

Ultra-low Sulfur Diesel

Implementation and Operational
Issues

Start-up Issues

- Seattle has been using ultra-low sulfur diesel for more than 4 years – the City has over 600 diesel vehicles (on and off-road) running on ULSD
- The City put oxidation catalysts on most of the City vehicles (or bought new trucks with oxidation catalysts) and about a dozen trucks had particulate filters installed – these pollution control devices would not be effective if they weren't operating on ulsd
- There were some issues in 2001 when Conoco/Phillips was learning how to meet the <30PPM sulfur spec
- Our experience since then is that we have had very few problems with the ultra-low sulfur diesel
- We used to have to get the ulsd at the Conoco/Phillips refinery in Ferndale, but now we can have it picked up in Tacoma
- Seattle has been using the ULSD mixed with bio-diesel for the past 3 years, off and on – there have been some quality issues with the bio-diesel from time to time that has caused plugged fuel filters and some other operational problems

Operational Issues

- Issues when we first switched included the refiner (Conoco/Phillips) to get the right additive package for the ULSD
- Conoco at first removed the additive package that they had been using and substituted 1% bio-diesel as a lubricity agent – eventually they put in a new additive package with the ULSD
- The fuel that is being used today is supposed to meet all the lubricating characteristics of the diesel engine manufacturers
- We have not had any engine warranty repairs turned down by diesel engine manufacturers due to our use of ultra-low sulfur diesel
- All in all, the use of ulsd is pretty seamless