Attachment A
History of the Lister Avenue Facility

to the Comments on behalf of the Lower Passaic River Study Area Site Cooperating Parties Group on the Proposed Plan for the Lower Eight Miles of the Lower Passaic River Study Area Portion of the Diamond Alkali Superfund Site

Occidental Chemical Corporation ("Occidental"),[1] Maxus Energy Corporation ("Maxus,"),[2] and Tierra Solutions, Inc. ("Tierra")[3] (collectively, the "Lister Parties") are responsible for cleaning up 2,3,7,8-TCDD discharged by Diamond Shamrock Corporation ("Diamond")[4] from its facility at 80 and 120 Lister Avenue in Newark, New Jersey. The 2,3,7,8-TCDD from this facility is the predominant chemical of concern in the Passaic River. Accordingly, the Lister Parties should be held accountable for any remediation required for the Lower 17 Miles of the Passaic River.

I. Diamond produced 2,3,7,8-TCDD at its Lister Avenue facility.

From 1951 to 1969, Diamond produced trichlorophenol ("TCP") and 2,4,5-Trichlorophenoxyacetic acid ("2,4,5-T") at 80 Lister Avenue in Newark, New Jersey.[5] Diamond succeeded Kolker Chemical Works, Incorporated, which had begun making TCP and 2,4,5-T at the facility in 1950.[6] In the 1960s, Diamond produced Agent Orange, which is made with 2,4,5-

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[1] Occidental has been adjudicated as the legal successor to Diamond Shamrock Corporation. Ex. 1, Order Partially Granting Pls'. Mot. for Partial Summ. J. Against Occidental Chem. Corp., Maxus Energy Corp. and Tierra Solutions, Inc., filed July 19, 2011 (*New Jersey Dep't of Envtl. Protection v. Occidental Chem. Corp.*, N.J. Super. Ct. Law Div.); Ex. 2, Transcript of Proceedings, July 19, 2011, 244:7-11 (*New Jersey Dep't of Envtl. Protection v. Occidental Chem. Corp.*, N.J. Super. Ct. Law Div.). In litigation, Occidental, Maxus, and Tierra agreed that Diamond Shamrock Corporation – and thus, under the court's ruling, Occidental – is the corporate successor to Kolker Realty Company, Kolker Chemical Works, Inc., Diamond Alkali Organic Chemicals Division, Inc., and Diamond Alkali Company. Ex. 3, Consent Order on Track III Kolker-Era Issues, filed Feb. 7, 2012 (*New Jersey Dep't of Envtl. Protection v. Occidental Chem. Corp.*, N.J. Super. Ct. Law Div.).

[2] Maxus has been adjudicated as the indemnitor to Occidental and the alter ego of Tierra. Ex. 4, Order Granting Pls.' Mot. for Partial Summ. J. Against Maxus Energy Corp. and Denying Maxus Energy Corp.'s Track III Cross-Motion for Partial Summ. J., filed May 21, 2012 (*New Jersey Dep't of Envtl. Protection v. Occidental Chem. Corp.*, N.J. Super. Ct. Law Div.); Ex. 5, Order Granting Def. Occidental Chem. Corp.'s Mot. for Partial Summ. J. on Cross-Claim Against Maxus Energy Corp. for Contribution under the New Jersey Spill Act, filed May 21, 2012 (*New Jersey Dep't of Envtl. Protection v. Occidental Chem. Corp.*, N.J. Super. Ct. Law Div.).

[3] Tierra is a subsidiary of Maxus and the current owner of the property at 80 and 120 Lister Avenue. Ex. 6, Order Granting Pls.' Mot. for Partial Summ. J. Against Tierra Solutions, Inc., filed Aug. 24, 2011 (*New Jersey Dep't of Envtl. Protection v. Occidental Chem. Corp.*, N.J. Super. Ct. Law Div.).

[4] This attachment refers to Diamond Alkali Company, Diamond Shamrock Corporation, and Diamond Shamrock Chemicals Company collectively as "Diamond."

[5] Ex. 7, Letter from James B. Worthington, Diamond Shamrock Director of Environmental Affairs, to Michael Catania, NJDEP Office of Regulatory Services, June 10, 1983 (MAXUS036796) ("Worthington 6/10/1983 Letter").

[6] Ex. 8, United States Tariff Commission, 1950 (MAXUS0849332); Ex. 9, United States Tariff Commission, 1951 (MAXUS0849343).

T. Between 1961 and 1969, Diamond made an estimated 127 shipments of Agent Orange to the United States military pursuant to ten different contracts.[7]

Diamond produced millions of pounds of TCP and 2,4,5-T at its Lister Avenue facility. As indicated in the following table, Diamond reported that its production capacity increased several fold from 1951 to 1969:[8]

	TCP	2,4,5-T Acid
January 1951	- 0.5 MM lb/yr	- 0.65 MM lb/yr
February to March 1953	- 1.5 MM lb/yr	- 2.0 MM lb/yr
February 1961	- 1.9 MM lb/yr	- 2.5 MM lb/yr
November 1967	- 2.3 MM lb/yr	- 3.0 MM lb/yr

Diamond's production of TCP resulted in the generation of 2,3,7,8-tetrachlorodibenzo-p-dioxin ("2,3,7,8-TCDD") as a product impurity.[9] Dioxin formation was also "inherent" in 2,4,5-T production,[10] and all of Diamond's 2,4,5-T contained dioxin.[11] Samples of Diamond's 2,4,5-T streams in 1965 detected 2,3,7,8-TCDD ranging from 80 ppm to 140 ppm, and as much as 26 ppm in its 2,4,5,-T product.[12] Tests by the U.S. Army of unused Agent Orange found that Diamond's Agent Orange had the highest dioxin content of any Agent Orange manufacturer.[13] In 1989, Diamond admitted to the New Jersey Appellate Division that 2,3,7,8-TCDD ("less than 100 parts per million") was created in its 2,4,5-T as an unintended product impurity.[14] The trial court found that "[d]ioxin was present as an impurity in all the 2,4,5-T phenoxy herbicides, including Agent Orange, manufactured by Diamond at the Newark plant."[15]

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7 Ex. 10, Opinion, at p. 5, filed Apr. 12, 1989 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) ("Aetna Trial Court Opinion") (MAXUS030403).

8 Worthington 6/10/1983 Letter, *supra* note 5, at MAXUS036805.

9 Ex. 11, Testimony of F. Gordon Steward, 6:9-18, Sept. 20, 1988 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) (MAXUS025738) ("Steward Aetna 9/20/1988 AM Transcript").

10 Worthington Letter 6/10/1983, *supra* note 5, at p. 2 (MAXUS036797).

11 Ex. 12, Brief on Behalf of Plaintiff-Appellant Diamond Shamrock Chemicals Company, at p. 8, filed Oct. 30, 1989, (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. App. Div.) (MAXUS034098) ("Diamond Aetna Appellate Brief"); Ex. 13, Plaintiff's Statement of Indisputable Material Facts with Respect to Second Tier Motions, at p. 17, filed Nov. 24, 1987 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) (MAXUS0964694) ("Diamond Second Tier Motion Indisputable Material Facts").

12 Ex. 14, Memorandum from F. G. Steward to F. R. Kennedy, re: p-Dioxin Review, Dec. 23, 1969, at p. 1 (MAXUS0995888) ("Steward 12/23/1969 Dioxin Review Memo").

13 Steward Aetna 9/20/1988 AM Transcript, *supra* note 9, 47:1-49:12 (MAXUS025779-81).

14 Diamond Aetna Appellate Brief, *supra* note 11, at p. 9 (MAXUS034099).

15 Aetna Trial Court Opinion, *supra* note 7, at p. 2 (MAXUS030400).

II. Diamond knew it was producing 2,3,7,8-TCDD at its Lister Avenue facility.

Diamond knew early on that its manufacturing processes generated 2,3,7,8-TCDD. From 1950 to 1969, Diamond's employees suffered a serious skin condition known as chloracne.[16] Chloracne was an unpleasant skin condition of blackheads forming all over a person's body. The doctor would cut and stab large blackheads until they bled.[17] Some of the workers returned to work in the plant still bleeding.[18] One former employee had a blister the size of a cup, and the blood went right through his shirt.[19] Another employee had cysts all over his face, neck, back, and other areas, and described himself as unrecognizable: "I didn't even look human I had it so bad."[20] Former Diamond employees would later estimate that, at a given time, 90 percent of the employees at the plant were being treated for chloracne.[21]

Diamond knew that the chloracne was being caused by 2,3,7,8-TCDD. By the mid-1950s, Diamond was aware that the chloracne was associated with the operation of the TCP production unit, specifically the autoclave.[22] Diamond had learned that one way to lower costs was to create faster chemical reactions in the autoclave, which could be done through higher autoclave temperatures.[23] Yet as it created faster reactions and lowered costs, the higher temperature also generated more 2,3,7,8-TCDD. In September 1957, a representative from a German company, C. H. Boehringer Sohn, visited Diamond and, based on the experiences at its own facility, identified 2,3,7,8-TCDD as the likely chloracnegen and the autoclave temperature as the likely cause of 2,3,7,8-TCDD.[24] Boehringer Sohn recommended that Diamond lower the temperature in the autoclave to below 155°C.[25] In 1957 and 1960, two different Diamond

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[16] Ex. 15, Deposition of John Burton, 251:18-252:3, Apr. 3, 1987 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) ("Burton Dep. II") (MAXUS1069537-38); Ex. 16, A. Poland et al., A Health Survey of Workers in a 2,4-D and 2,4,5-T Plant, 22 Arch. Environ. Health 316, 323 (1972) (MAXUS0284848).

[17] Ex. 17, Testimony of Aldo Andreini, 54:17-55:4, Oct. 13, 1988 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) (MAXUS028460-461) ("Andreini Aetna 10/13/1988 Transcript").

[18] *Id.*

[19] *Id.*

[20] Ex. 18, Testimony of Chester Mysko, 50:23-51:6, Oct. 5, 1988 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) (MAXUS027706-707) ("Mysko Aetna 10/05/1988 Transcript").

[21] Ex. 19, Centanni Dep. I, 83:8-14, 84:5-7 (MAXUS0407854, 855); Ex. 20, Deposition of Walter Klosowski, 62:20-63:4, Apr. 28, 1988 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) (MAXUS1023156-157) ("Klosowski Dep.").

[22] Ex. 21, Supplemental Answers to Interrogatories, at p. 9 (*Ironbound Human Rights Advisory Commission v. Diamond Shamrock Chemicals Co.*, (N.J. Super. Ct. Law Div.) (MAXUS1111040) ("Diamond's Ironbound Supplemental Interrogatory Answers").

[23] Ex. 22, Esters, Sept. 16, 1954, at p. 5 (MAXUS1204726).

[24] Ex. 23, Memorandum from D. J. Porter to J. Burton, re: Chloracne, Sept. 18, 1957 (MAXUS1021666) ("Porter 9/18/1957 Chloracne Memo").

[25] Porter 9/18/1957 Chloracne Memo, *supra* note 24, at p. 1 (MAXUS1021666); Ex. 24, Letter from C. H. Boehringer Sohn to Diamond Alkali Company, Sept. 30, 1957, at p. 1 (MAXUS0991681); Ex. 25, Memorandum from Thornton F. Holder to J. Burton, re: Boehringer – Chloracne Problem, Sept. 30, 1959, at p. 1 (MAXUS1055211) ("Holder 9/30/1959 Memo").

employees diagrammed 2,3,7,8-TCDD and identified it as the cause of the employee chloracne problems.[26]

Financial motives kept Diamond from addressing its chloracne problem, and thus its 2,3,7,8-TCDD problem. In former Diamond plant manager Gordon Steward's testimony as a witness for Diamond in the *Aetna* litigation by Diamond against its insurers, he acknowledged that if Diamond had reduced the temperature in the autoclave, it would have reduced the production of dioxin, but also reduced the amount of product that was made.[27] Dr. T. W. Fraser Russell, Diamond's expert in the personal injury litigation by former Diamond employees and neighbors, opined that adopting Boehringer Sohn's suggestions "would have resulted in a far less productive and significantly less economic operation of the plant."[28] It does not appear that Diamond ever lowered its autoclave temperature below 155°C, as recommended by Boehringer Sohn to eliminate the chloracne and 2,3,7,8-TCDD problems.

III. Diamond intentionally discharged 2,3,7,8-TCDD from its Lister Avenue facility.

Despite knowing that its TCP production created 2,3,7,8-TCDD and that its 2,4,5-T contained 2,3,7,8-TCDD, Diamond discharged TCP and 2,4,5-T directly into the Passaic River until its operations ceased in 1969.[29] Based on the record presented at trial, the Appellate Division concluded: "A number of former plant employees testified concerning Diamond's waste disposal policy which essentially amounted to 'dumping everything' into the Passaic River."[30]

As of 1959, former plant manager John Burton reported that Diamond discharged about 100 tons of 2,4,5-T effluents to the river.[31] According to Mr. Burton, the effluent "would consist of mostly trichlorophenols . . . ."[32] An engineering firm retained by the insurance companies in the *Aetna* litigation estimated that 100 tons of 2,4,5-T containing a 1 ppm dioxin concentration would have resulted in a single-year discharge to the river of four pounds of dioxin.[33] As previously discussed, Diamond's 2,4,5-T streams contained dioxin as high as 140 ppm.[34]

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[26] Porter 9/18/1957 Chloracne Memo, *supra* note 24; Ex. 26, Memorandum from J. H. Perkins to J. A. Borror, re: Proposed process for Making Sodium 2,4,5-Trichlorophenate, June 27, 1960 (MAXUS045918) ("Perkins 6/27/1960 Memo").

[27] Steward Aetna 9/20/1988 AM Transcript, *supra* note 9, 30:3-37:4 (MAXUS025762-69).

[28] Ex. 27, Letter from John E. Flaherty to Michael Gordon, Re; IHRAC v. Diamond Shamrock, et al., Opinion of T.W.F. Russell, Nov. 18, 1988, at p. 2 (MAXUS1144471) ("Russell Expert Opinion").

[29] Aetna Trial Court Opinion, *supra* note 7, at p. 9 (MAXUS030407); Diamond Aetna Appellate Brief, *supra* note 11 at p. 14 (MAXUS034104).

[30] Ex. 28, *Diamond Shamrock Chemicals Company v. Aetna Casualty & Surety Company*, 258 N.J. Super. 167, 183 (App. Div. 1992).

[31] Ex. 29, Memorandum from J. Burton to H. S. Weiner, Re: River Contaminants, and Your Memo of March 31st, at p. 2, Apr. 4, 1960 (MAXUS036884) ("Burton to Weiner Memorandum").

[32] *Id.*

[33] Ex. 30, Paulus, Sokolowski and Sartor, Assessment of Potential Sources of Release of Dioxin to the Environment from Reported Manufacturing Operations and Activities at the Diamond Shamrock Facility 80 Lister Avenue, Newark, New Jersey, prepared for Defense Steering Committee (Diamond Shamrock v. Aetna, et al), at p. 5-2, May 29, 1987 ("Aetna Defendants Dioxin Source Report") (MAXUS0197613).

[34] *See* Ex. 31, Memorandum from F. G. Steward to F. R. Kennedy, re: p-Dioxin Review, Dec. 23, 1969, at p. 1 (MAXUS0995888) ("Steward 12/23/1969 Dioxin Review Memo").

In 1960, Diamond admitted it was discharging 30,000 gallons of process wastewaters per day, one-third of which "could have contained some dioxins."[35] Later, in a confidential report on water pollution control to the Manufacturing Chemists Association in 1967, Diamond reported that it had three water-borne waste discharges to surface waters, and a fourth that discharged both to the sewer and to the river.[36] In the report, Diamond acknowledged that it discharged to the river 8,700 pounds of dissolved inorganics each day, and 1,780 pounds of dissolved organics each day.[37]

Based on documents and deposition testimony, the Aetna defendants' engineering consultants estimated that the process spills and leaks resulted in 96 pounds of 2,3,7,8-TCDD in the soil at 80 Lister Avenue.[38] The firm did not estimate how much 2,3,7,8-TCDD the Lister Avenue facility discharged to the Passaic River.

A. Diamond's discharges of 2,3,7,8-TCDD were intentional.

The New Jersey trial court found that Diamond "intentionally and continuously discharged highly toxic chemical effluent into the Passaic River from 1951 to 1969."[39] According to the court, Diamond's discharges were "intentional, planned discharges from processing equipment through pipes or ditches."[40] The New Jersey Appellate Division agreed with the trial court's conclusions: "We are convinced from our examination of the record that Diamond intentionally and knowingly discharged hazardous pollutants with full awareness of their inevitable migration to and devastating impact upon the environment."[41]

Testimony about the "abuse of the river" was "highly relevant" in the trial court's opinion "because it established that from 1951 to 1969 Diamond had a mindset and a method of conducting manufacturing operations which were destructive of the land, air and water resources of the environment."[42] Even by the standards of the 1950s and 1960s, the trial court ruled that "Diamond's conduct in operating the Newark plant was unacceptably wrong and irresponsible."[43]

B. Diamond knew its discharges were illegal.

Diamond's discharges were specifically forbidden by state law,[44] and Diamond knew what it was doing was illegal.[45] Mr. Burton knew the regulations were "quite strict on almost

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35 Worthington 6/10/1983 Letter, *supra* note 5, at p. 5 (MAXUS036800).

36 Ex. 32, Water Pollution Control in the Chemical Industry, Individual Location Report Completed by F. Gordon Steward for the Diamond Alkali Company, at p. 1, Mar. 24, 1967 (OCCNJ0048898).

37 *Id.* at p. 3 (OCCNJ0048900).

38 Aetna Defendants Dioxin Source Report, *supra* note 33, at 5-1 (MAXUS0197612).

39 Aetna Trial Court Opinion, *supra* note 7, at p. 32 (MAXUS030430).

40 *Id.* at p. 9 (MAXUS030407).

41 *Diamond*, 258 N.J. Super., *supra* note 30, at 197.

42 Aetna Trial Court Opinion, *supra* note 7, at p. 11 (MAXUS030409).

43 *Id.*

44 *Id.* at p. 8 (MAXUS030406).

45 Ex. 33, Testimony of John Burton, 79:21-25, Oct. 17, 1988 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) (MAXUS028548) ("Burton Aetna 10/17/1988 AM Transcript").

any pollution," and around 1954 would have known that "the amount of chlorophenols and the effluent from the trichlorophenol unit was illegal."[46] The trichlorophenol unit was the suspected source of 2,3,7,8-TCDD production in the 2,4,5-T process. Mr. Burton knew these discharges were toxic, and he knew that "people are getting exposed to it in some form."[47] Mr. Burton also knew these discharges to the river were "a potential danger."[48]

The trial court found that "Diamond was conscious that its discharges into the river were illegal."[49] Based on the evidence and testimony at trial, "The conclusion is inescapable that the consistent policy of Diamond's management (both at the local plant level and at corporate headquarters) was to discharge dangerous chemicals into the Passaic River in known violation of public law."[50] This policy, wrote the trial court, "was consciously adopted by Diamond's management because the pollution of the public waters of the State was not perceived by them as a significant wrong, and because it would have been technically difficult and very costly to have avoided such discharges."[51]

C. Diamond attempted to hide its discharges.

The trial court determined that Diamond "deliberately concealed" its discharges.[52] Because Diamond knew its discharges broke the law,[53] it attempted to hide its discharges through such methods as a secret alarm system,[54] hidden discharge pipes,[55] and discharges at night.[56] Two of these examples demonstrate Diamond's determination to hide its intentional, unlawful actions.

1. Diamond's "clever strategy" of a secret alarm system for inspectors.

Testimony by former employees provides a clear picture into the secret alarm system that Diamond maintained to hide its discharges. Prior to an inspection, the company guard blocked "the holes on all the sewer pipes" that discharged into the river.[57] When the inspectors pulled up in the jeep, they would "try and go right down to the river front and see what [Diamond] was

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46 *Id.* at 93:3-16 (MAXUS028562).

47 *Id.* at 78:23-79:2 (MAXUS028547-548).

48 Ex. 34, Testimony of John Burton, 62:2-8 Oct. 17, 1988 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) (MAXUS028644) ("Burton Aetna 10/17/1988 PM Transcript").

49 Aetna Trial Court Opinion, *supra* note 7, at p. 9 (MAXUS030407).

50 *Id.* at pp. 9-10 (MAXUS030407-408).

51 *Id.* at p. 10 (MAXUS030408).

52 *Id.* at p. 9 (MAXUS030407).

53 *Id.* at pp. 9-10 (MAXUS030407-408).

54 *Id.* at p. 9 (MAXUS 030407).

55 Ex. 35, Testimony of Nicholas Centanni, 12:3-22, Oct. 13, 1988 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) (MAXUS028418) ("Centanni Aetna 10/13/1988 Transcript").

56 Mysko Aetna 10/05/1988 Transcript, *supra* note 20, at 36:17-25 (MAXUS027692).

57 Ex. 36, Testimony of Arthur Scureman, 38:6-11 Oct. 17, 1988 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) (MAXUS028507) ("Scureman Aetna 10/17/1988 Transcript").

draining" and take a sample.[58] To delay the inspectors and their collection of samples, Diamond instructed its employees to "try and stop [the inspectors] so they don't go to the river front."[59]

The standard procedure for any visitor was to check in with the receptionist, who would contact an escort.[60] Diamond had an "inter-plant communication system" for inspector visits.[61] When a receptionist recognized an inspector, the receptionist would sound three buzzes on the inter-plant communication system, "which would alert the foreman and the operators that an inspector was on hand."[62] The purpose of the alarm system was "so that all discharges to the river could be stopped by the time the inspector got back to the riverbank."[63] Upon hearing the alarm, the foreman and operators "would take prompt steps to see that anything being, going into the river at that moment was stopped."[64]

While the inspectors were being delayed, Diamond instructed other employees to "run in the building and the ester room and 2,4-D building and tell them to stop dropping all their stuff to the sewer, close off the valves."[65] The employees were to "make sure nothing was going to the sewer that wasn't suppose[d] to go to the sewer," which was a reference to the trenches that ran to the river.[66] As a result of the time delay, by the time the inspector entered the plant with an escort, "he would find nothing, except for . . . the one time when we got caught because we thought that was so inconsequential that it didn't matter."[67] While the inspectors were inside the plant, the employees would pretend to work, but had actually stopped working and did not do anything until the inspection was over, according to former employee Walter Klosowski.[68] Mr. Klosowski thought work was stopped "so none of the material would get on the floor or whatever."[69] As soon as the inspectors left, the employees resumed work.[70]

Mr. Burton testified that the alarm system was used because "we didn't want to be caught violating the regulations."[71] Mr. Burton thought the alarm system was "a clever strategy,"[72] of which he was proud.[73]

The trial court determined the alarm system existed, writing that "over a period of many years [Diamond] employed an alarm system to warn employees to stop the discharges when

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58 *Id.* at 38:4-5 (MAXUS028507).

59 *Id.* at 39:11-15 (MAXUS028508).

60 Burton Aetna 10/17/1988 AM Transcript, *supra* note 45, 105:10-15 (MAXUS028574).

61 *Id.* at 105:15-17 (MAXUS028574).

62 *Id.*

63 *Id.* at 108:7-11 (MAXUS028577).

64 *Id.* at 105:22-24 (MAXUS028574).

65 Scureman Aetna 10/17/1988 Transcript, *supra* note 57, 39:15-18 (MAXUS028508).

66 *Id.* at 37:23-25 (MAXUS028506).

67 Burton Aetna 10/17/1988 AM Transcript, *supra* note 45, at 105:25-106:4 (MAXUS028574-575).

68 Klosowski Dep., *supra* note 21, 23:10-24:18, (MAXUS1023118).

69 *Id.* at 24:8-12 (MAXUS1023119).

70 *Id.* at 24:13-18 (MAXUS1023119).

71 Ex. 37, Deposition of John Burton, 288:9-10, Apr. 3, 1987 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) ("Burton Dep. II") (MAXUS1069574).

72 Burton Aetna 10/17/1988 PM Transcript, *supra* note 48, 6:10-21 (MAXUS028588).

73 *Id.*

Passaic Valley [Sewer Commission] inspectors were on the premises."[74] Diamond admitted that the alarm system was used, but argued the practice stopped in 1956: "One fact that troubled the Superior Court was the apparent use of a warning system by which discharges from the plant to the river would cease when inspectors visited the plant. While such practice, which the evidence suggests stopped in 1956, is not to be condoned, it has nothing to do with the issue of whether the environmental damage at issue was expected or intended."[75]

2. The "mountain of DDT" in the river was removed with ice picks.

Diamond had a "mountain of DDT" in the river because the DDT solidified when it hit the water.[76] The mountain was visible when the weather turned cold and the river was at low tide.[77] When the tide went down, "there was like an island in the river."[78] The mountain looked "like an ant hill, one of these huge ant hills you see in Africa."[79] It also was described as looking like "the bottom of an ice cream cone."[80] Former employee Chester Mysko's supervisor asked him to go out and remove the mountain because "it was too obvious for boats going by."[81]

Diamond employees were instructed to surreptitiously wade into the river at low tide to remove the mountain.[82] Because former employee Arthur Scureman could not swim, a rope was put around him so he could "go down in there and watch the tide and chop the DDT with an ice chopper and put it in drums."[83] Diamond employees broke up the DDT with an ice fork that had four prongs.[84]

D. Diamond illegally dumped its waste in the river for financial gain.

Financial considerations motivated Diamond: "Diamond always put its narrowly perceived economic interest first," determined the trial court.[85] For example, according to Mr. Burton, there always was the capability to separate or neutralize phenolic effluents from the rest of Diamond's waste, but "the cost of doing it would make the whole operation uneconomical."[86] Mr. Burton testified: "It was always a question of economics and we did make sometimes some estimates of the cost of doing this operation differently, which would at least reduce the volume of these [discharges], but the estimated cost always appeared too high to be economically justified."[87] It was easier to discharge to the river.[88]

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74 Aetna Trial Court Opinion, *supra* note 7, at p. 9 (MAXUS030407).

75 Diamond Aetna Appellate Brief, *supra* note11, at p. 5 (MAXUS034095).

76 Centanni Aetna 10/13/1988 Transcript, *supra* note 55, 31:18-24 (MAXUS028437).

77 *Id.* at 32:5-7 (MAXUS028438).

78 Scureman Aetna 10/17/1988 Transcript, *supra* note 57, 41:24-25 (MAXUS028510)

79 Centanni Aetna 10/13/1988 Transcript, *supra* note 55, 32:7-8 (MAXUS028438).

80 *Id.* at 33:16-18 (MAXUS028439).

81 Mysko Aetna 10/05/1988 Transcript, *supra* note 20, 31:1-11 (MAXUS027687).

82 *Diamond*, 258 N.J. Super., *supra* note 30, at 183-84.

83 Scureman Aetna 10/17/1988 Transcript, *supra* note 57, 42:1-7 (MAXUS028511).

84 Centanni Aetna 10/13/1988 Transcript, *supra* note 55, 32:13-16 (MAXUS028438).

85 Aetna Trial Court Opinion, *supra* note 7, at p. 11 (MAXUS030409).

86 Ex. 38, Deposition of John Burton, 170:2-7 Mar. 18, 1987 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) (MAXUS1068963) ("Burton Dep. I").

87 *Id.* at 215:12-17 (MAXUS1069008).

After inspections by the Passaic Valley Sewerage Commission, Mr. Burton told his superiors that Diamond would have "to continue to out-wit them as we have in the past or spend a substantial amount of money for neutralizing our effluent . . . . Every year that we can stall this off we are saving ourselves a substantial amount of money . . . . [W]e may have to spend some capital and operating money to keep out of trouble if we are not able to continue to outwit the various agencies concerned with the Passaic River."[89] Mr. Burton's superiors responded, "Evasive tactics are fine as long as they work, . . ."[90]

The Aetna trial court determined Diamond "deliberately and persistently cheated on the limited environmental regulations which were in place."[91] According to the court:

> Diamond did know the nature of the chemicals it was handling, it did know that they were being continuously discharged into the environment, and it did know that they were doing at least some harm. Diamond unequivocally knew that at least some of this contaminating activity violated the then existing statutory prohibitions against discharges into the Passaic River.[92]

The *Aetna* trial court found the "resulting injury and damage was expected" and that "[w]hen someone acts the way Diamond did for 18 years, it is no accident that the environment was contaminated, that property was damaged, that neighbors may have been injured."[93]

IV. Previous litigation has focused on the Lister Parties and the discharges from the Lister Avenue facility.

As a result of its operations at 80 Lister Avenue, Diamond has settled with a class of veterans for $23 million;[94] a group of former employees, relatives, and residents for $1 million;[95] and lost its coverage lawsuit against its insurers for "Newark Dioxin Claims."[96]

Litigation continued against the Lister Parties in the 21st century. In 2005, the New Jersey Department of Environmental Protection sued the Lister Parties for its past and future costs of investigation, cleanup, and removal in the Newark Bay Complex. The State of New Jersey did not sue any other parties connected to the Passaic River. Even though other parties

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88 *Id.* at 215:18-20 (MAXUS1069008).

89 Ex. 39, Memorandum from J. Burton to Dr. B. D. Gleissner, re: Newark Effluent Problem, July 10, 1956, at p. 2 (OCCNJ0048863) ("Burton 7/10/1956 Memo").

90 Ex. 40, Memorandum from W.R. Taylor to John Burton, re: Newark Effluent Problem, July 31, 1956 (OCCNJ0048856).

91 Aetna Trial Court Opinion, *supra* note 7, at p. 12 (MAXUS030410).

92 *Id.* at p. 33 (MAXUS030431).

93 *Id.* at p. 34 (MAXUS030432).

94 *Id.* at p. 6 (MAXUS030404).

95 Ex. 41, Ellen K. Silbergeld, Michael Gordon, and Lynn D. Kelly, *Dioxin at Diamond: A Case Study in Occupational/Environmental Exposure*, chapter 2 in *Toxic Circles* (R. Wedeen and H. Sheehan, eds.), pp. 55-80, Rutgers University Press, New Brunswick, NJ (1993) (MAXUS0459306).

96 Ex. 42, Partial Final Judgment and R. 4:42-2 Certification, at p. 6, filed July 1, 1989 (*Diamond Shamrock Chemicals Company v. Aetna Casualty and Surety Company*, N.J. Super. Ct. Law Div.) (MAXUS033008) ("Aetna Trial Court Final Judgment"); Aetna Trial Court Opinion, *supra* note 7, at pp. 7-8 (MAXUS030405-406).

"could have discharged substances" to the Passaic River, "[n]one of these other hazardous substances have been scientifically found to be as toxic as [the Lister Parties'] TCDD, none are as pervasive throughout the Newark Bay Complex, and none of these substances have been uniquely fingerprinted to a specific site or operated as the TCDD from the Lister Site has, versus being more ubiquitous and arising from many sites and many potentially responsible parties."[97]

In 2011 and 2012, Occidental, Maxus, and Tierra were found jointly and severally liable under the New Jersey Spill Act for all past and future cleanup and removal costs incurred by the State of New Jersey associated with the discharges of hazardous substances at and from the Lister Plant property into the Passaic River.[98] Maxus, Tierra, and their foreign corporate parents have settled state litigation brought by the State of New Jersey for at least $130 million. At this point, Occidental has not agreed to a settlement that has been submitted for public comment.

V. The Lister Parties are failing to participate in investigation and removal efforts

Despite the established, overwhelming responsibility for their production and knowing discharge of vast amounts of TCDD into the Passaic River, the Lister Parties are failing to address the environmental issues caused by the discharges of 2,3,7,8-TCDD from 80 Lister Avenue. On three key issues – the removal action for river sediment in front of Lister Avenue, the RI/FS, and the River Mile 10.9 removal – the Lister Parties are not carrying out their obligations.

In 2008, Occidental and EPA signed an Administrative Order on Consent to remove approximately 200,000 cubic yards of contaminated sediment from the Passaic River in the vicinity of the Lister Avenue facility.[99] To date, 160,000 cubic yards still need to be removed because Phase II of this removal action has not yet begun. EPA has taken no action to compel the Lister Parties to complete this removal action.

After the Lister Parties left the CPG in May 2012, the Lister Parties have refused to participate in or fund the RI/FS for the lower 17 miles of the Passaic River. EPA has taken no action to compel the Lister Parties to participate in the RI/FS.

In June 2012, the CPG, minus the Lister Parties, entered an Administrative Order on Consent (AOC) to remove contaminated sediment and install a cap at River Mile 10.9. The CPG has completed the removal of the sediment and installation of the cap. The Lister Parties declined to sign the AOC, and EPA issued a unilateral administrative order to Occidental to

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[97] Ex. 43, New Jersey Department of Environmental Protection Brief in Support of Motion to Control Third Party Practice, at p. 6, filed July 15, 2008 (*New Jersey Department of Environmental Protection v. Occidental Chemical Corporation*, N.J. Super. Ct. Law Div.) ("NJDEP Third Party Practice Motion").

[98] Order Granting Plaintiffs' Motion for Partial Summary Judgment Against Maxus Energy Corporation and Denying Maxus Energy Corporations Track III Cross-Motion for Partial Summary Judgment, filed May 21, 2012, (*New Jersey Department of Environmental Protection v. Occidental Chemical Corporation*), *supra* note 2; Order Regarding Partial Summary Judgment on Track III Liability Issues, filed May 21, 2012 (*New Jersey Department of Environmental Protection v. Occidental Chemical Corporation*), *supra* note 2.

[99] Ex. 44, Administrative Settlement Agreement and Order on Consent for Removal Action, CERCLA Docket No. 02-2008-2020 (MAXUS1355006).

participate meaningfully in the AOC.[100] They have not done so. EPA has taken no action to enforce the unilateral administrative order, or to compel Occidental or any of the other Lister Parties to participate in the removal action at River Mile 10.9.

VI. Conclusion

The Lister Parties intentionally, secretly and wantonly discharged 2,3,7,8-TCDD and other contaminants into the Passaic River. The 2,3,7,8-TCDD from the Lister Avenue facility is the predominant chemical of concern in the river and requires cleanup. Accordingly, the Lister Parties should be held accountable for any remediation required for the Lower 17 Miles of the Passaic River.

[100] Ex. 45. Unilateral Administrative Order for Removal Response Activities, CERCLA Docket No. 02/2012/2020.