



BEFORE THE ENVIRONMENTAL APPEALS BOARD
 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 WASHINGTON, D.C.



)	
IN THE MATTER OF:)	
)	
TIGER SHIPYARD, INC.)	CERCLA 106(B) PETITION
PORT ALLEN, LOUISIANA)	NO. 96-3
)	
PETITIONER)	
)	

RECOMMENDED DECISION

Pursuant to Section 106(b)(2)(C) of CERCLA, 42 U.S.C. § 9606(b)(2)(C), Tiger Shipyard, Inc. (Tiger) is liable as an operator, generator, and transporter under Sections 107(a)(2), (3), and (4) of CERCLA, 42 U.S.C. §§ 9607(a)(2), (3), and (4).

BY: EVAN L. PEARSON
 Regional Judicial Officer

DATED: July 26, 1999

APPEARANCES:

On behalf of the Petitioner:

MICHAEL A. CHERNEKOFF
 PAULINE F. HARDIN
 GREGORY C. LATHAM
 Jones, Walker, Waechter, Poitevent
 Carrere & Denegre, L.L.P.
 201 St. Charles Avenue
 New Orleans, Louisiana 70170-5100

On behalf of the EPA:

KEITH W. SMITH
ANNE FOSTER
MICHAEL C. BARRA
Superfund Branch (6RC-S)
Office of Regional Counsel
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Note: Due to the reformatting that occurred when the document was converted from WordPerfect to PDF, some text which appeared on one page now appears on another. The author was unable to correct this formatting problem. Therefore, the page numbering on the Table of Content was changed to reflect the reformatting. No changes to the text were made.

TABLE OF CONTENTS

I.	OVERVIEW	1
II.	FACTUAL BACKGROUND	2
III.	PROCEDURAL BACKGROUND	8
IV.	STATUTORY FRAMEWORK	13
V.	LIABILITY UNDER SECTION 107(A) OF CERCLA	15
	A. THERE IS NO QUANTITATIVE THRESHOLD FOR A HAZARDOUS SUBSTANCE	16
	B. PETROLEUM EXCLUSION	19
	C. ALLEGED CROSS-CONTAMINATION OF SAMPLES	21
	D. ANALYTICAL ISSUES	27
	E. RESPONSIBLE PERSON UNDER SECTION 107(A) OF CERCLA	29
VI.	DISPOSAL OF DRUMS INTO THE MISSISSIPPI RIVER	32
	A. SUMMARY OF PARTIES' POSITIONS	32
	B. FLOATING DRUMS/ILLEGAL DISPOSAL FROM VESSELS	34
	C. DISPOSAL OF DRUMS FROM THE BARGE CLEANING FACILITY	36
	D. ANALYSIS OF DRUMS	43
	E. DETERMINATION OF LIABILITY	58
VII.	THIRD PARTY DEFENSE	59
VIII.	OTHER ISSUES	61
	A. USE OF DAUBERT STANDARD IN NON APA ADMINISTRATIVE HEARING	61
	B. ORDER STRIKING PORTION OF TIGER'S REPLY BRIEF	62
	C. MISCELLANEOUS ISSUES	63
IX.	CONCLUSION	63

I. OVERVIEW

On March 15, 1995, the United States Environmental Protection Agency, Region 6 (EPA) issued a unilateral administrative order (UAO) to Tiger Shipyard, Inc. (Tiger), pursuant to Section 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9606(a). The UAO directed Tiger to conduct removal actions to abate an imminent and substantial endangerment to the public health, welfare, or the environment caused by the disposal of drums containing hazardous substances into the Mississippi River. On April 9, 1996, Tiger petitioned the Environmental Appeals Board (Board) pursuant to Section 106(b)(2)(A) of CERCLA, 42 U.S.C. § 9606(b)(2)(A), claiming that it was not a responsible party under CERCLA, and seeking reimbursement of \$1,366,240.19, plus interest, the costs it claims it incurred in complying with the UAO.

The Board determined that an evidentiary hearing on the issue of Tiger's liability was necessary. The undersigned Presiding Officer was charged with conducting the evidentiary hearing and preparing a recommended decision. After a review of the evidence, it is the Presiding Officer's recommendation that Tiger is liable as an operator, generator, and transporter under Sections 107(a)(2), (3), and (4) of CERCLA, 42 U.S.C. §§ 9607(a)(2), (3), and (4). Tiger failed to prove by a preponderance of the evidence that it did not dispose of three drums containing hazardous substances into the Mississippi River.

II. FACTUAL BACKGROUND

Between November 21, 1990 and October 1996, Tiger operated a shipyard on the west bank of the Mississippi river, north of Port Allen, West Baton Rouge Parish, Louisiana, at approximately mile marker 237.¹ Greenville Johnny of Louisiana, Inc. (Greenville Johnny), conducted similar operations at that same location from approximately September 1987 to November 20, 1990. The shipyard was divided into two sectors: a barge cleaning yard which comprised the upriver side of the site, and a barge repair maintenance yard which comprised the downriver side of the site. Joint Ex. 1, ¶¶ 2 and 4.

Tiger acquired some of Greenville Johnny's barges, and added barges to comprise its current cleaning plant configuration. There were three principal changes to the configuration. First, in November 1991, a boiler barge (DM 1458) was installed in its current location, and deck barges DHF and Dravo 3329 were moved riverside approximately 30 feet where they would hit the office barge. Second, Barge 1701 was placed in its current location in the August 1992. Third, the Bio Barge (1404) was installed in the fall of 1992. Transcript (Tr.) pp. 393 - 395, 448 - 542; Tiger Ex. 30, ¶ 32. Thus, the following barges comprised the barge cleaning plant from August 1992 to October 1996: Bio Barge 1404, Barge 1308, Barge 1701, Barge

¹The barge cleaning portion of the shipyard has since been moved to a different location. Tr. p. 391.

NM 1200, Gas Free Barge, LTC-66 Work Barge, Barge DM 365, Barge DM 1458 (boiler barge), Dravo 3329, and the DHF. Exhibit 56. Tiger cleaned barges that carried, among other things, benzene, BTX mix (benzene, toluene and xylene), chloroform, styrene, gasoline, diesel, 1,1,1-trichloroethane, toluene, methyl ethyl ketone (MEK), lube oil, cumene, and ethylene dichloride. Tiger Ex. 9, Table 1; EPA Ex. 32 and 38.

The barges came into the site commercially empty, although they may have contained as much as a few hundred gallons of cargo in the sumps and the barge piping located within the barge compartments or tanks. The cleaning process could consist of one or more of the following: stripping, venting, butterworthing, and hand washing. Stripping involved pumping out the residual product and storing it in tanks for resale. Venting consisted of forced air evaporation of remaining volatile organic compounds (VOCs) in the barge tanks. If a barge needed to be washed, one of two methods was used, butterworthing or hand washing. An automated cleaning machine (Butterworth), using heated and/or cold water and detergents, washed the inside of the barge tanks. Alternatively, hand washing required employees washing the interior with hand-held high pressure wash hoses. Tr. pp. 407 - 410; Tiger Ex. 6, p. 12; Tiger Ex. 9; Tiger Ex. 18, ¶ 8 - 10.

Wash waters generated in the cleaning process were pumped to vacuum tanks, treated, and discharged to the Mississippi River via a state water discharge permit. Any rust or scale generated during the cleaning process, including any accumulated rust or scale from the vacuum tanks, was placed into drums. These drums would contain hazardous substances as a result of the barge cleaning operation. The drums were moved offshore, consolidated into a dumpster, and then disposed of offsite. Tr. pp. 415 - 416; Tiger Ex. 18, ¶ 11; Tiger Ex. 30, ¶¶ 7 - 12; EPA Ex. 15.²

In 1994, EPA undertook a criminal investigation of alleged illegal disposal activities at the Tiger Shipyard. The criminal investigation resulted in part from allegations by former Tiger employees that drums containing rust and scale from the barge cleaning operations were dumped into the Mississippi River. Tr. p. 939; EPA Ex. 15. EPA executed a criminal search warrant to enter the Tiger facility in late July 1994. EPA sampled drums, barge compartments, river sediments, and soil. EPA's analytical results revealed that six drums containing rust and scale (three drums near the parking lot and three drums located on the LTC-66 Barge)

²The foregoing discussion of the barge cleaning operation does not mean that illegal or unauthorized activities did not take place. It is merely to provide background on how barges were cleaned.

contained hazardous waste. EPA Ex. 15; Tiger Ex. 70.³ EPA also conducted vector and side scan sonar surveys of the Mississippi River bottom in the vicinity of Tiger Shipyard. EPA Ex. 10. The sonar survey identified approximately 23 hard targets and two hard target areas on the Mississippi River bottom immediately adjacent to the Tiger barge cleaning operations. Tiger Ex. 3, § 2.2.

After attempts to negotiate an administrative order on consent failed, on March 15, 1995, EPA issued a UAO to Tiger pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a), directing Tiger to locate and remove the suspected drums. Tiger Ex. 1. EPA's sonar results were used in planning the scope of the removal action. Tr. pp. 582 - 583. The dive area was narrowed to a 100 foot by 540 foot area around Tiger's cleaning facility. Tr. p. 586; Tiger Ex. 56. The dive area was then divided into grid sectors with 10 foot by 10 foot dimensions. The grids were labeled on the vertical axis as A, B, C, etc., and numbered on the horizontal axis as 1, 2, 3, etc. Thus, if a drum was found in grid D.4, it would be identified as Drum D4-1. If a second drum was found in grid D.4, it would be identified

³Tiger claims that prior to this waste being shipped off site for disposal, its analysis revealed that the waste was nonhazardous. Tiger's Comments to EPA's Proposed Findings of Fact and Conclusions of Law at 4. The difference probably results from where the samples were collected. EPA collected its samples from each individual drum. EPA Ex. 15. Tiger's practice was to collect its samples from a dumpster where the contents of numerous drums had been placed. Tr. p. 479. In all likelihood, the hazardous wastes in the six drums were diluted by other material.

as Drum D4-2. Tr. pp. 440 - 442; Tiger Ex. 56. Fifty (50) drums were located as a result of the diving operation. However, 15 of the drums were in such bad condition that they could not be recovered. EPA Ex. 12, p. 2. The recovered drums were each encased in overpack drums and sealed until it was time to sample. Tr. pp. 153 - 154.

Characterizing the contents of the drums consisted of three activities: screening, sampling, and analysis. Screening activities consisted of the following: (1) checking the containers for volatile emissions as the lid on the overpack was removed; (2) noting the presence of any floating sheens or product; and (3) testing the corrosivity of the water. Tiger Ex. 4, p. 2-2. These activities were conducted on September 13, 1995. Tr. p. 75.

The drums were sampled on September 19 - 20, 1995. Tr. pp. 83 and 90. The main purpose of the sampling was to determine whether the recovered drums contained characteristic hazardous waste, so the waste could be properly disposed. Tiger Ex. 3, Appendix B, pp. 8-1 to 8-2. Samples were taken from each of the 35 drums. EPA selected 13 drums to receive split samples (D27-1, D27-2, D55-1, D55-2, D55-3, D55-4, D55-5, G29-1, G31-1⁴, H32-1, I26-1, J17-1, and J48-1). Tiger Ex. 4, pp. 2-3 to 2-5.⁵

⁴Samples G31-1A and G31-1B represent the contents of the container and an absorbent sock. Tiger Ex. 4, p. 2-5.

⁵Although samples were taken from each drum, some of the samples were composited prior to analysis. Tiger Ex. 4, pp. 2-5 to 2-8. Samples from the 13 drums were collected on September 19, 1996, and

Tiger analyzed its samples for hazardous waste characteristics of ignitability, corrosivity, reactivity, plus toxicity characteristic leaching procedure (TCLP) metals, volatile organic compounds (VOCs), and semivolatile organic compounds (SVOCs). Tiger's analytical results showed that samples from eight of the drums (C5-1, D55-1, D55-2, D55-3, D55-4, D55-5, I26-1, and J17-1) exceeded the TCLP regulatory limits for certain VOCs, and thus contained hazardous waste.⁶ Tiger Ex. 4, pp. 2-5 to 2-8, 3-2, Tables 4, 6, 7, and 8; 40 C.F.R. § 261.24. Four other drums were found to contain hazardous substances, as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14) (Drums D27-2, F35-1, F40-1, and J48-1). Tiger Ex. 4, Tables 4, 6, 7, and 8.

Rather than conducting the same tests as Tiger, EPA analyzed its samples for total VOCs and SVOCs. EPA's purpose in using the total analysis method as opposed to the TCLP method was to identify all of the compounds in the sample, instead of characterizing the waste for disposal.⁷ Tr. pp. 892 - 893; EPA Ex. 16. EPA's results

samples of the remaining drums were collected on September 20, 1996. Tiger Ex. 5, pp. 2-11 to 2-12.

⁶If a substance is found to be a hazardous waste under RCRA, then it is also considered a hazardous substance under CERCLA. 42 U.S.C. § 9601(14).

⁷A total analysis attempts to identify and quantify all of the compounds in a particular group (e.g., VOCs). With the TCLP, the compounds that actually leach from the sample are highly dependent on their solubility in the extraction fluid. Thus, a sample that was

confirmed that Drums D27-2, D55-1, D55-2, D55-3, D55-4, D55-5, I26-1, and J17-1 contained hazardous substances. EPA did not detect any hazardous substances in Drum J48-1. EPA Ex. 16. On September 21, 1995, the drums were removed from their overpack containers and the exterior of the drums examined. Tr. pp. 90 - 91. All of the drums were properly disposed of at a later date. Tiger Ex. 5, Appendix B. As required by the UAO, Tiger submitted a Final Report to EPA, contending that it had fully complied with all requirements of the UAO. Tiger Ex. 5.

III. PROCEDURAL BACKGROUND

On April 9, 1996, Tiger timely filed a petition under Section 106(b)(2)(A) of CERCLA, 42 U.S.C. § 9606(b)(2)(A), for reimbursement of \$1,366,240.19, plus interest, the costs it claims it incurred in complying with the UAO. Tiger argued that it is not a liable party of Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and that Region 6 arbitrarily and capriciously selected the response action. On April 25, 1997, EPA responded to the petition for reimbursement. After numerous filings by the Parties, the Board determined that an evidentiary hearing on the issue of Tiger's liability was necessary. Order Granting, in Part, Request for Evidentiary Hearing and Denying Motions to Strike at 1 - 2 (EAB April 2, 1998).

analyzed using the TCLP method could have hazardous substances in it that would not be revealed using the TCLP method. Tr. pp. 892 - 893.

Pursuant to the Order of the Board dated April 20, 1998, the undersigned was appointed as the Presiding Officer in this case. The Presiding Officer was charged with conducting an evidentiary hearing and providing recommended findings to the Board on the following issues, namely, whether:

1. Tiger is liable within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2), as an operator of a facility at which hazardous substances were disposed of;

2. Tiger is liable within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3), as a person who by contract, agreement, or otherwise arranged for disposal of hazardous substances; and

3. Tiger is liable within the meaning of Section 107(a)(4) of CERCLA, 42 U.S.C. § 9607(a)(4), as a person who accepted any hazardous substances for transport to disposal facilities.

If the Presiding Officer determines that the answer to issues 1, 2, or 3 is yes, the Presiding Officer shall make recommended findings on the following two additional issues, namely, whether:

1. Tiger has a defense to liability under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), by virtue of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3), which protects otherwise liable parties from the acts or omissions of third parties; and

2. Tiger has a defense to liability under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), by virtue of the "innocent landowner" defense raised by Tiger.

Order Scheduling Evidentiary Hearing at 1 - 2 (EAB April 20, 1998).

Furthermore, the Order provided that:

In conducting the prehearing proceedings and the evidentiary hearing, the Presiding Officer is authorized to make any necessary decisions including decisions regarding the admission of evidence. In so doing, the Presiding Officer shall look for guidance to the Consolidated Rules of Practice set forth at 40 C.F.R. Part 22 (recognizing, of course, that under the present circumstances the burden of establishing that reimbursement is appropriate is on Tiger).

Id. at 2.

On April 23, 1998, the Presiding Officer issued a Prehearing Order which included a hearing date. However, on May 13, 1998, EPA filed a motion to stay the evidentiary hearing, citing a criminal indictment obtained by the State of Louisiana against Tiger and seven of its employees.⁸ The Board granted the stay pending resolution of the criminal proceedings. Order Granting Stay (EAB May 21, 1998). On December 9, 1998, EPA notified the Board that the state criminal proceeding had been concluded by a plea agreement. On January 22, 1999, the Board lifted the stay. Order Rescheduling Evidentiary Hearing (EAB January 22, 1999). Prior to the evidentiary hearing, the Presiding Officer issued four orders disposing of motions filed by the Parties. An addition motion was rendered moot due to a stipulation between the parties. These orders are as follows:

⁸In December 1997, the United States Attorney's Office notified Tiger that it had declined prosecution of the case and was referring the matter back to EPA.

1. On April 1, 1999, Tiger filed a Motion in Limine, requesting an Order excluding EPA Prehearing Exhibits 32 - 35 from the evidentiary hearing. Tiger alleged that the documents were obtained in violation of Rule 6(e) of the Federal Rules of Criminal Procedure. On April 19, 1999, Tiger's Motion was denied. *In the Matter of Tiger Shipyard, Inc.*, 1999 EPA RJO LEXIS 5. Tiger filed a Motion for Certification for Appeal of Presiding Officer's Order Denying Tiger's Motion in Limine on April 26, 1999. This motion was denied via a bench ruling. Tr. pp. 707 - 708.

2. On April 6, 1999, Tiger filed a Motion for Production of Impeaching Evidence, seeking an Order directing EPA to produce all evidence which would be used to impeach four potential EPA witnesses. This Motion was granted in part on April 21, 1999. *In the Matter of Tiger Shipyard, Inc.*, 1999 EPA RJO LEXIS 6.

3. On April 7, 1999, EPA filed a Motion to Strike Affirmative Defenses and Motion in Limine, seeking to strike two affirmative defenses: (1) the innocent landowner defense as defined in Section 101(35) of CERCLA, 42 U.S.C. § 9601(35); and the third party defense of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3). The Motion in Limine sought to exclude the testimony of four witnesses and three exhibits that EPA claimed related to the "innocent landowner" defense. On April 21, 1999, the Presiding Officer granted EPA's Motion to Strike Tiger's Innocent Landowner Defense, denied EPA's

Motion in Limine, and denied EPA's Motion to Strike Tiger's Third Party Defense. *In the Matter of Tiger Shipyard, Inc.*, 1999 EPA RJO LEXIS 3.

4. On April 20, 1999, EPA filed a Motion for Issuance of Subpoenas to Compel the Appearance of Witnesses at 106(b) Evidentiary Hearing. On April 21, 1999, EPA's Motion for Subpoenas was denied. *In the Matter of Tiger Shipyard, Inc.*, 1999 EPA RJO LEXIS 2. EPA filed a Motion for Reconsideration of Order Denying EPA's Motion for Subpoenas on April 23, 1999. This motion was denied via a bench ruling. Tr. pp. 9 - 10.

5. On April 20, 1999, Tiger's filed a Cross Motion to Strike and Motion in Limine with Respect to Operator Liability. This Motion was rendered moot by stipulation of the parties. Joint Exhibit No. 3.

The evidentiary hearing was held in Baton Rouge, Louisiana from April 26 - 30, 1999. Tiger called 18 witnesses (one of which also testified as a rebuttal witness), and EPA called 11 witnesses. Eighty exhibits were received into evidence.⁹ Three sets of joint stipulations were reached, and entered into evidence as Joint Exhibits 1 - 3. The transcript of the hearing consists of 1202 pages. The parties served their initial post-hearing submissions on

⁹Some exhibits were identified and admitted as multiple exhibits for easy identification (e.g., Tiger Ex. 19 and 19A). However, they were counted as one exhibit.

June 14, 1999, and reply briefs on July 28, 1999. The record of the hearing closed upon receipt of the reply briefs.

IV. STATUTORY FRAMEWORK

"In response to widespread concern over the improper disposal of hazardous wastes, Congress enacted CERCLA, a complex piece of legislation designed to force polluters to pay for costs associated with remedying their pollution." *United States v. Alcan Aluminum Corporation*, 964 F.2d 252, 257 - 258 (3rd Cir. 1992); *In Re Findley Adhesives, Inc.*, 5 E.A.D. 710, 711 (EAB 1995) ("CERCLA was enacted to accomplish the dual purpose of ensuring the prompt cleanup of hazardous waste sites and imposing the costs of such cleanups on responsible parties"). Courts have traditionally construed CERCLA's liability provisions "liberally with a view toward facilitating the statute's broad remedial goals." *United States v. Shell Oil Company*, 841 F. Supp. 962, 968 (C.D. Cal. 1993).

CERCLA grants broad authority to the Federal government to provide for such cleanups. Specifically, the government may respond to a release or a threatened release of hazardous substances at a facility by itself undertaking a cleanup action under Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and then bringing a cost recovery action against the responsible parties under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). Alternatively, where there is imminent and substantial endangerment to the public health or welfare or the

environment, the Federal government may order potentially responsible parties (PRPs) to respond to the threat through the issuance of an administrative order pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).¹⁰ This is the course the Region chose to follow in this case. Those who comply with the administrative order may, under Section 106(b)(2)(A) of CERCLA, 42 U.S.C. § 9606(b)(2)(A), petition the Agency for reimbursement of reasonable costs incurred during the cleanup, as Tiger has done here.

In order for a petitioner to receive a reimbursement for its response costs, Section 106(b)(2)(C) of CERCLA provides that the petitioner:

shall establish by a preponderance of the evidence that it is not liable for response costs under [section 107(a)] and that the costs for which it seeks reimbursement are reasonable in light of the action required by the relevant order.

42 U.S.C. § 9606(b)(2)(C).

A petitioner may also recover response costs expended to the extent that under Section 106(b)(2)(D) of CERCLA:

it can demonstrate, on the administrative record, that the President's decision in selecting the response action ordered was arbitrary and capricious or was otherwise not in accordance with law.

42 U.S.C. § 9606(b)(2)(D).

¹⁰EPA is authorized to bring a civil action requesting penalties up to \$27,500 per day, and treble damages against any person who refuses to comply with an EPA order issued under Section 106(a) of CERCLA. 42 U.S.C. §§ 9606(b)(1) and 9607(c)(3); 40 C.F.R. § 19.4, Table 1.

V. LIABILITY UNDER SECTION 107(A) OF CERCLA

For a recipient of an administrative order under Section 106 of CERCLA, liability for cleanup costs attaches under Section 107 of CERCLA if: (1) the site in question is a "facility"; (2) a "release" or threatened release of a "hazardous substance" has occurred at the facility; and (3) the recipient of the administrative order is a responsible person under Section 107(a) of CERCLA. *In Re Chem-Nuclear Systems, Inc.* 6 E.A.D. 445, 455 (EAB 1996).

First, the parties agree that the CERCLA "facility" at issue is the bed of the Mississippi River. Tiger Ex. 6, p. 33; EPA Post-Hearing Brief at 40. Thus, the bottom of the Mississippi River adjacent to Tiger Shipyard is a "facility" within the meaning of CERCLA in that it is an "area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located." 42 U.S.C. § 9601(9)(B). Second, although the Board noted that 12 of the 35 drums contain hazardous substances,¹¹ Tiger now claims that four of the 12 drums do not contain hazardous substances. Third, Tiger asserts that some of the drum contents are consistent with petroleum products, and thus exempt under the petroleum exclusion. Finally, Tiger has raised a number of issues relating to the integrity of the sample collection and analysis.

¹¹Order Granting, in Part, Request for Evidentiary Hearing and Denying Motions to Strike at 6.

As discussed below, Tiger's claims are rejected. Each of the 12 drums in question contains hazardous substances. Furthermore, the petroleum exclusion does not apply to any of the drums identified by Tiger, and both Tiger's and EPA's analytical results are usable in this action.

A. THERE IS NO QUANTITATIVE THRESHOLD FOR A HAZARDOUS SUBSTANCE

As discussed in Section II, Tiger's analytical results showed that samples from eight of the drums (C5-1, D55-1, D55-2, D55-3, D55-4, D55-5, I26-1, and J17-1) exceeded the TCLP regulatory limits for certain VOCs, and therefore contained hazardous waste. Tiger Ex. 4, pp. 2-5 to 2-8, 3-2, Tables 4, 6, 7, and 8; 40 C.F.R. § 261.24. Identification as a hazardous waste meets the definition of hazardous substance. 42 U.S.C. § 9601(14). Four other drums were found to contain hazardous substances, as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14) (Drums D27-2, F35-1, F40-1, and J48-1). Tiger Ex. 4, Tables 4, 6, 7, and 8. Thus, 12 drums contained hazardous substances. EPA's results confirmed that Drums D27-2, D55-1, D55-2, D55-3, D55-4, D55-5, I26-1, and J17-1 contained hazardous substances. EPA Ex. 16. Furthermore, the dumping of these drums into the Mississippi River meets the definition of "release". 42 U.S.C. § 9601(22).¹²

¹²"Release" is defined as "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, (continued...)"

However, Tiger now contends that four drums (D27-2, F35-1, F40-1, and J48-1) do not contain hazardous substances because the analytical results indicate that although one or more analytes under the TCLP protocol were detected, the concentrations were insufficient to trigger any standard under the TLCP protocol. Tiger Reply Brief at 39. In other words, Tiger argues that because the level of contamination in each of the four drums is insufficient to classify it as hazardous waste, it cannot be a hazardous substance. Tiger cites *Amoco Oil Company v. Borden, Inc.*¹³ and *Licciardi v. Murphy Oil U.S.A., Inc.*¹⁴ in support of its claim. However, Tiger's analyses of *Amoco* and *Licciardi* are flawed.

In *Amoco*, the Court found that the substance in question, phosphogypsum, was a hazardous substance, rejecting the district court's finding that CERCLA required Amoco to show that the radioactive emissions violated a quantitative threshold to establish a release of a hazardous substance. 889 F.2d at 669. The Court held that "the plain statutory language fails to impose any quantitative requirement on the term hazardous substance and we decline to imply

¹²(...continued)
leaching, dumping, or disposing into the environment (*including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant*)." 42 U.S.C. § 9601(22) (emphasis added).

¹³889 F.2d 664 (5th Cir. 1989).

¹⁴111 F.3d 396 (5th Cir. 1997).

that any is necessary." *Id.* Thus, a substance is a hazardous substance if it qualifies under any of the statute's definitional requirements. *Id.* Likewise, in *Licciardi*, the Court found that the particular substance in question (lead) which was detected above background levels, but below the TCLP standard, was also a hazardous substance. 111 F.3d at 398.¹⁵

Therefore, a substance is a CERCLA hazardous substance if it contains substances listed as hazardous under any of the statutes referenced in CERCLA § 101(14), regardless of the volumes or concentrations of those substances. *Amoco Oil Company v. Borden, Inc.*, 889 F.2d at 668; *Licciardi v. Murphy Oil U.S.A., Inc.*, 111 F.3d at 397; *In Re A & W Smelters and Refiners, Inc.*, 6 E.A.D. 302, 319 (EAB 1996). Therefore, Drums D27-2, F35-1, F40-1, J48-1 contain hazardous substances.

Finally, EPA contends that four additional drums [D27-1, G29-1, G31-1 (samples G31-1A and G31-1B) and H32-1], contain hazardous substances. EPA Post-Hearing Brief at 13 (citing EPA Ex. 16).¹⁶

¹⁵Whether a substance is a hazardous substance is only one element of determining liability under Section 107(a) of CERCLA. *In Re Chem-Nuclear Systems, Inc.*, 6 E.A.D. at 455.

¹⁶EPA has asserted that it is possible that even more drums contained hazardous substances, but Tiger focused its sample analysis on RCRA characteristic analysis, rather than total analysis. EPA Post-Hearing Brief at 15 - 16. This claim is without merit. EPA approved Tiger's Remedial Action Workplan. EPA could have required Tiger to conduct total analysis on all 35 drums. EPA could also have split samples on all 35 drums, but chose to split samples from only
(continued...)

However, these drums were identified for the first time in EPA's Post-Hearing Brief.¹⁷ Thus, there was no opportunity for Tiger (who has the burden of proof), to present evidence relating to these drums. Therefore, by waiting until its Post-Hearing Brief to identify these four drums, EPA waived its right to contend that these drums contained hazardous substances.

B. PETROLEUM EXCLUSION

Tiger asserts that label and sample analyses of certain drums indicate that the drum contents were consistent with petroleum products, and thus these drums may be exempt under the petroleum exclusion of CERCLA. Tr. pp. 92 and 95; Tiger Post-Hearing Brief at 66. However, Tiger failed to meet its burden of proof on this issue.

Section 101(14) of CERCLA excludes from the definition of hazardous substances:

petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph.

42 U.S.C. § 9601(14). This exclusion only applies to the virgin petroleum product, not to petroleum products to which hazardous substances have been added as a result of contamination during use.

¹⁶(...continued)
13 drums.

¹⁷The Board noted that only 12 of the 35 drums contained hazardous substances. Order Granting, in Part, Request for Evidentiary Hearing and Denying Motions to Strike at 6.

United States v. Gurley, 43 F.3d 1188, 1199 (8th Cir. 1994), *cert. denied* 516 U.S. 817, 116 S.Ct. 73 (1995); *Dartron Corp. v. Uniroyal Chemical Company, Inc.*, 917 F.Supp. 1173, 1183 (N.D. Ohio 1996)("spilling 'virgin' motor oil on the ground is not a release of a hazardous waste under CERCLA, but spilling used motor oil -- which contains substances not found in virgin motor oil -- almost certainly is").

Thus, Tiger has the burden of proving that the petroleum exemption applies (e.g., that the drums contained virgin petroleum products). *Ekotek Site PRP Committee v. Self*, 881 F.Supp. 1516, 1524 (D. Ut. 1995). Tiger's claim is based on the fact that certain drums had labels indicating they contained motor oil, and analytical results revealed concentrations of petroleum compounds. Tr. pp. 92 and 95. A review of Tiger Ex. 4, Table 11 shows that seven drums (A44-1, D55-2, F46-2, G32-1, G46-1, H32-1, and J48-1) had labels which indicate the drums originally may have contained petroleum products. However, Tiger never presented any evidence that any of the drums still contained only virgin petroleum products, and therefore did not meet its burden of proof.¹⁸ Furthermore, of the seven drums, only two, D55-2 and J48-1, were determined to contain hazardous substances. See Section V.A, *supra*. However, the

¹⁸For example, the only substances identified for Drum J48-1 were mercury and barium (Tiger Ex. 4, Table 4), which are obviously not even petroleum products.

Presiding Officer determined Tiger did not dispose of either of these drums. See Section VI.D, *infra*. Therefore, this claim is also moot.

C. ALLEGED CROSS-CONTAMINATION OF SAMPLES

Tiger claims that the actions of Mr. Robert Sullivan, an EPA Alternate On-Scene Coordinator, destroyed the integrity of the entire sampling operation. Tiger contends that Mr. Sullivan entered the drum staging area alone, without any protective gear, and handled, opened, and closed the lids to the overpack containers wearing soiled latex gloves. Because of Mr. Sullivan's actions, there was a great potential for cross-contamination between drums and/or adding contamination to previously uncontaminated drums. Thus, Tiger argues it would be impossible from a scientific standpoint that the samples taken from the drums after this incident are representative of the contents of the drum after they were recovered. Tiger Brief at 60 - 61. EPA vigorously denies these allegations. Because of the seriousness of these allegations, each party's version of the events is set forth below.

Tiger's Version

The recovered drums were placed in the hopper barge, where they were stored until it was time to sample. Tr. p. 59. As part of the health and safety program, an exclusion zone was set up in the hopper barge in preparation of collection of samples. The exclusion zone was marked by yellow banner tape. EPA Ex. 45. Entrance to the exclusion zone was limited to only persons wearing prescribed

personal protective equipment. Tr. p. 77; Tiger Ex. 3, Appendix A, p. 5-4. Mr. Sullivan executed the Health and Safety Plan Compliance Agreement indicating that he had read the plan and agreed to abide by it. Tiger Ex. 4, Appendix A. The Health and Safety Plan approved by EPA employed a "buddy system" which required that one person would watch the other at all times so as to prevent unnecessary injuries. Tiger Ex. 3, Appendix A, p. 5-5.

Screening activities began on September 13, 1996. Tr. p. 75. Screening of the containers involved checking for volatile emissions as the lid on the overpack was removed, noting the presence of any floating sheens or product, and testing the corrosivity of the water. Tiger Ex. 4, p. 2-2 to 2-3. During the afternoon of September 13, 1995, Mr. George Cook, the on-site Health and Safety Coordinator for Geraghty & Miller (Tiger's contractor) told Mr. Robert Sherman, an engineer for Ecology & Environment (EPA's contractor), that they were going to put the overpack lids back on with the ring, and secure the bolt inside the ring hand tight. They would complete the screening activities the next day. Tr. p. 173. Mr. Sherman testified that the lids were on the container when he left. He doesn't remember if they were tightened. However, he did not have any problems with the condition of the containers when he left. Tr. pp. 672 - 673.

Later that afternoon, Mr. Ronald Garbinsky,¹⁹ saw a man in the barge where the overpack containers were stored without any protective equipment. He saw the man open one container, look inside, and put the lid back on. Tr. pp. 115 - 117. Mr. Garbinsky called Mr. Merlin Wilson²⁰ concerning what he had observed. Tr. pp. 127 - 128. After the phone call, Mr. Garbinsky went back to the barge to observe the man further. Tr. pp. 117 - 188.

Upon his arrival, Mr. Wilson observed Mr. Sullivan inside the contaminated zone without any respiratory protection. When Mr. Wilson entered the hopper barge to confront Mr. Sullivan, he saw that two or three lids had been removed from the overpacks. Tr. pp. 129 - 130. Mr. Cook, who accompanied Mr. Wilson, observed Mr. Sullivan in the bottom of the hopper barge in the exclusion zone with three to five lids removed from the overpacks. Mr. Sullivan was wearing only a pair of gloves and at the time had his hand inside a drum. As his hands had been inside a drum, the glove was soiled. Mr. Cook informed him that he should not be in the exclusion zone because he wasn't wearing any protective equipment. Mr. Sullivan said okay, and exited the exclusion zone by going under the exclusion zone tape. Mr. Sullivan put the lids back on the overpacks before leaving, but he never sealed them. The lids were not secured on the overpack

¹⁹An employee of National Marine (Tiger's parent corporation).

²⁰Also employed by National Marine.

containers until the following morning, September 14, 1995. Tr. pp. 175 - 177.

EPA's Version

Mr. Sullivan noticed that the lids to the overpack containers were off-center after the screening was completed on September 13, 1996. He simply repositioned overpack lids that were off-center into their correct position. He did not remove any covers, place any covers on the ground, move any covers from one drum to another, put anything into the drums, remove anything from the drums, or put his hands inside any of the drums. The repositioning process took less than five minutes. After he finished, he talked to an employee of Geraghty & Miller, and then left the scene. Tr. pp. 838 - 840.

On cross-examination, Mr. Sullivan testified he never entered the exclusionary zone. Rather, he reached over the banner tape to resecure the overpack lids. The only part of his body that went over the banner tape was his hands. He was able to resecure the lids to 20 overpack drums (the lids were off-center approximately one to two inches) by just putting his hands over the tape. No other part of his body crossed over the boundary of the tape. His gloves did not get soiled as a result of his activity. Mr. Sullivan made no reports or notes of these activities, but told a Geraghty & Miller representative at the scene that it was standard operating procedure to replace the lids in an appropriate position on the overpack drums. Tr. pp. 848 - 859, 862 - 863.

The Presiding Officer believes that Tiger's version of events is the more likely version. Tiger documented its version in both field notes by Mr. Cook (Tiger Ex. 46, Book 2, pp. 99 - 100) and Mr. Garbinsky (Tiger Ex. 50), and in correspondence to EPA almost immediately after the incident took place. Tiger Ex. 4, Appendix A. Mr. Sherman testified that he made no notes of the incident. Tr. p. 854. A review of EPA Exhibit 45 shows that it is physically impossible to reposition 20 lids with just putting one's hands over the banner tape. Mr. Sherman (an EPA contractor) testified that the lids were on the overpack drums when he left, and that there was no problem with the condition of the containers when he left. Tr. pp. 672 - 673. The Presiding Officer finds it hard to believe that two professionals, Mr. Cook and Mr. Sullivan, would leave 20 lids slightly off center. Mr. Sullivan's testimony is not credible and will be rejected.

The question then becomes whether Mr. Sullivan's actions resulted in cross-contamination of the drums. The Presiding Officer believes that Tiger has not met its burden of proof on this issue.

First,

volatile organic emissions were detected by the PID [photo ionization detector] in 14 of the 35 overpacks with nine of the readings in excess of 10 parts per million (ppm) threshold established in the Removal Action Work Plan as being suspected of having materials with volatile organic compounds. Sheens were reported on the surface of the water in eight overpacks while floating product was reported on the surface of water in four overpacks.

Tiger Ex. 4, p. 2-3. Nine of the 12 drums identified as containing hazardous substances were detected as having VOCs, six of which were greater than 10 ppm. Tiger Ex. 4, Table 2. Eight of the 12 drums in question were reported as having either a sheen or floating product. Tiger Ex. 4, Table 2. These observations and measurements took place on September 13, 1996, prior to the incident involving Mr. Sullivan. Tiger Ex. 46, Book 2, pp. 96 - 98. Thus, there were strong indications that hazardous substances were present in the drums at issue prior to this incident.²¹ Furthermore, one of the drums where VOCs were not detected was J48-1. The only hazardous substances found in this drum were mercury and barium, which are not VOCs. Tiger Ex. 4, Table 4. PCBs (also a hazardous substance) were only found in one drum, I26-1.

Second, a core sample was collected from each drum. This provided a representative sample over the entire depth of the drum. Tiger Ex. 4, pp. 2-4. The samples were then split and mixed to form the samples that Tiger and EPA received. If Mr. Sullivan had placed something in the top of the drum as Tiger has suggested (Tr. p. 80), the core sampling would not be sufficient to determine whether cross-contamination occurred. Other tests would have to have been

²¹As previously noted, a substance is a CERCLA hazardous substance if it contains substances listed as hazardous under any of the statutes referenced in CERCLA § 101(14) regardless of the volumes or concentrations of those substances. *In Re A & W Smelters and Refiners, Inc.*, 6 E.A.D. at 319.

conducted to determine whether cross-contamination had occurred. Tr. pp. 935 - 936.

Third, there is no evidence that Mr. Sullivan carried anything into the exclusionary zone. Only 12 of the 35 drums contain hazardous substances. No one can say which overpack lids Mr. Sullivan removed. Based on the foregoing, Tiger has not met its burden of proof that the analytical results are not reliable to determine whether the drums contain hazardous substances.

D. ANALYTICAL ISSUES

Tiger also claims that EPA failed to comply with sample preservation and holding time protocols, and thus EPA's data is not usable. Tiger Post-Hearing Brief at 62 - 65. However, the evidence shows that although EPA did not follow certain protocols, the only effect would be to lower the concentration of the hazardous substances. Thus, Tiger did not meet its burden of proof on this issue.

EPA obtained split samples from 13 drums on September 19, 1996. Tr. p. 83; Tiger Ex. 4, p. 2-5. Rather than immediately place the samples in an ice chest, some of EPA's samples were outside for up to eight or nine hours. Tr. p. 113. When the samples were sent to the National Enforcement Investigation Center's laboratory in Denver, they were not analyzed until December 1996. Tiger Ex. 19. First, Tiger claims that the samples should have been tested by running TCLP analysis, as required by the EPA approved sampling and analysis plan,

instead of the total analysis method. Tiger Post-Hearing Brief at 63. Second, Tiger claims that EPA failed to properly preserve the samples by not cooling them to 4° C, as required by OSWER Directive 9360.4-07. Tiger Ex. 22. Third, Tiger contends EPA exceeded the recommended holding times set forth by the USEPA Functional Guidelines for Organic Data Review (February 1994). Tiger Ex. 19 and 19B.

First, EPA was not required to run the same type analysis as Tiger. There was no requirement in the sampling and analysis plan that EPA had to conduct the same tests as Tiger. Thus, EPA was free to conduct any type of analysis that it chose. Second, even though that the samples were not placed in an ice chest until early that evening, the only effect would be to reduce the concentration of volatile and semi-volatile compounds. Tr. p. 898. Third, EPA's expert testified that the purpose of the holding times was ensure that analyses that companies conduct of their own samples are analyzed in a timely fashion, so that the concentration of the sample would not decrease below the regulatory limit. It would not otherwise affect the quality of the analysis unless the compound is reactive or breaks down in some way. Tr. pp. 896 - 897. Therefore, the net effect of EPA's inactions would only be to reduce the concentration of the compounds. Therefore, EPA's results are useable to determine the presence of hazardous substances. *See United States v. Hicks*, 103 F.3d 837, 846 (9th Cir. 1996), *cert. denied* 520 U.S.

1193, 117 S.Ct. 1483 (1997) (imperfectly conducted laboratory procedures go to weight, not admissibility of evidence); *People v. Hale*, 29 Cal. App. 4th 730 (Ct. App. Calif. 1994) (sampling evidence admissible even if deviates from SW-846).

E. RESPONSIBLE PERSON UNDER SECTION 107(A) OF CERCLA

In a CERCLA § 106(b) proceeding, the petitioner bears the burden of proof, which includes both the burden of initially going forward with the evidence and the ultimate burden of persuasion. See *In Re B & C Towing Site, The Sherwin-Williams Company*, 6 E.A.D. 199, 207 (EAB 1995). Thus, Tiger has the burden of proving by a preponderance that it is not liable as an operator, generator, or transporter under Sections 107(a)(2), (3), or (4) of CERCLA, 42 U.S.C. §§ 9607(a)(2), (3), or (4). Each of these categories are be discussed below.

1. CERCLA Operator

A person is liable as a CERCLA operator if the person "at the time of disposal of any hazardous substance . . . operated any facility at which such hazardous substances were disposed of." 42 U.S.C. § 9607(a)(2). The parties have stipulated that:

Tiger's CERCLA operator liability in this matter results only from one or more acts of disposal of hazardous substances on the [Mississippi River bed] by Tiger, including its employees, agents, or representatives. EPA further agrees that if Tiger is not found to have disposed of any of the drums containing hazardous substances found

on the [Mississippi River bed], then Tiger is not liable as a CERCLA operator.

Joint Exhibit No. 3 (emphasis in original).

2. CERCLA Generator

A person is liable as a CERCLA generator if the person

by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by such person, by any other party or entity, at any facility or incineration vessel owned or operated by another party or entity and containing such hazardous substances.

42 U.S.C. § 9607(a)(3). In this case, Tiger would be liable as a CERCLA generator if it disposed of drums containing hazardous substances into Mississippi River. However, "CERCLA only requires proof that the generator arranged for disposal of hazardous substances that were 'like' those contained in wastes found at the site." *In Re Chem-Nuclear Systems, Inc.*, 6 E.A.D. at 456. Also, no "direct causal connection" need be established between the Tiger's hazardous substances and the release of hazardous substances at the site. *In Re B & C Towing Site, The Sherwin-Williams Company*, 6 E.A.D. at 219. As the Fourth Circuit Court of Appeals stated in *United States v. Monsanto*:

the phrase "such hazardous substances" denotes hazardous substances alike, similar, or of a kind to those that were present in a generator defendant's waste or that could have been produced by the mixture of the defendant's waste with other waste present at the site. It

does not mean that the plaintiff must trace the ownership of each generic chemical compound at the site . . . a showing of chemical similarity between hazardous substances is sufficient.

858 F.2d 160, 169 (4th Cir. 1988), *cert. denied* 490 U.S. 1106, 109 S.Ct. 3156 (1989).

3. CERCLA Transporter

A person is liable as a CERCLA transporter if the person accepts or accepted any hazardous substances for transport to disposal or treatment facilities, incineration vessels or sites selected by such person from which there is a release, or a threatened release which causes the incurrence of response costs, of a hazardous substance.

42 U.S.C. § 9607(a)(4).

Section 101(26) of CERCLA defines "transport" or "transportation" to mean:

the movement of a hazardous substance by any mode . . . and in the case of a hazardous substance which has been accepted for transportation by a common or contract carrier, the term "transport" or "transportation" shall include any stoppage in transit which is temporary, incidental to the transportation movement, and at the ordinary operating convenience of a common or contract carrier, and any such stoppage shall be considered as a continuity of movement and not as the storage of a hazardous substance.

42 U.S.C. § 9601(26). Thus, in order to be liable as a CERCLA transporter, Tiger must have: (a) accepted hazardous substances for transport; (b) transported the drums containing the hazardous substances to the bed of the Mississippi River; and (c) selected the bed of the Mississippi River as the disposal site.

VI. DISPOSAL OF DRUMS INTO THE MISSISSIPPI RIVER

A. SUMMARY OF PARTIES' POSITIONS

As previously stated, Tiger has the burden of proving by a preponderance of the evidence that it did not dispose of drums containing hazardous substances in the Mississippi River. Tiger cites the following reasons why it is not liable under CERCLA:

1. The drums were disposed of by the previous owner of the site, Greenville Johnny;

2. The river's currents and geography of the area would cause floating drums to become lodged in the river bed near Tiger's facility;

3. The drums were thrown from passing vessels or vessels coming to Tiger for cleaning or repair;

4. Tiger didn't handle certain types of wastes found in the drums. While some of the chemical substances detected in the drums are similar to chemical substances handled by Tiger, the same chemical substances would have been handled by Tiger's predecessor, Greenville Johnny, or by any vessel traveling the Mississippi River.

5. There is no physical link between the Tiger and the drums themselves. There are no markings on the drums which indicate they came from Tiger. Also, drums are in universal use in the inland marine industry;

6. Most of the 35 recovered drums were of a type they did not handle (e.g., ring top drums);

7. The corrosion on the drums indicates that they were in the water longer than five years, thus predating Tiger's operations at the site;

8. The locations of the recovered drums were inconsistent with where Tiger cleaned barges;

9. None of the drums found contained rust or scale, which was the basis for the criminal investigation;

10. There was no economic incentive to illegally dispose of the drums; and

11. The dumping of drums containing chemical substances would cause serious safety concerns.

EPA disputes all of Tiger's claims, and asserts that the drums were disposed of by Tiger, citing:

1. The proximity of the drums to the cleaning plant (50 drums within a 100 foot by 540 foot area near Tiger's barge cleaning operation);

2. The similarity of chemicals between the type of waste found in the drums and the type of wastes generated by Tiger;

3. A former Tiger employee testified that he witnessed illegal dumping in the area of the barge cleaning operation, and that the

waste in the drums resulted from Tiger's barge cleaning operations;
and

4. There are no other barge cleaning facilities upriver of Tiger for at least 60 miles.

As the foregoing discussion concerning these issues will show, the evidence is contradictory and subject to varying degrees of interpretation. Therefore, the concepts of burden of proof and preponderance of the evidence are extremely important. See *In Re Nello Santacroce & Dominic Fanelli d/b/a Gilroy Associates*, 4 E.A.D. 586, 595 (EAB 1993).

B. FLOATING DRUMS/ILLEGAL DISPOSAL FROM VESSELS

The testimony presented at the evidentiary hearing established that floating drums (floaters) are not an uncommon occurrence on the Mississippi River. In fact, witnesses testified to seeing a number of objects, including drums, refrigerators, a part of a house, and even a man floating on a log. Tr. pp. 120, 155. In addition, it is not unusual to discover drums near the Tiger facility. Three drums were discovered in the mud in September 1994, two months after the search warrant was executed. These drums were empty. Tr. pp. 261 - 263; EPA Ex. 12, p. A5; EPA Ex. 45. In April 1995, Tiger discovered an empty drum upstream from the facility that apparently had been exposed by the receding water. Tiger Ex. 42, 43, 44; EPA Ex. 12, p. A5; EPA Ex. 45.

In June 1995, a floating drum was retrieved by Tiger. This drum was also empty. Tr. pp. 277 - 278; Tiger Ex. 45 and 55; EPA Ex. 12, p. A5; EPA Ex. 45. In addition, two floaters were observed while the removal action was taking place. The first floater was observed on August 5, 1995, and sank under Tiger's Office Barge. Tr. pp. 156 - 158; Tiger Ex. 5, p. 2-6. The second floater was observed on August 15, 1995, and was retrieved by Tiger. This drum appeared to contain used motor oil. Tr. pp. 158 - 159; Tiger Ex. 5, p. 2-6. This drum was not sampled.

Tiger also presented testimony that drums were found in the mud in the area of the Tiger facility prior to Tiger's purchase of Greenville Johnny's assets. These drums were observed when the water level in the Mississippi River receded more than usual. Tr. pp. 554 - 555. Likewise, in February 1991, Mr. Anthony Buancore testified that due to the low level of water in the river, he observed numerous drums on the inboard side of the cleaning plant and the batture.²² These drums were later removed. Tr. p. 424. In addition, testimony of illegal dumping of drums from vessels was also presented. Tr. pp. 329 - 330. However, Tiger admitted that it "has never observed nor has it been aware that vessels at its site, or traveling to or from

²²The term batture "is applied principally to certain portions of the bed of the Mississippi River which are uncovered at time of low water but are covered annually at time of ordinary high water." Black's Law Dictionary at 153 (6th Ed. 1990).

its site, have dumped drums into the river at or near [its] site." Tiger Ex. 6, p. 46. Nevertheless, the possibility that one or more of the 35 drums were the result of floaters or illegal disposal from vessels cannot be ruled out.²³

However, this decision is only concerned about the 12 drums that contain hazardous substances. Tiger would have to prove by a preponderance of the evidence that a particular drum in question (e.g., one of the 12) is a floater. The Presiding Officer cannot make a blanket determination that one or more of the drums are floaters without additional evidence as to that particular drum. However, the evidence presented indicates that a majority of the drums came from the barge cleaning facility (either from when it was owned by Greenville Johnny or Tiger).

C. DISPOSAL OF DRUMS FROM THE BARGE CLEANING FACILITY

The Presiding Officer believes that the evidence shows that majority of the 12 drums originated from the barge cleaning facility. A number of the 12 drums were fairly full. Tiger Ex. 60. A full 55 gallon drum can weigh from 400 to 600 pounds. Tr. p. 463. None of the 12 drums had lids. Tiger Ex. 4, Table 11. Thus, these drums would likely sink fast once they were dumped into the river. The proximity of the drums to the barge cleaning facility also cannot be

²³In the future, the term "floater" will refer to any floating drum, whether it disposed of by a shore facility or by a vessel.

overlooked. In addition, seven of the drums had a high iron content (from 19 to 38%), leading EPA to assert that the drums contained rust (iron oxide) from barge cleaning operations.²⁴ Tr. pp. 908 - 909; Tiger Ex. 4, Table 8. Of these seven drums, the physical appearance of the contents and the analytical results for five drums (D55-1 to D55-5) are fairly consistent. Tiger Ex. 4, Table 4 and 8; Tiger Ex. 60; EPA Ex. 45. This, along with the fact they were found in the same location (Tr. pp. 438 - 442; Tiger Ex. 56), suggests that these five drums came from the same source.

However, Tiger claims that no rust or scale was ever found in the drums, disputing EPA's conclusion that the high levels of iron were the result of rust breaking down. However, Tiger's expert witness, Mr. Gerhardus Koch, testified that mechanical action of river water on rust flakes would cause them to break down into powder. Tr. pp. 1115 - 1116. All of the drums with high levels of iron had cut tops, removed lids, or other openings which would allow the contents to be exposed to the river water. Tiger Ex. 4, Tables 8 and 11; Tiger Ex. 60.

Despite Tiger's position, high levels of iron (from the rust) is consistent with its theory that some of the drums were disposed of by Greenville Johnny. For example, Drums D55-1 through D55-5 all

²⁴One other drum had an iron content of 6%. Tiger Ex. 4, Table 8.

contained high levels of iron (from 21 - 38%). Tiger Ex. 4, Table 8. Greenville Johnny also operated a barge cleaning operation at the same site. Tiger claims that these five drums probably came from Greenville Johnny, because of the material contained in the drums, the location of the drums, and the label on Drum D55-4. Tiger Post-Hearing Brief at 68 - 69. If Tiger's argument is true, then these drums would likely contain rust and scale from Greenville Johnny's barge cleaning operation.

Thus, the Presiding Officer believes when you look at all the evidence, the high iron content is consistent with rust from a barge cleaning operation. There is no other logical explanation for the high iron content, when you consider that the drums would sink fast once pushed into the river (due to their weight and no lid), and they were found near a barge cleaning operation, other than the drums contain rust from a barge cleaning operation.

Tiger also cites four other reasons why it could not have disposed of the drums. First, it generated very little rust or scale during the time in question, contending that rust and scale are generated mainly from the cleaning of gasoline barges (Tiger Post-Hearing Brief at 36),²⁵ and that Tiger cleaned very few gasoline barges until after 1994 - 1995. Tr. pp. 405 - 406. However,

²⁵Tiger cited pages 410 - 412 of the transcript in support of this claim, but a careful reading of those pages does not support Tiger's claim.

Tiger's own documents showed that Tiger cleaned 161 gasoline barges in 1991, which constitutes 38.5% of the barges it cleaned in 1991. Tiger Exhibit 9, Table 1. Second, Tiger claims that the extent of the corrosion indicates that the drums had been in the river for a number of years, or pre-dating the time that Tiger operated at this location. Tr. pp. 1096 - 1103. However, no one could testify with any accuracy how long the drums were in the river because no one knows the condition (e.g., whether it was severely corroded, or had holes) or age of the drums at the time they were dumped in the river. See e.g., Tr. pp. 1110 - 1111. Therefore, the extent of corrosion is not necessarily a reliable indication of how long a drum had been in the river.

Third, Tiger asserts that there are no markings on the drums which indicate that they belong to Tiger. However, EPA points out that most of the drums at the facility observed during the search warrant did not contain any markings identifying them as belonging to Tiger. Tr. p. 824. Finally, Tiger claims that the drums photographed during the search warrant are different from those recovered during the removal operation. Although the drums containing rust near the dumpster are different, the three drums of rust located on the LTC-66 Barge are similar. Tiger Ex. 60 and 70; EPA Ex. 15.

There was also conflicting testimony whether Greenville Johnny employees dumped drums into the river. One current Tiger employee, Mr. Myron Porsche, testified that he helped dump two or three drums into the river when the site was operated by Greenville Johnny. Tr. pp. 550 - 551. However, in his April 3, 1996 affidavit, he stated that he observed another worker push two drums into the river. He never mentioned he helped push the drums into the river in his affidavit. Tiger Ex. 27, ¶ 18. Four other Greenville Johnny employees (and current Tiger employees) also testified at the hearing. Mr. Mike Rago testified that never witnessed anyone push any drums into the river during the entire time he was at the facility. Tr. p. 524. However, the three other employees (James Lee, Ronald Rogers, and Patrick Rouse, Sr.), although never asked, never mentioned any illegal disposal of drums while they were working for Greenville Johnny. Tr. pp. 526 - 540; Tiger Ex. 24 and 30.

Several Tiger employees testified that no drums were ever disposed of into the river while Tiger operated the site. See e.g., Tr. pp. 490 - 511. However, the Presiding Officer gave very little weight to this testimony, since it was obviously self serving. No attorney is going to put a person on the stand (having previously interviewed this person) who is going to admit that they dumped drums

into the river, an act for which they could be fired.²⁶ One person's testimony alone would prevent Tiger from receiving more than \$1,400,000 in reimbursement. Thus, the Presiding Officer believes that other evidence (e.g., where the drum was found, the content of the drum, why certain materials in the drum are consistent or not consistent with Tiger's operation, etc.) is much more reliable and probative than the testimony of Tiger's employees who stated that they did not dump drums into the river.

Mr. Troy Courville testified on behalf of EPA that Tiger employees did dump drums into the river. Mr. Courville is a former employee of Greenville Johnny and Tiger. Mr. Courville testified on direct that while he was employed as a mechanic in the cleaning plant at Tiger, he observed Tiger employees throwing drums into the river. He also claims that he witnessed employees throwing buckets or pouring buckets of things in the river. Mr. Courville testified that

²⁶This would also be a criminal offense, but the plea agreement between Tiger and the State of Louisiana provided that no past or current employees would be charged with any offense relating to the disposal of hazardous substances. Letter to Honorable Kathie A. Stein from Keith W. Smith, EPA Attorney dated December 9, 1998, with attached Plea Agreement.

Tiger may argue that is what Myron Porsche did when he testified that he helped dispose of two or three drums into the river when the site was operated by Greenville Johnny. Tr. pp. 550 - 551. However, his testimony places the blame on Greenville Johnny, not Tiger. He could also not be prosecuted for his actions at Greenville Johnny because the statute of limitations has run. 18 U.S.C. § 3282; La.C.Cr.P. Art. 572.

Tiger mainly handled open topped drums which contained rust and trash. The drums contained rust and trash. Mr. Courville stated that the substances that were cleaned from the barges included carbon tet (tetrachloride), benzene, styrene, glycol, caustic, tars, and oil. Tr. pp. 1045 - 1052.

Upon cross-examination, Mr. Courville's memory faltered. He couldn't remember when he started working at Greenville Johnny or when he stopped working at Tiger Shipyard. Tr. pp. 1054 - 1058. He couldn't remember what year he saw the drums being dumped into the river, even within two or three years. Tr. pp. 1058 - 1059. Mr. Courville did state that he observed Donald Bacon dumping drums into the river. Tr. pp. 1060 - 1061. Of course, Mr. Bacon of course later denied this. Tr. p. 1200. Mr. Courville claimed that Tiger employees would also throw a lot of empty barrels into the river. Tr. p. 1061. Mr. Courville also testified that no barrels of rust were ever hauled off for disposal from the Tiger facility. The only thing hauled off in dumpsters was wax. Tr. p. 1073. Mr. Courville also did not know for sure how many barrels of rust were dumped into the river. Upon prompting by Tiger's counsel, he first testified that 400 to 500 drums of rust were dumped into the river, but later changed that figure to anywhere from 100 to 500 drums of rust. Tr. pp. 1073 - 1075.

The Presiding Officer finds that Mr. Courville's testimony is not credible. First, he was unable to recall specific dates of his employment at Greenville Johnny and Tiger and even determine, within two or three years, the date that the drums were disposed of into the river. Thus, the drums that he allegedly saw being dumped into the river could have been dumped while Greenville Johnny operated the site. Second, if several hundred drums of rust were dumped into the river from the cleaning plant (as he testified), more drums would have been discovered during the sonar search. Drums of rust weigh anywhere from 400 - 600 pounds. Tr. p. 463. They would sink rather quickly, especially if the lids were off. Thus, they would likely be found close to the cleaning plant. His testimony that no drums of rust were ever disposed of off-site not only contradicts Mr. Buancore's testimony (Tr. pp. 415 - 416), but what EPA discovered during the execution of the search warrant.²⁷ Therefore, Mr. Courville's testimony cannot be relied upon to prove that Tiger disposed of drums into the Mississippi River. Thus, a drum by drum analysis of each of the 12 drums is necessary to determine how the drums ended up in the Mississippi River.

D. ANALYSIS OF DRUMS

An analysis of the evidence regarding each of the 12 drums reveals that Tiger proved by a preponderance of the evidence Tiger

²⁷EPA found barrels of rust near a dumpster. EPA Ex. 15.

did not dispose of nine drums (C5-1, D55-1, D55-2, D55-3, D55-4, D55-5, I26-1, J17-1, and J48-1). However, Tiger failed to prove by a preponderance of the evidence it did not dispose of three drums (Drums D27-2, F35-1, and F40-1).

1. Drums that were not disposed of by Tiger

a. Drum C5-1 was recovered in an area under Barge 1701. Tiger Ex. 56. The drum was corroded, bent, with holes cut out of the sides near the top of the drum. The drum was labeled "corrosive". Tiger Ex. 60, pp. 33, 34, 36; EPA Ex. 45, picture numbers 911, 1212, 1213, 1218. The analytical results show an iron content of almost 34%, indicating the presence of rust. Tiger Ex. 4, Table 8. Therefore, it is likely that this came from the barge cleaning facility. See Section VI.C, *supra*. Tiger states that it was found in an area of the facility where its liquid storage barges are located. Tiger claims that it does not handle drums in this area. Tr. p. 437. Also, Barge 1701 was moved to its current location in August 1992 (Tiger Ex. 30, ¶ 32) (apparently implying that it could not have disposed of this drum while the barge was in this location). Tiger claims that based on the location of the drum, the drum is more consistent with the operation of Greenville Johnny. Tiger Post-Hearing Brief at 69 - 70.

The sample was described as dark gray-black, granular absorbent like material. Tiger Ex. 4, Table 3. A comparison between the

analytical data (Tiger Ex. 4, Tables 6 and 8) and the substances handled by Tiger (Tiger Ex. 9, Table 1; EPA Ex. 32 and 38) reveals that the content of the drum is similar to substances handled by Tiger.²⁸

EPA contends that although Tiger claims that this drum was found in the portion of the cleaning facility where Tiger typically does not handle drums, it is still part of the cleaning facility. EPA Post-Hearing Brief at 20. Second, if the drum was disposed of after August 1992, then EPA contends that there is sufficient room between the barges and the shore to throw a drum overboard, and with the slope of the river bed, come to rest under the barge. Tr. pp. 1127 and 1129 - 1130.

The Presiding Officer believes that EPA failed to present sufficient evidence to rebut Tiger's showing that drums were not handled in this area [Barge 1701], and thus would not be dumped into the river from that area. In fact, EPA noted that during the execution of the search warrant, that three main areas were used to store drums of waste materials, an area near the parking lot, the LTC-66 Barge, and the Gas Free Barge. EPA Ex. 15, p. 6. It is too

²⁸Tiger contends that nothing about the analytical data is unique to Tiger. Post-Hearing Brief at 69. However, an identical match is not required. *United States v. Monsanto*, 858 F.2d at 169. In addition, the burden of proof is on Tiger to prove that none of the waste originated from it. *In Re B & C Towing Site, The Sherwin-Williams Company*, 6 E.A.D. at 221.

speculative to assume that the drums may have been disposed of prior to August 1992, or disposed of between the barge and the shore. Therefore, it is more likely than not that this drum was not disposed of by Tiger.

b. Drums D55-1 through D55-5 - All five drums were found in close proximity to one another, underneath Barge DHF. Tiger Ex. 56. Drum D55-1 was severely corroded, with rusted out holes. There was no lid or label on the drum. Tiger Ex. 4, Table 11; Tiger Ex. 60, p. 25; EPA Ex. 45, photo numbers 912, 1104 - 1107. Drum D55-2 was corroded with its lid cut out. The label on the lid inside the drum reads "SAE 40 Motor Oil". Tiger Ex. 4, Table 11; Tiger Ex. 60, p. 13; EPA Ex. 45, photo numbers 903, 1017. Drum 55-3 was bent, corroded, with no lid. Tiger Ex. 4, Table 11; Tiger Ex. 60, p. 10; EPA Ex. 45, photo numbers 905, 1015. Drum D55-4 was rusty with 2 holes cut out on the side of the drum near the top, and had no lid. The drum was marked "State Chemical". Tiger Ex. 60, p. 1; EPA Ex. 45, photo numbers 906, 1016, 1225. Drum D55-5 has no lid, was badly dented, and corroded. Tiger Ex. 4, Table 11; Tiger Ex. 60, p. 31; EPA Ex. 45, photo number 908.²⁹

²⁹A comparison between Tiger Ex. 60 and EPA Ex. 45 seems to indicate that they are not the same drum. EPA Ex. 45, photo number 905 shows a badly dented drum, which corresponds to the description in Tiger Ex. 4, Table 11. The drum depicted in Tiger Ex. 60, p. 31 is not dented. Therefore, it appears that Tiger Ex. 60, p. 31 depicts some other drum.

Tiger describes the samples for Drums D55-1 through D55-4 as tar or asphalt like material. Drum D55-5 was described as black medium to coarse grain sand. Tiger Ex. 4, Table 3. EPA samples for Drums D55-1, D55-2, D55-3, and D55-5 were described as oily solids. The sample for D55-4 was described as gray-black, wet, fine to medium solid. EPA Ex. 16. The analytical results show an iron concentration from 21% to 38%, thus indicating the presence of rust. Tiger Ex. 4, Table 8. Thus, the Presiding Officer concludes that these five drums came from the barge cleaning facility. See Section VI.C *supra*.

A comparison between the analytical data (Tiger Ex. 4, Tables 4 and 8; EPA Ex. 16) and the substances handled by Tiger (Tiger Ex. 9, Table 1; EPA Ex. 32 and 38) reveals that the contents of the drums are similar to the substances handled by Tiger. However, the analytical results also show the presence of cresols. Tiger Ex. 4, Table 4. Tiger presented evidence that it did not clean barges containing creosote, asphalt, or heavy oils. Tr. pp. 404 and 495; Tiger Ex. 9, Table 1; EPA Ex. 32 and 38. On the other hand, Greenville Johnny cleaned barges containing these substances. Tr. pp. 555 and 557. In addition, the drums were also located underneath Barge DHF. This barge was moved to this location in the fall of 1991. Tr. pp. 392 - 393. Furthermore, Tiger discontinued using

State Chemical (Drum D55-4) as a vendor shortly after Tiger took over operations at the site. Tr. pp. 539 - 540.

EPA responds that the Barge DHF was not moved to that location until November 1991, and that Tiger had one year to dispose of drums in that location. EPA Reply Brief at 20. EPA also claims that the cresols could result from sources other than creosote, solvents, pesticide formulations, the combustion of diesel fuels, and biodegradation of other chemicals. Tr. p. 906. EPA further asserts that Tiger handled a number of petroleum products. EPA Reply Brief at 17, fn. 18.

However, the Presiding Officer believes that EPA arguments are too speculative, and thus Tiger has met its burden of proof that it did not dispose of these five drums. They were more likely than not disposed of by Greenville Johnny, due to the presence of cresols, and the testimony that Greenville Johnny cleaned barges that contained creosote, asphalt, or heavy oils. There is no evidence that Tiger cleaned barges containing these substances. Tr. pp. 404, 495, 555, and 557. See *In Re B & C Towing Site, The Sherwin-Williams Company*, 6 E.A.D. at 221 ("presence of certain chemicals that could not be in Sherwin-Williams' waste stream, no matter how small the amount, shows that the waste subject to the clean-up order cannot be fully accounted for by Sherwin-William's waste").

c. Drum I26-1 was found approximately 40 feet off the cleaning plant in a debris pile. Tiger Ex. 56. The condition of the drum could not be determined because the drum was wrapped in plastic. However, the lid had been removed. Tiger Ex. 4, Table 11. The contents seem to be a very thick black liquid. EPA Ex. 45, photo numbers 808, 1020, 1021, 1022. Tiger describes the sample as a tar or asphalt like sludge. Tiger Ex. 4, Table 3. A comparison between the analytical data (Tiger Ex. 4, Tables 4, 6, and 8; EPA Ex. 16) and the substances handled by Tiger (Tiger Ex. 9, Table 1; EPA Ex. 32 and 38) reveals that the content of the drum is similar to the substances handled by Tiger. However, the analytical results also show the presence of cresols and PCBs greater than 500 ppm.³⁰ Tiger Ex. 4, Table 4 and 8. Tiger claims that they never handled PCBs. Tr. pp. 418 - 419.

In response, EPA claims that part of Tiger's operations involved stripping used oil off barges. PCBs are found in certain capacitors, transformers, and hydraulic or heat transfer fluids. 40 C.F.R. Part 761. EPA noted that Tiger sometimes bought oil for customers' barges in order to replace the heating transfer oil in the barges (which could be up to 20 years old). EPA Reply Brief at 17 - 18 (citing Tr. pp. 410 - 411, 518 - 519). However, EPA's response is

³⁰The concentration of PCBs was estimated. Tiger Ex. 4, Table 8.

speculative. Allegations that oil may have contained PCBs are insufficient to rebut Tiger's evidence. Therefore, Tiger has met its burden of proof, and I conclude it was more likely than not that this drum was not disposed by Tiger because of the presence of cresols and PCBs. See *In Re B & C Towing Site, The Sherwin-Williams Company*, 6 E.A.D. 199, 221 (EAB 1995) ("presence of certain chemicals that could not be in Sherwin-Williams' waste stream, no matter how small the amount, shows that the waste subject to the clean-up order cannot be fully accounted for by Sherwin-Williams waste").

d. Drum J17-1 was found approximately 40 feet off the cleaning plant in the same debris area as drum I26-1. Tiger Ex. 56. The drum had no lid, was bent, corroded, with some holes in the drum. Tiger Ex. 60, p. 14; EPA Ex. 45, photo number 1018. Tiger's sample was described as dark gray with streaks, pockets brown black medium to coarse grain sand, with streaks of tar or asphalt like material, and welding rods. Tiger Ex. 4, Table 3. EPA's sample was described as brown-gray, wet, oily sand. EPA Ex. 16. A comparison between the analytical data (Tiger Ex. 4, Tables 4, 6, and 8; EPA Ex. 16) and the substances handled by Tiger (Tiger Ex. 9, Table 1; EPA Ex. 32 and 38) reveals that the content of the drum is similar to the substances handled by Tiger.

However, Tiger claims that due to the presence of welding rods, this drum did not come from its facility. Tiger argues that no

welding is ever done in the barge cleaning yard due to safety concerns. Barges have blown up in the past at other facilities due to sparks, electrical generation, or hot work being done in an inappropriate place. For example, Tiger uses non-sparking tools in the barge cleaning plant. Thus, Tiger asserts that welding rods would not be present in the barge cleaning plant area. Tiger also presented testimony that boats, tows, and barges have welding machines on board. Tr. pp. 420 - 421; Tiger Ex. 18, ¶ 40.

EPA claims that the welding rods could have gotten in the drum in a number of ways. First, after repair work is done to a "double bottom" barge, welders often leave welding rods in the bottom, and after some time, the "double bottoms" are cleaned in the cleaning facility and the welding rods end up in the drums. Also, barges sometimes go from the cleaning plant to the repair plant and back to the cleaning plant for more cleaning. Under this scenario, the barge generally has topside repairs remaining, and the welding rods would be found on deck. If there is a drum on top, the rods could easily get tossed in the drum when it goes back to the cleaning plant. In other words, EPA contends that fact that a drum contains welding rods is not conclusive of the drum's origin. Tr. pp. 1002 - 1004.

Although EPA's argument sounds plausible, it is speculative. There is no evidence that any of these events occurred at the Tiger facility. Therefore, it is not sufficient to rebut Tiger's evidence

that Tiger did not conduct welding operations in the barge cleaning plant and that other vessels have welding machines onboard. Therefore, it is more likely than not that this drum was not disposed of by Tiger.

e. Drum J48-1 was found approximately 35 feet from the DHF Barge. Tiger Ex. 56. The lid had been removed, a one foot circle cut on one side, rusted, with rusted out holes. A label on the side reads "Conoco - Fleet Heavy Duty Motor Oil SAE 40". Tiger Ex. 4, Table 11; Tiger Ex. 60, pp 2, 38; EPA Ex. 45, photo numbers 910, 1023, 1024, and 1222. Tiger's sample was described as gray with dark brown streaks, medium to coarse grain sand. Tiger Ex. 4, Table 3. EPA's sample was described as gray, wet, fine sand. EPA Ex. 16. The only substances identified by Tiger's analysis are small amounts of barium and mercury. Tiger Ex. 4, Table 4. EPA's analysis did not detect any target compounds. EPA Ex. 16. However, Tiger did not clean barges containing only barium or mercury. Tiger Ex. 9, Table 1, EPA Ex. 32 and 38. Therefore, it is more likely than not this drum was not disposed of by Tiger.

2. Drums disposed of by Tiger

As shown below, Tiger failed to prove by a preponderance of the evidence that it did not dispose of three drums (D27-2, F35-1, and F40-1). The only testimony at the hearing concerning these three drums which related to liability was either the location of the drum

(D27-2) or the condition of the drums (F35-1 and F40-1). Tr. pp. 443, 1102 - 1103. As discussed in Section VI.C, the Presiding Officer gave very little weight to the testimony of Tiger employees who testified that they did not dump drums into the river. The Presiding Officer believes that other evidence is more reliable and probative than this type of testimony. Tiger did, however, incorporate by reference its previous arguments concerning these drums from its Petition. Tiger Ex. 6, pp. 59 - 60. However, these arguments mainly consisted of conclusory statements. Therefore, the Presiding Officer was left to piece together the evidence. Tiger has the burden of proving that *none* of the waste (none of the drums) originated from it. *In Re B & C Towing Site, The Sherwin-Williams Company*, 6 E.A.D. at 221. Thus, Tiger's decision not to argue or present sufficient evidence (*on an individual drum basis*) proved fatal for these three drums.³¹

³¹One reason why Tiger may not have presented more evidence is that Tiger claims that these drums did not contain hazardous substances because they did not fail the TCLP test. Tiger Post-Hearing Brief at 66; Tiger Reply Brief at 33, 38 - 40. However, the Presiding Officer rejected this claim. See Section V.A, *supra*.

However, the Presiding Officer was able to determine that Drum J48-1 (which Tiger also claimed did not contain hazardous substances) did not belong to Tiger because the only hazardous substances detected in the drum were barium and mercury. Tiger Ex. 4, Table 4. There was no evidence that Tiger cleaned any barges containing only barium or mercury. Tiger Ex. 9; EPA Ex 32 and 38.

a. Drum D27-2 was located under Barge DM 365, one of the barges comprising the cleaning plant. Tr. p. 443; Tiger Ex. 56. The drum was corroded, slightly bent, with no lid, and no labels. Tiger Ex. 4, Table 11; Tiger Ex. 60, p. 11; EPA Ex. 45, picture numbers 901, 1002, and 1005. Tiger's sample was described as dark brown medium to coarse grade sand. Tiger Ex. 4, Table 3. EPA's sample was described as "top layer: gray-brown, cloudy, nonviscous liquid (2%); bottom layer: gray-brown, wet, fine to medium sand (98%)". EPA Ex. 16. Both Tiger's and EPA's analytical results show the presence of chloroform. Tiger did clean barges containing chloroform. Tiger Ex. 9, Table 1 (23 barges in 1991); EPA Ex. 38 (13 barges from April - December 1993). This drum had no lid, so it likely sank quickly.

The only testimony potentially related to liability was a discussion of its location. Tr. p. 443. In its Petition (Tiger Ex. 6), Tiger claims that this was a ring-top drum, with no characteristics or appearances consistent with Tiger operations or materials it handled, and thus it was more likely a floater. Tiger Ex. 6, p. 59. Tiger has argued that it did not handle ring-top drums. However, the evidence presented shows that Tiger did purchase some ring-top drums. Tr. p. 434, Tiger Ex. 28, ¶ 11.

Conclusory statements by Tiger that there no characteristics or appearances consistent with Tiger operations or materials it handled, and that it was more likely a floater are insufficient to meet its

burden of proof. See *Masat v. C.I.R.*, 784 F.2d 573, 576 (5th Cir. 1986); *Patel v. Minnix*, 663 F.2d 1042, 1043 - 1044 (8th Cir. 1981). Tiger may now argue that drum's location under the barge means that it couldn't have disposed of the drum. However, Barge DM 365 was also a part of Greenville Johnny's configuration. Tr. pp. 393 - 400, 449; Tiger Ex. 30, ¶ 32. Likewise, a floater would somehow have to get under the barge as well. Tiger may also argue that the extent of corrosion visible in the photos indicates that drums had been in the river before Tiger had operated the site. However, no one knows the condition of the drum at the time it was disposed of in the river. Thus, this evidence is of little value. See Section VI.C, *supra*. Thus, Tiger's failure to present sufficient evidence that *this particular drum* was not disposed of by Tiger was fatal.

b. Drum F35-1 was found just off Barge DM 365. Tiger Ex. 56. This drum had no lid, was corroded, and slightly bent out of shape. The marking "TRA" is legible on its side. Tiger Ex. 4, Table 11; Tiger Ex. 60, pp. 18 - 19; EPA Ex. 45, photo numbers 805, 1111. The sample was described as dark grey, medium to coarse grain sand, granular like absorbent material, tree branches. Tiger Ex. 4, Table 3. The analytical results show an iron content of 19%, indicating the presence of rust. There was no lid, so the drum likely sank quickly. Thus, it is more likely than not that the drum came from the barge cleaning facility. See Section VI.C, *supra*. A comparison

between the analytical data (Tiger Ex. 4, Tables 6, 7, and 8) and the substances handled by Tiger (Tiger Ex. 9, Table 1; EPA Ex. 32 and 38) reveals that the content of the drum is similar to substances handled by Tiger.

The only testimony related to liability at the hearing was an opinion that the corrosion of the drum was severe, and that it had been in the water for several years. Tr. p. 1102. However, because no one knows the condition of the drum at the time it was disposed of in the river, this evidence is of little value. See Section VI.C, *supra*. In its Petition, Tiger argued that:

this drum was found in an area where the Corps of Engineers revetment apparently had some buckles and accumulated debris . . . It appeared to be an open, ring-top drum, in bad condition, warped out of round and rusty . . . Nothing about the drum is consistent with Tiger's operations. Rather, given its location, condition, and description, it is more likely a floater or from a vessel or barge navigating the river which became entangled in the debris and the revetment. It is not Tiger's drum.

Tiger Ex. 6, pp. 59 - 60.

Tiger has argued that it did not handle ring-top drums. However, the evidence presented shows that Tiger purchased some ring-top drums. Tr. p. 434, Tiger Ex. 28, ¶ 11. Given the fact that it is more likely than not that the drum came from the barge cleaning facility due to its high iron content, Tiger's floater argument is rejected. In addition, conclusory statements by Tiger that there no characteristics or appearances consistent with Tiger operations or

materials it handled are insufficient to meet its burden of proof. See *Masat v. C.I.R.*, 784 F.2d 573, 576 (5th Cir. 1986); *Patel v. Minnix*, 663 F.2d 1042, 1043 - 1044 (8th Cir. 1981). Once again, Tiger's failure to present sufficient evidence that *this particular drum* was not disposed of by Tiger results in Tiger failing to meet its burden of proof.

c. Drum F40-1 was found just off Barge DM 365. Tiger Ex. 56. The drum was corroded, partially torn, with small holes. There was also no lid on the drum. Tiger Ex. 4, Table 11; Tiger Ex. 60, p. 35; EPA Ex. 45, photo number 1114. The sample was described as dark brown-pockets brown, medium to coarse grain sand, granular like absorbent material. Tiger Ex. 4, Table 3. The only hazardous substance identified was tetrachloroethylene. Tiger Ex. 4, Table 7. Tiger did clean barges containing tetrachloroethylene.³² Tr. p. 930; EPA Ex. 15, pp. 5, 7, 8, and Table 1; EPA Ex. 32.

The only testimony related to liability at the hearing was that there was a hole in the drum and Mr. Koch's opinion that the drum had been in the water for several years. Tr. p. 1102. However, because no one knows the condition of the drum at the time it was disposed of in the river, this evidence is of little value. See Section VI.C, *supra*. In its Petition, Tiger stated that

³²Tetrachloroethylene is a synonym for perchloroethylene. Lewis, *Hazardous Chemicals Desk Reference* at 998 (3rd Ed. 1993); EPA Ex. 15, p. 7 footnote.

this drum is fairly similar to that of Drum F35-1 in that it was in poor condition, rusty with holes, out of round and contained granular-like absorbent material . . . It, too, was found in an area near buckled revetment . . . Given its location, condition, and description, this drum is more like than not a floater or from a vessel or barge navigating the river or from Greenville operations. It is not Tiger's drum.

Tiger Ex. 6, p. 60.

The classification of a drum as a floater would be rejected without more evidence. See Section VI.B, *supra*. Once again, conclusory statements by Tiger that there no characteristics or appearances consistent with Tiger operations or materials it handled, and that it was more likely a floater are insufficient to meet its burden of proof. See *Masat v. C.I.R.*, 784 F.2d 573, 576 (5th Cir. 1986); *Patel v. Minnix*, 663 F.2d 1042, 1043 - 1044 (8th Cir. 1981). Thus, for a third time, Tiger's failure to present sufficient evidence concerning *this particular drum* results in Tiger failing to meet its burden of proof.

E. DETERMINATION OF LIABILITY

As shown above, Tiger failed to prove by a preponderance of the evidence that it did not dispose of three drums into the Mississippi River. Thus, Tiger is liable as an operator and generator under Section 107(a)(2) and (3) of CERCLA, 42 U.S.C. §§ 9607(a)(2) and (3). Tiger is also liable as a transporter under Section 107(a)(4) of CERCLA, 42 U.S.C. § 9607(a)(4). Tiger accepted the waste from its

customers and was responsible for its off-site disposal. Tr. pp. 434 - 436. Instead, Tiger selected the river as its disposal site and moved the drums from its facility to the river. Thus, Tiger is liable as a CERCLA transporter.

VII. THIRD PARTY DEFENSE

Since the Presiding Officer has determined that Tiger is liable as an operator, generator, and transporter under Sections 107(a)(2), (3), and (4) of CERCLA, 42 U.S.C. §§ 9607(a)(2), (3), and (4), the question becomes whether Tiger is entitled to the third party defense of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).³³ Tiger bears the burden of proof of establishing all of the elements of a third party defense by a preponderance of the evidence. *In Re Tamposi Family Investments*, 6 E.A.D. 106, 120 (EAB 1995).

Liability under section 107(a) is "subject only to the defenses set forth in subsection (b)." 42 U.S.C. § 9607(a). Tiger has raised the third party defense of Section 107(b)(3), which provides that:

There shall be no liability under [§ 107(a)] for a person otherwise liable who can establish by a preponderance of the evidence that the release or threat of release of a hazardous substance and the damages resulting therefrom were caused solely by -

* * * *

³³Tiger's innocent landowner defense was stricken prior to the evidentiary hearing. *In the Matter of Tiger Shipyard, Inc.*, 1999 EPA RJO LEXIS 3 (April 21, 1999).

3) an act or omission of a third party other than an employee or agent of the defendant, or than one whose act or omission occurs in connection with a contractual relationship, existing directly or indirectly, with the defendant (except where the sole contractual arrangement arises from a published tariff and acceptance for carriage by a common carrier by rail), if the defendant establishes by a preponderance of the evidence that (a) he exercised due care with respect to the hazardous substance concerned, taking into consideration the characteristics of such hazardous substance, in light of all relevant facts and circumstances, and (b) he took precautions against foreseeable acts or omissions that could foreseeably result from such acts or omissions.

42 U.S.C. § 9607(b)(3).

"The third party defense under CERCLA requires proof that the acts or omissions of a third party be the sole cause of the release." *Carter-Jones Lumber Company v. Dixie Distributing Company*, 166 F.3d 840, 845 (6th Cir. 1999) (citing 42 U.S.C. § 9607(b)(3)); *United States v. Monsanto Company*, 858 F.2d at 168 (section 107(b)(3) creates a defense only where there is "complete absence of causation" on the part of the defendant in connection with the release or threatened release at the CERCLA facility). Thus, Tiger's acts as an operator, generator, and transporter under CERCLA (disposing of drums into the river) preclude a finding that a third party was the sole cause of the release. Therefore, Tiger is not entitled to the third party defense of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

VIII. OTHER ISSUES

A. USE OF DAUBERT STANDARD IN A NON APA ADMINISTRATIVE HEARING

Tiger contends that the Presiding Officer improperly granted Mr. Mark Toepfer expert status, citing *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S.Ct. 2786 (1993). *Daubert* provides that a trial judge must perform a gatekeeping function to determine the admissibility of expert testimony.³⁴ However, the *Daubert* standard is based on Rule 702 of the Federal Rules of Evidence. *Daubert*, 509 U.S. at 588 - 592, 113 S.Ct. at 2794 - 2796. The Federal Rules of Evidence do not apply to this administrative hearing. The standard for admissibility of evidence is 40 C.F.R. § 22.22(a) ("Presiding Officer shall admit all evidence [that] is not irrelevant, immaterial, unduly repetitious, or otherwise unreliable or of little probative value"). The Consolidated Rules of Practice, 40 C.F.R. Part 22, allow for the admission of a broader range of evidence than under the Federal Rules of Evidence. *In Re Ocean State Asbestos Removal, Inc.*, CAA Appeal Nos. 97-2 and 97-5, slip op. at 12, fn. 7 (March 13, 1998); *In Re Britton Construction Company*, CWA Appeal Nos. 97-5 & 97-8, slip op. at 34, fn. 14. (March 30, 1999) (Federal Rules of Evidence more restrictive than EPA's administrative rules). Therefore, the *Daubert* standard is inapplicable in this

³⁴*Daubert* was limited to scientific testimony. In *Kumho Tire Company, Ltd. v. Carmichael*, 119 S.Ct. 1167 (1999), the U.S. Supreme Court extended the *Daubert* decision to all expert testimony.

case. Irrespective of *Daubert* standard, the Presiding Officer did not rely on Mr. Toepfer's testimony for any material issue in this case. Therefore, Tiger's argument is not only irrelevant, but moot.

B. ORDER STRIKING PORTION OF TIGER'S REPLY BRIEF

In its Reply Brief, Tiger argued that EPA's Post-Hearing Brief improperly referred to statements by Mr. Eric Minor and Mr. Thomas Firman. Tiger claims that EPA was attempting to use inadmissible statements of Mr. Minor and Mr. Firman even though their statements were not part of the record. Tiger Reply Brief at 18 - 20. Neither person testified at the hearing.³⁵ At the hearing, EPA sought to introduce a Declaration from Mr. Firman, but the Presiding Officer ruled that the Declaration was inadmissible. Tr. pp. 961 - 962. As a result of EPA's arguments in its Post-Hearing Brief, Tiger provided a narrative of negative information about Mr. Minor and Mr. Firman. Tiger Reply Brief at 21 - 23.

However, Tiger's narrative concerning Mr. Minor and Mr. Firman was improper. If Tiger believed that portions of EPA's Brief were improper, Tiger should have filed a motion to strike those allegedly inappropriate portions, not put unsubstantiated allegations in its

³⁵EPA claimed that these two persons would not testify without a subpoena. However, the Presiding Officer ruled that he did not have the authority to issue subpoenas in this action. *In the Matter of Tiger Shipyard, Inc.*, 1999 EPA RJO LEXIS 2. EPA filed a Motion for Reconsideration of Order Denying EPA's Motion for Subpoenas on April 23, 1999. This motion was denied via a bench ruling. Tr. pp. 9 - 10.

reply brief. The Presiding Officer is well aware of what was admitted into evidence and what was rejected. However, Tiger's action was inexcusable. Therefore, it is hereby **ORDERED** that the portion of Tiger's Reply Brief beginning with the second paragraph on page 21 through the end of Section II.E. on page 23 is stricken from the record.

C. MISCELLANEOUS ISSUES

Tiger has raised two other issues in its Post-Hearing Brief. First, Tiger claims that EPA's extended warrantless search of the Tiger Facility was in violation of the Fourth Amendment of the Constitution, and thus it is entitled to have all illegally obtained evidence suppressed. Tiger's Post-Hearing Brief at 9 - 10, fn. 16. Tiger not only never identified what evidence was illegally obtained, it never raised this issue until its Post-Hearing Brief. Therefore, to the extent that there is a motion to exclude certain evidence, the motion is denied.

Second, Tiger claims that if it is found liable, it is entitled to apportionment of the removal costs. Tiger Post-Hearing Brief at 71 - 73. However, apportionment of removal costs is beyond the scope of the Presiding Officer's authority in this matter.

IX. CONCLUSION

Based on the foregoing, it is the recommendation of the Presiding Officer that:

1. Tiger is liable within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2), as an operator of a facility at which hazardous substances were disposed of;

2. Tiger is liable within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3), as a person who by contract, agreement, or otherwise arranged for disposal of hazardous substances;

3. Tiger is liable within the meaning of Section 107(a)(4) of CERCLA, 42 U.S.C. § 9607(a)(4), as a person who accepted any hazardous substances for transport to disposal facilities;

4. Tiger does not have a defense to liability under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), by virtue of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3), which protects otherwise liable parties from the acts or omissions of third parties; and

5. Tiger does not have a defense to liability under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), by virtue of the "innocent landowner" defense.

This Recommended Decision constitutes the Presiding Officer's Findings of Fact and Conclusions of Law. See F.R.C.P. 52(a) ("it is sufficient if the findings of fact and conclusions of law . . . appear in an opinion"). All proposed findings of fact and conclusions of law inconsistent with those set forth herein are rejected.

Pursuant to instructions from the Board, the Parties may submit comments on the Recommended Decision. Any Party wishing to submit comments shall submit an original and five copies of their comments to the Clerk of the Board, with one copy served on the Regional Hearing Clerk. Comments cannot exceed limited twenty (20) double spaced pages, and are limited to alleged factual and/or legal errors in the Recommended Decision. **All comments must be received by the Clerk of the Board within fifteen (15) days from service of the Recommended Decision.**

Dated this 26th day of July, 1999.

/S/ _____
Evan L. Pearson
Regional Judicial Officer

CERTIFICATE OF SERVICE

I hereby certify that on the 26th day of July, 1999, I served true and correct copies of the foregoing Recommended Decision on the following in the manner indicated below:

CERTIFIED MAIL - RETURN RECEIPT REQUESTED P 422 558 592

Clerk of the Environmental Appeals Board (1103B)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED P 004 766 925
AND VIA OVERNIGHT MAIL**

Michael Chernekoff
Jones, Walker, Waechter, Poitevent,
Carrere & Danegre, L.L.P.
Place St. Charles
201 St. Charles Avenue
New Orleans, Louisiana 70170-5100

INTEROFFICE MAIL

Keith Smith
Assistant Regional Counsel
Superfund Branch
Office of Regional Counsel
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

/S/
Evan L. Pearson
Regional Judicial Officer