

DEPARTMENT OF HEALTH SERVICES

714/744 P STREET
P.O. BOX 942732
SACRAMENTO, CA 94234-7320

(916) 322-3670



September 12, 1989

Patrick J. Sheehan, Ph.D.
Supervising Toxicologist
ChemRisk
980 Atlantic Avenue, Suite 100
Alameda, CA 94501

Dear Dr. Sheehan:

AUGUST 30, 1989 LETTER ON PNA CONTAMINATION IN SOILS

Thank you for your letter of August 30, 1989. In reviewing your summary of my August 22, 1989 letter, I find that three points are not entirely accurate. The purpose of this letter is to further clarify these issues.

1. The Department of Health Services policy on hardened asphalt is exclusively a matter of policy. It is not a criterion, regulation or statute. This policy applies only to hardened asphalt from roadways or other pavements. It does not apply to other asphalt-like wastes. The point to be drawn from this reference is that not all PNA-containing wastes are considered to be hazardous.
2. I enclose a copy of the data which you initially provided for my review with your July 25, 1989 letter. According to these data, the total concentration of carcinogenic PNAs in boring EM-4 is 26.5 ppm, not less than 10 ppm as stated in your August 30, 1989 letter. As I mentioned in my reply of August 22, 1989, the EM-4 values represent discrete results, not statistical estimates. Consequently, little can be said about the mean concentration of PNAs at the site except that the mean concentration of PNAs in excavated soil may be lower than indicated by the EM-4 numbers if the PNAs are confined to localized areas throughout the site, the EM-4 values represent worst-case conditions, and no attempt is made to excavate and manage PNA-contaminated areas separately. I assume that your client considered the concentration of total PNAs in evaluating this waste and self-classifying the waste as nonhazardous.

Your letter mentions California Code of Regulations (CCR) section 66680 in connection with self-classification. This section is only partially relevant to waste classification. The fact that a substance is not listed in Article 9 does not mean that it is to be considered nonhazardous. Pursuant to the waste classification procedure outlined in CCR section 66305, a waste may be classified as hazardous by

ALAMEDA COUNTY
DEPT. OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS
9.15.89

Patrick J. Sheehan, Ph.D.
Page 2
September 12, 1989

application of the CCR Article 11 criteria or Health and Safety Code section 25117 regardless of whether or not the waste is listed in CCR Article 9.

3. The 10 ppm standard applies only to the OSHA-regulated substances listed in CCR section 66696(a)(5). It does not apply to other substances.

Thank you again for your letter. Please feel free to contact me at the letterhead address or telephone number if I can be of any further assistance to you.

Sincerely,



Norman E. Riley
Alternative Technology Division
Toxic Substances Control Program

enclosure

cc: Howard Hatayama, Regional Administrator
REGION 2/Emeryville
Toxic Substances Control Program
2151 Berkeley Way, Annex 7
Berkeley, CA 94704

Steven Ritchie
Executive Officer
Regional Water Quality Control Board
San Francisco Bay Region
1111 Jackson Street, Room 6040
Oakland, CA 94607

Carl L. Smith, M.D.
Director
Alameda County Health Department
80 Swan Way
Oakland, CA 94607

✓ Lowell Miller
Alameda County Health Department
80 Swan Way
Oakland, CA 94607

NR:nr/ba

TABLE 1

CONCENTRATIONS OF PNAS IN THE SOIL CONTAINING
AN ASPHALT-LIKE MATERIAL

CARCINOGENS (b)	CONCENTRATIONS (ppm) (a)		
	EM-4 (ATT)(c)	EM-4 (EM)(c)	EM-1
Benzo(a)anthracene	N.D. (10)	4.8	N.D. (20)
Benzo(b)fluoranthene	N.D. (10)	5.8	N.D. (20)
Benzo(k)fluoranthene	N.D. (10)	5.5	N.D. (20)
Benzo(a)pyrene	N.D. (10)	1.4	N.D. (20)
Chrysene	N.D. (10)	N.D. (0.6)	N.D. (20)
Dibenzo(a,h)anthracene	N.D. (10)	7.6	N.D. (20)
Indeno(1,2,3-cd)pyrene	N.D. (10)	1.4	N.D. (20)
NONCARCINOGENS			
<i>Σ = 26.5 ppm.</i>			
Acenaphthene	N.D. (10)	17.8	N.D. (20)
Acenaphthylene	N.D. (10)	N.D. (12.5)	N.D. (20)
Anthracene	N.D. (10)	N.D. (0.2)	N.D. (20)
Benzo(g,h,i)perylene	N.D. (10)	2.7	N.D. (20)
2-Chloronaphthalene	N.D. (10)	- -	N.D. (20)
Fluoranthene	N.D. (10)	N.D. (1.2)	N.D. (20)
2-Methylnaphthalene	N.D. (10)	- -	N.D. (20)
Naphthalene	N.D. (10)	N.D. (6.2)	N.D. (20)
Phenanthrene	N.D. (10)	N.D. (7.8)	N.D. (20)
Pyrene	N.D. (10)	N.D. (0.6)	N.D. (20)

- a N.D. indicates that none of the compound was detected at the limit specified in parenthesis.
- b Classified as a possible or potential human carcinogen but not listed as hazardous waste in Title 22 CCR Section 66680.
- c EM-4 was sampled by two different firms Aqua Terra Technologies and Earth Metrics