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HEALTH STATUS OF PAH'S IN COKE BY-PRODUCT WASTES

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

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MEMORANDUM

SUBJECT: Health Status of PAH's in Coke By-Product Wastes

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The following PAH's currently have RfD values or CAG classifications.

1. Benzo[a]pyrene 50-32-8
 - B2 carcinogen, no quantitative data
2. Benzene 71-43-2
 - A carcinogen; oral and inhalation slope factor 2.9×10^{-2} mg/kg/day
 - RfD inhalation 5.7×10^{-3} mg/m³ (under review)
3. Ethylbenzene 100-41-4
 - D carcinogen
 - RfD oral 1×10^{-1} mg/kg/day

4. 2-Methyl phenol (o-cresol) 95-48-7
 - No CAG data
 - RfD oral 5×10^{-2} mg/kg/day
5. 4-Methyl phenol (p-cresol) 106-44-5
 - No CAG data
 - RfD oral 5×10^{-2} mg/kg/day
6. Napthalene 91-20-3
 - No CAG data
 - RfD oral 0.4 mg/kg/day
7. Phenol 108-95-2
 - No CAG data
 - RfD oral 6×10^{-1} mg/kg/day
8. Styrene 100-42-5
 - No CAG data
 - RfD oral 2×10^{-1} mg/kg/day
9. Toluene 108-88-3
 - No CAG data
 - RfD oral 3×10^{-1} mg/kg/day
 - RfD inhalation 2.0 mg/m³
10. Xylene 1330-20-7
 - D carcinogen
 - RfD oral 2.0 mg/kg/day
 - RfD inhalation 3.0×10^{-1} mg/kg/day

The following PAH's are in the process of having RfD values developed.

Acenaphthene
Acenaphthylene
Anthracene
Fluoranthene
Fluorene
2,4-dimethyl phenol
Pyrene

The following PAH's have health documents (HEEPs, Tox Profiles, Hazard Profiles) indicating no evidence of systematic toxicity and limited or inadequate evidence or carcinogenicity.

Benzo(b) fluoranthene
Benzo(k) fluranthene
Chyrsene
Phenanthrene
Dibenzo [A, H] Anthracene
Benzo [a] anthracene
Benzo [g,h,i] perylene

No information could be located on the following PAH's.

Indeno (1,2,3-cd) pyrene
2-methyl naphthalene