Testimony by Tom Mikulka, Ph.D., CIH (ret)

Subject: Support for LD 1507

Dear Chairpersons Senator Denise Teller and Representative Victoria Doudera and esteemed members of the Energy and Natural Resources Committee.

I am a resident of Cape Elizabeth and a former member of the Clean Air Advisory Committee of South Portland. The opinions expressed here do not necessarily represent the position of the Committee.

LD 71 required that all Maine Petroleum Product tank farms initiate fence line monitoring for a family of hazardous air pollutants known as BETX. The most carcinogenic of that family is benzene. The Maine CDC sets the long term ambient air guideline (AAG) for benzene at 1.28 ug/m3.

We now have the first 4 months of sampling data. The table below shows the results for the average benzene levels along the fence lines for two South Portland tank farms located adjacent to residential neighborhoods, Citgo and Sunoco.

Tank Farm	#. gasoline tanks	Measurement period	Sample Number	Benzene Average + 95% Confidence Limits (ug/m3)
Sunoco	3	8/8 - 12/26	156	1.75 +/- 0.88
Citgo	4	8/27 - 12/17	177	2.14 +/- 0.10

The averages for each tank farm exceed the AAG for benzene and thus indicate a long term health threat for nearby residents. For the Sunoco tank farm the AAG was exceeded at individual fence line locations 36 % of the time while the Citgo tank farm fence line locations exceeded it 96 % of the time. This difference is reflected in the 95% confidence limits.

These differences are partially due to the fact that available delivery data shows that in the first 3 months of the measurement period there were 3 times as many vessel deliveries of gasoline at the Citgo tank farm as compared to the Sunoco tank farm, 32 and 10, respectively. It its an undisputed fact that tank emissions increase during vessel offloading. Offloading times are typically 12-24 hrs. What is not known is the magnitude of the increase.

LD 1507 requires that residents be notified of pending vessel deliveries of all petroleum products, not just gasoline since they all contain BETX. Gasoline contains the highest concentration. This will allow residents to take precautions to avoid the increased exposure that occurs while offloading.

The amendment to LD1507 is an attempt to determine the magnitude of the emissions increase due to vessel offloading. Unfortunately, it lacks specificity. It does not specify the methodology that would enable the determination of how much of an increase in emissions occurs during offloading. Consultation with DEP engineers and scientists is suggested to resolve this problem.

I fully support the LD1507 requirement for alerting residents to impending vessel deliveries. I also support the intent of the amendment but it needs to be revised to add specificity.