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To whom it may concern,

My name is Dr. C. James Mahoney. I have been a veterinarian for over 40 years and I have a doctorate in physiology.

I was asked by the animal advocacy group, In Defense of Animals, to review, and give my professional opinion of, the medical records of elephants that have been housed and maintained at the entertainment park known as Six Flags Discovery Kingdom, located in Vallejo, California. In all, I examined the records of 8 elephants, ranging in age from 2 1/2 to approximately 60 years old, as well as the necropsy reports of one infant that died shortly after birth, and one full-term fetus which died *in-utero*.

Euthanasia:

Two of 8 elephants had to be euthanized because of incurable medical conditions:

- **Tina**, a 46-year-old female, was euthanized after several years of suffering because of severe, progressive and incurable pathologies of all major and minor joints of all four legs, extending, in the case of the hind limbs, from the hips down to the feet. During her last days, she was unable to ambulate in a comfortable fashion.
- **Tika** (age not indicated in records), despite clear evidence that her full-term fetus had died within her uterus one day after an unsuccessful attempt to induce labor, was allowed to suffer for 46 days from severe, progressive infection of her birth canal and abdominal cavity, because of the continued presence of her rotting fetus, before she was put out of her misery through euthanasia. It was then discovered that she had a ruptured, almost split in two, uterus.

Spontaneous deaths:

One of 8 elephants, a 2 1/2-year-old male, **Kala**, died from an acute viral infection, Elephant Endotheliotropic Herpes Virus (EEHV).

Two perinatal deaths also occurred, one, the calf of Misha, died shortly after birth (please see below); another, a full-term fetus, died in-utero following an unsuccessful attempt to induce labor in Tika (please see above).

Chronic, recurring disorders:

Two of the 6 surviving elephants suffer from chronic foot and leg conditions:

- **Liz**, at 42 years of age, has been on and off lame in her left foreleg for 6 1/2 years. The distal bone of the third digit was first observed by x-ray in January 2001 to be cracked and infected. As of late April 2006, the record states, "Need to X-ray . . . to evaluate joint and bone health *as she is persistently lame . . .* (my emphasis)." This is the first time such a statement has been made in the records of persistent lameness! Over the following two months -- the end of the records provided -- there is no recording of X-rays having been taken. This lack of follow up is, unfortunately, commonly found in the Six Flags records in general. This is precisely the type of medical problem that should be taken seriously right from the beginning, and aggressively treated to avoid the development of osteomyelitis, an often irreversible disease in elephants. It is reported that chronic arthritis and osteomyelitis afflict over 50 percent of zoo elephants, and constitute the greatest cause of death by euthanasia.
- **Taj**, the oldest of the elephants by far, has been plagued by arthritis of the feet for years. She has been heavily subjected to non-steroidal anti-inflammatory drugs. Yet, like Liz, she is still forced to perform for the public by carrying and stacking heavy weights, such as logs.

One of the 6 surviving elephants suffers from a severe, chronic abscess of the jaw:

- **Misha**, 23-years old, suffered a jaw, and later a chin abscess for 4 1/2 years, before she was shipped off to the Hogle Zoo, in Salt Lake City, Utah. Her present medical condition is unknown.

Another of the 6 surviving elephants has a chronic tusk problem:

- **Tava**, at 28-years of age, shows another aspect of being confined mainly to the unyielding floor surfaces typical of zoo situations. Her left tusk is cracked and its tip worn from her lying on the concrete floor.

The last of the 6 surviving elephants has chronic, often severe, hives and other allergic reactions:

- **Mailika**, a young female of 19-years old, apart from fight injuries from being beaten by other elephants, has suffered continuously from hives and other allergic-type reactions. These attacks become so bad at times that she has difficulty swallowing, because of swelling of her esophagus, and her breathing is labored. She also frequently suffers from gastro-intestinal ailments such as colic, bloat and diarrhea from consuming sand and gravel. Her records are replete with references to moldy, dusty fodder, and a need for better quality control of hay deliveries.

In general, record keeping was inconsistent, with often gaps of up to 6 months between clinical notations for even known ill animals. As an example, this led to the surgical insemination of Misha, without any attention paid to her previously known jaw lesion, which only the next day would be described as “massively infected.” There were often no follow up remarks to determine the success or failure of treatment schedules, or whether treatments were even concluded. Favored treatments often appeared to be high pressure cold water hosing (hydrotherapy), as in the case of Tina’s hip and Misha’s jaw abscesses, and irrigation with dilute chlorox, packing lesions with hemorrhoidal ointments, non-Pasteurized honey, and mud. By the time a more concerted medical approach was taken, the lesions in many of the animals, as in the case of Tina and Misha’s abscesses, were so advanced as to be out of control. Treatment of symptoms rather than attacking the root of the cause of the medical problem seems to be the *modus operandi*.

I have a great concern about the history of care and treatment of the elephants at Six Flags Discovery Kingdom, and I would urge the City of Vallejo to seriously consider its plan to sell its elephants to the amusement park, and take the humane and ethical step to retire them to a sanctuary where they can be provided the space and, most importantly, the naturalistic environment they so desperately need. Elephants and the traditional conditions of their captivity do not seem to go together.

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