

Energy Act of 1954 (the "1954 Act"). The 1954 Act redefined the atomic energy program by ending the government monopoly on technical data and making the growth of a private commercial nuclear industry an urgent national goal. The 1954 Act directed the AEC "to encourage widespread participation in the development and utilization of atomic energy for peaceful purposes." At the same time, the 1954 Act instructed the AEC to prepare regulations that would protect public health and safety from radiation hazards.

3. The 1954 Act assigned the AEC three major roles: to continue its weapons program, to promote the private use of atomic energy for peaceful applications, and to protect public health and safety from the hazards of commercial nuclear power. Those functions were in many respects inseparable and incompatible, especially when combined in a single agency. The competing responsibilities and the precedence that the AEC gave to its military and promotional duties gradually damaged the agency's credibility on regulatory issues and undermined public confidence in its safety program.

4. The AEC's regulatory staff, which was created soon after the passage of the 1954 Act, confronted the task of writing regulations and devising licensing procedures rigorous enough to assure safety but flexible enough to allow for new findings and rapid changes in atomic technology. Within a short time the staff drafted rules and definitions on radiation protection standards. The AEC's radiation protection regulations were first issued for public comment in 1955 and became effective in 1957.¹

5. The regulations that became effective in 1957 were the first federal regulations governing radiation in the United States. During the entire period of 1942 through 1957, there

¹ Paragraphs 2 through 4 of this Complaint are verbatim statements or paraphrases of the Nuclear Regulatory Commission published at <http://www.nrc.gov/about-nrc/short-history.html>.

were no federal safety standards related to radioactive material. No regulatory framework governing the safety of nuclear material or radiation existed in the United States before 1957.

6. Mallinckrodt refined uranium at its facility in downtown St. Louis, Missouri between 1942 and 1957.

7. According to a U.S. Army Corps of Engineers report, from 1942 to 1957, the plant had processed more than 50,000 tons of uranium product. Contaminated scrap metal and miscellaneous radioactive wastes were transported to SLAPS (defined herein) and buried on the western edge of the property.²

8. Mallinckrodt transported and disposed of radioactive materials from its facility in downtown St. Louis, Missouri to a 21.74-acre site in the vicinity of the St. Louis Airport in north St. Louis County, Missouri, to a location known as SLAPS (defined herein) between approximately 1946 and 1957.

9. Mallinckrodt stored the transported waste materials at the SLAPS between 1946 and 1957.

10. Mallinckrodt's acts and omissions between approximately 1942 and 1957 caused the release of hazardous, toxic, and radioactive substances into the environment along haul routes and in north St. Louis County, Missouri, thereby contaminating the air, soil, surface water, and ground water along the haul routes and in the area surrounding SLAPS and Coldwater Creek.

11. Mallinckrodt's acts and omissions between approximately 1942 and 1957 proximately caused Plaintiffs to be exposed to hazardous, toxic, and radioactive substances in north St. Louis County, Missouri.

12. Mallinckrodt's acts and omissions between approximately 1942 and 1957 proximately caused Plaintiffs to suffer the injuries described in this Complaint.

² <http://www.mvs.usace.army.mil/Missions/CentersofExpertise/FormerlyUtilizedSitesRemedialActionProgram.aspx>

13. Mallinckrodt's acts and omissions, which are described in this Complaint and which proximately caused the injuries complained of in this Complaint, occurred between 1942 and 1957. Between 1942 and February 1957 there were no federal regulations governing permissible levels of exposure of radiation to members of the public and there were no federal regulations governing permissible releases of radiation into the environment.

REGULATORY HISTORY APPLICABLE TO COTTER

14. The AEC issued new regulations for public comments in 1959 and made new regulations effective on January 1, 1961. According to the AEC, as set forth in 25 FR 8595-8604, the basic approach of the AEC in 10 CFR Part 20 with respect to levels of radiation and concentrations of radioactive materials in unrestricted (general public) areas limited levels of radiation and concentrations of radioactive material which could be created in unrestricted areas by licensees, without special authorization from the AEC, to specified low levels. These federal regulations, which appeared at 10 CFR §§ 20.105 and 20.106, governed releases of radiation in unrestricted areas.

15. The hazardous, toxic, and radioactive wastes residues were removed from the SLAPS in various stages throughout the 1960s. Some of the radioactive waste was transported to property at 9200 Latty Avenue (now known as the HISS and the Futura Coatings Company properties) for storage.

16. In 1969, Cotter purchased, stored, and processed the hazardous, toxic, and radioactive waste that had been transported from the SLAPS to Latty Avenue. Between 1969 and 1973, Cotter stored, processed, and transported hazardous, toxic, and radioactive wastes out of state and to West Lake Landfill in north St. Louis County, Missouri.

17. Cotter's acts and omissions between approximately 1969 and 1973 caused the release of hazardous, toxic, and radioactive substances into the environment in north St. Louis County, Missouri, thereby contaminating the air, soil, surface water, and ground water in the area.

18. Cotter's acts and omissions between approximately 1969 and 1973 proximately caused Plaintiffs to be exposed to hazardous, toxic, and radioactive substances in north St. Louis County, Missouri.

19. Cotter's acts and omissions between approximately 1969 and 1973 proximately caused Plaintiffs to suffer the injuries described in this Complaint.

20. Cotter's acts and omissions, which are described in this Complaint and which proximately caused the injuries complained of in this Complaint, occurred between 1969 and 1973. During the entire period between 1969 and 1973, no federal regulations governed the permissible or maximum amount of radiation to which a member of the general public could be exposed. Instead, between 1969 and 1973, federal regulations governed levels of radiation and concentrations of radioactive material that could be created in unrestricted areas by licensees, without special authorization from the AEC.

21. Between approximately 1957 and 1989, the numerical radiation dose threshold regarding members of the general public included a 500 milirem per year limit. In and after 1989, the numerical radiation dose threshold regarding members of the general public included and includes a 100 milirem per year limit.

JURISDICTION AND VENUE

22. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. § 1331 because this action arises under a law of the United States, namely, the United States Price-Anderson Act ("PAA"), 42 U.S.C. § 2210 *et seq.* This Court may also exercise subject matter

jurisdiction over this action directly pursuant to Section 2210(n)(2) of the PAA, which provides the United States District Court in the district where the nuclear incident takes place shall have original jurisdiction with respect to any public liability action arising out of or resulting from a nuclear incident.

23. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391(b)(2) because a substantial part of the events or omissions giving rise to the claims occurred in this district. Venue is also proper in this judicial district pursuant to 42 U.S.C. § 2210(n)(2) because the nuclear incidents giving rise to Plaintiffs' claims took place in this district.

PARTIES

24. The following persons are the Plaintiffs in this action:

A.1. Robert Malon worked for the McDonnell Douglas Corporation ("MDC"), who has since merged with The Boeing Company, in close proximity to Coldwater Creek and in close proximity to the SLAPS and HISS. During that time, Mr. Malon frequently engaged in work related activities in various MDC buildings, all of which were located in close proximity to SLAPS, HISS, and Coldwater Creek and all of which were on the corporate campus of MDC. Mr. Malon consecutively worked for MDC between the years of 1966 and 2001. In addition, Mr. Malon lived at 501 Ballman Avenue, Ferguson, Missouri, for approximately eight (8) years from 1968 to 1976, at 1710 Cargill Drive, Dellwood, Missouri, for approximately seven (7) years from 1976 to 1983, and at 1901 Tealwood Cove, Hazelwood, Missouri, for approximately sixteen (16) years from 1983 to 1999. During these times, Mr. Malon frequently engaged in outdoor recreational activity in and around Coldwater Creek, SLAPS, and HISS sites. Subsequently Mr. Malon was diagnosed with colon cancer. Plaintiff lacked knowledge of his exposure to radiation and the relationship between that exposure and his injuries and had no reasonable basis to

determine same until less than five (5) before commencement of this action. As a result of Defendants' acts and omissions described in this Complaint, Mr. Malon developed significant and debilitating personal injuries. As a result of Defendants' acts and omissions described in this Complaint, Mr. Malon suffered physical injury, pain, and suffering. As a result of Defendants' acts and omissions described in this Complaint, Mr. Malon was exposed to radiation in excess of federal dose limits. Specifically, Mr. Malon's average annual exposure to radiation at times between 1966 and 2001, as the result of Defendants' conduct, was in excess of 500 millirem.

A.2. Kurt Manns currently works for The Boeing Company, formerly known as McDonnell Douglas Corporation ("MDC"), in close proximity to Coldwater Creek and in close proximity to the SLAPS and HISS. During his employment, Mr. Manns has frequently engaged in work related activities in various MDC buildings, all of which were located in close proximity to SLAPS, HISS, and Coldwater Creek and all of which were on the corporate campus of MDC. Mr. Manns has consecutively worked for MDC from 1986 to 2016. Subsequently Mr. Manns was diagnosed thyroid disease less than five (5) before commencement of this action. As a result of Defendants' acts and omissions described in this Complaint, Mr. Manns suffered physical injury, pain, and suffering. As a result of Defendants' acts and omissions described in this Complaint, Mr. Manns was exposed to radiation in excess of federal dose limits. Specifically, Mr. Manns's average annual exposure to radiation at times between 1986 to present, as the result of Defendants' conduct, was in excess of 500 millirem.

A.3. Gregory Martinelli currently resides at 5727 Whitehead Road, Hillsboro, Missouri. He lived at 4085 Nara Drive, Florissant, Missouri, for approximately eighteen (18) years from 1965 to 1983. During that time, Mr. Martinelli engaged in frequent outdoor recreational activity in and around Coldwater Creek, SLAPS, and HISS sites. Subsequently, Mr. Martinelli was

diagnosed with thyroid disease. Plaintiff lacked knowledge of his exposure to radiation and the relationship between that exposure and his injuries and had no reasonable basis to determine same until less than five (5) years before commencement of this action. As a result of Defendants' acts and omissions described in this Complaint, Mr. Martinelli suffered physical injury, pain, and suffering. As a result of Defendants' acts and omissions described in this Complaint, Mr. Martinelli was exposed to radiation in excess of federal dose limits. Specifically, Mr. Martinelli's average annual exposure to radiation at times between 1965 and 1983, as the result of Defendants' conduct, was in excess of 500 millirem.

A.4. Herman Martinelli worked for the McDonnell Douglas Corporation ("MDC"), who has since merged with The Boeing Company, in close proximity to Coldwater Creek and in close proximity to the SLAPS and HISS. During that time, Mr. Martinelli frequently engaged in work related activities in various MDC buildings, all of which were located in close proximity to SLAPS, HISS, and Coldwater Creek and all of which were on the corporate campus of MDC. Mr. Martinelli consecutively worked for MDC between the years of 1948 and 1957 and 1960 and 1986. In addition, he lived at 4085 Nara Drive, Florissant, Missouri, for approximately thirty-two (32) years from 1963 to 1995. During this time, Mr. Martinelli frequently engaged in outdoor recreational activity in and around Coldwater Creek, SLAPS, and HISS sites. Subsequently Mr. Martinelli was diagnosed with thyroid disease and basal cell carcinoma. Plaintiff lacked knowledge of his exposure to radiation and the relationship between that exposure and his injuries and had no reasonable basis to determine same until less than five (5) before commencement of this action. As a result of Defendants' acts and omissions described in this Complaint, Mr. Martinelli developed significant and debilitating personal injuries. As a result of Defendants' acts and omissions described in this Complaint, Mr. Martinelli suffered physical

injury, pain, and suffering. As a result of Defendants' acts and omissions described in this Complaint, Mr. Martinelli was exposed to radiation in excess of federal dose limits. Specifically, Mr. Martinelli's average annual exposure to radiation at time between 1948 and 1995, as the result of Defendants' conduct, was in excess of 500 millirem. At all relevant times, Dorothy Martinelli was the wife of Mr. Martinelli. Dorothy Martinelli suffered and continues to suffer damages for loss of consortium as a result of the injuries sustained by her husband.

A.5. Karen McCarthy currently resides at 10126 Northwood Drive, Blackwell, Missouri. He lived at 855 Teson, Hazelwood, Missouri, for approximately one (1) year in 1965, at 1437 Springhurst Drive, Florissant, Missouri, for approximately twenty (20) years from 1966 to 1986, at 775 Babler Drive, Florissant, Missouri, for approximately one (1) year from 1987 to 1988, and at 9316 Managua Drive, Ferguson, Missouri, for approximately one (1) year from 1994 to 1995. During this time, Ms. McCarthy engaged in frequent outdoor activity in and around Coldwater Creek, SLAPS, and HISS sites. Subsequently, Ms. McCarthy was diagnosed with thyroid disease. Plaintiff lacked knowledge of her exposure to radiation and the relationship between that exposure and her injuries and had no reasonable basis to determine same until less than five (5) years before commencement of this action. As a result of Defendants' acts and omissions described in this Complaint, Ms. McCarthy developed significant and debilitating personal injuries. As a result of Defendants' acts and omissions described in this Complaint, Ms. McCarthy suffered physical injury, pain, and suffering. As a result of Defendants' acts and omissions described in this Complaint, Ms. McCarthy was exposed to radiation in excess of federal dose limits. Specifically, Ms. McCarthy's average annual exposure to radiation at times between 1965 and 1988, and 1994 and 1995, as the result of Defendants' conduct, was in excess of 500 millirem.

A.6. Elizabeth McGinnis currently resides at 1080 Treeshade Drive, St. Peters, Missouri. She lived at 14000 Invicta Drive, Florissant, Missouri, for approximately nineteen (19) years from 1969 to 1988, and at Pelican Cove Apartments, 2121 Flordawn Drive, Florissant, Missouri, for approximately three (3) years from 1993 to 1996. In addition, Ms. McGinnis was employed at DePaul Health Center, 12303 De Paul Drive, Bridgeton, Missouri, for approximately fourteen (14) years from 1992 to 2006. During these times, Ms. McGinnis engaged in typical outdoor activity in and around Coldwater Creek, SLAPS, and HISS sites. Subsequently, Ms. McGinnis was diagnosed with breast cancer less than five (5) years before the commencement of this action. As a result of Defendants' acts and omissions described in this Complaint, Ms. McGinnis developed significant and debilitating personal injuries. As a result of Defendants' acts and omissions described in this Complaint, Ms. McGinnis suffered physical injury, pain, and suffering. As a result of Defendants' acts and omissions described in this Complaint, Ms. McGinnis was exposed to radiation in excess of federal dose limits. Specifically, Ms. McGinnis's average annual exposure to radiation at times between 1969 and 1988, and 1992 and 2006, as the result of Defendants' conduct, was in excess of 500 millirem.

A.7. James McMullin currently resides at 18 Wheatmill Court, St. Charles, Missouri. James was employed by the Berkeley Police department for approximately twenty-six (26) years from 1973 to 1999, where he frequently visited the shooting range located at the corner of Frost and Eva. Additionally, from approximately 1984 to 1999, Mr. McMullin worked at the shooting range located at the corner of Frost and Eva as a shooting range instructor for the Berkeley Police department. During this time, Mr. McMullin engaged in outdoor activity in and around Coldwater Creek, SLAPS, and HISS sites. Subsequently, Mr. McMullin was diagnosed with kidney cancer. Plaintiff lacked knowledge of his exposure to radiation and the relationship

between that exposure and his injuries and had no reasonable basis to determine same until less than five (5) years before commencement of this action. As a result of Defendants' acts and omissions described in this Complaint, Mr. McMullin developed significant and debilitating personal injuries. As a result of Defendants' acts and omissions described in this Complaint, Mr. McMullin suffered physical injury, pain, and suffering. As a result of Defendants' acts and omissions described in this Complaint, Mr. McMullin was exposed to radiation in excess of federal dose limits. Specifically, Mr. McMullin's average annual exposure to radiation at times between 1973 and 1999, as the result of Defendants' conduct, was in excess of 500 millirem.

A.8. Kenneth McNeal currently resides at 2725 Meramar Drive, St. Louis, Missouri. He lived at 4691 Hern Drive, Berkeley, Missouri, for approximately five (5) years from 1964 to 1969, and at 2145 Argo Drive, Florissant, Missouri, for approximately four (4) years from 1970 to 1974. During these times, Mr. McNeal frequently engaged in outdoor recreational activities in and around Coldwater Creek, SLAPS, and HISS sites. Subsequently, Mr. McNeal was diagnosed with thyroid cancer. Plaintiff lacked knowledge of his exposure to radiation and the relationship between that exposure and his injuries and had no reasonable basis to determine same until less than five (5) years before commencement of this action. As a result of Defendants' acts and omissions described in this Complaint, Mr. McNeal developed significant and debilitating personal injuries. As a result of Defendants' acts and omissions described in this Complaint, Mr. McNeal suffered physical injury, pain, and suffering. As a result of Defendants' acts and omissions described in this Complaint, Mr. McNeal was exposed to radiation in excess of federal dose limits. Specifically, Mr. McNeal's average annual exposure to radiation at times between 1964 and 1974, as the result of Defendants' conduct, was in excess of 500 millirem.

A.9. Deborah McReynolds currently resides at 920 Apricot Drive, St. Charles, Missouri. She lived at 7822 Blandford Drive, Ferguson, Missouri, for approximately nineteen (19) years from 1954 to 1973, on Parker and Bellefontaine Roads in Spanish Lake, Missouri, for approximately one (1) year from 1978 to 1979, at 11674 Mimeaux Drive, Spanish Lake, Missouri, for approximately seven (7) years from 1979 to 1986, at 2846 Krem Avenue, Overland, Missouri, for approximately two (2) years from 1986 to 1988, and at 12801 Ellisor Drive, Bridgeton, Missouri, for approximately eleven (11) years from 1988 to 1999. During these times, Ms. McReynolds engaged in outdoor activity in and around Coldwater Creek, SLAPS, and HISS sites. In addition, she owned and operated a small business at McDonnell Douglas and Lindbergh, Hazelwood, Missouri for approximately four (4) years from 1989 to 1993. Subsequently Ms. McReynolds was diagnosed with thyroid disease, uterine cancer, and skin cancer. Plaintiff lacked knowledge of her exposure to radiation and the relationship between that exposure and her injuries and had no reasonable basis to determine same until less than five (5) before commencement of this action. As a result of Defendants' acts and omissions described in this Complaint, Ms. McReynolds developed significant and debilitating personal injuries. As a result of Defendants' acts and omissions described in this Complaint, Ms. McReynolds suffered physical injury, pain, and suffering. As a result of Defendants' acts and omissions described in this Complaint, Ms. McReynolds was exposed to radiation in excess of federal dose limits. Specifically, Ms. McReynolds's average annual exposure to radiation at times between 1954 and 1973, and 1978 and 1999, as the result of Defendants' conduct, was in excess of 500 millirem.

A.10. Terry Mecalo currently resides at 609 Thornridge Drive, O'Fallon, Missouri. She lived at 1444 Fair Meadows Lane, Spanish Lake, Missouri, for approximately four (4) years

from 1959 to 1963, at 705 Mark Twain Drive, Florissant, Missouri, for approximately three (3) years from 1963 to 1966, and at 14626 Hidden Cove Lane, Florissant, Missouri, for approximately nine (9) years from 1972 to 1981. During these times, Ms. Mecalo engaged in outdoor activity in and around Coldwater Creek, SLAPS, and HISS sites. Subsequently, Ms. Mecalo was diagnosed with thyroid disease and skin cancer. Plaintiff lacked knowledge of her exposure to radiation and the relationship between that exposure and her injuries and had no reasonable basis to determine same until less than five (5) years before commencement of this action. As a result of Defendants' acts and omissions described in this Complaint, Ms. Mecalo developed significant and debilitating personal injuries. As a result of Defendants' acts and omissions described in this Complaint, Ms. Mecalo suffered physical injury, pain, and suffering. As a result of Defendants' acts and omissions described in this Complaint, Ms. Mecalo was exposed to radiation in excess of federal dose limits. Specifically, Ms. Mecalo's average annual exposure to radiation at times between 1959 and 1966, and 1972 and 1981, as the result of Defendants' conduct, was in excess of 500 millirem.

25. The following entities are Defendants in this action:

B.1. Mallinckrodt LLC, a Delaware limited liability company, maintains its headquarters in Missouri at 675 McDonnell Blvd., Hazelwood, MO 63042, and is an indirect affiliate of Mallinckrodt plc, a publically owned company. The entities referred to in paragraphs 25(B)(1) and 25(B)(2) will be referred to collectively as "Mallinckrodt." Upon information and belief, in 1986, Mallinckrodt Missouri was broken up and sold to MI Holdings, Inc. and Mallinckrodt, Inc. Upon information and belief, Mallinckrodt Chemical Works is now known as or has been merged into MI Holdings and/or Mallinckrodt, Inc. Upon information and belief, Mallinckrodt LLC is the successor-in-interest to Mallinckrodt, Inc. and Mallinckrodt Chemical Works.

Mallinckrodt Nuclear Corporation was formerly a wholly owned subsidiary of Mallinckrodt Chemical Works. All foregoing Mallinckrodt entities will be referred to collectively as “Mallinckrodt.”

B.2. Cotter Corporation (“Cotter”), a Colorado corporation with its principal place of business in Englewood, Colorado, operates as a subsidiary of General Atomics, Inc., a California corporation. It was purchased by and became a wholly owned subsidiary of Commonwealth Edison in 1975. Through its various mining and milling operations, Cotter has produced uranium, vanadium, molybdenum, silver, lead, zinc, copper, selenium, nickel, cobalt, tungsten and limestone. In December 1969, Cotter purchased the remaining residues at 9200 Latty Avenue and dried and shipped those residues to Colorado at a rate of approximately 400 tons per day. B&K Construction Company was engaged by Cotter for this purpose.

BACKGROUND

26. During World War II, the nation began a top-secret project to build the first atomic bomb. At this time, the Army created the Manhattan Engineering District (“MED”) to carry out much of the work of the so-called “Manhattan Project.” After the war, the nation sought ways to use nuclear energy for peaceful purposes and formed the Atomic Energy Commission (“AEC”) in 1946 to continue this nuclear research. Some of this work was performed in the St. Louis area.

27. From 1942 to 1957, under contracts with the MED and/or the AEC, the Destrehan Street Refinery and Metal Plant (which later became Mallinckrodt Chemical Works) processed natural uranium into uranium oxide, trioxide, and metal uranium at a facility in downtown St. Louis, Missouri. This facility became known as the St. Louis Downtown Site (“SLDS”). The SLDS site became contaminated with hazardous, toxic, and radioactive substances as a result.

28. In 1946, MED acquired the St. Louis Airport Site (“SLAPS”), a 21-acre site just north of the St. Louis Airport, for storage of hazardous, toxic, and radioactive waste residues from the SLDS. In subsequent years, the SLAPS and adjacent properties became contaminated with hazardous, toxic, and radioactive substances as a result.

29. During the 1960’s, private companies purchased the hazardous, toxic and radioactive waste residues being stored at the SLAPS and began hauling them from the SLAPS to a site on Latty Avenue in Berkeley, Missouri (part of this site later became the Hazelwood Interim Storage Site (“HISS”)). These waste residues, which contained valuable metals, were sold for their commercial value and shipped to various other destinations. The Latty Avenue site became contaminated with hazardous, toxic, and radioactive substances as a result.

30. Transport and migration of hazardous, toxic, and radioactive waste residues to/from the SLDS, the SLAPS and the HISS also spread hazardous, toxic, and radioactive substances along haul routes to nearby Vicinity Properties (“VPs”). Even though the federal government was not responsible for this contamination, Congress directed that the government add these sites to the Formerly Utilized Sites Remedial Action Program (“FUSRAP”).³

THE ST. LOUIS FUSRAP SITES⁴

31. Between 1942 and 1973, Defendants processed, stored, handled, and/or disposed of large volumes of hazardous, toxic, and radioactive materials in four separate geographical areas located in and around metropolitan St. Louis, Missouri. The designations assigned to these sites

³ The Formerly Utilized Sites Remedial Action Program (FUSRAP) is an environmental remediation program that addresses radiological contamination generated by activities of the Manhattan Engineer District and the Atomic Energy Commission (“MED/AEC”) during development of the atomic weapons in the 1940s and 50s.

⁴ The St. Louis FUSRAP Sites include: (1) the St. Louis Downtown Site (“SLDS”); (2) the St. Louis Airport Site (“SLAPS”); (3) the Hazelwood Interim Storage Site (“HISS”); (4) the Vicinity Properties (“VPs”); and (5) the Madison Site.

are the St. Louis Downtown Site, the North St. Louis County Sites, the Madison Site, and the West Lake Landfill Site.

The St. Louis Downtown Site (“SLDS”):

32. The St. Louis Downtown Site is located in an industrial area on the eastern border of St. Louis, approximately 300 feet west of the Mississippi River. The property is about 11 miles southeast of the SLAPS and the Lambert-St. Louis International Airport. The SLDS encompasses nearly 45 acres and is presently owned and operated by Mallinckrodt, Inc. (formerly Mallinckrodt Chemical Works). The property includes many buildings and other facilities involved in chemical production.

33. From 1942 to 1957, Mallinckrodt used the SLDS for processing various forms of uranium compounds, for machining, and for recovery of uranium metal. In 1946, Mallinckrodt began the manufacture of uranium dioxide from pitchblende ore at a newly constructed plant at the SLDS.

34. When Mallinckrodt ran out of space at the SLDS to store the hazardous, toxic and radioactive waste residues left over from the production process, a 21.7-acre tract of land (now known as the SLAPS) was procured in north St. Louis County to store hazardous, toxic and radioactive waste residues from uranium processing at the SLDS.

The North St. Louis County Sites:⁵

35. The St. Louis Airport Site is an unincorporated 21.7-acre property located near the St. Louis Airport in north St. Louis County. The SLAPS is bounded by McDonnell Boulevard to the north, Banshee Road and Norfolk Southern Railroad on the south, and Coldwater Creek on the west.

⁵ The North St. Louis County Sites consist of: (1) the St. Louis Airport Site; (2) the SLAPS Vicinity Properties (VPs); and (3) the Latty Avenue Properties. In October 1989, EPA placed three of the North St. Louis County site properties (SLAPS, HISS, and Futura Coatings Company) on the Superfund National Priorities List (“NPL”).

36. Mallinckrodt used the SLAPS to store hazardous, toxic and radioactive waste residues generated by Mallinckrodt during uranium processing activities at the SLDS. These materials included, but were not limited to, pitchblende raffinate residues, radium-bearing residues, barium sulfate cake, Colorado raffinate residues and contaminated scrap.

37. Mallinckrodt stored the radioactive materials in bulk on the open ground or buried at the western end (near Coldwater Creek) and at other parts of the SLAPS.

38. By 1960, there were approximately 50,000 empty drums and approximately 3,500 tons of miscellaneous contaminated steel and alloy scrap stored onsite at SLAPS.

39. The SLAPS Vicinity Properties (“VPs”) consist of approximately 78 properties, including properties along former haul routes between the SLAPS and the HISS, Coldwater Creek, the open fields (a former ball field area) immediately north of the SLAPS, and other SLAPS contiguous properties. The SLAPS VPs impacted by hazardous, toxic, and radioactive wastes are located along the haul routes between the SLAPS and the HISS, and include both recreational and residential properties. These haul routes include Eva Avenue, Frost Avenue, Hazelwood Avenue, McDonnell Boulevard, and Pershall Road.

40. Coldwater Creek flows for 500 feet [153 meters] along the western border of the SLAPS. The creek originates 3.6 miles [5.8 kilometers] to the south of the SLAPS and continues for 15 miles [24 kilometers] in a northeasterly direction through the City of Hazelwood, the City of Florissant, unincorporated areas of St. Louis County, and along the northern edge of the community of Black Jack, until it discharges into the Missouri River. Coldwater Creek is generally accessible to the public, except for approximately 1.2 miles [1.9 kilometers], which flows under the Lambert-St. Louis International Airport. Coldwater Creek is contaminated with hazardous, toxic, and radioactive materials.

41. The Latty Avenue Properties are located in an area approximately one half mile [1 kilometer] north of the St. Louis Airport in the towns of Hazelwood and Berkeley, Missouri. The Properties include: (1) the Hazelwood Interim Storage Site; (2) the Futura Coatings Site (used for manufacturing plastic coatings); and (3) several Vicinity Properties on Latty Avenue. The Latty Avenue Properties have elevated levels of residual uranium and thorium on site.

42. From approximately 1961 to 1990, hazardous, toxic, and radioactive materials, specifically those involved in the processing of columbium and tantalum (C-T), were used in activities for commercial clients at the SLDS. The contamination present in the soil and groundwater at the FUSRAP sites may be attributed to releases of radionuclides to the environment during the uranium processing operations, the C-T processing operations, or operations unique to the VPs.

43. Hundreds of thousands of tons of hazardous, toxic, and radioactive wastes were transported from the SLDS to the SLAPS for storage, including radium-bearing residues, refined cake, barium sulfate cake, and C-liner slag. Over time, these hazardous, toxic, and radioactive waste residues migrated directly from the SLAPS onto other sites (via Coldwater Creek) or were deposited as the residues were hauled along transportation routes, contaminating the soils and sediments of the Vicinity Properties.

44. The SLDS and the North St. Louis County Sites have elevated levels of uranium, thorium, and radium in soils and groundwater. The EPA has concluded that direct contact with, or accidental ingestion of, contaminated soils or groundwater near these sites may pose health risks to individuals.

SITE HISTORY

45. Mallinckrodt processed uranium feed material for the production of uranium metal from 1942 to 1957 under contracts with the Manhattan Engineer District and the Atomic Energy

Commission (“MED” / “AEC”). The work was performed at the Mallinckrodt Plant, located at the SLDS. Within a year, the SLDS ran out of space to store the hazardous, toxic, and radioactive waste residues left over from the production process.

46. Beginning in 1946, the hazardous, toxic, and radioactive waste residues left over from the production process at the SLDS were being transported to the SLAPS for storage.⁶ Scrap metal, chemical drums, and other contaminated debris were placed in low areas at the SLAPS adjacent to Coldwater Creek on the western end of the property and covered with dirt to make a level storage area.

47. By 1960, there were approximately 50,000 chemical drums and approximately 3,500 tons of miscellaneous contaminated steel and alloy scrap stored onsite at SLAPS directly adjacent to Coldwater Creek. Coldwater Creek is the major drainage mechanism for the SLAPS, the SLAPS VPs, and the Latty Avenue Properties. It has been designated a Metropolitan No-Discharge Stream. Through time, various meanders in Coldwater Creek were backfilled to support construction, resulting in commingling of the site soils and sediments with hazardous, toxic, and radioactive wastes brought to the SLAPS.

48. These hazardous, toxic, and radioactive wastes residues were removed from the SLAPS in various stages throughout the 1960s. Initially, the residues were sold to Contemporary Metals Corporation (“Contemporary Metals”). Soon thereafter, their subsidiary, Continental Mining & Milling Company (“CMM”), began transporting the waste residues to property at 9200 Latty Avenue (now known as the HISS and the Futura Coatings Company properties) for storage.

⁶ The following byproducts and scrap were transported mainly from the SLDS to the SLAPS for storage: padium-bearing residues (“K-65” residues); AM-7 pitchblende raffinate cake; AM-10 Colorado raffinate cake; AJ-4 barium sulfate cake (unleached) and AJ-4 barium cake (leached); C-liner slag that was created during metal firming operations; C-701 U scalping of magnesium fluoride, Japanese precipitates, Vitro residues from the Vitro Corporation’s facility in Canonsburg, PA; and empty drums, contaminated steel and alloy scrap, and building debris.

49. After CMM went into receivership, the Commercial Discount Corporation (“CDC”) of Chicago, Illinois, took possession of its assets, including the Latty Avenue Property and the hazardous, toxic, and radioactive waste residues stored therein.

50. In 1969, the remaining hazardous, toxic, and radioactive wastes residues at Latty Avenue were sold to the Cotter Corporation (“Cotter”) of Canon City, Colorado. In 1970, Cotter employed B&K Construction Company of St. Louis, Missouri, to transport these waste residues out of state. By late 1970, most of the residues had shipped offsite, except for 10,000 tons of Colorado raffinate and 8,700 tons of leached barium sulphate raffinates.

51. In 1973, Cotter disposed of approximately 47,700 tons of soil mixed with uranium ore processing residues, including leached barium sulfate, uranium, and thorium, into the West Lake Landfill. This radiologically contaminated soil was routinely used as cover for municipal wastes and other landfill operations.

52. Since 1946, residues have migrated from the SLAPS (via runoff onto adjacent properties and Coldwater Creek or wind) or were released or otherwise deposited when material was transported along haul routes, contaminating the soil and sediments at the SLAPS VPs and the Latty Avenue Properties.

53. During the relocation of waste material, improper handling and transportation from the SLAPS to the Latty Avenue Sites, caused contamination to spread along haul routes. Improper storage exacerbated the contamination and caused adjacent properties (the SLAPS and the Latty Avenue Vicinity Properties (VPs)) to be contaminated.

INVESTIGATION OF CONTAMINATION

54. In October 1989, Congress added the SLAPS, the HISS and the Futura Site to the U.S. EPA’s NPL.

55. In 1992, the Madison Site was added to the FUSRAP list slated for cleanup. Approximately two cubic yards of contaminated uranium and thorium dust were located on overhead surfaces. Forty cubic yards of contaminated dust and materials had to be sent offsite for disposal.

56. In 1994, the Department of Energy (“DOE”) issued a Remedial Investigation (“RI”) Report summarizing the results of previous investigations conducted at the North St. Louis County Sites and SLDS. The RI Report concluded that contamination is present in both surface and subsurface soils at the North St. Louis County Sites.

57. In 1995, DOE issued an RI Addendum Report to summarize the results of an additional investigation conducted to fill the data gaps identified in the RI Report. The activities associated with this investigation included, but were not limited to, soil sampling at the SLAPS VPs; sediment sampling in Coldwater Creek; installation of monitoring wells at the SLAPS; vegetation sampling along ditches next to the haul roads; and background soil and ground-water sampling. The results of the investigation confirmed the presence of widespread radioactive contamination of surface and subsurface soils at the North St. Louis County Sites.

TOPOGRAPHY AND DRAINAGE OF CONTAMINANTS

58. The North St. Louis County and the SLDS sites are located on a modest upland area south of the Missouri River floodplain. The upland area surrounds a topographic depression known as the Florissant Basin.

59. Coldwater Creek is the major drainage mechanism for the SLAPS, the SLAPS VPs, and the Latty Avenue Properties. It has been designated a Metropolitan No-Discharge Stream. Coldwater Creek flows adjacent to the SLAPS and the SLAPS VPs, then meanders near the HISS, the Futura Site, and other Latty Avenue Properties and continues to flow through northern St. Louis County until it discharges into the Missouri River.

60. Coldwater Creek floods areas of the North St. Louis County Sites including portions of the SLAPS, the HISS, the Futura Site, and several VPs. The runoff from precipitation that enters Coldwater Creek in a given unit of time greatly exceeds the predevelopment quantities. This runoff overloads Coldwater Creek and increases the likelihood of local and area-wide flooding.

61. Upon information and belief, the SLAPS and the Latty Avenue VPs, including impacted areas along Coldwater Creek, were contaminated with radium, thorium and uranium. Investigations have determined that contamination levels at the North St. Louis County Sites exceed federal dose limits.

62. On-site sampling at the SLAPS, the HISS and the Futura Sites found elevated levels of hazardous, toxic, and radioactive materials in the groundwater, soils, and air, in excess of regional isotope background values.

63. Operations at the St. Louis FUSRAP Sites have included, but were not limited to, the processing, storing, handling and/or disposing of uranium, enriched uranium, and other radioactive materials constituting source, special nuclear, or nuclear by-product materials as defined in the Atomic Energy Act, 42 U.S.C. § 2011 *et seq.* These radioactive materials, their by-products, and their decay (or “daughter”) products are highly toxic and carcinogenic.

64. Operations at the St. Louis FUSRAP Sites have also involved the use of non-radioactive chemicals, many of which are classified as hazardous under applicable federal law. *See, e.g.*, 42 U.S.C. § 9601(14); 40 C.F.R. § 302.4 [including tables]; 42 U.S.C. § 6903(5); 40 C.F.R. § 261.3; and 40 C.F.R. Part 261, Subpart D.

65. Defendants' processing, storage, handling and/or disposal of hazardous, toxic, and radioactive materials at the St. Louis FUSRAP Sites have generated significant quantities of substances that are highly toxic to humans and the environment and are carcinogenic.

66. Throughout the history of St. Louis FUSRAP Sites, each Defendant (or its predecessor in interest) caused recurrent releases of hazardous, toxic, and radioactive materials into the environment, in complete disregard for applicable law and for the health and safety of the surrounding communities and the natural environment. These negligent, grossly negligent, and reckless releases occurred in various ways, including through direct and indirect discharges of radioactive and toxic materials into public water bodies, such as Coldwater Creek; the exposure of workers to these materials, who then in turn spread contamination outside the worksite; and the improper disposal of hazardous, toxic, and radioactive materials.

67. These negligent, grossly negligent, and reckless releases have resulted in Plaintiffs' exposure to hazardous, toxic, and radioactive materials. Moreover, because of the long half-life of the radioactive substances involved, persons currently living near the St. Louis FUSRAP Sites have been, and will continue to be, exposed to these dangerous substances.

68. Upon information and belief, the substances to which Plaintiffs and their communities were exposed include, but were not limited to, the natural forms and various isotopes of cesium, thorium, radium, uranium, and radon. Some of these substances were used in the conduct of Defendants' operations, and some were created as by-products or decay ("daughter") products.

CAUSE OF ACTION PURSUANT TO THE PRICE ANDERSON ACT

69. Plaintiffs incorporate by reference the preceding paragraphs of this Complaint.

70. In 1957, Congress amended the Atomic Energy Act to implement its policy to foster private sector participation in the nuclear energy industry. These 1957 amendments became

known as the Price-Anderson Act (“PAA”). The uranium, thorium, and other radioactive substances processed, handled, stored, and/or disposed by Defendants at the St. Louis FUSRAP Sites include nuclear by-product materials, special nuclear materials, and/or source materials. 42 U.S.C. § 2014(e), (z), (aa). Any release of these by-product, special nuclear, or source materials causing bodily injury, sickness, disease, death, loss or damage to property, or loss of use of property constitutes a “nuclear incident” under the terms of the Price-Anderson Act. 42 U.S.C. § 2014(q).

71. Plaintiffs further assert that Defendants’ acts and omissions and negligent releases of hazardous, toxic, and radioactive waste materials have exposed Plaintiffs to highly dangerous materials. Plaintiffs have suffered bodily injury, sickness, and disease, as a direct and proximate result of their exposures. Plaintiffs’ cause of action therefore asserts legal liability based upon a “nuclear incident,” or series of such incidents, and is consequently a “public liability action” within the terms of the PAA.

72. Each Defendant’s conduct constituted a “nuclear incident” within the meaning of the PAA because it was an occurrence within the United States causing bodily injury, sickness, disease, or death arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material.

73. Pursuant to the PAA, the substantive rules for decision in this action arising under 28 U.S.C. § 2210 shall be derived from the law of the State in which the nuclear incident involved occurred, namely, Missouri, unless such law is inconsistent with the provisions of such section.

74. Missouri substantive rules for decision provide that a person is strictly liable for harm, injury, or damage arising from an abnormally dangerous activity. Missouri substantive

rules for decision provide that handling nuclear materials constitutes an abnormally dangerous activity.

75. Defendants' conduct in the processing, handling, storage, and/or disposal of hazardous, toxic, and radioactive waste materials posed significant risk of harm to persons living and working in the vicinity of the operation. The consequences of nuclear accidents or incidents to health, property, and the environment are extremely dire, and can be measured in millions, if not billions of dollars. It is not possible to eliminate all of the risk by taking reasonable precautions. Finally, the processing, handling, storage, and/or disposal of hazardous, toxic, and radioactive waste materials has never been a matter of common usage; indeed, private operators historically were not permitted to engage in such activities at all. The conduct of Defendants' activities at the St. Louis FUSRAP Sites constituted abnormally dangerous activities.

76. In addition, with the knowledge of the environmental and health hazards associated with the processing, handling, storage, and/or disposal of hazardous, toxic, and radioactive waste materials, Defendants chose to conduct their activities near residential communities such as Berkley, Hazelwood, and Florissant, Missouri. Although Defendants' activities were abnormally dangerous per se, the location of such activities in well-populated areas such as north St. Louis County, Missouri would independently have rendered them abnormally dangerous.

77. As a direct and proximate result of Mallinckrodt's processing, handling, transportation, storage, and/or disposal of hazardous, toxic, and radioactive waste materials at the St. Louis FUSRAP Sites between 1942 and 1957, there have been releases of such substances into the environment, thereby injuring Plaintiffs, whose injuries include actual

present harm and increased risks of harm to their persons. These injuries constitute the type of harm the possibility of which made Mallinckrodt's activities abnormally dangerous.

78. Mallinckrodt is therefore strictly liable to Plaintiffs for all damages which have resulted and which will continue to result from the processing, handling, storage, and/or disposal of radioactive, toxic, and hazardous substances at the St. Louis FUSRAP Sites.

79. Missouri substantive rules for decision provide that a person who fails to use due care to avoid injuring another person may be held liable for anything which appears to have been the natural and probable consequence of his act or omission.

80. Defendants owed to Plaintiffs a duty of due care which could only be satisfied by the legal, safe, and proper processing, handling, storage, and/or disposal of the radioactive, toxic, and hazardous substances in Defendants' possession. Defendants had a duty to prevent the discharge or release of such substances that might harm Plaintiffs. Defendants also had a specific duty to warn or notify Plaintiffs of the potential hazards of exposure to radioactive, toxic, and hazardous substances, and to warn or notify Plaintiffs of the fact that discharges or releases of these substances had occurred and were likely to occur in the future.

81. Further, Defendants had a duty to comply with applicable state, federal, and local governmental laws, regulations, and guidelines applicable to persons processing, handling, storing, and/or disposing of hazardous, toxic, and radioactive waste materials.

82. Defendants breached these duties by their negligent, grossly negligent, and reckless processing, handling, storage, and/or disposal of hazardous, toxic, and radioactive waste materials at the St. Louis FUSRAP Sites. Such conduct was in utter non-compliance with applicable federal, state, and local laws, regulations, and guidelines. Defendants' negligent, grossly negligent, reckless, and illegal conduct resulted in the dangerous release of hazardous,

toxic, and radioactive substances into the communities surrounding the St. Louis FUSRAP Sites, including but not limited to Berkley, Hazelwood, and Florissant, Missouri. These actual and continued releases have subjected Plaintiffs to an unreasonable risk of harm, and to actual injuries to their persons. Defendants also failed to warn Plaintiffs of the actual and threatened releases of such hazardous, toxic, and radioactive substances and of the reasonably foreseeable effects of such releases, an omission that was negligent, grossly negligent, and reckless. Finally, Defendants failed to act to prevent their releases from harming Plaintiffs.

83. According to an Army Corps of Engineers report, from 1976 until 1978, radiological investigations of SLAPS and Latty Avenue were performed. Contamination was found at both sites, along with elevated radionuclide concentrations onsite and north of the site in ditches along McDonnell Boulevard. The ditches were designated for remedial action under the FUSRAP program.⁷

84. According to an NRC report published in 1994, a survey of the Latty Avenue property revealed radiation levels in excess of the NRC criteria for unrestricted use.⁸

85. Defendants knew about the hazards associated with nuclear operations. The legislative history of the PAA, which was passed with the active participation of private companies involved in the nuclear power industry, is rife with references to the extreme consequences that could be expected in the event of a nuclear incident. Indeed, the gravity of such consequences was a major contributing factor to the passage of the PAA. These Defendants knew or should have known that their generation, management, storage, use, disposal, releases, or discharges of radioactive, toxic, and hazardous substances in connection with their operations at the St. Louis FUSRAP Sites would result in actual injuries and

⁷ <http://www.mvs.usace.army.mil/Missions/CentersofExpertise/FormerlyUtilizedSitesRemedialActionProgram.aspx>

⁸ See https://nrctracking.ornl.gov/tlts/PDFs/DL-032394_01.pdf

increased risks to the persons, property, and economic interests of the public without taking proper safety precautions.

86. Defendants' acts and omissions and their negligence were a direct and proximate cause of Plaintiffs' injuries causing both actual present harm and/or creating an increased risk of harm to person. Plaintiffs are entitled to recover damages for such injuries.

87. As a direct and proximate result of Defendants' conduct described in this Complaint, Plaintiffs have suffered and/or will continue to suffer great physical pain and suffering, incurred hospital, medical, pharmaceutical, and other expenses. Further, prior to the onset of their symptoms, Plaintiffs were extremely active and participated in numerous hobbies and activities, and as a result of their injuries, Plaintiffs were and are unable to engage in said activities, in which their participation was normal prior to developing symptoms and injuries resulting from exposure to toxic, hazardous, and radioactive substances.

88. Because Defendants' conduct was intentional, malicious, grossly negligent, and reckless, Plaintiffs seek punitive damages.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs demand judgment in their favor and against Defendants, jointly and severally, for general damages, special damages, punitive and exemplary damages, prejudgment interest, costs of the action, and such further relief as this Court deems proper.

May 20, 2016

Respectfully submitted,

/s/ Kenneth J. Brennan

ENVIRONMENTAL LITIGATION GROUP, P.C.

Greg Cade (*pro hac vice*)
James L. Wright (*pro hac vice*)
Kevin B. McKie (*pro hac vice*)
2160 Highland Avenue South
Birmingham, AL 35205
(205) 328-9200
gregc@elglaw.com
larry@elglaw.com
kmckie@elglaw.com

BYRON CARLSON PETRI & KALB, LLC

Christopher W. Byron
Eric J. Carlson
411 St. Louis St.
Edwardsville, IL 62025
(618) 307-4054
ejc@bcpklaw.com
cwb@bcpklaw.com

TORHOERMAN LAW LLC

Kenneth J. Brennan, #47523MO
Eric M. Terry, #57102MO
Tyler Schneider, #6313923IL
101 W. Vandalia Street, Suite 350
Edwardsville, IL 62025
(618) 656-4400
kbrennan@thlawyer.com
eric@thlawyer.com
tyler@thlawyer.com
cfinley@thlawyer.com

WALTON TELKON FOSTER

Troy E. Walton
241 N. Main Street
Edwardsville, IL 62025
(618) 307-9880
twalton@waltontelken.com
Attorneys for Plaintiffs