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To: Dolores Gough
Subject: ::::BPS Refinery Storage and Fugitives – Comments

Dolores

Here are a few thoughts with regards to storage and fugitive sources at a refinery that may contribute to GHG emissions and some of the existing controls that should be considered as Best Performance Standards (BPS) mitigation measures.

Organic Liquid Storage Tanks: Rule 4623 requirements should be considered BPS for organic liquid storage tanks. Controls are based on tank size, throughput and vapor pressure. Current controls offer up to 99% control efficiency. In refinery operations, the methane content is 60% or less of the tank vapor phase. The following examples demonstrate that tank methane emissions are a very small and insignificant contributor of GHG emissions.

1. A 10,000 barrel tank on vapor recovery storing gasoline with a vapor pressure 7 RVP and assuming 100 turnovers per year only contributes 990 lbs of methane emissions per year.
2. A 10,000 barrel tank uncontrolled tank storing a low vapor pressure < 0.5 RVP and assuming 100 turnovers per year only contributes 3.8 lbs of methane emissions per year.

Existing Rule 4623 controls already reduce GHG emissions to the greatest extent possible. Kern recommends Organic Liquid Storage Rule 4623 be adopted as BPS for GHG emissions.

Fugitive Emissions: Rule 4455 is clearly the most stringent fugitive emissions rule in the country and already places significant control on GHG emissions. Quarterly inspections, one hour minimum repairs, and repairs to leak free condition between 2 to 7 days and requirements to replace chronic leakers with BACT components, have significantly reduced VOC and associated GHG emissions.

Existing Rule 4455 controls already reduce GHG emissions to the greatest extent possible. Kern recommends Fugitive Rule 4455 be adopted as BPS for GHG emissions.

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