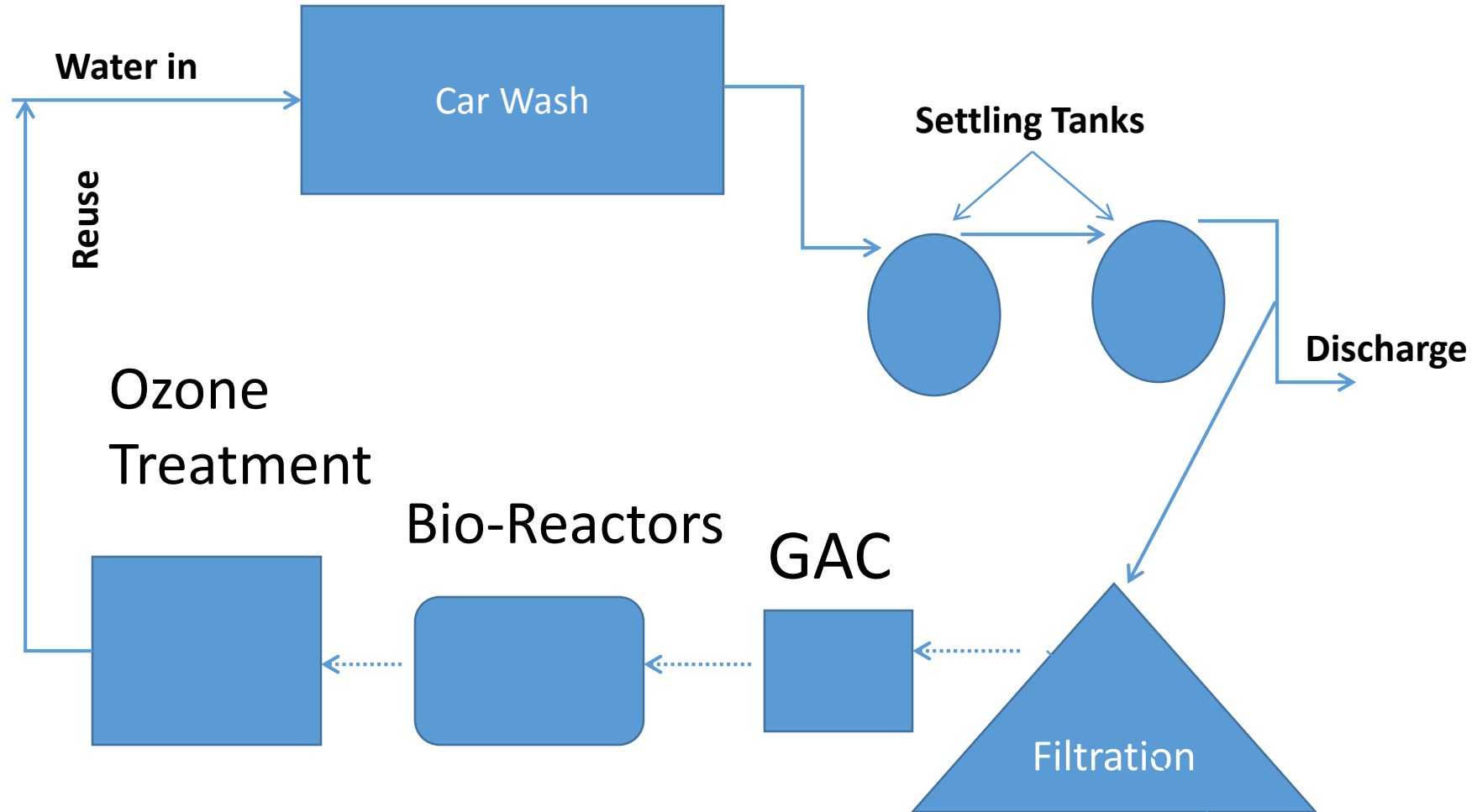
Class I - Non Hazardous

- Very popular in Florida
- Becoming popular in Colorado
- Realistically only for larger municipalities
- Long term – Cost effective; space efficient; potentially less liability

Car Washes



Car Washes – General Schematic



Car Washes

- Amazing new technologies
- Reuse, Reuse, Reuse
- Until 2013 Region 8 RA car washes
- Now permitted with quarterly sampling

Car Washes

- Metals and VOCs a potential risk
- Sand and Grease traps are rarely maintained
- Potential improper disposal/decontamination

Class V in R8

- Water Treatment Issues
 - EPA does not regulate single family systems
 - RO backwash is an issue in areas that already exceed MCLs @ background
 - Class I wells are a potential solution
- Car Washes
 - Used to RA now Permit w/sampling
 - Metals and VOCs are a big concern

Questions?

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