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AFFIDAVIT OF DR. NANCY DWYER

I, Dr. Nancy Dwyer, being duly sworn, state the following under oath:

1. I am employed by Mobil Oil Corporation as a Consultant in Toxicology and Product Safety at Mobil's Research, Engineering and Environmental Affairs Division in Princeton, NJ. In this position I am responsible for reviewing and assuring the safety of Mobil's products from a toxicological and environmental standpoint.

2. I hold a Bachelor of Science degree in chemistry and zoology from Drew University (1966); a Masters of Science degree in physiology and biochemistry from Rutgers University (1968); and a Ph.D. in biochemistry from Rutgers University (1976). I have worked as a toxicologist at Mobil for 16 years. My responsibilities have included toxicological evaluations and hazard assessments on numerous chemicals and the preparation and review of material safety data sheets (MSDS) for a wide variety of Mobil products, including lubricating oils. I have also been responsible for tracking toxicological and regulatory developments (OSHA, RCRA, CWA etc.) relevant to Mobil products and for helping to ensure compliance with applicable regulatory requirements. For purposes of this affidavit, "potentially hazardous materials" are defined by the 6 criteria set forth in OSHA's Hazard

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Communication Standard, 29 CFR 1910.1200 (i.e., carcinogen, corrosive, highly toxic, irritant, sensitizer, toxic).

3. I am familiar with the chemical contents, physical and chemical properties, toxicology, and environmental fate and effects of finished lube oil products produced at Mobil's East Boston Lube Plant (EBLP) during the 1970's. I have reviewed a list of the products used and produced at the EBLP during the 1970's, including base oils and additives. Of these, approximately 60% were automotive engine oils, 25% industrial oils, and 10 to 15% specialty oils. All of these products contained at least 80 to 90% non-hazardous petroleum base oils. The additives in these products for the most part had negligible potential toxicity, and could not be considered hazardous under any criteria. Less than 2% of the additives could be considered potentially hazardous materials, and these additives were used in only a limited number of products.

4. My review of the EBLP additives list for the 1970's and my knowledge of the chemical composition of these additives from a review of their formulations indicates that none of the products or additives produced or used at EBLP in the 1970's contained PCBs, trichloroethylene, tetrachloroethylene 1,2-dichloroethylene, benzene, arsenic or nickel; nor did any of these products or additives contain any other chlorinated solvents or BTEX compounds. Moreover, none of the additives were or are currently classified as carcinogens.

5. Based on information that I have reviewed, including the affidavits of Richard Day and Paul Sullivan, I would

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estimate that there was an average of less than one gallon of residual material per drum returned to the EBLP. I understand that approximately 297,000 drums were sent by Mobil to the reconditioner (KSD). Therefore, no more than 297,000 gallons of product were sent to the reconditioner. The vast majority of this material was petroleum base oils. Potentially hazardous additives were present in less than 20% of the products, and these additives were used in low concentrations, with a maximum concentration in any product of 2.0%. I also understand that at least 95% of the "empty" drums sent to EBLP to KSD had contained lube oil products, and less than 5% had contained additives.

6. Based on the above, the maximum amount of potentially hazardous material sent by EBLP to the reconditioner may be calculated as follows: 20% of 297,000 drums equals less than 60,000 gallons of product containing potentially hazardous additives. However, given that the maximum concentration of such potentially hazardous materials in any product was less than 2%, the total number of gallons of potentially hazardous materials in product residue sent to the KSD was less than 1,200 gallons. In addition, additive drums must be considered. Given that less than 5% of the drums sent to the reconditioner had contained additives, but that less than 2% of these were considered to contain potentially hazardous material, the maximum number of gallons of potentially hazardous additive residue sent to the reconditioner is estimated to be 297. Added to the number of gallons of potentially hazardous

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materials from the product drums (less than 1,200), the total number of gallons of potentially hazardous materials sent to KSD is estimated to be less than 1,500 gallons.

7. Finished lubricating oils produced at EBLP, both currently and in the 1970's, including automotive oils (engine oils, ATF fluids), industrial oils (including hydraulic oils and cutting fluids) and other oils (including gear lubes, greases and synthetics) have a low order of toxicity to humans and laboratory animals, based on criteria applied by EPA, OSHA, CPSC etc. (See, e.g., EPA TSCA Test Guidelines, 50 Fed. Reg. 39252 (Sept. 27, 1985)). The additives are minor ingredients generally having a low order of toxicity, particularly at the low concentrations used in the finished products. No chronic adverse health effects would be expected from exposure to lubricating oils such as those produced at EBLP.

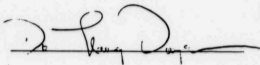
8. Lube oil such as those produced at the EBLP have relatively low environmental mobility, due their high viscosity, specific gravity and low solubility in water. They tend to remain in a separate phase and to adsorb to soils. Lube oils are readily biodegraded by aerobic bacteria (and to a lesser extent anaerobic bacteria) in the environment, which ultimately reduce these oils to carbon dioxide and water. The range of biodegradability is 20% to 40% CO₂ evolved in a standard EPA shake flask test. Biodegradability tests on two representative lube (motor) oils at Mobil's Environmental

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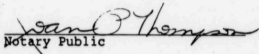
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Health Sciences Laboratory showed biodegradation of 38% and 56% in 7 and 21 days, respectively. Also, several representative base oils and additives were tested for potential toxicity to fish, and the results indicated that these materials were non-toxic.

9. Based on the above, and my understanding of the types and amounts of hazardous substances found at the KSD/GLCC site as set forth in the EPA's Record of Decision, including the substances specified in paragraph 4 above, it is my opinion that the potential toxic or other potential adverse effects of the substances contributed by Mobil to the KSD/GLCC facility were minimal in comparison to the other hazardous substances of concern at the facility (i.e., those identified in the ROD as requiring clean up).



Subscribed and sworn to before me this 29th day of October 1992.


Notary Public

My commission expires: Feb. 15, 1996

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