

March 2, 1976

Mr. Edward Kohn
Smithsonian Institution
National Zoological Park
Washington, D.C. 20560

Dear Mr. Kohn:

On January 28-29, 1976, atmospheric sampling for asbestos was conducted in the Reptile House, National Zoological Park, Washington, D.C. The sampling was conducted at the request of Mr. Mike Davenport, Assistant Curator of the Zoo. Area asbestos samples were taken in the visitor areas and in Service Rooms "C" and "F". Personal samples were taken during morning sweep-up, and during routine reptile feeding operations. Sampling results indicate that Reptile House employee's exposure to asbestos is minimal (Table 1). All samples were below the Federal Standard of two fibers per cubic centimeter of air (fibers/cc).

The ceiling of the reptile house is sprayed with a material that contains 50% asbestos. This could be a potential health hazard both to employees and to the general public visiting the Reptile House since the material is sloughing off at various locations. This sloughing off of material is caused by a leaking outside roof. As the material continues to deteriorate and subsequently flake-off, personal exposure to asbestos will increase. Corrective measures should be taken to alleviate this potential problem. A sealer/adhesive can be applied to the ceiling or the ceiling material can be removed.

Hot water pipes in the Service Rooms, Commissary, animal holding areas and basement are insulated with an asbestos covering. In all of these locations the pipe covering is cracking, peeling and flaking-off. Suitable corrective action should be taken to repair the covering and in effect reduce the possible exposures to asbestos.

Health hazards associated with asbestos exposures are well documented. When working with asbestos, suitable protective equipment must be worn. Mr. David Billings, Safety Officer for the Smithsonian Institution, should be able to assist you in providing protective equipment for employees working with asbestos.

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Regulations pertaining to protective equipment and permissible exposures to asbestos can be found in the Federal Register 29 CFR 1910.91a, Volume 39, June 27, 1974. If further assistance is required, please contact me.

Sincerely yours,

Joseph A. Sosa
Engineering Technician
Industrial Hygiene Services Branch
Division of Surveillance, Hazard Evaluations,
and Field Studies

cc: Mr. J. Davenport
Mr. Anthony Kadlubowski
Mr. Jaren Forsley
Mr. David Billings

TABLE 1
PERSONAL AND AREA SAMPLES
NATIONAL ZOOLOGICAL PARK
REPTILE HOUSE

	<u>Sample #</u>	<u>Location</u>	<u>Asbestos Concentration</u> <u>fibers/cc</u>
1/28/76	RH-1	Cuban Crocodile Area	0.04
	RH-2	Calman Crocodile Area	0.05
	RH-3	Service Area "C"	0.02
	RH-4	C-16 Area	0.04
	RH-5	Service Area "F"	0.04
	RH-6	Tree Kangaroo (D-4)	0.05
1/29/76	RH-7	Sweeping Public Area (Personal)	<0.01
	RH-8	Sweeping Public Area (Personal)	0.02
	RH-9	Service Area "C"	<0.01
	RH-10	Cuban Crocodile Area	<0.01
	RH-11	Calman Crocodile Area	<0.01
	RH-12	Boa C-16	0.01
	RH-13	Skink A-4	0.01
	RH-14	Tree Kangaroo D-4	0.02
	RH-15	Service Area "F"	0.01
	RH-16	"A" Line Feeding Area (Personal)	<0.01
	RH-17	"E" Line Feeding Area (Personal)	<0.01
	RH-18	"F" Line Feeding Area (Personal)	0.01