TCEQ DOCKET NO. _____

IN THE MATTER OF VIOLATIONS	§	**BEFORE THE**
OF THE TEXAS SOLID WASTE	§	
DISPOSAL ACT AND TCEQ	§	**TEXAS COMMISSION ON**
REGULATIONS BY PENSKE	§	
TRUCK LEASING CO., L.P. AND	§	**ENVIRONMENTAL QUALITY**
PENSKE LOGISTICS, INC.	§	

TEXAS DISPOSAL SYSTEMS LANDFILL, INC.'S
PETITION TO REVIEW THE EXECUTIVE DIRECTOR'S ACTION
AND ORDER PROPER DISPOSAL OF HAZARDOUS WASTE

TO THE HONORABLE COMMISSIONERS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY:

COMES NOW Texas Disposal Systems Landfill, Inc. ("TDSL") and files this, its Petition to Review the Executive Director's Action and Order Proper Disposal of Hazardous Waste, seeking the Texas Commission on Environmental Quality's ("TCEQ" or "Commission") review of the Executive Director's failure to enforce State and federal laws and regulations governing management and disposal of hazardous waste, and requesting the Commission to order that the hazardous waste left on TDSL's site be removed, managed, and disposed of by Penske Truck Leasing Co., L.P. and Penske Logistics, Inc. ("Penske") in compliance with all applicable law.

SUMMARY STATEMENT OF THE PETITION

Because the Executive Director and Penske, the party primarily responsible for abandonment of hazardous waste on TDSL's property, have failed to, and refused to, relieve TDSL from the enormous burden which that illegal waste abandonment has imposed on TDSL for nearly a decade, TDSL is requesting that the TCEQ Commissioners exercise their plenary power to enforce the Texas Solid Waste Disposal Act and the regulations that they have adopted to implement this Act and their delegated responsibilities under the federal Resource

Conservation and Recovery Act ("RCRA"); order Penske to remove this hazardous waste from TDSL's property and manage and dispose of it in full compliance with State and federal law; and order the Executive Director to take all action necessary to ensure that Penske does obey the law and the mandate of the Commission.

BACKGROUND

This matter began with a traffic accident on Interstate Highway 35 ("IH-35") south of Austin, Texas, on October 9, 1997, involving a load of 1,248 cathode ray tubes ("CRTs") owned by Zenith Electronics Corporation ("Zenith") and transported by a Penske truck. The CRTs were being shipped by Zenith to a final assembly plant in Mexico as part of Zenith's television assembly process.

As a result of the traffic accident, the broken and discarded CRTs were D008 characteristic hazardous waste pursuant to Zenith's pre-existing waste characterization for broken or discarded CRTs based on process knowledge, including Zenith's TCLP tests on broken CRTs. In addition, by contract between Zenith and Penske, Penske was aware of the D008 characterization of broken or damaged CRTs and the resulting necessity to dispose of the broken CRTs as hazardous waste in accordance with RCRA regulations. In spite of this corporate knowledge, responsibility, and duty, the Penske driver, who was in direct communication with his dispatch supervisor from the time immediately following the truck accident, initially represented to emergency responders that the broken and discarded CRTs were not hazardous. Penske did not notify the on-scene emergency responders that the discarded CRTs were in fact classified as hazardous waste until approximately four hours after the accident, although Penske officials were aware of the accident within minutes of when it occurred. Zenith officials, within approximately forty minutes after the accident, reminded Penske officials that the broken and discarded CRTs had to be disposed of as hazardous waste.

As a result of Penske's misconduct, nine dump truck loads of D008 CRT waste were sent to TDSL's municipal solid waste ("MSW") landfill near Creedmoor, and seven loads were placed on and compacted into the working face, under the Penske representation that it was not hazardous waste. Upon notification of the D008 classification by Penske, approximately four hours after the initial misrepresentation by the Penske driver, TDSL refused to accept additional loads of D008 CRT waste, immediately required return of two of the dump trucks of D008 CRT waste to the accident scene, and immediately isolated the D008 CRT waste that had been commingled with regular MSW in the working face. TDSL also immediately placed a demand upon Penske to remove the D008 CRT waste from the TDSL landfill as required by TDSL's Commission-approved Site Operating Plan ("SOP").

When on-scene emergency responders were finally informed by Penske that the accident scene waste was D008 hazardous waste, they immediately stopped all clean up activities at the accident scene and directed Penske to assume responsibility for all clean up activities. Penske then hired an independent hazardous waste remediation contractor, Code 3 Environmental Services ("Code 3"), to finish the cleanup of the D008 CRT waste and accident debris on October 9, 1997. The Penske contractor loaded the remainder of the broken and discarded CRTs, packing materials, and CRT-contaminated soils from the bar ditch along IH-35 into seven roll-off containers. The Penske contractor then sent seven roll-off containers of the material to the TDSL landfill, with TCEQ approval, for secure storage awaiting proper disposal at an authorized facility.

On October 10, 1997, TDSL inspected the landfill working face surface and removed D008 CRT waste, packing materials from the load of CRTs, and regular MSW visibly contaminated by D008 CRT glass. This segregated D008 waste was contained in two partially

filled roll-off containers to await proper disposal by Penske. In January 1998, these two partially filled roll-off containers of segregated D008 waste plus the seven roll-off containers of discarded CRTs, packing materials, and CRT-contaminated soils were hand-sorted by Code 3, Penske's hazardous waste remediation contractor, into separate hazardous and non-hazardous waste containers. The hazardous waste classified materials, which included CRT glass, regular MSW contaminated with CRT glass, and bar ditch soils contaminated with CRT glass, were placed in two roll-off containers and were properly disposed of by Penske at a hazardous waste landfill as D008 hazardous waste under a standard hazardous waste transport and disposal manifest.

Following the October 10, 1997 surface removal activity, the D008 CRT waste remaining in the working face beneath the surface, along with D008 contaminated MSW and cover soil (the "commingled D008 waste"), were pushed to the edge of the disposal area for isolation and encapsulation by TDSL to await removal and proper disposal by Penske. Since Penske would not hire Code 3 to remove the waste from the landfill, TDSL hired Code 3 to supervise the isolation and encapsulation of the commingled D008 waste for its subsequent removal.

The record is clear that TDSL immediately rejected all D008 CRT waste that was delivered to the TDSL landfill working face, after being notified that it was hazardous, and demanded that Penske remove its D008 CRT waste as well as the MSW and soil contaminated by the D008 CRT waste. The D008 CRT waste was never disposed of at the TDSL landfill, even though Penske allowed it to be shipped to the TDSL landfill for disposal and then abandoned it to become the problem of TDSL and the Commission. Instead, pursuant to Permit No. MSW-2123 issued to TDSL by the Commission and TDSL's approved SOP, the commingled D008 waste was immediately isolated and stored at the TDSL landfill pending removal by the

generator (*i.e.*, Penske) for proper disposal. The commingled D008 waste has now been stored at the TDSL landfill for nearly ten years awaiting removal and proper disposal by Penske.

On January 15, 2004, the Commission authorized TDSL to transfer the commingled D008 waste from storage in the landfill to storage in roll-off transport containers. TDSL moved the commingled D008 waste from the encapsulated area to 99 plastic-lined and covered roll-off containers, placed the containers on a secured clay pad, and continued to wait for Penske to transport the commingled D008 waste to an authorized hazardous waste treatment and/or disposal facility pursuant to appropriate hazardous waste manifest. (A schematic description of the fate of the D008 CRT waste is depicted in the one-page illustration attached hereto as Exhibit 1.)

It is well-documented that a substantial amount of D008 CRT waste from the accident is contained within the commingled D008 waste. Mr. Eric Cooper, an employee of Code 3, confirmed under oath in a March 2004 deposition that pieces of D008 CRT waste were present in the commingled D008 waste now stored in the 99 roll-off containers.[1] Another third-party environmental consultant, Mr. Ian Howes of HBC/Terracon, stated in his deposition that in January and February 2004 he observed numerous pieces of glass, which appeared to come from the CRT monitors, in the material going into the 99 roll-off containers.[2] Mr. Robert Zoch, a recognized RCRA expert, has determined that more than 18.1 % of the original amount of D008

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1 *See* Deposition of Mr. Eric Cooper, *Texas Disposal Sys. Landfill, Inc. v. Penske Truck Leasing Co., L.P.*, Cause No. 98-0159, 207th Judicial Dist. Ct., Hays County, Texas, at 93-95 (Mar. 1, 2004), attached hereto as Exhibit 2.

2 *See* Deposition of Mr. Richard Ian Howes, *Texas Disposal Sys. Landfill, Inc. v. Penske Truck Leasing Co., L.P.*, Cause No. 98-0159, 207th Judicial Dist. Ct., Hays County, Texas, at p. 53 & 55 (Mar. 3, 2004), attached hereto as Exhibit 3.

CRT waste remains in the 99 roll-off containers.[3] This can be easily calculated to show there are thousands of pounds of toxic characteristic hazardous lead waste in the 99 roll-off containers.

On May 13, 2004, the Executive Director issued a notice of violation ("NOV") to Penske as the generator of the D008 CRT waste, alleging violations of 30 TEX. ADMIN. CODE §§ 335.4(b), 335.2(a) and (b), 335.43(a), and 335.62.[4] In a May 25, 2004 letter to TDSL the Executive Director clarified that "Penske generated the hazardous CRT waste and is responsible for the proper disposal of the waste."[5] In response to the NOV letter, Penske proposed to dispose of the commingled D008 waste as non-hazardous special waste.[6]

In response to Penske's proposal, on June 18, 2004, Mr. John Steib, acting on behalf of the Executive Director, issued a letter approving Penske's plan to transport and dispose of the commingled D008 waste as non-hazardous special waste.[7] A confirmation of Mr. Steib's decision was sent to Penske pursuant to a letter from Mr. Wade Wheatley, Director of the Commission's Waste Permits Division, on June 30, 2004.[8] TDSL filed Motions to Overturn

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3 *See* Report of Robert M. Zoch, Jr., June 4, 2004, at 11, attached hereto as Exhibit 4.

4 Letter from Mr. Glenn Shankle, Acting Executive Director, TCEQ, to Mr. Brian Hard, President, Penske Truck Leasing (May 13, 2004), Summary of Investigation Findings. The Executive Director identified that Penske had violated 30 TAC § 335.43(a), which states: "No person shall store, process, or dispose of hazardous waste without first having obtained a permit from the . . . [Texas Commission on Environmental Quality]." *Id.*, Summary of Investigation Findings, at 1 (quoting 30 TAC § 335.43(a)). The second violation was presented as: "Failure to determine if the generated waste was a hazardous waste." *Id.* at 2.

5 Letter from Mr. Glenn Shankle, Acting Executive Director, TCEQ, to Mr. Bob Gregory, President and CEO, Texas Disposal Systems, Inc., at 1 (May 25, 2004). The Executive Director's letter also stated: "TDSL acted in a responsible manner to ensure that the waste did not impact human health or the environment." *Id.* at 2.

6 *See* letter from Mr. Marc E. Althen to Mr. John Steib, Deputy Director, Office of Compliance and Enforcement, TCEQ (June 1, 2004).

7 Letter from Mr. John F. Steib, Jr., Deputy Director, Office of Compliance and Enforcement, TCEQ, to Mr. Marc E. Althen, Senior Vice President, Penske Truck Leasing (June 18, 2004).

8 Letter from Mr. Wade M. Wheatley, P.E., Director, Waste Permits Division, TCEQ, to Mr. Marc E. Althen, Senior Vice President, Penske Truck Leasing (June 30, 2004).

these two June 2004 letters. Following oral presentations by all parties, the Commission issued an Interim Order on September 16, 2004, granting TDSL's Motions to Overturn.[9] A former acting EPA Director, Ms. Marianne Horinko, testified in support of TDSL's position and provided a report that fully explained why Penske must remove the commingled D008 waste from TDSL's landfill and properly manage it.[10]

In the course of their public consideration and granting of TDSL's Motions to Overturn, the Commissioners stated: (1) that Penske was the generator of the D008 CRT waste; (2) that the D008 CRT waste had to be disposed of as hazardous waste; and (3) that proper disposal could be accomplished either by disposing of the entire mass of D008 CRT waste commingled with MSW and landfill cover soil as hazardous waste or by segregating the D008 CRT waste from the nonhazardous waste as had originally been done with the remainder of the debris after the accident. The TCEQ Commissioners rejected Penske's invitation to find that TDSL was somehow at fault for allowing the CRT debris into its landfill.

The week after the TCEQ Commissioners' September 16, 2004 ruling, the Executive Director issued a new letter to Penske that provided it with two options – one that was consistent with the law as interpreted by the Commission at the September 16 hearing and one that was not. *See* September 24, 2004 letter from Glenn Shankle, Executive Director, to Marc E. Althen, Senior Vice President of Penske Truck Leasing (copy of which is attached hereto as Exhibit 6). The lawful first option was stated clearly: "No later than October 27, 2004, Penske must remove all of the waste currently stored in the 99 roll-off containers at the TDSL facility. *This waste must be manifested as hazardous waste and disposed of at a permitted hazardous waste facility.*"

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9 *Interim Order Concerning Motions to Overturn Regarding the Executive Director's June 18, 2004 and June 30, 2004 Letters Allowing Penske Truck Leasing Co., L.P. to Dispose of Commingled Picture Tube Waste as Municipal Solid Special Waste*, TCEQ Docket No. 2004-0984-IHW-E (Sept. 16, 2004).

10 *See* Report of Marianne Lamont Horinko, September 8, 2004, attached hereto as Exhibit 5.

(Emphasis added.) The second option reopened the possibility of additional sampling and testing of the entire volume of the commingled D008 waste, without physical separation and extraction of the D008 CRT waste, and then reclassifying some or all of the commingled D008 waste as nonhazardous: "In any case, the roll-off containers must be removed from the TDSL facility by October 27, 2004, and the waste manifested as hazardous waste until such time as it is conclusively determined that no D008 waste at the level that is characteristically hazardous remains."

After the Executive Director's issuance of this letter Penske stated that, in fact, it would dispose of any one, or all of, the containers of the D008 CRT waste commingled with MSW and landfill cover soil as nonhazardous if the entire mass of diluted waste in each container tested as characteristically nonhazardous. TDSL objected because any test of the municipal solid waste and landfill cover soil commingled with the D008 CRT waste could not legally be used to recharacterize the D008 CRT waste generated at the accident scene as nonhazardous.

Because this proposal by Penske, with the apparent blessing of the Executive Director, would violate State and federal law and expose TDSL and its customers to intolerable risk of liability, TDSL refused to participate in Penske's removal, retesting, and disposal plans.[11] Instead, TDSL felt compelled to take the matter back before the Commission by filing, on October 18, 2004, a Motion to Overturn Portions of the Executive Director's September 24, 2004 Decision. Unfortunately, at a hearing conducted during their Agenda Meeting on December 1, 2004, the Commissioners were unable to reach a decision to overturn the instructions given to Penske in the Executive Director's September 24, 2004 letter.

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[11] In *United States v. Wasserson*, 418 F.3d 225 (3rd Cir. 2005), the court made clear that liability could attach to anyone in Zenith's and Penske's, and potentially TDSL's, current position if they did not properly address a hazardous waste management situation. Conscious indifference cannot be used to avoid criminal or civil liability for improper hazardous waste management.

To characterize the Commission's stalemate on December 1, 2004, as "unfortunate" is an understatement. It has effectively left unaddressed the responsibility for the proper management of the roll-off boxes of commingled D008 waste. Consequently, these 99 roll-off boxes containing D008 CRT waste have remained at the TDSL site for another two and a half years, bringing the plastic coverings over the tops of the 99 boxes near the point that they will have so deteriorated from exposure to ultraviolet sunlight that either the boxes will have to be moved indoors or have their coverings replaced. Additionally, due to the long period of time that the steel roll-off containers have been stored outdoors on the clay soil pad, the bottoms of the containers are beginning to deteriorate. Because TDSL is unwilling to expose itself, and its customers, to the risk of the enormous liability that could follow from having hazardous waste mixed with MSW at its landfill end up in a landfill that is not authorized for disposal of hazardous waste, TDSL has not allowed Penske to remove the waste from its site without complete assurance that nothing contained in those 99 roll-off boxes will end up in a nonhazardous landfill unless it is first separated from any D008 CRT waste with which it has been commingled and the D008 CRT waste treated and/or disposed of as hazardous waste. Since Penske has been unwilling to provide such legally sufficient assurance, TDSL has refused to allow Penske access to its landfill to remove and dispose of the material.

The Executive Director has allowed Penske to continue its recalcitrance by not revising his September 24, 2004 letter so as to close the Executive Director's loophole that would allow Penske to improperly test and reclassify the commingled hazardous and municipal waste, and by accepting Penske's assertion that it is being blocked by TDSL from addressing the violations identified in the May 13, 2004 NOV. See the exchange of letters between Pam Giblin, on behalf

of Penske, and Glenn Shankle, acting as Executive Director, on October 10 and October 12, 2005, copies of which are attached hereto as Exhibits 7 and 8 respectively.

The Executive Director's and Penske's ostensible positions are that "these matters are best addressed in court." However, neither has done anything to advance any of the multiple petitions for review of the TCEQ's and Executive Director's actions in this matter that have been filed in Travis County District Court.[12] The Hays County District Court tort claim for damages before a jury is not an appropriate substitute for the Commission's exercise of its statutory mandate to ensure that the environmental protection laws of this state are enforced. Indeed, unless the TCEQ first acts clearly and decisively to interpret and enforce the hazardous waste regulations for which it has primary responsibility, the court and jury will be left without the most authoritative guidance as to what these complex environmental laws mean.

ARGUMENT

A. Management of the Waste under Applicable Law and Prior Commission Rulings.

As recognized by a majority of the Commission at the September 16, 2004 hearing on TDSL's Motion to Overturn, the wastestream that is the focus of this matter is the D008 CRT waste generated by Penske at the time of the traffic accident on October 9, 1997, which is currently stored with the MSW and clay soil (i.e., the commingled D008 waste) in the 99 roll-off containers at TDSL's Creedmoor site, and the accident scene was the point of generation of the D008 CRT waste. As noted by Chairman White at the September 16, 2004 Agenda Hearing, because the D008 CRT waste was hazardous at the point of generation, testing of the commingled D008 waste in the roll-off containers at any later date is not relevant to the Commission's decision.

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[12] Similarly, TDSL has not sought to advance this judicial review as it suspects that a court would ultimately decide that this case involves complex environmental regulatory issues that must be finally resolved by the TCEQ.

The Executive Director, based upon the Commission's September 16, 2004 decision, unequivocally correctly directed in his September 24 letter that Penske must remove all of the commingled D008 waste from the TDSL landfill under hazardous waste manifest. The only problem with his letter was with the single sentence that has been interpreted by Penske, apparently as intended by the Executive Director, to allow Penske to subsequently test the the commingled D008 waste and reclassify it as nonhazardous for disposal at a nonhazardous waste landfill rather than deliver it to a licensed treatment and disposal facility, under hazardous waste manifest, for proper disposal.

As correctly recognized by the Commission, because the D008 CRT waste was hazardous at the point of generation (i.e., it exhibited the toxicity characteristic for lead, as determined by Zenith based upon process knowledge), any testing that occurs after the D008 CRT waste has been commingled with MSW and clay cover soils is not a valid and accurate representation of the hazardous nature of the D008 CRT waste itself. Penske cannot now rely on non-representative sampling of the commingled D008 waste to attempt to reclassify the D008 CRT waste as nonhazardous. Instead, the commingled D008 waste must be treated by Penske as hazardous waste until the D008 CRT waste contained in the commingled D008 waste is completely separated from nonhazardous MSW and soil and then the separated D008 CRT waste must be properly treated and disposed of by Penske. The legal conclusion that the D008 CRT waste, wherever contained within the commingled D008 waste, must be separated and then tested, treated, and disposed of as directed by RCRA's Land Disposal Restrictions ("LDRs") was the fundamental basis of the Commission's September 16, 2004 decision.

Once the hazardous waste characteristic attaches at the point of generation (i.e., the accident scene) under EPA regulations that waste code carries through until the materials are

properly treated to remove the toxic hazardous waste characteristic and meet the LDRs. Mixing or commingling the hazardous waste with MSW and clay cover soil to dilute the hazardous waste is not a legally authorized substitute for the treatment of the hazardous waste as required by RCRA's LDRs. Thus, as previously recognized by the Commission, the wastestream at issue in this matter is the D008 CRT waste and Penske's defensive focus on the commingled CRT/MSW wastestream to avoid proper hazardous waste treatment protocols is not supported by the law.

Penske cannot reasonably deny that D008 CRT waste remains in the commingled D008 waste contained in the 99 roll-off containers. Thus, as previously determined by the Commission, the commingled D008 waste must be manifested as hazardous waste from the TDSL landfill so that the D008 CRT waste can be separated, treated, and properly disposed of pursuant to applicable LDRs.

The law is clear and simple with regard to the proper classification of the D008 CRT waste. Title 40, Section 262.11 of the Code of Federal Regulations places the responsibility of determining whether a waste is a hazardous waste on the generator of the waste. Where a waste is not a listed hazardous waste, the determination of whether it is a characteristic hazardous waste can be made based on testing of the waste or process knowledge. 40 CFR § 262.11(c)(1) – (2). Zenith and Penske, relying on Zenith's process knowledge and prior testing, had classified the CRT waste as D008 hazardous waste prior to the time of generation, i.e., the time of the accident. Penske cannot change or revise its own classification of the waste to attempt to re-write history and redefine the D008 CRT waste as nonhazardous.

Therefore, the TCEQ's requirement that the commingled D008 waste be transported from the TDSL landfill via hazardous waste manifest is the only legally permissible manner for

transportation of the D008 CRT waste from the landfill. To the extent that the Executive Director's September 24, 2004 letter allowed physical separation of the D008 CRT waste and its treatment and disposal as hazardous waste before any remaining waste can be classified as nonhazardous, that order by the Executive Director should be enforced. The Commission must clarify that the commingled D008 waste cannot be reclassified simply by sampling and testing the unseparated mass. Penske and the Executive Director must be instructed that if Penske chooses to dispose of the entire contents of the 99 roll-off boxes without separation of the hazardous D008 CRT waste from the nonhazardous components, it must do so only in a facility that is permitted to manage hazardous waste.

B. Necessity for Commission Action.

The Commissioners must exercise their statutory authority[13] and compel Penske, the entity primarily responsible for the problem, to dispose of the hazardous waste that it generated in compliance with the law. TDSL has made clear that it is not going to allow Penske to remove the waste from its site without legally binding assurance that the hazardous CRT waste will be disposed of in a hazardous waste landfill authorized to receive it. Penske has made clear that it is not going to provide such assurance willingly to TDSL. The Executive Director has made clear that he is not going to order Penske to provide that assurance or act in accordance with the environmental regulations discussed herein – at least not until he receives explicit instruction from the Commission.

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[13] The Commission's plenary authority to implement and enforce the environmental laws of the State is expressed in Texas Water Code §§ 5.012, 5.102, 7.002, and 7.0025(a). Its corresponding specific authority over the management of hazardous and nonhazardous solid waste is stated in Texas Health and Safety Code § 361.017. The Executive Director's subordination to the Commissioners in all such implementation and enforcement matters is expressed in Texas Water Code §§ 5.108(a), 5.221, and 5.230. The "plenary power" of the TCEQ over all such environmental matters within its jurisdiction was recently recognized by the 261st Judicial District Court of Travis County in *Asarco Incorporated v. TCEQ*, Cause No. GN401709 (Order issued March 9, 2005).

Despite Penske's specious assertions that this dispute should be "left to the courts" – and the Executive Director's seeming adoption of that assertion in order to excuse his own inaction – the interpretation and enforcement of the complex specialized hazardous waste regulations at issue in this matter are not issues that the courts can be expected to resolve. Even if the Travis County District Court, before which multiple appeals still lie, were to eventually review the Executive Director's and Commission's inconclusive actions in 2004, it could simply remand the matter back to the TCEQ to apply the law to Penske and TDSL in a manner "consistent with the court's opinion." Realistically, such a result would put the Commission and the parties in no better position, nor any closer to the goal of proper disposal of this hazardous waste, than they are today. The Commission should not wait for a decision by a "generalist" judge on the "correct" interpretation of the TCEQ's own regulations.

The Commission is the statutorily prescribed agency of the State with the required expertise to construe its own regulations, including those adopted from the EPA. The Commissioners have the authority and duty to apply their expertise to this dispute and order the parties to act in accordance with their ruling. Then, if a party remains unwilling to accept the Commissioners' ruling and comply with their order, it can seek review of that ruling in the courts. To put the courts ahead of the Commissioners in this process of decisionmaking is a reversal of the appropriate function of judicial review.

It is even less likely that the tort damages litigation in Hays County District Court is going to compel appropriate disposal of this mismanaged waste. TDSL may eventually come out of the Hays County litigation with some money to reimburse it for all the damages done it by Penske and Zenith; however, realistically, it is very unlikely that a State district judge is going to feel confident enough of his/her mastery of hazardous waste law that he/she is going to mandate

any particular fate for the 99 boxes of commingled waste which remain on TDSL's site. All indications to date demonstrate that the Hays County District Judge will consider that decision making process to be the statutory responsibility of the TCEQ.

Therefore, TDSL is simply asking the TCEQ Commissioners to do that job now, not years from now after related disputes have bounced around in the courts. Nothing filed in any court has divested the TCEQ of its statutory jurisdiction.

The Executive Director should certainly welcome the Commission's resolution of this long-festering contentious matter. By now Penske should have realized that "leaving it to the courts" is not going to make it go away. Hopefully, both the Executive Director and Penske will now join TDSL in its request for a definitive ruling by the Commission that will relieve the pain and impasse of the past ten years.

PRAYER

THEREFORE, TDSL respectfully prays that the TCEQ will convene a hearing for oral argument on this Petition before the Commissioners at an Agenda Meeting at the earliest possible time, grant this Petition, and order Penske to manage the 99 roll-off boxes of commingled D008 CRT waste, municipal solid waste, and soil at the TDSL landfill in the following way:

1. No later than 30 days from date of the Commission's order, Penske shall remove all waste contained in the 99 roll-off boxes at the TDSL landfill under an unconditional hazardous waste manifest that designates Penske as the generator of the D008 hazardous CRT waste and identifies the 1997 accident scene on I-35 in Hays County as the point of generation.

2. The hazardous waste manifest shall designate the destination of the waste as a facility that is authorized to treat and dispose of D008 hazardous waste.

3. Penske shall arrange for, and actually dispose of all D008 hazardous waste contained in the 99 roll-off boxes in one of the following two ways:

   (a) By disposal of the entire contents of the 99 roll-off boxes in a landfill that is authorized to receive and dispose of such hazardous waste; or

   (b) By "negative sort" separation of all nonhazardous municipal solid waste (MSW) from the D008 CRT component debris and D008 contaminated soil in the roll-off boxes, followed by disposal of the remaining D008 CRT debris, D008 contaminated soil, and any MSW unsegregated from the mix, in a landfill that is authorized to receive and dispose of hazardous waste.

4. Any MSW separated from the hazardous CRT debris and contaminated soil by negative sort may be tested for the presence of any hazardous characteristic and, if there is none, disposed of in a municipal solid waste landfill.

5. All commingled waste and soils that have not been removed as part of a negative sorting process shall be disposed of as "D008 hazardous waste contained within MSW and clay soils," with Penske designated as the generator.

TDSL also respectfully prays that the Commission will order the Executive Director to

take all necessary and appropriate action, including oversight, inspections, and issuance of such further orders to Penske, as necessary, to expeditiously implement the order of the Commission.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on this the 21st day of June, 2007, a true and correct copy of the foregoing document has been sent via facsimile, first class mail, Federal Express overnight delivery, or hand delivery to the following:

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KERRY E. RUSSELL

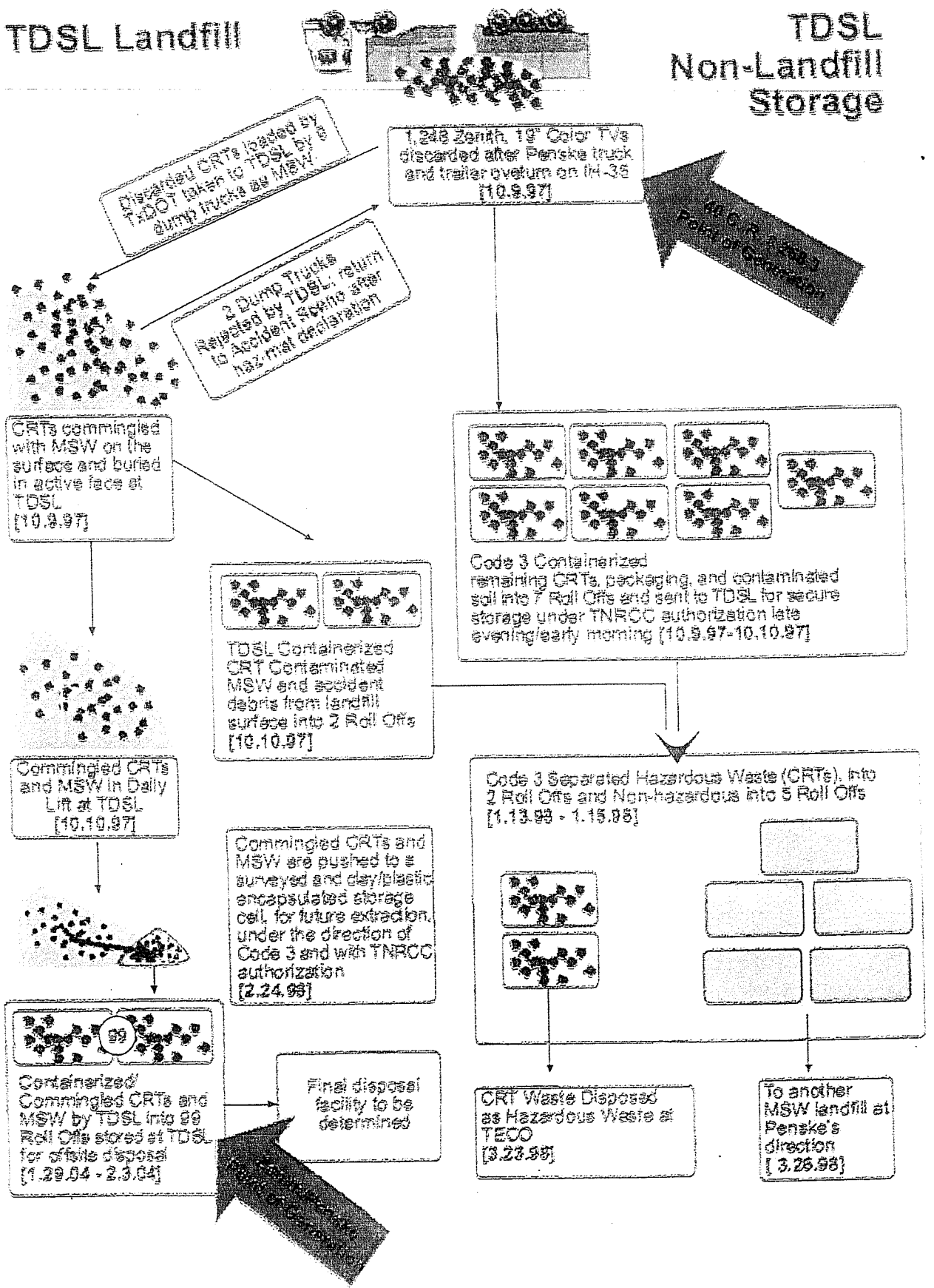
TDSL Landfill
TDSL Non-Landfill Storage
Discarded CRTs loaded by TxDOT taken to TDSL by 3 dump trucks as MSW.
1,248 Zenith 19" Color TVs discarded after Penske truck and trailer overturn on IH-35 [10.9.97]
2 Dump Trucks Rejected by TDSL; return to accident scene after haz/mat declaration
CRTs commingled with MSW on the surface and buried in active face at TDSL [10.9.97]
Code 3 Containerized remaining CRTs, packaging, and contaminated soil into 7 Roll Offs and sent to TDSL for secure storage under TNRCC authorization late evening/early morning [10.9.97-10.10.97]
TDSL Containerized CRT Contaminated MSW and accident debris from landfill surface into 2 Roll Offs [10.10.97]
Commingled CRTs and MSW in Daily Lift at TDSL [10.10.97]
Code 3 Separated Hazardous Waste (CRTs), into 2 Roll Offs and Non-hazardous into 5 Roll Offs [1.13.98 - 1.15.98]
Commingled CRTs and MSW are pushed to a surveyed and clay/plastic encapsulated storage cell, for future extraction, under the direction of Code 3 and with TNRCC authorization [2.24.98]
99
Containerized Commingled CRTs and MSW by TDSL into 99 Roll Offs stored at TDSL for offsite disposal [1.29.04 - 2.3.04]
Final disposal facility to be determined
CRT Waste Disposed as Hazardous Waste at TECO [3.23.98]
To another MSW landfill at Penske's direction [3.26.98]

Exhibit 1

CAUSE NO. 98-0159

TEXAS DISPOSAL SYSTEMS LANDFILL, INC., Plaintiff,	IN THE DISTRICT COURT OF
VS.	
PENSKE TRUCK LEASING CO., L.P., PENSKE LOGISTICS, INC., ZENITH ELECTRONICS CORP., ZENITH ELECTRONICS OF TEXAS, INC., and HARRY ERNEST McCAIN, Defendants.	HAYS COUNTY, TEXAS 207TH JUDICIAL DISTRICT

****

THE ORAL & VIDEO DEPOSITION OF
ERIC COOPER
MARCH 1, 2004

****

THE ORAL & VIDEO DEPOSITION of ERIC COOPER, produced as a witness at the instance of the Defendant, and duly sworn, was taken in the above-styled and numbered cause, on the 1st day of March, 2004, from 10:03 o'clock a.m. to 1:29 o'clock p.m., before JULIE VERASTEGUI, Certified Court Reporter in and for the State of Texas, reported by stenographic and computer-aided transcription, at the offices of Plunkett & Gibson, 70 Northeast Loop 410, Suite 1100, San Antonio, Texas 78216, pursuant to Subpoena, the Texas Rules of Civil Procedure and the provisions stated on the record or attached hereto.

Reported by: Julie Verastegui
Job No. 44906

your handwritten report, there's a sentence that says, "Mr. Newton expressed his concern as to avoiding cross contamination and making sure the whole excavation was handled safely and correct." Was -- Did you have any role in confirming whether or not the excavation was handled safely and in the correct manner?

A. Yes.

Q. Okay. And what -- what was the nature of your role?

A. To observe, for one, that no one else that wasn't associated with the project walk in the way of heavy equipment or even walk over in that general area.

Q. Was -- Was part of your role to try to determine whether or not any TV tube waste that was in the landfill had actually been moved?

A. Just be moved from that particular area of the landfill, I was to observe that.

Q. Okay. And it was part of your -- your job to make sure that no TV tube waste remained in -- in the original area, but that it was all moved?

A. Yes.

Q. Okay. Now, in the -- the next paragraph down, there's a sentence that starts, "Due to the

motor vehicle accident."

A. Yes, sir.

Q. Do you see that? It says, "Due to the motor vehicle accident that these ha" -- "that these televisions were involved in, the televisions were broken into many pieces." Then it continues, "I personally visualized these broken pieces as the trash was moved. These pieces included a stainless steel band with four brackets, a thin sheet of metal, pallets that televisions were stacked on and, of course, the glass from the bulb and screen." Do you see that?

A. Yes, sir.

Q. And those are pieces of television tubes that you personally observed in the TDSL landfill on February 24th, 1998?

A. Yes, sir.

Q. Okay. Did they look like the pieces of television tubes that you saw in the roll-offs a few weeks earlier?

A. Exactly. That's the only way I could understand that that's where those came from.

Q. Then on the next page, your report starts, "Once the pieces were moved, I walked the original excavation site, ensuring all televisions were

removed. At this time, the pieces of televisions and surrounding product were neatly staged and covered with approximately six inches of clay." And you have a question mark after "clay." First of all, is it accurate to say that you ensured that all the televisions were removed to the staging area?

A. Yes.

Q. Okay. And then why do you have "clay" in between little stars and a question mark?

A. I didn't know the correct terminology. I didn't know if it's supposed to be called "compost material" or "sandy loam" or "dirt." And I think I called it "clay," because that's what I thought it was.

Q. Okay. And you weren't familiar with the -- the municipal solid waste landfill business?

A. No, not -- No.

Q. Okay. Then the next paragraph starts, "Before, during and after, surveyors were on site performing readings." You see that?

A. Yes, sir.

Q. Do you have any recollection of that other than just what it says here?

A. No, I don't.

Q. Do you have any recollection about what the

CAUSE NO. 98-0159

TEXAS DISPOSAL SYSTEMS LANDFILL, INC.,	)	IN THE DISTRICT COURT OF
Plaintiff,	)	
VS.	)	HAYS COUNTY, TEXAS
PENSKE TRUCK LEASING CO., LP, PENSKE LOGISTICS, INC. ZENITH ELECTRONICS CORP., HARRY ERNEST MCCAIN,	)	
Defendants.	)	207TH JUDICIAL DISTRICT

****

ORAL AND VIDEO DEPOSITION OF

RICHARD IAN HOWES

MARCH 3, 2004

****

ORAL DEPOSITION OF RICHARD IAN HOWES, produced as a witness at the instance of the Defendants, was duly sworn, was taken in the above-styled and numbered cause on MARCH 3, 2004, from 9:23 a.m. to 12:19 p.m., before Chris Carpenter, CSR, in and for the State of Texas, reported by machine shorthand, at the offices of Graves, Dougherty, Hearon & Moody, P.C., 515 Congress Avenue, Suite 2100, Austin, Travis County, Texas, pursuant to the Texas Rules of Civil Procedure and the provisions stated on the record or attached hereto.

Exhibit 3

Q. And while you were out there, did you observe the excavation process?

A. Yes.

Q. Did you also observe the removal of the, what we call the overburden material?

A. Yes.

Q. What did it look like to you?

A. It looked about like what was in the face, but dislodged.

Q. Did it look like garbage?

A. Oh, definitely.

Q. What did the commingled material look like, the quote, unquote "commingled material," what did that look like?

A. It pretty much looked like garbage as well.

Q. Did you notice any visible differences between the overburden and what has been called the commingled material?

A. On a grand scale, I would say no. Some pieces of what was represented to me to be of interest was brought to me during the removal of the body.

Q. And what -- what was that?

A. Large shards of thick glass. There was a piece of sort of maybe blue, similar to your exhibit sticker, plastic that was -- it was indicated to me that was packing between the tubes.

Q. Who brought you these large shards of sharp glass?

Q. So all you know about the source of the glass is what somebody else told you, correct?

A. Yes.

Q. You have no -- was there any -- anything about this glass that would lead you to conclude that the glass came from a TV tube manufactured by Sony as opposed to a TV tube manufactured by Mitsubishi?

A. I -- I couldn't speak to the manufacturer, no.

Q. Would -- would it -- would the piece of the glass tell you from looking at it whether it was -- came from a computer monitor or a window or some other type of CRT material?

A. I can definitely go with the other CRT. It was definitely not window glass based on what I know about having broken a lot of windows and a lot of demolition projects. It wasn't beer bottle bottoms. It was fairly unusual appearing glass. Over the course of the Friday, Saturday, and Sunday, it was fairly liberally spread throughout the body. It was not a one off -- there was one pocket of it coming out.

Q. It was literally spread without what -- throughout what body?

A. The -- the body that was being excavated.

Q. And what -- what body is that; is that the -- what body is that, the body that was --

A. The body of interest. You know, what -- why we were

Texas Disposal Systems Landfill, Inc.

v.

Penske Truck Leasing Co. L.P., et al

CIV No. 98-0159
207th Judicial District, Hays County, Texas

Report of
Robert M. Zoch, Jr.

June 4, 2004

Respectfully Submitted,

Robert M. Zoch, Jr., P.E.

Exhibit 4

Texas Disposal Systems Landfill, Inc.

v.

Penske Truck Leasing Co. L.P., et al

CIV No. 98-0159
207th Judicial District, Hays County, Texas

Report of
Robert M. Zoch, Jr.

June 4, 2004

I. Introduction

1.1 **Purpose** – I have been asked by counsel for Texas Disposal Systems Landfill, Inc. (TDSL) to offer my expert opinion concerning sampling, testing, regulatory characterization, treatability and disposal options for various materials incident to the management of debris arising from a transportation accident on October 9, 1997 in Hays County, Texas, involving television cathode ray tubes (CRT). Based upon those evaluations, I was also asked to opine on the appropriateness of subsequent actions of the Parties to this litigation under applicable environmental Statutes, regulations and industry standards, including their responsibility under Superfund and other similar regulations. This report represents my current opinions on these matters based upon my education, professional experience and review of relevant documents. Should additional information become available, I may amend or expand upon these opinions.

1.2 **Materials Reviewed** – In developing my opinions in this matter, I have reviewed the following materials:

- Plaintiff's Fifth Amended Petition and Application for Permanent Injunction in the referenced matter.

- Plaintiff's Tenth Supplemental Responses to Request for Disclosure Under Rule 194.2.

- Fourth Amended and Supplemental Disclosures of Penske Truck Leasing Co., L.P., Penske Logistics, Inc., and Harry McCain (Collectively "Penske").

- Reports of Defendant's experts Neal Bolton, P.E., Kyle Shelton, P.E. and Fred Dalbey; supplemental expert report of Mr. Shelton.

- Deposition transcripts of Jesse K. Boultinghouse, Wade Wheatley, J.D. Porter, Gary Russell and Brian Weaver, together with selected exhibits to depositions taken during discovery in this matter.

- Plaintiff's Admitted Trial Exhibits, Vol. 1., April 12, 2004.

- Texas Ecologists, Inc. waste characterization form and stabilization recipe summary form for the "Zenith spill".

- A publication of the Rauland Division of Zenith Electronics Corporation (Zenith) providing an overview of its CRT manufacturing procedure.

- Project reports of SKA Consulting and HBC Terracon from February 2004 concerning the containerization of CRT debris commingled with municipal solid waste at the TDSL landfill.

- A video of the excavation and sampling of the waste material removed from the TDSL landfill, and earlier proposals outlining contractor scopes of work.

- Recent correspondence between TDSL and the Texas Commission on Environmental Quality (TCEQ) and a May 13, 2004 Notice of Violation from the TCEQ to Penske Truck Leasing.

- TDSL, "Sequence of Events Relating to Handling Aftermath of Accident," May 5, 2004.

Specific Bates Stamped documents I have reviewed are listed in Exhibit 1.

1.3 **Credentials** - I am a chemical engineer and a registered professional engineer in the State of Texas, having received a Bachelor of Science degree in Chemical Engineering from the University of Houston (UH) in 1968. I also attended graduate school at UH through 1971, extending my education in the fields of chemistry, civil engineering and chemical engineering. Since that time, I have attended numerous "short courses" concerning the technical aspects of groundwater protection, wastewater treatment and hazardous waste management, and have taught courses in workplace exposures to environmental hazards.

As an undergraduate, I worked for a pharmaceutical chemicals plant, and became involved in the plant's environmental control affairs in about 1965. Subsequently, after serving as senior plant engineer and plant manager, I became Director of Environmental Control for the parent company in 1972. In 1974 I formed an independent environmental consulting company, providing engineering and regulatory support services to a broad range of industrial clients seeking to comply with emerging environmental regulations concerning air and water pollution control and industrial waste management. An important aspect of many project assignments has involved the interpretation of newly promulgated regulations and/or developing an understanding of regulatory agency interpretations of those regulations in fact specific circumstances.

After taking my company public in 1987, it was sold to a German corporation in 1990. I then headed the US based division of that international company's environmental research and development organization, and have since returned to consulting by forming Zoch Consultants, LLC. In my current role, I provide consulting services primarily related to contaminated site investigation, remediation and impact assessment. Through all of this experience, I am familiar with the development, implementation and enforcement of the US environmental regulations over the past 35 years.

Since the 1970s, I have performed and/or managed hundreds of projects involving solid and hazardous waste issues including:

- site selection, design and permitting of municipal and industrial waste management facilities;
- characterization of waste materials and contaminated media under various State and Federal environmental protocols, specifically including RCRA, the Texas Solid Waste Disposal Act and the Texas Waste Code.
- contaminated property site investigation and remediation; and
- liability and equitable allocation of response costs under applicable provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended.

Many of these project assignments have included the regulatory characterization, development of treatment methods and evaluation of disposal alternatives for lead, as a significant contaminant of concern.

A current copy of my resume is attached as Exhibit 2. Additionally, matters in which I have testified over the past four years and my billing rate are included as Exhibit 3.

1.4 Summary of Opinions Concerning Waste Sampling/Characterization

1.4.1 CRT debris from Zenith's color television picture tube manufacturing process is a characteristic hazardous waste under §261.24 of the Resource Conservation and Recovery Act (RCRA) due to the excessive leachability of its lead content.

1.4.2 The waste profile prepared by Penske Truck Leasing in March 1998 properly identified the broken or discarded CRT/soil mixture (CRT accident residue) as a hazardous waste, irrespective of any lead leachability testing. TECO's subsequent waste stabilization testing demonstrates the non-homogeneous nature of the CRT accident residue.

1.4.3 Sampling of the CRT accident residue commingled with municipal solid waste (commingled hazardous waste) extracted from the TDSL landfill was not representative of the actual mixture, and the related analytical results are irrelevant to the regulatory characterization of the combined wastes.

1.4.4 Although TCLP leachability does not directly correlate to the total lead content of a waste material, testing for total lead could have been useful for various purposes.

1.5 Summary of Opinions Concerning the Responsibility of Penske and Zenith

1.5.1 Penske, as the generator of the CRT accident residue, was responsible for its characterization and proper disposal as hazardous waste.

1.5.2 Zenith, as the owner of the in-process materials (the CRT units), is a generator of hazardous waste, is responsible under Federal and State law for the proper management of the CRT accident residue and had, and continues to have, the obligation to remove all its hazardous waste from the TDSL landfill.

1.5.3 Penske and Zenith, as the parties responsible for the generation and management of the CRT debris, must properly dispose of the commingled hazardous waste now stored at the TDSL site.

1.6 Summary of Opinions Concerning Actions of TDSL in this Matter

1.6.1 The initial acceptance of CRT accident residue from the transportation accident by TDSL was proper.

1.6.2 The immediate response actions performed by TDSL upon learning that the CRT accident residue was a hazardous waste minimized the environmental impact and remedial costs caused by Defendants' improper management of their waste.

1.6.3 The entire management of this incident by TDSL has been appropriate considering the circumstances involved, and their response actions did not make TDSL a generator of hazardous waste.

Pertinent background information is provided in the following section, followed by a discussion of the basis for each opinion stated above.

2.0 Background

A summary of some of the factual background I considered in formulating my opinions in this matter follows:

2.1 Zenith CRT Manufacturing Process – The CRT production line is a continuous process, requiring about 22 hours from beginning to end, to produce color television picture tubes. A simplified manufacturing description was produced by Zenith in this matter, describing the basic elements of the process. The four primary components of a CRT are:

- The Panel – A glass plate which forms the screen of the picture tube onto which various phosphor coatings are applied.
- The Mask – A thin, perforated metal sheet that directs the beams from the electron gun to the screen.
- The Funnel – A formed glass receptacle into which the electron gun is mounted and which is bonded to the panel utilizing a "frit" seal.
- The Electron Gun – The source of electron beams, directed through the mask, which then strike the phosphor coatings causing them to glow and form the color image on the screen.

The manufacturing process forms, cleans, coats, aligns and assembles these parts to exacting specifications to produce a vacuum picture tube known as a CRT. Further details of this process are not critical in this litigation, except for the toxic metal content of some components and the resulting regulatory characterization of related waste materials.

2.2 Toxic Metal Issues

2.2.1 Composition – The glass components of a CRT contain several regulated heavy metals, with lead exhibiting the highest concentration. Leaded glass utilized for the panel reportedly contains 2.3-2.9% lead, while funnel glass contains 22.5-24.2% lead. Additionally, the glass frit used to bond the panel glass to the funnel is a lead zinc borate material, containing 65-80% lead oxide (about 60-74% lead) or possibly a lead aluminosilicate containing up to 90% lead oxide. A 19-inch Zenith CRT reportedly weighs 33 pounds and contains a total of 3.5 pounds of lead, or about 10.6% by weight. Although the precise distribution of this lead has not been made available, much of the 3.5 pounds per unit is obviously contained in the funnel glass and the frit seal.

2.2.2 **Lead Mobility** – Generally, the lead content of leaded glass is not considered water soluble since it is bound within the ceramic structure of the glass. The frit which joins the funnel to the screen, however, is described as "moderately soluble" in water, indicating the potential aqueous mobility of its lead content.

Under the hazardous waste regulations, any solid wastes containing designated toxic metals (such as lead) must be tested for leachability as a measure of constituent mobility. In accordance with Federal regulations, Zenith performed this testing on various samples of its production waste, with the following data produced from analyses conducted between 1988 and 1995:

Table 1

Testing for Lead in CRT Production Wastes

Waste Material	Total Lead (mg/kg)	Leachable Lead (mg/l)
Funnel Glass	225,000-242,000	10.2-22.0
Waste Frit (85% solids)	444,000	7000
Broken Glass from Process	410	119
Broken Picture Tubes	31,400	406

2.3 **Response Actions Regarding Accident Waste** – This case concerns the actions taken in response to the transportation accident on October 9, 1997 which caused the generation of hazardous CRT debris waste. The time line for those response actions is summarized as follows:

Table 2

Time Line for Response Actions

Date	Response
10/9/97	• Transportation accident caused damage to and release of picture tubes on and adjacent to highway. Penske driver advised emergency responders that CRTs are not hazardous, resulting in arrangements for disposal of debris at TDSL. • Several dump truck loads of CRT accident residue taken to TDSL with certification that they contained no hazardous waste. Seven loads dumped on working face and two others returned when TDSL finally received notification from Penske that waste was, in fact, hazardous.

	• Remaining CRT accident residue placed in roll-off boxes and temporarily stored on TDSL property.
10/10/97	• TDSL collected approximately 1 ½ roll-off boxes of commingled hazardous waste from the surface of the landfill working face and contacted Penske/Zenith to coordinate removal of all CRT accident residue and commingled waste from the site. Contaminated area of landfill was condoned off.
	• Penske acknowledged that it was the generator of the CRT accident residue.
10/16/97	• TDSL sent written request to Penske and Zenith to remove all CRT accident residue and commingled hazardous waste.
12/2/97	• Penske formally acknowledged that the CRT accident residue sent to TDSL was hazardous waste.
1/13-15/98	• Penske mobilized a contractor to sort the waste stored in the roll-off boxes based on visual appearance. Two roll-off boxes were filled with CRT accident residue and five boxes were filled with MSW and non-hazardous debris from the accident (i.e. pallets, packing material, parts of the trailer, etc.)
2/3/98	• TDSL again requests that Penske and Zenith remove all commingled hazardous waste and reimburse TDSL for damages.
2/23/98	• After additional request is rejected, TDSL filed its initial complaint against Penske and Zenith seeking removal of the commingled hazardous waste.
2/25/98	• All commingled hazardous waste in the area of the landfill previously cordoned off was removed from the active portion of the

	TDSL landfill, isolated near the outside wall of the fill area and covered with clay.
3/23/98	• After profiling the segregated CRT accident residue, Penske arranged to dispose of the two roll-off boxes at TECO in Corpus Christi. The segregated MSW and non-hazardous waste from the accident was landfilled at the BFI landfill.
7/24/03	• TDSL notified Penske and Zenith that their commingled hazardous waste was a significant problem to site operations.
12/19/03	• Penske agreed to assume responsibility as generator and arranger for disposal of commingled hazardous waste, but failed to accept financial responsibility for proper disposal.
1/6/04	• Zenith represented that the CRT accident residue commingled with MSW is not hazardous waste unless it fails leachability test.
1/29 - 2/2/04	• The commingled hazardous waste remaining in the isolation area of the TDSL landfill was excavated, sampled and placed into 99 roll-off boxes for final disposition.
4/12/ - 4/24/04	• Trial in this case ends in mistrial.
5/13/04	• TCEQ issued Notice of Violation to Penske, requesting documentation that the commingled hazardous waste stored in the 99 boxes has been removed and properly disposed at an authorized facility.

3.0 Basis for Opinions Concerning Waste Sampling/Characterization

3.1 CRT debris from Zenith's color television picture tube manufacturing process is a characteristic hazardous waste under §261.24 of the Resource Conservation and Recovery Act (RCRA) due to the excessive leachability of its lead content.

RCRA was passed in 1976 and the first implementing regulations under the Act became effective during 1980 to require comprehensive management of solid waste nationwide. A solid waste was defined under those regulations as "any discarded material" not specifically excluded under very narrow definitions. Several sub-sets of solid waste were defined as "hazardous waste" including characteristically "toxic" wastes, defined as those for which the extract of a representative sample exceeds specified limits. Solid waste containing lead meets the definition of a hazardous waste if the leachate from a representative sample exceeds 5 mg/l. Although RCRA has been reauthorized and numerous modifications and additions have been made to the supporting regulations and waste testing procedures, the threshold of 5mg/l of lead in a representative waste leachate continues to define a waste as hazardous under 40 CFR §261.24.

As discussed in Section 2.2.2 of this report, leaded glass would not be expected to leach excessive lead from its structure. As demonstrated by Table 1, however, the heavily leaded funnel glass somewhat exceeds the leachable lead standard. More importantly, the frit seal material exceeds the hazardous waste criterion by a factor of 1400. Test results of the homogenized components of "broken picture tubes" exceed the regulatory determination of lead toxicity by nearly two orders of magnitude. Consequently, Zenith has managed several of its process materials as hazardous wastes under RCRA, and broken picture tubes from transportation accidents in 1994 and 1996 were disposed of as hazardous waste. There is no question that the CRT accident residue from the October 9, 1997 incident was also hazardous waste, as ultimately communicated by Zenith on that day through the use of "process knowledge", without the need for additional testing. That CRT accident residue was a hazardous waste when generated at the accident site and was a hazardous waste when sent to TDSL and placed into the landfill. Additionally, although the intact picture tubes were not classified as hazardous **materials** under Department of Transportation (DOT) requirements, when broken or discarded they were hazardous **waste** under RCRA and, therefore, also hazardous **materials** under DOT.

3.2 The waste profile prepared by Penske Truck Leasing in March 1998 properly identified the broken or discarded CRT/soil mixture (CRT accident residue) as a hazardous waste, irrespective of any lead leachability testing. TECO's subsequent waste stabilization testing demonstrates the non-homogeneous nature of the CRT accident residue.

When Penske arranged for the disposal of the sorted, containerized debris from the accident in March 1998, they were required to complete a waste profile form to notify TECO (the disposal site) of the waste characteristics. That profile properly identified the waste mixture of soil and picture tubes as D008 (toxic hazardous waste for lead), since the CRT accident residue was known to meet that criterion. The mixture, reported at that time to contain 70% soil and 30% broken tubes, was then subjected to stabilization testing by TECO to meet the Land Disposal Restrictions, which required that D008 waste be treated prior to disposal. The sample tested by TECO was obviously not homogenous, since testing of four replicates of the treated material indicated leachate lead concentrations ranging from <0.10 to 2.34 mg/l. Multiple samples of the untreated waste

would likely exhibit an even greater range of leachate lead concentrations, above the hazardous waste criterion. This testing demonstrates the difficulty in obtaining a representative waste sample of soil mixed with solid debris. Even the debris was not homogenous since glass, frit and inert parts of the CRTs exhibited wide ranges of lead concentrations and lead leachability. The TECO stabilization tests were not meant to be a substitute for waste characterization and did not produce data representative of the CRT accident residue. The waste sent to TECO by Penske was hazardous as formally acknowledged by Penske.

3.3 Sampling of the CRT accident residue commingled with municipal solid waste (commingled hazardous waste) extracted from the TDSL landfill was not representative of the actual mixture, and the related analytical results are irrelevant to the regulatory characterization of the combined wastes.

When the commingled hazardous waste was excavated earlier this year, a composite sample of every other roll-off box was prepared by mixing "three to five" random grab samples from every third and sixth trackhoe bucket of waste. This technique was performed to obtain representative samples of the commingled hazardous waste under the assumption that the material was "homogenous". Based upon my experience with municipal solid waste and my review of the sampling video, I am certain that the materials sampled were not homogenous and that the samples taken were not representative. From the field notes, only three samples contained glass of unspecified appearance, and it is uncertain whether any of the CRT accident residue was included in the hand picked grab samples. Because of the heterogeneous nature of MSW and the random distribution of CRT accident residue within it, there is virtually no way that a representative sample of the commingled hazardous waste was obtained.

In any case, the lead leachability of the commingled hazardous waste is irrelevant to its regulatory characterization under RCRA §268.3 which prohibits dilution as a substitute for treating restricted waste under the Land Disposal Restrictions. It is not permissible to "de-characterize" a waste under §261.3(d) by mixing it with non-hazardous waste. Since the CRT accident residue was characterized as a hazardous waste (D008) at the accident site, its commingling with municipal solid waste rendered the entire mixture hazardous, irrespective of subsequent testing. That mixture, now stored in 99 roll-off boxes at the TDSL site, remains a hazardous waste. This regulatory interpretation is reinforced by the TCEQ determination of January 15, 2004, which cites the dilution prohibition of §268.3. All of this commingled hazardous waste must, therefore, be disposed of at a permitted hazardous waste facility.

3.4 Although TCLP leachability does not directly correlate to the total lead content of a waste material, testing for total lead could have been useful for various purposes.

A fundamental requirement for proper characterization of a solid waste under RCRA is that representative samples of the waste be tested. Since CRT debris contains large concentrations of total lead exhibiting widely varying leachability, one test of sample representativeness would be to test the sample for total lead. Applying "material

balance" considerations, representative samples of the CRT accident residue and the commingled hazardous waste should have contained roughly 3.2% and 0.30% respectively of total lead, if the estimated number of picture tubes were actually contained within each mixture. Although the resulting leachable lead concentrations cannot be directly calculated using those percentages, analyses for total lead would have provided an indication of how representative the samples were.

Total lead testing could also have been useful to perform a rough "material balance" on the ultimate partitioning of the CRT debris within the CRT accident residue and the commingled hazardous waste. For example, the percentage of CRT debris at TDSL has been estimated at 18.1%, based on the number of stainless steel bands recovered for off-site disposal. This percentage underestimates the amount of CRT debris remaining at TDSL because the equivalent amount of broken glass associated with those bands was likely not removed from the landfill. Existing data are insufficient to estimate the fate of the hazardous CRT components (i.e. funnel glass and frit). It is certain that when bands were removed from the landfill working face, some portion of the glass remained. Absent any analyses for total lead in the waste mixtures, it can only be concluded that the amount of hazardous waste in the 99 roll-off boxes remaining at TDSL significantly exceeds 18.1% of the hazardous waste originally generated at the accident site.

4.0 Basis for Opinions Concerning the Responsibility of Penske and Zenith

4.1 Penske, as the generator of the CRT accident residue, was responsible for its characterization and proper disposal as hazardous waste.

Penske was transporting the picture tubes at the time of the accident and was responsible for the proper characterization of the CRT accident residue at the time it was "generated" at the site. To the extent they chose to use Zenith's "process knowledge" that the residue was hazardous, it was their responsibility to immediately inform the emergency responders of that characterization. Although Penske possessed that knowledge within their organization prior to the accident, it was not communicated to their driver or to other on-scene personnel until after removal and disposal of the CRT accident residue was initiated. As a result, Penske's driver told emergency responders at the accident scene that the residue was not hazardous. If they had wished to confirm or refute Zenith's process knowledge by testing representative samples of waste from the accident site, they should have informed the emergency responders of their intentions and expeditiously conducted the sampling and analysis. Alternatively, they should have arranged for the collection and temporary storage of the CRT accident residue pending characterization and notification to the TCEQ. Their inadequate training of the driver and their lack of action to respond to this emergency resulted in disposal of some restricted waste at an unauthorized site. The Notification of Violation issued to Penske by the TCEQ on May 13, 2004 and the attached Summary of Investigation Findings confirm these interpretations.

4.2 Zenith, as the owner of the in-process materials (the CRT units), is a generator of hazardous waste, is responsible under Federal and State law for the proper management of the CRT accident residue and had, and continues to have, the obligation to remove all hazardous materials from the TDSL landfill.

The picture tubes involved in the accident were being transported by Penske from Zenith's manufacturing and warehousing locations in Illinois to their assembly plant in Mexico. Consequently, Zenith was the owner of the in-process materials, continued to own the CRT accident residue. Consequently they were a generator of hazardous waste and were required to immediately report the spill under §302.6 of CERCLA and §327.1 through §327.5 of the Texas Water Code. Under Federal and State law, Zenith is responsible for the improper disposal of their waste material which they knew to be characteristically hazardous.

In correspondence sent soon after the accident, Zenith claimed the "useful product defense" to their liability under Superfund. In my technical experience in analyzing that defense, I have concluded that a manufacturer claiming the useful product defense has a difficult burden of demonstrating that the disposal was actually an arm's length sale of a commercial product at the then-existing market price. In this case, the CRTs in transport were not yet a commercial product and, more importantly, after the accident the CRT accident residue was not sold, but rather disposed of as a waste. In my opinion, Zenith is not entitled to the useful product defense under the relevant facts of this incident, and they would meet the definition of a responsible "person" under §107(a) of CERCLA for any costs incurred in responding to the release or threat of release of lead from the CRT accident residue.

The October 9, 1997 event was not the first transportation accident involving CRT accident residue where Zenith, as the owner of the materials, was obligated to perform a waste characterization and to direct waste disposal actions. Following a similar accident that occurred on the same date in 1994, Zenith advised their transportation agent, G.E. Transport, that "if any of the tubes were broken, that would change the classification to hazardous material, and she [G.E.'s dispatcher] must return all material back for proper handling by Zenith." They further concluded that if the landfill thought to have received the CRT accident residue couldn't accept hazardous materials, "Zenith will require an approved carrier to go into this landfill and haul the material to an approved site." As a result of this incident, Zenith representatives "[took] charge of the matter" and planned "to establish a procedure for future accidents of this nature."

Nevertheless, two years later on October 8, 1996, Zenith was again required to respond to a transportation accident involving its CRT picture tubes. This time, they advised the emergency responder that the CRT accident residue "should be handled as a hazardous material" and "transported to a hazardous waste site." They also notified Federal and State environmental programs of the hazardous material release, as is their obligation under applicable regulations. In that case, Zenith acted properly to inform the appropriate emergency responders, Federal and State environmental authorities and waste disposal facilities of the nature of their CRT accident residue, and they coordinated its proper disposition.

Even with this recurring experience demonstrating that transportation accidents would result in Zenith's in-process materials becoming hazardous waste, they failed to anticipate and adequately respond to the 1997 incident. As a result, they are now obligated to properly characterize and remove their commingled hazardous waste from the TDSL landfill which, from prior experience, they knew would be necessary under the circumstances involved.

4.3 Penske and Zenith, as the parties responsible for the generation and management of the CRT debris, must properly dispose of the commingled hazardous waste now stored at the TDSL site.

Under Federal and State law, the parties responsible for a hazardous waste must manage that waste from the point of generation through final disposition in accordance with applicable regulatory requirements. This has come to be known as "cradle to grave" responsibility for hazardous waste. Under the provisions of RCRA §268.3, the commingling of hazardous waste with other materials prior to its ultimate disposal does not relieve Penske and Zenith of this responsibility. Their waste and any related mixtures were hazardous when generated at the accident site on October 9, 1997, they were hazardous when improperly sent to TDSL, they were hazardous when some portion was sent to TECO for final disposition and the remainder in storage at the TDSL site is hazardous today, awaiting proper disposition. There is no excuse for Penske and Zenith's refusal to accept their responsibility for proper disposition of the commingled hazardous waste during the past six and a half years.

5.0 Basis for Opinions Concerning Actions of TDSL in this Matter.

5.1 The initial acceptance of CRT accident residue from the transportation accident by TDSL was proper.

TDSL had no basis to suspect that the debris from Zenith's broken CRTs was a hazardous waste. It had specific prohibitions against transporting restricted materials to its landfill and exercised appropriate controls to prevent unauthorized disposal. TDSL properly relied upon the regulatory requirements applicable to the waste generator and transporter to characterize their waste and, although Zenith and Penske possessed knowledge concerning the CRT accident residue characterization, it was not communicated to TDSL until after the initial disposal had occurred. Upon being informed that the CRT accident residue was a hazardous waste, TDSL immediately ceased receiving the waste, rejected two truckloads of waste preparing to dump at the site, ceased MSW disposal operations in the affected area and cordoned it off, notified the TCEQ of the incident and initiated discussions with the responsible parties for removal of the CRT accident residue and commingled hazardous waste. These actions met or exceeded the requirements of its landfill permit and applicable hazardous waste regulations.

5.2 The immediate response actions performed by TDSL upon learning that the CRT accident residue was a hazardous waste minimized the environmental impact and remedial costs caused by Defendants' improper management of their waste.

The immediate response actions instituted by TDSL prevented the dumping of additional hazardous waste in their landfill. Steps taken to prevent the spread and/or burial of the existing waste minimized the ultimate volume of commingled hazardous waste, and the collection of surface debris reduced the likelihood of contaminant migration. These provisions remained in place despite significant site operational difficulties they caused and, when the responsible parties failed to remove their hazardous waste, TDSL isolated and surveyed the waste within the smallest area possible. These actions minimized the release or threat of release of hazardous substances and adverse impacts upon human health or the environment, as acknowledged by the TCEQ in their May 13, 2004 letter to TDSL. Those efforts also controlled the costs of ultimately disposing of the commingled hazardous waste.

5.3 The entire management of this incident by TDSL has been appropriate considering the circumstances involved, and their response actions did not make TDSL a generator of hazardous waste.

Because of the failures of Penske and Zenith to first notify TDSL that the CRT accident residue was hazardous and then their failure to remove the restricted waste from the landfill, TDSL has been placed in an extremely difficult regulatory position. If the commingled hazardous waste remains at their landfill, major permitting, design, construction and operational changes will be necessary. The attendant agency review and public participation would be time consuming and expensive and could jeopardize the entire municipal waste disposal business of TDSL.

On the other hand, off-site disposal of the commingled hazardous waste by TDSL would subject them to potential future claims under Superfund. Zenith generates millions of pounds of hazardous production waste and debris annually, and disposes of that material off-site. Penske has already acknowledged its responsibility for the CRT accident residue and has moved some of the waste off-site, but stopped short of properly completing the job. Those entities, through their actions, are already exposed to Superfund liability. Nothing that TDSL did in response to learning that the CRT accident residue was a hazardous waste made them a "generator." Therefore, it is inequitable for TDSL to become exposed to that liability because of the failure of Penske and Zenith to comply with the law and complete the off-site disposal of their commingled hazardous waste.

Faced with this dilemma, TDSL has taken the appropriate action to segregate, contain and isolate the commingled hazardous waste and to prevent adverse impacts to human health or the environment due to its presence at the site. These response actions have been performed under the continuing oversight of the TCEQ and its predecessor agency, which have acknowledged and approved TDSL's management of the incident.

EXHIBIT 1

Bates Stamped Documents Reviewed

Document date	Document	Bates Stamp
October 13, 1997 - October 27, 1997	Marcel Deposition Exhibit 29.	ZEN00487-ZEN00489
November 20, 1997	Letter from Wayne M. Koprowski to Gary Newton, Esq. (Deposition Exhibit 102).	TDS00158-TDS00159
January 13, 2004	Wheatley Deposition Exhibit 277.	TDS03056-TDS03065
November 11, 1997	Gregory Exhibit 42.	TDS00094-TDS00106
N/A	Wyckoff Exhibit 38.	ZEN00031-ZEN00035
July 13, 1993	Material Safety Data Sheet.	ZEN00718-ZEN00719
January 6, 1998	Letter from Suzanne Marcel to Tim Herman re: cathode ray tubes sent to TDSL's landfill (with attachments).	TDS00169-TDS00199
March 23, 1998	American Ecology Corporation Waste Disposal Information.	TECO0010-TECO0013
April 2, 1998	Teco Stabilization Recipe Summary Form.	TECO0033
March 13, 1992	PDC Laboratories, Inc. Toxicity Characterization Constituents (TCLP).	ZEN00432-ZEN00434
June 9, 1995	Peoria Disposal Company Waste Material Data Sheet.	ZEN00455
N/A	Zenith Electronics Corporation 1997 Hazardous Waste Report.	ZEN00496 and ZEN00499
N/A	Stabeno Deposition Exhibit 90 – handwritten notes.	TDS02355
N/A	TxDOT (Edward Villalpando) handwritten notes.	TDOT00016
N/A	Deposition Exhibit 23 – Verbal Spill Incident Checklist.	PTL223-PTL224
October 10, 1997	Deposition Exhibit 24 – Fax from Charles J. Smith, Penske to Don Holding re: Accident I-35.	PTL215
October 10, 1997	Deposition Exhibit 25 – Fax from Charles J. Smith, Penske to Jim Gregory, Texas Disposal.	PTL217
October 20, 1994	Zenith internal report of the incident re: G. E. Transport #236182.	ZEN00183-ZEN00192
January 1, 1997	Dedicated Vehicles Transportation Agreement, pages 1, 14 and 18.	PTL92, PTL105 and PTL109
October 7, 1997	Bill of Lading.	PTL74
October 27, 1997	Reszke memorandum to Zenith warehouse offices.	ZEN00827
October 17, 1997	Fax from Marcel to Althen enclosing internal MSDS, glass formulation, and laboratory TCLP testing on the leaded glass.	PTL75-PTL87

October 16, 1997	Fax from Althen to Ware enclosing partially completed disposal information sheet with an MSDS for the material.	TECO0001-TECO0006
N/A	Publication of Rauland Division of Zenith.	ZEN00688-ZEN00715
February 20, 1984	W. B. Swindle, Owens-Illinois letter to Paul Riopel, Rauland Corporation re data for funnels, neck glass and funnel body glass.	ZEN00448-ZEN00450
December 13, 1990	Zenith Rauland Waste Profile Sheet.	ZEN00437-ZEN00438
March 13, 1992	PDC Laboratories, Inc., Toxicity Characteristic Constituents (TCLP).	ZEN00432-ZEN00434
July 1993	Zenith Material Safety Data Sheet.	ZEN00718-ZEN00719
January 10, 1994	Procedure for Returning CRTs to Rauland, Plant #25.	ZEN01236-ZEN01239
January 21, 1994	1992 vs. 1993 Summary of Waste Materials.	ZEN00172-ZEN00173
Unknown	Illinois EPA 1995 Hazardous Waste Report.	ZEN00532-ZEN00544
February 28, 1997	Zenith 1996 Hazardous Waste Report.	ZEN00514-ZEN00531
March 28, 1997	Bill Rowe, Zenith-Rauland memo.	ZEN00671-ZEN00672
May 30, 1997	Indiana EPA Form 8700-22 Uniform Hazardous Waste Manifest.	ZEN00082
May 30, 1997	Midwest Transport, Inc. Trip Ticket.	ZEN00083
May 30, 1997	Land Disposal Notification and Certification form.	ZEN00084
May 16, 1997	Illinois EPA 8700-22 Uniform Hazardous Waste Manifest.	ZEN00085
None	Peoria Disposal Company Fingerprint Analysis, Scale Ticket 542316.	ZEN00086-ZEN00087
May 19, 1997	Illinois EPA 8700-22 Uniform Hazardous Waste Manifest.	ZEN00088
May 29, 1997	Illinois EPA 8700-22 Uniform Hazardous Waste Manifest.	ZEN00089
None	Peoria Disposal Company Fingerprint Analysis, Scale Ticket 543926.	ZEN00090-ZEN00091
May 31, 1997	Illinois EPA 8700-22 Uniform Hazardous Waste Manifest.	ZEN00092
May 31, 1997	Envirite of Illinois, Inc., Nonhazardous Certification	ZEN00093
April 29, 1997	Illinois EPA 8700-22 Uniform Hazardous Waste Manifest.	ZEN00094
None	Peoria Disposal Company Fingerprint Analysis, Scale Ticket 540013.	ZEN00095-ZEN00096
April 18, 1997	Illinois EPA 8700-22 Uniform Hazardous Waste Manifest.	ZEN00097
April 15, 1997	TMT Transport Inc. Ticket No. 5549	ZEN00098

April 18, 1997	"Hard Hammer" Wastes Interim Land Disposal Restriction Notification and Certification Form.	ZEN00099
April 25, 1997	Indiana EPA 8700-22 Uniform Hazardous Waste Manifest.	ZEN00100
April 25, 1997	Indiana EPA 8700-22 Uniform Hazardous Waste Manifest.	ZEN00102
April 25, 1997	Land Disposal Notification and Certification Form (UTS).	ZEN00104
April 25, 1997	Midwest Transport Inc., Trip Ticket 000204051.	ZEN00105
May 18, 1998	Peoria Disposal Company, Waste Material Data Sheet.	ZEN00679
	Zenith Corporation, 1997 Hazardous Waste Report.	ZEN00496-ZEN00513
January 15, 2004	Wade Wheatley, Texas Commission on Environmental Quality, letter to Bob Gregory, Texas Disposal Systems, Inc.	TDS03066
January 12, 2004	Bob Gregory, Texas Disposal Systems letter to Wade Wheatley, Texas Commission on Environmental Quality (with attachments).	TDS03056-TDS03065
October 21, 1996	J. J. Bradley, Zenith Electronics Corporation letter to Depart of Air Quality (with attachments).	ZEN00456-ZEN00460
October 16, 1997	Memo from Tony Marinello to PA. Grnhills.Paul-P.	PTL407
October 9, 1997	Hays County Fire Marshall's Office/Emergency Management report.	TDS01887-TDS01888
October 16, 1997	Tim Herman, Texas Disposal Systems letter to Marc Althen, Penske Truck Leasing.	TDS00090-TDS00091
January 16, 1998	Suzanne Marcel, Zenith Electronics Corp. letter to Tim Herman (with attachments).	TDS00169-TDS00199
January 19, 1998	Code 3, Inc., Report to Penske re: Segregate and Inventory Televisions in Buda, Texas.	PTL120-PTl129
January 8, 1998	Code 3, Inc., proposal to Penske re: Excavation of television picture tubes from landfill in Austin, Texas.	TDS01227-TDS01229
February 27, 1998	Code 3, Inc., Report for Excavation.	TDS00078-TDS00080

EXHIBIT 2

RESUME

ROBERT M. ZOCH, JR.

PROFESSIONAL HISTORY

Zoch Consultants
Nukem Development
ENSR Corporation
Marathon Manufacturing Company
Mineral Oil Refining Company

EDUCATION

B.S. (Chemical Engineering) University of Houston
Graduate Study (Chemical Engineering, Environmental Engineering) University of Houston
Environmental Short Courses in Air, Water, Groundwater, and Solid Waste

PROFESSIONAL REGISTRATIONS & AFFILIATIONS

P.E. (Chemical Engineering) Texas
American Institute of Chemical Engineering
National Society of Professional Engineers
Texas Society of Professional Engineers
American Chemical Society

TECHNICAL SPECIALTIES

Mr. Zoch has over 35 years experience in process and environmental engineering related to:

- Industrial Solid and Hazardous Waste Management
- Wastewater Treatment and Disposal
- Air Pollution Control
- Superfund RI/FS Process
- Waste Disposal Site Evaluations and Closure Plans
- Radioactive Waste, PCB and Asbestos Management
- Site Remediation Design and Implementation
- Petrochemical Process Design
- Process Technology R&D
- CERCLA Response Cost Allocation

REPRESENTATIVE PROJECT EXPERIENCE

- CERCLA RI/FS Investigations - Various Sites. Technical Consultant or Project Manager on many RI/FS investigations or oversight activities under EPA protocol including responsibility for overall technical direction and content; PRP representation before EPA and Department of Justice.

- Envirosafe Services of Texas, Inc. - Hazardous Waste Air Emissions Evaluation. Development of estimation techniques for air emissions from hazardous waste processing and disposal facilities, off-site impact analysis, design of appropriate controls, and public hearing testimony.

- Richmond Tank Car Company. Design of rail car cleaning and service facility including tank and hopper car cleaning racks, wastewater management, plastic product recycle, abrasive blasting and painting facilities.

- A.B. Chance Company - Hazardous Waste Lagoon. Site evaluation, development of closure plan and supervision of closure activities for a waste galvanizing pickle liquor (K062) lagoon, including environmental agency liaison and public notification.

- Houston Lighting and Power - Parish Plant. Modeling and field monitoring verification of ambient air impacts associated with lignite coal handling and storage.

- VETCO 3-C. Monitoring of emissions and evaluation of off-site impacts in residential areas associated with oil field pipe coating activities.

- Commercial Waste Injection Well. Overall design of commercial industrial liquid waste injection well facilities and expert testimony at public hearing.

- Texaco, Inc. - Industrial Waste Landfarm Evaluation. Evaluation of waste loading and degradation rates for an existing landfarm, and recommendations for operational modifications and monitoring improvements to extend its useful life.

- Marathon Steel. Design of an integrated source/fugitive air emissions control system for an electric arc steel making furnace shop, utilizing first-of-a-kind technology to capture hot, particulate laden gases during charging and tapping operations.

- Steel Casting Shops - Particulate Emissions Compliance. Numerous projects for steel casting facilities involving design of control systems and verification of performance through source testing.

- Industrial Waste Land Disposal. Design and permitting of various industrial waste land disposal facilities under state and federal statutes including RCRA and TSCA.

- Municipal Landfill Siting/Permitting/Operating Procedures. Various projects involving landfill site selection, permitting, operation, closure and post closure care.

- Marathon Battery Company - Heavy Metal Sludge Removal. Removal of nickel and cadmium sludges from underwater river sediments, separation from dredging water return flow, and landfill in a secure repository – in settlement of litigation under 1899 Refuse Act.

- Nuclear Sources and Services, Inc. - Low-Level Radioactive Waste Facility. Design of low-level radioactive waste storage and processing facility, including preparation of operating/safety plans and participation in public hearings.

- Record Storage and Disposal, Inc. Air pollution control system design and permitting for a medical waste incineration facility, including representation at public hearing.

- Lead Products Company. Assessment of soil and water contamination from recycle of lead/acid batteries and design of corrective action program.

- Recycle Plastics. Evaluation of potential off-site impact from a fluid bed incinerator applied to plastics pyrolysis and recovery.

- Industrial Waste Surveys. Surveys of industrial waste generation and disposal practices, with projection of trends under various economic and regulatory pressures.

- Marathon - MORCO - Chemical Wastewater Treatment. Physical separation and catalytic oxidation of petrochemical wastewater, along with discharge permitting and impact analysis on receiving stream.

- Texaco, Inc. -- Refinery Closure. RCRA closure plan development, approval and project management for on-site landfill of refining waste and contaminated media.

- Toshiba International. Design and permitting of a thermal incinerator system for solvent emission control from process operations.

- Richmond Tank Car Company. Design, permitting and performance verification of a catalytic incineration unit for removing solvent emissions from rail car painting facilities.

- Rohm & Haas. RCRA permitting for Texas chemical plant; investigation and closure of related on-site and off-site industrial waste disposal facilities.

- C & H Die Casting Company - PCB Lagoon Closure. The development and implementation of a closure plan for a lagoon containing regulated levels of PCB by off-site disposal.

- Steel Mill - Wastewater Control. Wastewater segregation, pretreatment, and surface discharge permitting activities for a large integrated electric arc furnace steel mill.

- Refinery - RCRA Part B Permit Applications. Regulatory and technical direction in preparation of RCRA Part B Permit Applications for several integrated refineries around the country.

- Texas Star Scrap. Design, permitting and performance verification of air pollution control equipment on a secondary metals recovery furnace.

- Hudson Oil - Inactive Refinery. Site investigation and negotiation of RCRA Corrective Action Order for an integrated petroleum refinery. Project involved site-specific, risk-based limits on carcinogenic and non-carcinogenic Polyaromatic Hydrocarbons (PAH).

- TXI. Off-site impacts assessment and waste acceptance procedures associated with hazardous waste fuels used in cement kilns for RCRA BIF permit; participation in public hearing.

- Nukem Development - Process development and international commercialization of PCB decontamination and destruction processes.

- Texas TGV – High Speed Railroad Franchise. Environmental impact assessment for proposed multibillion dollar high speed rail project, including expert testimony at hearing.

- American Ecology Environmental Services. Development of expert opinions and testimony concerning release, fate and transport of chemicals and resulting exposures in workplace and surrounding neighborhood environments.

- Juncos Landfill Superfund Site. Evaluation of responsibility for hazardous substances and development of cost allocation methodology among industrial users of a municipal landfill.

- American Premier Underwriters, Inc. – Technical support and expert testimony in insurance claim for environmental damage.

- TexTin Superfund Site – CERCLA response cost allocation among the U.S. Government, former site operators, and suppliers of recyclable metals at a WWII primary and secondary smelter (War Plant case).

- Scaltech, Inc. – Technical support in patent infringement suit concerning refinery waste processing.

- Environmental Contamination Fingerprinting – Evaluation of contaminant sources and probable age of releases based upon environmental analytical data.

- DuPont – CERCLA action for contribution to cleanup costs at 15 plants containing numerous chemical and radioactive contaminants.

- General Motors – Allocation of response costs for solvent and metals contamination at diverse manufacturing plants.

- Wood Treating Plants – Investigations and corrective action alternatives for former wood treating plants involving creosote, pentachlorophenol, or chromated copper arsenate (CCA) treatment systems.

- Maywood Chemical – Evaluation and coordination of response actions to address radioactive and chemical contamination under State of New Jersey requirements, CERCLA, and the Federal FUSRAP program for radioactive material processing facilities.

- Forensic Investigations – Evaluation of plant process conditions and operating procedures which resulted in industrial exposures or injuries.

PUBLICATIONS

Zoch, Robert M., Jr., "Causes and Control of Fires in Sanitary Landfills," presented to Annual Meeting of the Texas Association of Solid Waste Management, Houston, Texas, 1971.

Zoch, Robert M., Jr., "Removal of Heavy Metals from Industrial Wastewater," presented to the Texas Water Pollution Control Association, College Station, Texas, 1975.

Zoch, Robert M., Jr., "Technical Aspects of Environmental Permits," presented to an Institute sponsored by the State Bar of Texas, Houston, Texas, 1980.

Zoch, Robert M., Jr., "Hazardous Waste Management Alternatives for the Acid/Clay Oil Re-Refining Process," presented to the Fourth International Conference on Used Oil Recovery and Reuse sponsored by the Association of Petroleum Re-Refiners, the U.S. Department of Energy, and the National Bureau of Standards, Las Vegas, Nevada, 1981.

Zoch, Robert M., Jr., "Groundwater Contamination Issues Related to Land Disposal of Industrial Wastes," State Bar of Texas, "Environmental Law of the 80's," San Antonio, Texas, 1984.

Zoch, Robert M., Jr., "You Don't Close a Refinery by Shutting it Down," presented at the Annual Meeting of the National Petroleum Refiners Association, San Antonio, Texas, March, 1985.

Zoch, Robert M., Jr., "When an HPI Plant Shuts Down," Hydrocarbon Processing, Gulf Publishing, October, 1985.

Zoch, Robert M., Jr. & Caputo, Dennis L., "Decommissioning Old Plants," presented at 67th Annual GPA Convention, Dallas, Texas, March, 1988.

Zoch, Robert M., Jr., "Superfund Remediation/RCRA Corrective Action and the Role of Risk Assessment - The Consultant's Perspective," presented at the Environmental Law Course, Dallas, Texas, November, 1989.

Zoch, Robert M., Jr., "Emerging Environmental Issues Facing Electric Utilities," presented at the Southeastern Electric Exchange, Pensacola, Florida, October, 1993.

EXHIBIT 3

Robert M. Zoch, Jr., P.E.

Matters in Which I have Testified in Last 4 Years

Year	Type Testimony	Matter	For
2004	Deposition	ESSO Standard Oil Company (Puerto Rico) v. Carlos Rodriguez Perez, Carlos M. Belgodere Pamies, et al. CIV No 01-2012 (SEC) (JA) U.S. District Court, District of Puerto Rico	Plaintiff
2003	Deposition	Gloria and Elgin Cole, et al v. Groendyke Transport, Inc. and Raymond Rice C.A. No. A-000311-C 128th Judicial District Orange County, Texas	Defendant
2002	Trial	Homer Abron, Jr., et al v. Dean Lumber Co., Inc., et al C.A. No. 2: 99 CV 197 United States District Court Eastern District: Marshall Division, Texas	Defendant
2002	Deposition	Homer Abron, Jr., et al v. Dean Lumber Co., Inc., et al C.A. No. 2: 99 CV 197 United States District Court Eastern District: Marshall Division, Texas	Defendant
2001	Deposition	American Premier Underwriters, Inc. v. Certain Underwriters at Lloyd's London, et al C.A. No. A97-03088 Hamilton County, Ohio, Court of Common Pleas	Plaintiff
2001	Deposition	E.I. DuPont de Nemours, et al. v. United States of America, et al. CIV-97-497(JCL) District of New Jersey	Plaintiff

2000	Deposition	Virgie Adams, et al. v. American Ecology Environmental Services Corp., et al. CA No. 236-165224-96 236th District, Tarrant County, Texas	Defendant
2000	Deposition	Neil S. Platzer, et al. v. Trinity Industries, Inc., et al. CA No. DV-99-01537 14th District, Dallas County, Texas	Plaintiff
1999	Deposition	Linda Hamilton, et al. v. ASARCO, Inc., et al. CA No. 94-3420F, 94-3421F, 94-3422F 214th District, Nueces County, Texas	Defendant

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The billing rate for Robert M. Zoch, Jr. in this matter is $225.00 per hour plus reimbursement of direct expenses at cost.

BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

TCEQ DOCKET NO. 2004-0984-IHW-E

REPORT OF MARIANNE LAMONT HORINKO

SEPTEMBER 8, 2004

Exhibit 5

1. IDENTIFICATION

My name is Marianne Lamont Horinko, 4710 Benjamin Cross Court, Chantilly, Virginia, 20151, telephone 202-997-3318.

2. CREDENTIALS

From 2001 to 2004, I served as Assistant Administrator of the Office of Solid Waste and Emergency Response (OSWER) at the U.S. Environmental Protection Agency (EPA), including service as Acting Administrator of EPA from July through November, 2003. OSWER is the office responsible for administration of the federal Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) programs. From 1992 to 2001, I served as President of Clay Associates, Inc. (and Executive Vice President and General Counsel of its predecessor organization, Don Clay Associates, Inc.), a national environmental consulting firm specializing in hazardous waste policy. From 1990 to 1992 I served as Attorney Advisor to Don Clay, the Assistant Administrator for OSWER, responsible for RCRA and CERCLA policy. From 1986 to 1990 I practiced law at Morgan, Lewis & Bockius, specializing in RCRA and CERCLA. From 1983 to 1985 I was a staff scientist at ENVIRON Corporation, specializing in risk assessment and environmental regulation. A copy of my resume is attached as Exhibit A.

3. SUBJECT MATTER

This report provides my expert opinion as to the regulatory status of co-mingled hazardous waste, generated as a result of the traffic accident on I-35 involving damage to

approximately 1,248 color television cathode ray tubes (CRTs) from a Penske Truck Leasing Co., L.P. truck on October 9, 1997 in Hays County, Texas, and municipal solid waste at the Texas Disposal Systems Landfill (TDSL).

4. GENERAL SUBSTANCE OF MENTAL IMPRESSIONS AND OPINIONS AND BRIEF SUMMARY OF BASIS FOR THEM

A. FRAMEWORK FOR REGULATION OF HAZARDOUS WASTE UNDER RCRA

Since 1980, EPA has developed a comprehensive regulatory framework under Subtitle C of RCRA for identifying, transporting, treating, storing, and disposing of hazardous waste. The regulations (set forth at 40 C.F.R. Part 261-299) center around two broad objectives: to prevent releases of hazardous wastes and constituents through a comprehensive and conservative set of management requirements (commonly referred to as "cradle-to-grave" management), and to minimize the generation and maximize the legitimate reuse, recycling, and treatment of hazardous waste and constituents.

The RCRA regulations generally apply to any "solid waste." EPA defines "solid waste" as garbage, refuse, sludge, or other discarded material (including solids, semi-solids, liquids, and contaminated gaseous materials). If a material is a "solid waste," the generator must then determine if it is a "hazardous waste." *It is the responsibility of the generator either to test the waste or use its knowledge of the waste to make a determination about its properties, either before or at the time of generation.* EPA generally defines hazardous waste as either "listed"

waste, which is a specific waste stream designation based upon the specific hazardous properties of that waste stream, or "characteristic" waste, which is a generic waste stream that exhibits a characteristic of hazardous waste. There are four categories of characteristic waste: ignitable, corrosive, reactive, and toxic. For toxic wastes, EPA has published a schedule of concentration levels for leachability testing of specific toxic chemicals, above which wastes are deemed to be hazardous.

The RCRA statute further mandates that hazardous wastes be treated to minimize threats to human health and the environment prior to land disposal. EPA has developed a set of regulations, the Land Disposal Restrictions (LDR), that apply to each listed and characteristic hazardous waste to ensure that they are treated properly prior to land disposal. These regulations are needed to fulfill the intent of the law that hazardous wastes be treated so as to "substantially reduce the toxicity of the waste or migration of hazardous constituents from the waste so that short-term and long-term threats to human health and the environment are minimized." RCRA Section 3004(m)(1). *In other words, it is not permissible to simply dilute a waste in order to reduce the toxicity below the characteristic leachate level; the waste must be treated to comply with the law.*

B. THE SPILLED CRTS FROM THE PENSKE TRUCK WERE HAZARDOUS WASTES UNDER RCRA

In the instant matter, the CRTs being shipped by Penske ceased being useful products and became "discarded" (and thus, solid wastes under RCRA) when the Penske truck accident

occurred at approximately 12:51 p.m. on October 9, 1997. (This situation is analogous to the train derailment which occurred in California in the early 1990s involving a spill of metam sodium, a toxic pesticide; in that situation, EPA testified that the pesticide product became discarded and thus, subject to RCRA when the train left the tracks.) Under its contractual arrangement with the shipper, Zenith Electronics Corporation (Zenith), Penske was on official notice that any discarded CRTs would be hazardous waste because of their high lead content. Zenith routinely managed all of their other discarded CRTs as D008 hazardous waste. Furthermore, contractual arrangements between Zenith and Penske specified that any discarded CRTs would be managed as D008 waste. Thus, both Zenith and Penske had knowledge that the materials would be hazardous if discarded, and at the time the CRTs spilled from the truck and were no longer usable as intended or for other purposes, they became discarded under RCRA. (Indeed, EPA itself specified that discarded commercial CRTs are hazardous D008 waste in a rule proposing to exempt recycling of CRTs under certain conditions to safeguard their handling from the hazardous waste management requirements. 67 Fed. Reg. 40508).

Zenith's assertion that the CRTs are essentially harmless is mistaken. In fact, EPA is on the record as having great concern about the growing amount of CRT waste - that is why the Agency proposed the CRT recycling rule, to keep the discarded CRTs out of landfills. EPA also convened a stakeholder group, the National Environmental Product Stewardship Initiative, to develop consensus on how to stop disposal of discarded CRTs. Last year California enacted legislation to mandate CRT recycling, and a number of states are considering landfill bans on CRTs.

Both Zenith, as the owner of the CRTs, or Penske, as the operator of the truck carrying the CRTs, could be considered the "generator" for purposes of RCRA. As generator of a solid waste, Penske had the obligation to determine whether the material was "hazardous" under RCRA upon occurrence of the accident and then ensure its proper treatment and disposal. Thus, Penske should have either relied upon its knowledge to report the materials as hazardous, or tested the spill materials to determine actual hazard, prior to allowing the spilled materials to be sent to a municipal landfill in error.

Penske was also obliged to provide proper notification to public authorities under CERCLA that a release of a hazardous substance above its reporting threshold had occurred. Public safety officials responding to the traffic accident relied upon the Penske driver's misrepresentation that the CRT waste (i.e., shattered glass materials containing leachable lead) was not hazardous to send the materials to the TDSL facility in error. Penske's assertion that the emergency responders and receiving facility were responsible for the hazardous waste designation runs counter to the RCRA rules, which rely upon generator testing or knowledge.

At the time of the truck accident, the discarded CRTs should have been managed as D008 hazardous waste. After the passage of several hours and upon realizing its error, Penske appears to have taken some proper steps to correct its error and to ensure responsible and legal management of the waste CRTs (other than those that had been placed into the landfill face because of the truck driver's misrepresentation). Penske headquarters, prior to discovering the error, caused seven dump trucks to be taken to TDSL and unloaded at the landfill face.

Thereafter, after Penske's notification to TDSL that the discarded CRT waste was hazardous, two of the nine dump trucks originally directed to TDSL from the accident scene were returned to the scene. Penske mobilized a licensed hazardous waste handler, Code 3, to containerize these two dump truck loads and the remaining discarded CRT waste in rolloff boxes, separate out the CRT waste, and manage it as hazardous waste. However, Penske is irresponsible in not managing the mixture of municipal solid waste and hazardous waste as D008 hazardous waste. Once the hazardous waste characteristic attaches at the point of generation under EPA's rules (i.e., the accident scene in this instance), that waste code carries through until the materials are properly treated to remove the hazardous waste characteristic and meet the LDR requirements. As discussed below, simply diluting the hazardous waste to reduce the levels of toxic constituents below the characteristic is impermissible.

The September 2, 2004 letter from Charles J. Sheehan, EPA Regional Counsel, Region 6 (Dallas) to Lydia Gonzalez Gromatzky, TCEQ supports this reading of the regulations. Sheehan correctly notes that a waste which does not meet the characteristic levels at the point of generation does not require disposal in a RCRA Subtitle C hazardous waste landfill. Sheehan further emphasizes that improper dilution, such as mixing with municipal solid waste, may not be used to achieve these levels and avoid adequate treatment under RCRA, and a regulating agency may take such enforcement action as is necessary to ensure that proper treatment of such waste occurs.

C. MIXING THE SPILLED HAZARDOUS WASTE WITH MUNICIPAL SOLID WASTE DOES NOT DEFEAT THE MATERIALS' HAZARDOUS WASTE DESIGNATION UNDER RCRA

The RCRA statute expressly mandates that hazardous waste be treated to minimize threats prior to land disposal. This statutory requirement applies to both listed and characteristic wastes. In promulgating the regulatory treatment levels for each RCRA waste stream, EPA divided the task into manageable packages or "thirds." The treatment standards for characteristic wastes were included in the so-called "third-thirds" rulemaking (note that the designation of wastes into each "third" was something of a misnomer, given that the last "third"actually contained much more than a third of the RCRA waste streams).

In promulgating the "third-thirds" rule, which contained the LDR standards for characteristic wastes, EPA faced the dilemma of whether to set treatment standards for these waste streams that might be below the characteristic concentration levels. In other words, could EPA mandate treatment to levels below which the waste was clearly hazardous? EPA found that soundest reading of the RCRA statute would indeed require such treatment, noting the "statutory goals and policies of seeking to reduce the uncertainties inherent in the land disposal of hazardous waste by substituting a system whereby hazardous wastes are pretreated in such a way that minimizes threats to human health and the environment." 54 Fed. Reg. 48490.

In reaching this policy result, EPA recognized that the characteristic of toxicity is defined by levels higher than the health-based levels that have been the basis for delisting many

hazardous wastes. In other words, the toxicity characteristic concentration levels are those at which the wastes clearly present a substantial hazard, and that lower levels also may pose a hazard. In addition, characteristic wastes may also contain other hazardous constituents, and only by mandating treatment beyond simply removing the characteristic will allow EPA to reach these other hazardous chemicals. EPA indicated that this broad reading of its statutory authority was the only way to reduce the characteristic waste's toxicity and mobility in a way that further minimizes the threat to human health and the environment. Indeed, EPA noted that this reading was the only way to implement the Congressional admonition against dilution in lieu of treatment.

More critically, EPA also addressed the important issue of whether dilution could be used to defeat the hazardous waste characteristic - not just meet the LDR standards. EPA specifically stated: "It is not permissible to dilute a waste to render it non-hazardous in lieu of proper treatment under section 3004(m)" of RCRA. 54 Fed. Reg. 48495. In reaching this conclusion - that characteristic toxic wastes cannot be mixed with non-hazardous wastes in order to render them non-hazardous - EPA noted that its authority to mandate LDR treatment standards below the characteristic level would be largely meaningless if a person could dilute the waste to remove the characteristic rather than treating it. The legislative history of the statute clearly indicates Congress' intention that dilution not be used as a substitute for treatment, noting that "a prohibition of this type of dilution is particularly important where regulations are based on concentrations of hazardous constituents." Id. In the final "third-thirds" rule, EPA found that "in many cases dilution simply increases the volume of the waste without reducing or immobilizing

the mass of hazardous constituents," and that "characteristic wastes may also contain significant concentrations of other hazardous substances." 55 Fed. Reg. 22653. Thus, the Agency "adheres to the position that the act of impermissibly diluting a prohibited waste so that it no longer exhibits a characteristic (or is rendered delistable) is illegal." 55 Fed. Reg. 22666. The dilution prohibition clearly applies to removing the characteristic, not just complying with the RCRA land disposal restrictions.

Penske's assertion that EPA conclusively asserted that the currently containerized mixture of characteristic toxic waste and non-hazardous waste that was impermissibly diluted is automatically non-hazardous under the "third-thirds" rule is also wrong. Indeed, such a policy result would be contrary to the RCRA statute and also detrimental to the environment. Allowing Penske to classify all of the material as non-hazardous and dispose of the material without treatment violates the RCRA statutory mandate that hazardous waste be treated to minimize threats to human health and the environment. Any other result would remove the incentive for generators to treat their wastes responsibly, as well as allow them to reap an unfair economic benefit by evading the costs of proper waste management and disposal. Penske was responsible for the generation of hazardous waste and for potentially allowing hazardous waste to be disposed in a manner that may have caused risk to human health had TDSL not segregated and stored the waste immediately. Penske's preferred disposal option, to place the waste in a nonhazardous waste landfill, does nothing to reduce the toxicity or volume of waste material - it simply moves the problem. Irresponsible behavior should not be rewarded by selecting, and the Texas Commission on Environmental Quality (TCEQ) approving, the path of least resistance.

D. FAILURE TO MANDATE PROPER TREATMENT AND DISPOSAL OF THIS MATERIAL PLACES TDSL AND ITS CUSTOMERS AT UNFAIR RISK OF SUPERFUND LIABILITY AND EXPOSURE TO CITIZEN SUIT LITIGATION

The Superfund law places liability of cleanup of releases of hazardous substances upon four classes of individuals: Owners of facilities from which there has been a release; operators of such facilities; transporters of the hazardous substances; and those who "arranged for disposal" (or generators) of such substances. Liability is strict, joint, and several, meaning that each of those entities is potentially liable for the entire cost of cleanup. Cleanup of a Superfund site can be extremely expensive, often in excess of $25 million per cleanup. Many municipal solid waste landfills have ended up on the Superfund National Priorities List, in part because of the erroneous engineering perspective in past decades that the best way to dispose of hazardous waste was to mix it with MSW (at that time, it was viewed that MSW would act as a "sponge" for the hazardous waste. We now know, of course, that the hazardous waste simply leaked through the landfill and the large volume of MSW simply rendered the cleanup much more expensive.

Liability under Superfund attaches regardless of the concentration of the hazardous substances in the waste. As a result, simply removing the RCRA toxicity characteristic and rendering the hazardous waste more dilute does nothing to ameliorate potential Superfund liability. If Penske is allowed to remove this material and improperly dispose of it, resulting in future cleanup under Superfund, TDSL and the generators of the associated MSW may be

potentially liable for the entire costs of the cleanup. Furthermore, such liability may attach regardless of whether the site where the waste was disposed ends up on the National Priorities List. Under the Superfund law, not only the Federal government, but also the state, a local government, or even private parties can sue to recover the costs of cleanup. Furthermore, the RCRA statute also includes a citizen suit provision, under which TDSL could be liable for cleanup resulting from any "imminent and substantial endangerment" caused by the improperly-managed waste. As a result, assurances from the state that it will not pursue TDSL for any cleanup costs do not insulate TDSL from any other prospects of future liability for improper management of the Penske waste.

E. PENSKE SHOULD ASSUME RESPONSIBILITY FOR ITS MIXTURE OF HAZARDOUS AND SOLID WASTE BY REMOVING THE MATERIALS FROM THE TDSL PREMISES TO AN AUTHORIZED HAZARDOUS WASTE DISPOSAL FACILITY AND DETERMINING WHAT TYPE OF TREATMENT IS APPROPRIATE PRIOR TO LAND DISPOSAL IN ORDER TO MEET THE RCRA REQUIREMENT TO MINIMIZE THREATS

The TCEQ, as the state agency authorized to administer the RCRA statute in this case, should require that Penske utilize the same approach to the materials at issue here as the other discarded hazardous wastes generated at the truck accident scene. That is, Penske should hire a licensed hazardous waste contractor to remove the discarded material mixed with other waste to an authorized hazardous waste facility, manifested as D008 hazardous waste. The licensed contractor should then assist Penske and regulatory authorities in determining the appropriate treatment protocols and disposal options that will comply with the RCRA requirement that

contractor should then assist Penske and regulatory authorities in determining the appropriate treatment protocols and disposal options that will comply with the RCRA requirement that wastes be treated to minimize threats, reduce the toxicity and volume of material, and ensure proper disposal.

While I believe the law mandates treatment of the co-mingled materials as a hazardous waste, even if the Commission assumes for the sake of argument that there exists some flexibility under the law, they should still adhere to this course of action for a number of compelling policy reasons. Most important, of course, is protect the public health, ensure treatment to minimize threats consistent with RCRA, and disincentivize impermissible dilution. The Commission should also send a strong message that cavalier attitudes toward improper waste management and irresponsible corporate stewardship such as Zenith's and Penske's won't be tolerated in the state of Texas. Finally, the Commission should take steps to ensure that emergency responders and responsible actors helping out after an accident are insulated from liability for their actions. Thus, the proper course of action is to manifest the waste to a licensed RCRA hazardous waste handler and determine through proper testing and analysis whether treatment will immobilize the lead.

5. LIST OF DOCUMENTS, REPORTS, AND DATA COMPILATIONS THAT HAVE BEEN RELIED UPON IN PREPARATION OF THIS REPORT

A list of documents, reports, and data compilations that have been relied upon in preparation of this report is attached as Exhibit B. Should additional material or facts come to

light, I reserve the right to amend my opinion.

Respectfully submitted,

Marianne Lamont Horinko

EXHIBIT A:

Marianne Lamont Horinko

Marianne L. Horinko is a Visiting Scholar at the Environmental Law Institute, a non-profit organization devoted to the study of U.S. and international environmental law. She is an internationally-recognized author and speaker on the topics of environmental cleanup policy, hazardous waste regulation, waste reduction and recycling, emergency response and homeland security, and "brownfields" revitalization.

Ms. Horinko was named Assistant Administrator for the Office of Solid Waste and Emergency Response at the U.S. Environmental Protection Agency by President George W. Bush in June 2001, a position she held until June 2004. She served as Acting EPA Administrator from July through November, 2003 during the interim between Administrators Christine Todd Whitman and Michael O. Leavitt.

During her tenure as Assistant Administrator, Ms. Horinko refocused the goals of her office around five major priorities: Homeland Security/Emergency Response; One Clean-up Program; Land Revitalization; Energy Recovery, Recycling & Waste Minimization; a Retail Environmental Initiative (the Resource Conservation Challenge) and Workforce Development.

Following the events of September 11, Ms. Horinko learned that she had both war time and peace time responsibilities, and spent her first few months at EPA in the unprecedented and unexpected

role of assisting in environmental cleanup activities at Ground Zero in lower Manhattan, the Pentagon in Washington DC, and the U.S. Capitol due to anthrax contamination. In 2003, as National Program manager, she oversaw EPA's response to the Columbia Space Shuttle Disaster. As a result of these experiences, she has led the way in crafting the groundbreaking National Approach to Response.

She brought new approaches to environmental protection using partnerships, flexibility and innovation to create environmental improvement. The Brownfields program, signed into law by President Bush in 2002, is a model for many of her efforts, as it is the embodiment of these new approaches to environmental protection. Under her leadership, the budget for the Brownfields program more than doubled.

During the first Bush Administration, Ms. Horinko was Attorney Advisor to Don Clay, EPA's Assistant Administrator for Solid Waste and Emergency Response. In that capacity she was responsible for RCRA regulatory issues and Superfund reauthorization. Subsequently, she served as President of Clay Associates, Inc., a national environmental policy consulting firm, where she launched the RCRA Policy Forum, a membership organization comprised of federal and state governments, environmental groups, Hill staff, and industries interested in furthering constructive dialogue to improve the nation's waste programs.

Ms. Horinko is an alumna of the University of Maryland, College Park (B.S. in analytical chemistry, 1982) and Georgetown University Law School (J.D., 1986). From 1986 to 1990, Ms. Horinko was an attorney at Morgan, Lewis & Bockius, involved in the areas of pesticides and hazardous waste

counseling, Clean Water Act and Superfund litigation, and environmental audits in connection with business transactions. She was responsible for both the Superfund Settlements Project and the Information Network for Superfund Settlements, a policy group of over 120 companies, law firms, and other organizations aimed at cooperative efforts to streamline cleanups.

She is married and has two children. Bio Dated 8/17/04

EXHIBIT B - List of materials reviewed or relied upon in developing report

1. U.S. Environmental Protection Agency, "Land Disposal Restrictions for Third Third Scheduled Wastes," Final Rule, 55 Fed. Reg. 22520.

2. U.S. Environmental Protection Agency, "Land Disposal Restrictions for Third Third Scheduled Wastes," Proposal Rule, 54 Fed. Reg. 48372.

3. May 25, 2004 Letter to Bob Gregory, TDSL from Glenn Shankle, TCEQ re: Zenith Cathorde Ray Tubes (CRT); Truck accident of October 9, 1997 and subsequent handling of CRT waste accident debris at the accident scene and at the TDSL landfill; TCEQ Permit No. 2123; Travis County.

4. TCEQ Docket No. 2004-0984-IHW-E, Penske Truck Leasing Co., L.P.'s Response to Texas Disposal Systems Landfill, Inc.'s Motions to Overturn, August 2, 2004.

5. June 30, 2004 Letter to John Steib, TCEQ from Gary Newton, TDSL re: June 18, 2004 letter to Marc Althen of Penske Truck Leasing Co. on Hazardous CRT Waste and Penske's Request for Authorization for Disposal of a Special Waste.

6. October 10, 1997, Fax from Charles J. Smith, Jr., Penske Truck Leasing, to Jim Gregory, Texas Dispoal Systems Landfill, noting Penske as generator of spilled materials.

7. November 5, 1997 Letter from Chris Smith, TCEQ to Mark Althen, Penske Truck Leasing, re: Penske Truck Leasing Spill Located at South IH-35 near Buda, Hays County, Texas.

8. December 2, 1997 Letter to Chris Smith, TCEQ from Marc Althen, Penske Truck Leasing re: Penske Logistics Spill IH-35 Near Buda, Harp County, Texas.

9. January 15, 2004 Letter to Bob Gregory, TDSL from Wade Wheatley, TCEQ re:

Commingled Cathode Ray Tube Regulated Hazardous Waste, Texas Disposal Systems Landfill, Inc., TCEQ Permit No. MSW-2123, Travis County, Texas.

10. May 12, 2004 Letter to Glenn Shankle, TCEQ from Kerry Russell, Russell, Moorman, and Rodriguez, L.L.P. re: May 6, 2004 TDSL Meeting.

11. May 13, 2004 Letter to Brian Hard, Penske Truck Leasing from Glenn Shankle, TCEQ re: Notice of Violation for the Sill Investigation at IH-35 South, near Exit 221, Buda, Hays County, Texas.

12. May 13, 2004 Letter to Bob Gregory, TDSL from Glenn W. Shankle, TCEQ re: Zenith Cathode Ray Tubes (CRT); Accident of October 9, 1997.

13. May 14, 2004, Opinion of Keith Hopson, Attorney-at-Law.

14. September 2, 2004 Letter to Lydia Gonzalez Gromatsky, TCEQ from Charles J. Sheehan, Regional Counsel, EPA Region 6.

15. June 1, 2004 Letter to John Steib, TCEQ from Marc Althen, Penske Truck Leasing re: Proposed Removal Plan, Notice of Violation dated May 13, 2004, Spill Investigation at IH-35 South, near Exit 221, Buda, Hays County, Texas.

16. June 4, 2004, Report of Robert M. Zoch, Jr., P.E.

17. June 16, 2004, Letter to Lydia Gonzalez-Gromatsky, TCEQ from Gary Newton, TDSL re: Response to May 20, 2004 letter regarding Cathode Ray Tube Regulated Hazardous Waste, TCEQ Permit No. MSW-2123, Travis County Texas.

18. June 18, 2004 Letter to Marc E. Althen, Penske Truck Leasing from John F. Steib, Jr., TCEQ.

19. June 21, 2004 Request for Authorization for Disposal of a Special Waste from Waste

Management, Inc. to TCEQ.

20. Penske/Zenith Hazardous Waste Handling General Timeline

21. TCEQ Docket No. 2004-0984-IHW-E, In the Matter of the Authorization of Disposal of Waste as Special Waste Issued by the Executive Director, Executive Director's Response to Texas Disposal Systems Landfill, Inc.'s Motion to Overturn.

22. TCEQ Docket No. 2004-0984-IHW-E, In the Matter of the Authorization of Disposal of Waste as Special Waste Issued by the Executive Director, Zenith Electronics Corporations's Response to Motion to Overturn.

23. July 28, 2004 Letter to Bob Gregory, TDSL from John Steib, TCEQ.

24. July 28, 2004 Letter to Gary T. Newton, TDSL from Michael A. Duff, Penske Truck Leasing.

25. July 27, 2004 Letter to Mike Duff, Penske Logistics from Gary Newton, TDSL re: Response to your July 23, 2004 letter.

26. July 23, 2004 Letter to Gary Newton, TDSL from Michael A. Duff, Penske Truck Leasing.

27. July 8, 2004 Letter to Bob Gregory, TDSL from John F. Steib, Jr., TCEQ.

28. TCEQ Docket No. _____, In the Matter of the Authorization of Disposal of Waste as Special Waste Issued by the Executive Director to Penske Truck Leasing Co., L.P., Texas Disposal Systems Landfill, Inc.'s Motion to Overturn the Executive Director's June 30, 2004 Decision.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 24, 2004

Mr. Marc E. Althen
Senior Vice President
Penske Truck Leasing.
P.O. Box 563
Reading, Pennsylvania 19603-0563

Dear Mr. Althen:

On May 13, 2004, the Texas Commission on Environmental Quality (TCEQ) issued Penske Truck Leasing (Penske) a Notice of Violation (NOV) in connection with the spill investigation at IH-35 South near Exit 221 in Buda, Hays County. This NOV required Penske to take certain corrective actions. On June 18, 2004, on my behalf, John Steib, Deputy Director for the Office of Compliance and Enforcement, approved your proposed plan for removal and disposal of the waste located at the Texas Disposal Systems Landfill (TDSL) as special waste. TDSL filed a Motion to Overturn my decision in this matter. On September 16, 2004, the Commission issued an order overturning my decision and remanding this matter.

I now exercise my authority to act in this matter, and by this letter, I am requiring the following actions of Penske. No later than October 27, 2004, Penske must remove all of the waste currently stored in the 99 roll-off containers at the TDSL facility. This waste must be manifested as hazardous waste and disposed of at a permitted hazardous waste facility. Alternatively, Penske may pursue the actions discussed at the September 16th hearing relating to the assessment and any necessary extraction of the waste in the roll-off containers. If Penske pursues this approach, all activities associated with the assessment, characterization and extraction of the contents of the roll-off containers must be conducted at a separate authorized facility in a manner that ensures protection of human health and the environment. Specifically, Penske must ensure compliance with all RCRA requirements, including land disposal restrictions for any D008 waste triggering those requirements. In any case, the roll-off containers must be removed from the TDSL facility by October 27, 2004, and the waste manifested as hazardous waste until such time as it is conclusively determined that no D008 waste at the level that is characteristically hazardous remains.

Exhibit 6

Upon completion of this activity, but no later than 90 days from the date of this letter, please submit all documentation necessary to demonstrate that the waste was properly disposed of in accordance with all applicable rules and regulations. Please submit this information to:

Ms. Anna Rodriguez, Special Assistant
Office of Compliance and Enforcement
Texas Commission on Environmental Quality
P.O. Box 13087, MC 163
Austin, Texas 78711-3087

If you have any questions, please feel free to contact Mr. John F. Steib, Jr.,Deputy Director, Office of Compliance and Enforcement at (512) 239-5718.

Sincerely,

Glenn Shankle, Executive Director
Texas Commission on Environmental Quality

cc: Ms. Pam Giblin, Baker Botts, LLP
Mr. John F. Steib, Jr., Deputy Director, TCEQ Office of Compliance and Enforcement
Mr. Robert Gregory, Texas Disposal Systems

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October 10, 2005

BY HAND DELIVERY

Pamela M. Giblin
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pam.giblin@bakerbotts.com

Mr. Glenn Shankle
Executive Director
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Dear Mr. Shankle:

As you know, my client, Penske Truck Leasing Co., L.P. ("Penske"), has attempted on numerous occasions to remove certain material stockpiled at Texas Disposal Systems Landfill, Inc. ("TDSL") in accordance with your letters dated May 13, September 24 and October 19, 2004. Although Penske did not generate, transport or dispose of the material in question, Penske has cooperated fully with the Texas Commission on Environmental Quality ("TCEQ") and has done everything possible to address the Notice of Violation ("NOV") you issued. TDSL, however, has repeatedly refused to allow Penske access to the landfill to remove and dispose of the material in accordance with your directives.

Penske believes that it is appropriate to proceed with the litigation pending in Hays County, which TDSL instituted seven and one-half years ago. As acknowledged at the December 1, 2004 hearing, the ultimate resolution of this dispute belongs in court. A hearing is scheduled in the Hays County action for October 12, 2005 to discuss a new schedule and trial date. Because the Hays County litigation is the appropriate forum to resolve all the disputed issues between Penske, TDSL, and Zenith Electronics Corp., Penske intends to proceed with all deliberate speed and let a court and jury ultimately decide the relevant issues at trial. We hope that you will agree that Penske has done everything in its power to address the NOV you issued, and that it is now time for the pertinent and disputed issues to be ultimately decided by a court and a jury.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Pamela M. Giblin

cc: Mr. John Steib

bcc: Lydia Gonzalez Gromatzky

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 12, 2005

Ms. Pamela M. Giblin
Baker Botts, LLP
1500 San Jacinto Center
98 San Jacinto Blvd.
Austin, Texas 78701-4287

Dear Ms. Giblin:

I am responding to your recent letter regarding the May 13, 2004 notice of violation (NOV) issued by the Texas Commission on Environmental Quality to Penske Truck Leasing Co., L.P. (Penske) in connection with the spill investigation at IH-35 South near Exit 221 in Buda, Hays County. You believe that Penske has done everything in its power to address this NOV and state that Penske now intends to proceed with obtaining a trial date in the pending Hays County litigation to allow a court to ultimately decide the disputed issues in this matter.

I agree that Penske has made appropriate attempts to address the NOV. Further, notwithstanding the briefings filed, meetings convened and hearings held before this agency, a number of relevant issues remain in dispute and are unresolved. In my view, these matters are best resolved in court. Given these circumstances, I do not plan to take further action on the NOV pending the resolution of this matter in court proceedings.

Sincerely,

Glenn Shankle
Executive Director

Exhibit 8