PCB data:-

- PCB's from dept 246 - #/da = 0.4 to 3.3
  avg = 1.1#

  flow - 300 gpm ppb = 110 to 910
  avg 310

- Plant Effluent - 1 - 3600 gpm - 115 ppb - 5#/da
  2 - 2400 gpm - 50 ppb - 1½#/da

- Natural breakdown of other materials to PCB's.

PCB's in the environment are frequently estimated at 780 M# p-14 - Nisbet and Sarofi
ref p-20
Monsanto Production 1957 - 1971 are 784 M#

Fish - -

S of Plant

	6/1/77	6/72						
	Carp	Carp	Bull Head		Channel Cat		Perch	
	4.1#	2.8#	3.9#	2.1#	3.3	0.9	1.6	0.9
Edible Portion	5.07	4.17	33.6	6.3 ppm	9.38	4.71	12.	3.2

8/72 North of Plant

Carp			
1.4#	1.7	2.3	3.8
0.107	.218	0.31	0.07

Water:- Chain of Rocks 0.22 ppb N Ill River 0.19 ppb
Mud: Mo River <0.05 (NDA) J.B. Bridge 10/20/72 = 0.07 ppm

MONS 057280

Easley:

EPA - Sec 307 - Toxic Pollutants

0.283 m^3/sec = 10 ft^3/sec < 2.02 hectares

Low flow stream or small lake — max { 0.0648 #/da / 0.024 Kg/da

Big flow - big lake — —

Estuary — 0.054 #/da

Coastal Waterway — 0.0648 #/da

280 micrograms/liter daily into fresh water

10 " " " " " " salt "

≧ 10 X the waste stream flow

or

0.1 x concentration

large body of water

0.0000865 x rec. water body flow in m^3/sec = Kg/day

0.00000540 x rec water body flow in ft^3/sec = #/day.

provided no discharge greater than 0.0244 Kg/day / 0.0540 #/day

28.0 U/liter = .000028 /liter

.000028/1,000,000

.00000054 x 1,810,000 = 0.978 #/da

MONS 057281

Easley:

Key: II - Applies to smaller streams - smaller lakes.

Daily average PCB concentrations in the waste stream must not exceed 280 µl/l if there is immediate 1/10 dilution assured.

in the fresh water or 10 µl/l in the salt water provided that the lowest flow of the receiving water is ≥ waste stream flow.

Bigger streams - bigger lakes

divide by 10 on concentration gradient