

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

AMERICAN SOCIETY FOR THE PREVENTION)	
OF CRUELTY TO ANIMALS, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
v.)	
)	Civ. No. 03-2006 (EGS/JMF)
)	
FELD ENTERTAINMENT, INC.)	
)	
Defendant.)	
)	
)	

PLAINTIFFS' PROPOSED FINDINGS OF FACT

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TABLE OF CONTENTS

	PAGE
I. JURISDICTION	-1-
A. The Plaintiffs Provided The Notice Required By The ESA	-1-
B. Plaintiffs Have Demonstrated Article III Standing.	-2-
1. Tom Rider Has Article III Standing	-2-
2. Plaintiff Animal Protection Institute Also Has Article III Standing. . .	-31-
II. RELEVANT BACKGROUND	-37-
A. The Applicability Of The ESA To The Elephants At Issue.	-37-
1. The Asian Elephant	-37-
2. Captive Elephants Are Wild Animals	-40-
3. The Asian Elephants In FEI’s Possession	-43-
4. FEI Uses The Asian Elephants For Commercial Purposes.	-46-
5. The Training And Handling History Of The Seven Elephants With Whom Mr. Rider Worked	-47-
a) Karen	-47-
b) Nicole	-48-
c) Susan	-49-
d) Jewell	-50-
e) Lutzi	-51-
f) Mysore	-52-
g) Zina	-53-

III.	FINDINGS OF FACT CONCERNING PLAINTIFFS’ BULL HOOK CLAIM	-54-
A.	The Bull Hook And How It Is Used By FEI	-54-
1.	The Bull Hook’s Physical Characteristics And Function	-54-
2.	FEI’s Own Officials/Employees Admit That The Handlers Strike The Elephants With Bull Hooks.	-58-
3.	USDA Documents Further Demonstrate That The Bull Hook Is Used To Strike Elephants.	-59-
4.	Former Ringling Bros. Employees Have Testified That FEI Routinely Uses The Bull Hook To Hook And Strike Elephants.	-60-
5.	Other Eye-Witnesses Corroborate That The Bull Hook Is Systematically Used To Strike The Asian Elephants.	-65-
6.	The Record Shows That Elephants Are Also Beaten With Bull Hooks.	-69-
B.	The Elephants’ Medical Records Corroborate Plaintiffs’ Claim That FEI’s Use Of The Bull Hook Routinely Wounds and Injures The Elephants.	-76-
C.	The Bull Hook Is Used To Prevent The Elephants From Engaging In Normal Behaviors.	-78-
D.	The Record Shows That “Hot Shots” And Other Instruments Are Used On The Elephants	-79-
E.	The Elephants Are Trained To Fear The Pain Of The Bull Hook.	-80-
F.	The Elephants Are Struck With Bull Hooks Throughout FEI And With The Knowledge And Acquiescence Or Approval Of FEI’s Highest Officials.	-83-
G.	FEI Has No System In Place To Ensure That Management Is Kept Informed Of Incidents Of Mistreatment Of The Elephants By Its Employees.	-87-
H.	The Record Shows That FEI’s Use Of The Bull Hook Wounds, Harms, And Harasses The Elephants	-90-

I.	The Record Also Demonstrates That FEI’s Use Of The Bull Hook Also Harms And Harasses The Elephants By Disrupting Their Normal Behaviors.	-94-
J.	FEI’s Use Of The Bull Hook That Harasses The Elephants Can Not Be Excused As A “Generally Accepted Husbandry Practice” That “Meets Or Exceeds” Any Animal Welfare Act Standard	-97-
IV.	PLAINTIFFS’ CLAIM CONCERNING THE CHAINING AND CONFINEMENT OF THE ELEPHANTS	-100-
A.	The Performing Animals Are Chained On Hard Surfaces For Many Hours On The Train.	-100-
B.	The Elephants Who Travel With The Circus Are Also Chained For Many Hours When They Are Off The Train At Performance Venues.	-106-
C.	FEI’s Use of “Pens” Does Not Sufficiently Ameliorate The Amount Of Chaining That The Elephants Endure.	-111-
D.	The Elephants At The CEC Are Chained On Concrete For Many Hours Each Day.	-113-
E.	The Elephants At Williston Are Confined On Concrete For Many Hours Each Day.	-117-
F.	FEI’s Chaining And Confinement Practices Harm And Harass The Asian Elephants.	-118-
1.	FEI’s Chaining Practices Significantly Disrupt The Normal Behaviors Of The Elephants	-119-
2.	Dr. Ensley’s Review Of The Medical Records.	-120-
a)	Bed or Pressures Sores	-121-
b)	Split/Cracked Toe Nails And Nail Bed Abscesses	-123-
c)	Osteoarthritis/Degenerative Joint Disease And Additional Lameness And Stiffness Documented In The Medical Records	-130-

d) Additional Foot and Leg Injuries Associated With Chaining -134-

3. Dr. Ensley’s Opinions Regarding The Causes Of The Foot And Leg Injuries In FEI’s Elephants Are Also Based On, And Strongly Supported By, The Medical And Scientific Literature -136-

4. FEI’s Own Expert Testimony And Documents Also Support Dr. Ensley’s Opinion Regarding the Causal Relationship Between FEI’s Practices And The Foot and Joint Problems In FEI’s Elephants . . . -141-

5. That FEI’s Practices Cause And Aggravate the Elephants’ Foot And Other Musculoskeletal Disorders Is Strongly Reinforced By The Prevalence Of These Disorders Throughout The FEI Elephant Population, Including The Very Young Elephants -144-

6. The Veterinary Treatment The Elephants Receive From FEI Does Not Address Or Resolve The Conditions That Cause Foot, Leg, And Other Chronic Medical Conditions. -150-

G. The Fact That The FEI Elephants Engage In Stereotypic Behavior Is Further Evidence That They Are Being Harmed By Their Conditions Of Confinement. -152-

1. The Record Shows That The FEI Elephants Engage In Classic Stereotypic Behavior. -152-

3. Stereotypic Behavior Indicates That The Elephants Are Suffering From Poor Welfare. -156-

4 Stereotypic Behavior Aggravates The Elephants’ Injuries And Diseases. -162-

5. Dr. Friend’s Testimony That The Stereotypic Behavior Engaged In By The FEI Elephants Is Not An Indicator Of Poor Welfare Is Completely Unreliable. -164-

H. The Fact That FEI Elephants Have Tuberculosis Is Additional Evidence That The Elephants Are Living Under Stressful Conditions. -167-

I. FEI’s Chaining Practices Can Not Be Excused As “Generally Accepted Husbandry Practices” That “Meet Or Exceed” Standards For Facilities And Care Under The Animal Welfare Act. -170-

V.	ADDITIONAL EVIDENCE THAT IS RELEVANT TO PLAINTIFFS’ CLAIMS	-172-
A.	The Elephants Are Not Provided Access To Water	-172-
B.	FEI Conceals From The Public How It Actually Treats The Elephants.	-173-
VI.	PLAINTIFFS’ EXPERTS ARE QUALIFIED AND RELIABLE	-182-
A.	Dr. Joyce Poole	-182-
B.	Dr. Philip Ensley.	-186-
C.	Carol Buckley	-187-
D.	Dr. Ros Clubb	-188-
E.	Colleen Kinzley	-189-
F.	Dr. Benjamin Hart	-191-
G.	Gail Laule	-192-
VII.	DEFENDANTS’ EXPERT WITNESSES ARE NOT RELIABLE	-193-
A.	Dr. Dennis Schmitt	-193-
B.	Michael Keele	-200-
C.	Dr. Ted Friend	-202-
D.	Kari and Gary Johnson	-205-
E.	Gary Jacobson	-208-
VIII.	ENDNOTES	-212-

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PLAINTIFFS’ PROPOSED FINDINGS OF FACT

Pursuant to the Court’s First Amended Pretrial Order (Docket Entry (“DE”) 328), plaintiffs American Society for the Prevention of Cruelty to Animals, et al., submit the following proposed findings of fact. For the convenience of the Court, and to make sure that the Court has citations to all of the record evidence that supports each of plaintiffs’ proposed findings, plaintiffs have included endnotes with some of the findings that contain such additional citations. When plaintiffs submit the electronic copy of this document, the endnotes will all be linked to the text, along with the exhibits and other citations, so that the Court can easily refer to them. Plaintiffs are also filing as a separate document their proposed conclusions of law. However, where applicable, findings of fact should also be deemed conclusions of law, and vice versa.

I. JURISDICTION

A. The Plaintiffs Provided The Notice Required By The ESA

1. As required by the citizen suit provision of the Endangered Species Act (“ESA”), 16 U.S.C. § 1540(g), plaintiffs sent 60-day notice letters to Kenneth Feld, Chief Executive Officer of defendant Feld Entertainment Inc. (“FEI”), and to the Secretary of the Interior and the Director of

the Fish and Wildlife Service (“FWS”), advising them that FEI was in violation of the “take” prohibitions of Section 9 of the ESA, id. § 1538, with regard to its treatment of the Asian elephant. See PWC 91 (Letters dated December 21, 1998; November 15, 1999; April 12, 2001; July 22, 2005.) FEI owns and operates the Ringling Brothers and Barnum & Bailey Circus (“Ringling Bros.”). The Court finds that these letters provided the requisite notice concerning each of the practices for which plaintiffs have sought relief in this case.¹

B. Plaintiffs Have Demonstrated Article III Standing.

1. Tom Rider Has Article III Standing.

2. The Court finds by a preponderance of the evidence that plaintiffs Tom Rider is a credible witness and that his testimony and the other supporting materials in the record demonstrate that Mr. Rider has Article III standing to pursue the claims in this case.

3. Plaintiff Tom Rider, was employed by the Ringling Bros. circus, on the “Blue Unit,” for approximately two and a half years, from June 1997 to November 1999. Trial Tr. 17:18 - 17:24, Feb. 12, 2009 a.m.; PWC 20 at 1 (PL 04458). For the first few months of his employment, he worked as a “barn helper,” helping to clean up around the elephants, but then he became a “barn man” for the Blue Unit, which required him to clean up after the elephants, provide them food and water, and watch over them whenever he was on duty. Trial Tr. 18:01 - 18:15, Feb. 12, 2009 a.m. In this capacity, he was around the elephants all the time that he was working, id. at 21:06-09; in fact, he testified that he was instructed to “never take my eyes off the elephants.” Id. at 18:11 - 18:13. Jeff Pettigrew, who has worked for FEI for many years, and worked for the Blue Unit during the same time Mr. Rider worked there, testified that Mr. Rider spent a lot of time with the elephants. PWC 178 at 115:03 - 115:17 (Nov. 14, 2008).

4. During his time there, Mr. Rider formed a strong personal attachment to many of the Ringling Bros. elephants, including Meena, Lechamee, Kamela, Lutzi, Susan, Zina, Rebecca, Jewel, Sophie, Karen, Mini, Mysore, Nicole, and Roma, whom he calls his “girls.” Trial Tr. 18:22 - 19:02, Feb. 12, 2009 a.m. (naming the elephants that he worked with); id., Trial Tr. 30:16 - 31:10 (he “loved going to work,” he “loved seeing those elephants,” he “enjoyed going to work to see the girls.” “I called them my girls”).²

5. That Mr. Rider formed a special bond with the elephants he worked with is corroborated by Diane Ward, the USDA Investigator who was assigned to handle Mr. Rider’s Complaint under the Animal Welfare Act, who told her superiors that “I have worked with Tom for the last week, and have taken a lengthy statement from him . . . Tom worked with these elephants, as their keeper (Barn man) for 2 ½ years. There is no question that he loves the elephants that he worked with (in the blue unit) and wants to help them find a better life than what is provided by the circus.” PWC 93 at 1 (PL 012609).

6. That Mr. Rider formed an emotional attachment to these elephants is further corroborated by defendant’s own witnesses, including FEI’s Chief Executive Officer Kenneth Feld, who stated in sworn testimony that the people who work with the elephants at FEI have a “real bond” with the elephants, “an attachment,” that is “really no different than what any of us would have with our dogs or our pets.” PWC 182 at 68:02 - 69:12, Vargas Dep., May 31, 2007. Alex Vargas, who has worked as an FEI elephant handler for many years, testified that he agrees with this statement, see id. at 69:17 - 19; 70:03, and, at the trial, Mr. Feld repeated several times that employees who work with the elephants form a special “bond” with them. See Trial Tr. 12:10-12:11, March 3, 2009 a.m. (the elephants “have a bond with the people that work with them every day”); id. at 116:20 -

116:23 (describing as the “heart of everything that we’re talking about here,” the “human animal experience and the bond that our trainers, our animal handlers have with these animals”); see also Trial Tr. 84:25 - 85:02, March 5, 2009 p.m. (Testimony of Gary Jacobson) (he thinks of the elephants he works with like “part of the family”).

7. Even though it has been many years since he worked with the elephants, Mr. Rider is still able to describe the elephants’ unique physical characteristics, as well as their personalities. See Trial Tr. 21:10 - 29:06, Feb. 12, 2009 a.m.; Trial Tr. 28:21 - 31:10, February 17, 2009 p.m..

8. Although when shown video footage of some of the elephants at trial, Mr. Rider was unable to positively identify particular elephants by name with absolute certainty, this does not mean that Mr. Rider does not continue to have a bond with these elephants. Indeed, defendant’s own witness, Brian French, who currently works with the Blue Unit elephants, was not able to identify one of the elephants depicted in the video footage of the Auburn Hills inspection. See Trial Tr. 77:08 - 77:20, March 12, 2009 a.m. By analogy, the mere fact that someone could not with certainty identify his golden retriever when shown a photograph of several such dogs (and subject to the penalty of perjury if he makes a mistake) would not mean that he does not love his dog, particularly when asked to do so many years after he last lived with his dog.

9. Seven of the elephants with whom Mr. Rider worked – Karen, Nicole, Lutzi, Zina, Mysore, Susan, and Jewell – are still in FEI’s possession. See PWC 169 (Chart of Elephants owned by Feld Entertainment, including location of elephants).

10. The record establishes that Zina was one of the elephants with whom Mr. Rider worked and formed a personal attachment. See PFF No. 3 and Exhibits cited therein; see also PWC 169; PWC 184 at 10, 17, 107 (references to Zina in Mr. Rider’s March 25, 2000 deposition taken by

Performing Animal Welfare Society); PWC 20 at 2 (PL 04459) (describing in July 2000 sworn affidavit to USDA a beating Jeff Pettigrew gave Zina). Accordingly, there is no basis for defendant's suggestion that Mr. Rider does not have standing with respect to the treatment of Zina.

11. The fact that Mr. Rider once forgot to mention Zina's name when asked to name the Blue Unit elephants with whom he worked is not a basis for doubting his credibility when he says that Zina is one of the elephants he loves and saw mistreated. In fact, when asked to name the Blue Unit elephants that he worked with, defendant's witness Daniel Raffo left out Mysore, who was on the Blue Unit when he worked there. See Trial Tr. 7:11 - 7:16, March 4, 2009 a.m.; see also PWC 169 (Mysore was on the Blue Unit from 1/94 - 3/06); PWC 183 (Raffo worked on Blue Unit 1994 - 1997). Indeed, it is not uncommon for a grandparent to leave a name of one of his grandchildren off the list when asked to name them, but this certainly does not mean that he does not love that grandchild.

12. Currently, Karen and Nicole are still on the road with the Circus's "Blue Unit," and Lutzi, Jewell, Susan, Mysore, and Zina are at FEI's "Center for Elephant Conservation" ("CEC") in Florida. See Chart, PWC 169.

13. When he worked for FEI, Mr. Rider saw the elephants mistreated on a daily basis by being hit and beaten with bull hooks. Trial Tr. 49:25 - 51:14, Feb. 12, 2009 a.m. (describing the "excessive" use of the bull hook, and how the handlers would always hook the elephants on the top of the ear, on the head, hit them on the back of the legs or behind the knees, that "they had a habit, every time they wanted to move an elephant over . . . they'd stab them," "hook them in the rear," "[a]ny time they wanted to get an elephant to respond, they were using the hook on them"); (naming the handlers who used the bull hook this way).³

14. Mr. Rider also saw the elephants mistreated by being kept in chains for most of the day, and days at a time when the circus was traveling on railroad cars. See Testimony of Mr. Rider, Trial Tr. 30:18 - 30:19 (the elephants were “chained up all the time on this picket line”); id., 31:11 - 31:18 (the elephants were chained on two, opposite legs); 32:01 - 32:04 (the elephants were chained from the time he got to work until the time he left, except for when they were in the show).⁴

15. Mr. Rider’s trial testimony about the daily mistreatment of the animals is augmented and corroborated by the March 2000 deposition testimony he provided to the Performing Animal Welfare Society. See, e.g., PWC 184 at 9:22-10:20 (the handlers would hit the elephants on a daily basis); 12:07 - 13:15 (they would hook the elephants to make them go faster, “[h]itting them around the front leg and . . . hooking them on the back part”); 17:12 - 18:07 (describing the beating of Zina and Rebecca in Richmond, Va.); 20:05 - 20:12 (the elephants were hooked “repeatedly;” if they didn’t do something right in the ring, Randy Peterson would take both hands and “hook them underneath the knee and start ripping at them like that to make them get their foot in the air and stuff. Hit them on the forehead”); 20:17 - 21:11 (elephants that rattled their chains “would get severely beaten for it”); 21:16 - 22:18 (describes the beating of Karen in New Haven, Ct. for “rattling her chain”).⁵

16. Mr. Rider’s trial testimony is further augmented and corroborated by the July 2000 Affidavit that he provided to the United States Department of Agriculture (“USDA”). See, e.g., PWC 20 at 1 (“[t]he abuse at Ringling Brothers is 6 out of 7 days a week, it is just an on going daily event at every town listed on the route cards”); id. at 1-2 (describing specific incidents of abuse, including a beating in October 1997 of Nicole and Sophie because they “did not perform in the show correctly and they were being punished;” id. at 2 (describing the 1998 beating of Zina and Rebecca

in Richmond, Va.); *id.* at 3 (describing the beating of Karen in New Haven, Ct., because she “rattled her chain” when she saw Pat Harned beating Benjamin); *id.* at 4-5 (describing additional incidents).⁶

17. Mr. Rider’s accounts of the daily mistreatment of the elephants are also corroborated by several other former Ringling Bros. employees, including Frank Hagan, Gerald Ramos, Archele Hundley, Robert Tom, Jr., and Margaret Tom, *see* Proposed Findings of Fact (“PFF”) ¶¶ 139-147.

18. Mr. Rider’s accounts of mistreatment are also corroborated by a detailed complaint sent to the USDA in 1998 based on the eye-witness accounts of two other former Ringling Bros. employees, Glen Ewell and James Stechon, who worked on the Blue Unit during the same time frame that Mr. Rider worked there. *See* PWC 190D (December 21, 1998 Letter to the USDA describing the eye-witness accounts of Mr. Ewell and Mr. Stechon); *id.* at 2 (reporting that on many occasions they witnessed Ringling Brothers’ elephant handlers and trainers, including individuals named “Randy,” “Adam,” “Pat,” “Steve,” and “Robby,” beat elephants with a bull hook; and that the elephants were repeatedly beat with bull hooks on the head, ankles, and other parts of their bodies to make them behave in a particular way or to punish them for not performing as desired).⁷

19. Mr. Rider’s accounts of mistreatment are also corroborated by the testimony of Pat CuvIELLO, Sergeant Lanette Williams, and video and photographic evidence provided by those witnesses, *see* PFF ¶¶ 149-154; by FEI’s own internal documents, *see* PFF ¶ 136; by FEI’s own current employees, *see* PFF ¶¶ 134-35; and by USDA documents, *see* PFF ¶¶ 137-38. *See also* Trial Testimony of Pat CuvIELLO, Trial Tr. 89:21 - 90:04 (Mr. CuvIELLO explains that he supports Mr. Rider wholeheartedly because “I had been [monitoring the circus] for about 12 years prior to meeting Mr. Rider, so I had seen this stuff happening, so when Tom Rider came out, I knew what he was saying”).

was true, because I had witnessed it myself, and I supported him in helping the elephants in the circus”).

20. Mr. Rider observed the negative impacts this mistreatment has on the elephants, which in turn impaired his own aesthetic enjoyment of them. Trial Tr. 50:17 - 50:20, Feb. 12, 2009 a.m. (explaining that the elephants “fear” the bull hook, and that he has “seen elephants cringe when it comes at them”); id., 53:02 (he saw elephants bleed from bull hook wounds); id., 64:19 - 64:23 (he saw elephants “cringing, trumpeting, squealing, making squealing noises, and just cowering”); id., 35:05 - 35:17 (the elephants “would always sway back and forth” when chained . . . it was hard for them to lay down. If they laid down and tried to get up, they were always rocking, and kept rocking back and forth”); id. 36:25 (“[w]hen they are chained up, they really can’t turn around”); Trial Tr. 22:07 - 22:09, Feb. 17, 2009 p.m. (cont.) (“all the elephants at one time or another had bloody hook marks and stuff like that and hook wel[t]s”); id. 22:14 - 23:03 (he saw bloody hook marks on Nicole, Karen, Mysore, Jewell, Susan, Lutzi, and Zina); id., 26:02 - 26:22 (he saw cuts on the ears of the elephants caused by bull hooks, and he saw wounds behind their ears “two or three times a week”); see also PWC 184, 17:12:18:07 (testifying about the beating of Zina and Rebecca, “I got very upset that night); id., 26:05 - 26:15 (he heard “these outrageous wails of the baby getting hit”); 38:08 - 39:02 (the elephants “would flinch” every time Gary Jacobson was around); and the adult elephants “would cower, just back up in fear” when anyone came near them, they were always “in fear [that] something was going to happen;” “that’s a bad feeling . . . to watch [the elephants] show fear of a broom”); id., 49:11 - 49:13 (the elephants had “scars and scabs . . . from where they had been hooked so much”); see also DX 16, Tom Rider’s Response to Interrogatory No. 16, at 32 (“I loved those elephants, and I didn’t want to see them harmed, but I saw it”); PWC 20 (USDA Affidavit) at 1 (PL

04458) (“I saw blood on the trunks of the elephants”); PWC 184 (PAWS Deposition), 25:14 - 25:17 (he “hear[d] the screams of the babies” being hit by Pat Harned).

21. Despite the routine mistreatment that he observed, Mr. Rider stayed at Ringling Bros. for 2 ½ years because he loved the elephants and wanted them to at least have someone around who could give them love and affection. Trial Tr. 46:23 - 47:01, Feb. 17, 2009 p.m. (cont.) (“I loved my elephants and I knew that if I was there, at least they were . . . hearing me every day, they were seeing me every afternoon and I could give them my love and affection”); Trial Tr. 70:01 - 70:05, Feb. 12, 2009 a.m. (“I stayed there for 2 -1/2 years even though I saw all this that went on because I cared and I loved those girls. I loved those animals.”); see also DX 16, Response to Interrogatory No. 16, at 32 (“If felt that my emotional feelings for those elephants, my love for those elephants, was shown by not striking them”); id. (“When I was on the train it would be the same thing . . . I was up there my myself keeping them as content as I could”).

22. During his time at the circus, Mr. Rider complained to his fellow workers about the mistreatment of the elephants, including his supervisor Randy Peterson and his union steward Jeff Pettigrew. See Trial Tr. 8:12 - 8:17, Feb. 12, 2009 p.m. (he complained to Peterson who was his supervisor); id. at 11:04 - 11:16 (he complained to Pettigrew who was the union steward). However, whenever he complained, he was constantly told that hitting and beating the elephants with bull hooks was “discipline” that was necessary for the elephants. Trial Tr. 58:16 - 59:21, Feb. 12, 2009 a.m.; id. 59:08 - 09 (“If anybody ever asked [], why do you use the bull hook, it was always discipline, discipline that’s the word that came out”); Trial Tr. 8:08 - 11:16, Feb. 17, 2009 p.m. (cont.); PWC 20 (USDA Affidavit) at 2 (PL 04459) (in Greensboro, NC, “I had been doing a lot of complaining about the animal abuse, Randy wanted to get me out of the circus because of my

complaints, Randy knew I didn't like the animal abuse"); id. at 18-19 ("I told Alex [Vargas] about the animal abuse, he said he couldn't do anything about it because he didn't want to lose his job"); PWC 184 (PAWS Deposition), 15:06 - 15:12 (in Greensboro Randy Peterson threatened to get rid of Mr. Rider because he was outspoken about the bull hook); id. 64:22 - 65:02 (that's their "discipline for the elephants" – "smack them on the head" with a bull hook); 59:16 - 20 ("I went to Alex [Vargas] one time in Jacksonville, Florida and I told him the same thing. I said, you know, this has to stop. And he goes, well, it's not going to stop because it's just discipline . . . this is what they called it"); see also DX 32 at 31 (Mr. Rider often complained to his fellow workers about this mistreatment); id. (detailing the times he complained to Jeff Pettigrew, Randy Peterson, and Alex Vargas). .

23. Mr. Rider did not take his complaints to anyone above Mr. Peterson, because Mr. Peterson was his supervisor and he was afraid that he would lose his job if he did so. Trial Tr. 12:02 - 12:25, Feb. 17, 2009 p.m. (cont.); id. ("And I knew at that point if you went to anybody above your supervisor, which I really didn't have to go. I should have went to my supervisor and [it] should have been handled from that point. So when I found out that they are just going to call it discipline, I know I can't walk up to Kenneth Feld and go, 'Hey, Mr. Feld, come here, look what they're doing to your animals,' because you're done. You are going to lose your job for some reason. It doesn't have to be that, but you will not be there very long."); see also Trial Tr. 59:20-21, Feb. 12, 2009 a.m. ("I went to my supervisor, and that's about as far as I could go"); PWC 178 at 117:06 - 117:09 Pettigrew Dep., (Nov. 14, 2008) (Randy Peterson was Mr. Rider's supervisor on the Blue Unit). Mr. Rider followed FEI policy when he reported the mistreatment to his immediate supervisor, Randy Peterson. See Trial Tr. 17:21 - 18:05, March 4, 2009 p.m. (Kenneth Feld testified

that the “policy” at FEI is that employees are “encouraged if they view what they would say is mistreatment to speak with supervisors about that”).

24. Mr. Rider also did not complain to the USDA or any other authorities while he was employed at the circus because he was afraid that he would lose his job, because that is what the Ringling Bros. employees understood would happen if they said anything about the mistreatment that goes on at the circus. Id.; see also Trial Tr. 12:04 - 12:13, Feb. 17, 2009 p.m. (cont.) (“I didn’t want to lose my job . . . everybody on the animal crew knew that. If you complain . . . you’re going to get fired; maybe not for that, but they are going to find another reason. So it was just a known fact . . . you hide everything from the USDA, you don’t tell the USDA, you don’t even tell the general public what goes on. Everything is kept quiet”); see also PWC 20 (USDA Affidavit) at 1 (“[w]hen I was hired, I was told that if you complain to the USDA or the news media that we would lose our jobs”). Mr. Rider understood that while Ringling Bros. would not be overt about firing him for complaining about the mistreatment of the animals, it would find a way to fire him for other reasons. Trial Tr. 12:04 - 12:13, Feb. 17, 2009 p.m. (cont.)

25. Randy Peterson and Jeff Pettigrew themselves hit elephants with bull hooks on a regular basis, and this treatment did not stop after Mr. Rider complained to them. See Trial Tr. 8:18 - 9:16, Feb. 17, 2009 p.m. (cont.); id., 11:17 - 12:01. This testimony is corroborated by the testimony of Pat CuvIELLO, Trial Tr. 6:02 - 6:24, Feb. 9, 2009 p.m., and videotape of Mr. Pettigrew jabbing an elephant with a bull hook, see id.; PWC 132L; it is also corroborated by the testimony of Kenneth Feld who admitted that all of the Ringling Bros. handlers strike elephants with bull hooks. PFF ¶ 135; see also Chart C, PWC 183 (list of elephant handlers).

26. Mr. Rider's concerns about losing his job if he complained are corroborated by Daniel Raffo who testified that if Mr. Rider had complained about the treatment of the animals at Ringling Bros., Mr. Raffo never would have taken him to Europe. Trial Tr. 44:10 - 44:14, March 4, 2009 a.m.

27. Mr. Rider's concerns that he could lose his job if he complained about the mistreatment to others is further corroborated by the fact that he received all three disciplinary "write-ups" for other alleged employment transgressions after he started complaining about the mistreatment of the elephants, see DX 40 - 42; see also PWC 20 at 2 (in February 1998, Randy Peterson threatened to get Mr. Rider out of the circus because he was complaining a lot about the animal abuse). These concerns are further corroborated by the fact that Mr. Robert Tom also received "write-ups" for various alleged employment transgressions after he complained about the beating of an elephant by Sacha Houcke (including two "write-ups" on the same day for both missing work completely and being late for work). See DX 166 and DX 167; see also PFF ¶ 158.

28. Mr. Rider's concerns are further corroborated by the fact that Frank Hagan was fired for allegedly negligent behavior after he complained about the fact that a young lion died when he was deprived of water during a long trip through the Mojave Desert. See PWC 162, and id. at 2-3 (FEI wrongfully terminated Mr. Hagan for the false and pre-textual reason of an unintended power outage, and threw Mr. Hagan and his nine year old daughter off the train, after Mr. Hagan complained about the death of the baby lion).

29. Although he loved the elephants, after two and a half years Mr. Rider got to the point where he could not stand to see the elephants mistreated, and so, when he had an opportunity to go to Europe with Daniel Raffo and three of the elephants (Meena, Lechemee, and Camela), he left Ringling Bros. to pursue that opportunity. Trial Tr. 68:17 - 70:05, Feb. 12, 2009 a.m. (he left

because he was “tired of the way they are treating the animals here”) (“I just was really tired of the treatment they were getting and then seeing it, I just didn’t want it anymore. I didn’t want to see it”) (“I saw an opportunity to go over to Europe with [Camela, Lecheme, and Meena], and I decided, well, maybe it will be different over there. And I won’t have to put up with this kind of bull hooking that goes on there and the constant chaining and all this”) (“it hurt when I left . . . I stayed with them but I just – you get to a point when you just go, that’s it”).

30. Although Mr. Raffo was one of the handlers who had also mistreated the elephants, Mr. Rider believed things would be better when he and Mr. Raffo went to Europe with just three of the elephants and they were away from Ringling Bros. Id.; see also id., 70:23 - 71:23; see also PWC 184 (PAWS Deposition), at 108:02 - 07 (one of the reasons he went over to Europe was that he was hoping he had got at least three of the elephants away from “all the abuse I seen at Ringling”). In his March 2000 deposition, Mr. Rider explained that because the three “English” elephants belonged to Graham Chipperfield – i.e., they were not owned by FEI – they were not hit as much as the other elephants, except when Chipperfield was not around, when Randy Peterson would “pick on the English.”. See PWC 184, 107:06 - 108:11. However, after he left Ringling Bros., things did not change, and, in fact, Mr. Raffo made Mr. Rider use a bull hook as part of his new job with the three elephants under Raffo’s supervision. Id.; see also Testimony of Daniel Raffo, Trial Tr. 30:14 - 30:20, March 4, 2009 a.m. (Mr. Raffo paid Mr. Rider); id. at 31:24 - 32:12 (Mr. Raffo told Mr. Rider what to do, could have him fired, and was his “only boss”); id. 32:23 - 33:10 (Mr. Raffo admits that using the bull hook was part of Mr. Rider’s job when he worked for Raffo).

31. Mr. Rider had not used a bull hook at Ringling Bros., see Trial Tr. 63:23 - 64:10, Feb. 12, 2009 a.m., Trial Tr. 98:07 - 98:09, Feb. 12, 2009 p.m., and did not like having to use one when he worked for Daniel Mr. Raffo. See id. at 70:23 - 71:23; see also Trial Tr. 55:10- 55:24.

32. Although Mr. Raffo testified at trial that Mr. Rider also used the bull hook when he was employed at Ringling Bros., no other FEI employee corroborated this testimony – even though FEI has access to dozens of individuals who worked with Mr. Rider during the time he worked at FEI. See, e.g., PWC 183 (list of FEI employees, and when and where the work at FEI). Furthermore, Jeff Pettigrew, who worked with Mr. Rider for several years at the Blue Unit, testified that he never observed Mr. Rider using a bull hook at Ringling Bros. PWC 178, Pettigrew Dep., 149:02 - 149:11 (Nov. 14, 2008); see also PWC 183 at 5 (Jeff Pettigrew worked at the Blue Unit during 1997-99 when Mr. Rider worked there).

33. Mr. Raffo’s testimony that he saw Mr. Rider use a bull hook at Ringling Bros. is also contradicted by Mr. Raffo’s concession that he did not have an opportunity to observe Mr. Rider “interacting with the elephants” when they worked at Ringling Bros. Id. at 12:23 - 12:25. In addition, Mr. Raffo’s recollection of Mr. Rider having a bull hook at Ringling Bros. is identical to his memory of Mr. Rider having a bull hook when he worked for Mr. Raffo in Europe – i.e., both memories involve Mr. Rider carrying a bull hook around in a “wheelbarrow,” suggesting that Mr. Raffo is confusing his memory of Mr. Rider when he worked at Ringling Bros. with his memory of Mr. Rider when he worked for Mr. Raffo in Europe, and was required to have a bull hook. Compare Trial Tr. 8:11 - 8:18, March 4, 2009 a.m. with id. at 25:06 - 25:09. Indeed, Mr. Raffo admitted that the only photograph of Mr. Rider holding a bull hook was taken after Mr. Rider had already left Ringling Bros.. Trial Tr. 39:05 - 39:20, March 4, 2009 a.m.

34. Mr. Raffo's testimony that he saw Mr. Rider use a bull hook when he worked at Ringling Bros. is also not particularly credible in light of the fact that Mr. Raffo was rehired by FEI less than a year ago, after not working for FEI for almost nine years, and he was given a compensation package that exceeds \$100,000 a year - almost twice what he was paid at FEI the last time he worked there. See Id., Trial Tr. 55:23 - 56:11.

35. After three months of seeing the three elephants continue to be mistreated in Europe, being required to use a bull hook on the elephants, and, finally, seeing two young tigers killed simply because Mr. Raffo had no use for them in his tiger act, Mr. Rider decided he could no longer continue to watch animals be mistreated, so he quit that job and decided to speak out publicly about the mistreatment he had witnessed. See Trial Tr. 70:23 - 73:23, Feb. 12, 2009 a.m.; see also Trial Tr. 47:02 - 47:10, Feb. 17, 2009 p.m. (cont.). Mr. Rider's testimony that the two young tigers were killed because they were superfluous to Mr. Raffo's tiger act was corroborated by Mr. Raffo's own testimony when he admitted that the two young tigers "that were not working were removed when we were in Frankfurt [] Germany," Trial Tr. 34:02 - 34:03, March 4, 2009 a.m.; see also id. (explaining that when they got to Europe his contract with Mr. Chipperfield "changed," and "these two tigers were not necessary," and so they were "removed"). Before he left, Mr. Rider promised Lechemee, Camela, and Meena that he would do everything he could to help them. Trial Tr. 73:06-73:13, Feb. 12, 2009 a.m.; see also id. at 83:08 - 83:14 (explaining that the reason he does his public education work is that "I made a promise to my elephants when I left Germany . . . And I decided at that point, that's what I had to do, I have to speak to anybody that is going to listen, this is what goes on.").

36. Mr. Rider then went to London, contacted a reporter from the Daily Mirror who he knew had written a story about the boat trip with the three elephants, and told the reporter about the mistreatment he had witnessed while he was in Europe, which in turn resulted in a story about the treatment of the elephants in Europe. Id., at 73:15 - 75:10. At that point, Mr. Rider realized that the media was a powerful tool for informing the public about the mistreatment of animals that goes on at the circus. See Trial Tr. 48:24 - 49:13, Feb. 17, 2009, p.m. (cont.) (from his experience with the Daily Mirror, he learned that “by stepping forward and speaking for the elephants that the public was going to be made aware of this . . . and I knew that this was a way to help the elephants”).

37. Mr. Rider then returned to the United States, and went to the Performing Animal Welfare Society (“PAWS”) in Galt, California, where he gave a lengthy deposition under oath in March 2000 about what he had witnessed when he worked at Ringling Bros. See PWC 184. Mr. Rider spent the next year helping PAWS do media and public education concerning this issue, and he also testified before Congress about the mistreatment of the elephants at Ringling Bros. During that time, PAWS paid for Mr. Rider’s motel room in Galt, Ca. and gave him approximately \$50 a week for groceries. Trial Tr. 76:21 - 78:10 .

38. Mr. Rider also took his complaints to the United States Department of Agriculture (“USDA”) which administers the Animal Welfare Act, which governs the treatment of all animals used in entertainment, regardless of whether they are also covered by the Endangered Species Act. See 7 U.S.C. § 2131 *et seq.* He met with USDA Investigator Diane Ward in Sacramento, California, and later provided the USDA with a sworn affidavit, PWC 20, and he personally met with high level officials for the USDA in Washington, D.C., including Ron DeHaven, Director of Animal Care for USDA’s Animal Plant Health Inspection Services, and Michael Dunn, who was the Under Secretary

of Agriculture. Trial Tr. 78:22 - 79:20, Feb. 12, 2009 a.m. However, the USDA never took any enforcement action against Ringling Bros. as a result of Mr. Rider's complaints. Id.; see also DX 71A.

39. On July 11, 2000, Mr. Rider joined PAWS and its officials, along with several of the other organizational plaintiffs, in bringing a lawsuit against FEI under the ESA for "taking" the Asian elephants in violation of Section 9 of the statute. See ASPCA et al. v. Ringling Bros., et al., Civ. No. 00-1641 (D.D.C.). That suit was later dismissed and replaced with the present litigation, without prejudice. See Order (Nov. 25, 2003). Sometime later, PAWS asked Mr. Rider to do some security work for the organization at its property that it was turning into an animal sanctuary in California. Trial Tr. at 77:20 - 77:24, Feb. 12, 2009 a.m.; id., 79:29 - 80:04; id., see also DX 39.

40. In January 2001, PAWS and its officials Pat Derby and Ed Stewart settled a different lawsuit that they had brought against FEI under RICO for infiltrating and stealing confidential information from PAWS. Trial Testimony of Kenneth Feld, Trial Tr. 108:02 - 108:09, March 3, 2009 p.m.. As part of that settlement, (1) PAWS was given two of the Ringling Bros. elephants that Mr. Rider had worked with, Rebecca and Mini, for PAWS' sanctuary in California, as well as an undisclosed sum of money for their care; (2) PAWS, Ms. Derby, and Mr. Stewart were required to withdraw as plaintiffs from this action; and (3) anyone who was employed by PAWS was prohibited from speaking out against Ringling Bros.. See Notice of Voluntary Dismissal of Three of the Plaintiffs (Jan. 8, 2001), Civ. No. 00-1641; Testimony of Tom Rider, Trial Tr. 80:08 - 81:18., Feb. 12, 2009 a.m.; Testimony of Kenneth Feld, Trial Tr. 108:02 - 111:12, March 3, 2009 p.m..

41. In May 2001, PAWS officials informed Mr. Rider that because of this settlement he could no longer speak out about what he had seen at Ringling Bros. Trial Tr. 80:08 - 81:18., Feb.

12, 2009 a.m. However, because Mr. Rider was not a party to the settlement with FEI, and he wanted to “do everything in [his] power to help the elephants, and this means speaking out as much as possible about how Ringling Bros. beats them and especially mistreats the babies,” in May, 2001, Mr. Rider quit his position with PAWS. See id.; DX 39 (Mr. Rider’s letter to Ms. Derby of PAWS explaining why he left); see also id. (“I figured that leaving PAWS was the only way to do this, since I was not able to speak out anymore as long as I was there without getting you in trouble”).

42. On April 12, 2001, along with the ASPCA, Fund for Animals, and Animal Welfare Institute, Mr. Rider sent a 60-day notice letter to FEI that it was in violation of the “take” prohibition of the Endangered Species Act for its treatment of the endangered Asian elephants, and he sent a copy of that letter to the Secretary of the Department of Director of the Fish and Wildlife Service. PWC 91 at 10-12.

43. Since he left PAWS, with the financial support of the organizational plaintiffs and other animal protection groups, including The Wildlife Advocacy Project, and of other concerned individuals, Mr. Rider has devoted the last eight and a half years of his life to traveling around the country so that he can speak to representatives of the media, grassroots groups, and legislators about the harsh conditions endured by the circus elephants, in an effort to ameliorate these conditions and improve the lives of these animals. See Testimony of Mr. Rider, Trial Tr. 82:02 - 88:13, Feb. 12, 2009 a.m.; Trial Tr. 40:10 - 42:10, Feb. 17, 2009 p.m. (cont.) (Mr. Rider discusses other groups and individuals who have contributed funding to his efforts); see also Deposition Testimony of Eric Glitzenstein, President of The Wildlife Advocacy Project, PFF ¶ 58; PWC 94A and 94B (examples of media, grassroots, and legislative work done by Mr. Rider); DX 39 (Mr. Rider’s letter quitting his position with PAWS because “[w]hen you found out that I was planning to go to Washington to help

the ASPCA at a press conference, you told me that I would be fired if I did that. So, I decided that I had to leave PAWS. I want to do everything in my power to help the elephants, and this means speaking out as much as possible about how Ringling Bros. beats them and especially mistreats the babies”).

44. Mr. Rider’s genuine love for the elephants and his commitment to helping improve their lives is demonstrated by the fact that he has devoted the last nine years of his life to this cause, at great personal sacrifice. See PFF ¶ 56; see also Trial Tr. 51:13 - 51:16, Feb. 17, 2009 p.m. (cont.) (“As long as it takes me to get these elephants into a position where they are not being treated like they’re being treated now, I will devote the rest of my life to doing media if I have to”). His devotion to the elephants is further corroborated by the fact that unlike others who have settled lawsuits with FEI for large sums of money, including PAWS, and the fact that FEI is a very wealthy corporation, Mr. Rider has never asked FEI for money or anything else of value in exchange for dropping this case. See id. at 49:25 - 50:21 . Nor has Mr. Rider ever asked any of the plaintiff organizations for money in exchange for being a plaintiff in this case. Id.

45. Mr. Rider’s credibility is further corroborated by the fact that, in sharp contrast to some of defendant’s expert witnesses who changed their positions on some of the issues involved in this litigation after entering into lucrative financial arrangements with FEI, see PFF 429-431 (Dr. Schmidt); ¶ 438 (Dr. Friend), Mr. Rider has never changed his position with respect to the mistreatment of the elephants that he witnessed at Ringling Bros. In fact, Mr. Rider’s sworn accounts that he provided in his March 2000 PAWS deposition and his July 2000 USDA Affidavit – both of which were provided closer in time to his actual experience at the circus – contain more, not less, detail about the mistreatment that he witnessed than Mr. Rider recounted at the trial. See PWC 184;

PWC 20. Therefore, there is no validity to the suggestion that Mr. Rider has made things up as a result of receiving funding over the years for his public education activities.

46. Since leaving the circus, and in the years this litigation has been pending, Mr. Rider has made many efforts to visit and observe the elephants he loves, although every time he does so he cannot avoid suffering further aesthetic injury because of the way the elephants are mistreated. On every such occasion, Mr. Rider is confronted with the Hobson's choice of observing the elephants in what he knows are abusive and inhumane conditions or avoiding seeing them at all to avoid subjecting himself to further aesthetic injury. See Trial Tr. 97:01 - 98:10, Feb. 12, 2009 a.m. (he has been to see the elephants 30-40 times a year; and always sees "the same thing, I see the elephants chained up, I see the bull hooks") (he goes to see them "[b]ecause I miss them, I want to see them. I don't get a chance to go up and physically be with them, but I can see them from a distance. It still hurts. I still see the same thing I saw when I was there"); id., 98:12 - 99:07 ("nothing changes but the lot . . . nothing changes but where you're at. Still ongoing"); see also Trial Tr. 18:16 - 20:20, Feb. 17, 2009 p.m. (Mr. Rider affirms that he must refrain from visiting the elephants "to avoid subjecting himself to further aesthetic and emotional injury"); id. 22:20 - 22:23 (when he sees the elephants he suffers aesthetic injury).

47. The aesthetic injury Mr. Rider suffers when he observes the elephants is the direct result of FEI's mistreatment of the Asian elephants, see PFF ¶ 20, and is corroborated by others who have observed the Ringling Bros. elephants and the physical and other manifestations of their mistreatment. See, e.g., PWC 190D (accounts of former Blue Unit employees Glen Ewell and James Stechon), at 3 (F03269) (describing Nicole's "cries of distress" as she was being beaten); id. ("[t]hese men also testified that these beatings and stabbings with the bull hooks cause the elephants much

distress and pain, as evidenced by the animals' cries and other distressful verbal reactions, and that the elephant handlers often draw blood from the animals when they use the bull hooks"); id., Addendum at 2 (F03274) ("Nicole was making lots of noises and bellowing loudly" when she was beaten; "She shuffled her feet and kept urinating during the performances because she was afraid"); id. (Benjamin would "cry out and bellow in pain" when he was beaten by Pat Harned).

48. Mr. Rider's aesthetic injury is also corroborated by plaintiffs' expert witnesses who attended the court-ordered inspections and commented on the dispirited demeanor of the elephants, and the way in which many of them engage in stereotypic swaying and bobbing, including the observations of Dr. Joyce Poole, one of the world's foremost experts on elephant behavior, who said many of the elephants look like they are in a "stupor," and that she has seen the same kind of behavior in other elephants "that have been very traumatized." See PFF Endnote 45; see also PWC 181 B, 64:01 - 65:18 (Deposition of Elizabeth Swart) (March 18, 2005) (describing a baby elephant "screeching and recoiling" when it was hit in the face with a whip by Gunther Gebel-Williams); PWC 161 B (video) at 73:03 - 74:25 (Deposition of Frank Hagan) (he has heard the elephants "screaming" "like the elephant is in pain" a dozen times in one year, when they were inside the tent); Trial Tr. 71:13-71:23, 80:5-80:6, Feb. 5, 2009 a.m. (former FEI employee Archele Hundley saw an elephant with blood dripping down into her face, and heard the elephant "shriek[] and squeal[] in pain . . . [she] squealed in pain, three or four times and let out a loud, shrill shriek"); see also PWC 114A at 2 (Sept. 29, 2006 Declaration of Archele Hundley, ¶ 6); Trial Tr. 67:12-67:16, Feb. 19, 2009 a.m. (former FEI employee Margaret Tom testified that when Asia was beaten for defecating on a performer, she "squealed" a "deafening squeal").

49. The ways in which the elephants' demeanor is negatively affected by their mistreatment is further demonstrated in the videotape evidence of the elephants, which shows the elephants submissively lifting their legs to be chained, engaged in stereotypic behavior, and failing to move around much or engage in any natural intellectual curiosity or exploration of their surroundings. See PWC 130, 132A, 132B, 132E, 132F, 132I, 132K, 132O, 133A, 133B, 133C, 142A, 142D, 142E, 143A, 143F, 128A, 128B.

50. The dispirited behavior of these elephants is in sharp contrast to the way elephants in the wild behave. See PWC 113B (clips from movie "Elephant Lord of the Jungle"); PFF ¶¶ 84-87 (Dr. Poole's descriptions of the way elephants behave in the wild), and also in contrast to the way captive elephants at sanctuaries and zoos behave.

51. The relief that has been requested by plaintiffs – i.e. enjoining FEI from "taking" the elephants in violation of the ESA – will redress Mr. Rider's injuries because, if granted, this will improve the elephants lives, and therefore their demeanor and behavior, which in turn will improve Mr. Rider's aesthetic enjoyment of the elephants. See PFF 50; see also Trial Tr. 3:11 - 3:22, Feb. 17, 2009 p.m. (cont.) (If plaintiffs prevail in the lawsuit, the elephants "will be in a better situation than they are now"); id. 53:12 - 53:24 (Mr. Rider describes photographs and environment of two of the Ringling Bros. elephants who were placed at the PAWS Sanctuary); see also Trial Tr. 103:1-103:16, Feb. 23, 2009 a.m. (Testimony of Carol Buckley) ("[w]e've had several . . . elephants that performed in the circus, come to the sanctuary, and many of them, almost all of them display the neurotic behavior of bobbing and swaying when they arrive," but "[v]ery few elephants exhibit that behavior outside where they have access not only to a vast space but other elephants and a lot of stimuli things to interest them and get their attention"); see also Trial Tr. 4:13 - 4:17, Feb. 23, 2009

p.m. (Ms. Buckley) (“In giving the elephants that freedom of choice, not only can they develop a healthy self-esteem and learn to interact with other elephants in a healthy way, they can also interact with their habitat”); see also Trial Tr. 70:19 - 71:15, Feb. 18, 2009 p.m. ((Testimony of Colleen Kinzley, Curator of the Oakland Zoo) (explaining that when the zoo stopped chaining the elephants overnight, this “greatly reduced” the amount of stereotypic swaying). In addition, when Mr. Rider observes the elephants, he will know that their harsh living conditions have been ameliorated. Id., 53:02 - 53:11 (Mr. Rider “felt good” for the two elephants who went to the PAWS Sanctuary “that they weren’t in the circus anymore,” and is “happy” that Mini “got to live the rest of her life there”).

52. Mr. Rider wants to continue to visit the elephants as much as he can, and if plaintiffs prevail and the elephants either remain at Ringling Bros. or are relocated somewhere else, Mr. Rider will make efforts to see them. Trial Tr. 3:11 - 3:22, Feb. 12, 2009 p.m. (if the plaintiffs prevail “I will do everything I can to see them. I don’t care if they’re in the circus or where they’re at. I want to see the elephants . . . because I miss them, and if we prevail, I have a feeling that they will be in a better situation that they are in now”).

53. If plaintiffs prevail, FEI will either be required to treat the elephants better, or stop using them in the circus. Should FEI stop using the elephants in the circus, it will likely give them to another entity such as a zoo or sanctuary, in which case Mr. Rider will be able to observe the elephants living in better conditions. See PFF 55; see also Trial Tr. 75:23 - 76:06, March 3, 2009 p.m. (Kenneth Feld testifies that FEI has in the past given elephants that were living at the CEC to zoos; that it has a “companion elephant program” for that purpose); Trial Tr. 104:02 - 104:09, March 5, 2009 p.m. (Gary Jacobson, Director of the CEC, testifies that FEI currently had six elephants “out

on loan” to zoos, and that “every year” “Zoos ask us for surplus elephants so they’ll have friends for the elephants that they have”).

54. Two of the elephants that Mr. Rider worked with, Karen and Nicole, are still being used in the circus by Ringling Bros., and, according to FEI’s Rule 30(b)(6) witness Gary Jacobson, FEI intends to keep them on the road as long as there is a Blue Unit. See PWC 152A at 228:16 - 229:16 (Jacobson Rule 30(b)(6) Dep., Jan. 18, 2008). The other five elephants that Mr. Rider worked with that are still in FEI’s possession, Lutzi, Zina, Mysore, Jewell, and Susan, were all taken to the CEC several years after this lawsuit was filed. See Chart B, PWC 169. In addition, many of those elephants have been taken off the road and placed at the CEC before, but were then returned to the road. See PWC 169 (Jewell was on the Blue Unit until 2003, went to the CEC from 2003-2005, was returned to the Blue Unit from 12/05 to 9/06, and has been at the CEC since 9/06; Mysore was on the Blue Unit until 3/06, went to the CEC in 3/06, went to the “Gold Unit” from 3/06 - 8/06, and has been at the CEC since 8/06; Susan was on the Blue Unit until 7/01, went to the CEC from 7/01 - 11/03, then went back to the Blue Unit from 11/03 - 12/05, and has been at the CEC since 12/05; Lutzi was on the Blue Unit 1/05 and then went to the CEC; and Zina was on the Blue Unit until 12/03 and then went to the CEC); see also Trial Tr. 76:04 - 76:09, March 3, 2009 p.m. (Kenneth Feld testifies that elephants at the CEC go back on the road). In fact, Mr. Feld affirmed for the Court that “the fact that an elephant has gone from the circus to the CEC does not mean [] necessarily that an elephant will not be returned to the circus.” Id., at 76:16 - 76:19. Mr. Jacobson explained that none of these five elephants has been able to leave the CEC in recent years because the CEC has been under quarantine by the State of Florida because of the incidence of tuberculosis at the CEC. Trial Tr. 55:12 - 56:02, March 9, 2009 a.m. However, Mr. Jacobson also testified, at his Rule

30(b)(6) deposition, that FEI needs “more” elephants for the Blue Unit. See PWC 152A at 229:17 - 230:01(Jan. 18, 2008).

55. One of the elephants that Mr. Rider worked with, Sophie, was sent to a zoo in Illinois several years ago. See Trial Tr. 99:12 - 99:209, Feb. 12, 2009 a.m. As soon as Mr. Rider found out that she was there, he went to visit her at the zoo. Id.; see also Trial Tr. 52:03 - 52:12, Feb. 17, 2009 p.m. (cont.). When she saw him, Sophie immediately came over to him, put her trunk in the air, made chirping noises, and clearly recognized him. Trial Tr. 100:10 - 101:20, Feb. 12, 2009 a.m. Mr. Rider made an effort to visit Sophie again last year during his travels around the country but was unable to do so because of a snowstorm. Id., 99:20 - 99:22. Two other elephants that Mr. Rider worked with, Rebecca and Mini, were sent to the PAWS sanctuary as a result of PAWS settlement of its RICO case with FEI. Trial Tr. 52:13 - 53:11, Feb. 17, 2009 p.m. (cont.). Although, because of the way his relationship with PAWS ended, see PFF 41, Mr. Rider has not had an opportunity to visit those elephants, he feels good knowing that they got out of the circus and that Mini, who recently died, was able to live out the rest of her life at a sanctuary, id., and he has looked at photographs of Rebecca and Mini enjoying their lives at the sanctuary. Id., 53:12 - 54:16.

56. Mr. Rider does his public education work by traveling around the country in a used 1983 Volkswagen Van, which he also lives in, usually following the circus’s itinerary, and trying to do media in each city the circus goes to before the circus gets there. Trial Tr. 85:09 - 85:24, Feb. 12, 2009 a.m.; id., 91:19 - 92:07. Mr. Rider has been to “hundreds” of different cities over the years in his effort to educate the public about what really goes on at the circus. See Trial Tr. 85:09 - 85:24, Feb. 12, 2009 a.m. The fact that Mr. Rider has traveled across the country several times for this purpose is corroborated by the voluminous media coverage Mr. Rider has generated throughout the

country. See PWC 94A and 94B; see also Trial Tr. 17:01 - 17:09, Mar. 10, 2009 a.m. (Testimony of Lisa Weisberg, representing plaintiff ASPCA) (Mr. Rider has “done a pretty incredible job,” he has “talked to so many reporters all over the country,” “those stories, both in print and tv, have been aired widely,” and “we’ve heard from our members who are very grateful for the work that he’s done, and we think that it really has helped educate the public about how these animals are treated”). That Mr. Rider has traveled throughout the country is further corroborated by the Federal Express labels that FEI subpoenaed in this case, which show that Mr. Rider has been to almost every city to which the circus has traveled. Compare DX 58A with PWC 64 (Itineraries for the Circus).

57. Like others that do public relations work, Mr. Rider is not always physically in each city where he is doing his public education work, but is able to do that work over the phone or via email. Trial Tr. 93:25 - 94:14, Feb. 12, 2009 a.m.; see also id., 92:22 - 93:03 (Mr. Rider uses his cell phone to get media and sometimes for radio interviews); PWC 188B at 142:2-142:10 (Glitzenstein Dep., Dec. 21, 2007) (when Mr. Rider is not traveling “more of his media work has been concentrated on him making phone calls, doing e-mails, and reaching out to media that way”); id. at 101:7-101:12 (“sometimes . . . he would choose cities based upon how it would best serve the interests of the public education and lobbying campaign he was doing that were not the city that Ringling Brothers was going to”).

58. Mr. Rider has been an extremely effective spokesperson on behalf of the elephants. See PFF 59 (and Exhibits cited therein); see also PWC 188B at 30:05-30:07, 30:17 - 30:20 (Deposition Testimony of Eric Glitzenstein, President of The Wildlife Advocacy Project, Dec. 21, 2007) (Mr. Rider “has generated a considerable amount of media over the course of time;” he “convinces reporters to do important pieces that shed light on abuses at Ringling Brothers and the

plight of circus animals generally”); see also Trial Tr. 16:07 - 16:19, Mar. 11, 2009 a.m. (Testimony of Cathy Liss, President of plaintiff Animal Welfare Institute, id. 4:15-5:01 (Mr. Rider has “been a terrific asset,” has been valuable in light of his “firsthand experience,” his “strong relationship with the elephants,” and being “willing to selflessly travel around the country doing media work.”); id. at 31:7-31:14 (Mr. Rider’s efforts are “vital” in light of FEI’s public relations work; “we strongly support them as essential to try to get the facts out to the public. They need to know what really is going on behind the scenes that they certainly may not be able to see very clearly at a performance”); id. 32:04 - 32:11 (Mr. Rider’s efforts are necessary “[t]o counter the advertising campaign by the circus”); see also Trial Tr. 17:12 - 17:17, March 10, 2009 a.m. (Lisa Weisberg of the ASPCA testifies that Mr. Rider “has got a lot of credibility, and he is clearly very committed to these elephants and to this issue”); Trial Tr., 64:10 - 64:24, Mar. 10, 2009 p.m. (Testimony of Michael Markarian, President of the Fund for Animals) (Mr. Rider’s public education efforts are valuable because they “heightened the debate on circus issues and the treatment of elephants in this country,” Mr. Rider is a particularly good spokesperson “[b]ecause he witnessed the treatment of elephants firsthand and because he was a former employee of Ringling Brothers, and he knew what the elephants had been through”).

59. Although the amount of funding has varied over the years, Mr. Rider currently receives approximately \$500 a week in grant money that covers his living expenses, including food, gas, camping fees, and sometimes a cheap motel room. He also has a cell phone and a lap top computer. Trial Tr. 90:05 - 93:03, Feb. 12, 2009 a.m.; see also PWC 188B at 36:13- 36:17 (Glitzenstein Dep., Dec. 21, 2007) (the funding of Mr. Rider has been based on a “confluence of what

he needs in order to survive while he does an activity we regard as quite essential to the overall campaign on behalf of circus animals and the availability of resources”).

60. FEI’s contention that the grants made to Mr. Rider for his public education campaign are somehow inappropriate because he relies on them for basic living expenses – including, on occasion, purchasing a DVD – is contradicted by the testimony of FEI’s own witnesses concerning grants they have received. For example, Dr. Dennis Schmitt, who according to FEI is testifying as both an expert and a fact witness, is the beneficiary of \$ 729,000 in “grants” made by FEI to Dr. Schmitt’s University; this grant funding is presently being used to pay Dr. Schmitt more than \$ 140,000 each year – money that he can spend on DVDs, to go to the movies, or anything else he pleases. Trial Tr. 48:25-49:25, March 16, 2009 p.m. (Schmitt Test.). Similarly, Dr. Ted Friend testified that the grant he received from the USDA for his transport provided funding for both expenses – i.e., travel, mileage, hotel, and food – but also to provide additional compensation for students assisting with the project. Trial Tr. 26:12-27:21, March 9, 2009 p.m.

61. The amount of money that Mr. Rider receives for his public education advocacy pales in comparison to the millions of dollars that FEI spends on public relations and advertising each year, and is also far less than what the plaintiff organizations or WAP would have to pay a public relations firm for comparable work. See Trial Tr. 88:19 - 90:23, March 3, 2009 p.m. (Kenneth Feld testifies that FEI “absolutely” spends more than a hundred thousand dollars a year on public relations, and “millions of dollars” on advertising each year); see also id. 92:21 - 93:01 (Mr. Feld testified that FEI spends “well into the millions” on advertising each year); id. 95:09 -99:17 (Mr. Feld admits that FEI pays for full-page ads in newspapers to tell the public that the Ringling Bros. elephants are healthy and that the animal rights groups are lying when they say the elephants are mistreated); see also PWC

188B at 37:21-38:02 (Glitzenstein Dep., Dec. 21, 2007) (WAP is “familiar with what it costs to hire public relations firms [a]nd the amount we give to Mr. Rider is a pittance compared to that”); id., 30:05 - 30:13 (Mr. Rider “has generated a considerable amount of media over the course of time . . . frankly, more so than, again, based upon my involvement in this public interest advocacy for many years, high-priced media outfits”).⁸

62. Neither Mr. Rider nor the other plaintiffs have tried to hide from FEI the fact that he receives funding from the plaintiff organizations and others to conduct his public education activities. The record shows that high-level officials at FEI have known about this since at least 2002. See PWC 197 (May 29, 2002 E-mail from Gary Jacobson to Richard Froemming (Vice President of FEI) (forwarding information about Tom Rider); id. at 4 (FEI 38336) (“Tom said he follows Ringling around to protect ‘my girls’ [the elephants], and ASPCA pays his expenses for traveling. When pressed by Caprio, Tom said ASPCA pays for hotels, bus far, meals, a new set of luggage, and other business expenses”). In addition, plaintiffs’ counsel informed the Court of this fact at a public hearing on September 16, 2005. See Trial Tr. (Sept. 16, 2005) at 29-30 (“[r]ight now [defendants] are out there on a daily basis making all kinds of statements about the wonderful care they give their elephants . . . and that our clients are lying . . . that we are whacky animal rights activists [and] cannot be trusted . . . And what we have on the other side, Your Honor, we have Tom Rider, a plaintiff in this case, he’s going around the country in his own van, he gets money from some of the clients and some other organizations to speak out and say what really happened when he worked there.”). Mr. Rider did not believe that the funding he received could accurately be described as “compensation for services rendered” in response to one of FEI’s interrogatories, see DX 16 at (Tom Rider’s Response to FEI Interrogatory No. 24) – because he did not view the funding as salary he received for a job,

but rather simply to pay for his out-of-pocket costs while he traveled around the country. See Trial Tr. 91:12 - 92:08, Feb. 12, 2009 p.m. However, in his very first discovery responses, Mr. Rider agreed to provide FEI with a complete list of all money he had received from “any animal advocate or animal advocacy organization,” but simply asked FEI to agree to let him do so pursuant to a confidentiality agreement. See DX 16 at 39 (objecting to publicly provide this information because it is “protected by his right to privacy,” but agreeing, “subject to a confidentiality agreement,” to “[i]dentify all income, funds, compensation, other money or items, including, without limitation, food, clothing, shelter, or transportation, [he has] ever received from any animal advocate or animal advocacy organization”) (emphasis added).

63. However, FEI refused this offer of information, and instead moved to compel the information. See FEI Motion to Compel Discovery from Plaintiff Tom Rider (March 20, 2007) (Docket Entry (“DE”) 126). Subsequently, the Court ruled that Mr. Rider had to disclose to FEI information concerning the funding he had received, but that he did not have to disclose the source of any such funding “unless it is a party, any attorney for any of the parties, or any officer or employee of the plaintiff organizations or WAP.” Order (Aug. 23, 2007) (DE 178) at 4. Therefore, the Court ordered Mr. Rider to provide FEI less information than Mr. Rider had originally agreed to provide FEI subject to a confidentiality agreement – i.e. all funding, including the source of all such funding, he has received from “any animal advocate or animal advocacy organization. See DX 16 at 39 (emphasis added). Pursuant to the Court’s ruling, Mr. Rider did provide FEI with all of the information required. See DX 16, Mr. Rider’s 2d Supplemental Discovery Responses (Sept. 24, 2007), at 13 - 16.

64. For all of these reasons, the Court concludes that there simply is no basis for FEI's assertion that Mr. Rider, or anyone else, tried to conceal from FEI the funding of Mr. Rider's public education activities.

2. Plaintiff Animal Protection Institute Also Has Article III Standing.

65. Plaintiffs have also demonstrated by a preponderance of the evidence that plaintiff Animal Protection Institute has standing in this case.

66. As plaintiff witness Nicole Paquette testified, the organizational mission of Plaintiff Born Free U.S.A. united with Animal Protection Institute (hereafter "API") is to advocate against cruelty and exploitation of animals. See Trial Tr. 2:19-3:6 and 4:4-4:6, Feb. 19, 2009 p.m. Ms. Paquette has worked at API for nine years, and has served as general counsel since 2002. Id. 3:14-3:19. She was also appointed by the director of the California Department of Fish and Game to serve on an advisory committee concerning the inspection of exotic pet owners, which she co-chairs with FEI's general counsel, Julie Strauss. Id. 24:11-24:21. In light of these experiences, and having heard and observed her testimony, the Court finds Ms. Paquette's testimony concerning API and its activities to be entirely credible.

67. Based in Sacramento, California, and formed in 1968, id. 3:10-3:13, API in December 2007 combined with another organization, Born Free U.S.A., and changed its name to Born Free U.S.A. united with Animal Protection Institute. Id. 43:24-44:1. API, which is a non-profit 501(c)(3) organization, has four campaign areas, one of which focuses on animals in entertainment. It also works on international wildlife trade, exotic pets, and trapping and fur issues. Id. 3:7-3:11; see also id. 44:11-44:15.

68. With regard to animals in circuses, API's work includes: (a) public education and advocacy; (b) legislative efforts; and (c) regulatory work. Id. 4:16-4:21; 23:24-24:5.

69. Ms. Paquette testified that the purpose of API's public education and advocacy efforts is to educate the public and API members regarding the treatment of animals such as the animals at the Ringling Brothers circus, including use of the bullhooks and chains. Id. 4:22-5:5.

70. API spends significant resources on these advocacy efforts. Id. 8:24-9:3; 9:18-9:20; 10:10-10:13; 11:19-11:23. These resources are used for API's website, fliers and posters that API distributes to the public, as well as its mailings to members, the organization of peaceful protests, a billboard campaign, and public service announcements. Id. 6:1-6:12; 9:7-11:23; see also PWC 92 at 1-29 (API 5550-5578). API also sends action alerts to members notifying them when the circus is coming, and advising them how to get involved in the issue. Trial Tr. 11:24-12:15, Feb. 19, 2009 p.m.; id. 14:4-14:16; see also PWC 92 at 30-31 (API 5594-5595); PWC 92 at 45-49 (API 4828-4832). In addition, API publishes a quarterly magazine that educates API members, and includes stories about the Ringling Brothers circus. Trial Tr. 12:16-13:22, Feb. 19, 2009 p.m.; see also PWC 92 at 32-44 (API 5622-5626; 5670-5673; 5679-5682). Again, API spends a significant amount of money producing and distributing these materials. Trial Tr. 13:23-14:3, Feb. 19, 2009 p.m. Although each of these efforts also includes some other circus work, Ms. Paquette testified that the majority of API's advocacy efforts on the circus campaign are focused on the Ringling Brothers circus. Id. 14:17-14:21.

71. API also engages in legislative advocacy as part of its circus campaign. Id. 17:25-18:6. This includes working for passage of local ordinances to regulate the circus by drafting legislation and working with legislators for its passage. Id. 18:7-18:19; 19:14-21:2; see also PWC

95 at 1-10 (API 1850-1852; 2013-2015; 1880-1883). It also includes working on the state level, where API has helped to introduce bills banning the use of bullhooks and chains in California, Nebraska, Connecticut and Massachusetts. Trial Tr. 21:3-22:8, Feb. 19, 2009 p.m.; see also PWC 95 at 11-12 (API 4938-4939). API has also been involved in efforts to pass national legislation on the issue. Trial Tr. 19:2-19:13, Feb. 19, 2009 p.m. On its website API's also maintains lists of all of this work. Id. 22:16-22:20; see also PWC 95 at 13-16 (API 639-642) (available at http://www.bornfreeusa.org/b4a3_circuses_and_shows.php). Once again, API spends significant resources on these legislative efforts. Trial Tr. 22:21-23:1, Feb. 19, 2009 p.m.

72. API also works on the regulatory level to help animals in circuses. Id. 24:4-24:5. API comments on state regulations, especially in California where API is based, id. 24:5-24:10, and it also works on the federal level, monitoring the Federal Register, commenting on regulatory developments by the USDA under the AWA, and submitting Freedom of Information Act ("FOIA") requests to the USDA concerning animal circuses. Id. 24:22-25:5. API also monitors USDA's activities, and obtains and reviews USDA reports on AWA licensees, including, for example, USDA's 2004 Audit Report on AWA enforcement. Id. 25:6-26:15; 28:4-28:6; see also PWC 84. These efforts are necessary in part to counter the public relations efforts engaged in by FEI, in which it assures the public that the animals used in the circus, including the elephants, are healthy, well cared for, and content, and that animal advocacy groups that say otherwise are lying and extremists and should not be trusted. See PFF ¶¶ 382-386; see also Trial Tr. 30:25-32:11 Mar. 11, 2009 a.m. (Cathy Liss, President of the Animal Welfare Institute, explains that spending resources on public education on this issue is "vital" to counter the misinformation disseminated by FEI).

73. API also regularly monitors the Federal Register for activities of the Fish and Wildlife Service under the ESA, and regularly comments on permits issued by the FWS concerning captive animals after reviewing the application materials as permitted by ESA Section 10. Trial Tr. 28:7-28:16, Feb. 19, 2009 p.m. For example, Ms. Paquette testified that when FWS published a notice that it was considering granting permits for the take of certain endangered species in “canned hunts” in the United States, API requested all of the permit materials and then was able to use that information to advocate its position concerning the purported conservation efforts associated with these hunting activities. Id. 29:24-30:14.

74. API has 40,000 members and supporters nationwide. API and its members are concerned about Ringling Brothers use of the bullhook on elephants, the chaining of the elephants, and their transport across the country. Id. 5:6-5:25. In addition to API’s ongoing advocacy efforts, to address these concerns, in July 2005 API sent FEI a 60-day notice letter of intent to sue for violations of the ESA. Id. 16:10-17:6; see also PWC 91, and, on February 23, 2006, API became a plaintiff in this suit. See DN 60.

75. If plaintiffs prevail in this action, either FEI will not longer be able to mistreat the Asian elephants or, at the very least, it will be required to apply for a permit under Section 10 of the ESA, 16 U.S.C. § 1539, in order to engage in activities that otherwise unlawfully “take” the endangered Asian elephants under ESA Section 9. Id. § 1538. In that event, either FEI would not be able to obtain a permit, or, if the FWS granted FEI a permit, it would impose restrictions on the way the elephants are treated. Under any of these scenarios API would not need to spend as many resources on informing the public about these matters and advocating the protection of the endangered elephants.

76. Ms. Paquette testified that because Ringling Brothers has not applied for a Section 10 permit concerning their elephants, API is forced to use other means to endeavor to collect information to advocate for these animals, including monitoring news services. Trial Tr. 30:18-31:1, Mar. 11, 2009 a.m. API spends significant staff time trying to collect this information. Id. 31:2-31:4.

77. In 2007, API spent approximately \$ 97,000 on its work advocating for the better treatment of animals in captivity. Id. 36:16-37:10. API spent a similar amount in 2008. Id. 37:20-37:25. These funds include staff time, legislative efforts, and public advocacy and media efforts, and the bulk of these amounts are associated with API's advocacy concerning the Ringling Brothers elephants. Id. 37:13-37:19; 38:4-38:11.

78. API also expends approximately \$40,000 each year pursuing alternative sources of information from individuals, other organizations and government agencies concerning Ringling Brothers' treatment of its Asian elephants, id. 38:12-39:18. Again, these are resources that API would largely no longer have to spend if FEI were either enjoined from engaging in the practices that mistreat the elephants or it is required to apply for a permit under ESA Section 10. Id. 39:19-39:25.

79. In light of Ms. Paquette's testimony and the record evidence before the Court, the Court finds that relief in this case will reduce the amount of resources API will need to spend on monitoring defendant's treatment of Asian elephants, reporting its findings to its members, the public, and regulatory authorities, and advocating for better treatment of these endangered animals.

80. In addition, if FEI were required to apply for a permit, Ms. Paquette testified that API would request and utilize the information FEI would be required to submit with its application. Id. 31:2-34:19. For example, under 50 C.F.R. Section 17.22, to obtain a permit FEI would be required to describe the facilities where the elephants are being used, displayed and maintained – information

that would allow API to know, on an ongoing basis, the kinds of facilities where the elephants are being displayed and maintained, such as the kind of substrate they are standing on, whether they are indoors or outside, and the extent of their chaining. See 50 C.F.R. § 17.22(a)(v); see also Trial Tr. 31:20-32:14, Feb. 19, 2009 p.m.. FEI would also be required to provide the experience of the animal handlers – which would permit API to monitor, again, on an ongoing basis, who is handling the elephants and what experience they have for the job. See 50 C.F.R. § 17.22(a)(vi); Trial Tr. 32:15-33:9, Feb. 19, 2009 p.m. Ms. Paquette testified that all of this information would be useful to API. Id. 32:7-32:14; 32:22-33:9.

81. Furthermore, FEI would be required to describe both the “takes” that will occur under the permit, as well as why such takes are justified – which would allow API to learn, on an ongoing basis, both (a) the specific manner in which FEI’s elephants are being treated – such as, e.g., how the bullhook is used to discipline and train the elephants; when it is used outside of discipline and training; and how long and the manner in which the elephants are chained and confined – and (b) FEI’s justification for these activities – i.e., how FEI’s activities justify nevertheless engaging in an otherwise unlawful take of an endangered species because they “enhance the propagation or survival of the affected species” within the meaning of Section 10. See 16 U.S.C. § 1539(a)(1)(A); 50 C.F.R. § 17.22(vii); see also Trial Tr. 33:12-34:8, Feb. 19, 2009 p.m. If the FWS were to grant a Section 10 permit, Ms. Paquette testified that API would obtain and use in its advocacy work the agency’s findings as to the reasons that FEI’s activities are consistent with the ESA. Id. 104:24-105:23.

82. Ms. Paquette also testified that if API were to obtain all of this information, the organization would use the data for fact sheets, magazine articles, website postings and other forms of information to inform API’s members and the general public about these matters and to further its

advocacy efforts. She further testified that API would be able to use this information in its legislative efforts. Id. 34:9-34:17; see also id. 85:3-85:12.

II. RELEVANT BACKGROUND

A. The Applicability Of The ESA To The Elephants At Issue.

1. The Asian Elephant

83. The Asian elephant is listed as an endangered species under the ESA. 50 C.F.R. § 17.11. It was listed on June 14, 1976. See 41 Fed. Reg. 24064.

84. As plaintiffs' expert witness Dr. Joyce Poole – one of the world's leading experts on elephants – explained, and defendant's experts did not dispute, elephants are extremely intelligent animals. Trial Tr. 16:15 - 17:02, Feb. 4, 2009 p.m. (Testimony of Dr. Poole); id., 29:17 - 30:22. As explained by plaintiffs' expert Dr. Benjamin L. Hart – a Professor Emeritus at the University of California at Davis, who has taught animal behavior for more than forty years, developed the first course in a U.S. veterinary school on animal behavior, and has done extensive research on elephant intelligence and behavior, Trial Tr. 73:21–74:1, 74:16-75:7, Feb. 10, 2009 a.m. – elephants have by far the largest brain of all terrestrial animals, and also have the “largest cerebral cortex of all terrestrial animals.” Id. at 90:18-91:4; see also Trial Testimony of FEI's expert witness Gary Johnson, 32:24-32:25, Mar. 5, 2009 a.m. (Elephants are “very intelligent animals”). They are “self-aware,” make and use rudimentary tools, are capable of empathy, understand the concept of death, and have long-term memories. Trial Tr. 16:15 - 17:05, Feb. 4, 2009 p.m. (Testimony of Dr. Poole); id. at 30:23 - 32:01; 32:02- 32:17; Trial Tr. 57:01 - 57:15 Feb. 5, 2009 a.m. (because elephants “have the capacity of empathy,” they get upset when they see another elephant beaten, “so it's not only what the animal has experienced itself, but the feelings that it has for others and how they're being treated”).⁹

85. The elephants' empathy is further demonstrated by the fact that the older elephants show signs of distress when the younger elephants are being mistreated at FEI. See PFF ¶ 15 and Endnote 3 (Testimony of Tom Rider that Karen rattled her chains when Benjamin was being beaten by Pat Harned); see also PWC 190D (USDA Complaint based on testimony of former Ringling Bros. employees Glen Ewell and James Stechon), Addendum at 3 (F03275) (“[w]hen Benjamin is beaten, all the adult elephants cause a ‘ruckus’ and create a danger to the crew;” “[t]he adult elephants go ‘berserk’ and get ‘really freaked out and pull on their chains’ when Benjamin is beaten”).

86. As Dr. Poole and plaintiffs' other expert witnesses have also testified, elephants are also extraordinarily social animals; in the wild, they live in matriarchal societies in which the females stay with their families for their entire lives and the males leave only when they become sexually active at about the age of 14. See Trial Tr. 32:18 - 34:09, Feb. 4, 2009 (Testimony of Dr. Poole); see also Trial Tr. Carol Buckley 34:5-34:9, Feb. 23, 2009 a.m. (“If they're given the choice, female elephants will spend all their time interacting with each other, eating; if they have the freedom to move, they will move, not quickly, but they will meander, but most of their time is spent interacting with each other.”); Trial Tr. Colleen Kinzley 36:15-36:16, Feb. 18, 2009 p.m. (“They are also very highly social animals and they engage in a lot of social interactions.”) see also PWC 177A, 63:15 - 63:19 (Deposition of Troy Metzler Deposition) (July 25, 2006) (elephants are social animals that like to be with other elephants).

87. Elephants are also very mobile: in the wild they walk long distances each day, typically sleeping no more than four to five hours each day. See Trial Tr. 17:06 - 17:16, Feb. 4, 2009 p.m. (Testimony of Dr. Poole); id. at 73:19 - 73:22 (Elephants “want to move all the time, and they are very exploratory, they want to use their trunks all the time to check out what's happening”); see also

Trial Tr. 12:11 - 12:12 a.m. (a normal elephant is inquisitive), Feb. 5, 2009 (Dr. Poole); id. 80:24 - 80:25 (“they are intelligent and social”); see also Trial Tr. Carol Buckley 25:22-25:25, Feb. 23, 2009 evening (“it’s not natural for elephants to stand perfectly still. They will stand still when they are napping, that doesn’t last for very long. Otherwise, they’re constantly walking.”); id., at 35:13-35:18 (Elephants only sleep for “maybe four, five hours” during each 24-hour period). FEI’s own witness, Gary Jacobson testified that the adult elephants normally sleep only 3-4 hours a night. See Trial Tr. 60:24 - 60:25, Mar. 5, 2009 p.m.

88. Elephants are a “very long-lived species;” excluding death as the result of wounds inflicted by people, the median life span for females is 54 years old. Trial Tr. 38:25 - 39:18, Feb. 4, 2009 p.m. (Testimony of Dr. Poole).

89. Elephants have extremely sensitive skin, and are particularly sensitive on certain parts of their bodies, including in, around, and behind their ears, on their legs, and in and around their mouths. Trial Tr. 15:13 - 16:01, Feb. 4, 2009 p.m. (Testimony of Dr. Poole); Trial Tr. Colleen Kinzley 35:10-35:24, Feb. 18, 2009 p.m. (“Elephants are pachyderms, which means they have thick skin, and in fact in some parts of their body their skin is thick, but in many other areas they have very thin skin. Behind the ears, around the anus, around the eyes. But they also, over their entire body, have sensitive skin, and they spend a lot of time involved in taking care of their skin. Bathing, mud wallowing, dusting are all very important behaviors for elephants, and ones that you’ll frequently see them engage in both in the wild and in captivity. And, you know, one of the things that I like to tell people is that they are very responsive to insects, and they are also very sensitive to sunburn, but an elephant will be bothered even by a housefly touching down on its skin. They will react to that. So they do in fact have very sensitive skin.”). Indeed, research performed by plaintiffs’ expert Dr.

Benjamin Hart has demonstrated that elephants are so bothered by fly bites that they have evolved the extraordinary ability to use and modify branches to use as switches in order to reduce the number of bites. Trial Tr. 69:19-70:11, Feb. 10, 2009 p.m. (Hart Test.).

90. FEI's own witnesses agree that elephants have sensitive skin. See, e.g., PWC 175 at 173:15 - 173:17 (Deposition of Gary Jacobson) (Nov. 20, 2007); see also Trial Tr. Kari Johnson 107:13-107:17, Mar. 4, 2009 p.m. (admitting that elephants perceive the slightest touch on their skin); id., at 46:02-46:06 (the sensitive areas include "around the eyes," "around the genitals," "under the arm pits," "[m]aybe the inside of the ears").

91. As Dr. Poole has also testified, elephants are naturally excellent swimmers. In fact, they are the "best swimmers of any land mammal." Trial Tr. 37:22 - 38:07, Feb. 4, 2009 p.m. They also love to swim, and to cover themselves in mud. Id.; see also Elephant Lord of the Jungle film, PWC 113B.

2. Captive Elephants Are Wild Animals

92. Although captive elephants are sometimes referred to as being "domesticated," Dr. Poole explained that "they are domesticated in the sense that they are part of the economic, socioeconomic system, living with people, working for people," but that "they are not domesticated in the Darwinian sense." Trial Tr. 39:20 - 39:04, Feb. 4, 2009 p.m. Thus, Dr. Poole explained:

In the Darwinian sense you start by bringing in, say, wild animals, and then you isolate them from the wild population and do selective breeding so that you end up with a breed like a dog, like the difference between a dog and a wolf. But in elephants that has never happened.

Id. at 40:05 - 40:09. Accordingly, as explained by Dr. Poole, captive elephants "are no different from wild populations," and have not become domesticated "in that genetic or Darwinian sense." Id. 40:09 - 40:11, 41:01 - 41:02; see also Trial Tr. 100:21-100:22, Feb. 10, 2009 p.m. ("[T]he evolution of the

elephant hasn't changed . . . it is the same elephants as they were in nature."); Trial Tr. 27:11-21, Feb. 11, 2009 a.m. (Testimony of Ros Clubb) (Elephants "haven't been domesticated and they haven't been selectively bred of many, many generations as we would classify, for instance, farm animals or pet animals. They have been tamed, but that's a different process, and that [in] the domestication process, you're basically selecting for particular genes and particular traits, and often that involves selecting them so that they're more adaptive to the captive life, whereas taming is quite different, and I would say that elephants have been tamed but not domesticated.").

93. As Dr. Poole further explained, the fact that the captive elephants are not domesticated in the Darwinian or genetic sense means that in terms of determining what is the elephant's natural behavior, the FEI elephants need to be compared to wild elephants. See Trial Tr. 40:12 - 40:16, Feb. 4, 2009 p.m. . Thus, as Dr. Poole explained, "[y]ou can't call it a circus elephant as if somehow a circus elephant is another breed, because they are not. They are still, genetically . . . exactly the same as wild elephants." Id. at 40:16 - 40:19 (emphasis added). Trial Tr. Carol Buckley 46:6-46:9, Feb. 23, 2009 p.m. (Testimony of Carol Buckley ("[a]ny elephant that is brought into captivity is a wild elephant. The elephants that are born in captivity are not domesticated animals. So they, too, are wild animals born in captivity") (emphasis added).

94. FEI's own witnesses agreed that the FEI elephants are wild animals. Gary Jacobson admitted that the elephants are wild when they are born at the CEC and that he has to "train" them to make them usable for the circus. Trial Tr. 39:12 - 39:20, Mary 9, 2009 a.m.; see also Trial Tr. 105:05 - 105:07, March 5, 2009 p.m. (Jacobson Testimony) (stating that if FEI could not chain Karen and Nicole they would "have to treat them as if they're wild elephants").

95. Indeed, FEI's employees also admitted that because the elephants are wild they are also extremely dangerous. Thus, Mr. Jacobson explained that the reason Karen and Nicole have to be handled in free contact is that this is the only way "to keep the elephants safe from one another and people safe from the elephants," and that all of the elephant handlers need to carry bullhooks around the elephants when they are off their chains because this is "the only way you can stay safe." Trial Tr. 36:12 - 36:14, March 5, 2009 p.m.; id. at 71:15 - 71:19. Mr. Jacobson further testified that the reason FEI's male elephants must be kept "behind bars" once they get to be about eight years old is that they are "extremely dangerous." Id. at 37:05 - 37:12. FEI witnesses Brian French and Daniel Raffo agreed that the elephants are extremely dangerous. See Trial Tr. 57:10 - 58:02, March 12, 2009 a.m. (Brian French testified that the handlers need to use bull hooks because otherwise it would not be "safe for the public"); Trial Tr. 67:06 0 67:08, March 4, 2009 a.m. (Daniel Raffo testified that if an elephant wanted to it "could take you and kill you and smash you right then and there"). On the other hand, Troy Metzler denied that the elephants are dangerous – one of the many reasons this Court should not accept Mr. Metzler as a credible witness for the defense in this case. See Trial Tr. 51:12 - 52:08, March 12, 2009 eve. Moreover, Mr. Metzler's denial at trial is completely contrary to what he tells those who work at the circus. See PWC 168 B at 65:19 - 66:02 (Deposition of Gerald Ramos, Jan. 24, 2007) (Troy told him that the elephants are "dangerous animals, not pets").

96. In fact, Mr. Jacobson confirmed that there have been several incidents over the years when FEI elephants attacked their handlers. Thus, Axel Gautier was killed by an elephant in the 1990s; in 2005 an elephant knocked down a handler at the CEC and stepped on him, requiring him to be flown by helicopter to a hospital; in 2008, the young male elephant P.T. knocked Joe Frisco down while the circus was in Miami, requiring Mr. Frisco to go to the hospital; and very recently

Emma – one of the females who is kept on chains at the CEC for 22 ½ hours every day – knocked Randy Peterson down, requiring him to be hospitalized and get stitches on his face. See Trial Tr. 48:02- 51:19, March 9, 2009 a.m. (Jacobson Testimony); see also Trial Tr. Gail Laule 26:5-26:12, Feb. 18, 2009 a.m. (explaining that there have been “many cases” of elephants killing handlers which is one of the reasons she developed the protected contact method of handling elephants, because “people were being hurt and killed by elephants”).

3. The Asian Elephants In FEI’s Possession

97. FEI currently has fifty-four Asian elephants in its possession. See Trial Tr. 8:09 - 8:13, March 3, 2009 p.m. (Testimony of Kenneth Feld); see also Chart A, PWC A (Elephants Born to FEI); Chart B, PWC B (additional Elephants Owned by FEI). As indicated on Chart A, PWC 151, four of the 22 elephants born to FEI have died (hence the number of elephants born to FEI who remain living is 18); as indicated on Chart B, PWC 169, two of the elephants listed have also died (and hence the number of those elephants is 36). Eighteen of FEI’s elephants were born in captivity; the others, including all seven of the elephants with whom plaintiff Tom Rider worked – Karen, Nicole, Jewell, Lutzi, Mysore, Susan, and Zina – were born in the wild. Id.; see also PWC 36, Asian Elephant North American Regional Studbook, PWC 36, at 112-114.

98. FEI currently uses nineteen Asian elephants in its traveling circus; see Trial Tr. 8:09 - 8:13, March 3, 2009 a.m. (Testimony of Kenneth Feld); five of the other 54 elephants (Siam, Cora, Putzi; and Sabu and Prince) are currently maintained at FEI’s “Retirement” facility in Williston, Florida, see Deposition of Jeff Pettigrew (Nov. 14, 2008), 87:10 - 87:15; 87:22 - 88:06; see also Chart B, PWC 169; and the remaining thirty elephants are currently being maintained at FEI’s “Center for Elephant Conservation” (“CEC”) in Polk City, Florida. See PWC 151, 169.

99. Elephants are often transferred between the CEC and various units of the circus and then back to the CEC. See PWC 169; see also Trial Tr. 76:04 - 76:09, March 3, 2009 p.m. (Kenneth Feld testifies that elephants go from the road to the CEC and back to the road).

100. FEI operates three basic “units” of the circus – the Blue, Red, and Gold Units. See Trial Tr. 27:06-27:08, March 3, 2009 a.m. (Testimony of Kenneth Feld).

101. Both the Blue and Red Units travel by train throughout the country, and go to approximately 42-44 cities each year. See, e.g., PWC 64 (Itineraries for Blue and Red Units); Trial Tr. 29:08 - 29:10, March 3, 2009 a.m. (Testimony of Kenneth Feld).

102. At present, two of the seven elephants with whom Mr. Rider worked when he was at the circus, Karen and Nicole, are traveling with the Blue Unit, and five of the other elephants with whom he worked are located at the CEC – Jewell, Lutzi, Mysore, Susan, and Zina. See PWC 169.

103. Most of the Asian elephants in FEI’s possession were born in the wild, and have been with FEI for decades, including all seven of the elephants with whom Mr. Rider worked, see PWC 36 (Studbook) at 112-114, PWC 169 (Chart concerning date of birth and acquisition by FEI), and they all have spent decades traveling on the road with the circus. Thus, Karen has spent her entire life – 40 years – on the road performing in the Ringing Bros. circus; Nicole has been performing for 26 years and continues to travel on the road each year; Jewell performed with the circus for approximately 50 years before being moved to the CEC; Lutzi for about 51 years; Susan for 49 years; Zina for approximately 31 years; and Mysore for approximately 20 years. See id.

104. Therefore, according to Mr. Feld’s own figures, because “the vast majority of the people who come to [the circus] come to see the elephants,” see PFF 111, so far Karen and the other elephants have generated approximately four billion dollars in revenue for FEI. See id.; PFF 111 (Mr.

Feld testified that the circus generates at least \$100,000,000 in each year); id. (40 x (\$100,000,000 = \$ 4 billion).

105. The elephants who travel with the circus are one small part of an overall circus show that lasts about two hours and also includes clowns, acrobats, motorcycles, pyrotechnics, a high wire act, dancers, horses, zebras, tigers, and dogs. See, e.g., PWC 177A, at 127:22 - 148:17 (Metzler Dep. Aug. 8, 2006); see also PWC 136B (Videotape of Performances Produced by FEI).

106. The elephants are dressed in colorful costumes and paraded in and out of the arena, and some of them perform various “tricks” on command – e.g., they stand on two legs, sit on tubs, ring a bell, or wave their trunks. PWC 136B; PWC 177A, at 127:22 - 148:17 (Metzler Dep. Aug. 8, 2006) .

107. The tricks that the elephants are made to perform in the circus are not natural behaviors. See PWC 136; see also Trial Tr. 83:01 - 84:01, Feb. 4, 2009 a.m. (Testimony of Dr. Poole); Trial Tr. Carol Buckley 86:11-86:23, Feb. 23, 2009 a.m. (“They’re very intelligent and they’re physically coordinated, but these behaviors that are requested are not natural behaviors that they would do and hold in the wild”); Trial Tr. Colleen Kinzley 53:2-53:16, Feb. 18, 2009 p.m.; see also Trial Tr. 105:5-105:9, Mar. 4, 2009 p.m. (Testimony of FEI expert witness Kari Johnson) (Reading from a book regarding her stepfather Robert Smokey Jones’ training techniques which states that “[a]n elephant in the sitting position is a spectacular spectacle partly because of the enormous size of the elephants and partly because *wild elephants are rarely seen in this unnatural posture*. An elephant in a sitting position is frequently seen in circus acts.”).

108. The total time the elephants are part of the performance is at most bout nine minutes. See Trial Tr. 38:02 - 38:12, March 4, 2009, a.m. (testimony of Daniel Rafo) (the elephant act is 7-9

minutes long); see also PWC 177A, 147:21 - 148:03 (Metzler Dep.) (July 25, 2006) (the main elephant act is “6 minutes, 19 seconds”).

4. FEI Uses The Asian Elephants For Commercial Purposes.

109. FEI exhibits endangered Asian elephants for commercial profit.

110. Kenneth Feld is the Chairman of FEI and its Chief Executive Officer. Trial Tr. 4:24 - 5:01, March 3, 2009 p.m. He and his family own approximately ninety-eight percent of FEI. Id., 24:19 - 25:13. The only other owner is Jerome Sowalsky, General Counsel of FEI, who owns something like 2 percent of the company. Id. Mr. Feld has a hundred percent control over the company. Id., 25:14 - 25:21. Although Mr. Feld testified that he has no idea what his annual salary is, id. 25:22 - 26:09, he was willing to divulge that it is “something over a million dollars” a year, id. at 26:18 - 26:24, and that in addition to this he gets an annual bonus from FEI based on how well it performs. Id. 26:25 - 27:05.

111. Mr. Feld testified that the circus produces “over a hundred million dollars a year” for FEI, Trial Tr. 27:18 - 27:25, March 3, 2009 p.m., that the elephants are “the most important part” of the circus, and that “the vast majority of the people that come to our shows come to see the elephants.” Id. at 7:13 - 7:25. Mr. Feld also testified that FEI spends approximately \$62,000 a year on each of the elephants, id. at 10:03 - 10:06 – for a total of approximately \$3,348,000 each year (\$62,000 x 54 elephants), or 3.4% of the revenue that the circus generates for FEI.

112. FEI’s own documents demonstrate that many of the elephants in its possession were traded to or by defendant for money since June 14, 1976. See PWC1C–Josky (Bill of Sale for six elephants being sold to FEI by Schmitt); PWC 1C–Casey (sale of elephant Casey to FEI from Roman Schmitt); PWC 1C–Dolly (sale of five elephants from Diamond “O” Ranch to FEI); PWC 1C–

Smokey (sale of elephant Smokey to Gary Jacobson from FEI); DX 3 at 12, FELD 5354 (Mr. Sowalsky affidavit explaining the purchase of six elephants from Hermann Ruhe).

113. FEI has never reintroduced into the wild any of the elephants born at the CEC, nor does it have any intention of doing so. PWC 46 at 6 (Defendants' Response to Plaintiffs' Admissions); Trial Tr. 73:10 - 73:12, 74:01 - 74:03 (Testimony of Kenneth Feld).

114. At least four young elephants who were born at the CEC have died since January 1, 1998 – Kenny, Benjamin, Riccardo, and Bertha – although FEI continues to feature these deceased elephants in its advertising materials to demonstrate that it is “conserving” the Asian elephant for future generations. See PWC 151; PWC 99A (brochure).

115. FEI has castrated male elephants, including at least two of the elephants that it prroduced. See Trial Tr. 85:08 - 88:14, March 3, 2009 p.m. (Testimony of Kenneth Feld); PWC 151.

5. The Training And Handling History Of The Seven Elephants With Whom Mr. Rider Worked.

a) Karen

116. The evidence shows that the elephant Karen was trained by Axel Gautier see PWC 152 at 20:16-20:17 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), and that Karen has been handled by the following FEI employees: Kevin and Michael Gautier see PWC 152 at 109:06-110:07 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Jeff Pettigrew see PWC 152 at 118:14-119:13 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Daniel Raffo see Trial Tr. at 6:21-7:16, March 4, 2009 a.m., Robert Ridley see PWC 152 at 119:14-119:21 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and Trial Tr. 28:08-28:13, Feb. 17, 2009 evening, Buckles Woodcock see PWC 152 at 93:01-93:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and Trial Tr. 58:22-59:10, March 9, 2009 a.m., Graham Chipperfield see PWC 152 at

115:03-116:02, 116:22-117:17 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Troy Metzler see Trial Tr. 49:22-49:25, March 12, 2009 evening, Trial Tr. 44:02-44:16, March 3, 2009 p.m. and PWC 177 A at 124:13-125:03 (Metzler Dep., July 25, 2006), Randy Peterson see PWC 152 at 121:15-122:07, 122:13-122:21 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Patrick Harned see WC 152 at 128:08-128:16 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Brian French see Trial Tr. 9:08-11:07, 19:22-20:13, March 12, 2009 a.m., Hicham Basllam see PWC 183 at 1, and Alex Vargas see Trial Tr. 19:07-19:19:11, Feb. 12, 2009 a.m., PWC 152 at 120:03-120:15, 121:02-121:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and PWC 182 at 51:19-52:06 (Vargas Dep., May 31, 2007). The record shows that Karen is currently being handled by the following FEI employees; Robert Ridley see Trial Tr. 49:12-49:25, March 3, 2009 p.m., Hicham Basllam see PWC 183 at 1 and Brian French see Trial Tr. 19:22-20:13, March 12, 2009 a.m.

b) Nicole

117. The evidence shows that the elephant Nicole was trained by Axel Gautier see DX 308 at 28:09-28:15 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), and that Nicole has been handled by the following FEI employees: Kevin and Michael Gautier see PWC 152 at 109:06-110:07 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Robert Ridley see PWC 152 at 119:14-119:21, Buckles Woodcock see PWC 152 at 93:01-93:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and Trial Tr. 58:22-59:10, March 9, 2009 a.m., Jeff Pettigrew see PWC 152 at 118:14-119:13 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Daniel Raffo see Trial Tr. at 6:21-7:16, March 4, 2009 a.m., Alex Vargas see Trial Tr. 19:07-19:19:11, Feb. 12, 2009 a.m., PWC 152 at 120:03-120:15, 121:02-121:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and PWC 182 at 51:19-52:06 (Vargas Dep., May 31, 2007), Graham Chipperfield see PWC 152 at 115:03-116:02, 116:22-117:17 (Jacobson 30(b)(6) Dep., Jan. 18,

2008), Hicham Basllam see PWC 183 at 1, Troy Metzler see Trial Tr. 49:22-49:25, March 12, 2009 evening, Trial Tr. 44:02-44:16, March 3, 2009 p.m. and PWC 177 A at 124:13-125:03 (Metzler Dep., July 25, 2006), Randy Peterson see PWC 152 at 121:15-122:07, 122:13-122:21 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Patrick Harned see WC 152 at 128:08-128:16 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), and Brian French see Trial Tr. 19:22-20:13, March 12, 2009 a.m. The record shows that Karen is currently being handled by the following FEI employees: Brian French see Trial Tr. 19:22-20:13, March 12, 2009 a.m., Hicham Basllam see PWC 183 at 1, and Robert Ridley see Trial Tr. 49:12-49:18, March 3, 2009 p.m.

c) Susan

118. The evidence shows that the elephant Susan was trained by Smokey Jones see PWC 152 at 26:01-26:03 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), and that Susan has been handled by the following FEI employee: Kevin and Michael Gautier see PWC 152 at 109:06-110:07 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Robert Ridley see PWC 152 at 119:14-119:21, Buckles Woodcock see PWC 152 at 93:01-93:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and Trial Tr. 58:22-59:10, March 9, 2009 a.m., Gary Jacobson see Trial Tr. 34:05-36:03, March 5, 2009 p.m., Jeff Pettigrew see PWC 152 at 118:14-119:13 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Alex Vargas see Trial Tr. 19:07-19:19:11, Feb. 12, 2009 a.m., PWC 152 at 120:03-120:15, 121:02-121:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and PWC 182 at 51:19-52:06 (Vargas Dep., May 31, 2007), Graham Chipperfield see PWC 152 at 115:03-116:02, 116:22-117:17 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Troy Metzler see PWC 177 A at 124:13-125:03, 126:06-126:18 (Metzler Dep., July 25, 2006) and Trial Tr. 49:02-49:21, March 12, 2009 evening, Randy Peterson see PWC 152 at 121:15-122:07, 122:13-122:21, 126:07-127:09 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Patrick Harned see WC 152

at 128:08-128:16 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Trial Tr. 45:14-45:19, March 3, 2009 p.m., and Trial Tr. 23:01-23:02, March 9, 2009 a.m., Brian French see Trial Tr. 9:08-11:07, March 12, 2009 a.m., Joseph Frisco see PWC 174 A 34:16-35:07, 48:14-49:10, 50:22-51:05 (Frisco Dep., Dec. 7, 2007), Hicham Basllam see PWC 183 at 1, and Daniel Raffo see Trial Tr. at 6:21-7:16, March 4, 2009 a.m. The record shows that Susan is currently being handled by the following FEI employees: Gary Jacobson see Trial Tr. 34:05-36:03, March 5, 2009 p.m., Patrick Harned see Trial Tr. 45:14-45:19, March 3, 2009 p.m., and Trial Tr. 23:01-23:02, March 9, 2009 a.m., and Troy Metzler see Trial Tr. 49:02-49:21, March 12, 2009 evening.

d) Jewell

119. The evidence shows that the elephant Jewell was trained by Smokey Jones see PWC 152 at 23:19-23:21 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), and that Jewell has been handled by the following FEI employees: Kevin and Michael Gautier see PWC 152 at 109:06-110:07 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Robert Ridley see PWC 152 at 119:14-119:21, Buckles Woodcock see PWC 152 at 93:01-93:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and Trial Tr. 58:22-59:10, March 9, 2009 a.m., Gary Jacobson see Trial Tr. 34:05-36:03, March 5, 2009 p.m., Jeff Pettigrew see PWC 152 at 118:14-119:13 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Alex Vargas see Trial Tr. 19:07-19:19:11, Feb. 12, 2009 a.m., PWC 152 at 120:03-120:15, 121:02-121:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and PWC 182 at 51:19-52:06 (Vargas Dep., May 31, 2007), Graham Chipperfield see PWC 152 at 115:03-116:02, 116:22-117:17 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Troy Metzler see PWC 177 A at 124:13-125:03, 126:06-126:18 (Metzler Dep., July 25, 2006) and Trial Tr. 49:02-49:21, March 12, 2009 evening, Randy Peterson see PWC 152 at 121:15-122:07, 122:13-122:21 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Patrick Harned see WC 152 at 128:08-

128:16 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Trial Tr. 45:14-45:19, March 3, 2009 p.m., and Trial Tr. 23:01-23:02, March 9, 2009 a.m., Brian French see Trial Tr. 9:08-11:07, March 12, 2009 a.m., Joseph Frisco see PWC 174 A 34:16-35:07, 48:14-49:10, 50:22-51:05 (Frisco Dep., Dec. 7, 2007), Hicham Basllam see PWC 183 at 1, and Daniel Raffo see Trial Tr. at 6:21-7:16, March 4, 2009 a.m. The record shows that Jewell is currently being handled by the following FEI employees: Gary Jacobson see Trial Tr. 34:05-36:03, March 5, 2009 p.m., Patrick Harned see Trial Tr. 45:14-45:19, March 3, 2009 p.m., and Trial Tr. 23:01-23:02, March 9, 2009 a.m., and Troy Metzler see Trial Tr. 49:02-49:21, March 12, 2009 evening.

e) Lutzi

120. The record shows that the elephant Lutzi was trained by Smokey Jones see PWC 152 at 23:19-24:07 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), and that Lutzi has been handled by the following FEI employees: Kevin and Michael Gautier see PWC 152 at 109:06-110:07 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Robert Ridley see PWC 152 at 119:14-119:21, Buckles Woodcock see PWC 152 at 93:01-93:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and Trial Tr. 58:22-59:10, March 9, 2009 a.m., Gary Jacobson see Trial Tr. 34:05-36:03, March 5, 2009 p.m., Jeff Pettigrew see PWC 152 at 118:14-119:13 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Alex Vargas see Trial Tr. 19:07-19:19:11, Feb. 12, 2009 a.m., PWC 152 at 120:03-120:15, 121:02-121:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and PWC 182 at 51:19-52:06 (Vargas Dep., May 31, 2007), Graham Chipperfield see PWC 152 at 115:03-116:02, 116:22-117:17 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Troy Metzler see PWC 177 A at 124:13-125:03, 126:06-126:18 (Metzler Dep., July 25, 2006) and Trial Tr. 49:02-49:21, March 12, 2009 evening, Randy Peterson see PWC 152 at 121:15-122:07, 122:13-122:21 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Patrick Harned see WC 152 at 128:08-

128:16 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Trial Tr. 45:14-45:19, March 3, 2009 p.m., and Trial Tr. 23:01-23:02, March 9, 2009 a.m., Brian French see Trial Tr. 9:08-11:07, March 12, 2009 a.m., Joseph Frisco see PWC 174 A 34:16-35:07, 48:14-49:10, 50:22-51:05 (Frisco Dep., Dec. 7, 2007), Hicham Basllam see PWC 183 at 1, and Daniel Raffo see Trial Tr. at 6:21-7:16, March 4, 2009 a.m. The record shows that Lutzi is currently being handled by the following FEI employees: Gary Jacobson see Trial Tr. 34:05-36:03, March 5, 2009 p.m., Patrick Harned see Trial Tr. 45:14-45:19, March 3, 2009 p.m., and Trial Tr. 23:01-23:02, March 9, 2009 a.m., and Troy Metzler see Trial Tr. 49:02-49:21, March 12, 2009 evening.

f) Mysore

121. The record shows that the elephant Mysore was trained by Smokey Jones see PWC 152 at 125:12-125:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), and that Mysore has been handled by the following FEI employees: Kevin and Michael Gautier see PWC 152 at 109:06-110:07 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Robert Ridley see PWC 152 at 119:14-119:21, Buckles Woodcock see PWC 152 at 93:01-93:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and Trial Tr. 58:22-59:10, March 9, 2009 a.m., Gary Jacobson see Trial Tr. 34:05-36:03, March 5, 2009 p.m., Jeff Pettigrew see PWC 152 at 118:14-119:13 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Alex Vargas see Trial Tr. 19:07-19:19:11, Feb. 12, 2009 a.m., PWC 152 at 120:03-120:15, 121:02-121:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and PWC 182 at 51:19-52:06 (Vargas Dep., May 31, 2007), Graham Chipperfield see PWC 152 at 115:03-116:02, 116:22-117:17 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Troy Metzler see PWC 177 A at 124:13-125:03, 126:06-126:18 (Metzler Dep., July 25, 2006) and Trial Tr. 49:02-49:21, March 12, 2009 evening, Randy Peterson see PWC 152 at 121:15-122:07, 122:13-122:21 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Patrick Harned see WC 152 at 128:08-

128:16 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Trial Tr. 45:14-45:19, March 3, 2009 p.m., and Trial Tr. 23:01-23:02, March 9, 2009 a.m., Brian French see Trial Tr. 9:08-11:07, March 12, 2009 a.m., Joseph Frisco see PWC 174 A 34:16-35:07, 48:14-49:10, 50:22-51:05 (Frisco Dep., Dec. 7, 2007), Hicham Basllam see PWC 183 at 1, and Daniel Raffo see Trial Tr. at 6:21-7:16, March 4, 2009 a.m. The record shows that Mysore is currently being handled by the following FEI employees: Gary Jacobson see Trial Tr. 34:05-36:03, March 5, 2009 p.m., Patrick Harned see Trial Tr. 45:14-45:19, March 3, 2009 p.m., and Trial Tr. 23:01-23:02, March 9, 2009 a.m., and Troy Metzler see Trial Tr. 49:02-49:21, March 12, 2009 evening.

g) Zina

122. The record shows that Zina has been handled by the following FEI employees: Kevin and Michael Gautier see PWC 152 at 109:06-110:07 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Robert Ridley see PWC 152 at 119:14-119:21, Buckles Woodcock see PWC 152 at 93:01-93:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and Trial Tr. 58:22-59:10, March 9, 2009 a.m., Gary Jacobson see Trial Tr. 34:05-36:03, March 5, 2009 p.m., Jeff Pettigrew see PWC 152 at 118:14-119:13 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Alex Vargas see Trial Tr. 19:07-19:19:11, Feb. 12, 2009 a.m., PWC 152 at 120:03-120:15, 121:02-121:14 (Jacobson 30(b)(6) Dep., Jan. 18, 2008) and PWC 182 at 51:19-52:06 (Vargas Dep., May 31, 2007), Graham Chipperfield see PWC 152 at 115:03-116:02, 116:22-117:17 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Troy Metzler see PWC 177 A at 124:13-125:03, 126:06-126:18 (Metzler Dep., July 25, 2006) and Trial Tr. 49:02-49:21, March 12, 2009 evening, Randy Peterson see PWC 152 at 121:15-122:07, 122:13-122:21 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Patrick Harned see WC 152 at 128:08-128:16 (Jacobson 30(b)(6) Dep., Jan. 18, 2008), Trial Tr. 45:14-45:19, March 3, 2009 p.m., and Trial Tr. 23:01-23:02, March 9, 2009 a.m.,

Brian French see Trial Tr. 9:08-11:07, March 12, 2009 a.m., Joseph Frisco see PWC 174 A 34:16-35:07, 48:14-49:10, 50:22-51:05 (Frisco Dep., Dec. 7, 2007), Hicham Basllam see PWC 183 at 1, and Daniel Raffo see Trial Tr. at 6:21-7:16, March 4, 2009 a.m. The record shows that Zina is currently being handled by the following FEI employees: Gary Jacobson see Trial Tr. 34:05-36:03, March 5, 2009 p.m., Patrick Harned see Trial Tr. 45:14-45:19, March 3, 2009 p.m., and Trial Tr. 23:01-23:02, March 9, 2009 a.m., and Troy Metzler see Trial Tr. 49:02-49:21, March 12, 2009 evening.

III. FINDINGS OF FACT CONCERNING PLAINTIFFS' BULL HOOK CLAIM

A. The Bull Hook And How It Is Used By FEI

1. The Bull Hook's Physical Characteristics And Function

123. The record shows that the FEI elephant handlers routinely use a “bull hook” or “ankus” to train, handle, control, “correct,” discipline, and punish the elephants.

124. Although FEI employees now refer to the bull hook as a “guide,” the record shows that this term was apparently adopted by FEI after this lawsuit was filed. See, e.g., PWC 83 (June 13, 2002 FEI Check to Charles Gray for the purchase of “40 BULLHOOKS;” FEI payment requisition for the purchase of “40 Bull hooks”); see also Trial Tr. 65:14-65:15, 67:16-67:19, March 12, 2009 (Testimony of FEI expert witness Michael Keele) (acknowledging that the industry’s current effort to change the name exists because “bull hook” has a “bad public connotation” and, in particular, “sounds like a weapon.”).

125. The bull hook is an approximately two and a half to three-foot long rod – about the length of a fireplace poker, but thicker – made of wood or fiber glass, with both a metal hook and a metal point on its end. See, e.g., PMC 54, at PL 15027, 15052 - 57, 15083 (Photographs of bull

hooks at the Auburn Hills Inspection of the Blue Unit); PWC 118, at 20, 22, and MC 54, ## 360, 370, 374, 375 (Photographs of bull hooks at the CEC Inspection).¹⁰

126. The point or “heel” of the bull hook is most frequently used to move the elephant away from the trainer often on the “rump,” “heel of their feet,” and the trunk. Trial Tr. 77:8-77:19, Feb. 23, 2009 a.m. (Testimony of Carol Buckley); see also Trial Tr. 43:10-43:11, Mar. 4, 2009 p.m. (Testimony of FEI expert witness Kari Johnson)(the purpose of the heel is to “direct the elephant away from you”); Trial Tr. 22:3-22:4, Mar. 5, 2009 a.m. (Testimony of FEI expert witness Gary Johnson)(“the heel is used to push them away”).

127. The hook of the bull hook is used to move the elephant towards the handler and is frequently used at “the top of the eye,” “at the top of the head,” “the neck”, in the “armpit,” “behind the wrist,” “along the backbone,” front of the back legs, “front of the toes,” the trunk, and in the “ear canal.” Trial Tr. 77:20-78:22, Feb. 23, 2009 a.m. (Testimony of Carol Buckley); Trial Tr. 22:4-22:5, Mar. 5, 2009 a.m. (Testimony of Gary Johnson) (“the hook is to bring them to you”)

128. Bull hooks have sharp metal points to “get the elephant’s attention” See Trial Tr. 52:15-53:17, Mar. 4, 2009 p.m. (Testimony of Kari Johnson); Trial Tr. 29:2-29:20, Mar. 5, 2009 a.m.(Testimony of Gary Johnson).

129. The FEI handlers use the bull hook on particular “cue” points on the bodies of the elephants to make them do as required. See, e.g., Trial Tr. 65:03 - 10, March 5, 2009 p.m. (Testimony of Gary Jacobson) (admitting that there are “generally recognized cue spots”); see also DX 2 at 33) (diagram showing cue spots on elephants). These cue spots correspond with places where the elephants are struck with bull hooks – e.g., under the chin, where the ear is attached to the head, on the top of the head, on the back, on the trunk, on the legs. See PFF ¶¶ 13, 15, 137-40; 142-

46; see also Trial Tr. 43:19-43:21, 44:1-44:12 Mar. 4, 2009 p.m. (Testimony of FEI expert witness Kari Johnson); Trial Tr. 37:5-37:8, Feb. 18, 2009 p.m. (Testimony of Colleen Kinzley) (“all the cue points, the top of the shoulders, the top of the head, behind the leg, all of those are points where the elephant would be moving away from that pressure or pain of the bull hook.”); Trial Tr. 4:9-5:9, Feb. 18, 2009 p.m. (Testimony of Gail Laule); 89:8-89:14, Feb. 18, 2009 a.m.; id. 89:8-89:14 (explaining to the Court that the locations used to cue the elephant are the more tender locations on the elephant’s bodies).

130. All elephant trainers typically work the elephant from the left side. See Trial Tr. 110:24-111:14, Mar. 4, 2009 p.m. (Testimony of FEI expert witness Kari Johnson). The record shows that the FEI handlers typically strike the elephants with bull hooks on the left side of their bodies. See PFF 151-153; see also DX 2 at 33 (diagram shows cue spots on the left side of the elephant).

131. FEI elephant handlers typically have more than one bull hook. A larger bull hook is usually used in the barn; a smaller bull hook is used during the performances. See, e.g., PWC 180 at 97:07 - 97:11 (Deposition of Robert Ridley) (Aug. 25, 2006) (explaining that he has a small bull hook that he uses for the show); PWC 182, at 88:20 - 90:10 (Deposition of Alex Vargas) (when he worked on the Blue Unit he “always” had two bull hooks; id. at 102:01 - 103:18 (the trainers, including Troy Metzler, Mike Hayward, and Brian French each had at least two bull hooks, including one large and one smaller one; the smaller one was generally used during the act); see also Trial Tr. 59:9-59:17, Feb. 23, 2009 a.m. (Testimony of Carol Buckley) (explaining to the Court that most of the time handlers have a “barn hook, and that’s the one that they use predominantly when . . . they’re

not showing the elephant,” and “their show hook has to . . . look not very menacing, so a good trainer has more than one hook.”).

132. The bull hooks used in the performances typically have black handles, or the handles are wrapped in black tape, so that they are less conspicuous to the public. See MC 54, PL 15052, 15053 (Photographs of bullhooks taken at the inspection of the Blue Unit); see also Trial Tr. 46:19 - 46:25, Feb. 12, 2009 a.m. (Testimony of Tom Rider) (“they would take and [] wrap black tape around the hook . . . so when you go into the show they don’t see it”); id. at 47:10 - 47:15 (“it was to cover up the hook . . . we were always told that is so nobody sees the hook”) ; Trial Tr. 29:15 - 29:04, March 5, 2009 p.m. (Gary Jacobson admits that the bull hooks used in the performances have black handles).

133. Some handlers stick the bull hooks up their sleeves so that they will not be seen by the public. See Trial Tr. 88:24-89:5, Feb. 5, 2009 p.m. (Robert Tom testified that during performances animal handlers carry bullhooks “[u]p their sleeves where the audience couldn’t see where the hooks are”). FEI’s own witness, Daniel Raffo, admitted this is done by some handlers because the bull hook “looks bad.” Trial Tr. 65:02 - 65:16, March 4, 2009 a.m.; see also Trial Tr. 57:14-57:24, Feb. 18, 2009 p.m. (Testimony of Colleen Kinzley) (describing the “very small, very narrow bull hook that the [Ringling Bros.] handlers would put up their sleeve, so they would hold it like this, so you can’t -- the hook part is in the palm of the hand, so it just even looks like they are patting the elephant, and they are using the hook on it”); Trial Tr. 58:17-58:24, Feb. 23, 2009 a.m. (Testimony Carol Buckley) (regarding a photograph of a bull hook from the court-ordered inspection, PMC 54 at 40, “what you’ll notice is there’s black tape not over the handle, not only over the handle, but on a good portion of the hook that is not used on the elephant. The areas of the hook that are used on the elephant, the

tip, both tips are exposed. The reason that they do that is, when they take it in for a show, they don't want the lights to reflect off. They don't want people to notice the hook.”).

2. FEI's Own Officials/Employees Admit That The Handlers Strike The Elephants With Bull Hooks.

134. FEI's own employees testified that they use the bull hook to train, handle, control, “correct,” discipline, and punish the elephants. See, e.g., PWC 177A, at 342:02 - 342:20 (Deposition of Troy Metzler, July 25, 2006) (he has “corrected” elephants with bullhooks; “if they are doing something wrong, fighting, things of that nature;” if they were fighting, he would “correct” them by “back[ing] them up away from each other and bop[ping] them on the head”); id. at 358:15 - 358:19 (he uses the hooked part of the bull hook on the elephant's head “[i]f you're asking them to move up and they weren't”); id., at 368:12 - 368:15 (admitting that he has seen other FEI handlers hit elephants with force (“Bop them on the head, yes, I have, with the handle part, yes”); PWC 171A at 304:09 - 305:01 (Deposition of Joe Frisco, Jr.) (he has “bopped” Asia her under the chin with a bull hook; has “whack[ed] Tonka on the leg with a bull hook; and has hit Luna on her trunk with a bull hook “so she would quit grabbing at everything”); id. at 272:11 - 272:20 (explains that “the occasional whack under the chin or on the leg” is the same as “bopping an elephant”); id. at 311:01 - 03 (he has “bopped” Banko with a bull hook); id. at 357:04 - 357:20 (testifies that it is “appropriate use of the bull hook” to strike the elephants to make them do as commanded); Trial Tr. 65:12 - 17, March 5, 2009 p.m. (Gary Jacobson testifies that he uses a bull hook to “correct” elephants, which means “to have them comply with your command”).¹¹

135. Kenneth Feld, CEO of FEI, admitted at trial that all of the elephant handlers at FEI strike elephants with bull hooks. Trial Tr. 43:14 - 43:16, March 3, 2009 p.m.

136. FEI's internal documents and additional trial testimony further demonstrate that FEI employees use bull hooks to strike elephants. Robert Ridley (nicknamed "Suni" or "Sonny"), who has worked for Ringling Bros. for more than 40 years, testified that he sees "puncture wounds caused by bullhooks . . . three to four times a month." PWC 180 at 55:20-56:02 (Ridley Dep. August 25, 2006); see id. (he sees them under the chin and on the back of the leg); in a sworn affidavit provided to the USDA, Mr. Ridley stated that he sees "hook boils" on the elephants "twice a week on average." See PWC 26; see also PWC 19 (FEI Animal Activist Activities Report) at FEI 38280 (an elephant was beaten so badly that she had 22 "puncture wounds" caused by "sharp" bull hooks); PWC 9 Memorandum from Deborah Fahrenbruck to Mike Stuart (January 8, 2005) ("[I]ast night in the show . . . [a handler] hook[ed] Lutzi under the trunk three times and behind the leg once in an attempt to line her up for the T-mount," an elephant was "dripping blood all over the arena floor during the show from being hooked," and there was "blood in small pools and dripped along the length of the rubber and . . . all the way inside the barn").¹²

3. USDA Documents Further Demonstrate That The Bull Hook Is Used To Strike Elephants.

137. USDA documents further demonstrate that FEI employees strike elephants with bull hooks. See DX 74 at 9 (USDA Inspection) ("Report from May 2000 documented an elephant exhibiting open lesion(s) possibly secondary to excessive use of an overly sharp ankus hook"); PWC 7 (USDA Investigation Report, Sept. 2, 2005), at 2 (PL 011718) (reporting that "[a]n employee of Ringling Bros. and Barnum & Bailey Circus used physical abuse to handle and cause unnecessary discomfort to an elephant" by "repetitively jab[bing] and strik[ing] the back leg of an elephant with what appears to be a bullhook"); PWC 190J (USDA Investigation Report, May 15, 2001) at 2 (PL 01352) ("[t]he evidence shows that the ankus is used to correct the baby elephants, and it also

appears that pliers are used as a correction tool”); PWC 190 (Affidavit of USDA Veterinarian, Sept. 26, 2000) (listing “wounds” and “lesions” found on elephants).¹³

138. One USDA Investigation Report concluded that the use of the bull hook by FEI elephant handler Pat Harned in July 1999 “created behavioral stress and trauma which precipitated in the physical harm and ultimate death” of the baby elephant named Benjamin, when he was swimming in a pond in Texas. PWC 24 at 3. See also PWC 190D, at 3, 5 (informing the USDA in December 1998, when Benjamin was still alive, that former Ringling Bros. employees Glen Ewell and James Stechon “witnessed Pat [Harned] beat the baby elephant Benjamin many times,” and urging the agency to exercise its authority under the Animal Welfare Act to confiscate Benjamin and place him in a temporary shelter to protect him “from further abuse and mistreatment”); see also Trial Tr. 61:13 - 62:05, Feb. 12, 2009 a.m. (Testimony of Mr. Rider) (Benjamin was hooked “all the time,” “daily” by Pat Harned; whenever he did not respond to Harned “he was hooked, he was hit on the back, he was hit on the legs, he was poked”); id. at 54:22 - 55:13 (recounting incident when Karen was beaten by Pat Harned when she rattled her chains because Harned was “hooking [Benjamin] pretty severely”); PWC 20 (Mr. Rider’s USDA Affidavit at 6 (“I saw baby Benjamin systematically abused, 5 to 6 times a day, by Pat Harned”); PWC 184 (Mr. Rider’s March 2000 deposition testimony), 25:03 - 26:15 (describing beatings Pat Harned gave Benjamin; it was “four or five times a week at least that Benjamin was getting hit”); id. 107:09 (“Benjamin got it the most”).

4. Former Ringling Bros. Employees Have Testified That FEI Routinely Uses The Bull Hook To Hook And Strike Elephants.

139. Former Ringling Bros. employees Tom Rider, Frank Hagan, Gerald Ramos, Archele Hundley, Robert Tom, and Margaret Tom, have all presented credible testimony that FEI employees routinely hit the Asian elephants with bull hooks, on both the Blue and the Red Units.

140. Mr. Rider testified that he saw the bull hook used “excessive[ly]” on the Blue Unit, that the handlers “would always hook [the elephants] . . . on the top of the ear . . . to bring their heads down, or they’d put the point up here in the head and bring their head down. They would hit them on the back of the legs . . .,” that “every time they wanted to move an elephant over . . . they’d stab them Hook them in the rear” . . . “at first they might hook them, if didn’t respond, yank on them real hard”); Trial Tr. 50:01 - 50:20, Feb. 12, 2009 a.m.; id. 51:15 - 52:02 (describing the beating of Zina and Rebecca by Jeff Pettigrew and Andy Weller because they “wouldn’t lay down,” resulting in more than 20 hook marks on one of the elephants and more than 30 hook marks on the other); id. at 53:19 - 54:06 (he saw hook boils 2-3 times a week; and “cuts from bull hooks” “every other day, sometimes daily”); id. at 54:07 - 54:20 (he saw hook marks behind the ears of the elephants, on top of the head, behind the trunk, under the chin, behind the legs, “ a lot of them on the back when they were laying them down. Up behind the ears. Meena, I could stick my little finger in the scars behind there, from people hooking it and then it slips and it rips down the side” I’ve seen some pretty bad little rips in them”); id. at 58:08 - 58:12 (incidents of striking and hooking elephants with bull hooks were “frequent” and occurred in “almost every town we were in”); id. 54:22 - 56:24 54 (describing a beating of Karen in New Haven, Connecticut by Pat Harned because when Harned was hooking the baby elephant Benjamin “pretty severely,” “Karen picked up her chain and started smacking it”) (Harned “came over there and he started in on Karen for at least 21 minutes, 23 minutes. He had her, jabbing her under the leg, making her raise her foot up and hold it there, hitting her behind the leg, come and jabbing her in the side – sorry. Hooking on the head and behind the ears. It just went on and on”); see also Trial Tr. 21:12 - 24:10, Feb. 17, 2009 p.m. (Mr. Rider testified that the number of times he saw the bull hook used in a way that broke the skin was “so numerous, I couldn’t count

them,” that he saw the bull hook used in a way that made elephants bleed “hundreds” of times; that “all the elephants at one time or another had bloody hook marks and stuff like that and hook wel[t]s,” including the seven elephants that he worked with who are still in FEI’s possession; id. at 26:26:02 - 26:22 (he saw “wounds” behind the ears of elephants “two or three times a week,” usually on the left side; see also PFF 15, Endnote 5 (Mr. Rider’s other prior sworn testimony concerning the use of the bull hook).

141. Mr. Rider saw the following FEI employees routinely use the bull hook to strike elephants: Randy Peterson, Pat Harned, Adam Hill, Dave McFarlane, Andy Weller, Randy Peterson, Adam Hill, Alex Vargas, Daniel Raffo, Dave Whaley, Dave McFarlane, Gary from England, Robert Ridley, Jeff Pettigrew . Trial Tr. 48:13 - 48:22, 50:22 - 52:02; see also PWC 20 (Mr. Rider’s July 2000 USDA Affidavit) at 6 (“The people employed by Ringling Brothers who abused animals daily were: Adam Hill, Pat Harned, Randy Peterson, Scott Green, Jeff Pettigrew, Robert Ridley, Jeff (known as “Cowboy”), James, Dave McFarland, Steve Heart, Josh, Dave Whaley, Dave Wiley, Daniel Raffo, and Gary Jacobson (baby trainer). These people used excessive hitting with the bull hooks, and hooking the elephants then giving them commands (they just hook the elephant for no reason, they never even give the elephant a command so how could she have disobeyed)”).

142. Frank Hagan, worked for the circus on and off for about ten years, and primarily for the Blue Unit. Although he primarily took care of the lions, he worked near the elephants and had an opportunity to observe them. PWC 161A, 6:23 - 7:03, 12:04 - 12:07 (Hagan Deposition, Nov. 9, 2004). Mr. Hagan testified that he saw Troy Metzler hit elephants with a bull hook, if elephants moved out of line “he would usually whack them across the trunk or the foot” “strike [them] with the bull hook;” “he would take a one-handed swing at the elephant’s trunk, strike them with the bull

hook across usually the trunk or the foot area depending on which way he wanted them to move;” and that if the elephants get out of line “[t]hey usually get hooked or whacked” by the handlers; “[t]hey’ll take the bull hook to the ear,” or “they’ll push it over by the chin with the bull hook pointed end”). PWC 161B (Video); 13:15 - 16:01 (Nov. 9, 2004); see also id. at 16:17 - 17:23 (he saw Mr. Metzler swing the bull hook like a “baseball bat” to hit elephants on the trunk); id. at 18:23 - 19:06 (he saw Metzler hit the elephants on the “trunk, the chin, under the chin, the legs and the anus area, the back end,” and the ears, both the adults and the baby elephants on the Blue Unit); id. at 19:15 - 20:17 (Metzler is known as “Captain Hook” because “he had a tenacity for being overzealous with the bull hook”). Mr. Hagan testified that he saw other handlers take “the pointy part” of the bullhook “and just push it up [in between the toes] so [the elephants] would lift their foot up, id. at 23:11 - 24:11, and that when the elephants line up before the show they are not allowed to move freely; if they move out of line “[t]hey would be hooked;” “usually [the handler] would take the hook to the chin or the ear area to make it back up or move forward or whatever direction they wanted it to go;” “it happens so many times a year that they line up,” id. at 37:17 - 38:18. Mr. Hagan demonstrated how the bull hook was routinely used, including to “discipline” elephants, id. at 65:22 - 73:02. See also id., at 68:14 - 69:06 (the bull hook was used to “pop” the elephant “under the chin,” id., 70:13 - 71:01; 72:12 - 73:02 (demonstration).

143. Gerald Ramos, who worked for the Blue Unit for a short time in September 2006, testified that he saw Troy Metzler use a bull hook on the elephants “all the time.” PWC 161B at 10:10 - 11:02 (Ramos Dep. Jan. 24, 2007); see id. at 11:08 - 12:06 (he saw Mr. Metzler hook a young elephant in its mouth); id. at 94:19 - 95:07 (Metzler hit the young elephant over the head with the bull hook the way a baseball player swings a baseball bat).

144. Archele Hundley worked for the Red Unit from April to June, 2006, Trial Tr. 60:04-60:15, Feb. 5, 2009 a.m., and principally took care of horses. Id. 60:10-60:15. She testified that while working for the circus she would see the individuals who worked with the elephants “beat the elephants daily with the bullhooks.” Id. 66:18-66:20. She also testified that, “I’ve seen them jerk them underneath the jaw, I’ve seen them smack them behind the ear, inside the ear, on the legs, on the back even.” Id. 66:21-66:25. She witnessed this kind of treatment “daily,” sometimes as often as five or ten times each day. Id. 67:1-67:12. Ms. Hundley testified that she saw the following handlers hit elephants with bullhooks: Sacha Houck, Alex Vargas, Jimmy [Strickland], Pista, and George. Id. 67:13 - 67:22.

145. Robert Tom Jr. worked for the Red Unit for two years, until August of 2006. Trial Tr. 78:19-79:2, Feb. 5, 2009 p.m. He principally cared for horses, but on occasion also assisted with the elephants. Id. 79:5-79:12; 80:3-80:8. He testified that every day he witnessed handlers hooking elephants with bull hooks, including on their legs and ears, id. at 84:15-84:25, that he saw the handlers use the bull hooks to hit the elephants hard, and push and pull the elephants. Id. at 85:1-85:7. Mr. Tom saw the following handlers hit elephants with bull hooks: Sacha Houcke, Jimmy Strickland, Pista, Alex Vargas, and Antonio, id. at 85:01- 85:24, and he saw Antonio hit an elephant “five or six times really hard” while he was drawing blood behind her ear while in Baltimore. Id. at 88:11-88:23.

146. Robert Tom’s wife Margaret Tom also worked for the Red Unit for two years ending in August, 2006. Trial Tr. 57:13-57:17, Feb. 19, 2009 a.m. She worked backstage, and part of her job included standing by the door to the show as animals came in and out of the performance. Id. at

57:20-57:24; 61:1-61:06. Ms. Tom testified that all of the elephants were hit and poked with bullhooks “all the time.” Id. at 60:10-60:25.

147. The Court finds the testimony of each of these former Ringling Bros. employees to be credible. The testimony of these former Ringling Bros. employees is also corroborated by each of the other Ringling Bros. employees – i.e., they all give similar accounts of the ways in which the bull hook is used by FEI employees, even though they worked at Ringling Bros. at different times and for different units. The accounts of these former Ringling Bros. employees is further corroborated by other former Ringling Bros. employees, Glen Ewell and James Stechon, who both worked on the Blue Unit during the fall of 1998. See PWC 190D; see also id. at 2 (F03268) (on many occasions they witnessed Ringling Brothers’ elephant handlers and trainers, including individuals named “Randy,” “Adam,” “Pat,” “Steve,” and “Robby,” beat elephants severely” with a bull hook); at 3 (F03269) (the elephant handlers and trainers use the sharp end of the bull hook to make the elephants do as they wish, by hooking into their ears, their ankles, and other parts of their bodies and then pulling on the bull hook).¹⁴

5. Other Eye-Witnesses Corroborate That The Bull Hook Is Systematically Used To Strike The Asian Elephants.

148. The testimony of these former Ringling Bros. employees is also corroborated by FEI’s own witnesses, FEI’s own internal documents, the video-tape evidence, USDA records, the medical records of the elephants, the inspections conducted by plaintiffs’ experts, and the expert testimony that was provided to the Court. See passim.

149. The testimony of these former Ringling Bros. employees is further corroborated by the testimony of other individuals who provided eye-witness accounts of the use of bull hooks by FEI employees.

150. Elizabeth Swart, who was subpoenaed by defendant to provide deposition testimony, testified that she saw the circus unloading the elephants on several different occasions between 1998-2001, and that when the elephants come off the train “they’re usually hooked with a bullhook” . . . “there’s always prodding of some sort with the bullhook, and yelling, and trying to coerce the elephants to stand in a line or hurry up . . . [t]here’s a forcefulness about it that is not very attractive.” PWC 181B (video) at 58:07 - 58:11 (prodding the elephant with the hooked end). Ms. Swart testified that when she went to Mexico City in 1998 to observe the Red Unit, the use of the bull hook was much more pronounced – “it was in the mouth and ears, and behind the knees, in a pronounced and sharp way,” id. at 60:20 - 61:06, and that she saw Gunther Gebel-Williams, who Kenneth Feld regards as “the greatest animal trainer” he has ever known, see Trial Tr. 48:05 - 48:12, March 3, 2009 a.m. (Testimony of Kenneth Feld), whip a baby elephant in the face, as well as “violent hooking.” Id. at 109:18 - 109:19. She also testified that during a performance in Mexico City she saw Gunther Gebel-Williams using a hot shot or something that “shocked the elephant”. Id. at 62:19 - 63:09.

151. Lanette Williams, a Sergeant on the San Jose Police Force for sixteen years, testified that in August 1999, she saw the Red Unit elephant handlers use bull hooks to “either pok[e] at the elephants in the leg area to get them to move,” or “the hook part of it behind the ear.” Trial Tr. 138:01 - 138:08, Feb. 2, 2009 p.m. Sergeant Williams further testified that when she saw the elephants get off the train in San Jose, Gunther Gebel Williams “use[d] his bull hook on the left side of the elephant and grab him in the mouth area and yank down with both hands.” Id. at 142:13 - 25; see also id. at 153:20 - 154:19 (she saw Gunther Gebel Williams use his ankus in a “punishing manner;” he grabbed an elephant on top of its ears and yanked down very hard with both hands).

Sergeant Williams also testified that during an inspection that year in San Jose, she and a local humane agent saw blood behind the ear of an elephant named Toby, id. at 145:03 - 145:15, and that, upon further inspection, seven of the elephants had injuries that were consistent with ankus marks. See id. at 145:19 - 146:19 (“there were several lacerations behind the left ear – it was always on the left side. There were also several puncture wounds in the leg area of the left side, and these were consistent with what I had seen in Oakland, the way the elephants were handled, the way the ankuses were used, and they were the type of injuries consistent with injuries that would have been caused by an ankus”). Sergeant Williams testified that photographs were taken of these wounds, she identified those photographs for the Court, PWC 119, and testified that they accurately depicted the “lacerations,” “puncture-type injuries,” and “injuries” that she observed on various parts of the elephants’ bodies. See Williams’ Testimony at 149:06-151:11; see also PWC 119 at 5, 10, 11, 13, 14, 17, 23, 25, 31, 34; see also id., at 153:03 - 153:19 (she investigated other possible causes and found none). Sergeant Williams also testified that during that same week in August 1999, she saw an elephant named Banana with a “puncture-type wound on her trunk that was fresh and bleeding,” and that later that week she also saw that both Toby and Banco “had fresh wounds behind their left ear.” Id. at 155:14 - 155:21.

152. Sergeant Williams also testified that in August 2001, she saw Red Unit elephant handler Mark Gebel, the son of Gunther Gebel Williams, stab an elephant named Asia with the pointed end of a bull hook, on Asia’s front leg, id. at 16:11 - 17:05, 17:14 - 15, 18:16 - 20, and that ten to fifteen minutes later, she observed a “bloody spot behind [Asia’s] left front leg” – a “puncture type wound with blood around it” in the same location where she has seen Gebel stab the elephant.

Id. at 20:05 - 20:22. Sergeant Williams also identified and showed the Court photographs of the bloody wound that she observed on Asia. See id. at 26:14 - 29:10; PWC 120A (photographs).

153. Pat CuvIELLO has been monitoring the Ringling Bros. circus, including both the Blue and Red Units, for about 20 years. See Trial Tr. 19:02 - 19:04, Feb. 9, 2009 a.m.; see also id., at 20:09 - 21:02 (he has monitored the circus every year in several cities in California, including Oakland, Daly City, San Jose, Stockton, Sacramento, Fresno, San Diego, and Los Angeles, and he also saw the circus in Rosemont, Illinois in 2005). Mr. CuvIELLO testified that he has seen the bull hook used to swing and hit elephants, to jab elephants with the pointed-tip end, to hook them under the chin, behind the ear, and on the front and back leg, and that he has seen the handlers threaten elephants with the bull hook. Id. at 22:22 - 23:23. He explained that by “hook” he means put the hook under the chin and “jerk it really hard to get the elephant to respond to their command.” Id. Mr. CuvIELLO testified that he has seen “many different handlers” use the bull hook in these ways, id. at 23:24 - 24:01, including Mike Hayward, Sonnie Ridley, Isham, David Polke, Brian Christiani [aka Brian French], Alex Petrov, Daniel Raffo, Robby, Andy Weller, Adam Hill, Pat Harned, Troy Metzler, Alex Vargas, and Jeff Pettigrew. Id. at 25:04 - 26:01; 27:05 - 27:19. He also testified that he witnessed Mark Gebel and Gunther Gebel Williams hook an elephant “for a good five minutes,” and that “she was screaming,” and that Gunther Gebel Williams “was a big hooker,” and Mr. CuvIELLO also testified that he saw Sacha Houcke hook elephants with bull hooks “quite a few” times. Id. at 29:11 - 30:24. Mr. CuvIELLO also testified that the handlers typically walk on the left side of elephants. Id. at 36:14 - 16.

154. The Court was also presented with video tape evidence showing FEI employees hooking, striking, and jabbing elephants with bull hooks. See PWC 132C (elephant hit with bull hook

as dancer gets on); PWC 132D (elephant jabbed under chin by handler who is putting headdress on); PWC 132G (Troy Metzler hitting young elephant under chin and on trunk); PWC 132H (Dave Whaley hitting elephant with bull hook and threatening elephants with a bull hook); PWC132J (elephant hit under chin with bull hook); PWC 132L (Jeff Pettigrew jabs an elephant with a bull hook); PWC 132M (handler hits elephant when it steps out of line); PWC 132N (handler hooks an elephant under its chin); PWC 146A (Sacha Houcke hooking an elephant behind its ear, and jabbing elephant's foot with a bull hook); PWC 146B (David Polke and Troy Metzler hooking elephants with bull hooks) see also Trial Testimony of Pat Cuvillo, Feb. 9, 2009 a.m. at 66 - 81, and Feb. 9, 2009 p.m. at 4-13 (describing these video clips and identifying handlers); see also PWC 132 P (Suni Ridley hooks Karen in the mouth and gets the bull hook stuck in her mouth), Trial Testimony of Tom Rider, Feb. 12, 2009, at 6-7 (identifying videotape of Suni Ridley); PWC 141A (Gary Jacobson hitting and hooking Shirley as she is giving birth to Riccardo); see also PWC 135A (showing an elephant being hit, poked, and hooked with bull hooks); Trial Tr. 88:25-89:13, Feb. 23, 2009 a.m. (Testimony of Carol Buckley) (describing the use of the bull hook seen in PWC 135A); Trial Tr. 52:2-52:4, Mar. 5, 2009 a.m. (Testimony of Gary Johnson) (testifying that what is shown in PWC 135A is the appropriate use of the bull hook).

6. The Record Shows That Elephants Are Also Beaten With Bull Hooks.

155. The record also shows that elephants are beaten with bull hooks to punish them for misbehaving or failing to perform as required. See PFF ¶¶ 13, 15, 16 (Mr. Rider's Testimony about beatings he witnessed); PWC 20 (Mr. Rider's USDA Affidavit); see also PFF ¶ 18 and PWC 190D (accounts of former employees Glen Ewell and James Stechon); PWC 190D at Addendum at 1 (F

03273) (Mr. Ewell reported that he had seen elephants beaten “many times,” if the elephants were too slow or non-responsive, or did not perform well.¹⁵

156. Archele Hundley testified that in 2006 she was working for FEI during a two-week layover in Tulsa, Oklahoma. Trial Tr. 69:9-69:18, Feb. 5, 2009 a.m.; see also PWC 64 at 24 (PL 13577) (2006 Red Unit tour itinerary shows that between May 25, 2006 and June 4, 2006 the Red Unit was on a “Domestic Break” immediately before performing in Tulsa, Oklahoma). According to Ms. Hundley, during this period the elephants were given a bigger pen, and one day they also were given a tub of water to play in. Id. 69:19-69:24. She testified that two elephants got into a fight, and afterward one of the elephants refused a command to lie down. Id. 70:4-70:8. Ms. Hundley testified that she witnessed Sasha Houcke repeatedly hitting this elephant who would not obey. Id. 70:17-71:8. She testified that Mr. Houcke “was hitting her with the bullhook behind the ear,” “on the back of the legs,” and, at one point “he reached over and he got a bullhook from Alex Vargas and he actually took both bullhooks up onto her back and pulled and she didn’t lie down so he then gave, handed it back to Alex.” Id. 70:17-71:3. Then “he took the bullhook into both of his hands and swung it like a baseball bat into her ear canal and then he pulled down on the handle with all of his body weight.” Id. 71:05-71:8. Ms. Hundley first saw blood on the elephant behind her ear, and then “after [Houcke] swung the bullhook into her ear, blood started dripping from inside of her ear and down into her face and onto the ground.” Id. 71:13-71:17. Ms. Hundley testified that this beating went on for 35 to 40 minutes. Id. 71:9-71:10; see also PWC 114A at 2 (PL 014598-014605) (Sept. 29, 2006 Declaration of Archele Hundley, ¶ 6); PWC 114B at 4-5 (PL 014571-014572) (Dec. 13, 2006 Affidavit of Archele Hundley).

157. Ms. Hundley's account of the events in Tulsa are corroborated by the testimony of Robert Tom, who testified that he also witnessed this beating. Trial Tr. 86:5-88:4, Feb. 5, 2009 p.m. Mr. Tom testified that he saw Sasha Houcke hooking the elephant who would not lie down behind the ear because "the elephant refused to go down." id. 86:06-86:16, and that he saw Sasha use two bullhooks trying to pull the elephant down, id. 86:17-86:23; id. 87:5-87:10; see also PWC 115 at 1-2 (PL 14501-14502) (Affidavit of Robert Tom). Mr. Tom testified that the incident lasted between 30 minutes to an hour, Trial Tr. 110:17-111:1, Feb. 5, 2009 p.m., and that he first saw blood on the elephant when she was hooked, not before the hooking began. Id. 128:25-129:8.

158. The Court finds Ms. Hundley and Mr. Tom to be credible witnesses. Their prior consistent statements are entirely consistent with their trial testimony, see PWC 114, 114A and 115, and their testimony is consistent with the testimony of other former Ringling Bros. employees. See PFF ¶¶ 139-143.

159. Defense witness Carrie Coleman also largely corroborated the account of the beating in Tulsa. Trial Tr. 105:23-109:13, March 5, 2009 a.m. Ms. Coleman worked as a veterinary technician for FEI's Red Unit from May, 2006 to July, 2008. Id. 91:23-92:5. She was present and witnessed the elephants fighting, and also agreed that Archele Hundley was present at the time. Id. 106:1-107:24; see also Trial Tr. 17:25-18:2, Mar. 5, 2009 p.m. On cross-examination Ms. Coleman admitted that Sasha Houcke was hard to get along with and had a temper. Id. 14:3:14:7. She further admitted that after the fight Mr. Houcke chained up the elephants, and commanded them to lay down. Id. 18:3-18:25. She admitted that Mr. Vargas was in the barn as well, id. 18:14-18:19, as Ms. Hundley described. On cross-examination, Ms. Coleman further admitted that when the elephant would not lie down, Mr. Houcke used his bullhook. Id. 19:5-19:17 ("He continued to use it until

she'd lied down, yes"). Ms. Coleman even agreed that "it's possible" that Mr. Houcke used the bullhook on the top of the elephant's head and on her back. Id. While she refused to agree that this was a "beating," in her words his repeated use of the bullhook showed "consistency." Id. 20:4-20:9. As she explained, "You have to finish the – follow through, otherwise, you know, they're not going to listen. So I'd call it following up; I wouldn't call it beating." Id. (emphasis added). She further admitted that the elephant was bleeding. Id. 21:13-21:18.

160. The testimony of Mr. Vargas further corroborates the accounts of Ms. Hundley and Mr. Tom. Mr. Vargas testified that he saw Sacha Houcke "discipline" an elephant named Banco in Tulsa in 2006, PWC 182 at 112:07 - 113:12 (Vargas Dep.) (May 31, 2007); that Mr. Houcke used the hooked end of the bull hook on the elephant's head, id. at 113:21 - 114:16, that Mr. Houcke was using one of the larger bull hooks, and that he made the elephant lie down for about five-ten minutes, and that he also made her hold her trunk up; id. at 115:17 - 116:08, and that the elephant was made to lie down on all four of her legs and that this is called making the elephant "stretch[] out;" id. at 116:19 - 117:01; and that the other elephant involved in the Tulsa incident was Baby. Id. at 122:06 - 122:18.

161. Mr. Houcke's own testimony corroborates many of the details of the accounts provided by Ms. Hundley and Mr. Tom. He agrees that there was about a two-week layover in Tulsa Oklahoma at the end of May or beginning of June, 2006, see PWC 167A and B (Transcript and Video of Mr. Houcke's Deposition) at 93:17 - 93:22, and that there was a fight between Baby and Banco that he had to stop, id. 94:07 - 94:10. Mr. Houcke also testified that he "disciplined" the elephants, id. at 94:16 - 94:25, 95:12 - 95:14, and that this "discipline" involved chaining the elephants, making the lie down on all four legs, and putting their trunks up, id. at 95:19-95:24, 96:05 - 96:10. Mr.

Houcke also agrees that Alex Vargas, Pista, and Robert Tom were present during the incident, and that Archele Hundley could have been present. Id. at 96:18 - 97:10. Mr. Houcke also admits that he “tapped” Banco on her back with a bull hook to make her lie down, id. at 100:12 - 103:03, and that he “touched” Banco by her ear with the bull hook to make her go over. Id. 101:24 - 102:30. In his direct examination, Mr. Houcke also admitted that there was blood on the elephants, but he contended that this was caused by the two elephants fighting and puncturing each other with their tusks. See id. 107:09 - 107:19; see also DX 347 A, 12:12:10 - 12:16 (Mr. Houcke testifies that Banco and Baby were “pushing each other with their tusks and the trunk”); id. at 14:14 - 14:20 (testifying that “[b]ecause of the tusks, they had cuts on their forehead and by their neck already”); 20:18 - 20:25 (again stating that Banco and Baby had blood on them “from fighting from the tusks”); 25:09 - 25:16 (stating that Banco had blood on her “from the two tusks”).

162. Mr. Houcke’s insistence that he only “tapped” or “touched” Banco with the bull hook is not credible in light of the eye-witness accounts of Ms. Hundley and Mr. Tom that the elephant that was disciplined was bleeding. Mr. Houcke’s testimony is also not credible in light of Mr. Feld’s own testimony that these particular verbs – i.e., “tap” and “touch” – when used by FEI employees – are synonymous with “strike.” See Trial Tr. 36:09 - 36:21, March 3, 2009 p.m. (in response to questions from the Court Mr. Feld explained that “bopping,” “tapping,” and “touching” with the bull hook are all “synonymous” with “striking” with the bull hook). In addition, Mr. Houcke similarly testified that he only “touches” the horses with a whip, by “let[ting] my whip go to touch the horse” when he gives a command. See PWC 167A and B at 103:25 - 105:1. That Mr. Houcke equates whipping a horse with “touching” it indicates that he probably is similarly minimizing the way he uses

the bull hook on the elephants when he says he only “touches” them with it. See also id. (Mr. Houcke demonstrates how he uses a whip).

163. Mr. Houcke’s testimony is also not credible because he went out of his way to stress several times during his version of what happened in Tulsa that the blood seen on Banco was caused by Baby’s “tusks.” See PFF ¶ 161. However, FEI’s own medical records show that Baby’s tusks were removed in 1992 – many years before the Tulsa incident occurred. See PWC 1A-Baby (Feld 26682). For all of these reasons, and because the Court has had the opportunity to observe Mr. Houcke’s demeanor by watching his videotaped deposition, the Court does not find Mr. Houcke’s account of the Tulsa, Oklahoma incident, in which he denies that he beat Banco and made her bleed, to be credible.

164. The accounts of Ms. Hundley and Mr. Tom are also corroborated by the testimony of other witnesses about the way elephants are “disciplined” by FEI employees. Joe Frisco, Jr., who has worked at both the Red Unit and the CEC, testified that he has disciplined elephants in a way that is remarkably similar to what Ms. Hundley and Mr. Tom testified was done by Mr. Houcke – i.e., by making the elephant go down on all four legs with their trunks up – “stretch out for three or four minutes” – and that he does this to “draw attention” to what the elephant has done – “it makes them think about what they’ve just done.” PWC 171B, 319:02 - 321:16 (Frisco Dep.) (Video) (Dec. 7, 2007); see also id. (admitting that this position is uncomfortable for the elephants if they are made to do it for any length of time); id. at 324:04 - 325:18 (making the elephant hold its trunk up is part of the disciplinary measure – it “gets their attention, lets them know you’re talking to them”). Alex Vargas, who has worked for both the Blue and Red Units, see PWC 183, testified that he saw Graham Chipperfield discipline an elephant in this way on several occasions – by making it go down

on all four legs and hold its trunk up for several minutes – because the elephant “did not step on the place he should have.” See PWC 182, 119:04 - 120:15 (Vargas Dep.) (May 31, 2007). Similarly, Frank Hagan testified that he saw Gunther Gebel-Williams “discipline” an elephant by bringing it down to all four knees and then “two guys were on each side with a bull hook holding it down by the ears.” PWC 161B, 20:13 - 22:10 (Hagan Dep.) (Video) (Nov. 9, 2004).¹⁶

165. Margaret Tom testified that she saw the elephant Asia beaten once because Asia had defecated on a performer during the show, Trial Tr. 61:22-62:22, Feb. 19, 2009 a.m., that Asia was bleeding from the beating, id. 64:23-64:24, and that although Asia returned to the show, they began beating her again when she came offstage again. Id. 65:21-66:01; see also id. 62:2-62:22; 63:20-64:11; 66:2-66:5 (Jimmy “was hitting her with a bull hook”).

166. The Court finds Ms. Tom’s testimony eminently credible. Other witnesses corroborated that the elephants are made to defecate on command before each performance so that they will not do so during the show. Brian French (aka Brian Christiani), who is currently working for the Blue Unit, and who has worked for all three units of the circus in the past, see PWC 183, testified that the elephants are “crapped out” every day, before every show, and that this means they are given a command to defecate before the show. See Trial Tr. 83:02 - 84:06, March 12, 2009 a.m.; see also PWC 44 at 2 (“[p]rior to Elephant act in second part of show, elephants are stood up and crapped out”). Mr. CuvIELLO testified that over the years he has seen the FEI handlers force the elephants to defecate prior to the show. See Trial Tr. 59:03 - 59:12, Feb. 9, 2009 a.m. The Court was also shown video footage of elephants being made to defecate. See PWC 133C; see also Trial Tr. 38:09 - 38:24, Feb. 4, 2009 p.m. (Dr. Poole explains that the normal way elephants defecate is while standing, and that she has never seen an elephant squat to defecate); see also PWC 29 (Internal

FEI E-mail from Veterinarian Alison Case to Jim Andacht (July 26, 2004) (stating that “[i]t has been brought to my attention by more than one person that the elephants are not receiving enough water ‘so as to minimize the amount they urinate,’” and that “I did notice dry hard feces and in reflecting on my three days [visiting the circus], did not happen to see any urination”); Trial Tr. 1:12-51:20, Feb. 24, 2009 a.m. (Testimony of Dr. Ensley) (elephants normally “form maybe 15 gallons of urine in a 24-hour period”).

167. Ms. Tom’s testimony is also entirely credible because there is other compelling evidence in the record that the elephants are punished when they do not perform properly. See PFF ¶¶ 140, 142, 156, 157.

B. The Elephants’ Medical Records Corroborate Plaintiffs’ Claim That FEI’s Use Of The Bull Hook Routinely Wounds and Injures The Elephants.

168. Plaintiffs’ expert witness Dr. Philip Ensley worked as an elephant veterinarian at the world renowned San Diego Zoological Society for 29 years and is one of only approximately 120 veterinarians in the world who is a Diplomate in the American College of Zoological Medicine. Trial Tr. 7:21-9:12, 15:19-16:15, Feb. 24, 2009 a.m. (Ensley Test.); PWC 113J (Ensley cv). Dr. Ensley thoroughly reviewed all of the medical records concerning the elephants in FEI’s possession that FEI made available to plaintiffs in response to this Court’s Orders compelling the disclosure of such records. Trial Tr. 18:17-18:19, Feb. 24, 2009 a.m. (Ensley Test.); Trial Tr. 40:14-41:1, Feb. 24, 2009 eve. (Ensley Test.). In total, Dr. Ensley reviewed a dozen or more boxes of medical records pertaining to 140 elephants, including the seven elephants with whom Mr. Rider worked at FEI; this review took over 1300 hours over a three-year period. Trial Tr. 18:3-18:19, Feb. 24, 2009 a.m. (Ensley Test.).

169. Dr. Ensley's review of the medical records supports plaintiffs' claim that FEI personnel routinely use the bull hook in a manner that causes wounds and otherwise injures the elephants. Although the medical records do not generally refer directly to wounds caused by bull hooks, the medical records do repeatedly refer to abrasions and other wounds occurring on or near the traditional "cuing" points on the left side of the elephants' bodies, i.e., the side of the elephants on which all parties agree the bull hook is generally used. See PFF ¶¶ 130, 140, 151, 153. As explained by Dr. Ensley, not only is this recurrent pattern of injuries on the left side of the elephants' bodies in areas that are traditional cuing points entirely consistent with defendant's witnesses' own admissions that the sharp ends of the bull hook are traditionally applied to the elephants' skin in these locations, see DX 2 at 33, and that abrasions, lacerations, and other wounds do often occur, see PFF ¶¶ 126, 128-130, 136, but FEI has offered no plausible alternative explanation for why these abrasions and other wounds are disproportionately occurring on the left side of the elephants' bodies at or near the traditional cuing points. See, e.g., Trial Tr. 51:23-52:7, Feb. 24, 2009 a.m. (Ensley Test.) (Q. "[T]here's a phrase [on a medical record for Karen] that says small healing abrasion on left axillary area. Does that have any significance to you with regard to the issues in this case?" A. "Based on the body of records I've looked at, and the practice of cuing with the ankus, this would be consistent with an abrasion or breaking of the skin with the bull hook." Q. "Is there any significance to it being on the left area of the animal's body?" A. "This is where your handler or trainer generally manages his or her elephant.").¹⁷

170. The medical records for all of the elephants with whom Mr. Rider worked, as well as other FEI elephants, contain multiple references to such injuries and wounds in traditional points for cuing the elephants on the left side of their bodies. See, e.g., Trial Tr. 51:21-52:24, 53:21-54:11,

Feb. 24, 2009 a.m. (Ensley Test.) (medical record, PWC 2A-Karen at 278 (FEI 0021897), describes “abrasion[s] on left axillary area” – behind the elbow – on Karen, Zina, and a third elephant on the blue unit on the same day); Trial Tr. 55:22-56:13, Feb. 24, 2009 a.m. (Ensley Test.) (medical records for Blue Unit elephant Sophie refers to “wounds on the inside of the left ear, just inside the ear canal”).¹⁸

171. Consistent with this pattern, at the Court-ordered inspection, Dr. Ensley observed scarring consistent with bull hook use on the left side of Karen’s jaw. Trial Tr. 36:10-36:19, Feb. 24, 2009 p.m. (Ensley Test.) (“on the angle of [Karen’s] left jaw, there was scar tissue compatible with localized trauma consistent with bull hook use”); PWC 113K (inspection photographs) at Fig. 21-PL 14949, Fig. 22-PL 14947 (photos of scar tissue on Karen’s left jaw). Notably, this observation at the inspection is consistent with Mr. Rider testimony, as reinforced by a video he took, showing one of the Blue Unit handlers getting the sharp point of a bull hook stuck in Karen’s mouth. See Trial Tr. 28:08 - 28:20, Feb. 17, 2009 p.m. (Rider Testimony); see also PWC 132P (Videotape of Suni Ridley getting a bull hook stuck in Karen’s mouth).

C. The Bull Hook Is Used To Prevent The Elephants From Engaging In Normal Behaviors.

172. The elephants are hit with bullhooks when they engage in normal behaviors, such as exploring their surroundings, moving about, touching each other, or showing empathy toward other elephants. See e.g., PFF Endnote 3 (Mr. Rider describes Karen being beaten when she smacks her chain in reaction to Benjamin being hit by Pat Harned); PWC 181 B (Deposition of Elizabeth Swart) (Video) at 59:02 -60:15 (“if an elephant attempts, after coming off the train to touch another elephants with her trunk, to do normal things like put her trunk in another elephant’s mouth or touch another elephant, Ringling instructs them to stop it and to separate and not to do those natural

behaviors”); PWC 161 B (Deposition of Frank Hagan), 39:14 - 40:14 (if elephants reach outside their area, the handlers “would take the bull hook and strike them across the trunk”); id. at 37:17 - 38:18 (when elephants are lined up before the show they are not allowed to move freely, if they move out of line “[t]hey would be hooked”); id. at 13:15 - 16:01 (if the elephants moved out of line Troy Metzler “would usually whack them across the trunk or the foot”); see also Trial Tr. 55:10 - 55:16, Feb. 4, 2009 p.m. (Testimony of Dr. Poole) (observing that at the inspection at the CEC the elephants “had to stay in line,” and had “no freedom of movement;” id. at 77:25 - 81:01 (Dr. Poole testifies that “the elephants are being prevented from . . . carrying out their normal behavior,” such as exploring with their trunks, that it is “harmful for the elephants to be controlled in that way and not be able to carry out their normal behavior” . . . “[t]hey’re not allowed to explore, which is . . . very natural for them to do. They are curious animals, they are intelligent and social, and they are just limited to these very few things they’re allowed to do”).

173. The evidence shows that bull hooks are also used to keep mothers under control when they are giving birth. See PWC 141 (Video of Shirley giving birth to Riccardo).

D. The Record Shows That “Hot Shots” And Other Instruments Are Used On The Elephants

174. The record shows that FEI employees also use “hot shots” and other tools on the elephants to “correct” and handle them, further corroborating the evidence that FEI mistreats the elephants with bull hooks and chains.

175. The record shows that FEI employees also use what is called a “hot shot” (or electric prod) – i.e., a device that inflicts an electric shock – on the elephants. See Trial Tr. 57:01 - 57:09, March 3, 2009 p.m. (Testimony of Kenneth Feld); see also Trial Tr. 13:23-13:25, Feb. 18, 2009 p.m. (Testimony of Colleen Kinzley) (“[o]ne form [of electricity] is relatively commonly used in free

contact, and that is using an electric prod, cattle prod, hand-held.”). One of FEI’s elephant trainers for the Blue Unit, “Buckles Woodcock,” used a hot shot to make an elephant move faster to get into the ring. See PWC 19 at 5 (FEI 38277); see also Trial Tr. 53:02 - 56:18, March 3, 2009 p.m. (Testimony of Kenneth Feld). The record further shows that although Kenneth Feld was informed about Mr. Woodcocks’ use of the hot shot, he did not fire Mr. Woodcock, id., 56:22 - 56:23; and that, in fact, when Mr. Woodcock finally left the circus a year and a half later, his leaving had nothing to do with the fact that he had used a hot shot on the elephant. See id., 121:07 - 122:01; see also id. 58:23 - 59:01 (Mr. Woodcocks stayed at the circus for more than a year and a half after the hot shot incident was reported). The record further shows that Troy Metzler who has worked for FEI for many years, see PWC 183, uses a hot shot on the elephants “to get their attention.” See PWC 10.¹⁹

E. The Elephants Are Trained To Fear The Pain Of The Bull Hook.

176. The circus uses negative reinforcement and physical punishment to train the elephants, which is also called “free contact” – i.e., the elephant and handler are in the same physical space together. Trial Tr. Gail Laule 91:12-91:19, Feb. 17, 2009 p.m., id., at 87:21-87:25; see also Trial Tr. 9:17-9:19, 9:22-10:1, Mar. 4, 2009 p.m. (Testimony of FEI expert witness Kari Johnson); Trial Tr. 131:24-131:25, Mar. 4, 2009 p.m. (Testimony of Gary Johnson).²⁰

177. Other facilities that have captive elephants, including many zoos, use a form of management called “protected contact,” which means that there is some kind of barrier between the elephant and the handler, and the handler does not need to control the elephant through dominance and punishment. Trial Tr. 44-46, Feb. 18, 2009 a.m. (Testimony of Gail Laule); see id. at 99:6-99:11 (it is “a system that's based exclusively on positive reinforcement” . . . and it “prohibits any physical

punishment of the elephant”); see also Trial Tr. 39:7-39:15, Feb. 18, 2009 p.m. (Testimony of Collen Kinzley) (“the change to protected contact really allowed the elephants to behave much more freely and behave like elephants. They really could make choices for themselves . . . And of course very importantly for us, it meant that they would not be physically disciplined or punished.”); Trial Tr. 92:11- 92:15, Feb. 17, 2009 p.m. (Testimony of Gail Laule) (Approximately half the AZA zoos now use protected contact to manage their elephants).

178. FEI admits that it uses free contact to train and manage all of its female elephants, as well as all of the males before they become adolescents. See Def.’s Proposed Findings of Fact at 36, ¶ 113, Ex. 1 A to Def.’s Pre-Trial Statement (DE 391); see also Trial Tr. Gail Laule 27:24-28:3, Feb. 18, 2009 a.m. (“It’s no doubt to me that they use free contact methods.”).

179. The FEI elephants are trained from a young age to fear retribution with the bull hook if they do not perform or otherwise behave as required. See Trial Tr. 43:13 - 44:07, March 9, 2009 a.m. (Testimony of Gary Jacobson) (admitting that as part of the “correction process” the baby elephants are hit with bull hooks); see also PWC 172 (Deposition of Kenneth Feld, Jan. 16, 2008) at 99:08 - 100:04 (elephants are struck with bull hooks as “a reminder that when I say pick up your head, you should pick up your head. It’s conditioning”); Trial Tr. 59:17-62:15, Feb. 23, 2009 p.m. (Testimony of Carol Buckley) (“The only reason an elephant reacts to the bull hook is because of [its] history. If they had never been hurt by the bull hook, they are not going to react negatively to it at all. But, because there is a history of . . . the pain that they’ve experienced . . . – that’s why the hook is effective”); PWC 168 B (Ramos Dep.) (Jan. 24, 2007), 78:06 - 79:23 (describing that the baby elephant was hit the most on the Blue Unit – “always the baby elephant. She seemed to be the one that was a little bit more independent . . . and hadn’t had enough hits over the head or bull hooks

in the mouth . . . to get the message instilled in her”); Trial Tr. 31:01 - 31:12 (Testimony of Pat CuvIELlo) (“the young elephants seem to be hooked a whole lot more” than the older ones).

180. For the free contact system to work, the elephant must understand that the bull hook inflicts pain. See Trial Tr. 58:3-58:14, Feb. 23, 2009 a.m. (Testimony of Carol Buckley); see also Trial Tr., 37:1-37:8, Feb. 18, 2009 p.m. (Testimony of Colleen Kinzley) (“the elephant is taught that [it] need[s] to move away from the pressure or pain of the hook so all of the behaviors, all the cue points, the top of the shoulders, the top of the head, behind the leg, all of those are points where the elephant would be moving away from that pressure or pain of the bull hook.”); id. at 94:18-95:3, 95:21-96:6 (discussing pain from bull hook); Trial Tr. 37:13-37:23, Feb. 18, 2009 a.m. (Testimony of Gail Laule) (“To an elephant who . . . has never experienced a bullhook, it’s simply a neutral object, so if I’m going to use it as a tool to manage an elephant in a free contact system, I have to establish that tool and make it very clear to the elephant what this tool represents and what it does, and so what I have to do is teach that animal it means pain and discomfort, so I’m going to have to pair that experience, the hook comes, you feel it, it hurts . . . so that the animal learns to then react appropriately, which is when I feel this hook behind my leg, I then move my leg forward to escape from that pain.”).

181. For an elephant to be trained it must first be “broken” which helps the handler establish his or her dominance over the elephant. See Trial Tr. Colleen Kinzley 58:25-59:7, Feb. 18, 2009 p.m.; see also Trial Tr. 39:21 - 40:17, March 9, 2009 a.m.(Gary Jacobson admits that when people refer to “breaking” an elephant this means “taking a wild young elephant and training it to obey commands so that it can be used in the circus”); PWC 177A, 199:07 - 200:03 (Deposition of Troy Metzler, July 25, 2006 (stating that Gary Jacobson “**broke all of the babies**” at FEI).²¹

182. The record shows that traditional free contact elephant trainers generally use similar techniques to train and manage elephants. See PWC 177A at 13, Dep. Tr. Troy Metzler 7/25/06, 81:8-81:16 (stating that Smokey Jones, Mike Hackenberg, and Bobby Moore used the same techniques, and that these are the same techniques that he learned from Smokey Jones and Bobby Moore); Trial Tr. 9:17-10:4, Feb. 23, 2009 a.m. (Testimony of Carol Buckley) (“Smokey Jones, Rex Williams, Buckles Woodcock, and Mack McDonald and Bucky Steel[e]” all used “[v]ery similar” techniques for training elephants); see also PWC 81 at 1-2 (comment letter to the USDA describing elephant handling techniques on behalf of FEI and “William [Buckles] Woodcock”); see also PWC 175, 80:21-81:3, 84:13-84:16, 218:22-219:2, 219:6-219:9 (Jacobson Dep., Oct. 24, 2007) (Gary Jacobson learned how to train elephants from William “Buckles” Woodcock and Robert “Smokey” Jones); PWC 152, 162:21-162:22, 163:1-163:8 (Jacobson Dep., Feb. 18, 2008) (Mr. Jacobson taught Pat Harned, Randy Peterson, and Joe Frisco how to handle elephants); PWC 177A, 30:4-31:8, 32:17-32:19 (Metzler Dep., July 25, 2006); PWC 174A, 192:22-193:12 (Frisco Dep. December 7, 2007) (Troy Metzler and Joe Frisco learned how to handle elephants from Smokey Jones); see also Trial Tr. Kari Johnson 103:9-103:20, Mar. 4, 2009 p.m. (FEI’s expert witness Kari Johnson learned how to train elephants from Smokey Jones, who was her stepfather); Trial Tr. Gary Johnson 67:15-68:14, Mar. 5, 2009 a.m. (FEI’s expert witness Gary Johnson, who is married to Kari Johnson “learned a lot” about training elephants from Smokey Jones).

F. The Elephants Are Struck With Bull Hooks Throughout FEI And With The Knowledge And Acquiescence Or Approval Of FEI’s Highest Officials.

183. Bull hooks are routinely used to strike and hook elephants by elephant handlers employed throughout FEI, in the course of their employment with FEI and with knowledge of FEI’s

management and supervisory employees. See PFF 184-193; PWC 183 (list of FEI employees, where they worked, and titles).

184. The record shows that the following FEI elephant handlers strike elephants with bull hooks: Randy Peterson, Pat Harned, Adam Hill, Dave McFarlane, Andy Weller, Adam Hill, Alex Vargas, Daniel Raffo, Dave Whaley, Dave McFarlane, Robert Ridley, Jeff Pettigrew, Jeff (known as “Cowboy”); Steve Heart, Gary Jacobson, Dave Wiley, Scott Green, Mike Hayward, Isham, David Polke, Brian Christiani [aka Brian French], Alex Petrov, Robby, Troy Metzler, Mark Gebel, Gunther Gebel Williams, Sacha Houcke, Jimmy Strickland, Pista, George, and Antonio. See PFF 139-147.

185. Many of these handlers still work for FEI and are still handling elephants, including, but not limited to, the seven elephants with whom Mr. Rider worked who are still at FEI and with whom Mr. Rider formed an emotional bond. See PWC 183. The record also shows that handlers leave FEI, but then come back. See id. (e.g. Pat Harned, Gary Jacobson, Randy Peterson, Jeff Pettigrew, Brian French, Jim Williams, and Buckles Woodcock have all left the employment of FEI for some period of time but then returned to FEI); see also Trial Testimony of Daniel Raffo (who was recently rehired by FEI after working somewhere else for the last nine years). Sacha Houcke testified that Mr. Feld told him he was welcome back at the circus any time he wants to come back, and Mr. Feld agreed that this was true. See Trial Tr. 48:02 - 48:04, March 3, 2009 a.m. (acknowledging that he “may have said something like that”).

186. Many of these individuals have worked at several different FEI facilities over the years. See PWC 183 (e.g., Brian French, Joseph Frisco, Pat Harned, Mike Hayward, Troy Metzler, Randy Peterson, Jeff Pettigrew, David Polke, Daniel Raffo, Alex Vargas, Dave Whaley).

187. Many of these individuals have already handled or are currently handling Karen, Nicole, Susan, Lutzi, Jewell, Zina, and Mysore. See id.; see also PFF ¶¶ 116-22 (A list of which FEI employees have handled or are currently handling one of these elephants).

188. Again, Mr. Feld testified that he is aware that all of the elephant handlers who work at FEI strike elephants with bull hooks. See Trial Tr. 43:14 - 43:16, March 3, 2009 p.m.; see also id., 34:25 - 35:16 (acknowledging that he has seen handlers use “both sides of the bullhook behind the ear of an elephant,” that he has seen Ringling Brothers’ employees strike elephants under the chin with a bullhook, and that he regards this as “correcting” the elephants). Mr. Feld also testified that he visits the Blue Unit four to six times each year, and that he visits the CEC three to six times each year, Trial Tr. 13:06 - 13:11, 14:10 - 14:12, March 3, 2009 p.m., so he is clearly in a position to know how the bull hook is routinely used by his employees.

189. Tom Rider testified that his supervisor Randy Peterson, who was the Superintendent for Elephants and Animals on the Blue Unit when Mr. Rider worked there, see PWC 183 at 4, “frequently” struck elephants with bull hooks, see Trial Tr. 8:18 - 8:23, Feb. 17, 2009 p.m.; Trial Tr. 50:22 - 51:05, February 12, 2009 a.m.; and that he also witnessed Mr. Peterson, along with Adam Hill and Pat Harned, beat several elephants with bull hooks in Canada. See 59:23 - 60:21, Feb. 12, 2007 a.m.; see also PWC 20 (Mr. Rider’s July 2000 USDA Affidavit) at 2 (PL 04459) (stating that “the abuse to the elephants [got] worse” after Randy Peterson became the superintendent of animals).²²

190. Mr. Rider testified that the mistreatment with bull hooks took place in front of other supervisory employees. See Trial Tr. 59:23 - 60:21 (recounting a beating of several elephants in Canada that took place in front of Jeff Steele, who was the unit manager for the Blue Unit, see id.,

see also PWC 183 at 6, and also in front of Richard Froemming, who was then Vice President of Circus Operations, see Trial Tr. at 60:21-60:25, March 9, 2009 a.m. (Testimony of Gary Jacobson); see also PWC 184 (PAWS Dep.) at 66:10 - 70:07 (Jeff Steele knew about the abuse and did not want the public to see the hook marks on the elephants).

191. Mr. Rider's testimony is corroborated by the accounts of two other former Blue Unit employees, Glen Ewell and James Stechon, who worked on the Blue Unit during part of the same time that Mr. Rider worked there. See PWC 190D. Those individuals reported that on many occasions they witnessed Ringlings' elephant handlers, including "Randy," beat elephants severely with bull hooks, see id. at 2 (F 03268), that they had seen "Randy" beat Nicole on several occasions, "and that "Randy beat her so hard once that he shattered a bull hook on her." See id. at 3 (F 03269).

192. These men further reported that Jeffrey Steele, the manager of the Blue Unit, was present during at least one severe beating of Nicole by Randy, which was conducted in full view of Mr. Steele, and "[w]hen asked whether it was possible that Mr. Steele did not see this beating and therefore was unaware of it . . . Mr. Stechon explained that, while he did not believe that Mr. Steele could have avoided seeing the beating, he certainly could not have missed hearing the repeated 'whacking' sound of the bull hook on Nicole as well as Nicole's cries of distress." Id. The men reported that, despite this abusive treatment, Mr. Steele neither said nor did anything to stop it, nor did he take any action whatsoever to reprimand the Ringling Brothers' employee who was engaging in this conduct. See id.

193. Mr. Rider's testimony is further corroborated by the testimony of Frank Hagan, who worked at the Blue Unit for approximately ten years, and who testified that Jeffrey Steele, Unit

Manager for the Blue Unit, was present when Troy Metzler hit an elephant with a bull hook. See PWC 161B (Hagan Dep.) (Video), 27:13 - 28:09.

194. That this mistreatment is countenanced by FEI is further evidenced by the fact that Mr. Metzler, who is shown on videotape striking elephants with bull hooks, see PWC 132 G, has been given supervisory positions at FEI. See PWC 183 (e.g., Mr. Metzler held the position of “Blue Unit Superintendent of Elephants” in 2003 - 2007). Mr. Hagan testified that he saw Troy Metzler hit elephants with bull hooks on many occasions, see Metzler Dep. (Video) at 12:04 - 12:22; 14:06 - 15:06; 16:13 - 19:06, and that Mr. Metzler was nicknamed “Captain Hook” on the Blue Unit because of the way he used the bull hook. Id., at 19:15 - 20:12.

195. Mr. Metzler was nevertheless “promoted” to be the Superintendent of Elephants for the Blue Unit. Id., 25:14 - 26:15; see also Trial Tr. 38:14 - 39:16, 40:13 - 41:05, March 12, 2009 eve. (Mr. Metzler admits that he hits elephants with bull hooks to “correct” them); see also id., 34:14 - 36:12 (Mr. Metzler also admits that he uses a “hot shot” on the younger elephants because “sometimes you just need to get their attention more than others that the guide may not do”); see also PFF 143 (Testimony of Gerald Ramos concerning Mr. Metzler).

G. FEI Has No System In Place To Ensure That Management Is Kept Informed Of Incidents Of Mistreatment Of The Elephants By Its Employees.

196. Although Mr. Feld, FEI’s CEO, testified that he wants to be informed if an employee is mistreating an animal, see Trial Tr. 66:03 - 66:06 March 3, 2009 p.m.; both he and James Andacht, Vice President for Circus Operations admitted that there is no system or policy in place at FEI for ensuring that either one of them is so informed. See Trial Tr. 72:25 - 73:05, March 3, 2009 p.m. (Feld Testimony); PWC 171B (Andacht Dep.) (video), 103:04 - 105:22; see also PWC 171 (Andacht

Dep.) at 162:16 - 163:10 (there is “no system” to ensure that Mr. Andacht of any high level official at FEI are kept informed of incident of mistreatment of animals).

197. Mr. Andacht also admitted that, in fact, if FEI actually determined that an employee had mistreated an elephant, this is not something that would necessarily result in a written reprimand. See PWC 171B (Andacht Dep.) (video) at 90:04 - 94:11; see also PWC 171A (Andacht Dep.) at 88:10 - 88:16 (he does not know whether the writeup policy applies to an employee who mistreats and animal); Trial Tr. 68:24 - 70:02, March 3, 2009 p.m. (Mr. Feld testified that he does not know whether such mistreatment would result in a written reprimand).

198. On the other hand, the record shows that when an employee is late to work, misses a shift, or oversleeps, this is the kind of conduct that does result in a written reprimand – i.e., according to Mr. Andacht, these are examples of employment infractions that management would deem “important enough to write someone up.” See PWC 171 A (Andacht Dep.) at 73:21 - 75:03, 75:-6 - 75:07. 75:15-75:17; see also DX 40 (write up for Mr. Rider for missing a day of work); DX 167 - 169 (“write ups” for Robert Tom, Jr. (for failing to show up for work; missing animal walk, and being late to work)); see also Trial Tr. 16:15 - 18:23, Feb. 17, 2009 p.m. (cont.) (Testimony of Mr. Rider) (“insubordination” write up he received was because he gave Karen food before giving her water).

199. In fact, when presented with the sworn testimony of Robert Ridley, an elephant handler for Ringling Bros. for over 30 years, that he sees “puncture wounds caused by bull hooks” 3-4 times a month on average, Mr. Feld testified that this testimony did not cause him any concern. See Trial Tr. 49:12 - 51:19.

200. Mr. Feld also testified that he knew that Mr. Houcke had been accused of beating an elephant before he left FEI in November 2006, but that this had nothing to do with Mr. Houcke's leaving FEI, that Mr. Houcke left solely because his contract was up and he wanted to go to Europe, and that it was not FEI's decision not to renew Mr. Houcke's contract. See Trial Tr. 45:20 - 47:09, March 3, 2009 p.m. Sacha Houcke's testimony is consistent with Mr. Feld on this point – he testified that the only reason he left FEI was that he wanted to go back to Europe, and that his leaving had nothing to do with the incident in Tulsa, Oklahoma in the summer of 2006. See PWC 167A at 79:08 - 80:06, 84:25 - 85:04 (Houcke Dep., January 7, 2002). However, Mr. Andacht, Vice President of Circus Operations, testified that it was FEI's decision not to renew Mr. Houcke's contract, because it was “[t]ime for a change,” see Andacht Dep. at 212:09 - 212:21, 213:13-212:15 (Jan. 30, 2008) – casting doubt on Mr. Feld's and Mr. Houcke's insistence that Mr. Houcke left on his own accord.

201. Mr. Houcke also testified that Mr. Feld personally told him that he could come back to the circus whenever he wants, see PWC 167A at 89:12 - 89:16 (Houcke Dep., Jan. 7, 2002), and Mr. Feld agreed with this testimony. Trial Tr. 48:02 - 48:04, March 3, 2009 p.m.

202. Mr. Feld also testified that FEI took no disciplinary action against Buckles Woodcock when he used a “hot shot” on an elephant to make it move faster, see PFF 175, and no disciplinary action was taken against Troy Metzler for using a “hot shot” on a young elephant. See PFF 175 and Endnote 19; PWC 177A at 186:20 - 187:06 (Metzler Dep., Aug. 8, 2006) (he has never been reprimanded for his treatment of an elephant); Trial Tr. 53:05 - 53:08, March 12, 2009 eve. (affirming that in all his years at Ringling Bros. he has never been reprimanded for any kind of treatment of an elephant).

203. The record contains voluminous evidence that Gunther Gebel Williams, who worked for the circus from 1969 until he died in 2001, see Trial Tr. 48:23 - 49:49:03, March 3, 2009 a.m. (Testimony of Kenneth Feld), routinely used the ankus in an abusive way with the elephants, and that his son Mark Oliver Gebel, also struck elephants with bullhooks and made them bleed. See PFF 150-53. Yet Mr. Feld testified that he regards Gunther Gebel Williams as the “greatest animal trainer” he has ever known, Trial Tr.48:05 - 49:12, March 3, 2009 a.m., and that Mark Gebel “carried on his father’s legacy” at the circus. Id. at 49:04 - 49:09; see also PWC 149A (FEI Video in which Mr. Feld states that Gunther Gebel Williams “changed the face of animal training in the world,” by bringing “a new way to work with animals”).

204. Although plaintiffs requested in discovery “all documents and records concerning any disciplinary measures that have been taken by Ringling since 1994 with respect to any employee’s treatment of an elephant,” no such documents were produced. See PWC 46 at 29.

205. Based on this record, the Court concludes that there is ample evidence that high-level officials at FEI know that the handlers routinely strike elephants with bull hooks, and that they cause the elephants to bleed as a result of this treatment. The Court further concludes that such treatment is tolerated and acquiesced in by FEI; that disciplinary actions are not taken against employees who engage in such conduct; and that FEI has no system or policy in place to ensure that the elephants are not wounded and harmed with bull hooks.

H. The Record Shows That FEI’s Use Of The Bull Hook Wounds, Harms, And Harasses The Elephants.

206. The record overwhelmingly demonstrates that the use of the bull hook by FEI employees wounds the elephants. Robert Ridley, (nicknamed “Sunī”), who has worked for Ringling Bros. for more than 40 years, testified that he sees “puncture wounds caused by bullhooks . . . three

to four times a month.” PWC 180 at 55:20-56:02 (Ridley Dep. August 25, 2006); see id. (he sees them under the chin and on the back of the leg); id. 14:14 - 14:16 (he has worked for RB since 1966); see also Trial Tr. 55:14 - 55:25, March 12, 2009 a.m. (Testimony of Brian French) (admitting that - the bull hook can break the skin if the elephant pulls against it and that punctures can occur if you are trying to get the elephants to respond to a command). In a sworn affidavit provided to the USDA, PWC 26, Mr. Ridley stated that he sees “hook boils” on the elephants “twice a week on average.” See also PWC 119 (photographs of wounds observed by Sergeant Williams); PWC 120A (photographs of wounds on the elephant Asia).²³

207. The medical records of the elephants contain additional evidence that the elephants are routinely struck with bull hooks. See PFF 169-171.

208. In response to the Court’s questions, Mr. Keele acknowledged that a “puncture” from use of the bull hook means that there has been “intrusion into the skin,” and he further acknowledged that it would be “proper to call” any such puncture a “wound,” including those he would characterize as “superficial” because they would require no medical care. See Trial Tr. 52:23-52:25, 53:22-54:10, 54:17-55:12, March 12, 2009 p.m.; see also id. at 69:20-69:22. Mr. Keele further acknowledged that any puncture wound from a bull hook could become infected and require medical care, id. at 52:14-52:15, and that a “hook boil” is a “deeper puncture that does infect and does require some care.” Id. at 56:1-2. Mr. Keele also testified that the use of the bull hook in such a manner that it causes frequent lacerations and puncture wounds could in fact be detrimental to the elephants and “bad for their well-being.” Id. at 87:15-88:4. All of this testimony supports plaintiffs’ position that FEI’s policy and practice in using the bull hook, which the record reflects results in frequent

lacerations, punctures, and other wounds, constitutes a take because it wounds, harms, injures, and harasses the elephants within the plain meaning of those terms and within their regulatory definitions.

209. Although Michael Keele described some bull hook wounds as “superficial,” he acknowledged that, as a high-ranking zoo official, he is concerned about the presence of any such wounds, and that they are recorded in the zoo’s medical records even when it is determined that they require no medical care. Trial Tr. 54:6-54:8, 89:23-90:1, March 12, 2009.

210. The use of the bull hook causes the elephants pain and discomfort. See PFF Endnote 20; e.g., Trial Tr. 18:20 - 19:07, Feb. 4, 2009 (testimony of Dr. Poole) (elephants feel pain); id. 20:05 - 21:07 (elephants engage in behaviors to avoid pain); id. 77:25 - 78:06 (hitting an elephant under its chin with a bull hook is “painful,” and “harmful”); 80:06 - 80:08 (it is painful for elephant to be hit on its trunk with a bull hook); Trial Tr. 58:3-58:14, Feb. 23, 2009 a.m. (Testimony of Carol Buckley) (“ this hook is actually used to grab, to sink it into the skin, to inflict pain, to reinforce their dominance and control over the animal.”); Trial Tr. 94:18-95:20, Feb. 18, 2009 p.m. (Testimony of Colleen Kinzley) (explaining that fundamentally, the purpose of the ankus is to cause “some kind of discomfort or pain in order for the elephant to move away from that feeling;” id. at 96:02-96:06.

211. FEI’s counterintuitive contention that the lacerations, abrasions, punctures, and other wounds that its employees inflict on the elephants do not cause the elephants’ physical pain because they have thick skin is contrary to the evidence, including that of FEI’s own veterinarian. Dr. Schmitt conceded that a leading medical textbook on elephants by Dr. Susan Mikota (“Medical Management of the Elephant”) on which Dr. Schmitt has relied in his own writings states that “[t]he elephant’s skin which varies in thickness over its body is a sensitive organ system with a rich nerve supply.” Trial Tr. 87:3-87:12, March 12, 2009 p.m. (Schmitt Test.). Dr. Schmitt further acknowledged that a “rich

nerve supply” means that an animal can sense stimuli, and that one of the stimuli that nerves sense is pain. Id. at 87:13-88:2; see also Trial Tr. 110:22-110:25, Feb. 10, 2009 p.m. (Hart Test.) (“One thing that people don’t understand about elephant skin, I mean, we call it pachyderm, but there are papillae that stick up in the skin and carry blood vessels and nerve fibers.”). Moreover, as explained by Dr. Hart – and as undisputed by FEI – “all animals that we know of have pain receptors and pain responses”; hence, especially when elephants flinch or move away after being jabbed or struck by the bull hook – as is reflected in many of the FEI videos in evidence – the “most logical explanation from a behavioral standpoint” is that the elephant is experiencing pain in the same manner that a dog, chimpanzee, or any other animal with nerves in its skin would experience when being struck by a heavy, sharp weapon. Id. at 101:22-101:25, 102:7-102:9, 103:2-103:5.²⁴

212. Plaintiffs’ experts presented additional credible expert testimony that the use of the bull hook wounds the elephants, based on their inspections of the elephants. See, e.g., Trial Tr. 68:3-68:13, Feb. 23, 2009 a.m. (Testimony of Carol Buckley) (describing the “volume of scarring” on the elephants that she observed during the inspections, including scars “around the target points for hooks, so around the head, under the chin, a lot of scarring under the chin along the jaw line, up along where the ear meets the head and on top of the head”); Trial Tr. 41:9-41:15, Feb. 18, 2009 p.m. (Testimony of Colleen Kinzley) (“explaining that scars seen on the elephants during the inspection “on the top of the ear . . . is definitely a result from hook wounds. It’s very consistent with the location that the hook is used. You know, the legs, the front legs also, when they are asking an elephant to lift its leg, and it’s consistent with what I’ve seen in person, but also consistent with the video of hooking the elephants behind the front leg to get them to lift the leg higher.”).²⁵

213. Mr. Rider testified that when he worked at the circus, he was required to use a product called “Wonder Dust” to cover up the wounds on the elephants caused by the bull hooks. See Trial Tr.51:15 - 53:08, Feb. 12, 2009 a.m. (describing how, after a beating of Zina and Rebecca, he “had to go get the Wonder Dust and literally cover up the cuts on her,” “it was gray in color and it would just blend right in with the skin of the elephant,” “whenever we saw a cut or a hook mark or a hook boil or anything like that, we always covered it up with it . . . [w]e’d go through bottles of it).²⁶

I. The Record Also Demonstrates That FEI’s Use Of The Bull Hook Also Harms And Harasses The Elephants By Disrupting Their Normal Behaviors.

214. The record also demonstrates that the routine use of the bull hook by FEI employees harms and harasses the elephants by disrupting their normal behavioral patterns, including their ability to move freely, their ability to explore their surroundings, and their ability to socialize with other elephants. As Dr. Poole explained, use of the bull hook is “harmful” because “[w]henever they try and investigate anything, then they are reprimanded . . . “it is completely controlling everything that would be part of the natural behavior – preventing anything that’s part of their natural behavior.” Trial Tr. 77:25 - 78:13, Feb. 4, 2009 p.m.; see also id. at 80:02 - 80:04 (explaining that hitting an elephant on its trunk with a bullhook is “harmful” because “[i]t’s harmful for the elephants to be controlled in that way and not be able to carry out their normal behavior”); id. at 83:01 - 83:21 (“They’ve got no choice . . . if they don’t follow instructions, they get beaten”); 87:21 - 88:04 (“these elephants have no freedom, they live sort of under a command and control lifestyle. They have no choice. There’s nothing . . . here that resembles their life in the wild at all. So, I think it’s very harmful to them as individuals. I think it harasses them and it wounds them”).²⁷

215. The record demonstrates that the routine use of the bull hook by FEI employees causes the elephants trauma, behavioral stress and unnecessary discomfort, by making the elephants live in constant fear of being struck with the bull hook if they do something wrong, engage in normal elephant behavior, or for no reason at all. See PFF 168-173; see also Trial Tr. 56:13 - 57:15, Feb. 5, 2009 a.m. (Dr. Poole testified that the elephants live in fear from both the memory of being chained and beaten themselves and from seeing other elephants chained and beaten, and that this also constitutes a “take” under the ESA); Trial Tr. 50:08 - 50:20, Feb. 12, 2009 a.m. (Testimony of Tom Rider) (describing how the elephants “cringe” when the bull hook comes at them); PWC 184 (Tom Rider’s March 2000 Dep.) at 38:05 - 39:02 (describing how the young elephants “would flinch” every time Gary Jacobson came around them, and that all of the elephants would “close their eyes” when someone walked by them “in fear something was going to happen”); PWC 190D, Addendum at 2 (F03274) (Nicole “shuffled her feet and kept urinating during the performances because she was afraid” of being beaten); PWC 4 (Narrative of USDA investigation) (reporting that the elephant urinated when Randy Peterson began giving it commands); PWC 24 (USDA Investigation Report) at 3 (reporting that “seeing and/or being ‘touched’” by Mr. Harned with the ankus “created behavioral stress and trauma which precipitated in the physical harm and ultimate death” of the baby Benjamin); Trial Tr. 54:06 - 55:09, Feb. 4, 2009 p.m. (Testimony of Dr. Poole) (describing how elephants “froze” when Pat Harned walked into the barn during the CEC inspection); id., 77:06 - 77:17 (explaining that a young elephant is exhibiting alarm (in video clip PWC 132 G) when she is hit with a bull hook because “[y]ou can see the whites of its eyes showing”); see also Trial Tr. 75:11-76:1, Feb. 23, 2009 a.m. (Testimony of Carol Buckley also describing fear response of elephants seen during the CEC Inspection when a handler [Pat Harned] came into the barn); Trial Tr. 54:17-54:23,

Feb. 18, 2009 a.m. (Testimony of Gail Laule) (“THE COURT: And what about those scenes we saw where it appears that the hook was used for some unknown reason, was just arbitrary, what’s the impact on the elephant? MS. LAULE: To me, that is probably the worst because what the elephant relies on is their ability to predict, you know, to say, you know, to be able to when I see the hook I know I’m supposed to do so”); id. 43:3-43:6 (explaining that the elephants “always have to be on their guard,” and that this causes “a level of stress” that diminishes the “welfare” of the elephants”); see also Trial Tr. 62:20-63:2, Feb. 23, 2009 p.m.(Testimony of Carol Buckley) (explaining that the fear reaction by the elephant also harms it “ because the initial harm was the -- physically what you did to them to hurt them, that was a take. Then if your treatment of them continues to elicit that fear, then you’re harming them again, because you’re eliciting that fear from them”).

216. According to FEI’s own expert witness, Michael Keele, if a bull hook is used “inappropriately” – i.e., if it is used routinely to obtain compliance with commands and inflict pain on the elephant – the elephant “can learn to fear” simply the sight of the bull hook. Trial Tr. 48:6-48:10, 62:8-62:12, 64:2-64:5, March 12, 2009 p.m. Mr. Keele further testified that if a bull hook were being “misused” on an elephant, then “whenever the handler is around, the elephant would kind of flinch or kind of back away” from the handler. Id. at 56:3-56:9. In fact, however, video of the CEC inspection clearly shows one of the elephants rapidly backing away from Mr. Jacobson when the elephant has stepped forward from the line and Mr. Jacobson approaches with the bull hook in his hand. See PWC 142F. Accordingly, the Court finds that, at a Court-ordered inspection, an elephant exhibited exactly the behavior that FEI’s own expert witness testified would be evidence of “misuse” of the bull hook. See also Trial Tr. 70:16-70:21, Feb. 10, 2009 p.m. (Hart Test.) (if an elephant were hit several times with a bull hook “certainly they would remember that bull hook”);

Trial Tr. 70:9-71:7, Feb. 11, 2009 a.m. (Clubb Test.) (FEI's frequent use of the bull hook is "associated with chronic stress" and "harms the animals psychologically").

J. FEI's Use Of The Bull Hook That Harasses The Elephants Can Not Be Excused As A "Generally Accepted Husbandry Practice" That "Meets Or Exceeds" Any Animal Welfare Act Standard.

217. According to FEI's own witness, Gary Jacobson, who is the General Manager of the CEC, and "in charge of [FEI's] entire elephant program, see Trial Tr. 16:24 , March 3, 2009 p.m. (Testimony of Kenneth Feld), the term "husbandry" means "the care and management of elephants, the taking care of [the elephants]," which includes "feeding, watering, foot care, breeding, all the normal maintenance." Trial Tr. 51:05 - 51:15, March 5, 2009 p.m. Even the "Elephant Husbandry Resource Guide," upon which FEI heavily relies in this case, refers to "husbandry" as activities necessary for the day-to-day care and maintenance of elephants, such as activities necessary for veterinary and foot care, feeding, and watering. DX 2 at 37-59; see also Trial Tr. 3:8-3:22, March 12, 2009 eve. (Keele Test.) (agreeing that "husbandry" means "day-to-day care and feeding of elephants"). With regard to the relationship between training and husbandry, the Guide provides that "[e]ach elephant should be trained to perform daily controlled behaviors such as a means of allowing the handler to provide foot, mouth, eyes, ears, and skin care; exercise; and medical examinations and treatments." Id. at 37-38. In other words, the only reference to training is that which is necessary for the health and well-being of the elephant. The Guide in no way suggests that training the elephant to perform unnatural circus tricks for entertainment purposes – such as standing on two legs on the back of another elephant, skipping, or sitting on a tub – has anything whatsoever to do with "husbandry" practices. To the contrary, the Guide states expressly that "[e]lephants are trained for a variety of reasons, including husbandry, education, research, work, and entertainment." Id. at 21

(emphasis added). The clear import of this language is that training for “entertainment” is entirely separate from training for “husbandry.” See also Trial Tr.51:05-51:15. March 5, 2009 p.m. (Jacobson Test.). Similarly, there is nothing in the Guide to suggest that routinely chaining elephants on trains so that they may be transported for entertainment purposes should be classified as a husbandry practice.

218. The record demonstrates that the routine use of the bull hook by FEI employees to train, “correct,” discipline, and punish the elephants in order to get them to perform tricks in the circus is not a “husbandry practice.” See Trial Tr. 51:05 - 51:15, March 5, 2009 p.m. (Testimony of Gary Jacobson); see also Trial Tr. 13:24 - 14:11, March 9, 2009 a.m. (Gary Jacobson testifies that teaching young elephants to perform tricks in the circus is not for husbandry purposes); id., at 14:20 - 15:01.

219. Even if such use of the bull hook were considered a “husbandry” practice, the Court finds that it is certainly not a “generally accepted” husbandry practice. According to FEI’s own expert witness, Michael Keele, the “routine” striking of an elephant simply in order to obtain compliance with commands is “not appropriate” use of the bull hook. Trial Tr. 105 :17-105:22, March 12, 2009 p.m. (Keele Test.); see also id. at 88:6-88:8 (Q. “And in fact, it’s also the case that elephants should not be routinely struck with the bull hook. Correct?” A. “Correct.”). Mr. Keele, who conceded that he is “not really familiar with Ringling’s operations,” id. at 25:18-25:22, and in particular cannot opine on how FEI personnel use the bull hook, id. at 26:2-26:5, further testified that, due to the potential for harm to the elephants and the policy at the Oregon Zoo, he would be extremely concerned about, and would seek to terminate the employment of, any elephant handler at the Oregon Zoo who routinely struck the elephants with bull hooks. Id. at 88:9-88:23. Indeed,

when an elephant handler at the Zoo inflicted bull hook wounds on an elephant, the result was that he “was no longer employed at the zoo,” and Mr. Keele agreed that, as a manager, “that was a result that [he] very much desired.” Id. at 64:17-65:9. Mr. Keele further testified that he is “always concerned” about any kind of puncture wound on an elephant; that as a higher-up official at the zoo, he makes it his business to know about all incidents involving puncture wounds; that he does not regard any puncture wound as a minor matter; that it is inappropriate to strike an elephant with a bull hook near its mouth; that the proper use of the bull hook should not result in frequent lacerations and puncture wounds; that standards issued by the American Veterinary Medical Association likewise provide that the bull hook should not be used in a way that results in puncture wounds or lacerations; and that the use of the bull hook in this manner could be detrimental for the elephants and “bad for their well-being.” Id. at 79:25-80:12, 87:7-88:3, 89:9-89:13, 95:2-95:7.

220. Even the Husbandry Resource Guide on which FEI relies provides that the bull hook should be used in a way that does “not tear or penetrate into the skin,” and that even “superficial skin marks” should only occur on a “rare occasion” with bull hook use. DX 2 at 66. However, once again, the record here – including FEI’s own documents and testimony – establishes that, as employed by FEI personnel, the bull hook is used in a manner that often tears and penetrates the skin, and that puncture wounds, lacerations, and other “skins marks” are a common, rather than a rare, occurrence. See PFF 168-172.

221. The record also demonstrates that such use of the bull hook does not meet or exceed the minimum standards for facilities and care under the Animal Welfare Act. In fact, regulations issued by the USDA under the Animal Welfare Act provide that “[p]hysical abuse shall not be used to train, work, or otherwise handle animals,” and that the “[h]andling of all animals shall be done .

. . . in a manner that does not cause trauma . . . behavioral stress, physical harm, or unnecessary discomfort.” 9 C.F.R. §2.131(b). As stated above, the record in this case demonstrates that the routine use of the bull hook by FEI employees causes trauma, behavioral stress, physical harm, and unnecessary discomfort.

IV. PLAINTIFFS’ CLAIM CONCERNING THE CHAINING AND CONFINEMENT OF THE ELEPHANTS

A. The Performing Animals Are Chained On Hard Surfaces For Many Hours On The Train.

222. The Asian elephants in FEI’s possession are routinely chained on hard surfaces for many hours each day, and for an average of more than 26 consecutive hours when the elephants are traveling in railroad cars around the country.

223. The evidence demonstrates that elephants who perform with the circus travel up to 48 weeks a year, by train. See, e.g., PWC 177A, 246:19 - 247:03 (Deposition of Troy Metzler, July 25, 2006); see also PWC 64 (FEI Itineraries).

224. Ringling Brothers is the only circus in the United States that transports its elephants by train. See Trial Tr. 49:14 - 49:16, Feb. 23, 2009 a.m. (Testimony of Carol Buckley in response to a question from the Court); see also Trial Tr. Carol Buckley 24:13-24:24, Feb. 23, 2009 evening (“ A lot of elephants make one trip to their zoo and then they live there their whole life. In other situations, for breeding purposes, females will be moved around. In that case they’re moved one time and then once they are pregnant, most of the time they are moved back, so, two years later. So, rather seldom zoo elephants are moved.”); Trial Tr. Colleen Kinzley 25:8-25:10, Feb. 19, 2009 a.m. (it is “only occasional” that zoos transport their elephants).

225. It is the common practice of FEI to chain the elephants on two legs whenever they are on the train. See PWC 180 at 128:18 - 128:24 (Deposition of Robert Ridley, August 25, 2006); Trial Tr. 31:23 - 31:25, March 3, 2009 a.m. (Testimony of Kenneth Feld); see also PWC 130 (videotape of elephants chained on the train); PWC 152A at 187:02 - 187:05 (Rule 30(b)(6) Dep. Testimony of Gary Jacobson, Jan. 18, 2008).

226. FEI's own "Transportation Orders" which show a portion of the time that the elephants are on the train from one city to the next, demonstrate that the elephants are chained in the train for an average of 26 consecutive hours when the circus travels from one venue to another, and that they are often kept chained in the box cars for 60-70 consecutive hours or more, and sometimes as much as 90-100 consecutive hours. See PWC 50; Testimony of Michelle Sinnott, Trial Tr. 31:06-45:10, Feb. 10, 2009 a.m. (explaining the methodology she employed in preparing this chart); see also PWC 50 at 2-12 (declaration of Ms. Sinnott detailing the same); see also PWC 152A (Rule 30(b)(6) Deposition of Gary Jacobson, Jan. 18, 2008) at 208:03 - 208:20 (train "loaded and ready for switching" means the animals are all loaded on the train); id. at 212:07 - 213:09 (when the Transportation Order says "rest" this means the elephants were taken off the train); id. at 215:09 - 215:12, 217:08 - 218:03 (train "spotted," means put in a spot where the train can be unloaded); id. at 219:03 - 221:10 (if the Transportation Order does not say "rest," this means the elephants were not taken off the train); id. 226:08 - 226:22 (Mr. Jacobson testifies that the Transportation Orders reflect the actual departure and arrival dates); see also Trial Tr. 46:04 - 46:08, Feb. 12, 2009 a.m. (Testimony of Tom Rider) (explaining that "spotting the train" meant "everybody could get off").

227. FEI's Transportation Orders demonstrate that for the Blue Unit the elephants were chained on the train in 2000 an average of 27.81 consecutive hours; in 2001, an average of

consecutive 26.92 hours; in 2002, an average of 24.30 consecutive hours; in 2003, an average of consecutive 27.11 hours; in 2004, an average of consecutive 24.41 hours; in 2005, an average of consecutive 28 hours; in 2006, an average of consecutive 26.74 hours; and in 2007, an average of consecutive 30.46 hours. PWC 50 at 9-10, 20, 22, 24, 26, 27, 29, 31, 33, 35.

228. Similarly, the for the Red Unit the elephants were on the train in 2000, an average of 26.80 hours; in 2001, an average of 25.59 hours; in 2002, an average of 25.83 hours; in 2003, an average of 24.68 hours; in 2004, an average of 28.64; in 2005, an average of 25.42 hours; in 2006, an average of 31.03 hours; an in 2007, an average of 28.50 hours, see PWC 50 at 11, 39, 41, 43, 45, 48, 50, 52, 54. There are several trips each year, however, where the Red Unit elephants are chained and traveling on railroad cars for significantly more time then what is reflected by these averages. For example, in 2001, on a trip from Lexington, KY to Tucson, AZ, the Red Unit elephants were chained on the train for at least 100 consecutive hours spanning the course of 5 days, see PWC 50 at 40; PWC 49 B at 63 (FELD 3703). Similarly in 2002, on a trip from St. Louis, MO to Tampa, FL, the Red Unit elephants were on the train for at least 94 consecutive hours, see PWC 50 at 43; PWC 49 B at 127 (FELD 3992). In 2007, on a 3 day trip from Chicago, IL to Huntsville, AL, the Red Unit elephants were chained on the train for at least 67 consecutive hours, see PWC 50 at 54; PWC 49 B at 367 (FELD 48616.)

229. FEI's Transportation Orders further demonstrate that the Blue Unit elephants routinely travel for two to three days straight without coming off of chains. For example, in 2007, the Blue Unit elephants were chained on the train for two consecutive days or longer during three separate trips – including one trip during which they were chained on the train for seventy-six consecutive hours. PWC 50 at 34-35; PWC 49A at 351 (FEI 48707), 345 (FEI 48713), 331 (FEI

48728). Likewise, in 2006 the elephants were chained for more than two consecutive days on four separate occasions, PWC 50 at 32-33; PWC 49A at 294 (FEI 48766), 296 (FEI 48764), 306 (FEI 48754), 315 (FEI 48745) – including one trip on which the elephants were chained on the train for seventy-one hours straight, PWC 50 at 33; PWC 49A at 315 (FEI 48745). The Red Unit elephants have been chained on the train for up to 100 consecutive hours. PWC 50 at 40; PWC 49B at 63 (FELD 3703).

230. The record shows that because the train schedule is often delayed, the elephants sometimes stay chained on the train for much longer than is reflected in the Transportation Orders, and that the elephants are loaded on to the train hours before the train actually leaves. See, e.g., PWC 48 (USDA Memorandum, July 21, 2004), at 1 (PL 013535) (reporting that the animals were “on the train in their enclosures 9 hours prior to departure,” that the trip from Phoenix AZ to Fresno CA was “delayed,” id., and that “[t]he total transport time for all the animals was approximately 36 hours through the Arizona and California desert region,” id. at 2 (PL 013536) – for a total of 45 hours on the train); see also PWC 66 (internal FEI document reporting that “due [to] a problem with the railroad the train was unable to move, for 12 hr. Time span”).²⁸

231. FEI’s own employees admit that FEI often keeps the elephants on the train for longer periods of time than are reflected in the Transportation Orders – including overnight and at other times when the train is stationary. Indeed, according to Brian French who currently works on the Blue Unit and has worked on both the Red and Blue Units for many years, see Trial Tr. 5:02 - 5:03, March 3, 2009 a.m., see also PWC 183, the “normal” procedure is for the elephants to stay on the train overnight after it arrives in a new city. PWC 172, at 156:04 -157:19 (Deposition of Brian French, Nov. 6, 2008). In other words, FEI basically stores the elephants on the train for many

hours while it sets up at a new venue. Id. See also PWC 152A, at 189:04 - 189:07; 192:20 - 193:01 (Rule 30(b)(6) Dep. of Gary Jacobson, Jan. 18, 2008) (admitting that once the train is loaded there is often a wait before the train leaves); PWC 167A at 92:02 - 92:07 (Deposition of Sacha Houcke, Jan. 7, 2002) (admitting that elephants sometimes loaded several hours before the train leaves).

232. Indeed, the record shows that, if anything, the Transportation Orders generally understate the amount of time the elephants are chained on the railroad cars. When FEI's expert Dr. Friend calculated the actual amount of time the elephants were on the trains his transport study, those calculations exceeded – sometimes by many hours – the schedules reflected in the transportation orders for the same trips. Compare DX 300A at 25 with PWC 49B at 24 (actual Red Unit trip nearly six hours longer than transportation order schedule); DX 300A at 27 with PWC 49B at 25 (actual Red Unit trip thirty minutes longer than schedule); DX 300A at 31 with PWC 49A at 32 (actual Blue Unit trip 9 ½ hours longer than schedule); DX 300A at 34 with PWC 49A at 33 (actual Blue Unit trip seven hours longer than schedule); DX 300A at 67-68 with PWC 49A at 43 (actual Blue Unit trip 8 ½ hours longer than schedule); DX 300A at 71 with PWC 49A at 46 (actual trip 4 ½ hours longer than schedule). Indeed, Dr. Friend acknowledged at trial that the elephants often spend many hours chained on the railroad cars after the units arrive at their destinations. Trial Tr. 54:19-54:23, March 9, 2009 p.m.

233. The train cars have hard floors. See Trial Tr. 43:24 - 44:01, Feb. 12, 2009 a.m. (Testimony of Tom Rider) (“the elephant cars had a metal floor”); see also WC 118, PL 1500, PL 15017, PL 15018 (Photographs taken of inside of train at Blue Unit inspection); PWC 130 (Video footage of inside of train); see also Trial Tr. 44:01- 44:06, Feb. 23, 2009 a.m. (Testimony of Carol

Buckley who inspected the train during the Blue Unit inspection) (“the floor is covered with a hard . . . plastic like they spray on in the beds of the trucks, so its hard.”).

234. Evidence demonstrates that the train cars in which the elephants are chained are narrow and cramped, and that the elephants’ movements are severely restricted when they are on the train. See, e.g., PWC 118, PL 1500, PL 15017, PL 15018 (Photographs of inside of train taken at Blue Unit inspection), id. at PL 15007 (showing chains used on train), id. at PL 15069 (showing elephant on train with not much space); see also PWC 130 (videotape of inside of a train taken by Mr. Gedo).²⁹

235. FEI’s own witness, Brian French, testified that the elephants can only “take up to about a step-and-a-half or two steps forward and back and side to side to the extent of the walls of the train,” Trial Tr. 43:03 - 43:05, March 12, 2009 a.m.

236. The evidence also shows that the train cars fill up with excrement and urine, which the elephants are forced to stand in because they are chained in place. See Trial Tr. 11:04-11:06, Feb. 9, 2009 a.m. (Testimony of Louis Gedo) (the elephants chained in the train are kept “standing in urine and feces”); see also, e.g., PWC 130 (video tape of inside of train taken by Mr. Gedo (with noone there to clean up after the elephants)); Trial Tr. 43:14 - 43:22, Feb. 17, 2009 a.m. (Testimony of Tom Rider) (describing how some of the elephants stood in feces “all the time” and others “until we were able to clean it out, depending on where we were”); Trial Tr. 33:18 - 34:01, Feb. 9, 2009 a.m. (Testimony of Pat CuvIELlo) (he observed elephants chained inside the train with feces on the floor); Trial Tr. 74:14-75:11, Feb. 5, 2009 a.m. (Testimony of Archele Hundley (she participated in cleaning out the trains with the elephants when they approached Tulsa, Oklahoma, and that the manure and urine were spread throughout the train car, including where the elephants had been

standing, and that the smell was “unbelievable”); see also PWC 114A (Ms. Hundley’s September 29, 2006 Affidavit, ¶ 39) (“[t]here was such an accumulation of elephant feces that it took two dump trucks to remove all the waste from the boxcars”); id. (“[t]he stench from urine and feces is overwhelming and makes your eyes water and your nose burn”); Trial Tr. 91:15-92:14, Feb. 5, 2009 p.m. (Testimony of Robert Tom, Jr.) (He would clean out cars after a two or three day run, and would see feces and urine mixed with the hay in the areas where the elephants had been standing); PWC 115 (Mr. Tom’s October 10, 2006 Affidavit, ¶ 17 (“[o]n a 3 or 4 day train run, they stop only once to let the elephants and horses off of the train . . . we fill up to a dumpster-and-a-half with waste that accumulates”); see also Trial Tr. 141:04 - 141:24, Feb. 5, 2009 p.m. (Testimony of Sergeant Williams) (she observed the train rocking back and forth and liquid seeping out of it that appeared to be urine, based on its consistency and smell).

B. The Elephants Who Travel With The Circus Are Also Chained For Many Hours When They Are Off The Train At Performance Venues.

237. The record shows that the elephants who travel with the circus are also chained for long periods of time when they are off the trains at the performance venues. FEI admits that the elephants are always chained at “night.” See, e.g., PWC 46, Def.’s Answer to Interrog. No. 13, June 9, 2004 (admitting that the performing elephants are “tethered” throughout “the night”). However, unlike humans, elephants do not sleep throughout the night; rather, as Mr. Jacobson himself admitted, adult elephants normally only sleep about 3-4 hours a night. See Trial Tr. 60:24 - 60:25, Mar. 5, 2009 p.m. See also Trial Tr. Gail Laule 40:3 - 40:12, Feb. 18, 2009 a.m. (“I don’t believe that it is appropriate or acceptable to use chaining as the primary means of housing an animal overnight. These animals are not like us, and like so many other animals where when the sun goes

down, they go to sleep and they sleep the whole night, these animals have a behavior pattern that is active and inactive throughout a 24-hour period of time. So basically what you're doing is you're restraining those animals . . . you're talking about a small amount of movement that animal is allowed to do. For a significant amount of time they would normally be up and moving about and active.”).

The record further shows that when FEI refers to the elephants at the CEC being chained for the “night,” it means starting at about 3:00 p.m. See PWC 175 at 153:01-153:03 (Jacobson Dep., Oct. 24, 2007); see also Trial Tr. 7:02 - 7:10, March 9, 2009 a.m. (Gary Jacobson stating that the elephants at the CEC are only chained “at night”).

238. Furthermore, FEI also concedes that the performing elephants are chained after the last show is over. See, e.g., Trial Tr. 33:02 - 33:04, March 3, 2009 a.m. (Kenneth Feld); Trial Tr. 23:14 - 23:22, March 12, 2009 a.m. (Testimony of Brian French). Although the last show is sometimes over as late as 10:00 p.m., at other times the last show is over as early as 3:00 p.m. See PWC 173, at 164:04 - 165:02 (Deposition of Brian French, Nov. 6, 2008); see also DX 26I (Video tape of Blue Unit Inspection) (showing the elephants already chained for the night by 6:36 p.m.). The record further shows that the elephants are usually not taken off their chains until about 7:30-8:30 a.m. the next day. See e.g., PWC 182 (Deposition of Alex Vargas, May 31, 2007) at 186: 14 - 187:11 (elephants are chained until 7:30-8:30 a.m. the next day). Therefore, even accepting FEI's own employees' testimony on this point, the elephants are on chains anywhere between 17 ½ hours to 9 ½ hours each 24 hour period.

239. However, the record demonstrates that in fact the elephants spend much more time on chains than the FEI employees are willing to admit. For example, the Washington Humane Society reported in May 23, 2005 that when the Blue Unit was in Washington, D.C., the Unit

Manager Mike Stuart stated that “the elephants spend four to five hours a day outside and are kept chained during the performance except for a 20 minute period at the beginning and end of each show when they are performing,” and that “[a]ccording to these numbers, the elephants spend 17-20 hours a day chained.” PWC 28 at 1 (FEI 1576); see also PWC 183 (Chart showing Mike Stuart as the Blue Unit General Manager in May 2005); see also PWC 52 (Internal FEI Email dated Oct. 2004) (Veterinarian Ellen Wiedner states that “[e]lephants are being walked not even ten minutes a day – on one day, the ‘exercise’ consisted of three circles around the wooden pallets. The unit continues to find reasons why the elephants cannot go outside”). Former Ringling Bros. employees also provided testimony that the elephants who travel with the circus spend most of the time chained. See Trial Tr. 31:19 - 32:04, Feb. 12, 2009 (Testimony of Tom Rider) (“when I started there [] we didn’t have pens, so they were chained from the time that I got to work until the time I left, except for the show”).³⁰

240. The record also shows that some elephants are kept chained even when other elephants are taken off chains and put in “pens” for some period of time. Long-time FEI elephant handler Alex Vargas testified that certain elephants (Luna and Banana) are kept chained throughout the day. See PWC 182 at 186:14 - 187:11. Pat CuvIELlo, who has observed both the Blue Unit and the Red Unit dozens of times over the years, testified that even when the circus uses pens, typically one of the elephants still has a chain on her. Mr. CuvIELlo also testified that he has seen some of the elephants, including young elephants Sara and Angelica, kept on chains for days at a time at the Blue Unit, and Mr. CuvIELlo showed the Court video tape that he took of this in Oakland California in August 2004, which shows the two young elephants engaged in classic stereotypic behavior. See

Trial Tr. 41:01 - 50:12; see id. at 42:19 - 43:12 (describing the time he spent monitoring the circus, including all day Saturday and all day Sunday, and that “during the time I observed the elephants . . . Angelica was always chained up. I never saw her off chains once, and Sara was chained up except in the open house”); see also PWC 128A and 128B (videotape of Angelica and Sara on chains); see also id. 51:05 - 52:25 (Mr. CuvIELlo saw Zina chained by herself); id. at 52:01 (he saw an elephant named Bo chained separately from the other elephants); see also Trial Tr. 40:14 - 40:21, Feb. 9, 2009 a.m (Robert Tom testified that even when there are pens some of the elephants are kept chained).

241. When they are on chains, the elephants are chained on two alternate legs with little ability to move. See PWC 55 (USDA Memorandum) (1998) (reporting that the elephants “were chained on two opposite legs in a closely spaced line along one half of the tent, on a concrete pad . . . [t]he chains on some were so short and taut, that they could not have turn 180, or take a single full step forward or backward, much less a few steps”); PWC 180 at 128:10 - 128:17 (Ridley Dep.) (the elephants are chained on two legs); Trial Tr. 25:18 - 25:22, March 12, 2009 a.m. (Testimony of Brian French) (Karen and Nicole are chained next to each other and “can move side to side a couple of steps, forward one or two steps, and backwards. They can turn about halfway around”).³¹

242. Mr. Ramos testified that when he would come into work in the morning in September 2006 the elephants were chained on two legs and “were laying in excrement;” that “each morning . . . at least one or two of the elephants were laying in excrement.” PWC 168A, 168B at 14:07 - 15:11 (Ramos Dep., Jan. 4, 2007).

243. Although sometimes the elephants are kept chained on wooden pallets, see PWC 143 A (videotape of Karen and Nicole chained under tent at Blue Unit Inspection); see also Trial Tr.

25:18 - 25:25, March 12, 2009 (Testimony of Brian French) (stating that the elephants are “tethered to the boards” when the circus is at an outdoor venue), most of the time the elephants are chained on hard surfaces, and even when they are in “pens,” they are also standing on hard surfaces. See Videotape Evidence, PWC 132 E, PWC 132 I, PWC 132 K, PWC 132 O, PWC133 A, PWC 133 B, PWC 147 A, PWC 147 B; see also PWC 143 E, DX 26B, DX 26C, DX 26D, DX 26E, DX 26F, DX 26 G, DX 26 H, DX 27A, DX 27B (Videotape of elephants in “pens” at the Blue Unit Inspection); see also Trial Tr. 40:13, Feb. Feb. 9, 2009 a.m. (Testimony of Pat CuvIELlo) (the pens are usually set up on “blacktop” – “the parking lot surface”); see also PWC 198 (FEI 51988, FEI 52072, FEI 51937, FEI 51933, FEI 52043 (photographs of pens used by FEI); Trial Tr. 69:01 - 70:12 (Brian French affirms that these photographs are representative of the pens that are used by FEI); see also Trial Tr. 39:04 - 40:01, Feb. 9, 2009 a.m. (Testimony of Pat CuvIELlo) (he has never seen the elephants maintained on grass or dirt).

244. FEI’s chaining practices are inconsistent with the standards set by the American Zoo and Aquarium Association. See PWC 74 at § 5.5.1 (chaining is acceptable only as a “temporary restraint,” and even then “elephants must not be subjected to prolonged chaining (for the majority of a 24-hour period) unless necessary for veterinary treatment or transport”). The chaining done by FEI is not “temporary,” exceeds the majority of a 24 hour period, is not necessary for either veterinary treatment or transport. See, e.g., Trial Tr. 23:25 - 24:06 (in response to a question from the Court Kenneth Feld acknowledged that FEI could use trucks to transport the elephants).

245. In fact, Colleen Kinzley, the General Curator of the Oakland Zoo testified that elephants are no longer routinely chained at zoos Trial Tr. Colleen Kinzley 14:20-15:5, Feb. 18, 2009 p.m. (“And going back to the Oakland Zoo, are chains currently used at the Oakland Zoo? A.

Periodically we will use chaining as a tool, and that is primarily if there's a medical situation. We do like to keep the elephants comfortable with chaining, so we'll chain them for short periods of time, maybe 20 or 30 minutes periodically at this point, meaning, maybe once every couple of months"); Trial Tr. Gail Laule 39:8-39:14, Feb. 18, 2009 a.m. ("the vast majority [of AZA zoos] no longer use chaining as a means of maintaining animals for housing or for social management, which means keeping them on chains for extended periods of time, but chaining is used for very short periods of time for administering veterinary care or if you need to do something where the animals needs to be temporarily restrained.").

C. FEI's Use of "Pens" Does Not Sufficiently Ameliorate The Amount Of Chaining That The Elephants Endure.

246. The record shows that the "pens" that FEI uses are only between 30 feet by 25 feet, or 30 feet by 40 feet, and usually have several elephants in them. See Trial Tr. 37:03, March 12, 2009 a.m. (Brian French testified that the pens are approximately 30 feet by 25 feet in size); id. at 36:16 - 36:16 (he testified they are never smaller than 30 by 40 feet); Trial Tr. 40:22 - 41:06, Feb. 9, 2009 (Pat CuvIELLO testifies that the pens are usually 30 by 30 feet and there are anywhere between 2-4 elephants in one pen); see also Videotape Evidence of "pens" used at Auburn Hills, Michigan) (PWC 143 E, DX 26B, DX 26C, DX 26D, DX 26E, DX 26F, DX 26 G, DX 26 H, DX 27A, DX 27B); see also Photographs of pens used by FEI (PWC 198).

247. Moreover, the "pens" are usually set up on hard surfaces, such as asphalt parking lots. See id.; see also Trial Tr. 40:11 - 40:13, Feb. 9, 2009 a.m. (Testimony of Pat CuvIELLO) (Q. "And can you tell us what kind of surface the elephants are on when they're in the pens?" A. "It's the parking lot surface, the blacktop.").

248. The record further shows that even when FEI plans to use pens, it is not always able to do so. See, e.g., PWC 58 (FEI “Elephant Daily Report” (1999)) (noting that “[t]here was no pens set up due to the lay out of this blding” [sic]); PWC 59 (FEI “Daily Animal Record Blue Unit” for Cincinnati, Ohio (2001)) (“Very small lot, set up in the street and could only set up a very small tent no out door pens”); PWC 60 (FEI “Daily Animal Report Blue Unit” for Fort Worth, Texas (2001)) (“no pens possible for adult Elephants”); see also PWC 55 (USDA Memorandum) (noting that “[d]uring good weather, electrified pens are set up for the elephants. But the show’s route is such that bad weather is likely for much of the first half of the tour, and the elephants don’t get off chains much during that period”).

249. The amount of space provided by FEI’s pens is much less than what is required by the American Zoo and Aquarium Association Standards for Elephant Management and Care, which requires that “outdoor yards must have at least 1,800 sq. feet for a single adult individual and an additional 900 sq. ft. must be added for each additional animal,” and that “[i]f this space is the only location for exercise, then it is recommended that the space per elephant should be even greater;” and that “[i]ndoor space must provide adequate room for animals to move about and lie down without restriction,” that a “minimum of 400 sq. ft is required for a single animal, approximately 800 sq. ft. for two animals, and so on”). PWC 74 at § 1.2 (p. 2 (API 1425)). Those standards further provide that “[o]utdoor yard surfaces must consist primarily of natural substrates (e.g., soil, sand, grass),” and that “[w]hile outdoors, elephants must have access to sand and soil at all times for dust bathing”), id. at §§ 1.4.5, 1.4.6 (p. 3 (API 142)).

D. The Elephants At The CEC Are Chained On Concrete For Many Hours Each Day.

250. According to Gary Jacobson, General Manager of the CEC, elephants maintained there, including but not limited to Susan, Nicole, Lutzi, Mysore, and Zina, spend a minimum of 16 hours a day chained on two legs in a concrete “barn,” see PWC 175 at 153:01 - 153:06, 153:09, 153:13 - 153:14 (Jacobson Dep., Oct. 24, 2007) (elephants are chained in the barn from 3 p.m. to 7 a.m. the next morning);, the young male elephants are also chained for about 16 hours a day, id., 154:14 - 155:01; Trial Tr.(same), as are the young female elephants, id., 159:01 - 159:13. See Trial Tr. 7:02 - 7:07, 8:11 - 8:17, 9:01- 9:09, March 9, 2009 a.m. (same); see also PWC 142 A, 142D, 142 E (Videotape of elephants in the barn at the CEC inspection); PWC 118, Nos. 19, 23, 24 (photographs taken during CEC inspection); see also Trial Tr. 68:19-68:21, Feb. 18, 2009 p.m. (Testimony of Colleen Kinzley who attended the CEC inspection) (“this is video footage of elephants that are chained in the barn at the CEC. They’re on a very hard surface, concrete”); Trial Tr. 62:06 - 62:08, March 5, 2009 p.m. (Testimony of Gary Jacobson) (CEC barn has a “cement” floor).

251. The elephants are chained on two alternate legs, one front and one hind leg, in an extremely barren environment, have very little opportunity to move around, and they can only have physical contact with whichever elephants they are next to it. See Video of the CEC Inspection, PWC 142A, 142D, 142E; PWC 118, Nos. 23 and 19 (Photographs taken at CEC Inspection); Trial Tr. 59:14 - 59:18, Feb. 4, 2009 p.m. (Testimony of Dr. Poole) (the elephants chained at the CEC “can’t move more than a step forward or backward or a step to each side”).³²

252. The elephants at the CEC spend so much time chained that they have worn grooves into the concrete floor. Trial Tr. Carol Buckley 76:10-76:15, Feb. 23, 2009 a.m. (“What I observed

while I was there is . . . where each elephant was standing with their front feet, they had actually worn away the concrete. There was a recessed area right where their feet are moving back and forth, and that really caught my attention because that takes a whole lot of activity to wear down concrete like that.”); see also PWC 113K at Fig. 51-PL 15592 (photograph of worn area in concrete).

253. Some elephants at the CEC are chained on concrete for much longer periods of time. On October 24, 2007, when he was deposed, Mr. Jacobson testified that a female named Emma – who is now about 37 years old, see PWC 169 – was chained on concrete, by herself, for 22 ½ hours each day, and at the trial, Mr. Jacobson affirmed that Emma was still being maintained this way. See PWC 175 (Jacobson Dep., Oct. 24, 2007) at 161:11 - 161:20, 162:11; see also Trial Tr. 9:10 - 9:25, March 9, 2009 a.m. (affirming that Emma is still chained on concrete for about 22 ½ hours a day). This means that Emma has been living on chains for all but an hour and a half each day for at least a year and a half and probably longer. Id.

254. Similarly, on October 24, 2007, Mr. Jacobson testified that Shirley, who was then only twelve years old, see PWC 151, lived her life at the CEC chained on concrete for 22 ½ hours a day, while she was being made to nurse her calf named Mable. See PWC 175 (Jacobson Dep., Oct. 24, 2007) at 162:18 - 163:21, 164:04 - 164:14. At trial, Mr. Jacobson confirmed that Shirley was still being maintained this way, see Trial Tr. 9:10 - 9:25, March 9, 2009 a.m., which means she too has been living her life chained on concrete for at least the last year and a half. In addition, Mr. Jacobson testified that Shirley had tested positive for tuberculosis, but she is not receiving any treatment for the disease. See PWC 175 at 244:14 - 245:03, 246:18 - 245:20 (Mr. Jacobson’s Oct. 24, 2007 testimony).

255. Mr. Jacobson also testified that the young male elephant P.T., who is now about seven years old, see PWC 151, is chained “on a concrete slab under an awning,” see Jacobson Dep. (Oct. 24, 2007) at 155:08 - 155:13, and that the young female elephants Angelica, Asha, and Ruby (who are now eleven, seven, and seven, respectively, see PWC 151), were chained on two legs on concrete, id. at 159:01 - 159:13, 160:01 - 160:18.

256. Mr. Jacobson also testified that “[n]one of the males [ever] go out on the grass.” PWC 175, at 158:05 (Jacobson Dep., Oct. 24, 2007); see also Trial Tr. 7:11 - 13, March 9, 2009 a.m. (Jacobson Testimony), and that once the male elephants reach the age of about eight years old, they are maintained “behind bars” at the CEC for the rest of their lives. See Trial Tr. 37:05 - 38:04, March 5, 2009 p.m.; id. 35:24 - 35:25 (he considers an “adult male” a male elephant “normally from eight and over”).

257. This means that the youngest elephant born at the CEC, whom FEI named “Barak” after our new President, will spend a good portion of his life – at least 16 hours a day – chained on concrete, and then in about eight years, he will be put “behind bars” where he will live for another 50-60 years, and never go out on grass. Id., see also Trial Tr. 10:03 - 10:06 March 3, 2009 a.m. (Kenneth Feld testifies that the elephants live to be “fifty or sixty years old”).

258. Videotape evidence produced by FEI shows that female elephants are kept chained on concrete, by themselves, prior to and during labor. See PWC 141A (videotape of Shirley giving birth to Riccardo); see also Trial Tr. 102:21 - 103:20, March 5, 2009 (Mr. Jacobson testifies that the mothers are chained in the barn for at least two weeks prior to their due date, and that they that they are chained on two or three legs, on concrete).

259. The evidence shows that baby elephants are forcibly removed from their mothers before they are naturally weaned – when they are “around two” – so that they can be “managed” at the CEC, that chains and other restraints are used for this purpose, and this practice causes “large visible lesions” on the elephants’ legs. See PWC 175, 271:12 - 271:20 (Jacobson Dep., Oct. 24, 2007) (this is done to “manage” the babies); id. at 273:19 - 274:02 (admitting that the elephants are still nursing when this is done and that they are “around two” years old); id. at 274:14 - 274:18 (admitting that they take the baby elephants away from the mothers when they are young because they are more easily trained at that age); USDA Inspection Report, PWC 42.

260. In February 1999, USDA inspectors observed two elephants under two years old with “large visible lesions” on their legs at the CEC. See PWC 42, USDA Inspection Report (Feb. 10, 1999); see also PWC 151 (showing when Doc and Angelica were born). After consulting several elephant experts, the USDA’s Deputy Administrator for Animal Care informed FEI that “the handling of these two elephants . . . caused unnecessary trauma, behavioral stress, physical harm and discomfort to these two elephants.” PWC 43 (Letter from Ron DeHaven to Julie Strauss (May 11, 1999)).

261. Gary Jacobson testified that when he separated the calves Irvin and Aree from their mothers in April 2007, he “grabbed them and tied them up” by all four legs, put them in separate paddocks in the barn, kept them tied up for ten days on two legs, and then put them on chains. See PWC 175, at 275:04 - 276:18 (Jacobson Dep., Oct. 24, 2009). Irvin and Aree were two years old at the time. See PWC 151. Mr. Jacobson further testified that he kept Aree on chains for “four months” every day, except for about 40 minutes each day that she spent with Mr. Jacobson; id. at

279:17 - 280:05, 280:09 - 280:16, and that he kept Irvin tied up for “about 10 days,” id. at 280:17 - 280:22.

262. The evidence also shows that once the baby elephants are forcibly removed from their mothers, they never get to live with them again. See Trial Tr. 36:07 - 36:10, March 9, 2009 a.m.; see also PWC 175 at 281:09 - 281:11 (Jacobson Dep., Oct. 24, 2007) (once separated from their mothers, Aree and Irvin do not spend any time with them). In fact, Mr. Jacobson testified that except for the three most recently born calves (Mable, Sundara, and Barack), none of the other 15 calves born at the CEC who are still alive live with their mothers. See Trial Tr. 36:11 - 38:14, March 9, 2009 a.m.; see also PWC 151 (Chart of elephants born to FEI).

263. This treatment of the elephants is completely contrary to what occurs in the wild – where elephants give birth in communal settings, female elephants stay with their mothers their entire lives, and male elephants stay with their mothers until they are about fourteen. See Trial Tr. 32:18 - 34:09, Feb. 4, 2009 p.m. (Testimony of Dr. Poole); id. 85:13 - 86:15 (Dr. Poole explains that the scene of Shirley giving birth to Riccardo is “so completely different from an elephant in the wild who would be with her family, they would help her, they would help the calf get to her feet. There would be rumbling and trumpeting and sort of celebration with the birth of a baby”); see also Trial Tr. 105:21 - 106:07, March 5, 2009 p.m. (Gary Jacobson admits to the Court that in the wild first-time mothers “probably” don’t kill their calves as much as they do in captivity “because they live in wild herds, and it’s an entirely different environment”).

E. The Elephants At Williston Are Confined On Concrete For Many Hours Each Day.

264. The record shows that the FEI elephants who are maintained at its “Williston” facility in Florida are also maintained for many hours each day on concrete.

265. Geoffrey Pettigrew, who currently works at Williston, testified that FEI currently maintains five elephants at that facility – Siam, Cora, Putzi, Sabu, and Prince. See PWC 178, at 80:03 - 80:05, 87:10 - 87:15, 87:22 - 88:06 (Pettigrew Dep., Nov. 14, 2008). Although FEI refers to this facility as its “retirement” facility, both Prince and Sabu are relatively young elephants – Prince is 21 years old; Sabu is 26 years old. See id. at 89:01 - 91:02, 91:08 - 92:01; see also PWC 169 (Chart showing birth dates of elephants owned by FEI). Both elephants have been at Williston for many years – they were both moved to Williston in 1996, when Prince was only eight years old and Sabu was not quite fourteen. See id. According to Mr. Feld, they were both moved to Williston after FEI castrated them. See Trial Tr. at 86:04 - 88:16, March 3, 2009 a.m.

266. According to Mr. Pettigrew, Sabu and Prince live alone at Williston, see Pettigrew Dep. at 92:15 - 92:18, and are kept in a concrete barn for about 15 hours each day, id. at 98:10 - 98:21, 99:18 - 100:02. Each of the three female elephants at Williston – Siam, Putzi, and Cora – are also kept separately in a concrete barn for about 15 hours a day, and although Cora and Putzi get to spend some time together when they are not kept in the barn, Siam spends all of her time alone. Id. at 101:10 - 102:05, 103:07 - 103:11, 103:18 - 103:20, 104:02 - 104:08, 105:07 - 105:13.

267. Therefore, according to FEI’s own employee, the elephants who are “retired” or otherwise placed at Williston, also spend the majority of each 24 hour day standing on concrete.

F. FEI’s Chaining And Confinement Practices Harm And Harass The Asian Elephants.

268. Plaintiffs’ experts presented credible expert testimony that keeping the elephants on chains for many hours harms and harasses the elephants in many ways, by contributing to serious foot, leg, joint, and other injuries and diseases, and significantly impairing their essential and normal

behavioral patterns, including their need to walk, their need to turn around and explore their surroundings, and their need to socialize with other elephants.

1. FEI's Chaining Practices Significantly Disrupt The Normal Behaviors Of The Elephants.

269. Dr. Poole testified that it is “painful” for the elephants and uncomfortable for them to stand on hard surfaces for many hours. Trial Tr. at 61:06 - 61:21, Feb. 4, 2009 p.m. She further testified that keeping the elephants routinely chained on concrete at the CEC for fifteen hours or more each day is “very detrimental” and “very harmful” to the elephants, because it prevents “an animal that is in sort of perpetual motion in its natural state” from “being able to move properly,” and interferes with its ability to socialize with the other elephants, and because it causes “damage to their feet.” *Id.*, 46:08 - 47:06; see also id. at 53:13 - 53:19 (“this is not normal elephant behavior. They can’t engage in normal elephant behavior because they are chained”). Based on her review of videotape of the Ringling Bros. elephants being maintained inside at the MCI Center in Washington, D.C., Dr. Poole testified that keeping elephants chained on concrete as depicted in the videotape harms the elephants in the same way that being chained on the train and in the barn at the CEC harms them, and that it is not an appropriate way “to treat an intelligent social animal.” *Id.* at 65:02 - 68:13; PWC 145B-1 (MCI Videotape); see id. 67:23 - 67:24 (“it is beyond anything I can imagine doing to an animal like an elephant”).

270. Dr. Poole further testified that keeping the elephants chained on the train for many hours “is the most extreme of this whole lifestyle” that the elephants live because it is “totally unnatural,” “[i]f you compare how they live in the wild in a family group, on the move continually, their ability to explore, interact with one another, find their own food, search for mates, that sort of picture of elephant life, in this vision fusion society where they’re coming together and splitting apart

and in communication with one another, to this extreme existence chained in a train.” Trial Tr. 53:16 - 54:14, Feb. 5, 2009 a.m.

271. Dr. Poole testified, based on her participation at the CEC Inspection, that all five elephants that the experts inspected at the CEC “had an abnormal gait,” and that this means they have problems with their feet, their hips, their leg bones, or their spinal cords,” and that she observed that the elephants all had “difficulty getting up and down.” Trial Tr. 62:09 - 63:05, Feb. 4, 2009 p.m. She also testified that this was “quite different from elephants of [the same age] in the wild who have a normal gait and don’t have difficulties getting up or down.” Id. 63:04 - 63:18. Dr. Poole further testified that she only occasionally sees signs of lameness in wild elephants which is caused by the infliction of a spear or arrow, or in young males by a particular disease caused “twisting disease” which comes in the rainy season, lasts a few weeks and then dissipates,” id., and she further testified, based on her collaboration with Asian elephant expert Manori Gunawardena that lameness, “gait abnormality or chronic problems with the gait are not typical of wild Asian elephants.” Id. 64:12 - 64:24; see also id. at 110:24 - 111:07 (noting that she consulted with her Asian elephant colleague “specifically on this,” and that the kind of foot problems seen in wild Asian elephants are caused by “wounds inflicted by people”).

2. Dr. Ensley’s Review Of The Medical Records.

272. Based on his extensive review of the medical records that are available, as well as his attendance at the Court-ordered inspections and his review of the pertinent literature, including leading texts on the appropriate care and medical treatment of elephants, Dr. Ensley’s opinion – which the Court finds credible and reliable – is that FEI’s elephants have suffered, are suffering, and will continue to suffer, from myriad chronic medical problems that have been caused and/or

exacerbated by the practices at issue. These health problems include “chronic foot problems,” “split toenails,” “infected toenails,” “[f]oot abscesses,” “lamenesses,” “[u]neven wear on the soles of their feet,” “[i]njuries associated with travel [and] unloading,” arthritis, tuberculosis, and pressure or bed sores. Trial Tr. 35:8-35:12, 52:17-53:20, Feb. 24, 2009 a.m. (Ensley Testimony); see also id. at 22:7-22:20 (“the elephants are all being housed in conditions that exacerbate or accentuate their ongoing problems . . . cause the[] initiation of their problems.”); id. at 81:9-81:13 (the elephants “didn’t evolve to stand motionless for long periods of time on solid surface[s]. I think what you’re seeing here is an abundance of conditions related to an environment that they weren’t genetically programmed for.”); id. (confirming for the Court that the evidence shows “[m]edical conditions that were harming the animals precipitated by the way in which they’re handled”).

a) Bed or Pressures Sores

273. A pressure or bed sore in an elephant is a decubital ulcer or lesion that forms when a bony protuberance on the elephant – such as a cheek or hip bone – routinely rubs up against a hard surface from which the animal cannot escape. Trial Tr. 53:1-53:20, Feb. 24, 2009 a.m. (Ensley Test.). The condition – which is akin to bed sores suffered by “a person in a nursing home lying in bed in one position for a continued period of time with pressure on one location” – can be very serious because pressure sores may be very slow to heal and may become infected with contaminants that collect on the surface on which the animal is contaminated. Id. Most of the elephants with whom Mr. Rider worked, as well as other elephants in FEI’s possession, have repeatedly suffered from such sores. See, e.g., PWC 113L (Ensley Exp. Rep.) at 160 (medical records reflect that Nicole has suffered from chronic bed sores lesions on both sides of face and left hip); id. at 169 (medical records reflect that Lutzi has suffered from a bed sore on the left side of her head in 2003, a left cheek

pressure sore in 2004, and decubital lesions on cheeks in 2005); id. at 200 (medical records reflect that Zina has suffered from a pressure sore over her left knee and bed sores on the left side of her face and hip).³³

274. Pressure sores on elephants are “open wound[s]” that are caused and exacerbated by chaining the elephants for many hours on hard, unyielding surfaces, such as the surfaces to which the elephants in FEI’s possession are chained both while traveling with the blue unit and while maintained at the CEC. Trial Tr. 70:18-71:3, Feb. 24, 2009 a.m. (Ensley Test.); id. at 77:25-78:13; see also id. 17:21-18:2 (describing “Decubital ulcers, pressure sores,” caused by “[l]ying continually on a hardened surface, over an area where it’s – on the face, here, and the hip, where you have bony protrusions.”). Indeed, FEI’s own medical records analogize the lesions in the elephants to bed sores that develop in “human patients” who are unable to leave their beds for long periods of time. PWC 2A-Mysore at 315 (FELD 0008358); see also Trial Tr. 76:15-77:3, Feb. 24, 2009 a.m. (Ensley Test.) (analogizing sores that he sees on the elephants to what one would see on “[i]ndividuals restricted to bed, nursing home conditions, patients with chronic ailments confined to beds” – i.e., patients who cannot move).

275. None of FEI’s proffered expert witnesses disputed that pressure sores and decubital ulcers may be caused and/or exacerbated by forcing the elephants to spend many hours each day on concrete and other hard surfaces. To the contrary, Mr. Keele acknowledged that forcing elephants to live most of their lives on hard surfaces is one factor that causes the condition, although he testified that “there are other factors that come into play,” such as the age and body condition of the elephant. Trial Tr. 111:1-112:1, March 12, 2009 p.m. (Keele Test.). Mr. Keele further testified that if there

were many bed sores in a population of elephants, he would be concerned and would be looking to “see what we could change” to address the problem. Id. at 112:2-112:17.

276. Although antibiotics and other medication may temporarily alleviate bed sores and decubital ulcers, it is likely, if not inevitable, that these wounds will recur so long as the elephants in FEI’s possession are chained for many hours each day on the hard, unyielding surfaces. Indeed, at the Court-ordered inspection at Auburn Hills, Dr. Ensley observed scar tissue from a bed sore on Nicole’s right hip, and at the CEC inspection he observed a bed sore on the left side of Lutzi’s face. See Trial Tr. 24:19-25:1, Feb. 24, 2009 p.m. (Ensley Test.); PWC 113L at 263 (Ensley Exp. Rep.); PWC 143E (video of bed sore scarring on Nicole); PWC 113K at Fig. 12-PKE 108 (photo of bed sore scarring on Nicole).

b) Split/Cracked Toe Nails And Nail Bed Abscesses

277. As explained by Dr. Ensley, split or cracked toenails in Asian elephants are a potentially serious medical condition in which, as the elephants’ nails come in contact with hardened surfaces, the “nail tips themselves will crack or split, and sometimes the cuticles will crack or split also.” Trial Tr. 45:12-45:15, Feb. 24, 2009 a.m. Elephants’ toenails naturally grow at approximately a quarter to a half an inch each month; in the wild, the elephants naturally wear down the toenails through grazing and other activities on natural surfaces, thus greatly reducing the potential for cracks. Id. at 45:7-45:11. However, when Asian elephants are restrained on hard, unyielding surfaces, these natural processes cannot work to maintain the health of the elephants’ feet; to the contrary, as the elephants “move forward and back and to the left and to the right” on hard surfaces, the foot itself expands and contracts, so that tends to precipitate cracked nails.” Id. at 45:20-45:22; see also id. at 34:21-35:18 (explaining that photos of Karen’s feet taken at the Auburn Hills inspection, PWC 113K

at PKE 125, 126, demonstrate “a mechanical phenomenon” in which a crack in Karen’s foot that “goes all the way up the cuticle “opens and closes” and that “by maintaining the elephant on this hardened surface, back and forth, open and close, it makes it mechanically difficult for that to close and mend”).

278. FEI’s own medical records reflect that all of the elephants with whom Mr. Rider worked have suffered repeatedly from toenail cracks, often on several feet at the same time, as have the other Asian elephants in FEI’s possession. For example, a January 9, 2007 medical report on an inspection of the Blue Unit elephants indicates that Karen had a “vertical crack in her right front fourth digit and a vertical crack on the left hind leg, the second digit,” while Nicole at the same time was suffering from three toe nail cracks – a “vertical crack in the left front third digit,” a “vertical crack in the left hind, second digit,” and a “vertical crack in the right hind, third digit.” Trial Tr. 44:18-44:21, 46:15-46:17, Feb. 24, 2009 a.m. (Ensley Test.); PWC 2A-Karen at 392-93 (FEI 44481-82). In addition, four of the five other elephants then traveling on the Blue Unit were also suffering from multiple toenail cracks at the same time. Id. (indicating that Bonnie had two vertical and one “[w]edge and vertical” cracks; Sara had three vertical cracks, Kelly Ann had two vertical cracks, and Juliette had two vertical cracks). Of note, Bonnie, Sara, and Juliette are very young elephants already experiencing this medical condition. See PWC 113L (Ensley Expert Report) at 266-68 (indicating that Bonnie was 14 years old, Juliette 16 years old, and Sara seven years old). During the same month (January 2007), FEI’s medical records indicate that nine of the ten Asian elephants on FEI’s Red Unit also had toe nail cracks, with the tenth elephant suffering from a nail bed abscess (an even more serious foot condition which as will be discussed, often results from toenail cracks). See id. at 265 (citing FEI 44500-44502).

279. That toenail cracks are a recurrent medical problem in the FEI elephants, including those with whom Mr. Rider worked, is also established by Dr. Ensley's summary of the medical records and his testimony (and, indeed, appears to be undisputed by FEI). See PWC 113L (Ensley Expert Report) at 143-44 (nail cracks in Karen); id. at 169-70 (nail cracks in Lutzi); id. at 187-189 (nail cracks in Jewell); id. at 199-200 (nail cracks in Zina); id. at 218-221 (nail cracks in Susan); id. at 233-35 (nail cracks in Mysore); Trial Tr. 46:18-47:25, 49:3-50:3, 75:18-75:25, 86:10-86:20, March 24, 2009 a.m. (Ensley Test.).³⁴

280. Although cracked or split toenails are themselves physical injuries that may be "uncomfortable and painful" to elephants who are chained for many hours on hard surfaces, Trial Tr. 49:20-49:22, Feb. 24, 2009 a.m. (Ensley Test.), the conditions under which the FEI elephants are maintained also results in the development of an even more serious foot condition known as a "nail bed abscess" (which are referred to as "NBAs" in the medical records). An abscess is a "sequestered pocket of pus in an organ or beneath a surface" and "[i]n the elephant, abscesses manifest around the cuticle and around the nail and beneath the nail." Id. at 50:11-50:16; see also PWC 2A-Susan at 742 (FELD 0003145) (10/20/99 entry referring to a nail bed abscess with "two associated nail cracks").

281. Extensive chaining on hard surfaces results in the elephants' recurrent toenail cracks not only becoming deeper and wider as the elephants shift their weight back and forth, especially on their front feet – which bear the bulk of the elephants' weight – but also ensures that the elephants are repeatedly exposed to their own feces and urine, with the accompanying likelihood of contamination and infection resulting in abscesses. Trial Tr. 45:23-45:25, 49:9-49:12, Feb. 24, 2009 a.m. (Ensley Test.); id. at 51:12-51:20; id. at 29:5-29:9 (explaining that because of the "confinement in the location there [where the elephants were chained at Auburn Hills] you're going to get the feet

splashed and contaminated with urine. And the same thing as with particulate matter from solid waste.”); see also Trial Tr. 67:24-68:10, Feb. 18, 2009 p.m. (Testimony of Colleen Kinzley) (“in the chaining situation the elephants are forced to stand in their own urine and feces, which in my experience, if they have the choice, they avoid those locations and don’t stand in their urine and feces. But a chained elephant doesn’t have a choice in that matter.”); See also PFF 236; see Trial Tr. 29:21 - 29:23, March 12, 2009 a.m. (Brian French testified that FEI employees catch the waste from the elephants “probably 50 % percent of the time”).

282. Moreover, at the CEC, the concrete on which the elephants are chained for at least 16 hours each day has been worn down by the elephants’ feet, which results in eroded and roughened concrete in which “urine and fecal debris [will] collect,” thus further increasing the likelihood of contamination and infection of the elephants’ feet, as well as bed sores and other wounds associated with the animals’ conditions of confinement. Trial Tr. 47:5-47:11, 48:1-48:8, Feb. 24, 2009 p.m. (Ensley Test.); PWC 113K at Fig. 51-PL 15592 (CEC inspection photo showing “[r]oughened surface on concrete floor where fecal matter and urine accumulates”). According to FEI’s expert, Dr. Schmitt, when the elephants are chained, they can only “move a couple of steps forward” and a “couple of steps backward,” and then a “couple to the side.” Trial Tr. 7:20-7:24, March 16, 2009 p.m. Under such circumstances, and given the vast amount of waste that elephants produce, it is inevitable that the elephants will get considerable feces and urine on their feet regardless of any efforts that FEI makes to collect these waste materials. See, e.g., PWC 130 at 3:30-5:00 (video showing FEI elephants chained in train cars filled with the elephants’ feces). Indeed, a study of circus elephants co-authored by another of FEI’s experts, Dr. Friend, found that unchaining the elephants not only significantly reduced their stereotypic behavior but that “their feet were healthier because

their rear legs were no longer positioned over the area where they voided urine/feces”); PWC 158 at 222 (emphasis added); Trial Tr. 115:15-115:21, March 4, 2009 p.m. (agreeing that some urine splashes on the feet of the chained elephants despite efforts to collect it).

283. All of the elephants with whom Mr. Rider worked while on the blue unit, as well as many of the other elephants in FEI’s possession, have regularly developed nail bed and other foot abscesses – frequently referred to as “chronic” and “recurrent” abscesses in FEI’s medical records – as a consequence of the extensive chaining on hard surfaces that the animals must endure. PWC 113L (Ensley Report) at 143-44 (medical records report that Karen had a chronic nail bed abscess in 1999, an active abscess in 2003, and an abscess on her left foot in 2006); *id.* at 159-60 (medical records report that Nicole had a “severe NBA that involves the whole nail bed” in 1999, an abscess on toe in 2001, “healing” nail bed abscesses in 2002, and an “open abscess” on her leg in 2006).³⁵

284. Compounding the harm to the elephants, they have routinely been forced to travel on the railroad cars for many hours (and even days) at a time with severe abscesses on their feet, often while suffering other painful and debilitating feet and joint conditions simultaneously. Trial Tr. 50:4-50:10, 59:15-60:21, Feb. 24, 2009 a.m. (Ensley Test.) (Karen was traveling with a history of a nail bed abscess on her front left foot, and she had already been diagnosed with “chronic intermittent lameness” in her right hind leg, which was “assumed to be arthritis”). For example, while being forced to travel on the Blue Unit, Mysore was suffering from three nail bed abscesses at the same time – a “large active” abscess on one toe on her right front foot, another abscess on a different toe on the same foot, and a third abscess on a toe on her left foot “under [the] nail.” PWC 2A-Mysore at 47 (FEI 33029). At the same time, she was suffering from a nail crack on another toe, a “missing nail” on still another toe, and “interdigital tissue” i.e. – tissue between the toes – that was “very

swollen” on both front feet. Id.; see also PWC 113L at 224. On the same day, the other elephants traveling on the blue unit were also reported as suffering from a plethora of foot problems; Karen had a toe nail crack, “swollen” interdigital tissue, the heels of both of her hind feet were “worn down to pink tissue” and she was reported to “drag her feet when she walks”; Zina was suffering from “foot lesions” and nail cracks, as well as swollen interdigital tissue and an overgrown nail on another toe; and another elephant (Sophie) was suffering from nail bed abscesses, a nail split, “lameness” in her right front leg, and “swollen and soft” interdigital tissues in both her front feet. PWC-2A-Mysore at 48 (FELD 0021892).

285. On another occasion, Jewell was forced to travel on the Blue Unit with a “severe infectious process” at the base of a nail on her left foot, and there was also “radiographic evidence of osteomyelitis associated with [a] sole ulcer” in the same foot. PWC 113L at 176-77; see also PWC 170 at 3 (FELD 0006969). A diagnosis of osteomyelitis means that infection had likely spread into Jewell’s bone, resulting in “bone destruction.” Trial Tr. 9:2-9:8, Feb. 24, 2009 p.m. (Ensley Test.). Jewell was forced to travel chained for hours on the train with this serious and painful condition, while simultaneously suffering from additional feet maladies as well as osteoarthritis, another painful condition. Id. at 4:8-4:18 (indicating that Jewell had been diagnosed with arthritis in 1991); id. at 10:14-10:24 (An animal traveling with osteomyelitis “would be in discomfort and pain . . . [O]steomyelitis is, on a scale to ten, would be nine or ten. I mean, to have an animal traveling under these conditions with a bone infection, it raises in my mind, as a clinician with 30 years of experience, a high, high degree of concern.”).

286. Chaining an elephant on hard, unyielding surfaces for many hours while she is suffering from nail bed abscesses and related conditions not only causes the animal discomfort and pain, but

also causes further harm and injury to the elephant by making it more difficult for the abscess to heal than otherwise would be the case. See Trial Tr. 66:5-66:11, Feb. 24, 2009 a.m. (Ensley Test.) (explaining that the conditions under which the elephants are maintained helps “to precipitate the problem and not allowing good recuperation, not allowing the limbs to repair. You’re not giving this animal a break.”).

287. The conditions under which the elephants are being maintained makes it likely, if not inevitable, that they will continue to suffer nail bed abscesses and related conditions in the future. Indeed, the Court-ordered inspections of both the blue unit and CEC uncovered existing nail bed abscesses, as well as toe cracks poised to develop into full-blown abscesses. At the time of the CEC inspection, Susan had nail bed abscesses on both of her front feet. See Trial Tr. 46:14-46:22, Feb. 24, 2009 p.m. (Ensley Test.); PWC 113K at Fig. 45-PL 15320 (“[c]hronic toe nail abscess on Susan’s right front foot”); id. at Fig. 44-PL 15328 (“[c]hronic toe nail abscess on Susan’s left front foot”).³⁶

288. Although FEI’s veterinarians attempt to treat the elephants with medication when nail bed abscesses develop, this does not address the underlying cause of the problem, nor, more important, does it mean that the conditions under which the elephants are routinely maintained – i.e., chaining them on hard surfaces for many hours in a row – will not continue to precipitate and aggravate these injuries. Rather, the evidence from FEI’s own medical records, as well as the Court-ordered inspections, is compelling that the elephants will continue to suffer from “chronic,” “recurrent,” and “old” (adjectives that appear frequently in FEI’s own medical records) abscesses until and unless the underlying conditions causing these harmful conditions are ameliorated. See PFF 283 and Endnote 35; see also PWC 2A-Mysore at 55 (FELD 0021822) (medical record for Mysore

reporting on two nail bed abscesses and describing her examination as “[n]ormal examination except feet”) (emphasis added).

**c) Osteoarthritis/Degenerative Joint Disease And Additional
Lameness And Stiffness Documented In The Medical Records**

289. Osteoarthritis is synonymous with degenerative joint disease; it entails “joint surface debilitation or erosion of cartilage within the joint” and hence is a painful condition. Trial Tr. 7:3-7:13, Feb. 24, 2009 p.m. (Ensley Test.); see also Trial Tr. 59:22-59:25, Feb. 24, 2009 a.m. (Ensley Test.). According to Dr. Ensley’s review of FEI’s medical records, although most of the Blue Unit elephants with whom Mr. Rider worked have been diagnosed with arthritis, and others have suffered from recurrent lameness and painful joint stiffness, the elephants have continued to be chained with these conditions for many consecutive hours on hard surfaces, both on the road and at the CEC., over the course of many years. Trial Tr. 45:22-46:13, Feb. 24, 2009 eve. (Ensley Test.); Trial Tr. 41:5-41:17, 94:4-94:12, Feb. 23, 2009 a.m. (Buckley Test.) (a number of the elephants observed during the court-ordered inspections were suffering from stiffness, lameness, and abnormal gaits); Trial Tr. 71:21-71:24, Feb. 18, 2009 p.m. (Kinzley Test.) (elephants observed at the CEC “appeared to be very stiff” and “certainly did not appear to have a normal flexible gait”).

290. For example, as noted, FEI’s medical records reflect that Jewell had arthritis in 1991, see Trial Tr. 4:8-4:20, Feb. 24, 2009 p.m. (Ensley Test.), although she may have been suffering from the disease even earlier because there are few medical records prior to that date. See PWC 113L (Ensley Expert Report) at 171. However, she was forced to travel with the Blue Unit while suffering with this “painful” condition for many years thereafter, Trial Tr. 4:8-8:19, Feb. 24, 2009 p.m. (Ensley Test.), although the medical records are replete with references to Jewell continuing to suffer from “stiffness and lameness” in both of her front legs, PWC 113L (Ensley Expert Report) at 173, being

“consistently stiff on left foreleg, and intermittently stiff on right foreleg,” id. at 177, suffering from “[l]ikely osteoarthritis causing stiffness of left foreleg” and “acute lameness,” id. at 179, “chronic stiffness,” id. at 182, and a “gait abnormality.” Id. at 186.

291. Indeed, a USDA inspection report in May 2006 – after Jewell had been traveling on the Blue Unit with arthritis for fifteen years – found that “Jewell has an abnormal gait and walks with a stiff left front leg,” that the “stiffness in the left front leg did not disappear as she walked” and that “Jewell’s current condition needs to be addressed by the attending veterinarian to ensure the animal’s health and well-being.” Id. at 183. Nonetheless, Jewell was kept on the Blue Unit for several more months, while she continued to experience “[m]uscle pain” and “[s]tiffness unchanged in front,” Id. at 184, “osteoarthritis of let front foot and carpus” and “ongoing stiffness on the right fore limb.” Id. at 185. In September 2006, she was finally transferred to the CEC – where she continues to be chained on concrete for most of each day, Trial Tr. 13:6-13:15, Feb. 24, 2009 p.m. (Ensley Test.), see also PFF 250, although she continues to “suffer from bone and joint disease that’s ongoing, that’s been chronic.” Id. at 15:6-15:11.

292. Likewise, FEI’s medical records indicate that Karen received a diagnosis of “chronic intermittent lameness, right hind [leg], assumed to be arthritis” in February 2000, and yet it is undisputed that she has continued to travel on the Blue Unit over most of the last nine years, and continues to travel with the blue unit today. Id. at 59:9-59:16 (medical records for Karen indicate a diagnosis of “chronic intermittent lameness, right hind [leg], assumed to be arthritis). During this time, Karen has frequently been subjected to extremely lengthy trips while being chained in the railroad cars, sometimes for days at a time. See PWC 50, PWC 49A, 49B, 49C]. For example, the transport study performed by FEI’s own expert, Dr. Friend, indicates that, in October 2000, after

Karen had been diagnosed with “assumed” arthritis, she was chained on the train for an 82 ½ hour trip between Denver and Cleveland. Trial Tr. 59:15-61:23, March 9, 2009 (Friend Test.).

293. Similarly, the medical records reflect that Nicole was diagnosed as being “extremely stiff legged” in 2004 when she began to receive injections for a drug used to treat arthritis (Adequan); that she had a “stiff right front” leg in 2005; that she was diagnosed as having a “history of lameness” in her right hind leg in 2006, while she also experienced “muscle pain” and “limited flexibility” and “stiffness” of her right front leg. See PWC113L (Ensley Report) at 152, 156-58. Yet Nicole has continued to travel and perform with the Blue Unit despite this “history” of lameness and stiffness in several legs. Id.; see also Trial Tr. 65:3-65:16, 66:12-67:22, Feb. 24, 2009 a.m. (Ensley Test.).³⁷

294. As discussed below, the record is also clear that these conditions likely developed as a direct consequence of the FEI practices at issue. However, regardless of how the elephants developed these arthritic and joint conditions in the first instance – and, FEI’s practice of continuing to subject elephants with these medical conditions to prolonged chaining on hard surfaces is clearly injurious and harmful to them. As explained by Dr. Ensley, forcing any animal suffering joint inflammation, stiffness, or lameness to be chained with minimal mobility on hard, unyielding surfaces – such as those on the trains, at the venue sites, and at the CEC – for many consecutive hours will not only intensify the pain and suffering the animal is experiencing, but will actually “enhanc[e]” – i.e., worsen – the underlying condition itself. Trial Tr. 60:9-60:21, Feb. 24, 2009 a.m. (Ensley Test.); id. at 61:22-62:23 (explaining that keeping an elephant with arthritis chained on a railroad car for many hours at a time would be “arthritis enhancing” and “[i]t would be like taking your old household pet dog and letting him sleep out on the concrete at night”).³⁸

295. These facts – none of which have been rebutted by FEI and that, once again, are drawn from defendant’s own medical records – clearly establish that not only did FEI’s practices aggravate and enhance Karen’s arthritic condition, but that they clearly caused them in the first instance, i.e., Karen suffered an injury in the course of being compelled to train for a circus performance and then compounded the injury (and is still compounding it) through years of chaining on hard surfaces during travel and otherwise, and through the ongoing training and performing of unnatural circus tricks – including those which she was, understandably, “reluctant to perform.”

296. Likewise, in November 1999, Susan also “[s]lipped off [a] tub during practice,” at which point she began to experience lameness and stiffness. PWC 2A-Susan at 742 (FELD 0003145). A little more than a year later, in December 2000, radiographs were taken of her feet which, according to Dr. Ensley’s testimony (and undisputed by FEI), establish that she was suffering from “osteoarthritis or degenerative joint disease.” Trial Tr. 88:14-89:9, Feb. 24, 2009 a.m. However, she continued to travel with the Blue Unit although, according to the medical records, she was “lame and stiff when unloaded from the train,” “having a hard time laying down,” “[s]till not laying down at night,” and suffering from “[a]cute lameness.” PWC 113L (Ensley Expert Report) at 210-212. Once again, FEI’s own medical records point to only one conclusion – that Susan was both injured by being forced to train for a circus trick and that she was forced to endure the pain, suffering, and aggravation of this injury by being chained on the train and other hard surfaces for prolonged periods of time. See also Trial Tr. 20:23-20:25, March 16, 2009 eve. (Schmitt Test.) (conceding that FEI elephants have suffered leg injuries while participating in the circus, although questioning the severity of the injury).

d) Additional Foot and Leg Injuries Associated With Chaining

297. Dr. Ensley's review of the medical records, along with his participation in the Court-ordered inspections, also uncovered additional foot and leg disorders that are caused and/or exacerbated by the prolonged chaining of the elephants on hard surfaces. At the inspection at the CEC, Dr. Ensley and other experts observed chains with no protective coverings pulled tightly against the elephants' skin, and that Zina has scarring on her rear leg that has resulted from "sores from chronic trauma, from a tether that's been around the right rear leg." Trial Tr. 43:1-44:3, Feb. 24, 2009 p.m. (Ensley Test.); id. at 47:17-47:20 ("Obviously, Zina is having difficulty, or she wouldn't be fighting with her chain, constantly rubbing it, and creating those sores."); PWC 113K (inspection photos) at Fig. 37-PL 15269 (photo at CEC inspection showing "[s]car tissue [on Zina's leg] compatible with chain trauma"); id. at Fig. 53-PL 15602 (photo of CEC inspection showing chains tightly affixed to elephants' legs and elephant pulling against one of the chains); id. at Fig. 3-PL 15121 (photo of elephant on train at Auburn Hills inspection with bare chain tightly encircling elephant's leg); see also Trial Tr. 108:25-109:5, March 12, 2009 p.m. (Keele Test.) (agreeing that indentations on an elephant's leg would be evidence of improper chaining). FEI's expert, Dr. Schmitt, disagrees with the characterization of chain "scarring" on Zina's legs, but does not dispute that the chains are in fact causing physical changes in the tissues on her, as well as the other elephants', legs. Trial Tr. 22:5-23:10, March 16, 2009 eve. Rather, Dr. Schmitt maintains that the elephants are forming "excess tissues" or "calluses" in an effort to "protect the underlying tissues from injury" from the chains rubbing up against the elephants' skin. Id. (Q. "[A]s I understand what you're saying, it's happening because the chain is rubbing against the skin, right?" A. "It's against the skin, yes." Q. "So it's the skin's effort to protect itself against this insult from the chain, right?"

A. “I’ve seen that, yes. And, in some of these elephants, I think that may be true.”).

298. FEI’s medical records also reflect that Susan has for many years suffered from the problem of “chronically urinat[ing] on her feet, causing a dermatitis.” PWC 2A-Susan at 55 (FELD 0021823). The records further describe the condition as “[h]yperkeratosis, with moist and occasionally necrotic skin, medial aspects of hind feet, likely from urine scald.” PWC 2A-Susan at 745 (FELD 0003148). As explained by Dr. Ensley, this means that Susan now has a “leatherlike consistency on her rear legs, where the urine has come and irritated and scalded, over a chronic time, the tissue of the skin. Trial Tr. 44:9-44:16, Feb. 24, 2009 p.m. This chronic “burning from urine” or “urine irritation” on her hind legs is a condition that, although potentially related to “[v]aginal polyps [that] are common in older female elephants,” is being “aggravated” by FEI’s chaining practices “because she’s unable to avoid getting the urine on the inner aspects of her rear legs.” Trial Tr. 91:5-91:10, 92:2-92:22, Feb. 24, 2009 a.m.³⁹

299. Dr. Ensley’s review of the medical records, as well as the Court-ordered inspection he conducted along with the other experts, also determined that the chaining of the elephants on hard surfaces has resulted in the elephants’ feet being worn down in an unnatural and unhealthy fashion, which further contributes to their other feet and leg maladies. See Trial Tr. 35:21-36:16. Feb. 24, 2009 (Ensley test.) (explaining that a photo of Nicole’s shows uneven wear on her foot caused by her walking unevenly on a “surface that’s going to . . . enhance that abnormal wear”); PWC 113K (Auburn Hills inspection photos) at Fig. 10-PKE 093 (photo showing “Nicole’s feet were unevenly worn”). Similarly, the medical records pertaining to Karen indicate that the “caudal heal of both hind feet are worn down to pink tissue,” which is also consistent with an elephant “developing a wear pattern just like somebody would standing and moving in a pair of shoes continually.” Trial Tr.

55:13-55:21, Feb. 24, 2009 a.m. (Ensley Test.) (referring to PWC 2A-Karen at 21 (FELD 0021892)).⁴⁰

3. Dr. Ensley's Opinions Regarding The Causes Of The Foot And Leg Injuries In FEI's Elephants Are Also Based On, And Strongly Supported By, The Medical And Scientific Literature.

300. In reaching his conclusion that the recurrent nail bed abscesses, toe cracks, arthritis, and other foot and muskuloskeletal disorders seen in FEI's elephants are directly caused and/or aggravated by the elephants' extensive chaining on hard surfaces, Dr. Ensley also engaged in, and based his opinion on, an extensive review of the available literature on the causes and prevention of foot disease in Asian elephants. Trial Tr. 55:22-55:25, Feb. 24, 2009 p.m.; PWC 113L (Ensley Expert Report) at 265. Dr. Ensley's opinion is entirely consistent with and, indeed, strongly supported by this literature, including literature authored by FEI's own expert Dr. Schmitt. Trial Tr. 55:22-55:25, Feb. 24, 2009 p.m. (Ensley Test.).

301. For example, before he agreed to serve as FEI's expert witness, Dr. Dennis Schmitt authored a chapter on elephants for the fifth edition of a leading textbook, *Zoo and Wild Animal Medicine*, by Drs. Fowler and Miller; in that chapter, Dr. Schmitt stated that "[f]oot problems comprise the most common ailment in the care of captive elephants and are seen in 50 percent of the elephants at some point in their lifetime. The types of foot problems affecting elephants include penetrating injuries, sole cracks, cracks in the nail or cuticle, overgrowth, and abscesses. Most foot problems are treatable, but some can result in disability or death. Major contributors to foot problems in elephants are lack of exercise, standing on hard surfaces, and contamination resulting from standing in their own excrement." *Id.* at 56:1-57:11 (emphasis added). This statement "represents a widely-held view in the scientific community," which strongly supports Dr. Ensley's opinion here that FEI's

practices here are directly responsible for the chronic foot and leg problems observed in FEI's elephants. Id. at 57:12-57:17.

302. Dr. Ensley's opinion is also based on, and strongly supported by, a leading veterinary textbook on foot diseases and disorders in captive elephants, "The Elephant's Foot." This book resulted from a major conference in 1998 – the only one ever held that focused on the elephant foot – that was attended by individuals from over a hundred institutions, 40 zoos and circuses, and many elephant experts and handlers from around the world. Trial Tr. 57:18-58:13, Feb. 24, 2009 p.m. (Ensley Test.); Trial Tr. 90:13-90:18, March 16, 2009 p.m. (Schmitt Test.).

The book, which was published in 2001, contains the papers and presentations from the conference as well as consensus recommendations, and has become an "important piece of seminal literature for veterinarians working with elephants," Trial Tr. 58:4-58:7, Feb. 24, 2009 p.m. (Ensley Test.), as well as a "baseline from which to start looking at information" on the care and treatment of elephant feet. Trial Tr. 90:13-90:18, March 16, 2009 p.m. (Schmitt). The introduction to the book states that "[t]here is a general consensus that lack of exercise, long hours standing on hard surfaces, and contamination resulting from standing in their own excreta are major contributors to elephant foot problems." Trial Tr. 58:18-58:21, Feb. 24, 2009 p.m. (Ensley Test.). As explained by Dr. Ensley, this "consensus" mirrors the "experience of veterinarians working with elephants in captivity," and strongly supports his opinion that FEI's practice of "[c]ontinuing to keep these elephants under these conditions will exacerbate past and ongoing musculoskeletal disorders, as well as other maladies brought on by the longstanding practice of forcing these elephants to stand on surfaces causing injury, harm, discomfort, pain, and harassment." PWC 113L (Ensley Expert Report) at 265.

303. One of the chapters in “The Elephant’s Foot” on which Dr. Ensley relied is entitled “Foot Care for Captive Elephants” and was co-authored by Dr. James Oosterhuis, who was Dr. Ensley’s supervisor at the San Diego Zoo for many years. Trial Tr. 59:24-60:7, Feb. 24, 2009 p.m. (Ensley Test.). FEI’s own expert, Dr. Schmitt – in his direct testimony – singled out Dr. Oosterhuis as one of the “two or three” veterinarians in the United States who has focused his practice on elephant care, and as someone who Dr. Schmitt considers to be “knowledgeable” on elephant veterinary issues. See Trial Tr. 64:1-64:64:8, March 13, 2009 a.m.; Trial Tr. 89:8-89:20, March 16, 2009 p.m. Accordingly, it is particularly significant that Dr. Oosterhuis’s chapter on the leading causes of elephant foot maladies strongly supports Dr. Ensley’s opinion in this case.

304. In particular, Dr. Oosterhuis explains that, “[m]ost often the [wild] Asian elephant walks on soft yielding surfaces like the leafy jungle floor;” hence, Asian elephants are “able to maintain their feet by walking great distances each day for feeding, bathing, digging, and dusting,” and they also have other natural processes for keeping their feet “healthy and functional,” such as by “digging their feet in wet sand around the water source,” thereby “clean[ing] and scrubb[ing] between their nails and around their cuticles.” Trial Tr. 60:10-60:19, 61:4-61:15, Feb. 24, 2009 p.m. (Ensley Test.). In contrast, according to Dr. Oosterhuis, elephants in captivity develop foot diseases by being “constantly exposed to their own feces and urine, which results from long hours of confinement in their stalls, up to 16 hours a day in some situations,” id. at 60:22-60:25 – i.e., the minimum amount of time that FEI’s elephants are chained at the CEC, and less than the amount of time the elephants are often chained while traveling on the road.

305. Dr. Oosterhuis’s discussion in “The Elephant’s Foot” further supports Dr. Ensley’s opinion on the specific mechanisms by which FEI’s practices are causing recurrent nail cracks and

nail bed abscesses. As to the former, Dr. Oosterhuis explains that “[n]ail cracks are usually the result of a repetitive movement that puts abnormal pressure on the nail. The environment of the elephant’s enclosure can exacerbate this pressure. An example is the stereotypical [] rocking elephant, where an elephant stands in one place on a hard surface and rocks back and forth. This puts abnormal pressure on the lateral toes of the front feet eventually leading to nail cracks.” Id. at 63:6-63:15. Similarly, as to nail bed abscesses, Dr. Oosterhuis states that “abscess prevention is the best course of action,” and that such prevention involves “allowing the elephant to live on soft yielding surfaces,” as well as “elimination of behavioral motions that cause abnormal stress on the foot.” Id. at 61:20-62:1. Dr. Oosterhuis further maintained that “the elephant is not genetically programmed to withstand the constant gravitational pressure of living on hard surfaces and carrying the excessive weight typical of most captive elephants. Elephants certainly didn’t evolve to stand motionless for long period of time.” Trial Tr. 7:5-7:12, March 16, 2009 eve. (Schmitt Test.). Once again, these statements are entirely supportive of Dr. Ensley’s opinion. Trial Tr. 62:19-62:23, March 16, 2009 p.m. (Ensley Test.).

306. Dr. Ensley’s opinion is further supported by “concluding remarks” in “The Elephant’s Foot” that there was “general agreement” at the conference that “[e]ach elephant facility should minimize the amount of time elephants spend on hard, unyielding surfaces.” Trial Tr. 63:20-23, Feb. 24, 2009 (p.m.) (Ensley Test.). FEI’s expert, Dr. Schmitt, agreed that this was a “consensus recommendation” of the attendees at the conference. Trial Tr. 18:5-18:12, March 16, 2009 eve. Indeed, as a consequence of the “consensus in the relevant scientific community . . . on what is causing foot problems,” as embodied in “The Elephant’s Foot,” over the last several decades, there has been a “transition” in many zoos towards a management scheme that involves less chaining and

“more contact with being on normal substrate.” Id. at 59:6-59:23. FEI, however, has not modified its practices to conform to this scientific consensus but, rather, is continuing the same harmful and injurious conditions. Id. at 63:20-64:1. Indeed, FEI’s veterinarian, Dr. Schmitt, flatly conceded that FEI’s elephants are still “chained for long periods of time,” Trial Tr. 22:2-22:4, March 16, 2009 eve. – a practice that contravenes what “The Elephant’s Foot” describes as the “collective wisdom of the assembled elephant managers, curators, keepers, veterinarians and elephant enthusiasts” at the conference. Id. at 17:23-18:4.

307. Dr. Ensley’s opinions are further supported by another textbook – “Biology, Medicine and Surgery of Elephants” by Fowler & Mikota – which was also cited in Dr. Schmitt’s expert report. Trial Tr. 18:16-19:2, March 16, 2009 eve. (Schmitt). According to a chapter in that book on the “Musculoskeletal System” which was written by Gary West – an elephant veterinarian who previously worked for FEI, id. at 19:13-19:18 – “[m]echanical trauma due to repetitive loading stress on hard surfaces is probably a major factor in the development of joint disease” in captive elephants. Id. at 21:1-21:7. Also consistent with Dr. Ensley’s review of the medical records here, Dr. West’s chapter explained that “[o]ccupational injuries can contribute to joint disease. Performance of certain behaviors may put excessive stresses on the joints. Chaining elephants for prolonged periods limits their movements and may also contribute to the development of DJD, degenerative joint disease. Animals that constantly pull or resist chaining may cause joint damage.” Id. at 21:12-21:22; see also Trial Tr. 88:3-88:10, March 16, 2009 p.m. (Schmitt Test.) (acknowledging statement by Dr. Mikota in “Medical Management of the Elephant” that “[b]ehavior such as headstands, hind leg stands or sitting down appear to place a great deal of stress on the muscles and joints and, thus, may be detrimental to the health of the animal over time”). In sum, there is a wealth of scientific literature

to support Dr. Ensley's analysis as to the ways in which FEI's practices are causing and/or aggravating the epidemic of foot and joint problems observed in the elephants in FEI's possession.

4. FEI's Own Expert Testimony And Documents Also Support Dr. Ensley's Opinion Regarding the Causal Relationship Between FEI's Practices And The Foot and Joint Problems In FEI's Elephants

308. Dr. Ensley's opinion that chaining the FEI elephants on hard, unyielding surfaces for many hours each day has caused and/or exacerbated their myriad foot and leg problems, and that ameliorating that condition would be beneficial to the elephants is also supported by testimony from FEI's own expert witnesses, as well as by FEI's own exhibits. Thus, FEI's expert witness Michael Keele testified that, in an effort to improve the condition of the Asian elephants' feet at the Oregon Zoo, that institution changed the surfaces of both its indoor and outdoor yards in order to provide more surfaces where the elephants could stay without being on hard, unforgiving surfaces. Trial Tr. 108:2-108:12, March 12, 2009 p.m. In particular, over the course of a number of years, the Oregon Zoo "added a huge outdoor natural substrate yard," then "got rid of the asphalt yard and put in all natural substrate" in its place, and then "coated all the concrete in the buildings with a rubberized surface." *Id.* Mr. Keele testified that providing the Asian elephants with more forgiving surfaces on which to stand both in their indoor enclosure and their outdoors yard have been "big factors" in reducing the elephants' feet and musculoskeletal disorders and have been "important to good foot and joint health." *Id.* at 108:13-108:20. Mr. Keele further acknowledged that restraining elephants on a hard surface could exacerbate an arthritis problems in individual animals. *Id.* at 110:2-110:5.

309. As noted previously, another of FEI's experts, Dr. Schmitt, wrote in a textbook chapter – before he agreed to serve as an expert in this case – that "[m]ajor contributors to foot problems" in captive elephants are "lack of exercise, standing on hard surfaces, and contamination

resulting from standing in their own excrement.” Trial Tr. 82:9-82:25, March 16, 2009 p.m. (Schmitt Test.). In his testimony, Dr. Schmitt conceded that one of the factors he had identified as causing elephant foot problems is forcing elephants to stand on hard surfaces for a long period of time, and that the elephants traveling with the circus units do in fact spend much of their lives on such surfaces. Id. at 83:14-84:1.

310. Dr. Ensley’s opinion that FEI’s practices are responsible for the prevalence of foot and joint problems in the elephants under FEI’s care is also supported by FEI’s own documents. For example, a “[v]et report” sent to a number of FEI personnel recognizes that “[t]here’s a lot of severe, likely not completely treatable foot problems at Williston, that originated in the years that the elephants were on the road so I’m trying to both study foot problems and also prevent them.” PWC 23 (2/4/01 e-mail from Cathy Shilton). Accordingly, this e-mail appears to be a direct admission that conditions “on the road” have caused the “foot problems” that are so prevalent in the FEI elephants.

311. In addition, the Elephant Husbandry Resource Guide, on which FEI itself relies and that was co-authored by FEI’s own employees and experts, states that “since elephants in the wild are frequently on the move, overgrown pads and nails are naturally worn down, while the substrate prevents excessive moisture and fungus from becoming a problem.” DX 2 at 44; see also id. at 52 (“Elephants in the wild have been repeatedly documented traveling great distances in a day to find food, water, safety, or mates.”). Accordingly, the Guide reinforces the view, as set forth in the established literature on which Dr. Ensley relied, that Asian elephants in the wild do not generally suffer from a plethora of foot and musculoskeletal problems but, rather, through the process of natural selection have developed feet and joints that are well-adapted to traveling on softer surfaces – i.e., those in the forests where Asian elephants exist – than are found in many captive environments.

DX 2 at 2 (indicating that the “habitat” of wild Asian elephants is the “Forest of Southeast Asia”); see also Trial Tr. 119:11-119:25, March 12, 2009 p.m. (Keele Test.) (Q. “[T]he way natural selection works is that they’ve developed feet and legs in order to adapt to their particular environment. Correct?” A. “Yes.”). Indeed, the Husbandry Resource Guide further states that “[i]nfections involving the pad, nail, or skin of the foot are some of the most common medical problems in captive elephants (Mikota et al. 1994),” and that an institution’s “[f]ailure to prevent” conditions such as “cracked” nails, “abscesses,” “overgrown soles,” and “foreign body penetration” – i.e., the very medical conditions that Dr. Ensley has found to be recurrent problems in the FEI elephants – “can lead to pain, lameness, local infection, tissue destruction, and, ultimately, systemic infection and death.” DX 2 at 44, 46 (emphasis added).

312. The Husbandry Resource Guide further reinforces the consensus view of elephant experts (as set forth in the literature on which Dr. Ensley relied) that “[i]n captivity, some of the alleged causes of foot problems have been identified as the lack of exercise, excessive moisture, and improper substrate” and that “elephants that are given plenty of opportunity for natural wear on their feet through regular exercise appear to need less foot care than those that do not have a chance of natural wear.” Id. at 46 (emphasis added). This understanding of the causes of foot and joint problems in captive elephants is entirely consistent with Dr. Ensley’s opinion on the underlying cause of the systemic problems in FEI’s elephants, whose extensive chaining on concrete, in metal railroad cars, and on other “improper substrate[s]” that do not in any manner replicate the animals’ natural conditions in the wild creates all of the conditions that the Husbandry Resource Guide point to as responsible for such foot and joint problems, i.e., (1) it affords no opportunity for “natural wear” of the elephants’ pads and toenails; (2) it ensures that the elephants will be exposed to “excessive

moisture” through exposure to the elephants’ own urine and feces; and (3) chaining for many hours each day – and, for the elephants on the traveling units, frequently for several days at a time – in a manner that prevents the elephants from moving more than a few steps in any direction obviously precludes “regular exercise” of the feet and joints.

313. Hence, the Court finds that the Husbandry Resource Guide actually supports Dr. Ensley’s opinion on how FEI’s practice of routinely chaining the elephants on unyielding surfaces for many hours during each day is invariably causing and enhancing the foot and leg injuries that are epidemic in the FEI elephant population. See also Trial Tr. 120:4-120:16, March 12, 2009 p.m. (Keele Test.) (agreeing that an “excessively hard, unforgiving surface” is one of the kinds of “improper substrate” to which the Husbandry Resource Guide refers as contributing to foot and joint problems in captive Asian elephants).

5. That FEI’s Practices Cause And Aggravate the Elephants’ Foot And Other Musculoskeletal Disorders Is Strongly Reinforced By The Prevalence Of These Disorders Throughout The FEI Elephant Population, Including The Very Young Elephants

314. FEI does not dispute that its elephants have experienced, and continue to experience, many foot and joint problems, including chronic toenail cracks, nail bed abscesses, arthritis, lameness, and stiffness. See Trial Tr. 81:12-81:15, March 16, 2009 p.m. (Schmitt Test.). Instead, FEI maintains that these disorders are found “in many captive environments” and are not “unique” to FEI. Id. at 5:24-6:2; id. at 8:12-8:16 (acknowledging that Nicole has had “toe cracks,” “foot issues” and “sprains” but “I see the same kind of documentation in other facilities that are not unique to FEI”). Even if true, however, this would not mean that FEI’s practices – which are the only ones before the Court – are not themselves harming and injuring the elephants by causing and/or aggravating recurrent foot and joint diseases. In other words, even if it were the case that FEI’s practices were

no more harmful or injurious than practices at other institutions that would not mean that FEI is not “taking” the elephants at issue by continuing to subject them to very conditions that are resulting in, and will continue to result in, repeated foot, joint, and other muskuloskeletal injuries and diseases. Indeed, as set forth above, many zoos have been changing their practices in light of the scientific consensus that prolonged chaining on hard surfaces is inherently harmful and injurious to their Asian elephants.

315. In any event, the testimony and evidence in the record also reflects that the foot, joint, and other muskuloskeletal problems are in fact significantly worse in the FEI elephants even when compared with other captive Asian elephants. As explained by Dr. Ensley, a 1994 study by Dr. Susan Mikota of in zoos found that “approximately 50 percent of the elephants in her study population had foot problems at some point in their live[s], and up to 10 percent of them demonstrated lameness.” Trial Tr. 59:9-59:15, Feb. 24, 2009 (p.m.). Dr. Mikota’s findings – which are generally accepted in the scientific literature, including by Dr. Schmitt in his chapter on elephants for the textbook “Zoo and Wild Animal Medicine,” see Trial Tr. 85:5-85:22, March 16, 2009 p.m. (Schmitt Test.) – have been instrumental in influencing many zoos to modify their practices in an effort to reduce the prevalence of foot and other muskuloskeletal disorders in Asian elephants. Trial Tr. 59:4-59:23, Feb. 24, 2009 p.m. (Ensley Test.).

316. In addition, as acknowledged by FEI’s expert, Dr. Schmitt, some zoos have recently given up their Asian elephants after having determined that they cannot humanely care for them. Trial Tr. 65:19-65:22, March 16, 2009 p.m. (Schmitt Test.).

317. However, Dr. Ensley’s review of FEI’s medical records found the incidence of such disorders in FEI’s possession is “by far and away higher than the study populations previously looked

at” by Dr. Mikota. Trial Tr. 65:6-65:7, Feb. 24, 2009 p.m. (Ensley Test.). Thus, based on his review of the medical records furnished by FEI, Dr. Ensley found that not only have all of the elephants with whom Dr. Ensley worked suffered from recurrent foot and leg problems, but that “close to a hundred percent” of all of the elephants in FEI’s possession also have medical conditions such as nail cracks, nail bed abscesses, and foot pad disorders. Id. 64:18-65:5; see also PWC 113L (Ensley Expert Report) at 265. FEI has not effectively rebutted (nor even responded to) Dr. Ensley’s findings and testimony on this point, and they allow for but one plausible conclusion: that the conditions under which the elephants are being maintained by FEI – i.e., the “restrained locations on the hard surfaces, the urine and fecal contamination, and the lack of ability of elephants to move and exercise their legs” – are “major, major contributing causes” in the medical problems experienced by virtually all of the elephants. Id. at 65:8-65:19.

318. FEI’s contention that its practices are not responsible for the prevalence of foot and joint injuries and disorders in the elephants is also impossible to square with the fact that all of the Blue Unit elephants at issue have been in FEI’s possession and under its control for most and, in some cases, for virtually all of their lives. See PWC 169 (chart of elephants owned by FEI). Moreover, and perhaps most telling of all, FEI’s medical records reflects that precisely the same kinds of foot and other musculoskeletal disorders that are reflected in the Blue Unit elephants at issue are being manifested in the young elephants who were born at FEI and have, with rare exceptions, been in defendant’s possession and subject to its chaining and other practices for their entire lives. Hence, based on his review of the medical records, Dr. Ensley found that “of the 16 young elephants that were bred in captivity, 14 had similar injuries and findings as to what” Dr. Ensley found with regard to the older elephants whose records he scrutinized. Trial Tr. 65:20-66:12, Feb. 24, 2009 p.m.⁴¹

319. In short, the medical records reflect that “prolonged chaining, training, and housing on hard, unyielding and unnatural surfaces is causing injury, harm, discomfort, pain, and harassment, and aberrant behavior in younger elephants under [FEI’s] care;” id. at 266, which reinforces plaintiffs’ position that it is the conditions to which FEI’s elephants are subjected that are responsible for the extremely high prevalence of foot and joint problems in all of FEI’s elephants. Trial Tr. 81:4-81:9, Feb. 24, 2009 (Ensley Test.) (The younger animals are “expressing the same kinds of injuries as the older animals, the older elephants at a very young age, which I wouldn’t expect at all under normal circumstances. These are the kinds of entries into medical records you shouldn’t have, not for young animals like this.”).⁴²

320. FEI has not disputed that its medical records reflect toe nail cracks, nail bad abscesses, lameness, and stiffness in the young elephants, nor has it proffered any plausible alternative explanation for why these very young elephants are suffering these conditions. Rather, the only response by FEI (aside from its argument that this highly probative evidence should not be reviewed by the Court at all) was testimony by its veterinarian, Dr. Schmitt, that the young elephants “play and are rambunctious” and hence “develop some occasional cracks and strains.” Trial Tr. 22:9-22:16, March 16, 2009 p.m. (Schmitt Test.).

321. FEI, however, has failed to point to any documentation in the medical records or anywhere else to support the assertion that the young elephants developed these medical problems through “play” behavior. To the contrary, the medical records themselves make clear that, as with the older animals, the young elephants’ myriad foot and joint problems have been caused and/or aggravated by the arduous travel and training conditions to which the elephants are subjected. See, e.g. Trial Tr. 73:19-73:21, Feb. 24, 2009 p.m. (Ensley Test.) (describing medical reflecting that Doc

experienced stiffness following transport); *id.* at 76:8-76:16 (describing medical record reflecting that Juliette was “uncomfortable during hind leg stand”); *id.* at 80:4-80:10 (describing medical record reflecting that Angelica’s right hind lameness was “exacerbated” by being forced to perform a circus trick called the “ferris wheel,” which “requires hind leg strength”). Moreover, Mr. Jacobson acknowledged in his testimony that the young elephants spend most of their lives chained up and unable to interact with each other, Trial Tr. 8:02-9:09, March 9, 2009 a.m., although video taken at the CEC does show a young elephant being trained to perform a circus trick, falling off a tub, but then being forced to repeat the behavior. PWC 139A.

322. Mr. Jacobson also testified that when he trains the young elephants to perform routines in the circus, such as climbing on a barrel, the elephants are required to do these maneuvers many times until they learn to perform in the circus, that they sometimes fall – as Benjamin does on the videotape that FEI showed during Mr. Jacobson’s testimony – and that when they fall, he makes them get up and do it again. Trial Tr. 13:06- 13:20, March 9, 2009 a.m..

323. Dr. Schmitt’s conclusory assertion that the pattern of foot and joint conditions already being exhibited in the very young elephants is due to “play” behavior, rather than FEI’s practices, is further undermined by FEI’s own documents concerning the death of the elephant Riccardo. Trial Tr. 38:1-43:6. As conceded by Dr. Schmitt, FEI’s documents reflect that only three months after Riccardo was born in December 2003, Gary Jacobson was already training Riccardo at the CEC to perform circus tricks and, in particular, to climb onto a tub – i.e., the same circus trick that resulted in the chronic injuries sustained by several of the elephants with whom Mr. Rider worked. *Id.* at 38:12-39:9; see also Trial Tr. 23:10 - 26:02, March 9, 2009 (Testimony of Gary Jacobson). Three months later, Riccardo was already experiencing discomfort and swelling in one of his legs, and was

already being administered Banamine. Id. at 39:10-39:25. Yet Riccardo's training continued, including the use of ropes to pick up Riccardo's feet during the same month that the swelling occurred. Id. at 40:9-41:3. One month later, FEI's records reflect that Riccardo was experiencing stiffness in his leg, and one month later he slipped off a tub during a training exercise, broke his legs, and was euthanized. Id. at 41:4-41:12, 42:21-43:6. However, although the USDA, in its investigation of Riccardo's death, was "interested in what the training was at that time," id. at 43:15-44:5, FEI represented to the USDA that Riccardo had sustained the injuries while playing. Trial Tr. 26:03-28:16, March 9, 2009 a.m. (Jacobson Test.); see also PWC 186, PWC 187 (Unsworn statements by Jacobson provided to the USDA).

324. This series of events not only further reinforces the Court's finding that it is FEI's practices that are responsible for the prevalence of foot and joint disorders in the elephants, but that Dr. Schmitt's unsupported testimony to the Court blaming these problems on "play" behavior in the young elephants actually mirrors the misinformation furnished by FEI to the USDA concerning Riccardo's death.

325. Based on all of the evidence in the record, the Court finds that the pattern of foot and joint problems displayed by the very young elephants is attributable to the conditions to which they are subjected, and that this pattern strongly reinforces plaintiffs' claim that these conditions are directly responsible for causing and/or aggravating the myriad foot and other musculoskeletal problems experienced by the other FEI elephants, including those with whom Mr. Rider worked. Necropsy reports for other FEI elephants who have been euthanized further underscore the toll that the practices at FEI take on the elephants. For example, as corroborated by Dr. Schmitt, one of the elephants (Roma) who was euthanized at only 44 years of age for "humane" reasons was suffering

from a “chronic history of arthritis and foot problems,” including “multiple lesions on the foot”; she had “ulcerated wounds” – i.e., pressure sores – on both her left cheek and left hip; an “ulceration and undermining of the foot pads of both front feet and of the right rear foot”; and she was also infected with Tb. Trial Tr. 68:25-70:19, March 16, 2009 p.m. (Schmitt Test.). Accordingly, although plaintiffs, in order to prevail on their claims, certainly need not demonstrate that any of FEI’s elephants has died prematurely as a direct result of the kinds of wounds, injuries, and medical disorders that are associated with the practices at issue, the reality is that such deaths have occurred.

6. The Veterinary Treatment The Elephants Receive From FEI Does Not Address Or Resolve The Conditions That Cause Foot, Leg, And Other Chronic Medical Conditions.

326. Although FEI has relied on the fact that its veterinarians administer medical care to the elephants, it is apparent from the record that this care, no matter how well-intentioned, simply cannot prevent or meaningfully resolve the systemic foot and leg problems that are chronically injuring and harming the elephants; rather, that would necessitate basic changes in the way the elephants are maintained. For example, the medical records reviewed by Dr. Ensley reflect that FEI’s veterinarians generally treat the elephants suffering from arthritis, and other foot and joint injuries associated with travel, training, and performance, with a variety of non-steroidal anti-inflammatory drugs and other medications. See, e.g., Trial Tr. 56:16-57:4, 58:10-58:24, Feb. 24, 2009 a.m.(Ensley Test.) (medications used and considered for Karen after she slipped during rehearsal and suffering a swollen hamstring).⁴³

327. Simply put, treating the elephants with medication does not alter the underlying practices that all experts agree must be modified to prevent and ameliorate systemic foot and leg disorders in captive elephants. Trial Tr. 62:2-62:8, Feb. 24, 2009 a.m. (Ensley Test.); id. at 82:8-

82:17 (“If I had a prescription pad, I would simply get them out onto a natural substrate for as long as a period of time that I could”.); Trial Tr. 42:1-42:11, Feb. 24, 2009 p.m. (Ensley Test.) (A. “It’s unhealthy for this activity [chaining on concrete at the CEC] to take place, particularly with these older animals. Q. “And why is it unhealthy?” A. “They need to be on soft natural substrate, given their age and past . . . medical history.” Q. “And the past medical history being what?” A. “Arthritis, in the case of three out of five of these animals, and past lamenesses. And it will help to increase their longevity and their well-being just being able to move and stretch.”). Consequently, it is not only likely, but inevitable that, irrespective of the medical care that the elephants receive within the narrow confines of a management scheme that is inherently injurious and harmful to them, they will continue to suffer from foot and joint disorders. See Trial Tr. 42:11-43:14, Feb. 24, 2009 eve. (Ensley Test.) (Q. “How would you explain recurrent conditions of this kind?” . . . A. “They’re ongoing. They’re not resolving. They may ebb and flow . . . In other words, where we’ve got a problem and then a month later they’re resolving and then, you know, if you go back three or four months later they’re right back again.”); id. at 39:24-40:6 (“Do you have an opinion about a scheme of management, where, according to your testimony, nearly a hundred percent of the animals are exhibiting foot and leg problems?” . . . A. “It needs to change.”).

328. Even with regard to the very narrow sphere within which the veterinarians may attempt to improve the animals’ condition, the record does not support FEI’s contention that the veterinarians’ have final say with regard to the animals’ medical treatment. For example, the medical records for Mysore reflect that, in February 2006, “concern was raised over her general condition,” and FEI’s veterinarian recommended that “consideration be given to bring[ing] her home” – i.e., the CEC – “for several months.” PWC 2A-Mysore at 361 (FEI 11093). However, although she went

from the Blue Unit to the CEC on March 9, 2006, only one week later she was sent back onto the road – this time on the Gold Unit – although there is no indication in the medical records as to how her “general condition” could have improved so markedly in such a brief time or why the recommendation for “several months” off the road was not being followed. Trial Tr. 85:1-85:22, Feb. 24, 2009 a.m. (Ensley Test.).

329. Similarly, the medical records indicate that, when Jewell was suffering from lameness, the veterinary staff had to “ask” Blue Unit handler Brian French to “consider changing this animal’s ‘act’ to limit the number of lay downs and situp tricks” because “[b]oth require the usage of the sore leg.” PWC 2A-Jewell at 65 (FELD 0021828). Ten days later, Jewell was still “notably lame” and a veterinarian again “asked Brian to see if he could limit her routine to tricks that don’t require placing full weight on the hurt leg.” PWC-2A-Jewell at 66 (FEI 33051). There is no indication in the medical records that either of these request was granted nor, more important, why the veterinarians would have to ask a handler’s permission to restrict an elephant’s activity for medical reasons. Indeed, in another situation involving Kenny, a young Red Unit elephant, FEI’s own records reflect that FEI’s trainer simply ignored the veterinarian’s determination that Kenny should not be forced to attend the show, and that Kenny died a short time thereafter. Trial Tr. 46:14-47:10, Feb. 24, 2009 eve. (Ensley Test.); Trial Tr. 62:14-64:13, March 16, 2009 p.m. (Schmitt Test.) (Q. “Doesn’t that appear to be the vet saying I advise that Kenny should remain in the barn, but, nonetheless, he was taken into the arena?” A. “Yes.”).

G. The Fact That The FEI Elephants Engage In Stereotypic Behavior Is Further Evidence That They Are Being Harmed By Their Conditions Of Confinement.

1. The Record Shows That The FEI Elephants Engage In Classic Stereotypic Behavior.

330. It is generally accepted in the scientific community that one “marker of the adversity” of captive conditions for an animal species, and particularly whether the conditions are preventing the species from engaging in essential natural behaviors, is the degree to which the species engages in “abnormal behavior,” and particularly “stereotypic behavior.” Trial Tr. 43:10-43:16; 59:23-60:8, Feb. 10, 2009 (Hart Test.). Stereotypic behavior is defined as an abnormal repetitive movement – i.e., an action which the animal would not normally engage in when in a natural environment – with no discernible function or purpose; in elephants, stereotypic behavior is mainly manifested as repetitive swaying or weaving back and forth, and less often as repetitive head tossing or trunk waving. Trial Tr. 43:14-43:16, Feb. 10, 2009 p.m. (Hart Test.); Trial Tr. 45:21-45:25, Feb. 11, 2009 (a.m.) (Club Test.) (“weaving where the animal sways from side to side” is “by far” the most common form of stereotypic behavior in captive elephants).

331. The record is replete with evidence that the elephants engage in classic stereotypic behavior when they are chained – i.e., they engage in abnormal repetitive swaying, bobbing and weaving. See, e.g., PWC 128A, PWC 128B (videotape of Angelica and Sara on chains at the Blue Unit in Oakland, California 2004); Trial Tr. Carol Buckley 101:7-101:14, Feb. 23, 2009 a.m. (discussing videotape of Sara swaying) (“Well, right here is a baby elephant. She’s quite young. I’d say she’s probably about three years old, and she is engaged in neurotic behavior, swaying. It’s a repetitive movement wherever part of the body repeats the exact movement over, over and over again”).⁴⁴

332. At the Court-ordered inspection at Auburn Hills, Karen began to exhibit stereotypic swaying shortly after she was chained for the night (at 6:36 pm) and “pretty much for the balance of the evening while we [the experts] were in there, her swaying behavior was continuous.” Trial Tr.

28:1-3, Feb. 24, 2009 (p.m.) (Ensley Test.); Trial Tr. 46:21-46:25, Feb. 10, 2009 p.m. (Hart Test.) (Karen was swaying “continuously” for two hours, including after eating hay); see also PWC143F (video of the Auburn Hills inspection showing Karen engaging in nearly constant swaying behavior for nearly two hours); Trial Tr. 52:12-53:2, Feb. 11, 2009 p.m. (Clubb Test.) (the length of time Karen was observed engaging in repetitive swaying reflected “severe stereotypy” that “would raise significant welfare concerns regarding the conditions that the animal was kept in”).

333. Similarly, the video for the CEC inspection shows several of the elephants engaging in the same continuous stereotypic behavior while being chained. See, e.g., PWC 142E. Likewise, other videos show FEI elephants – including very young elephants who were born at the CEC and have spent their whole lives in FEI’s possession – engaging in such stereotypical behavior, either while being chained on the trains or in other venues. PWC 128A, PWC 128B, PWC 130. Both plaintiffs’ and FEI’s behavioral experts agreed that these videos document abnormal stereotypic behavior, see, e.g., Trial Tr. 45:23-46:17, Feb. 10, 2009 (Hart Test.), Trial Tr. 55:18-56:13, Feb. 11, 2009 a.m. (Clubb Test.), Trial Tr. 12:23-14:8, March 9, 2009 p.m. (Friend Test.) and, although FEI’s expert, Dr. Friend, destroyed or taped over the videos from his transport study after this lawsuit was filed, he testified that this is in fact the same type of behavior that was recorded as stereotypic during his transport study, and that under his protocol for the study, that this behavior was recorded whenever it would exceed five seconds. Id. at 13:5-13:17, 13:24-14:5.; Trial Tr. 105:20-105:24, March 9, 2009 a.m.

334. Dr. Poole testified, based on her participation in the inspection at the CEC, that all five elephants swayed during the time she was there, and that this includes swaying, head bobbing, and weaving. Trial Tr. 49:22 - 50:11, Feb. 4, 2009 p.m.. She further testified that she has “never” seen

this behavior in the wild. Id. 50:17 - 50:21; see also id. at 111:13 - 111:16 (“I have never seen any stereotypic behavior in the wild”); 53:16 - 53:24 (“in all the years I’ve seen elephants, 10,000, 20,000 elephants, I’ve never observed this behavior”). Dr. Hart concurred in this observation. See Trial Tr. 19:17-19:19; 48:2-48:9, Feb. 10, 2009 (p.m.) (Hart Test.) (“We’re referring to studies in Asia, we have not seen – all the hours we spend watching elephants in [the] wild, we haven’t seen it”; Dr. Hart also did not see stereotypic behavior in elephants in Asia who were in “seminatural captivity” who were “allowed to walk around at night”).

335. Indeed, even FEI’s expert Dr. Friend conceded, both in his testimony and in a report to the USDA, the kind of stereotypic behavior engaged in by the FEI elephants is indeed “abnormal,” i.e., it does not occur in wild elephants. Trial Tr. 15:13-15:22, 16:6-17:5, March 9, 2009 p.m.; DX 300A (USDA Report) at 20.

336. As explained by Dr. Clubb, who has a Ph.D from Oxford University, where she did her Ph.D thesis specifically on stereotypic behavior, the fact that young elephants who have spent their entire lives with FEI – as is the case with both Sara and Angelica, see PWC 128A and PWC 128 B (Videotape of Angelica and Sara engaged in stereotypic behavior in Oakland, California); see also PFF 240; PWC 151 (Chart of elephants born at CEC) – are already engaging in stereotypic behavior reinforces that the behavior has “developed within [FEI’s] conditions and those conditions have caused the stereotypies to develop.” Trial Tr. 56:14-58:2, Feb. 11, 2009 a.m; see also Trial Tr. 64:3-64:7, March 9, 2009 p.m. (Friend Test.) (acknowledging that on a trip from Chicago, Illinois to Savannah Georgia, one of the juvenile elephants spent approximately 80% of its time engaged in stereotypic behavior).

337. As also explained by Dr. Clubb, the fact that not every FEI elephant engages in stereotypic behavior under the same circumstances hardly means that the behavior is not indicative of adverse conditions or that the non-stereotyping elephant is not suffering from those conditions. Trial Tr. 42:2-43:9, Feb. 11, 2009 a.m. Rather, the available research indicates that an animal develops a stereotypic behavior in an effort to “cope with a sub- optimal environment” that is depriving the animal of its “ability to express its natural behaviors”; accordingly, the elephant who has developed this coping mechanism “may actually be better off” from a psychological standpoint than the elephant with no way of dealing with the adverse conditions, “but they’re both experiencing the same environment.” Id.; Trial Tr. 35:24-36:4, Feb. 11, 2009 p.m. (Clubb Test.) (“[E]ven the elephants that aren’t stereotyping, are just standing, not doing very much, which is quite unnatural. We call that apathy. And that would again match what we know about learned helplessness, in that the animal seems to have accepted that it has no control over the way it’s treated.”).⁴⁵

3. Stereotypic Behavior Indicates That The Elephants Are Suffering From Poor Welfare.

338. Although the presence of stereotypic behavior in an animal does not invariably mean that the animal is experiencing harmful conditions at the time the behavior is being exhibited, the available data reflects, and both plaintiffs’ and FEI’s behavioral experts agreed, that such behavior is typically caused by conditions that are in fact stressful to the animal and harmful to its well-being, and that impair the animals’ ability to engage in natural behaviors, particularly locomotion. Trial Tr. 17:6-19:4, March 9, 2009 p.m. (Friend Test.) (acknowledging that he told the USDA that stereotypic behavior normally infers a poor environment and that the animal finds the environment stressful); id. at 40:16-40:25 (conceding that he advised the USDA that “[c]oncern over animals performing

stereotypic behavior originated with animals that have a strong desire for locomotion”) (emphasis added).⁴⁶

339. There is compelling evidence from a number of empirical studies conducted on elephants in both zoos and circuses that there is a causal relationship between prolonged chaining and the manifestation of extensive stereotypic behavior in elephants. Trial Tr. 48:23- 50:13, Feb. 10, 2009 p.m. (Hart Test.); Trial Tr. 46:18-46:23, Feb. 11, 2009 a.m. (Clubb Test.) (Q. “[W]hat is the cause of stereotypic behavior in elephants?” A. “Well, from the work that’s been done, the key thing that comes out is restraint and confinement. So, for instance, elephants that are kept chained up have a much higher level of stereotypic behavior than those that aren’t.”). These studies also demonstrate that, although stereotypic behavior may not disappear entirely when elephants are unchained, especially when they are still confined in small circus pens or enclosures in zoos, “drastic reductions in stereotypic behavior are seen” when elephants are unchained. Id.; see also Trial Tr. 17:10-17:14, Feb. 11, 2009 p.m. (Clubb Test.) (“[T]he level of confinement is just less in a zoo. So I wouldn’t say that you never, ever see stereotypy in an unchained elephant. It’s just that it appears to a much lower level because . . . it’s a lower level of confinement.”).⁴⁷

340. Most important, comparative studies of circus elephants clearly demonstrate that prolonged chaining greatly increases stereotypic behavior and precludes species-typical behaviors. Trial Tr. 56:11-62:25, Feb.10, 2009 p.m. Hart Test.). One such study – Gruber et al., “Variation in Stereotypic Behavior Related to Restraint in Circus Elephants” (2000) – which was co-authored by FEI’s expert, Dr. Friend before he agreed to serve as an expert witness in 2004, Trial Tr. 88:21-88:88:25, March 9, 2009 a.m. (Friend Test.), compared the behavior of the same elephants when restrained on legs chains and when unchained in small pens. PWC 157. The study found that there

was a significant decrease in stereotypic behavior even when the elephants were unchained in small pens, and hence the study reaffirmed other studies that have demonstrated that “[a]lternatives to chained restraint have been associated with decreased stereotypies.” Id. at 217; id. at 216, Fig. 3 (demonstrating that the elephants spent nearly half of their time engaging in stereotypic behavior when chained, compared with less than 20% when confined in small pens). The study further found that the frequency with which the elephants stereotyped while chained “greatly reduced their opportunity to perform other behaviors” and that “[a]s a result of chaining, species-typical behaviors, such as foraging for food, social interactions, play behavior, and locomotion are greatly restricted. This inability to perform species-typical behaviors may contribute to the development of stereotypies in elephants.” Id. at 209-210. Dr. Hart testified that this conclusion comports with his own view, because elephants “cannot exhibit anything like natural species-specific behavior while they are chained up,” Trial Tr. 58:14-59:3, Feb. 10, 2009 p.m., and that it also a “very widely held view” among animal behaviorists that a severe interference with species-typical behaviors is considered to be “one of the primary factors that evokes or leads to stereotypic behaviors.” Id. at 59:23-60:8;

341. Another study of circus elephants in which Dr. Friend was a co-author “compar[ed] the effects of continuous picketing [chaining] and continuous penning of elephants under similar conditions of stereotypic behavior or other behavior” and found that the “amount of time the elephants spent stereotypic weaving was significantly decreased” when the elephants were kept in small pens when compared to keeping them on chains. PWC 158 at 213, 214 (Friend & Parker, “The effect of penning versus picketing on stereotypic behavior of circus elephants” (1999)). The study further found that “in addition to the significant decrease in stereotypic behavior” when the elephants were unchained, the “elephants seem to be more relaxed” and their “rear feet were healthier because

their rear legs were no longer positioned over the area where they voided urine/feces.” Id. at 222. The study further found that allowing elephants to live in pens instead of chaining them “has a positive effect on their well-being, in the form of fewer stereotypic behaviors exhibited.” Id. at 224.⁴⁸

342. Likewise, a study conducted in Europe found that elephants’ “stereotyped movements were nearly absent in paddocks” – *i.e.*, enclosures that afforded the elephants even more space than the pens studied in Gruber et al. – whereas such behavior in the same elephants is “very frequent in shackled keeping.” PWC 159 (Schmid, “Keeping Circus Elephants Temporarily in Paddocks – the Effects On Their Behavior” (1995)). The study further found that the elephants “had more opportunities for comfort, play and social behavior with a corresponding reduction in stereotypies” when unchained,” and that reducing chaining “represents a clear improvement in conditions for these animals,” and is a “great welfare improvement.” Id. at 99, 100.⁴⁹

345. Consistent with these empirical studies on the effect of chaining versus penning, in another study in which Dr. Friend was involved – which was funded in part by the USDA and sought to measure the amount of stereotypic behavior exhibited by circus elephants in transport, including FEI’s elephants – the amount of stereotypic behavior was directly related to the length of the trip during which the elephants were chained on the railroad cars, thus reaffirming that the longer the chaining “the more adverse it becomes.” Trial Tr. 43:17-44:9, Feb. 10, 2009 p.m. (Hart Test.); PWC 156 (Williams & Friend, “Behavior of Circus Elephants During Transport”). Although it is not highlighted in the published study, the data collected for the study show that every single elephant studied engaged in stereotypic behavior when chained on the train for the kinds of long trips that the FEI units typically take – including elephants who had displayed no such behavior on short trips. Trial Tr. 68:25-72:20, March 9, 2009 p.m. (Friend Test.); Trial Tr. 51:15-52:4, Feb. 10, 2009 p.m.

(Hart Test.). Thus, although some of the elephants studied engaged in no or relatively little stereotypic behavior on relatively short trips (i.e., trips that would be expected to last several hours) for the much longer railroad trips that the FEI units typically take (as reflected in FEI's transportation orders), the blue and red unit elephants were observed engaging in stereotypic weaving an average of 50% of the time, which is a "strong marker of the adversity" of prolonged chaining on railroad cars. Trial Tr. 43:17-44:19, Feb. 10, 2009 p.m. (Hart Test.); Trial Tr. 61:25-62:8, Feb. 11, 2009 (a.m.) (Clubb Test.) ("[T]he elephants engaged in very high levels of stereotypic behavior and some animals actually started stereotyping in that environment and they had never been seen to stereotype before, which is consistent with the idea that the greater level of confinement, the more stereotypic behavior, indicating the poorer the environment for the animal, and such high levels of [] stereotypy would be a real warning sign to me that there could be real significant welfare problems").⁵⁰

346. The transport study not only documented a significant increase in stereotypic behavior in the elephants, but also buttresses the opinions of plaintiffs' experts that prolonged chaining on the railroad cars precludes "most of their natural behaviors, so even quite basic movements such as being able to easily lie down, turn around, move to a place that's a bit more comfortable in terms of temperature, foraging, socializing, all of those behaviors . . . are either completely prevented or extremely restricted." Trial Tr. 79:4-79:11, Feb. 11, 2009 a.m. (Clubb Test.). For example, with regard to even so fundamental a behavior as being able to comfortably lie down and rest, the transport study found that most of the elephants spent no time lying down, "even in very long journeys" in which "you would expect them to spend much more time lying down." *Id.* at 80:9-80:18; PWC 156 (transport study) ("[o]nly two elephants . . . were observed lying down (2.8 and 4.6% of the observed time).⁵¹

347. In sum, the opinions of plaintiffs' behavioral experts that the prolonged chaining to which the FEI elephants are subjected is "injurious to the animal's welfare, to its engagement in naturalistic behavior," and that this is reflected in the extensive stereotypic behavior exhibited by the elephants, is strongly supported by the consensus view of animal behaviorists as well as the empirical research on captive elephants in particular, including several studies in which Dr. Friend himself participated. Trial Tr. 116:5-116:13, Feb. 10, 2009 p.m. (Hart Test.); Trial Tr. 72:15-72:19, Feb. 11, 2009 a.m. (Clubb Test.) ("[H]aving reviewed the evidence that I've seen in terms of the treatment of the elephants and the conditions they're kept in, it's my opinion that harm has been caused, and in terms of particularly disrupting their basic essential behaviors."). Moreover, in addition to a number of Dr. Friend's published statements – before he agreed to serve as an expert witness in this case – that strongly support plaintiffs' position, FEI's other expert witnesses have also made statements that support plaintiffs' contention that the kind and extent of stereotypic behavior seen in FEI's elephants is evidence of harmful conditions, and also that such behavior itself has adverse physical repercussions for the elephants. For example, Michael Keele has stated, in a book chapter he coauthored called "Zoos as Responsible Stewards of Elephants," that chaining of elephants in fact "causes[s]" stereotypic behavior and prevents elephants from engaging in "normal" behaviors. Trial Tr. 114:1-115:7, March 12, 2009 p.m. (Keele Test.) (acknowledging that he wrote that "[o]ne specific concern that arises because of space constraints is a method of restraining called chaining and tethering" and that "tethering also prevents normal social interaction and activities, and been shown to cause stereotypic behavior" and that its "excessive use may diminish welfare"). In making that statement – which was published in a book entitled "Elephants and Ethics" that was published by Johns Hopkins University in 2008 – Mr. Keele acknowledged in his testimony that he relied on an

article entitled “Variation in Stereotypic Behavior Related to Restraint in Circus Elephants” which was co-authored by another of FEI’s expert witnesses, Dr. Friend, and that Mr. Keele’s understanding of that article is that it demonstrated that when elephants are moved from chaining on pickets to pens, that stereotypic[] behavior is substantially reduced. Id. at 115:12-115:25, 116:;; see also PWC 157 (article by Gruber et al., including Dr. Friend). Mr. Keele testified that his statement on the relationship between chaining and stereotypic behavior also relied on a publication entitled “Nocturnal Behavior in a Group of Unchained Female African Elephants,” and that this publication likewise showed that when elephants were unchained at the Atlanta Zoo, they demonstrated much less stereotypic behavior than other elephants whose behavior had been studied. Trial Tr. 116:11-116:22, March 12, 2009 p.m.

**4 Stereotypic Behavior Aggravates The Elephants’
Injuries And Diseases.**

348. The abnormal stereotypic swaying that many of the elephants exhibit when chained for many hours also causes and/or worsens their toe nail cracks and nail bed abscesses. As the elephants sway back and forth, the elephant’s weight is shifted from one foot to the other, resulting in an expansion and/or aggravation of cracks and abscesses that are present and also causing the development of these conditions in the first instance. See Trial Tr. 29:1-29:4, 39:17-39:20, 41:8-41:14, Feb. 24, 2009 p.m. (Ensley Test.); PWC 143F (Auburn Hills video showing Karen, as she repeatedly sways, shifting weight from one foot to the other while chained); PWC 142E (CEC video showing Jewell and Zina shifting weight from one foot to the other while chained on concrete). Indeed, as a result of the elephants’ performing this repetitive behavior, and as an indication of how much stress it puts on the elephants’ feet, the concrete at the CEC has actually been “worn and roughened” by the action on the elephants’ feet. Trial Tr. 41:8-41:11, Feb. 24, 2009 p.m. (Ensley

Test.); PWC 113K at Fig. 51-PL 15568 (CEC inspection photo showing “[c]oncrete floor surface of barn with elephants’ foot wear patterns”). Accordingly, irrespective of whether stereotypic behavior is itself evidence of poor welfare and psychological harm in the elephants – which it is, see PFF 338-347 – the undisputed testimony and evidence reflects that when elephants must engage in this behavior while chained on hard, unyielding surfaces for many hours, it inevitably contributes to the development of toenail cracks and nail bed abscesses. In other words, even if it were the case that stereotypic behavior is not caused by chaining, and even if it were true that such abnormal behavior bears no relationship to the elephants’ psychological well-being – neither of which is borne out by the record – it would still be the case that chaining elephants on hard surfaces who are engaging in this behavior is harmful and injurious to their physical well-being.

349. Even Dr. Friend advised the USDA that “[o]ften the stereotypic behavior itself may result in secondary problems, such as foot injuries from excessive pacing,” DX 300A at 15, and in his testimony he agreed that the elephants’ stereotypic behavior could cause or exacerbate foot injuries and muskuloskeletal problems. Trial Tr. 19:5-20:8, Feb. 9, 2009 p.m.

350. The stereotypic swaying behavior that many of the elephants with arthritis and other joint problems engage in while chained on hard surfaces further exacerbates their arthritis and other joint problems. Trial Tr. 28:20, Feb. 24, 2009 p.m. (Ensley Test.) (explaining that Karen’s stereotypic swaying behavior at the CEC places “continual repetitive mechanical stress on joints” and “doesn’t allow the joints a complete and full range of motion”); PWC 143F (video of Audburn Hills inspection showing Karen engaging in nearly continuous stereotypic swaying while chained for the evening).⁵²

5. Dr. Friend's Testimony That The Stereotypic Behavior Engaged In By The FEI Elephants Is Not An Indicator Of Poor Welfare Is Completely Unreliable.

351. As for Dr. Friend, although his own studies have previously found that stereotypic behavior in elephants is reflective of “suboptimal conditions,” and hence that steps should be taken to reduce such behavior, PWC 157, and despite the fact that his transport study documented high levels of stereotypic behavior on the trips that FEI typically takes, the study concluded that this behavior was not “indicative of poor welfare” simply because the elephants were not in a “trance-like” state, i.e., “while weaving, elephants engaged in activities such as eating, throwing feed over their back, and looking out windows.” PWC 156 at 8. Similarly, in his trial testimony, while acknowledging that reducing chaining “would reduce stereotypic behavior” and would allow the elephants “more alternatives in their behavior,” including to “interact and “socialize,” Trial Tr. 5:1-5:6, March 9, 2009 p.m., Dr. Schmitt also opined that, unless elephants are in a “catotonic” state, even high levels of stereotypic behavior would not be indicative of adverse conditions. Trial Tr. 77:18-77:23, March 9, 2009 p.m. (Friend Test.)

For a number of reasons, the Court finds this testimony entirely unconvincing.

352. First, Dr. Friend's novel assertion regarding the need for a “trance-like” state before stereotypic behavior in elephants would be regarded as evidence of poor welfare has never been subjected to scientific peer review. Rather, it was published in the Journal of the Elephant Managers Association (“JEMA”), a publication that is supported by the circus industry, and that even Dr. Schmitt, who has worked on the publication, has admitted is “not a scientific peer-reviewed journal.” Trial Tr. 80:22-81:9, March 16, 2009 p.m. (Schmitt Test.); Trial Tr. 91:10-91:24, March 4, 2009 p.m. (K. Johnson Test.); see also Trial Tr. 76:19-76:25, March 12, 2009 p.m. (Keele Test.)

(a peer reviewed publication is one that is “sent out to other scientists to review for accuracy or for further references”).

353. Indeed, the transport study actually underscores the value of the peer review process; it contains a significant factual discrepancy which even Dr. Friend was evidently unaware of before his testimony. See Trial Tr. 73:11-75:13, March 9, 2009 p.m. (Friend Test.). In addition, as Dr. Friend acknowledged, had the study gone through traditional peer review, the reviewers could have requested the underlying data – including the videotapes on which the study relied – before making a decision on publication. Trial Tr. 96:17-96:21, 97:12-97:15, March 9, 2009 a.m. (Friend Test.) (Q. “[T]he usual process is that peer reviewers can ask to look at the underlying data, correct?” A. “Yes, they could. Otherwise they’d probably just reject the article.”). However, when he was deposed, Dr. Friend conceded that he had “probably” destroyed or taped over the videotapes before his article was even accepted by JEMA, id. at 103:13-104:13, and he certainly destroyed or taped over them before ever reviewing them himself. Id. at 105:25-106:1; 115:23-115:25 (“the tapes that are subject here are long gone”). Accordingly, Dr. Friend’s opinion on whether the elephants were in a “trance-like” state is based on underlying evidence that is not only unavailable for review by the Court or the parties, but that Dr. Friend himself never reviewed and also escaped scrutiny under the process ordinarily used for ensuring the reliability and integrity of scientific findings.

354. Second, there is nothing in the scientific literature on stereotypic behavior to suggest that such behavior is indicative of poor conditions only when an animal is in a “trance-like” or “catatonic” state and never engaged in any other behaviors. Trial Tr. 123:1-123:3, Feb. 10, 2009 p.m. (Hart Test.); Trial Tr. 62:13-62:20, Feb. 11, 2009 a.m. (Clubb Test.) (“I’ve never really heard that definition used . . . and I’ve never seen that used by any other researchers on stereotypic behavior

in any species, and I'm not sure where that comes from. They don't reference why they're so concerned about just what they call trance-like stereotypies." Nor is there anything in the study itself that even defines such a state, let alone reflects any objective effort to measure whether it actually did or did not exist in the elephants studied. Trial Tr. 123:4-123:6, Feb. 10, 2009 p.m. (Hart Test.) To the contrary, although the study evidently did attempt to measure the percentage of time the elephants were engaged in stereotypical behavior, standing, or laying down, see PWC 156 at 9, Table 1, it did not even record the time during which the elephants were engaging in the "range of activities" that led to the assertion that "weaving during transport did not appear to be indicative of poor welfare." Id. at 8; Trial Tr. 76:2-76:9, March 9, 2009 p.m. (Friend Test.). To the contrary, the study itself explains that the time spent in the behaviors relied on by Dr. Friend to find that the elephants were not in a "trance-like" state was "not recorded as the bouts were often very brief." PWC 156 at 8. Nonetheless, the study asserts that even "very brief" time spent on an activity other than stereotypic behavior – such as five minutes of tail-swishing during a lengthy trip – means that the elephant is not suffering from "poor welfare." PWC 156 at 8. However, there is nothing in the study itself, Dr. Friend's testimony, or any other scientific literature on stereotypic behavior in elephants that explains or supports this counterintuitive conclusion. Trial Tr. 123:1-123:12, Feb. 10, 2009 p.m. (Hart Test.).

355. Indeed, and perhaps most important, Dr. Friend himself conceded in his testimony that he has never even seen in any elephant he has ever observed (either in a circus or elsewhere) the "trance-like" or "catatonic" state referred to in the transport article. Trial Tr. 78:14-79:8, 83:1-83:6, March 9, 2009 p.m. Indeed, when shown various videotapes of FEI elephants, Dr. Friend agreed that they were all in fact engaging in stereotypic weaving of the same kind that was observed during the

transport study and that was reduced when elephants were unchained during Dr. Friend's prior studies, but that none were in the hypothetical state that Dr. Friend now regards as necessary for the stereotypic behavior to be indicative of stressful or harmful conditions. Id. at 79:9-83:4. For all of these reasons, the Court finds Dr. Friend's opinion regarding the importance of a "trance-like" state he has never observed to be unreliable, inconsistent with Dr. Friend's own prior research and statements on stereotypic behavior, and certainly less convincing than the testimony proffered by plaintiffs' behavioral experts.

H. The Fact That FEI Elephants Have Tuberculosis Is Additional Evidence That The Elephants Are Living Under Stressful Conditions.

356. Tuberculosis ("Tb") is a serious and potentially life-threatening micro-bacterial infection caused by the microbacterium tuberculosis. Trial Tr. 71:23-72:2, Feb. 24, 2009 a.m. (Ensley Test.). Tb in captive elephants is a respiratory disease that is likely "transmitted by sputum and trunk discharge." Id. at 74:1-5. There are no reports of Tb infection in wild, free-ranging elephants who have not lived in close proximity to captive elephants. Trial Tr. 72:24-73:21, March 16, 2009 p.m. (Schmitt Test.). In the United States, Tb was discovered in two circus elephants in 1996. Id. at 74:12-74:15.

357. The presence of Tb in the FEI elephants, although not crucial to plaintiffs' claims, is relevant to those claims because the practices at issue – i.e., that the elephants are chained in close confinement for long periods of time, both while traveling and at the CEC – are the very conditions under which the disease can thrive and be transmitted, and because, as in humans, stress also appears to aid in transmission of the disease. Trial Tr. 74:5-74:10, Feb. 24, 2009 a.m. (Ensley Test.) ("[I]f you have animals being maintained in darkened traveling containers for prolonged periods of time, and in barn conditions where they are tethered side by side[,] [a]nd if you consider this to be stressful

or contributing to stress, then you are setting up a condition whereby the organism will thrive.”). Dr. Susan Mikota – on whose work Dr. Schmitt relied when he prepared his discussion on Tb in elephants for his chapter in “Zoo and Wild Animal Medicine,” and who Dr. Schmitt conceded has “expertise in elephant tuberculosis,” Trial Tr. 76:7-76:25, March 16, 2009 p.m. (Schmitt Test.) – has written in a 2009 publication that Tb is a disease elephants “would not normally encounter living in their natural habitat in the wild,” and that in view of the “numerous stressors experienced by captive elephants,” and “given the clear association between stress and [Tb] in humans, it is logical to assume a similar association between stress and [Tb] in elephants.” Id. at 78:13-80:3; id. at 80:9-80:21 (acknowledgment by Dr. Schmitt that tuberculosis in humans has been linked to a stressful environment when it “involves immune suppression,” and that it is “possible” that such a link exists between stress and Tb in captive elephants).

358. FEI’s records reflect that a number of the elephants with whom Mr. Rider worked, as well as many other elephants in FEI’s possession with whom these elephants have come in contact, have either tested positive for Tb, been treated for Tb because they were suffering from symptoms consistent with Tb, or been placed in quarantine because they are in a facility with other infected elephants.⁵³

359. Overall, according to Dr. Ensley’s summary of the FEI medical records, TB “has been diagnosed in as many as thirteen of the defendant’s Asian elephants based on positive culture results, and six additional elephants by other diagnostic tests in the past ten years. As many as eleven more have been treated due to contact with elephants testing positive for tuberculosis. In at least three more of the defendant’s elephants that have died, evidence of tuberculosis was found on necropsy examination, and a fourth with lung lesions compatible with tuberculosis. Of the sixteen Asian

elephants belong to the defendant, referred to previously as born in captivity, and now living, six have tested positive for tuberculosis, and two have been treated for tuberculosis due to contact with a tuberculosis positive elephants.” PWC 113L (Ensley Expert Report) at 270; see also Trial Tr. 68:12-68:16, 70:15-70:25, March 16, 2009 p.m. (Schmitt Test.) (acknowledging that a number of FEI elephants were found to be infected with Tb only after being euthanized for various chronic health problems).

360. Because of the ongoing Tb problem, as recently as December 2007, a quarantine was placed on the CEC by the State of Florida; this quarantine applied to 22 elephants, including the five at the CEC with whom Mr. Rider worked (Jewell, Lutzi, Mysore, Susan, and Zina). Ensley Expert Report at 271; see also PWC 102A (December 19, 2007 Notice of Quarantine indicating that 22 of the elephants at the CEC are on “travel restrictions,” including Jewell, Lutzi, Mysore, and Susan).

361. In short, FEI’s own records reflect that there has been, and remains, a serious Tb problem in the elephants in FEI’s possession – a fact which reinforces plaintiffs’ claims that the practices at issue are harmful and injurious to them. See also PWC 2A-Nicole at 120 (FEI 21511) (1999 memorandum stating that at the CEC “a total of 12 elephants are currently being treated for M. tb,” including two who had actually tested “culture positive,” that additional elephants at FEI’s Williston facility were “culture positive” and were being treated for Tb; that FEI’s veterinarian was “concerned that as we continue intensified testing at Williston, additional positives will occur”; and that FEI “would likely have to consider euthanasia” for infected animals who could not tolerate the treatment).⁵⁴

I. FEI's Chaining Practices Can Not Be Excused As "Generally Accepted Husbandry Practices" That "Meet Or Exceed" Standards For Facilities And Care Under The Animal Welfare Act.

362. None of the chaining and confining practices challenged here are "generally accepted" husbandry practices that "meet or exceed" an Animal Welfare Act Standard.

363. First, chaining elephants on a train for many hours for the sole purpose of transporting them around the country to perform in a circus is not a "husbandry" practice. See PFF 217 ("husbandry" practices are those that relate to the care of elephants, such as feeding, watering, foot care, and breeding).

364. Second, the record shows that the amount of time the FEI elephants are kept chained on hard surfaces is way beyond what any other entity with captive elephants does. Thus, it certainly is not a "generally accepted" practice by any means. Thus, for example, FEI's own expert witness, Mr. Keele, testified that the AZA standards that apply to accredited zoos provide that chaining is acceptable only as a method of "temporary restraint." See PWC 74 at 9, AZA Standard 5.5.1. However, the record shows that FEI routinely chains its elephants for many hours every single day of their lives – not as a "temporary" measure. See PFF 227-232, 237-240, 250-256.

365. The AZA standards also provide that even when chaining is used as a "temporary restraint," elephants may not be chained "for the majority of a 24-hour period" – i.e., more than 12 hours. Id. However, the record shows that most of the CEC elephants are kept chained on concrete for approximately 16 hours each day, and that some are kept chained on concrete for 22 ½ hours. See PFF 250-256. The record further shows that the elephants who travel on the road are chained on the hard railroad cars for an average of 26 consecutive hours when the circus is traveling – which it does approximately 48 out of 52 weeks each year. See PFF 227-228 ; see also PFF 223.

366. The record also shows, that even accepting FEI's testimony about how many additional hours the performing elephants spend on chains, the elephants are chained as soon as the last show is over and all night long, which can range anywhere from approximately 17 ½ hours to 9 ½ hours each 24 hour period.. See PFF 238. However, the record demonstrates that, in fact, the elephants spend more time on chains than FEI is willing to admit. See PFF 239.

367. FEI's own expert witness Michael Keele demonstrated that FEI's chaining practices are not "generally accepted" in the exhibition industry. Thus, as a routine matter, the Oregon Zoo chains its elephants for only two hours during each 24-hour day, including at night. Trial Tr. 107:1-107:4, March 12, 2009 (Keele Test.). With regard to any other chaining that might be used – e.g., as part of a process "to reintroduc[e] the calf back to the mom" – the Oregon Zoo makes a case-by-case judgment as to when any further chaining is deemed necessary. Id. at 106:9-106:13. The Oregon Zoo has determined that limiting chaining in this fashion was better for the elephants at that institution than keeping them chained for long periods of time. Id. at 107:5-107:10. Moreover, the Oregon Zoo has had 27 elephant births and has never found it necessary to chain or otherwise restrain the mother during the birthing process – as FEI routinely does. See Trial Tr. 40:8-40:9, March 12, 2009 p.m. (Keele Test.); see also PFF 258.

368. FEI's other expert witnesses, Kari Johnson, who, with her husband Gary – another FEI expert witness – operate a commercial business that also uses captive Asian elephants testified that they are governed by the AZA standards, which, again, do not allow the chaining of elephants for more than 12 hours a day. See Trial Tr. 80:17 - 80:18, March 5, 2009 a.m.(Testimony of Kari Johnson). Accordingly, FEI's chaining practices simply are not "generally accepted" by the captive elephant industry.

369. Furthermore, even assuming FEI's chaining practices were generally accepted husbandry practices, they simply do not "meet or exceed" any Animal Welfare Act standards. On the contrary, USDA regulations provide that "[e]nclosures must provide sufficient space to allow each animal to make normal postural and social adjustments," and that "[i]nadequate space may be evidenced by malnutrition, poor conditions, debility, stress or abnormal behavior patterns." 9 C.F.R. § 3.128 (emphasis added). The record demonstrates that FEI's chaining and confinement practices do not comport with these requirements. See PFF 362-365. The USDA regulations further provide that "[p]rimary enclosures used to transport live animals . . . must have adequate ventilation and provide sufficient space to allow animals to turn about freely and make normal postural adjustments," 9 C.F.R. § 3.137 – another standard that FEI does not "meet or exceed." See PFF 234-235.

V. ADDITIONAL EVIDENCE THAT IS RELEVANT TO PLAINTIFFS' CLAIMS

The Court finds that the following additional facts are relevant to plaintiffs' claims because (a) the fact that FEI controls when the elephants are able to drink water every day corroborates plaintiffs' claims that FEI uses the bull hook and chains to similarly control the elephants' every move and to keep the animals in fear that if they do not do as required they will be punished; and (b) the fact that FEI takes measures to conceal from the public the way it actually treats the elephants bears on the credibility of all of FEI's testimony in this case and also supports API's basis for standing.

A. The Elephants Are Not Provided Access To Water

370. The record shows that the elephants are not provided free access to water; instead they are completely dependent on their handlers to give them water. See Trial Tr. 10:01 - 11:10, March 9, 2009 a.m. (Testimony of Gary Jacobson). Moreover, the elephants at the CEC typically are only provided water twice during each 24 hour day – once at about 6:15 a.m., and then again at

about 3:00 p.m. See Trial Tr. 93:14 - 93:17, March 5, 2009 p.m. (Jacobson Testimony); Trial Tr. 10:21 - 12:07, March 9, 2009 a.m. (Jacobson Testimony). Therefore, once the elephants are given their allotment at water at 3:00 p.m., they know they will not be getting any more water until 6:15 a.m. the next day – more than fifteen hours later. Id. This practice – controlling when the elephants are allowed to drink water – is contrary to the standards that apply to accredited zoos, which provide that “[e]lephants must have access to clean, fresh drinking water.” See AZA Standards, PWC 74 at 4 (§ 2.1.1) (emphasis added).

371. In fact, in one internal memorandum, an FEI veterinarian, Alison Case reported that “[i]t has been brought to my attention by more than one person that the elephants are not receiving enough water ‘so as to minimize the amount they urinate,’” and that “I did notice dry hard feces and in reflecting on my three days [visiting the circus], did not happen to see any urination”). PWC 29; but see Trial Tr. 1:12-51:20, Feb. 24, 2009 a.m. (Testimony of Dr. Ensley) (elephants normally “form maybe 15 gallons of urine in a 24-hour period”).

B. FEI Conceals From The Public How It Actually Treats The Elephants.

372. The record shows that FEI actively conceals from the public the way it actually treats the elephants. Thus, as demonstrated supra, the elephant handlers use smaller bull hooks in public, tape the bull hooks they use in the performances with black tape so that the public can not easily see them, and even put the bull hooks up their sleeves, because, in the words of FEI witness Daniel Raffo “it looks bad.” Trial Tr. 65:02 - 65:16, March 4, 2009 a.m.; see also PFF131-133. As also demonstrated, FEI uses a product called “Wonder Dust” to cover up the bull hook wounds on the elephants so that the public will not see them. See PFF 213.

373. Tom Rider testified that the supervisors at FEI were always concerned that measures be taken so that the public would not see the elephants being hit with bull hooks. He recounted a time when the television show “Dateline” came to do a story about the circus in Denver, Colorado, and the General Manager of the Blue Unit, Jeff Steele, brought the employees together and told them “don’t get caught on camera” hitting elephants with bull hooks. Trial Tr. 60:19 - 61:11, Feb. 12, 2009 a.m.; and that another time in Boston, Mr. Steele complained about bull hook marks, not because he was concerned that the handlers were harming the elephants, but because he “didn’t want the public to see it.” See Trial Tr. 13:21 - 15:13, Feb. 17, 2009 p.m..⁵⁵

374. Mr. Rider informed the USDA in July 2000 that once in Chatanooga, Tennessee he was instructed to “drop a side wall on the tent” so that Randy Peterson and Adam Hill could beat the elephants Sophie and Nicole without the public being able to see it. PWC 20 at 5 (PL 04462).

375. Mr. Rider’s testimony is corroborated by the letter FEI’s “Animal Behaviorist” Deborah Fahrenbruck drafted for Mr. Feld and gave to Mike Stuart, the Unit Manager for the Blue Unit in 2004, concerning the “hook[ing]” of Lutzi that resulted in “blood in small pools and dripped along the length of the rubber and all the way inside the barn.” See PWC 9. When read in its entirety that document demonstrates that one of Ms. Fahrenbruck’s principal concerns was that the handlers not get caught on videotape mistreating an elephant. Thus, she explains that Troy Metzler’s conduct makes it “very difficult . . . to defend [the handlers] . . . in the media,” and she gives as an example “the activist’s tape taken in Oakland,” which Ms. Fahrenbruck explains “could easily have been avoided,” by “putting up a tent wall.” See id. at 1 (emphasis added). Ms. Fahrenbruck also states that, after “discussing the situation with Alex a short time later a tent wall went immediately up and further videoing ceased.” Id. (emphasis added). In the same letter, Ms. Fahrenbruck also complains

that because of the hooking of Lutzi, “we had an elephant dripping blood all over the arena floor during the show.” Id. at 2 (emphasis added).

376. Indeed, Pat CuvIELLO testified that his efforts to videotape the circus “have been blocked, like somebody will put a trailer in my way or close the flaps on the tent; things like that . . . they’ll put the flaps down so we can’t see . . . the elephants in the tent,” and that this “typically happens every year.” Trial Tr. 62:04 - 62:09, Feb. 9, 2009 a.m. (emphasis added); see also PWC 9 at 3 (FEI 15027) (Troy Metzler tells Deborah Fahrenbruck that “what happens in the elephant barn stays in the barn”).

377. Several witnesses also consistently testified that FEI puts on a show for the public during the “open house” – the time before the performance when members of the public and the media are invited back to the compound to see the elephants, and allowed to take photographs. See, e.g., PFF 240. The witnesses uniformly testified that, in contrast to how the elephants are treated at all other times during the day and night, during the “open house,” the elephants are given branches and other items to play with, as well as special food treats, such as watermelon and fruit in ice cubes. See, e.g., Trial Tr. 13:25- 15:14, Feb. 6, 2009 p.m. (Sergeant Williams testified that in 2001 the elephants were chained except during the open house, that the public is allowed to take photographs at the open house, that the circus employees put down large tubs, bamboo, an old log or tree for the elephants, and that after the open house is over “[t]hey put [the elephants] back in the tent and chained them up”); see also id. at 15:15 (Sergeant Williams describes a “media event” at which, in addition to what they have at the open house, they had “frozen cubes of fruit for the elephants,” and that she did not see elephants provided fruit in ice cubes any other time she observed the circus in 1999 or 2001); Trial Tr. 54:04 - 55:25, Feb. 9, 2009 a.m. (Pat CuvIELLO testified that he has observed

many “open houses,” and that the elephants are provided watermelons, a block of ice with fruit in it, and hay, and that cameras are allowed at the open house). FEI’s own “Blue Unit Elephant Husbandry Protocol” reveals that “[w]hen possible, branches saved for open house.” PWC 44 at 2 (emphasis added); PWC 181B (Video) at 108:08 - 109:23 (Deposition of Elizabeth Swart) (explaining that as more people started going to the unloading of the elephants at the train, the “violent” hitting of the elephants in public lessened and “out would come the watermelons, so that the public and the media would have a shot of an elephant in a happier circumstance,” and that “when nobody is watching, it’s a violent practice; and when somebody is watching, then they’re performing for the camera”).

378. Mr. Rider testified that when he worked at Ringling Bros., Randy Peterson instructed him to put hay on the elephants’ chains during the open house so the public wouldn’t see them, see Trial Tr. 38:08 - 38:23, Feb. 12, 2009 p.m., and other witnesses testified that in later years, the elephants were taken off their chains during the open house. See, e.g., Testimony of Lanette Williams, supra PFF 377; see also PWC 161B at 116:17 - 117:16 (Deposition of Frank Hagan, Nov. 9, 2004) (during the open house the elephants are not chained); PWC 161B at 16:08 - 16:20 (Deposition of Gerald Ramos) (testifying that when he worked at the Blue Unit in 2006, the elephants were not on chains when they were in the show and when they “were out front for the people”); see also Trial Tr. 79:03 - 79:05, March 12, 2009 a.m. (Brian French confirms that the elephants are not chained during the open house).

379. In fact, FEI witness Brian French admitted that the scenes that were shown to the Court during his direct testimony of the elephants during the court-ordered inspection at Auburn Hills Michigan – in which the elephants have branches to play with, and large tires and tubs to climb on – were indistinguishable from what goes on at an FEI open house. See id. at 78:12 - 79:23

(explaining that the only difference is that at an open house the public is present), and when shown other videotape taken of the Blue Unit – by Pat CuvIELLO and without FEI’s knowledge – which shows a young elephant chained on concrete, on two legs, by herself, with no branches, no hay, no tires, no tubs to play on, and no pedestals to climb on, Mr. French admitted that this scene was definitely not taken at either an open house or a court-ordered inspection. Id. at 84:07 - 85:25; see also PWC 128B (video of Sara on chains).

380. Based on all of this testimony, the Court finds that FEI does in fact take measures at the open house to convince the public that it does not keep the elephants in chain for many hours and that it gives them all kinds of items of enrichment, when, in fact, the record shows that this simply is not how the elephants are treated when the public is not around. For the same reasons, the Court similarly concludes that FEI appears to have staged an “open house” for plaintiffs’ experts when they participated in the inspection at Auburn Hills that was not in fact typical of how the elephants are maintained for the great majority of the day.

381. The Court’s findings on this point are bolstered by the additional cross-examination of Mr. French in which he admitted, when faced with an internal document (PWC 44), that the FEI handlers force the elephants to defecate on demand every day before every performance, yet he failed to include this fact in his recitation on direct examination of the typical “daily routine” for the Blue Unit elephants. See id. at 80:08 - 84:06; see also id. at 83:02 - 83:23 (at first testifying that they simply “ask [the elephants] to go to the bathroom,” and then, after being questioned by the Court, admitting that they give the elephants a “command” to empty their bowels).

382. The record also shows that FEI’s public relations materials that it disseminates to the public contain inaccurate and misleading information. For example, FEI continues to disseminate a

glossy brochure that touts its successful “conservation” of the endangered Asian elephants, even though four of the baby elephants featured in that brochure have been dead for years. See PWC 99A; see also PWC 151 (Kenny, Benjamin, Riccardo, and Bertha are dead); Trial Tr. 77:02 - 80:15, 82:02 - 82:20, March 3, 2009 (Testimony of Kenneth Feld). As Mr. Feld himself admitted, the public would not know by reading this brochure that four of the baby elephants had died. Id. at 80:09 - 80:14; see also PWC 151; Trial Tr. at 23:05-23:11, March 16, 2009 p.m. (Testimony of Dr. Schmitt) (Bertha was born on July 30, 2005 and died shortly thereafter of congenital malformation of the digestive tract resulted in strictures”).

383. In another brochure disseminated to the public, FEI touts its CEC as “providing the Asian elephant with the ideal environment in which to flourish and thrive,” and describes it as a “200-acre facility” that includes an “Elephant Playground” of “30 acres . . . of prime meadow where elephants can roam and socialize to their heart’s content.” See PMC 75 at 2 (Feld 03355) (emphasis added). However, the record shows, and Mr. Jacobson admitted on cross-examination, that because most of the elephants at the CEC spend more than a majority of their lives chained on concrete – and at least two of the female elephants spend 22 ½ hours each day that way – and that none of the adult male elephants ever go out on grass, the elephants at the CEC certainly are **not** in fact spending their time “roaming and socializing to their heart’s content.” See Trial Tr. 5:06 - 9:25, March 9, 2009 a.m. (Testimony of Gary Jacobson). Accordingly, the Court again finds that FEI actively misleads the public about how the Asian elephants are actually maintained.

384. In fact, FEI spends millions of dollars each year on public relations and advertising to convince the public that it takes wonderful care of its elephants, that they are all healthy and content, and that the animal rights and welfare organizations who say otherwise, are lying “extremists” who

should not be trusted. See Trial Tr. 90:13 - 94:16, March 3, 2009 a.m. (Testimony of Mr. Feld) (admitting that FEI spends “well into the millions” on advertising, that, in addition, and that it additionally spends more than a hundred thousand dollars a year for outside companies to do public relations for FEI, in addition to what it spends in-house); see also id. at 94:08 - 94:12 (Q. “But it’s part of your public relations, isn’t it, to tell the public that the animal rights groups who say that the animals are mistreated, are lying, that they’re making it up, that they have a political agenda, correct?” A. “Well, we do say that because that’s what I believe is true . . .”) (emphasis added).

385. FEI has also spent considerable amounts of money to have “open letters” published in major newspapers to convince the public that its elephants are not mistreated in any way and that those who tell the public that this is not true are lying and politically motivated, including a full-page ad in The New York Times and an “open letter to the people of Boston” that was published in The Boston Globe. See id. at 96:08 - 99:23 (Testimony of Mr. Feld) (admitting that FEI paid “over a hundred thousand” dollars for a “full page ad” in the New York Times urging the public to question how much of the money raised by animal protection groups is spent “[i]n support of politically extreme groups,” that “people need to know the truth,” and that “[t]he truth is, no one is more concerned about the well-being of animals than Ringling Brothers,” and that “our animal partners are healthy, well cared for, and content”).⁵⁶

386. Indeed, FEI also sends out e-mail responses to patrons who contact the circus to express concern about the treatment of the animals, and particularly the Asian elephants, in which it denies that there is any validity to such concerns, and casts aspersions on those who make such allegations. See PWC 199. For example, in response to a parent who said “I just took my children, ages 3 and 5, to the circus . . . what they really enjoyed was the acrobatics and stunts performed by

the clowns and other entertainers,” but that “the elephants looked really sad,” FEI replied that “we want you to know that Ringling Bros. . . . is a committed animal steward and for more than a decade animal rights activist groups have been trying to distort Ringling Bros. outstanding record of animal care with false allegations and old, misleading edited videotape . . .” See PWC 199 at 3 (FEI 38808); at 1 (FEI 47309). A similar response was sent in reply to an email sent by a man who said “I am not a member of Peta or any other group, just a dad who had to explain to a 3 year old little girl why the elephants were so sad.” See id. at 4 (FEI 38720).⁵⁷

387. Unfortunately FEI’s efforts to deceive the public about how it treats the Asian elephants extended into the courtroom when, with the assistance of his counsel, Mr. Jacobson tried to make the Court believe that a series of video-footage taken by FEI depicting young elephants rehearsing routines for the circus in fact depicted the way in which the baby elephants are “*trained*” to perform these tricks. See, e.g. Trial Tr. 79:22 - 88:17, March 5, 2009 p.m.; see e.g., id. at 81:25 (referring to the videotape, FEI’s counsel asks “how did you *train* an elephant to do that?”); at 83:10 (same); 84:10 (“[h]ow did you *train* an elephant to do that, Mr. Jacobson?”); 85:22 (how did his wife “*train*” Shirley to play the drum?); 86:08 (“[h]ow did you *train* an elephant do that?”); 86:15 (same); 87:17 (same). However, on cross-examination, Mr. Jacobson admitted that none of these videotapes actually depicts the way in which these wild baby elephants are initially trained to perform a command, and that such training involves forcibly “grabbing” nursing babies away from their mothers – for life – keeping them restrained on ropes and chains for many days and even months, and teaching them that they will be hit with bull hooks if they do not do as required. See PFF 179; see also Trial Tr. 45:05 - 45:13, March 9, 2009 a.m. (Jacobson Testimony) (Q. “So those videotapes certainly did not reflect the way you actually train an elephant to perform a command for the first

time, right?” A. “No.” Q. “In fact, those videotapes we saw leave out a lot of steps, don’t they, between when the baby elephant is born and when it’s climbing or a barrel or playing a harmonica, right?” A. “Certainly”).

388. In fact, on cross-examination, Mr. Jacobson admitted that he does not believe that FEI has ever videotaped an actual training session when Mr. Jacobson was actually teaching the elephants how to do commands for the first time, id. at 45:18- 45:19, and he further admitted to the Court that he would “probably not” allow anyone to film the actual training sessions of the baby elephants because “in the modern world it’s just more difficult to explain.” Id. at 45:20 - 46:24. Moreover, when the Court gave Mr. Jacobson the opportunity to confirm that the training procedures he currently uses at the CEC are “humane,” Mr. Jacobson was unable to provide such testimony. See id. at Trial Tr. 47:06 - 47:13 (The Court: “Do you think your training procedures as discussed with your attorney a few minutes ago are humane?” A. “A lot of this has changed since some of these statements were made. As time goes on, we figure out how to be simpler and easier doing these things.” The Court: “More humane?” A. “Just work out better. People have learned quite a bit in the last twenty, thirty years.”). FEI also tried to make this Court believe that the videotape it showed of the day the baby elephant Benjamin died, somehow validated FEI’s position that, contrary to the official findings of the USDA investigator, PWC 24 at 3, Mr. Harned’s use of the bull hook had nothing to do with the death of Benjamin. See, e.g., Trial Tr. 72:16 - 72:19, March 18, 2009 p.m. (Closing argument of Mr. Simpson (“the tape speaks for itself, Judge, and I think hopefully having played that tape in this courtroom we’re not going to hear about how Feld Entertainment beat Benjamin to death with a bullhook. It speaks for itself”). However, not only did the woman who took the videotape testify that it is not a complete recording of what occurred that day, because she

kept turning the camera on and off, see DX 342 A at 34:02-34:05 (Martin Dep., March 9, 2005), but the Court can easily discern simply by watching the videotape that it is has been altered to some degree – indeed, Mr. Harned literally disappears from the picture in one scene when he is standing next to Benjamin by the water’s edge. See DX 183A at 1:20 - 1:26.

VI. PLAINTIFFS’ EXPERTS ARE QUALIFIED AND RELIABLE

389. The Court finds that all of plaintiffs’ expert witnesses are qualified to render expert opinions in the areas for which they were tendered and that their expert testimony in this case is completely reliable.

A. Dr. Joyce Poole

390. Plaintiffs’ expert Dr. Joyce Poole, is one of the world’s leading experts on elephants. See Curriculum Vitae, PWC 113-A. Dr. Poole has a doctorate degree from Cambridge University in Animal Behavior, see Trial Tr. 5:01-5:08, Feb. 4, 2009 p.m.; PWC 113A, and she has studied elephants for more than 33 years. Trial Tr. 6:20-7:14, Feb. 4, 2009 p.m. In her lifetime, Dr. Poole has observed between 10,000 and 20,000 elephants in the wild. Id. at 8:19-8:25. She has been the lead or co-author of dozens of articles and books about elephants, most of which have been published in prestigious peer-reviewed scientific publications. See PWC 113A; see also Trial Tr. 21:09-22:12, Feb. 4, 2009 p.m.; Trial Tr. 49:03-49:15, Feb. 5, 2009 a.m.

391. Defendant’s own experts have acknowledged that Dr. Poole’s extensive research and expertise on African elephants is directly relevant to Asian elephants, and is regularly relied on by those who are working with Asian elephants in captivity. See Trial Tr. 19:2-19:7, March 12, 2009 eve. (Keele Test.) (acknowledging that his expert report cites to Dr. Poole’s work and agreeing that Dr. Poole is a “recognized expert on wild Asian elephants”); id. at 20:5-20:8 (“A lot of what we rely

on for Asian elephants is based on [Dr. Poole's] work with African elephants, and so I regard her as an expert at the work she has done with the African elephants in Kenya [at Amboseli] for 30 years.”).

392. Although Dr. Poole's principle area of expertise is the African elephant, see Trial Tr. 6:23-9:03, Feb. 4, 2009 p.m.; see also PWC 113 A, Dr. Poole has also done research on Asian elephants, see Trial Tr. 12:06-12:13, Feb. 4, 2009 p.m., and she is currently conducting a study of Asian elephants in Sri Lanka, with the scientist Manori Gunawardena, who, because of Dr. Poole's expertise, asked Dr. Poole to help her conduct a study of the social behavior of Asian elephants. Id., at 12:24-13:22. Dr. Poole has observed at least 1,000 Asian elephants in the wild. Id. at 13:23 - 13:25. In addition, Dr. Poole's voluminous research on African elephants is relied on by Asian elephant experts, including Raman Sukumar, the world's preeminent expert on Asian elephants. See Trial Tr. 9:04-10:10, Feb. 4, 2009 p.m. During the last year, Dr. Poole and Professor Sukumar have collaborated on a project involving the interests of elephants based on elephant biology. See id. at 10:11-10:23.

393. Dr. Poole has also observed elephants in captivity in various settings around the world, including the United States, id., at 22:13-23:06, and she participated in the Court-ordered inspection of the elephants at issue in this case, at FEI's CEC in November 2007. Id. at 48:16 - 48:19; Trial Tr. 23:09-23:11, Feb. 4, 2009 p.m.

394. Dr. Poole's expertise in this case deserves to be afforded substantial weight because of her educational and professional background, the way in which she is regarded in the scientific community, and because she participated in one of the Court-ordered inspections.

395. The fact that Dr. Poole's primary expertise is with regard to the African elephant does not diminish her ability to provide reliable expert information and opinions in this case. As noted,

defendant's own expert, Mike Keele, acknowledged that Dr. Poole's research is relied on by those who maintain Asian elephants. See PFF 391; see also Trial Tr. 33:22-34:6, Feb. 18, 2009 p.m. (Kinzley Test.) (the research project Dr. Poole is a part of is the "longest ongoing study of elephants. In fact, my understanding is actually it's the longest ongoing study of any mammal. And most of what we know about the behavior of elephants and about musth, which is one of the interesting phenomena with elephants, has come out of that study. And also a lot about the communication of elephants has come out of that study."). In addition, as Dr. Poole explained, the two species are extremely similar with regard to characteristics that are relevant in this case. Thus, they are both "extremely social" animals that live in "matriarchal family groups;" both species have "very sensitive skin," and "very sensitive feet," and sensitive trunks. Trial Tr. 15:13-16:01, Feb. 4, 2009 p.m. Both species are able to produce low frequency sounds . . . below the level of human hearing, and they use those sounds to communicate with one another. Id. at 16:02-16:04. Both species "have extraordinary sense of smell" that is "very important in their social life." Id. at 16:11-16:13. Both species are also "very intelligent," and are "one of the few nonhuman animals capable of tool use, capable of simple . . . modification . . . of tools." Id. at 16:15-17:02. Both species are also "capable of empathy," and are "self-aware," and have a rudimentary "understanding of death." Id. at 17:02-17:05. Thus, as Dr. Poole explained, both species are "very complex." Id. at 17:04-17:05. Both species are also "[v]ery mobile," and "travel anywhere from eight to 15 kilometers a day" on an average day. Id. at 17:06-17:16. Both species also use their trunks for in many different ways – e.g., to smell, as a tool, for tactile taking care of babies. Id. at 17:17-18:10; see also id. at 18:17-18:19 (both species use their trunks this way). In addition, both African and Asian elephants experience pain. Id. at 18:20-19:17; see also id. at 20:05-21:07 (explaining to the Court her further basis for this statement). Both species

are also excellent swimmers – in fact, they elephants “are the best swimmers of any land mammal.” Id. at 37:11-38:05. The similarities between the species was also confirmed when Dr. Poole watched the movie “Lord of the Jungle,” which is about Asian elephants, see PWC 113*, and noted that the visual and tactile displays and signals of the Asian elephants were remarkably similar to those of African elephants. See id. at 16:15-16:22 (“I went through [the film] and . . . made a note of all the different displays and signals that I saw, and I counted 86 of them that I knew, and of those, 85 are also seen in African elephants. So they are very similar”).

396. Asian and African elephants are sufficiently similar in their behaviors and behavioral needs that the same Taxon Advisory Group/Species Survival Plan (“TAG/SSP”) of the Association of Zoos and Aquariums (“AZA”) addresses both species. Trial Tr. 80:22-81:5, March 12, 2009 p.m. (Keele Test.); id. at 81:4-81:5 (“We felt their captive needs were similar enough that we would address them as the same.”). In addition, unlike other species for which there are different SSPs (such as tigers and leopards), with regard to Asian and African elephants, the AZA has determined that its “pretty much the same people” who have relevant expertise, so it makes sense” for that reason as well to have one TAG/SSP for both species. Id. at 28:23-29:7.

397. Defendant’s own Exhibit, upon which it heavily relies in this case – “The Elephant Husbandry Resource Guide” – acknowledges that “both species appear to share the same needs,” and that both species are “generally similar in size, appearance, physiology, and social behavior.” DX 2 at 6 (1st column, 4th paragraph); id. at 8 (1st paragraph) (emphasis added). And, defendant’s own employee, Troy Metzler, who has handled both African and Asian elephants, testified that both species are social, have similar skin, like to be with other elephants, and use their trunks in similar ways – e.g., to drink water, throw it on their backs, pick up food, explore their surroundings, and

interact with each other. See PWC 177A, 63:08-63:11; 63:15-63:19; 64:02-64:20 (Metzler Deposition) (July 25, 2006).

398. Dr. Poole was not paid any compensation for her work on this case. Trial Tr. 88:05-88:07, Feb. 4, 2009 p.m.

399. For all of the following reasons, the Court finds that Dr. Poole is eminently qualified to render expert opinions about elephant behavior, and it finds her testimony both credible and reliable.

B. Dr. Philip Ensley

400. Dr. Philip Ensley, D.M.V., worked as an elephant veterinarian at the world renowned San Diego Zoological Society for 29 years and is one of only approximately 120 veterinarians in the world who is a Diplomat in the American College of Zoological Medicine. Trial Tr. 7:21-9:12; 15:19-16:15, Feb. 24, 2009 a.m. (Ensley Test.); PWC 113J (Dr. Ensley's Curriculum Vitae).

401. In Defendant's Notice of Daubert Objections, FEI appeared to concede that Dr. Ensley was qualified to review and offer an expert opinion concerning the medical records pertaining to the Asian elephants in FEI's possession, as well as to testify as an expert regarding the court-ordered inspections he attended at the CEC and Auburn Hills. See DE 371 at 10; see also Trial Tr. 18:20-18:25, Feb. 24, 2009 a.m. (discussing attendance at inspections).

402. Dr. Ensley conducted a "three-year" review of "somewhere between 12 and 14 boxes of medical records, actually, thousands of papers recounting and chronicling the health of the lives of close to 140 elephants" owned by FEI. Trial Tr. 18:1-18:19, Feb. 24, 2009 a.m.

403. For these reasons, the Court finds that Dr. Ensley is qualified as an expert in zoological medicine and is particularly well qualified to review FEI's medical records and offer an

opinion, based on them, regarding the physical and medical condition of the elephants and the relationship between that condition and the practices that form the gravamen of plaintiffs' claims in this case. The Court further finds that based on the extensive review of FEI's records that was conducted by Dr. Ensley, he is well qualified to offer an opinion about the overall ramifications of FEI's practices on the elephants' health and well-being.

C. Carol Buckley

404. Plaintiffs' expert witness Carol Buckley is a former circus elephant trainer who has trained, maintained, and cared for captive elephants for thirty-five years. See PWC 113H (Ms. Buckley's Curriculum Vitae); Trial Tr. 5:2-9:16, Feb. 23, 2009 a.m. For almost twenty years Ms. Buckley worked with elephants using traditional free contact methods, including working with various circuses. Id. 8:16-8:19; Trial Tr. 12:5-12:7, Feb. 23, 2009 p.m. Ms. Buckley has also worked at multiple zoos with captive elephants. Trial Tr. 10:19-10:23, Feb. 23, 2009 a.m. Ms. Buckley testified that she keeps up with the circus industry in particular by monitoring circuses, visiting them when they are in the area, and remaining in contact with colleagues in the industry. Id. at 17:2-17:10. She also frequently reviews video footage of captive elephants in conjunction with requests to assess the elephant's behavior or physical condition. Id. at 12:4-12:9. In light of these experiences the Court concludes that Ms. Buckley is familiar with how captive elephants are trained, maintained, and cared for in North America.

405. Ms. Buckley also has extensive knowledge concerning the health problems that captive elephants experience, including foot and behavioral problems. See, e.g., id. 103:1-103:16, id. 105:14-106:10; id. at 14:11-14:21. She has documented how foot problems in elephants can improve when natural substrates, space, and routine care are provided. See PWC 156. Ms. Buckley has worked

for USDA as an instructor, and she teaches school children about the biology and history of elephants. Id. at 17:11-17:20.

406. Since 1995 Ms. Buckley has co-operated the Elephant Sanctuary in Tennessee – “the nation’s only natural habitat refuge for elephants” that provides sanctuary for “sick and needy elephants from circuses and zoos.” Id. at 10:24-11:4; see also PWC 113h at 1. Ms. Buckley provides primary daily care for eight elephants at the Sanctuary, Trial Tr. 13:22-14:1, Feb. 23, 2009 a.m.; id. at 15:10-15:13, and works with a team of veterinarians administering care for all the elephants. Id. at 14:2-14:8.

407. Ms. Buckley participated in both the Court-ordered inspections in this case. Trial Tr. 21:16-21:20, Feb. 23, 2009 a.m.

408. Ms. Buckley was not compensated for her testimony at the trial, id. at 23:6-23:10, and the Court finds no reason to question her credibility or suspect any bias in her expert opinions. In light of her decades of experience working with elephants, the Court concludes that Ms. Buckley is qualified to render expert opinions regarding the training of circus elephants and the care and maintenance of captive elephants, and finds her testimony to be both credible and reliable.

D. Dr. Ros Clubb

409. Dr. Ros Clubb, has a Ph.D from Oxford University, where she did her Ph.D thesis specifically on stereotypic behavior and the relationship between an animal’s natural behaviors and the abnormal stereotypies the animal develops in captivity. Trial Tr. 6:19-7:8, Feb. 11, 2009 a.m.; PWC 113D (Dr. Clubb’s Curriculum Vitae).

410. After obtaining her Ph.D, Dr. Clubb co-authored a major study on the welfare of elephants in European zoos for the Royal Society for the Prevention of Cruelty to Animals, an animal

welfare organization, id. at 7:12-7:17, 27:23-27:24, which included analyzing the development of stereotypic behavior in captive elephants. Id. at 8:13-8:23. In preparing the study, Dr. Clubb engaged in a literature review that “included field studies and empirical data with the premise that we were going to survey all that was known about elephant welfare in captivity,” including U.S. studies on elephants in captivity. Id. at 22:10-22:14; 23:9-23:11, 29:13-29:19; 10:23-11:4. The extensive literature review and other scientific methodologies that she has relied on are common in the field of animal behavior. Id. at 7:2-7:9. Dr. Clubb also researched “how elephants live in the wild,” “talked to people who work with elephants and keepers as well as zoo curators,” and “analyzed data from zoo studbooks,” id. at 8:3-8:10, and spent “quite a lot of time” discussing how captive elephants are trained. Id. at 8:24-9:3.

411. This study has spurred additional research into the status of elephants in captivity, including a study funded by a British governmental agency and animal welfare organizations that was carried out by researchers at Bristol University. Trial Tr. 89:2-91:5, Feb. 11, 2009 a.m.

412. Dr. Clubb has continued to study and publish papers regarding captive elephants. Id. at 11:5-11:9; 23:2-23:6. She also conducted a recent literature review on elephants that was used by the UK government. Id. at 12:5-12:17.

413. Consequently, the Court finds that Dr. Clubb also has the requisite expertise to opine on elephant behavior and the causes of stereotypic behavior in the FEI elephants, and further finds her testimony to be both credible and reliable.

E. Colleen Kinzley

414. Plaintiffs’ expert witness Colleen Kinzley has been the General Curator at the Oakland Zoo since 1992. Trial Tr. 13:3-13:6, Feb. 18, 2009 p.m; see also PWC 113G (Ms. Kinzley’s

Curriculum Vitae). From 1982 to 1991 she maintained and trained elephants using traditional free contact methods. Trial Tr. 19:6-19:8, Feb. 18, 2009 p.m; id. at 13:15-15:9. Ms. Kinzley testified that she learned to work with elephants on-the-job with other elephant trainers, as well as by attending workshops, speaking with colleagues, and visiting other facilities. Id. at 19:10-19:16. She has extensive experience working with elephants. Id. at 13:13-13:14; id. at 15:12-17:9.

415. Ms. Kinzley is a member of the Association of Zoos and Aquariums (“AZA”) and the American Association of Zookeepers. Id. at 21:21-22:4. She has authored many publications on captive elephant management including behavioral issues, medical issues, training and enrichment. Id. at 22:25-23:12. She has also performed a “wide variety of minor medical procedures” on elephants over the years, including “foot soaks, blood draws, injections, eye treatments, [and] trunk washes.” Id. at 25:21-26:6. Ms. Kinzley was asked by the U.S. Department of Agriculture (“USDA”) to assist with transferring the first elephant the agency ever confiscated, id. 18:17-19:5, and has consulted with various zoos regarding “facility design,” elephant births, and developing a protected contact program. Id. at 18:7-18:16. Ms. Kinzley testified that she has also regularly inspected circus elephants in the San Francisco Bay area with local animal control officers. Id. at 23:15-24:10.

416. In addition to working with elephants at zoos, for the past five years Ms. Kinzley has been studying wild elephants in Namibia for her Master’s thesis, and on average observes fifty elephants each day when conducting her research. Id. at 20:4-20:23. She has also observed wild elephants in Kenya and Tanzania. Id. at 21:16-21:20.

417. The Court finds no reason to question Ms. Kinzley’s credibility or suspect any bias in her opinions. In light of her extensive background, training, and experience working with

elephants, the Court concludes that she is qualified to render expert opinions concerning elephant care and management and FEI's practices, and finds her testimony to be both credible and reliable.

F. Dr. Benjamin Hart

418. Dr. Benjamin L. Hart – a Professor Emeritus at the University of California at Davis – has taught animal behavior for more than forty years, and developed the first course in a U.S. veterinary school on animal behavior. See PWC 113C (Dr. Hart's Curriculum Vitae); Trial Tr. 74:16-75:3, Feb. 10, 2009 a.m.

419. Dr. Hart is one of eight “founding diplomat[s]” of the American College of Veterinary Behaviorists, “one of the twenty board-certified specialities in veterinary medicine.” Trial Tr. 77:5-77:21, Feb. 10, 2009 a.m. He is a member of the Animal Behavior Society and the Veterinary Society for Animal Behavior. Id. at 78:6-78:23.

420. Dr. Hart has published “over 175” peer-reviewed papers on animal behavior in his career, id. at 79:1-79:2, including extensive research on elephant intelligence, cognition, and behavior, Trial Tr. 73:21-74:1; 74:16-75:7, Feb. 10, 2009 a.m.; see also PWC 155. Dr. Hart has also conducted field research on Asian elephants documenting elephant's use of tools in several peer reviewed papers. Trial Tr. 79:20-80:21; 81:1-81:22; 84:25-87:24, Feb. 10, 2009 a.m.; see also PWC 153; PWC 154. His research on elephants has included extensive review of existing literature on elephants, Trial Tr. 88:3-88:13, Feb. 10, 2009 a.m.; Trial Tr. 8:17-8:25, Feb. 10, 2009 p.m. (discussing 87 different publications reviewed); id. at 9:4-9:18, as well as collaboration with other scientists. Trial Tr. 88:14-89:1, Feb. 10, 2009 a.m.; Trial Tr. 11:5-11:11, Feb. 10, 2009 p.m. Dr. Hart's research has demonstrated that elephants are highly intelligent, do have excellent “long-term memories,” Trial Tr. 8:3-8:16, Feb. 10, 2009 p.m., and recognize suffering of other animals. Trial

Tr. 90:16-92:17, Feb. 10, 2009 a.m. He continues to study the latest scientific findings “on elephant behavior and biology.” Trial Tr. 14:3-14:12, Feb. 10, 2009 p.m.

421. Dr. Hart participated in the inspection of the Blue Unit in Auburn Hills, Michigan. See Trial Tr. 36:7-36:23, Feb. 10, 2009 p.m.

422. FEI has pointed to no bias or conflict that undercuts Dr. Hart’s credibility and as a “public service” he is charging significantly less than his usual rate for expert services because of the “public interest” in elephants. Id. at 35:9-36:3.

423. Accordingly, the Court finds that Dr. Hart is qualified to render an expert opinion in this case about the behavior of elephants, as well as the impacts of FEI’s practices on such intelligent animals with high cognitive functioning.

G. Gail Laule

424. Plaintiffs’ expert witness Gail Laule has trained animals for more than 30 years, and has worked with more than 70 elephants since 1989. Trial Tr. 93:13-92:15, Feb. 17, 2009 p.m.; id. at 87:14-87:16; id. at 89:23-89:25. She has a Master’s degree in behavioral science, id. at 94:4-94:14, is a member of the American Zoo Association (“AZA”), id. at 94:18-94:21, and developed the first revision of the principles of elephant management course, which is part of the professional training of AZA. Id. at 94:25-95:4. Ms. Laule has published articles in peer reviewed journals, authored chapters for books, and provided presentations at conference proceedings regarding positive reinforcement training and animal welfare generally, and elephant training specifically. Id. at 99:1-99:9; DX 163 (discussing the use of protected contact with elephants); DX 164 (discussing the role of fear in abnormal behavior in captive animals and the role of positive reinforcement training); see also PWC 113E (Ms. Laule’s Curriculum Vitae).

425. Ms. Laule testified that she and Tim Desmond developed an alternative to the method traditionally used to work with captive elephants, called “protected contact.” Trial Tr. 88:5-88:14, Feb. 17, 2009 p.m. Ms. Laule has witnessed “free contact” training of elephants, id. at 91:2-91:4, and studied it in developing protected contact. Id. at 88:5-88:14; 89:15-89:22. Today Ms. Laule is an animal behavior consultant at her consulting firm, called Active Environments. Id. at 87:5-87:7. She has personally trained elephants to accept veterinary care and to participate in husbandry procedures, id. at 92:5-92:10, including working with elephants that were once in the circus. Id. 92:18-92:21.

426. Ms. Laule was not compensated by the plaintiffs for her testimony, id. at 102:20-102:22, and the Court finds no reason to question her credibility or suspect any bias in her expert opinions. In light of her extensive background, training, and experience working with elephants, the Court finds that Ms. Laule is qualified as an expert in animal training, and that her personal experience working with elephants qualifies her to opine on the manner in which FEI’s elephants are trained, maintained, and behave, and finds her testimony to be both credible and reliable.

VII. DEFENDANTS’ EXPERT WITNESSES ARE NOT RELIABLE

A. Dr. Dennis Schmitt

427. Dr. Dennis Schmitt – who has a longstanding relationship with FEI and is presently receiving extensive financial compensation from FEI as its newly created Chair of Veterinary Care and Director of Research and Conservation – is qualified to offer an expert opinion on the veterinary care administered to the FEI elephants, as well as their physical condition. Dr. Schmitt has no training as an animal behaviorist, Trial Tr. 46:6-46:8, March 13, 2009 a.m. (Schmitt Test.), and has not done any formal behavioral research on elephants. Id. at 77:17-77:23. Accordingly, insofar as

stereotypic behavior is concerned, Dr. Schmitt conceded to the Court that his expert testimony is limited to “medical issues” and “physical problem[s]” that relate to such behavior, i.e., the extent to which elephants engaging in that behavior are inflicting physical injury upon themselves. Id. at 50:17-50:19, 79:11-79:18, 80:8-80:10; Trial Tr. 16:1-16:5, March 16, 2009 eve. Dr. Schmitt has not studied elephants in the wild and has engaged in no research on elephants in the wild, and hence is not an expert on wild elephant behavior or ecology. Trial Tr. 80:11-80:24, March 13, 2009 a.m. Indeed, in contrast to plaintiffs’ experts Dr. Joyce Poole – whose research on wild elephant behavior is repeatedly cited with approval in Professor Sukumar’s leading textbook on elephant ecology and conservation – there are no references to any of Dr. Schmitt’s work in that textbook. Trial Tr. 35:21-36:24, March 16, 2009 p.m. (Schmitt Test.).

428. Although Dr. Schmitt is qualified to offer an opinion on the FEI elephants’ physical condition, there are several reasons for the Court to be concerned about the reliability and credibility of his opinion. First, although Dr. Schmitt has had a longstanding financial relationship with FEI, the nature and scope of that relationship changed dramatically after he agreed to serve as an expert witness. Beginning in 1998 and until 2004, when he was retained to serve as an expert witness, Dr. Schmitt – whose “primary” area of expertise involves elephant reproductive issues, Trial Tr. 68:4-68:9, 69:12-69:14. (Schmitt Test.) – worked with FEI at the CEC in determining which elephants would be appropriate for reproduction, evaluating their reproductive capacity, and assisting with the reproductive process. Id. at 68:22-69:14. In connection with that consulting work, Dr. Schmitt billed FEI for a “consultation fee” of

\$ 1500/day, in addition to all of his travel expenses; he also received a grant of \$ 37,000 from FEI for research on an elephant reproduction issue of interest to FEI (preservation of Asian elephant semen). Id. at 70:11-70:15; Trial Tr. 51:7-51:18, March 16, 2009 p.m. (Schmitt Test.).

429. After agreeing to serve as an expert witness, however, Dr. Schmitt entered into a new and far more lucrative relationship with FEI: in 2006, he was made FEI's chair of veterinary care and director of research and conservation, id. at 69:15-69:20, March 13, 2009 a.m. (Schmitt Test.), an arrangement that was accomplished through a grant by FEI to Missouri State University. Id. at 69:25-70:2. For the years 2006-2008, the new funding arrangement – which made Dr. Schmitt the first ever “chair” of veterinary care at FEI – provided for \$ 212,000 to be paid by FEI to Missouri State University, most of which would then be funneled to Dr. Schmitt. Id. at 70:23-71:10, 72:9-72:14. The grant arrangement has recently been renewed at an even higher annual rate; for 2008-2011, FEI is paying Missouri State University \$ 517,000 in connection with Dr. Schmitt's activities. Id. at 73:10-73:24. This funding scheme – which now totals \$ 729,000 – involves a “buyout” by FEI of Dr. Schmitt's time, i.e., FEI has in effect purchased from the University most of the time that Dr. Schmitt would otherwise have spent on teaching and other matters. Id. at 74:13-74:25. The underlying basis for this funding arrangement is a “simple one-page” memorandum of understanding – entered into after Dr. Schmitt agreed to serve as an expert witness – that described FEI “as a world leader in Asian elephant propagation and care.” Id. at 77:4-77:12, Trial Tr. 45:14-45:17, March 16, 2009 p.m.. Although Dr. Schmitt testified that a funding arrangement of this kind is not unusual, Trial Tr. 96:5-96:9, March 13, 2009 a.m., he could point to nothing remotely comparable; rather, the only other arrangement cited in his testimony was between his University and a non-profit

conservation organization for which he had never agreed to provide expert testimony. Trial Tr. 55:8-56:6, March 16 2009 p.m.

430. As a consequence of the current funding arrangement, FEI is paying 75% of Dr. Schmitt's University salary. Trial Tr. 75:7-75:14, 76:11-76:24, March 12, 2009 a.m. (Schmitt Test.). This means that since 2006, the "grant" provided by FEI has paid for \$ 135,000 of Dr. Schmitt's salary; this is money that Dr. Schmitt may spend on anything he chooses. Trial Tr. 48:25-49:10. Continuing through 2011, FEI's grant will be paying for even more – 5% higher than the \$ 135,000 annual salary. Id. at 49:15-49:25. In addition, Dr. Schmitt also operates a "private consulting business" known as Reproductive Services, through which he provides consulting services "during summer, semester breaks, weekends, etcetera." Trial Tr. 50:3-50:10, March 13, 2009 a.m. Through that arrangement, FEI pays now Dr. Schmitt another \$ 24,000 each year under a "retainer for Feld." Id. at 52:4-52:9. Accordingly, through these funding arrangements, FEI will be paying Dr. Schmitt a total of more than \$ 165,000 annually.

431. Despite his status as both Ringling Brothers' Chair of Veterinary Care and Director of Research and Conservation, and although Kenneth Feld testified that Dr. Schmitt "joined us full time in 2006," Trial Tr. 101:22-101:23, March 3, 2009 a.m., Dr. Schmitt testified that he is not an employee of FEI. Trial Tr. 41:10-41:13, 42:13-42:14, 71:11-71:14, March 13, 2009 a.m.; Trial Tr. 46:9-46:15, March 16, 2009 p.m. This testimony not only conflicts with Mr. Feld's testimony regarding Dr. Schmitt's status with the organization, id. at 46:9-46:15, but it also contradicts Dr. Schmitt's own sworn declaration to this Court in November 2006, in which he specifically represented to the Court that he was "employed by" FEI. Id. at 46:20-47:20 (conceding that his November 2006 declaration contained a "misstatement" of his status with FEI). In any event,

although Dr. Schmitt anticipates retiring from his position at Missouri State University “in the next few years,” Trial Tr. 44:19-44:20, March 13, 2009 a.m., he “assumes” that he will have an “ongoing relationship” with FEI – i.e., he will continue to serve as FEI’s chair of veterinary care and director of conservation – even after he leaves the University. Trial Tr. 57:10-57:19, March 16, 2009 p.m.

432. Second, in addition to his financial relationship with FEI, Dr. Schmitt has also been an unabashed advocate for the circus industry in general, and FEI in particular. In the course of this advocacy, Dr. Schmitt appears to have forfeited scientific objectivity and, in several respects, factual completeness and accuracy. In a book published in 2008 on “Elephants and Ethics,” Dr. Schmitt authorized a chapter entitled “View from the Big Top: Why Elephants Belong in North American Circuses,” which, in an effort to paint a rosy picture of circus life for elephants, displays a clear bias. For example, Dr. Schmitt asserted that, “[i]n training elephants for performances, natural behaviors are modified and these modifications are then reinforced through repetition, reward, and praise,” but the chapter omits any reference to the modification of behavior through discipline or punishment. Trial Tr. 58:3-59:9, March 16, 2009 p.m. (Schmitt Test.). The chapter also touts the “bonds of respect the elephants and their human caretakers have for one another” in the circus, and says that an “example of this involves Mark Oliver Gebel with Ringling Brothers” – the same FEI trainer who, according to Sargent Williams’ testimony, stabbed an elephant with a bull hook in California. Id at 61:3-61:24; Trial Tr. 17:03-17:15, Feb 6, 2009 p.m., and who, according to FEI’s own records, insisting on taking an extremely ill young elephant (Kenny) into the arena over the objection of FEI’s veterinarians, after which the elephant died. Trial Tr. 63:23-64:13, March 16, 2009 p.m. (Schmitt Test.). In addition, Dr. Schmitt’s chapter flatly asserts that Ringling Brothers’ animal care standards

“meet or exceed” the accreditation standards of the AZA, although, as Dr. Schmitt acknowledged at trial, that is simply not the case for “some” AZA standards. Id. at 64:20-65:13.

433. There are additional examples of Dr. Schmitt bending the truth during his circus advocacy. In Congressional testimony, Dr. Schmitt stated that “[u]sually only when transported or during bad weather are they [circus elephants] restrained,” although, as Dr. Schmitt conceded during his testimony, that statement is simply erroneous because there are other times when the FEI elephants are routinely chained (e.g., every night). Trial Tr. 65:23-67:5, March 16, 2009 p.m. In addition, in an FEI publication entitled “Frequently Asked Questions About Tuberculosis in Elephants,” Dr. Schmitt stated that none of FEI’s elephants had been euthanized as a result of Tb, but he failed to advise the public that a number of FEI elephants were euthanized with various health problems and then it was determined that they were in fact infected with Tb. Id. at 70:15-70:25; 68:12-68:16 (agreeing that “Ringling Brothers elephants have been euthanized, and it was learned upon euthanasia that they had tuberculosis”). This history of vigorous public advocacy on behalf of the circus industry and FEI in particular – even to the extent of skewing or withholding important facts – casts further doubt on Dr. Schmitt’s ability to furnish an objective expert opinion.

434. Third, Dr. Schmitt also has another inherent bias in offering an expert opinion of value to the Court, i.e., the 54 elephants at FEI are now ultimately under his care because, although he now insists that he is not an employee of FEI, he does “[s]upervise the veterinary staff and animal care staff” at FEI. Trial Tr. 57:4-57:8, 58:6-58:8, March 13, 2009 a.m. (Schmitt Test.). Consequently, because plaintiffs’ claims bear to some extent on the role that FEI’s veterinary staff is playing in perpetuating the purportedly harmful conditions that are at issue, it is difficult for Dr. Schmitt to offer an independent opinion on whether the health of the elephants has in fact been compromised by these

conditions. In this connection, it is noteworthy that FEI has not relied on any expert testimony from a veterinarian who can assert independence from FEI's operations and is therefore in more of a position to evaluate them independently. In sharp contrast, plaintiffs' expert veterinarian, Dr. Ensley has no relationship with any of the plaintiffs at the time he agreed to serve as an expert witness and, other than the very modest hourly fee he is receiving for the time spent on his report and testimony, Trial Tr. 32:03-32:07, Feb. 24, 2009 a.m., he has no financial arrangement with any of the plaintiffs. Accordingly, the Court finds that Dr. Ensley's opinion, in addition to being reliable and credible in its own right, is far more trustworthy than the opinion of FEI's own veterinarian, who plainly has a vested interest in promoting FEI's interests.

435. In addition to these factors undermining the trustworthiness of Dr. Schmitt's opinion, it is also significant that he has done a less thorough review of the documents bearing on the elephants' medical status and whether that status relates to the practices at issue here. Thus, although Dr. Ensley included in his report an extremely detailed assessment of the medical history of the elephants with whom Mr. Rider worked, as well as the entire FEI elephant population, and despite the fact that FEI obtained a lengthy extension from the Court for the express purpose of responding to Dr. Ensley's lengthy report, see DE 281 at 2, Dr. Schmitt continued to rely on his initial report and never prepared a report that specifically responds to Dr. Ensley's extensive review of the medical records. Trial Tr. 84:20-85:5, March 13, 2009 a.m. (Schmitt Test.). Consequently, although Dr. Schmitt offered his opinion at trial on the current health status of the elephants, he was in no position to opine upon, and in fact did not opine upon, the significance of the repeated pattern of medical conditions that Dr. Ensley gleaned from FEI's medical records. This is an additional basis on which the Court finds Dr. Ensley's opinion more reliable and credible than that offered by Dr. Schmitt.

B. Michael Keele

436. Michael Keele, who is the deputy director of living collections at the Oregon Zoo but did not testify as a representative of that zoo or any other entity, is qualified to offer an expert opinion on the proper management and husbandry practices pertaining to Asian elephants in zoos; he conceded, however, that he is unfamiliar with FEI's operations, and neither his expert report nor his live testimony offer any specific opinions on how FEI in particular use the bull hook or on FEI's specific practices with regard to the chaining of elephants on hard surfaces. Trial Tr. 26:18-27:8, 30:14-30:19, 61:3-61:11, March 12, 2009 p.m. (Keele Test.). Mr. Keele is not a veterinarian and did not, in any event, conduct a detailed review of the medical records pertaining to the elephants in FEI's possession. Id. at 26:9-26:20. Mr. Keele, who did not graduate from college and whose claim to expertise is based entirely on his practical experience and discussions with others, also acknowledged that he is not qualified to offer an opinion on the psychological effects of any of the practices at issue on elephants, and would defer to animal behaviorists on that topic. Id. at 25:2-25:10, 26:9-26:20, 26:21-27:4. Mr. Keele has not studied elephants in any wild setting and has never observed an elephant in a wild setting. Id. at 27:5-28:8. Accordingly, although the Court finds that Mr. Keele is qualified to offer an expert opinion that has a bearing on the issues in this case, that opinion is narrowly limited to the past and present practices of zoos regarding use of the bull hook and chaining, and how and why those practices have evolved over time.

437. Mr. Keele, as chairman of the AZA's TAG/SSP for Asian elephants, has an interest in promoting and furthering his organization's relationship with FEI. As Mr. Keele acknowledged in his testimony, and as he has written in published articles, the long-term prognosis for maintaining the population of elephants in AZA-accredited institutions is poor unless these institutions make

changes in their “breeding strategies.” Trial Tr. 77:3-77:18, March 12, 2009 (p.m.). Mr. Keele also agreed that one of the few such “strategies” that is potentially available to the AZA is to enter into “more arrangements with institutions that are not AZA” members and do not satisfy AZA standards for elephant welfare and well-being. Id. at 77:19-77:25. Accordingly, “[f]rom the standpoint of reproduction” – i.e., enhancing the long-term prognosis for maintaining elephants in zoos – Mr. Keele acknowledged that he is “interested in looking for a way of moving more FEI elephants into the AZA institutions.” Trial Tr. 8:12-8:15, March 12, 2009 eve. However, as Mr. Keele has written in a recent article in a peer-reviewed publication, *Zoo Biology*, “it is unlikely that non-AZA accredited facilities” – such as FEI – would be willing to contribute animals to the SSP population without gaining something in return, whether it is financial consideration or increased cooperation with and credibility from the professional zoo community,” i.e., by having more of a relationship with the AZA. Id. at 80:7-80:21 (emphasis added). Towards that end, FEI initiated a “conversation” with Mr. Keele which took the form of a dinner with a high-ranking FEI official in November 2007; the specific purpose of that meeting was to determine how FEI could “benefit” from helping AZA’s breeding efforts. Trial Tr. 10:2-10:20; 11:9-11:24, March 12, 2009 eve. (Keele Test.); id. at 11:15-11:19 (“the point of the meeting was that they have been involved in providing elephants to some zoos that needed them, and they were interested in long term to expand that. So they felt that if they were helping AZA that they should benefit somehow . . .”) (emphasis added). It was at precisely the same time – i.e., November 2007 – that Mr. Keele agreed to serve as an expert witness for FEI. Id. at 11:25-12:2. Hence, it is a reasonable inference from this conceded chain of events that Mr. Keele’s agreeing to serve as an expert witness for FEI was part of the “benefit” and the “credibility” that FEI sought (and obtained) in exchange for FEI’s continuing to assist with AZA breeding efforts. In any

event, although these circumstances do not mean that all of Mr. Keele's testimony should be disregarded, they do have a bearing on the weight it should be afforded.

C. Dr. Ted Friend

438. There are several factors undercutting the probative value of Dr. Friend's expert testimony. First, although Dr. Friend – most of whose research and publications have involved domestic livestock and who has never studied elephants in the wild, Trial Tr. 93:1-93:6, 106:6-107:7, March 9, 2009 a.m. (Friend Test.) – initially advised the Court that he was going to charge FEI his “normal \$ 400 rate for in-court testimony,” id. at 90:3-91:1, he subsequently acknowledged that he is actually charging \$ 500 per hour for his trial or deposition testimony, – more than his customary rate. Id. at 92:9-92:16. Because no explanation was proffered by FEI as to why its expert must be compensated at even more than his standard lucrative rate, this tends to cast some doubt on his entire testimony. Dr. Friend also acknowledged that he was getting paid \$ 400 for each hour for all of his time in Washington, D.C., but not actually testifying. Trial Tr. 90:11-90:20, March 9, 2009 a.m.

439. Second, as noted previously, Dr. Friend concedes destroying or taping over the videotapes that were relied on for his transport study. In particular, Dr. Friend admits that in August 2000 he entered into an agreement with FEI providing that FEI would retain ownership of the videotapes and that after analyzing the images on them, Dr. Friend would destroy or provide them to FEI. Id. at 104:25-105:14. However, although videotapes depicting the elephants on FEI's trains clearly constitute evidence that is highly relevant to this case, and FEI owned them pursuant to its agreement with Dr. Friend, they were destroyed after the lawsuit was filed. Id. at 105:18-105:24. This destruction of material evidence not only undercuts Dr. Friend's opinion on the transport study itself, but raises serious questions as to whether the Court should rely on his testimony at all.

440. Third, Dr. Friend has severely undercut the value of his own testimony by offering facially contradictory opinions on the stereotypic behavior exhibited by FEI's elephants. At trial, he testified that if elephants stop engaging in stereotypic behavior then this is a sign that they are under stress, whereas his earlier studies reached precisely the opposite conclusion – i.e., that chained elephants were engaging in stereotypic behavior because they were under stress, and that the cessation of stereotypic behavior is indicative of improved welfare. Compare Trial Tr. 124:23-125:7, March 9, 2009 a.m. with PWC 157, 158. Even at trial, Dr. Friend agreed that there are “benefit[s]” to allowing the elephants to be unchained – including “reduc[ing] stereotypic behavior,” as well as allowing the elephants to “interact,” “socialize,” engage in more locomotion, and have “more alternatives in their behavior,” Trial Tr. 5:1-5:6, 39:7-39:25, March 9, 2009 p.m. and that his earlier research had highlighted positive aspects of reducing chaining and that its “always nice if they don’t do it,” id. at 35:2-35:36:12, 39 – and yet he simultaneously insisted that prolonged chaining and stereotypic behavior (except in the trance-like state he has never observed) are not harmful. Id. at 36:13-38:13 (attempting to explain how a reduction in stereotypic behavior could be both a good and bad sign); id. at 83:11-84:15. Even further, he even offered the facially absurd opinion that, because elephants’ natural “lifestyle is traveling from one place to another” for foraging purposes, their being chained on the trains somehow replicates that “nomadic” existence in the wild. Id. at 125:24-126:12, March 9, 2009 a.m.; Trial Tr. 11:20-11:23, March 9, 2009 p.m. (Friend Test.) (“[W]hen you’re looking at something like a nomadic animal or an animal that tends to travel, in many ways a circus environment could fit into their lifestyle really well.”).

441. Fourth, Dr. Friend’s apparent willingness to contradict his own earlier work on harmfulness of, and the importance of reducing, stereotypic behavior may be attributable not only to

the particularly high hourly rate he is charging for his testimony, but also to the fact that, as characterized by one official at USDA, Dr. Friend has become “closely associated [with] and supported by the circus industry.” PWC 57 (USDA e-mail). Indeed, although he initially denied it in his testimony, a contemporaneous e-mail message shows that Dr. Friend first approached FEI for funding of the transport study. Trial Tr. 22:10-24:8, March 9, 2009 p.m. (Friend Test.). In addition, his transportation research was strongly supported by a circus trade organization affiliated with FEI (the “Outdoor Amusement Business Association”), id. at Tr. 24:9-26:11; FEI paid for his expenses to fly to Washington, D.C. in order to brief both FEI and USDA on the results of the transport study before he had even prepared his report to the USDA, id. at 28:19-29:6; FEI also agreed to fund a different research project of his on elephants after he agreed to serve as an expert witness, id. at 29:7-29:25; and another circus (Carson & Barnes) paid for some of his “direct costs” in connection with other research he was doing. Id. at 31:12-23. Accordingly, the facts bear out the USDA official’s characterization of Dr. Friend as being “closely associated [with] and supported by the circus industry,” and thus has ability and willingness to offer an unbiased expert opinion in this case.

442. In this connection, it is also noteworthy that Dr. Friend also testified that he “prefers not” to use the standard scientific approach of “hypothesis testing” in his studies because it introduces an “innate bias because we’re setting out to try to see if something is true or if something is false.” Trial Tr. 80:14-81:11, March 9, 2009 a.m. However, hypothesis testing – pursuant to which a scientist formulates a hypothesis to explain certain phenomena and then must reject the hypothesis if it does not continue to explain the available data – is designed to reduce, not inject, bias into scientific research and, indeed, Dr. Friend’s own research highlights how it may be useful in accomplishing that result. In one of Dr. Friend’s studies, he conjectured that some of the stereotypic

behavior exhibited by chained circus elephants might have been due to their “anticipation” before certain events, including performances. DX 220 at 85, 86. However, in his transport study, he asserted that the “causation of weaving during transportation is difficult to explain” because the “factors such as anticipation of feed, water, and performance are not present during transportation.” PWC 156 at 10. Had Dr. Friend applied the standard scientific method, he would have been forced to reject his earlier “hypothesis” as a causal explanation for the high levels of stereotypic behavior seen, and instead reaffirmed the consensus view that such behavior is a manifestation of stress induced by adverse conditions. Instead, the article published in JEMA reaches what appears to be the preordained conclusion – supported by no data whatsoever – that “elephants consider their transport vehicle to be a safe, secure place; that is “home.” Id.

D. Kari and Gary Johnson

443. With regard to defendants’ experts Kari and Gary Johnson, although the Court finds them qualified to render expert opinions concerning the care and handling of captive elephants based on their years of experience, several factors call into serious question the probative value of their testimony concerning FEI’s elephants. The Court will discuss their expert opinions together because they submitted a joint expert report, Trial Tr. 18:23-19:5, Mar. 4, 2009 p.m.; id. 127:18-128:3; Trial Tr. 15:10-15:14, Mar. 5, 2009 a.m., and they hold the same opinions on the matters they were asked to address. Id. 15:18-16:7.

444. Neither Mr. or Mrs. Johnson has worked for FEI or know how FEI trains its elephants. Trial Tr. 22:19-22:24, Mar. 4, 2009 p.m.; Trial Tr. 17:4-17:5, Mar. 5, 2009 a.m.; id. 44:8-44:10. Although Mr. and Mrs. Johnson performed their own personal inspections of the FEI

elephants upon which this case is focused, they have serious biases that undermine the utility of those inspections.

445. Mr. and Mrs. Johnson have long-standing relationships with many FEI employees, see Trial Tr. 93:14-93:19, Mar. 4, 2009 p.m.; Trial Tr. 52:5-52:16, Mar. 5, 2009 a.m.; Trial Tr. 92:24-93:13, Mar. 4, 2009 p.m.; id. 99:14-99:20, including Gary Jacobson, who manages the CEC and who the Johnsons have known for more than thirty years. Id. 99:21-99:24; Trial Tr. 51:20-51:22, Mar. 5, 2009 a.m. They have signed on to comment letters drafted by Feld Entertainment. Trial Tr. 93:24-94:15, Mar. 4, 2009 p.m.; see also PWC 81 at 2. They were also listed as “experts” by the Elephant Managers Association (“EMA”) when the EMA submitted information to the USDA regarding the agency’s investigation of Ringling Brothers’ separation of baby elephants from their mothers. Trial Tr. 95:1-98:4, Mar. 4, 2009 p.m. Mrs. Johnson has even sent FEI information about Tom Rider. See id. 98:15-99:13.

446. The Johnson’s testified that they inspected the elephants at the CEC, but that inspection only lasted an hour and did not include observing the elephants chained for the night in the barn. Id. 20:5-20:11; Trial Tr. 17:18-17:21, Mar. 5, 2009 a.m. They also did not observe the elephants on the Blue Unit chained on the train or chained for the night, Trial Tr. 20:2-20:4, 20:15-20:17, Mar. 4, 2009 p.m.; Trial Tr. 17:18-17:23, Mar. 5, 2009 a.m., and only spent an “hour-and-a-half to two hours” at the Blue Unit. Id. 17:24-18:2. This level of experience only permits Mrs. and Mr. Johnson to offer a general sense of FEI’s practices, and does not qualify them to offer any expert opinion concerning how FEI trains elephants, transports them, chains them, or otherwise manages them.

447. Mr. and Mrs. Johnson also have a financial and personal stake in ensuring that bull hooks and chains can continue to be used on elephants. Their income is based entirely around exhibiting elephants to the public using traditional free contact training, through their business, Have Trunks Will Travel. See Trial Tr. 6:12-6:17, Mar. 4, 2009 p.m.; id. 7:5-7:6; id. 18:10-18:13; Trial Tr. 44:11-44:13, Mar. 5, 2009 a.m. Like the elephants at defendant's CEC, the elephants at Have Trunk Will Travel are chained for 12 to 13 and a half hours each night. Id. 81:3-81:15. The Johnson's also transport their elephants as part of their business. Trial Tr. 7:23-7:25, Mar. 4, 2009 p.m. Their gross income from their business is \$600,000 a year. Id. 84:20-84:22.

448. In light of their business Mr. and Mrs. Johnson also have a bias in favor of allowing continued use of the bull hook, and thus the Court finds it both unsurprising and unilluminating that Mrs. Johnson believes that the use of bull hooks and chains "gives [elephants] the best care" in captivity. Id. 102:15-102:17. Indeed, consistent with the threat that regulation of the bull hook poses to their business and finances, Mrs. Johnson admitted that she has lobbied in opposition to elephant legislation around the country, id. 21:15-21:25, to ensure that she is "able to use the guides and tethers, and be able to manage the elephants in free contact . . ." Id. 79:12-79:20. She has even worked with "[s]everal of the people at Feld" on these legislative issues. Id. 79:21-80:2.

449. Mrs. and Mr. Johnson are also members of the Elephant Managers Association of which defendant's employees are also members. Id. 90:21-91:1; id. 132:10-132:112. Mr. Johnson also is a "founding board member" of the International Elephant Foundation ("IEF"), id. 132:9-132:10, where Ringling Brothers' employees Tom Albert and Dennis Schmitt also serve on that board. Id. 92:24-93:17. Several of Have Trunk Will Travel's former employees also now work for

Ringling Brothers, including Troy Metzler, Pat Harned, and Jim Williams. Id. 99:25-100:8; id. 56:9-56:11; id. 54:3-54:5; id. 53:15-53:18.

450. Taken together, the Mr. and Mrs. Johnson's close association with FEI and their concrete financial interest in limiting any restrictions on the use of the bull hook, chains, or other free contact practices on elephants calls the objectivity of their testimony into serious question, and the Court gives limited weight to their testimony.

E. Gary Jacobson

451. Gary Jacobson was offered as both a fact and expert witness. Plaintiffs do not dispute that based on his work history he is qualified to testify about the way in which the elephants at FEI are handled and maintained, and the way in which the baby elephants are trained for the circus.

452. However, plaintiffs submit that there are several reasons why Mr. Jacobson's testimony in support of defendant's position in this case is not reliable. First, Mr. Jacobson is employed by FEI and has worked for either Ringling Bros. or FEI on and off since about 1974, and he currently runs the CEC. See Trial Tr. 30:13 - 31:08, March 5, 2009 p.m.; id., 33:18 - 33:19; 34:05 - 34:18; see also PWC 183 (Chart of FEI employees). Mr. Jacobson's wife is also employed by FEI at the CEC, and has been for many years. See PWC 183. Therefore, Mr. Jacobson has a significant financial and personal stake in the outcome of this case.

453. Second, the record shows that Mr. Jacobson does not always tell the complete truth when it comes to discussing with governmental authorities the practices employed by FEI. For example, during his testimony at trial, it was revealed that during the USDA's investigation of the death of the baby elephant Riccardo, the USDA wanted to know whether Riccardo was in the process of being trained when he fell off a tub, and although Mr. Jacobson knew that Riccardo was in fact

being trained, he failed to disclose that extremely salient fact to the USDA in two different “statements” that he provided the agency. See Trial Tr. 23:10 - 33:24, March 9, 2009 a.m. (Testimony of Mr. Jacobson regarding Riccardo’s death); see also Trial Tr. 43:15-44:5, March 18, 2009 p.m. (Testimony of Dr. Schmitt showing that the USDA was “interested in what the training was at that time”).

454. The record shows that although Mr. Jacobson admits that when 8-month old Riccardo fell off the tub and broke his hind legs Mr. Jacobson and his wife were in the process of “training him to get on a tub,” id. at 23:18 - 23:25, and that this training involved the use of a bull hook and a rope tied around Riccardo’s trunk, id. at 24:07 - 24:18, 24:16 - 24:18. However, when Mr. Jacobson submitted his first – unsworn – statement to the USDA as part of its investigation, Mr. Jacobson did not disclose any of this information, and instead implied that Riccardo was only “playing” on the tub when he fell. See PWC 185 (“One of the enrichment and exercise toys with which Riccardo liked to play is a 19-inch high pedestal. All of the young elephants play on such pedestals and Riccardo had been playing on it for months”) (emphasis added). In a second – also unsworn – “supplemental” statement submitted to the USDA, Mr. Jacobson again failed to disclose that he and his wife were training Riccardo to get up on the tub when he fell, see PWC 186, and he also denied that he and his wife were using any “restraints” on Riccardo that day, id., stating only that his wife “held a soft rope in her hand and the other end of the rope was placed around Riccardo’s trunk to guide him . . .” Id. (emphasis added). However, at trial, Mr. Jacobson admitted that the rope was “tied around [Riccardo’s] trunk.” Trial Tr. 24:10 - 24:18 (“Q: And the training [] on that day when you were training Riccardo to get up on that tub also involved tying a rope around his trunk, didn’t it?” A. “I had a trunk rope on him.” Q. “So it involved a rope tied around his trunk, did it not.?” A. “Yes.”

Q. “And in fact, tying a rope around a baby elephant’s trunk is part of the training that you use for all of the elephants, right?” A. “Yes.”). The record also shows that when the USDA issued its final Investigation Report on the death of Riccardo it relied on Mr. Jacobson’s statements to conclude that “[t]he baby elephant was euthanized after sustaining non-repairable fractures to his back legs after reportedly falling off a training platform while playing.” See USDA Report, PWC 1B- Riccardo at 4 (emphasis added); see also id. at 5 (citing both of Mr. Jacobson’s statements as Exhibits).

455. Mr. Jacobson’s credibility was also undermined when it was revealed during cross-examination that, with the assistance of his counsel on direct examination he had made it seem as though video footage that he reviewed with the Court depicted typical “training” sessions with baby elephants, when, in fact, Mr. Jacobson admitted that these sessions did not depict the way he trains the baby elephants to learn commands, and he also testified that, in fact, he would not let anyone film the way he trains the baby elephants because “in the modern world it’s just more difficult to explain.” See PFF 388.

456. For all of these reasons, the Court finds that Mr. Jacobson’s testimony in support of FEI is not entitled to much weight.

Respectfully submitted,

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ENDNOTES

1. The first notice letter, dated December 21, 1998, was sent on behalf of the original plaintiff the Performing Animal Welfare Society (“PAWS”) and its officers, and put FEI on notice that it was violating the take prohibition of the ESA because “its elephant trainers and handlers routinely beat elephants, including baby elephants, in order to make them perform or behave in a particular way, and Ringling Brothers also keeps the elephants chained for extremely long periods of time.” See PWC 91 at 1; see also id. at 2 (“Ringling Brothers’ handlers and trainers beat elephants severely with an instrument called a ‘bull hook;’ “particular elephants are beaten more frequently, including an Asian elephant named ‘Nicole,’ and a baby elephant named ‘Benjamin;”” id. at 3 (the fact that supervisors witnessed and ignored this mistreatment demonstrates that “such treatment of elephants in Ringling Brothers’ circus is by no means aberrational, but, rather, is business as usual;” “elephants are left chained hour after hour, each day, . . . and when the circus is traveling, the elephants remain chained in the stock cars for as long as 2-3 days consecutively, and not provided any opportunity, whatsoever, to walk around or otherwise exercise;” [t]hese conditions, which are completely at odds with the natural biological needs of these magnificent animals, also constitute the unlawful ‘taking’ of endangered elephants”). Id. The second letter, sent on November 15, 1999, supplemented the initial notice letter by putting FEI on notice of “take” violations because of evidence that it forcefully separated nursing baby elephants from their mothers. See PWC 91 at 4-5.

The third notice letter was sent on April 12, 2001 on behalf of the ASPCA, Animal Welfare Institute (“AWI”), Fund for Animals (“FFA”), and Tom Rider. See PWC 91 at 10-12. It expressly incorporated by reference the earlier notice letters, and provided additional notice that FEI was violating Section 9 of the ESA because elephants were being “struck with bullhooks or clubs and other instruments, and, in one case, being clipped with a sharp instrument we believe is called a ‘leatherman.’” Id. That letter also complained about elephants engaged in “stereotypic behavior” from being chained, id., and handlers hitting elephants “under their chins,” and it referenced and enclosed videotape of these practices. Id. The fourth letter, dated July 22, 2005, was sent by the Animal Protection Institute. PWC 91 at 13-23. It expressly incorporated all of the previous notice letters by reference, id. at 14, and complained that FEI is violating Section 9 of the ESA because of the way elephant trainers and handlers “routinely chain and confine” the elephants, use the bull hook “to train, discipline, control, and dominate the elephants.” Id. at 13.

2. See also id., Trial Tr. at 69:11 - 69:19 (explaining that he had an “attachment” to the elephants; that he “had worked with these girls for 2 ½ years”); id., Trial Tr. 22:08 (“I always talked to them”); id. Trial Tr. at 70:01 - 04 (he stayed at Ringling Bros. because he “cared and [] loved those girls”); Trial Tr. 46:23 - 47:01, Feb. 17, 2009 p.m. (cont.) (“I loved my elephants and I knew that if I was there, at least they were hearing . . . me every day, they were seeing me every afternoon and I could give them my love and affection”); DX 16 at 32 (Rider Response to Interrogatory No. 16) (naming the elephants he worked with, and stating that “I got to know the elephants very well, and grew to love them,” he had “emotional feelings” for the elephants, he “looked forward to seeing them every day,” he was “very close to them, they got in my blood,” and every day he was with them “I showed them that I loved them,

and I believe they trusted me.”).

3. See also id. 51:15 - 52:02 (describing the beating of Zina and Rebecca by Jeff Pettigrew and Andy Weller that he witnessed in Richmond, Virginia because the elephants “wouldn’t lay down” – they “took the point and kept hooking her on the top of the back, trying to pull her down . . . [t]hey kept doing it over and over and over again. And when it was done I had to go get the Wonder Dust and literally cover up the cuts on her. There was 20-plus, 30-plus on one – 20-plus hook marks [with] little gouges in them”); id., 54:07 - 54:20 (describing the hook marks “behind he ears, on top of the head, behind the trunk, under the chin . . . cuts behind the legs. A lot of them on the back when they are laying them down”); id., 54:22 - 55:13 (describing a beating of Karen by Pat Harned when she rattled her chain when Benjamin was being hooked severely by Harned; “he yelled at Karen, and then he came over there and he started in on Karen for at least 21 minutes, 23 minutes. He had her, jabbing her under the leg, making her raise her foot up and hold it there, hitting her behind the leg, come up and jabbing her in the side . . . [h]ooking on the head and behind the ears. It went on and on”); id., 58:08 - 58:15 (incidents involving the use of the bull hook “were so frequent that it would – almost every town we were in was using the bull hook on the elephants”); id., 59:23 - 60:08 (describing a beating of the elephants in Canada by Adam Hill, Randy Peterson and Pat Harned – “they grabbed their bull hooks and they started just laying into the elephants, hooking them, hitting them”); id., 61:13 - 63:12 (describing the hooking of the baby elephants by Pat Harned and Gary Jacobson); id., 65:02 - 65:08 (elephants would be hit with bull hooks for “[a]ny behavior [the handlers] didn’t like”); see also Mr. Rider’s Testimony, Trial Tr. 21:12 - 21:20, Feb. 17, 2009 p.m. (he saw a bull hook used in a way that broke the skin of an elephant so many times that he couldn’t count them; and he saw the bull hook used in a way that made an elephant bleed “hundreds” of times); id., 22:04 - 23:19 (“all of the elephants at one time or another had blood hook marks and stuff like that and hook wel[t]s,” including Nicole, Karen, Mysore, Jewell, Susan, Lutzi, and Zina); id., 26:12 - 26:22 (he saw wounds behind the ears of elephants “two or three times a week”).

4. See also id. 34:02 - 34:05 (the elephants were chained up when he left each day and still on chains when he got to work in the morning); 36:25 (when they were chained up, they really can’t turn around); 42:01 - 42:11 (describing the elephants chained on the train “on both the same side legs;” “[t]hey would be chained on the inside legs by the wall of the train;” “Front and back. Always chained, never let loose to roam around in the train. And that’s where they stayed until we got from – when we put them on the train at night until we got there”); 42:12 - 43:23 (the elephants were rarely taken off the train, sometimes the train rides lasted many days; during the 2 ½ years he worked there the elephants were only taken off the train in the middle of a run two times); 43:24 - 45:03 (the train had a metal floor and elephants stood in urine and feces); see also Trial Tr. 23:04 - 24:10, Feb. 17, 2009 p.m. (cont.) (these chaining practices were used with Karen, Mysore, Jewell, Susan, Lutzi, and Zina).

5. See also id. 24:12 - 26:04 (Pat Harned would always pick on Benjamin, Benjamin was hit “four to five times a week, at least;” hit often with the bull hook and Gary Jacobson would “us[e] the hook on the babies repeatedly”); 42:05 - 43:01 (the abuse happened in “every town;” “all your ‘handlers’ were the ones, they were constantly hooking . . . On a daily basis when they

were walking them . . . every town”); 49:14 - 49:17 (Randy [Peterson] use to “get into and hook” Nicole); 59:09 - 59:13 (“it just deteriorated down to a point where it became Randy and his handlers becoming very hook happy and constantly beating on the elephants, especially Nicole”); 60:17 - 61:10 (Mr. Rider saw Randy Peterson “severely beat” elephants); 90:11 - 92:01 (the elephants had to stand in their own waste on the train); 93:21- 94:09 (on the train the elephants “are chained up and they can’t move . . . [i]t is very cramped conditions”); 95:01 - 95:21 (in the wintertime the elephants were on chains most of the time); 104:02 - 106:01 (Pat [Harned] beat Karen; “Sonny smacked her to keep her under control;” “Adam would lay into Sophie and Karen”).

6. See also id. at 5 (describing the beating of Nicole; and that in April 1999, Randy and Adam made Mr. Rider close the tent “so they could beat Sophie and Nicole for playing with each other”); id. (the beating of the elephants in Canada by Adam Hill, Randy Peterson, and Pat Harned); id. (Pat Harned “was always beating on Benjamin, because he was a young bull elephant and was full of play”); id. at 6 (providing a list of the handlers who “abused animals daily,” including “Adam Hill, Pat Harned, Randy Peterson, Scott Green, Jeff Pettigrew, Robert Ridley, Jeff (known as ‘Cowboy’), James . . . Dave McFarland, Steve Hart, Josh, Dave Whailey, Dave Wiley, Daniel Raffo, and Gary Jacobson (baby trainer),” and stating that “[t]hese people use excessive hooking and hitting with the bull hooks and hooking . . .;” id. at 7 (“I saw baby Benjamin systematically abused . . . by Pat Harned”).

7. See also id. at 3 (“[b]oth men also testified that the Ringling Brothers’ elephant handlers and trainers use the sharp end of the bull hook to make the elephants do as they wish, by hooking it onto their ears, their ankles, and other parts of their hides and then pulling on the bull hook . . . These men also testified that these beatings and stabbings with the bull hooks cause the elephants much distress and pain, as evidenced by the animals’ cries and other distressful verbal reactions, and that the elephant handlers often draw blood from the animals when they use the bull hooks”); id. (“Mr. Ewell and Mr. Stechon testified that particular elephants are beaten more frequently, including . . . “Nicole,” and a baby elephant named “Benjamin.” The men testified that they have seen Randy and Adam beat Nicole on several occasions, and that Randy beat her so hard once that he shattered a bull hook on her. Mr. Stechon testified that he saw three of the handlers and trainers, Randy, Adam, and Pat, beating Nicole at one time); id. (“The men also testified that they also witnessed Pat beat the baby elephant Benjamin many times”); id. at 4 (both men “also testified that elephants are left chained hour after hour, each day, and that, with few exceptions, they are allowed off their chains only when they perform. In addition when the circus is traveling, the elephants remain chained in the stock cars for as long as 2-3 days consecutively, and are not provided any opportunity, whatsoever, to walk around, or otherwise exercise”).

This letter was sent to the USDA before Benjamin died, and requested that, in view of the eye-witness accounts of the beatings of Benjamin by Pat Harned, the USDA take action to “ensure” that he (and Nicole) “are protected from further abuse and mistreatment.” See id. at 5. However, as with all of the other complaints sent to the USDA, the agency did nothing, see DX , and 7 months later, Benjamin was dead. See PWC 24, USDA Investigation Report, at 3 (PL 03143) (concluding that Benjamin, “seeing and/or being ‘touched’ or ‘poked’ by Mr. Harned with

an ankus created behavioral stress and trauma which precipitated in the physical harm and ultimate death of the animal”).

8. See also id. at 52:08 - 52:20 (“[t]here was an understanding that this overall campaign to do something about the mistreatment of elephants in circuses necessitated some kind of media campaign, in part, to respond to the media that was being done and we anticipated would be done by Feld Entertainment, and that since Mr. Rider . . . had proven himself to be a very good spokesperson on behalf of the elephants, that it would be good to find a way to continue to have him engage in that activity”); see also Trial Tr. 30:25 - 31:05, Mar. 11, 2009 a.m. (Testimony of Cathy Liss, President of AWI) (FEI spends “a great deal of money” to “highlight the supposed good care of the animals; and that bull hooks are not used; and that the animals aren’t chained; and that they love their babies despite the babies that have died at their very hands”).

9. See also id. 55:21 - 56:25 (explaining basis for expression “memory like an elephant”); see also Trial Tr. 41:22-42:16, Feb. 10, 2009 p.m. (Testimony of Dr. Hart.) (explaining that elephants “remember yearning for their mother decades later.”); id. at 8:6-8:16 (explaining that the elephant brain is in fact “hard wir[ed]” for long-term memory and social interaction); see also id. at 79:20-80:21, 84:25-85:25 (Dr. Hart conducted a study demonstrating that Asian elephants both use and modify tools, and hence are among the few mammals to have evolved that ability); id. at 92:10 - 92:14 (elephants “recogniz[e] the suffering of other animals”); id. at 31:23 - 32:25 (elephants are “aware, can sense what is going on with other elephants, can sense what is going on in its own brain therefore”); see also Trial Tr. 47:22-47:24, Mar. 5, 2009 a.m. (Testimony of FEI’s expert witness Gary Johnson) (observing that his elephants were upset by the death of another elephant) id. at 32:24-32:25 (elephants “have very good memories”).

10. See also Trial Tr. 43:4-43:7, Mar. 4, 2009 p.m. (Trial Testimony of FEI expert Kari Johnson) (a bull hook “has a handle and then on the end, there’s a straight part that we call the heel and then a curved part that would be the hook, and it is used to guide the elephant”); Trial Tr. 37:1-37:2, Feb. 18, 2009 p.m. (Trial Testimony of plaintiffs’ expert Colleen Kinzley) (“The bull hook or ankus is usually a staff with a hook and -- metal hook and point on the end of it); see also PWC 161A, 161B (Deposition of Frank Hagan) (Nov.. 9, 2004) at 13:15 - 13:20 (describing a bull hook); id. 65:22 - 70:06 (Mr. Hagan uses a bull hook to demonstrate his testimony); Trial Tr. 46:17 - 47:06, Feb. 12, 2009 a.m. (Testimony of Tom Rider); id., 47:13 - 48:03 (verifying that the bull hook used by plaintiffs as a demonstrative is “very typical”); PWC 190D, Addendum at 1 (F03273) (the bull hook is a long stick made of either wood or fiberglass).

11. See also id. at 27:18 - 27:19 (explaining that you give a voice command once or twice “then back it up with a guide”); PWC 175, 104:05 - 105:05 (Jacobson Deposition 11/20/07) (he uses the bull hook to “correct” an elephant by grabbing the elephant by its skin and pulling it towards him); Trial Tr. 43:13 - 44:07, March 9, 2009 a.m. (Testimony of Gary Jacobson) (affirming that part of the “correction” process for young elephants is to hit them with the bull hook to comply with your wishes); Trial Tr. 53:20 - 55:02, March 12, 2009 (Testimony of Brian French) (admitting to the Court that the “appropriate” use of the bull hook at FEI is “whatever amount of force is utilized to get the elephant to perform a behavior”); PWC 182, 128:05 - 10

(Deposition of Alex Vargas) (May 31, 2007) (he uses the hooked end of the bull hook behind an elephant's ear "if we were walking and it stops"); id. at 128:17 - 130:03 (he does this "[w]henver it is necessary;" this is a common use of the bull hook); PWC 180 at 99:16 - 99:20 (Deposition of Robert Ridley) (Aug. 25, 2006) (admitting that it is common for the handlers on the Blue Unit apply pressure or force when using the hooked end of the bull hook on the elephants).

12. See also Trial Tr. 31:17 - 33:17, March 12, 2009 evening (Troy Metzler admits that Lutzi was bleeding on her trunk as a result of being hit or "cued" with the bull hook); id. at 50:12 - 50:14 (he admits that the blood was "caused" by a bull hook); id., at 43:20 - 44:03 (Troy Metzler explains that he is seen hitting a young elephant on her trunk in video (PWC 132) to "correct" her because "you can use verbal commands for so long before you cue them. Or correct them."); PWC 11 (E-mail from William Lindsay to Julie Strauss (July 25, 2004)), FEI 166646 - 48 (Ringling Bros. veterinary technician states that "[a]fter this morning's baths, at least 4 of the elephants came in with multiple abrasions and lacerations from the hooks"); PWC 12 (follow-up e-mail from veterinarian technician listing the injuries observed on the elephants); PWC 10 (E-mail from Deborah Fahrenbruck to Mike Stuart (Jan. 8, 2005), FEI 15024 (stating that Troy Metzler, the FEI's "Superintendent of Elephants" "was observed hitting Angelica 3 to five times in the stocks before unloading her"); PWC 25 (E-mail from Ellen Wiedner to William Lindsay (Aug. 30, 2004), FEI 32492-94 (noting that an elephant has a "laceration" under her trunk, and that a handler named Peshta was observed "hitting elephants on [their] head[s] with [a] hook"); PWC 23 (FEI e-mail (Feb. 4, 2001) ("Vet Report for Red Unit") (noting "small lacerations behind the forelegs and ears in some elephants," "several bloody spots and one small abscess," and stating that "[n]ot being familiar with all the politics etc. that is going on at the Red Unit . . . I was reluctant to be too aggressive about obviously searching for lacerations").

The Court does not find credible defendant's witnesses who testified that the bull hook does not hurt the elephants. For example, despite voluminous evidence that the bull hook causes puncture wounds on the elephants, including testimony from FEI's own employees and documents that concede this point, in answer to specific questions from the Court at trial FEI witness Daniel Raffo told the Court that the tip of the bull hook is not capable of puncturing the skin of an elephant, and that it "never" punctures the skin because "it will not go in," see Trial Tr. 62:21 - 63:07, Trial Tr. March 4, 2009 a.m.— yet another reason to doubt Mr. Raffo's credibility. See also PFF 32-34.

13. See also USDA Narrative (Jan. 16, 1999) (reporting on results of inspection of the Blue Unit) (one of the elephants had a "lesion [that] was compatible with a fresh puncture wound," Randy Peterson acknowledged it could have been caused by "a bullhook," and reporting a "pecan sized lump of . . . scar tissue at the upper attachment of [Nicole's] right ear"); DX 74 (USDA Inspection Report) (Oct. 19, 1004) ("Upon entering facility I heard yelling and the sound of someone hitting something. I observed an elephant handler hitting an elephant with the wooden end of the handling tool to get it up").

14. See also id. at 3 (particular elephants are beaten more frequently, including Nicole and a baby elephant named Benjamin); see also PWC 190D, Addendum at 1-2 (F03274-75) (James

Stechon said that Randy Peterson, the head trainer, treats the elephants “forcefully and with no compassion;” Ewell and Stechon both reported that the elephants are struck with bull hooks under the trunks, and hooked behind ears or even inside of ears, or on top of their heads); PWC 190A at 3 (PL 014101) (USDA Investigation Report reporting sworn statement of Mr. Ewell that “Nicole, she’s one of the elephants that was mostly being beaten a lot . . . the handle [of the bull hook] being fiberglass, being shattered over the top of her head,” “Randy would take and use the bull hook, beating her on top of the head, and beating her on the ankles. . .,” “I’ve seen Pat take and hit Benjamin with a bull hook”); id. (reporting sworn statement by James Stechon that he “heard the most terrible noise, just whack, whack, whack . . . Randy . . . commenced beating on her (Nicole),” “this guy was hitting her so fast and so hard, . . . he would take both hands, and just really knock her . . .,” “I’ve seen him (Pat) beat Benjamin . . .,” “In Cleveland, Adam, Pat, and Randy, all three, one time ganged up on her (Nicole) . . . hitting her”).

15. See also id. at 2 (F 03275) (Addendum at 2 (F03274) (both Mr. Ewell and Mr. Stechon said that the beatings of Nicole were particularly frequent and entirely unprovoked; Mr. Ewell saw Nicole beaten over twelve times during the two months that he worked there, and that these were frequent, brutal, malicious and entirely unprovoked attacks on Nicole, including several times when she was returning from a performance; id., Mr. Stechon witnessed a three person attack on Nicole by Randy, Pat, Adam, and he saw Nicole beaten in Cleveland Ohio as punishment for her performance; this beating persisted for at least three minutes, was done with a bull hook, and blood was drawn); see also id. (Nicole was having trouble, “she shuffled her feet and kept urinating during the performances because she was afraid”).

16. See also id. (they “would make it come down on the joints of its knees, the front legs and the back legs and they would hold it down by the ears with the bull hooks;” they used a bull hook to make the elephant go down, they put it on the back of her neck and “forced her down,” and the held the elephant there for twenty minutes); see also Trial Tr. 80:14-81:10, Feb. 23, 2009 a.m. (Testimony of Carol Buckley) (explaining that trained elephants receive “tune-ups” when they are no longer “responding well” to their handlers’ commands – this involves when one or more trainers showing the elephant that they have control by giving the animal repeated commands and punishing the elephant when it fails to respond).

17. See also id. at 55:22-56:13 (testifying that reference to “superficial wounds” on the inside of the elephant’s left ear is “consistent with a bull hook or ankus injury” because “ of “[t]he location. The numbers of abrasions I’m seeing on the left side, particularly around sensory points, which historically have been used for guiding or cuing an elephant. And, really, I’m unaware of any other way in which the ear canal itself – it is only about as open as your small finger. I don’t know what would cause that. There’s no other explanation I can think of.”); id. at 74:17-74:23 (a “abscess” on Nicole’s “left lateral carpus” was indicative of a “pattern which I’ve seen through the volumes of Defendant’s medical records”); Trial Tr. 49:1-49:16, Feb. 24, 2009 p.m. (Ensley Test.) (A. “Just looking at the volume of records and seeing the incidences of wounds and abrasions on the left side . . . that’s of major significance to me”); id. at 50:3-50:5, 50:16-50:20 (explaining that elephant trainer literature “talks about walking on the left side, always hold your ankus. That way, you got the point this way, and if the elephant turns to face you, you’ve got the

ankus to touch the face/jaw area and prevent him from turning around to get you.”).

18. See also id. at 64:14-64:21 (explaining that 11/05 medical record for Karen reflects swelling on left foot “where the leg joint joins the pad” is “consistent with an ankus injury”); id. at 71:11-71:17 (reference in medical record for Nicole to “small raised lesion on the later aspect of the LF carpus” – i.e., wrist – is consistent with a bull hook injury); PWC 2A-Nicole at 225 (FEI 42625) (another reference in Nicole’s medical records to a “[s]mall raised lesion on the lateral aspect of LF carpus”); Trial Tr. 74:11-74:23, 75:6-75:9, Feb. 24, 2009 a.m. (Ensley Test.) (explaining that a 12/14/06 medical record for Nicole referring to a “chronic raised dermal mass on left lateral carpus” with the “center draining a small amount of white fluid” is “consistent with an ankus injury” and is a “hook boil that’s broken and is now draining”) (referencing PWC-2A-Nicole at 356 (FEI 44334); Trial Tr. 83:2-83:11, Feb. 24, 2009 a.m. (Ensley Test.) (medical record reflecting an abrasion on Mysore’s left jaw line “was a continuation of a characterization of a wound that appears consistently on the left side of the animal, and I would have to categorize this consistent with queuing [sic] or a bull hook injury.”); Trial Tr. 11:15-11:19, Feb. 24, 2009 p.m. (Ensley Test.) (Jewell’s medical records reflect a “resolving scratch on the left flank” that is “compatible with potential guide or ankus queuing, causing injury”); id. at 14:19-15:5 (reference in Jewell’s medical record to “[l]aceration on her left rib cage” – described as a “wound” in the medical record is consistent with bull hook use); id. at 18:14-18:19 (reference in Zina’s medical record to “laceration on left shoulder” is consistent with bull hook cueing); see also PWC 12 (July 2004 memo from FEI veterinarian regarding multiple bleeding lacerations behind Red Unit elephant’s left ear, one of which was “pointed out by two members of the public”).

19. See also Trial Tr. 43:14 - 35:13, March 12, 2009 evening (Trial Testimony of Mr. Metzler). In fact, Mr. Metzler admitted at trial that he uses a hot shot on the “younger” elephants, because “sometimes you just need to get their attention more than others that the guide may not do.” Id.; see also id., 36:01 - 36:21 (explaining that he uses the hot shot on both the trunks and the “butt[s]” of the elephants). However, Mr. Metzler has *never* been reprimanded for this or any other treatment of the elephants, see id., 53:05 - 53:08. The record further shows that Gary Jacobson, also uses a hot shot on the elephants. See Trial Tr. 52:07-54:12, March 9, 2009 a.m. (Mr. Jacobson testifies that he has used a hot shot); see also PWC 118 at 21, 374 (photographs of hot-shots taken at the Court-Ordered Inspection at the CEC); PWC 181B at 62:19 - 63:09 (Deposition of Elizabeth Swart) (March 18, 2005) (describing Gunther Gebel Williams using a hot shot or something that “shocked the elephant . . . during the performance” in Mexico City).

Mr. Cuvillo testified that he saw a tool called a “leatherman” – which is like pliers – used to pinch a baby elephant. See Trial Tr. 56:24 - 57:11, Feb. 2, 2009 a.m.; see also id. at 58:11 - 58:25 (he reported this incident to the the USDA, but it took no enforcement action); see also PWC 190J (USDA Investigation Report, May 15, 2001) at 2 (PL 01352) (“it also appears that pliers are used as a correction tool”).

20. See also Trial Tr. 61:01-61:05, Feb. 18, 2009 a.m. (Testimony of Gail Laule) (“It is not debated that [the bull hook] constitutes the use of negative re-enforcement and physical punishment.”); id. at 91:12-91:19 (the elephant “feels pain or discomfort from” the bull hook and performs “the behavior you want by moving away from [it]”); id. at 56:12-56:17 (explaining that “if they’re an elephant within the Feld Corporation . . . they’re being managed under free contact, they will have been exposed to exactly those same techniques. There’s no other option for them.”); id. at 86:01-86:04. (in a free contact system, “physical punishment is inherent in making sure that they cooperate a hundred percent of the time”).

21. See also Trial Tr. 31:05 - 31:23, Feb. 11, 2009 p.m. (Testimony of Dr. Ross Clubb) (describing the “breaking” of an elephant taken from the wild as involving “harsh techniques, such as tying the animal up and using punishment and corporal punishment to make it accept contact from people”); Trial Tr. Colleen Kinzley 59:8-59:14, Feb. 18, 2009 p.m. (explaining that “breaking” for an elephant born in captivity “would begin with being separated from the mother and, you know, forcibly separated. And certainly in reviewing the evidence, it’s something that I read about and am familiar with Ringling’s practices of forcibly separating the babies from their mother using ropes to pull them away from the mother”); see also Trial Tr. 45:05 - 46:24, March 9, 2009 a.m. (Gary Jacobson explaining to the Court why he would not let the public relations department of FEI videotape an actual training session of a baby elephant “[b]ecause everything is kind of born-free based. Everything has to be free and warm and fuzzy and . . . we handle elephants and then . . . they handle thousands of them in Asia and they tie them up and they have bullhooks, you know, but in the modern world it’s just more difficult to explain, you Honor. It is.”).

22. Id. at 5 (PL 04462) (Randy Peterson hit Nicole on the head); id. (Randy Peterson and Adam Hill had Mr. Rider drop the side wall on the tent so that they could beat Sophie and Nicole for playing with each other); id. (Randy Peterson, Adam Hill, and Pat Harned beat several elephants in Canada); id. at 6 (naming Randy Peterson as one of the Ringling employees “who abused animals daily”); PWC 184 (Mr. Rider’s March 2000 PAWS Deposition) at 20:05 - 20:12 (he has seen Randy Peterson “hook them repeatedly”); id. at 49:14 - 49:17 (Randy Peterson used to “get into and hook” Nicole); id. at 58:17 - 59:13 (when Randy Peterson became the superintendent of animals, it was “the downfall” of the elephants because “Randy and his handlers be[came] very hook happy and constantly beat[] on the elephants, especially Nicole, especially the elephants that Randy had”); id. at 60:17 - 61:10 (Randy Peterson “severely beat” the elephants about the head; “wail into Karen with not just one hand on the hook but both hands,” on the top of the head and the trunk); id. at 72:12 - 73:73:13 (Randy Peterson beat two elephants who tore some edging on a wall).

23. See also Trial Tr. 103:16-103:19, Feb. 18, 2009 p.m. (Testimony of plaintiffs’ expert Colleen Kinzley) (“I know that in the materials that I reviewed for the Ringling elephants, it is common for them to be struck with the bull hook and frequently with great force that causes actual wounds.”); id. 48:10-48:17 (regarding PWC 9 (the hooking of Lutzi during a performance resulted in blood dripping on the floor of the arena) “I think that that’s probably relatively typical, that hook wounds occur regularly. Certainly that was my experience in free contact . . . hook

wounds are relatively common in free contact. And I think, given the force and frequency that the hook, the bull hook is used with circus elephants, it's not at all surprising to me"); Trial Tr. 88:11-88:16, Feb. 18, 2009 a.m. (Testimony of plaintiffs' expert Gail Laule) (explaining that the use of the bull hook in free contact management can cause "dramatic wounding . . . anything from just a hook point . . . boils and bruising and things like that"); Trial Tr. 49:21-50:3, Mar. 4, 2009 p.m. (Testimony of FEI expert witness Kari Johnson) (admitting to the Court that the bull hook sometimes penetrates the skin and causes bleeding); Trial Tr. 64:5-64:8, 64:20-64:22, Mar. 5, 2009 a.m. (Testimony of FEI expert witness Gary Johnson) (acknowledging that a handler can draw blood with a bull hook).

24. See also id. at 110:14-110:17 ("When any animal is hit with a very sharp object . . . especially if they flinch, then it's a scientific and very reasonable conclusion that they're experiencing pain."); id. at 101:22-102:9; id. at 107:12-107:16 ("If you took a sharp ankus and you stabbed behind the ear . . . three elephants in a row, three stabbed, I think all three of them will have a similar response. They'll move away. There will be a reaction to that blow, which would be painful."); id. at 111:3-111:14 (Q. "Are you aware of any other biological differences between elephants and other mammals, subject to which elephants would not experience pain when other animals would?" . . . A. "As to whether the perception of pain in elephants is different qualitatively than other species, that's what your asking?" Q. "Qualitatively or physiologically?" A. "Right. No reason to believe that it is any different."); see also id. 69:19-70:11 (discussing his research documenting that elephants have evolved to use and modify branches as switches to reduce fly bites); id. at 106:7-106:8 (in "my professional opinion," being hit by an ankus "would be more painful than a fly bite" to an elephant).

25. See also id. at 42:6-42:14 (explaining that scars where "the ear meets the head" are the result of the elephants being repeatedly hooked at the top of the ear); PWC 54 at 16; Trial Tr. 46:13-46:23, Feb. 23, 2009 a.m. (Testimony of Carol Buckley discussing photograph of Karen (PWC 54 at 16) (as "one of the locations that you target on an elephant with a bull hook); id. at 52:19-53:11 (explaining to the Court why she concludes that this scar was caused by a bull hook and why that scar could not have been caused by the tusk of another elephant); PMC 54 at 211 (photograph of Susan); id. 61:8-61:18, Feb. 23, 2009 a.m. (Testimony of Carol Buckley) (regarding PMC 54 at 211 (explaining her observation that a scar at the top of Susan's neck is "an area that is targeted by trainers when you want the elephant to put her head down"), id. at 62:22-63:12 (explaining to the Court how that scar would be created); id. at 44:8-44:9, Feb. 23, 2009 a.m. (explaining that a scar on Mysore's ear was caused by a bull hook); id. at 78:25-79:9, Feb. 23, 2009 a.m. (describing scarring consistent with bull hook use and stating that she cannot imagine anything else that would have caused such a scar).

26. See also PWC 20 (Mr. Rider's July 2000 USDA Affidavit), at 3 (PL 04460) (describing a beating of Karen in New Haven by Pat Harned, and stating that "[a]fter Pat was done he asked me to get the Wonder Dust so that he could cover up the bleeding on Karen"). Mr. Rider's testimony was corroborated by the testimony of Frank Hagan. See PWC 161A at 111:25 - 112:08, 113:02 - 113:04, (Hagan Dep. Nov. 9, 2004) (explaining that Wonder Dust is a "covering compound" that "comes in a powder form and they mix it and it makes a gray cover on wounds,"

and that he has seen it used to cover up a wound on an elephant). The testimony of Mr. Rider and Mr. Hagan was further corroborated by the eye-witness accounts of other former Ringling Bros. employees. See PWC 190D, Addendum at 4 (F 03276) (Mr. Ewell said that “Sonny” would put something on the elephants to stop their bleeding and cover up what they were doing); id. (Mr. Stechon said that when the trainers are done beating the elephants, someone “puts purple stuff” on the cuts “to camouflage the wounds”). In addition, plaintiffs’ expert Carol Buckley, who once trained an elephant to do tricks on command and spent time with others who did so, testified that Wonder Dust is a “sulfur product” that is “gray” in color and used to “address” and “camouflage” wounds on elephants. Trial Tr. Carol Buckley 62:1-62:7, Feb. 23, 2009 a.m.. Ms. Buckley, referring to a photograph taken at the CEC inspection, PMC 54 at 211, testified that someone had applied Wonder Dust to a recent wound on one of the elephants that was subject to the inspection. See id. 61:8-61:9, 61:16-61:25 (“if you could zoom in just a little bit more, so you could see this, this is a wound (indicating). It’s recent. It hasn’t even developed necrotic tissue yet around it, and right in this area (indicating) it is quite raw right in there. You can still see the flesh right there, and then what I found interesting is right around here there and there it’s been doctored up with Wonder Dust.”); see also id. at 62:8-62:13 (“that’s what Wonder Dust looks like when the skin is wet and you apply this powder, you pump it out of the container, it adheres to the skin very well. It isn’t completely waterproof but it’s close and it just takes on the pigment of the elephant.”).

27. See also id. at 85:13 - 87:20 (describing her observations about the videotape footage of Shirley giving birth to Riccardo, including that “[t]hey’re using a bull hook on her as she’s giving birth and after she gives birth,” and “[s]he has no possibility of moving,” and “[i]t’s just so – so completely different from an elephant in the wild who would be with her family, they would help her, they would help the calf get to her feet”); see also id. at 73:15 - 74:01 (“elephants want to move all the time, and they are very exploratory, they want to use their trunks all the time to check out what’s happening. Every time they try and explore anything or take a step, they get poked or pushed back with the bull hook. If they are not walking fast enough, then the hook is used to drag them along. Getting out of the train, his hook is used to pull them down to get them to come faster”); see also Trial Tr. 51:19-52:1, Feb. 18, 2009 p.m. (Testimony of Colleen Kinzley) (discussing videotape, PWC 146B) (“the elephants are so heavily dominated and controlled [that] they really don’t get the opportunity to behave in a natural way . . . they don’t have freedom of movement, they don’t have the opportunity to interact with their environment, they can’t explore, they really have very little opportunity to interact with each other. Their behavior is extremely stifled.”); Trial Tr. 33:12-33:25, Feb. 18, 2009 a.m. (Testimony of Gail Laule) (“What it means for the elephant is that to a great degree their choice and control . . . is greatly diminished”); id. at 42:6-42:13 (“it would be hard to say that the use of adverse techniques is not stressful . . . [and] the fact that the animal has to always avoid that tool to avoid those adverse techniques . . . takes a lot of effort to always be aware of that and to make sure that you do something to avoid something bad happening”); Trial Tr. 93:19-94:3, Feb. 23, 2009 a.m. (Testimony of Carol Buckley) (explaining that the use of the bull hook “deprives the elephants from free choice, being able to make their own decisions. It complicates their life, their behaviors, and their physical wellness. When an elephant is not allowed to posture according to their needs, when they’re not allowed to interact socially with those individuals that are so important to their

well-being, all of that is stressful to the elephant, and even if it's a low-lying stress, it's a constant stress that can affect their immune system.”); see also PWC 133A (video footage); Trial Tr. 92:14-93:13, Feb. 23, 2009 a.m. (Testimony of Carol Buckley describing her observations of the elephants seen in PWC 133A (“They just seem so desensitized. They don't seem like real elephants.”)).

28. See also PWC 161A, at 103:02 - 103:16 (Deposition of Frank Hagan, Nov. 9, 2004) (explaining that when train arrives on a Monday evening the elephants are not unloaded until Tuesday morning); PWC 190Dat 4 (according to former FEI employees, “when the circus is traveling, the elephants remain chained in the stock cars for as long as 2-3 days consecutively, and are not provided any opportunity, whatsoever, to walk around, or otherwise exercise”); Trial Tr. 12:16 - 13:07, Feb. 6, 2009 p.m. (Testimony of Sergeant Lanette Williams) (the elephants were on the train for 16 hours for the trip from Oakland to San Jose, California, which by car is about 40 minutes); Trial Tr. 34:01 - 34:21, Feb. 9, 2009 a.m. (Testimony of Pat CuvIELlo) (sometimes the circus keeps the elephants on the train overnight before unloading).

29. See also Trial Tr. 37:24-38:10, Feb. 10, 2009 p.m. (Testimony of Dr. Hart who attended the Blue Unit Inspection) (noting that there is “not much space above the elephant's head” the window are “blocked over” so that the elephants cannot see outside and the overall environment is “barren”); see also Trial Tr. Carol Buckley 37:9-37:13, Feb. 23, 2009 a.m. (testifying that at the Blue Unit inspection “You could see that the elephant almost took up the entire height of that area, and this particular elephant had maybe a couple of inches of clearance, and if she were to raise her head up she would have bumped her head.”); id. at 38:15-38:20 (describing video of elephants coming off the train at the Blue Unit inspection “She's trying to come out of this door. The doorway is, you know, not tall enough for her to maneuver comfortably. She has to really bend down so she doesn't scrape her head. Now she's coming down a steep ramp. She's checking her footing with her trunk.”); id. at 42:22-43:3 (“The container is . . . small enough that the elephants wouldn't successfully be able to turn around, not gracefully anyway”); see also Trial Tr. 10:18-10:21, Feb. 9, a.m. (Testimony of Louis Gedo who took videotape of elephants on the train) (the elephants are chained in “very tight confinement” in “tiny boxcars” with “their heads [] almost g[r]azing the top and their [] bodies up against the walls”); PWC 54 (USDA Memorandum concerning inspection of the Blue Unit, July 1999) at 1 (PL 02081) (“[m]ost of the elephants are hauled in pairs. They are chained both front and hind by the legs next to the wall of the train car. There is very little space between the wall and the elephant's body, as well as very little space between the two elephants”); PWC 184 (Tom Rider's March 2000 Deposition) at 93:21 - 94:09 (“They are chained up and they can't move . . . It is very cramped conditions”).

30. See also PWC 161B at 13:18 - 13:20 (Ramos Dep, Jan. 24, 2007) (the elephants were chained “all the time”); id. at 16:08 - 16:20 (the elephants were not on chains when they were in the show and when they “were out front for the people”); id. 69:13 - 69:20 (“[t]he elephants don't have pens. They're chained up”); PWC 190D at 4 (Letter reporting the eye-witness accounts of two former Ringling Bros. employees) (the “elephants are left chained hour after hour, each day, and . . . with few exceptions, they are allowed off their chains only when they perform”); Trial Tr. 60:19 - 63:23, Feb. 5, 2009 a.m. (Archele Hundley testified that she would

see the elephants chained at 7:30 a.m. when she went to work; that they would be taken off chains and walked in a circle for approximately fifteen minutes at around 8:30 - 9:00 a.m., and then be put back on chains (although sometimes several elephants would be let off chains for a short while); the elephants would be let off the chains for the show, and then be put back on chains after the show, and they were always on chains when she left at the end of the day); see also PWC 114A (Sept. 29, 2006 Affidavit of Ms. Hundley) at ¶ 19 (“[t]he elephants are only unchained when the public is around. Whenever the public is not around, the elephants are chained up”); Trial Tr. 81:18 - 90:07, Feb. 5, 2009 (Robert Tom Jr. testified that he saw the elephants chained in the morning when he came to work at 9:00 a.m., that the elephants would get exercised for about an hour in the morning and then go back on chains until show time, that the elephants were chained “ninety percent of the day,” and that, although they were sometimes allowed off chains in an enclosure, in the two years he worked there he only saw that about 20-30 times, and that even then some of the elephants remained on chains during that time). Sergeant Lanette Williams testified that during the week she observed the elephants in San Jose in August 1999, “the majority of the time they were chained in the tent.” Trial Tr. 156:01 - 156:14, Feb. 6, 2009 p.m.; see also id. at 156:22 - 156:24 (“they were chained except when they were performing”); see also PWC 147B (videotape of the elephants chained in San Jose).

31. See also PWC 161A, 161B, at 90:06 - 90:17 (Hagan Dep.) (the elephants cannot interact with each other; they can only move so far, left to right; there is “no freedom of movement”); id. at 143:18 - 144:22 (when the elephants are chained under the tent they could only move a few feet front and back or side to side, and were not able to turn around); Trial Tr. 38:16-38:21, Feb. 9, 2009 a.m. (Pat Cuvillo testified that the elephants are still chained on a “picket line” at night, and that they can’t turn around); see also Trial Tr. 25:18 - 25:25 March 12, 2009 a.m. (Brian French testified that the elephants are still chained on a “picket line” when the circus is at an indoor venue); see also Videotape Evidence, PWC 132 E, PWC 132 I, PWC 132 K, PWC 132 O, PWC133 A, PWC 133 B, PWC 147 A, PWC 147 B.

32. See also Trial Tr. 74:3-74:9, Feb. 23, 2009 a.m. (Testimony of Carol Buckley who attended the CEC Inspection) (observing that the elephants “could take a few steps, maybe two steps forward. An elephant on chains in theory is able to lie down, but it’s a very restricted area. They can’t move around and posture in a way that they would want to. If one wanted to turn to the left four steps and lay down on their right side, they can’t do that. They are left to only lay in a specific area that the chains allow them to lay.”); id. at 42:18-42:22 (“because of the configuration of their chains, opposite legs, opposite front and back leg, they can’t turn around”); Trial Tr. 69:8-69:10, Feb. 18, 2009 p.m. (Testimony of Colleen Kinzley) (“You can also see the length of the chains, that it really only gives the elephants the opportunity to move a few steps in any one direction.”). Even Mr. Feld admitted that the elephants chained in the barn at the CEC “can’t physically touch each other.” Trial Tr. 34:15 - 34:21, March 3, 2009 a.m.

33. See also id. at 219, 221 (medical records reflect that Susan has been treated for a bed sore on left side and for bed sores on cheeks and hips); id. at 223 (medical records reflect that Mysore has suffered from pressure sores bilaterally on cheeks, i.e., on both cheeks); see also PWC2A-Nicole at 208 (FELD 0021836); PWC2A-Luzi at 607-08, 318 (FELD 0002923, FELD 0020407,

FELD 0028072); PWC2A-Zina at 249 (FELD 0021897) (“[p]ressure sore over left knee area with a focal lesion”; “[b]ed sore lesions on left side of face and hip”); *id.* at 253 (FELD 0021835) (“[b]ed sore lesions on left side of face and hip”); PWC2A-Susan at 52, 458, 461, 522, 524 (FELD 0021833, FEI 3952, FEI 3880, FEI 6256, FEI 6306); PWC2A-Mysore at 284 (FELD 0021835) (11/26/02 medical entry describing “chronic bed sore lesions on left cheek” and “[r]esolving abscess on right cheek”); *id.* at 315 (FELD 0008358) (2005 medical record describing “[s]ore on left side of face deep, puffy, and oozing [sic]”; recommending that the elephant receive the same medication as the “current treatment in human patients”); *id.* at 444 (FEI 41271) (9/18/06 medical record describing “[g]ranulating pressure sores on cheeks bilaterally” and referring to such sores as a “[c]hronic condition” in Mysore); *id.* at 565 (FEI 41461) (9/26/06 record with same description).

34. See also Trial Tr. 3:6-3:9, 18:23-19:2 Feb., 2009 p.m. (Ensley Test.); PWC 2A-Karen at 534, 545, 549, 550 (FEI 7962, FEI 8118, FEI 8165, FEI 8166) (photos reflecting Karen’s toenail cracks in various stages of severity and exposure to infection). It is also undisputed that most of the elephants inspected both at Auburn Hills and the CEC had toe nail cracks of the kind that are also reported as repeated problems in the medical records. See Trial Tr. 30:2-30:4, Feb. 24, 2009 p.m. (Ensley Test.) (Karen had a “significant toe crack” at the Auburn Hills inspection); *id.* at 33:18-33:20, 34:16-18 (explaining that the “critical thing” in photos reflecting the toe nail crack in Karen’s foot, see PWC 113K at Fig. 20-PKE 125, Fig. 19-PKE 126, Fig. 18-PL 15037, “is how the nail crack extends deeper into the tissue, past just the face of the nail” and that the toenail crack is “ripe for becoming infected, if it isn’t already”); Trial Tr. 33:1-33:2, Feb. 24, 2009 p.m. (Ensley Test.) (explaining that a photo of Nicole’s foot, PWC 113K at Fig.11-PKE 96, shows toenail crack); PWC 113K at Fig. 36-PL 15162 (CEC inspection photo showing toe nail cracks on Mysore); PWC 113L (Ensley Expert Report) at 264 (indicating that Zina had a “nail crack on a toe of the left front foot” at the CEC inspection); Trial Tr. 86:23-87:6, Feb. 18, 2009 p.m. (Kinzley) (a couple of the elephants she inspected had “fairly severe” toe nail cracks); Trial Tr. 2:11-2:13, March 16, 2009 eve. (Schmitt) (agreeing that five of the elephants inspected had toenail cracks); Trial Tr. 78:21-79:1, March 4, 2009 (K. Johnson) (Nicole had “more than just a little normal crack” on her toe).

Although FEI has sought to downplay the medical significance of toe nail cracks, FEI’s expert, Dr. Schmitt, acknowledged that a major survey of elephant health in zoos on which he and other veterinarians have relied treated toe cracks as a category of medical disorder. Trial Tr. 85:19-85:25, 86:14-86:24, March 16, 2009 p.m. Indeed, if toe nail cracks were of no medical importance, then there would be no reason for FEI’s own medical records to record and monitor them.

35. See also *id.* at 169-70 (medical records report that Lutzi had a nail bed abscess on her right front foot in 1999 and an “early” nail bed abscess on her left front foot in 2002); *id.* at 187-189 (medical records report that Jewell had a nail abscess in 1996, a nail bed abscess on her left front foot in 1998, an “old NBA” including a “small hole” on her right front foot, as well as several other nail bed abscesses in 1999, a foot abscess with evidence of osteomyelitis in 2000, a “chronic active” toe bed abscess and “inter-digital” nail bed abscess in 2001, an active nail bed

abscess in 2002, and a developing nail bed abscess in 2006); id. at 199-200 (medical records reflect that Zina had a nail bed abscess “with deeper inflammation” in 2006); id. at 218-221 (medical records reflect that Susan had a nail abscess in 1996, a nail bed abscess on her right front foot in 1999, five different abscesses on her right front foot and abscesses “with two associated nail cracks” in 1999, a “chronic and active” and “severe” nail bed abscess on one toe of her right front foot, a “chronic” abscess on another toe of the same foot, and two active nail bed abscesses – including a “recurrent” one – on different toes of her left foot in 2000, an “active” nail bed abscess on her left front foot and another NBA on her right front foot in 2001, a “bad abscess,” including a lost nail in 2004, and a “developing” and then “purulent” nail bed abscess in 2006); id. at 233-34 (medical records for Mysore report that she suffered from a nail bed abscess in 1999, “recurrent and active” nail bed abscesses in 2000, a “developing NBA” in 2002, and a nail bed abscess in 2006). In view of this evidence, FEI cannot, and does not, dispute that many of its elephants have suffered from nail bed abscesses. Trial Tr. 6:12-6:16, March 16, 2009 p.m. (Schmitt Test.) (admitting that many of the FEI elephants have nail bed abscesses).

36. See also Trial Tr. 13:6-13:25, March 16, 2009 p.m. (Schmitt) (concession by Dr. Schmitt that at the time of the Court-ordered inspection Susan had an “abscess, but it’s not necessarily infected” and that Susan had “necrotic tissue” on another toe for which she was receiving “veterinary care”). In addition, at the Aurbun Hills inspection, Karen was observed to be suffering from a toe crack that “goes all the way up to the cuticle” and is “ripe for becoming infected,” i.e., developing into an abscess. Trial Tr. 34:16-34:18, 35:15-18, Feb. 24, 2009 p.m. (Ensley Test.); PWC 113K at Fig. 18-PL 15037 (deep toe nail crack seen from the bottom of Karen’s foot).

37. See also id. at 88:14-90:18 (Susan had radiographic evidence of osteoarthritis, including “bone destruction” as of December 2000, but continued to travel on the Blue Unit for years afterwards while “suffering from degenerative joint disease”); PWC 2A-Mysore at 567 (FELD 8361) (medical record indicating that Mysore was suffering from a lame right hind leg and that “Sonny” – presumably Sonny Ridley, a Blue Unit handler – “feels that this is no worse than usual”); Trial Tr. 16:15-17:17, Feb. 24, 2009 p.m. (Ensley Test.) (medical records reflect that Zina was on medication for arthritis while she continued to travel on the Blue Unit); see also PWC 113L (Ensley Expert Report) at 203 (referring to three other elephants traveling on the Blue Unit who, according to a statement by FEI’s veterinarian “have had arthritis for many years (at least 12)”).

38. See also id. at 90:11-90:18; Trial Tr. 5:19-6:2, Feb. 24, 2009 p.m. (Ensley Test.) (“[y]ou’re adding to the insult to the . . . current ongoing condition” by “[k]eeping them on solid surfaces, restricting the motion of the limbs, which is really good physical therapy”); id. at 13:6-13:15 (it is “disease-enhancing” to chain an elephant with osteoarthritis on the concrete surface of the CEC); PWC 113L (Ensley Expert Report) at 263 (“During the site inspection at the CEC, this elephant [Lutzi] demonstrated stiffness in the left front leg.”). Indeed, FEI’s own medical records make clear that preventing the elephants from moving for long periods worsens their joint problems. See PWC 2A-Susan at 83 (FEI 13135) (“Sue was lame and stiff when unloaded from the train”) (emphasis added); PWC 2A-Susan at 754 (FEI 3355) (Susan’s “[s]tiffness seems to get

better with walking, but stiffens up when standing") (emphasis added).

39. The photos taken at the Court-ordered inspection of the CEC – where Susan continues to be chained for the majority of the day, thus further exacerbating this longstanding medical condition – show the scar tissue that has formed on Susan’s legs due to years of what FEI’s own records describe as urine scalding. See PWC 113K at Fig. 43-PL 15367, Fig. 42-PL 15369 (showing “scar tissue on inner and rear aspect of [Susan’s] left rear leg”). Accordingly, reducing the amount of time Susan must spend chained on hard surfaces and hence unable to escape her own urine would significantly relieve this longstanding and uncomfortable medical condition. Trial Tr. 46:9-46:13, Feb. 24, 2009 p.m. (Ensley Test.) (“you would be gaining a lot of ground if you had this girl out, off of chains and off of the hard surface where urine is splashing and contaminating those rear legs. She would be doing better in that environment.”); PWC 113L (Ensley Expert Report) (noting that Susan was observed at the CEC inspection “continuing to itch” the affected areas of her legs).

Dr. Schmitt acknowledged that Susan has suffered from a “dermatitis” caused by urine splashing on her legs that FEI’s veterinarians have attempted to treat with medication, although he disagreed about where precisely on her legs she is suffering from that condition and whether it is related to her prolonged chaining on a concrete surface at the CEC. Trial Tr. 11:8-11:12, March 16, 2009 p.m. At the same time, however, he testified that the dermatitis is “along right around ground level on the inside of her feet,” and that “[a]s the urine splatters down, that’s where we see the dermatitis come up on her.” Id. at 12:19-12:22. This supports Dr. Ensley’s opinion that keeping Susan chained on a hard surface is ensuring that more urine is getting on her legs – and contributing to her skin condition – than would be the case if she spent more time able to move away from her urine and on a natural substrate (e.g. dirt) that would absorb rather than deflect her urine.

40. See also PWC 113K (Auburn Hills inspection photos) at Fig. 15-PKE 118, Fig. 16-PKE 120 (photos showing uneven wear pattern on the soles of Karen’s rear feet); Trial Tr. 19:7-19:14, Feb. 24, 2009 p.m. (Ensley Test.) (medical record for Lutzi reflects “uneven wear between the front and rear soles” of her feet); id. at 41:21-42:1 (“three out of the five elephants [at the CEC] had overly-worn front feet compared to the rear feet,” which is “unhealthy”); PWC 113L (Ensley Expert Report) at 263-64 (Lutzi, Jewell, and Zina also suffered from an “abnormal increase in wear” on the soles of their front feet compared with their back feet); Trial Tr. 66:21-67:6, Feb. 23, 2009 a.m. (Buckley Test.) (explaining that Lutzi has an “excessively thin pad” that has “no pad structure, and this is a type of foot that is most susceptible to bruising on the pad, which leads to osteomyelitis”).

41. For example, according to FEI’s medical records Gunther was already suffering from lameness, stiffness, and foot abscesses when he was four years old; Doc was suffering from nail cracks, stiffness, and lameness, and was receiving arthritis medication when he was five years old; Juliette was suffering from chronic lameness and stiffness in her back, ribs, hips or upper hind legs, and was receiving both arthritis medication as well as medication for “presumptive Tb” when she was five years old; Romeo was suffering from “chronic” lameness and stiffness when he was

six years old; PT was already suffering from “severe acute lameness,” stiffness, and nail bed abscesses, and was “hit hard” by Tb medication when he was only two years old; Sara was suffering from stiffness and nail bed abscesses when she was six years old; and Angelica was suffering from “right hind lameness exacerbated by performing” a circus trick called the “ferris wheel,” which “requires hind leg strength” when she was seven years old. Id. at 70:18-81:22; PWC 113L (Ensley Expert Report) at 266-68 (summarizing these and other conditions in the younger elephants, including abrasion, laceration, pressure sore, and stereotypic behavior).

42. See also PWC 1A-Angelica at 1-2 (FEI 31832, FEI 22434); PWC 1A-Bonnie at 1 (FELD 21831); PWC 1A-Doc at 1-3 (FELD 2762, FELD 2764, FELD 16839); PWC 1A-Gunther at 1 (FELD 8373); PWC 1A-Juliette at 1-5 (FELD 7068, FELD 19917, FELD 21843, FELD 2848, FELD 2850); PWC 1A-PT at 1-3 (FEI 8407, FEI 20416, FEI 41271); PWC 1A-Romeo at 1-2 (FELD 7597, FELD 21843); PWC 1A-Sarah at 1-2 (FEI 50395, FEI 48055).

43. See also PWC 113K (Ensley Expert Report) at 156-57 (Nicole treated for stiffness and lameness with banamine and adequan injections). Although treating an elephant suffering from these conditions may help provide temporary relief for pain and discomfort, but see PWC 2A-Nicole at 447 (FEI 21808) (“Nichole [sic] is very stiff, and the banamine wasn’t doing very much”), it does nothing to prevent or ameliorate the underlying conditions that cause and/or aggravate these medical problems, i.e., the conditions under which the elephants are chained on hard surfaces for many hours and are compelled through use of the bull hook to train and perform unnatural behaviors. See Trial Tr. 60:9-60:21, 80:5-80, 12 Feb. 24, 2009 a.m. (Ensley Test.) (the medications are “temporary, short-lived, they’re not . . . rehabilitating the animal, giving the animal complete recovery”). Moreover, this pattern of treatment – i.e., responding to immediate symptoms while disregarding the underlying causes – itself actually contributes to the long-term harm inflicted on the elephants by “masking the pain to some degree” while the elephants continue to be exposed to the very conditions that caused and/or worsened their medical problems in the first instance. Id.; see also id. at 69:19-70:6 (Q. “Do you have an opinion about whether or not the training and the performances are consistent with the well-being of an animal with stiffness and lameness?” . . . A. “I don’t think that would be appropriate for an animal undergoing this condition on medication.” Q. “And why is that?” A. “You’re masking the pain with the medication. You’re giving an analgesic and providing pain relief, and then keeping an animal under a circumstance – travel, movement on hard surfaces, reducing the range of motion on the leg” – responsible for the underlying problem); PWC 2A-Nicole at 26, 27 (FEI 22860, FEI 22861) (medical records indicating that “Nicole received her injection” on travel days).

Although Dr. Schmitt acknowledged in his testimony that veterinarians are trained not merely to administer medications merely to “mask the symptoms” experienced by the elephants and that medications such as banamine should not be used “long term,” Trial Tr. 40:4-40:8, March 16, 2009 p.m., the record here compels the conclusion that the FEI elephants are routinely given these medications to expedite their return to circus performance and training and, indeed, that this use of medication begins when the elephants are only a few months old.

44. See also Trial Tr. 42:01 - 50:12, Feb. 9, 2009 (Testimony of Pat CuvIELLO describing what is shown on the videotape); *id.* at 43:01 - 43:16 (stating that Sara's repetitive behavior that is shown on the videotape is "typical of most of the elephants when they're chained"); *id.* at 52:08 - 52:24 (explaining that throughout his years he has seen many FEI elephants chained in parking lots and that they "would be swaying and rocking back and forth. Some would bob their head up and down"); see also Videotape Evidence, PWC 132 E, PWC 132 I, PWC 132 K, PWC 132 O, PWC133 A, PWC 133 B, PWC 147 A, PWC 147 B; Trial Tr. 155:08 - 155:13, Feb. 5, 2009 p.m. (Testimony of Sergeant Williams) ("many of them swayed a lot when they were chained. Almost every time I saw them chained, they would be swaying back and forth"); PWC 147B (videotape taken of elephants at San Jose Inspection conducted by Sergeant Williams); PWC 161A at 88:02 - 88:09 (Hagan Dep., Nov. 9, 2004) (describes elephants "doing the bopping" when they are on chains - "They bop their head left and right").

45. See also Trial Tr. 12:02 - 12:13, Feb. 5, 2009 a.m. (Dr. Poole testified that "the Ringling Brothers' elephants are very often in kind of a stupor where they are just not doing anything, even when there is a lot of activity around them when a normal elephant would be inquisitive," that she has seen the same kind of behavior in other elephants "that have been very traumatized."); see also *id.*, 15:02 - 15:14 ("elephants suffer from posttraumatic stress disorder"); *id.* 56:13 - 57:15 (Dr. Poole explains that the elephants' cognitive abilities further supports that they suffer from posttraumatic stress); Trial Tr. 72:15-73:22, Feb. 23, 2009 a.m. (Buckley Test.) (stereotypic behavior is a coping mechanism for the FEI elephants she observed during the Court-inspections, who were "showing no normal social interaction and seemed to be zoned out in their own little world"); see also DX 300A (Dr. Friend's USDA Report) at 22 ("It is presumed that stereotypic behavior is mediated through the release of endogenous opiates which create a pleasant or event addictive sensation and assist with some form of coping" with adverse conditions); Trial Tr. 21:5-22:9, March 9, 2009 p.m. (Friend Test.) (rejecting the analogy between elephants engaging in habitual stereotypic behavior and chain smokers or heroin addicts because the smokers or addicts, unlike the elephants, may not begin their behavior due to a stressful situation).

46. See also DX 300A (Friend USDA Report) at 6, 15; Trial Tr. 111:15-112:7, Feb. 10, 2009 p.m. (Hart Test.) (a major study of stereotypic behavior in all captive animals found that approximately 68% of situations that caused increased stereotypic behavior also decrease the animals' welfare); Trial Tr. 39:7-39:15, Feb. 11, 2009 a.m. (Clubb Test.) (Stereotypic behavior is "very repetitive behavior that's very fixed in form and it doesn't appear to have any apparent function . . . and it's generally developed in animals in captive situations where they're kept in an environment that doesn't give them everything they need, and particularly when animals are frustrated and they can't perform behaviors that they really want to perform"); *id.* at 41:13-41:22 (A. "And is there a consensus in the animal behavior community about the causal factors of stereotypic behavior?" A. "They're generally accepted to be an indicator of poor welfare, and they're often used in many, many welfare studies as an indicator of welfare . . . so in general they're seen as a sign that the environment that the animal is kept in or the conditions in which it's being subjected to are insufficient to give it what it needs.").

FEI's expert witnesses, Dr. Schmitt, testified that "any time you see stereotypic behavior,

it should raise a red flag of some concern” with regard to medical problems, Trial Tr. 47:19-47:22, March. 13, 2009 a.m. (emphasis added), and that he would look for whether the elephants “had stereotypic behaviors that resulted in them self-injuring themselves” physically. *Id.* at 47:25-48:1. Once again, however, the record here, as well as the scientific literature, abundantly supports the proposition that elephants who are engaging in prolonged stereotypic behavior on hard surfaces are in fact “self-injuring themselves,” and even Dr. Schmitt, after reviewing a videotape of an FEI elephant while shifting its weight in the course of engaging in stereotypic behavior, conceded that this is the kind of behavior that “raises a flag” and “raises concern” with respect to the infliction of physical harm on the elephants’ feet and toes. Trial Tr. 13:13-14:19, March 16, 2009 eve.

47. See also id. at 27:20-28:21 (explaining that all of the studies demonstrate that the amount of stereotypic behavior increases with the degree of restriction on movement, with elephants in “relatively large amounts of space” in zoos demonstrating the lowest level of stereotypic behavior (2 to 3%), and elephants chained on the FEI trains showing “very high levels” of such behavior).

Plaintiffs’ other expert witnesses also testified that, based on their personal observations, stereotypic behavior declined dramatically when elephants were removed from chains and afforded more opportunity to engage in natural behaviors. Trial Tr. 25:21-26:4, Feb. 19, 2009 a.m. (Kinzley Test.); Trial Tr. 103:1-103:16, 103:24-104:25, 105:1-105:8, Feb. 23, 2009 a.m. (Buckley Test.). Based on her years of observations both at the Elephant Sanctuary and in the circus context, Carol Buckley testified that there is “surely” a link between chaining and stereotypic behavior. *Id.* at 77:22-78:5 (explaining that when a one-year old elephant who engaged in no stereotypic behavior was chained, she “started stereotypic behavior” within three weeks thereafter).

48. See also id. at 222-23 (“The more relaxed behavior of the elephants in general and the concurrent decrease in stereotypic behavior may be due to a decrease in the general arousal that is reported in animals maintained under chronic close confinement . . . Chronically unsatisfied motivation can result in increased general arousal, stereotypies, learned helplessness and pathological physiological responses.”); see also Trial Tr. 50:18-50:24, Feb. 11, 2009 a.m. (Clubb Test.) (The Friend & Parker study “forms part of the evidence towards a linkage between confinement, and particularly chaining, and the performance of stereotypic behaviors. Remove the chains, give them more space and freedom to perform more natural behaviors and you see a reduction in stereotypy, and that’s consistent with studies that have been done on a whole range of other animals.”).

49. See also id. at 87 (Chaining “strongly restricts the freedom of movement to such a degree that these animals are not able to exhibit most of their species-typical behavior. Wild elephants show various social, comfort and play behaviors, seeking physical contact with other members of the group, calming and protecting inexperienced young, taking a bath daily and wallowing in mud and dust to take care of their skin etc. All of these activities are restricted when elephants are kept shackled.”) (citing, among others, Dr. Poole)). The study reaffirmed that elephant “[s]tereotypies, also called ‘weaving,’ are connected with unsuitable keeping systems,” *id.*, a

conclusion that further supports the opinions of plaintiffs' experts concerning the conditions in which FEI's elephants are now maintained. Trial Tr. 65:10-68:11, Feb.10, 2009 p.m. (Hart Test.) (FEI's present practices are "unsuitable" and are "harming the elephants" because there is a "very severe disruption of their normal behaviors" and results in a "high degree of abnormal stereotypic behavior," although elephants in other captive situations, including performances, would not elicit the same concerns).

50. For example, according to the study data, on a relatively short trip – from Austin to San Antonio – one of the Red Unit elephants spent only 2.4% of the recorded time "weaving," but on a much longer trip – from San Antonio to College Station, Texas – the same animal spent 88.5% of her time engaging in that stereotypic behavior. PWC 156 (transport study) at 9 Table 1). The stereotypic behavior for another red unit elephant was recorded as going from zero to 53% on the same trips. *Id.* Similarly, the only blue unit elephant for whom data is recorded in the study engaged in stereotypic behavior 43% of the recorded time on a trip from Los Angeles to San Diego, but that already significant number increased to 61.7% on the much longer trip from San Diego to Oakland. *Id.* Along with the increase in stereotypic behavior on longer trips, the study also documented that blood levels of cortisol – which is "generally considered an indicator of psychological stress, Trial Tr. 46:7-46:13, March 9, 2009 p.m. (Friend Test.) – increased as the transport times increased. *Id.* at 50:24. This increase was greatest for a long trip taken by FEI's blue unit. DX 300A at 40 ("There was a trend for the difference between mean transport and control concentrations to gradually increase with successive sampling time. The largest difference between control and transport samples was seen during the last sample for Ringling Blue when an increase of 271% occurred between the control and transport.").

51. Indeed, Dr. Friend's report to the USDA on the study acknowledged that the railroad cars are so narrow that two elephants chained side by side could not lie down at the same time even if they desired to but, rather, would be forced to take turns (although this fact is omitted from the published article). Trial Tr. 92:12-92:21, March 9, 2009 p.m. (Friend Test.).

Video of the elephants inside one of the railroad cars underscores how difficult it would be for one, let alone two, elephants to comfortably lie down within the very narrow cars, Trial Tr. 81:21-81:25, Feb. 11, 2009 (Clubb Test.). and also highlights the accumulation of fecal material in the car – which likely also explains the elephants' reluctance to lie down. PWC 130 at 3:30. Moreover, Dr. Friend's report to the USDA confirms the extremely lengthy time periods that the elephants must endure these conditions. For example, during a trip taken on August 8, 2000 to travel 200 miles from Los Angeles to San Diego, the Blue Unit elephants – including Jewell, who had already been diagnosed with arthritis – were chained on the train for 30 ½ hours, including 10 hours before the train departed and after it arrived at its destination. Trial Tr. 52:13-53:20, March 9, 2009 p.m. (Friend Test.). During another Blue Unit trip from Denver to Cleveland, the elephants – including Karen, who was being treated for chronic lameness both shortly before and after the trip – spent 82 ½ hours chained on the train, including, once again, many hours chained on the train both before and after the trip. *Id.* at 59:15-61:23; *id.* at 54:19-54:23 (it was "not uncommon" for the elephants to spend many hours chained on the train after arriving at a destination).

52. In his testimony, Dr. Schmitt also suggested agreement that the following “general description” by Dr. Oosterhuis (in “The Elephant’s Foot”) of how captive elephants develop nail bed abscesses “fits” the development of such abscesses in FEI’s elephants; Dr. Oosterhuis explained that, when confinement on hard surfaces is “combined with abnormal behavioral movement, poor conformation or previous injuries, the foot is destined to develop abscesses. Any abnormal pressure on the nails, as seen on the lateral nails of the stereotypical rocking elephant, will result in a disruption of the blood supply to the sensitive tissue behind the nail. When this tissue is subject to constant or intermittent abnormal pressure, it will eventually become devitalized, like a bad bruise, and then form a sterile nail abscess. This abscess then follows the path of least resistance as the body tries to get rid of it. It usually ruptures toward the surface of the cuticle line or at the interface between the bottom of the nail and the pad. As soon as it ruptures, it becomes an infected abscess.” Trial Tr. 8:15-9:11, March 16, 2009 eve.. (Schmitt Test.). Dr. Schmitt’s apparent agreement with an opinion that elephants are “destined to develop abscesses” under the very conditions that mirror those to which the FEI elephants are routinely exposed further reinforces plaintiffs’ claim that the elephants are suffering physical injury and harm as a direct consequence of those conditions, and that the elephants will continue to suffer such injury and harm unless these conditions are changed. See also Trial Tr. 47:19-47:22, March 13, 2009 a.m. (Schmitt Test.) (“any time you see stereotypic behavior, it should raise a red flag of come concern” with regard to the potential for physical injury); Trial Tr. 13:13-14:19, March 16, 2009 (Schmitt Test.) (videotape of an FEI elephant coming up on its toes while shifting its weight in the course of engaging in stereotypic behavior “raises a flag” and “raises concern” with regard to physical effects on the elephant); id. at 16:13-17:12 (agreeing that Dr. Oosterhuis’s description of how stereotypical behavior on hard surfaces would explain at least some of the nail cracks in the FEI elephants).

53. In particular, the medical records reflect that Susan tested positive on Tb tests in 2000 and 2001, PWC 2A-Susan at 244 (FEI 21311), that she was suffering from “chronic weight loss” throughout 2001, PWC 2A-Susan at 128 (FELD 0020622), and she was put on Tb medication in February 2002. Trial Tr. 95:6-95:12, Feb. 24, 2009 a.m. (Ensley Test.); Trial Tr. 14:1-14:9, March 16, 2009 p.m. (Schmitt Test.) (acknowledging that Susan “did have a positive on the serum test that was being developed” although “she’s never been positive on trunk wash”). Moreover, FEI’s own expert, Dr. Schmitt, wrote in his chapter on elephants in Zoo and Wild Animal Medicine that chronic unexplained weight loss may be one of the signs of Tb, and his testimony he acknowledged that Susan’s weight loss – while she was traveling with the Blue Unit – was consistent with Tb and that FEI never developed any alternative explanation for it. Id. at 75:9-75:18, 77:1-78:9. In addition, FEI’s medical records reflect that Nicole, who is still traveling on the Blue Unit, received medication for suspected Tb in 1999 and 2000. Trial Tr. 72:5-72:11, Feb. 24, 2009 a.m. (Ensley Test.) (referencing PWC 2A-Nicole at 518 (FELD 30198)). According to a September 1999 memorandum, Nicole – as well as four other elephants then at the CEC (Alana, Romeo, Juliette, and Kelly) – were “being treated, with 2 [Tb] drugs, either because of past clinical suspicions, positive DNA tests, or positive ELISA tests (blood results).” PWC 2A-Nicole at 120 (FEI 21511). The medical records reflect that Nicole was put on a “3 drug therapy for possible Tb,” and that she was suffering from “swollen” legs, including an “accumulation of fluid extending up to her elbows, and “swelling under [her] belly”; after she

was given Tb medication, these symptoms improved and Tb treatment was concluded. PWC 113L (Ensley Expert Report) at 145-51.

54. See also PWC 2A-Susan at 244 (FEI 21311) (April 2002 FEI e-mail reporting that nine elephants had tested positive for Tb, and that four others – including Karen – had received “suspect” results); PWC 2A-Susan at 345 (FEI 21212) (10/02 e-mail from FEI veterinarian to Susan Mikota confirming that there are “10 cases at RBBB,” that one of these elephants (Teetchie) was “resistant” to a Tb medication and was euthanized, and that another elephant with Tb who had been euthanized (Dolly) had negative trunk wash tests both before and “immediately post euthanasia”); Trial Tr. 53:15-53:18, March 16, 2009 (Schmitt Test.) (Shirley, a young elephant at the CEC and the mother of Riccardo, has tested positive for Tb and is quarantined at the CEC); see also PFF (Shirley is not receiving any treatment for the disease).

As these citations confirm, and as FEI’s own expert witness acknowledged, negative trunk washes are an unreliable basis for asserting that an elephant is not infected with Tb because FEI elephants who have tested negative on that test have in fact been found to have been infected with Tb only after being euthanized for serious health problems. Trial Tr. 68:12-68:24, 70:15-70:25, March 16, 2009 p.m. (Schmitt Test.). Accordingly, because FEI relies primarily on these admittedly non-definitive trunk washes to determine whether Tb is present in the elephants who are traveling with the units, even FEI’s own expert, Dr. Schmitt, conceded that it is indeed “possible” that FEI’s elephants are presently are presently traveling and performing, although they are infected with Tb. Id. at 72:11-72:13; id. at 72:1-72:10 (acknowledging that the traveling elephants could have “latent Tb” because trunk washes can only confirm “active Tb,” i.e., situations in which the elephant is actually “shedding tuberculosis” at that time)

55. See also id. (in response to questions from the Court Mr. Rider explained that “[i]t was the same it had been for two-and-a-half years. It was, you know, we got to keep it – my impression was that they didn’t want nobody to see it, so you know, it was just like when Dateline was there . . . ‘Don’t get caught on camera. When you’re doing the walks, you either hide the bull hook or don’t get caught”); see also PWC 184 (Mr. Rider’s March 2000 Deposition) at 66:09 - 68:04 (with reference to the incident in Boston, testifying that Jeff Steele “would get mad, saying ‘If I see any more hook marks on these elephants, somebody is going to pay’ . . . He just didn’t want to see them. He knew they would be there. He just didn’t want to see it”); id. at 76:07 - 78:20 (testifying about Dateline incident in Denver Colorado) (“[w]e knew Dateline was coming . . . for months because they ordered these nice little brown shirts,” “[t]hat whole thing was a cover-up” . . . “[t]hey were scared they were going to get caught for sure” . . . They had Pat [Harned] sitting outside, at which time . . . they ask[ed] him, ‘Have you ever hit an animal?’ And his answer was, ‘No.’ And I thought, how can he sit there and say that,” and “They had Kenneth Feld come out and had the ring all set up with the banners, and that was when he said, ‘To the best of my knowledge, I know of no animal abuse going on at the circus.’”); see also PWC 20 (Mr. Rider’s July 2000 USDA Affidavit) at 4 (PL 04461) (“October 1998, Denver, CO - ‘Dateline’ was coming to film the animals for animal abuse. Jeff Steele (unit manager) met with us about not abusing the animals while ‘Dateline’ was here, we were instructed not to hit the animals while being filmed. Pat Harned and Kenneth Feld were interviewed by ‘Dateline’ and

stated they never hit or beat the elephants”); id. (“*Of course the handlers do not hit the animals when they know a filming crew is present, or if they know the USDA is coming*”) (emphasis added).

56. See also id. (the “open letter” from Mr. Feld to the people of Boston states that “[r]ecent comments about the treatment of animals in the circus may have raised questions in your mind,” and that “it’s important to know that the criticism comes from the small group of people who have an extreme agenda,” and that “I want to ensure [sic] you that at Ringling Brothers [the] four hundred animals we care for around the clock 365 days a year, [have] safe, stimulating and healthy lives”) (emphasis added); see also id. at 100:17 - 100:21 (admitting that FEI is currently spending money on telling the public that the animal rights groups who say that Ringling Brothers mistreats animals are not telling the truth – “I think that’s correct, yes”).

57. See also id. at 6 (FEI 39176) (“I think it is great that you have created the [CEC], but what about the elephants that you have traveling from city to city right now? I wouldn’t have been prompted to write this e-mail, but when my 7 year old son said, “Mom, why aren’t these animals running around in the jungle with their families, I thought to myself, he is right!”); see also id. at (FEI 51228) (FEI response stating that “Ringling Bros. provides the highest standards of care to all our animal performers and employs an animal husbandry team that provides a stable, stimulating and rewarding environment where animals thrive year round. Contrast this with people whose expertise is in advocacy, misinformation, and speculation and who provide other unsuspecting people with inaccurate, dated and out of context materials”) (emphasis added).