EXHIBIT G

SITE LOCATION

1949 at Mathieson employment began This is new evidence. Chemical Company in Pasadena, Texas. His employment there ended in 1978. I have tried to describe this plant site as I know it, as others have told me, and from public information I have collected. As mentioned elsewhere in my report, no records were kept on events that transpired during the early 1950s. Company officials and Government officials kept all information regarding uranium in the plant a high priority secret. Employees did not know about the presence of uranium in the plant. As mentioned elsewhere, when the earliest survey (November 8, 1977) was made, it was made from information furnished by Mathieson officials and was not documented until March 1980. These officials alleged that the entire AEC contract work (1951 – 1953) was done in one 12 x 14 ft room in a one story building that had no air conditioning. The diagram shown in the survey of this room does not show any windows. This room was located in the west end of the old administration building. Please consider the following:

The Mathieson Chemical Company located in Pasadena, Texas is a "Covered Facility" under the EEOICPA. This is where was an employee for approximately 29 years, beginning in 1949. This facility was also known as Pasadena Chemical Corp., Olin Mathieson Chemical Co., and Mobil Mining and Minerals Co.. The present occupant of this plant site is the Agrifos Fertilizer Plant. The Mathieson Chemical Company was an Atomic Weapons Employer and extracted uranium oxides out of phosphoric acid compounds in a pilot study for the Atomic Energy Commission. The time period is shown as 1951-1953, with Residual Radiation 1954 – October 2009. This information was furnished by DOE and also informs us that "There was one record found for the facility: Mathieson Chemical Co.". This page, taken from the EEOICPA Facility List is noted to have been last updated on June 4, 2008. (See Attachment 1.)

The DOE Appendix A-1 Residual Radioactive Contamination – Summary of All Sites (As of October 31, 2008), (Page 8 of 13)) shows that Mathieson Chemical Co., Pasadena, Texas – Period Previously Listed on DOE ES&H Website, 1951-1953 – Period Currently Listed on DOE ES&H Website, Same – Previous Evaluation Findings, Little Potential – Previous Period of Potential Residual Contamination, N/A – Revised Evaluation Findings, Potential Exists – Revised Period of Potential Residual Contamination – 1954–present. See Exhibit A.

This revision in 2008 indicates that this particular plant site was more harmful to employees than was previously believed. To me, "Revised Period of Potential Residual Contamination – 1954-present" means <u>Danger continues to exist</u>. I have tried, without

success, to locate records prepared by officials from this site location which would pertain to work conditions at the plant during employment there and any factors which would relate to the presence of uranium in the plant. To my knowledge no records made at that time exist.

Officials of our government felt that the presence of uranium at this plant site posed a danger to the health and welfare of these employees when this plant was added to the list of "Covered Facilities". Employees of these "Covered Facilities" were included in the EEOICPA.

Mathieson Chemical Company has a long history of diversification, beginning when Neil Mathieson, a British soda ash and bleaching powder merchant, obtained a charter in Virginia to open an alkali plant, Mathieson Alkali Works, in 1892. Bleaching powder was manufactured using electrolytic cells that forced chlorine to be absorbed in lime. In 1893 this company acquired the Holston Salt and Plaster Corp. in Saltville, Virginia. In Saltville, the company produced chlorine and caustic soda which produced up to 100 pounds of methylmercury per day (the company's own estimate) and for decades the plant dumped its calcium chloride effluent into the soils and the North Fork of the Holston River. In 1924 the muck dam in Saltville broke, killing 19 people. According to the "EPA Environmental News", from 1895 to 1972, the Saltville Waste Disposal Site was occupied by Olin Corporation and predecessors, Mathieson Chemical Corporation and Mathieson Alkali Works. Olin estimated that 100 pounds of mercury a day were lost from 1951 to 1970 into the ground and the river. Wastes from the plant were pumped into large settling basins or waste ponds. In 1970, Olin modified its operation to cut mercury losses to a quarter pound per day. In 1970 the Virginia State Water Control Board adopted a new standard for dissolved solids which Olin indicated they could not meet. Olin shut down the Saltville operations in 1972. The chlorine plant was demolished in 1973 and buried between waste ponds. In 1970 the company announced that it would not be able to meet EPA water pollution standards and would close the plant. The Olin Superfund site was first added to the EPA's National Priorities List of the worst hazardous waste sites in the country in 1982, after an initial investigation revealed the presence of mercury in the soil and river sediment. (See Attachment 2.)

Since the early 1900s, and in different locations, Mathieson has produced ammonia, liquid chlorine, calcium hypochlorite, alkali for pH control, carbonic gas, ammonium-soda, chlorine used in high-octane jet and tank fuel, plastics and insulation, and a long list of diversified chemical products and mixtures, including industrial phosphates. In 1909 the company began commercial production of liquid chlorine. In 1919 Mathieson began producing ammonia, a byproduct of electrolytic alkali processes. In the 1930s Mathieson began shipping caustics for use in rayon manufacture. In 1934 the company built an ammonium-soda plant in Lake Charles, Louisiana. During the Second World War, Mathieson chlorine was in high demand for use in many products. Starting in 1947, Mathieson President Tom Nichols, with the help of his friend John Leppart, had transformed Mathieson into a company with \$366 million in sales by the time merger plans with Olin materialized in 1954. In 1949 Mathieson had expanded to manufacture fertilizers, pesticides, and sulfuric-acid for agriculture and industry. In 1952 Mathieson

bought E. R. Squibb & Sons pharmaceutical company. For the period 1951-1953 Mathieson Chemical Company at Pasadena, Texas extracted uranium oxides out of phosphoric acid compounds in a pilot study for the Aromic Energy Commission. This uranium was placed in the plant without the knowledge or consent of the employees. Related activities and residual contamination subsequent to the presence of uranium beginning in 1951 are yet to be determined although many workers who were employed there have died of cancer.

Also in 1892, the same year the charter was obtained for Mathieson Alkali Works in Virginia, Franklin W. Olin founded the Equitable Power Company in East Alton, Illinois. This was a predecessor of Olin Industries. This company supplied blasting powder to coal fields and soon expanded into small arms ammunition. The Western Cartridge Company was formed in 1898. In 1931 Western Cartridge Company purchased the Winchester Repeating Arms Company in New Haven, CT. which expanded production during World War 1. Winchester-Western manufactured 15 billion rounds of ammunition for Allied Forces in the Second World War and developed the U.S. Carbine and M-1 Rifle. By the end of the war, they employed 62,000 people, including those at plants operated for the government. Olin also had a history of diversity. In 1944 the Olin businesses were brought together under the new corporate name of Olin Industries, Inc. and went through a period of great expansion. In 1951 Olin acquired the properties of Frost Lumber Industries of Louisiana and Arkansas, including 440,000 acres of timberlands. Also about this time Olin acquired Ecusta Paper Corporation in Pisgah Forest, NC, a leading producer of fine papers for everything from cigarettes to the Bible. Over the years and also in different locations, Olin produced blasting powder, brass, chlorine, caustic soda, ammunition, explosives, batteries, and expanded into the cellophane, lumber, paper, and power tool industries, as well as copper and copper based alloy sheet, strip, tube, fabricated products, industrial phosphates, and chemical products (sometimes described as "specialty" chemicals).

In 1954 Olin and Mathieson merged to become the Olin Mathieson Chemical Corporation. The company bought the Blockson Chemical Company (another "Covered Facility" under the EEOICPA) in Joliet, Illinois in 1955, the Brown Paper Mill Company in Monroe, Louisiana in 1955, and also Marquardt Aircraft at about that time. The company also made an agreement with Revere Copper & Brass, Inc. (another "Covered Facility" under the EEOICPA) in 1956 to form Ormet Corporation, primarily for the production of aluminum. In the 1960s Mathieson Chemical entered into an agreement with Mallinckrodt Chemical Works (another "Covered Facility" under the EEOICPA) to produce certain nuclear products for the Federal Government. The Olin Mathieson Chemical Corporation changed its name to Olin Corporation in 1969. In a current report (2010) of data furnished by Dunn & Bradstreet, the Olin Corporation, now based in St. Louis, Missouri, has estimated annual sales shown to be \$1,764,500,000 and an estimated total of 3600 employees. This, as stated above, is the Corporation with which Mathieson Chemical Company had merged in 1954. It seems that this Corporation and these companies mentioned above had common interests and a relationship that could be accurately described as "complex" as well as "similar".

This is the Corporation where no records are available for the period of 1951 when uranium was placed in the plant through the period that uranium, toxic waste substances and hazardous bi-products have remained in the plant. No records are available for the Mathieson Chemical Company Plant Site which is a "Covered Facility" under the EEOICPA. The above referenced record states "Facility Description: Mathieson Chemical extracted uranium oxides out of phosphoric acid compounds in a pilot study for the Atomic Energy Commission". The earliest record is of a survey made in 1977, of one small room, which is alleged to be the location where all the uranium contract work was done. No records exist that these dangerous materials were removed from the plant. Will employees at Mathieson Chemical Company be denied benefits they deserve because company officials and others were successful in keeping no records relating to their disgraceful conduct? Based on information which brought about the legal claims approved under the EEOICPA, many other employers committed similar actions to victimize their employees. Unlike Mathieson Chemical, actions by other companies have been discovered and employees have been compensated. No one in authority appears to be interested in the absence of records for the Mathieson plant. Mathieson Chemical is the "forgotten plant". The truth has not yet come out.

I have shown this information and the above history to indicate that this Company had previously victimized its employees and had connections with several companies whose employees had similar working conditions, and were similarly victimized by employers. These employers appeared to have no qualms about the dangers their employees faced by continual exposure to toxic substances, sometimes without their knowledge. Many of these victims of exposure to radiation and hazardous by-products have now been justly recognized as such by being awarded Special Exposure Cohort status under the EEOICPA. Without a doubt, this Mathieson Chemical Company had the resources, professional ability, and expertise to provide records of their operation and activities had they so desired. Why are there no records? These employees and survivors deserve more than the Technical Bulletin estimates and assumptions on which dose reconstructions are made. The Dose Reconstruction Report made for my claim was made without any credible information from the plant site. Records were either not made, or were hidden or destroyed. No on-site inspection was made prior to 1977, and this was made of only one small room. This room is described in a letter dated March 30.1979 from Mr. Lewis M. Cook of the Texas Department of Health as located "in the west end of the old administration building, the areas we were told the old Manhattan project work was carried out". See Exhibit 1.

The company that was so successful in deception continues to victimize former employees. The absence of records, the numerous unknowns critical to this matter, and the massive significant effect on employees make dose reconstruction not feasible for this group of employees. Mathieson Chemical Company should be designated (as these other companies are designated, and for the same reasons) as a Special Exposure Cohort Group.

According to the Houston Chronicle, dated October 3, 2000, (See Exhibit B.), two plants in this area each produced at least 50 pounds of uranium for the Atomic Energy

Commission in the 1950s. These plants were the Mathieson Chemical Company in Pasadena, Texas and the Texas City Chemicals plant (another "Covered Facility" under the EEOICPA) in Texas City, Texas. This was part of a pilot project to extract uranium from the phosphate ore used to manufacture fertilizer. Also, according to the article, U.S. Department of Energy officials acknowledged that the government has no idea how many may have come in contact with radioactive byproducts, or how and where the companies disposed of the waste. According to an article in The Pasadena Citizen, dated September 13, 2000, (See Exhibit B.) the Agrifos Fertilizer Plant Manager stated that "to his knowledge", only a bench scale lab existed at the site between 1951 and 1953. He also said "Bench lab means all the work was done in beakers and glasswear. There was nothing that we know of involving pipelines or reactors.". This gentleman is commenting, in September of 2000, about a situation that happened in the early 1950s, when he was not present. Of course he did not know about it. He was not there. Comments of that nature are usually prefaced by a disclaimer similar to "There was nothing that we know of.". The present occupants of this site readily admit to the presence of "at least 50 pounds" of uranium. That seems to be the usual figure that has been used since the presence of uranium in the plant became known. How much uranium is "at least 50 pounds" of uranium? Is that 60 pounds? Is that 100 pounds? Is that 50,000 pounds? Or is it more? Someone must have given out a figure and only information concerning an alleged bench lab with glassware to imply that the presence of uranium at Mathieson Chemical Company was harmless.

This "Lab" was in the same building where administrative employees had offices. I have been told that due to this proximity, Lab employees and friends and acquaintances who were administrative employees quite often had cordial visits during the day such as on "breaks". No guards were posted at this Lab. The "Lab" had no air conditioning. Does it seem reasonable that this contract with the Government which extended from 1951 – 1953 involved only "harmless" uranium in glassware in one room? Was the work which was required to crush the phosphoric ore and to process chemical compounds to recover this uranium from these processes for this period of time all done using only "glassware"?

A letter dated March 13, 1979 from Mr. William E. Mott, U. S. Department of Energy to Mr. M. S. Davenport, Plant Manager, Olin Corporation, Pasadena, Texas (See Exhibit I) states in part "Enclosed is a copy of a preliminary summary describing work conducted at a portion of your facility for the AEC. Doe is still in the process of reviewing MED/AEC operations records in order to obtain all available information. The enclosed draft is based upon data collected to date and is submitted to you so that your review and comment can be received in a timely manner." This "draft" which is enclosed is a one page document regarding the site survey which was made November 18, 1977 by Oak Ridge Operations (OR) and Oak Ridge National Laboratory (ORNL) personnel. This enclosure includes the following "Site Function — Olin Mathieson Chemical Company had at least one contract for research and development on uranium recovery from phosphoric acid produced at Pasadena. A pilot plant was operated during the early 1950s. Site Description — A single laboratory-type building was utilized under the AEC contract. Owner History — The site is owned by Olin Mathieson Chemical Company.

Radiological History and Status – This site was visited by Oak Ridge Operations (OR) and Oak Ridge National Laboratory (ORNL) personnel on November 18, 1977. ORNL is preparing a letter report covering the findings of the site visit. Preliminary review of the field notes indicate the presence of some contamination; however, levels seem minor. Category and Status – No Survey is anticipated. ORNL is preparing a survey report. References – 1. ORNL Field Notes from site visit, November 18, 1977. 2. Letter, "Site Visit to Olin Mathieson," W. T. Thornton (OR) to Mr. Davenport (Olin Mathieson, October 1977." These two references are not included as they were not found with this letter. (See Exhibit I.)

Also, "The second enclosure lists the specific information that should ideally be included in the attached summaries. As you can see, a portion of the information has not yet been identified. The survey was done November 18, 1977 and Mr. Mott of DOE is requesting help from Mr. Davenport of Olin Corporation in this letter dated March 13, 1979 in order that a report may be documented. Mr. Mott stated, "I would appreciate receiving any supplemental information you can supply that might fill in some of the incomplete areas. I would also like to solicit any additional information regarding other facilities involved in the feed materials program of MED/AEC.". This enclosure is entitled "Contents of Site Summaries" and lists questions each site summary should ideally answer under the respective categories, as Mr. Mott suggests. For more on this, see letter dated April 12, 1979 in Exhibit I. Mr. Mott was not satisfied with this report.

Based on a letter dated March 30, 1979 to Mr. H. E. Kaufman, Manager, Governmental Affairs and Energy, Olin Chemicals Group, from Mr. Lewis M. Cook of the Texas Department of Health, Mr. Kaufman was told, "Thank you for coming by my office and discussing your company's views about phosphate mill tailings (gypsum). Because our survey of the plant on September 20, 1978 was only a partial survey, we did not write a report. We, as we discussed last September, were concerned about possible residual contamination from the old Manhattan Engineering District tests conducted there many years ago. Mr. C. R. Meyer of our regional office and I conducted a gamma ray radiation survey in the west end of the old administration building, the areas we were told the old Manhattan project work was carried out. We found no contamination we could attribute to that operation." Mr. Cook also said that they made a survey of the plant where they found the radiation levels were not atypical of those found in other plants reported in the literature. This "literature" is not identified. (Please see Attachment 3 of Exhibit I for actual numbers reported by Mr. Cook.) Mr. Cook also writes, "If you require further information or desire to discuss your plans further, please do not hesitate to call or come by." The "plans" are not described. These gentlemen seem to have had a friendly relationship. Please note that this letter was written March 30, 1979. Also, please note that the survey was made in areas they were told the old Manhattan project work was carried out. In other words, they looked where they were told to look. What about the other parts of the plant?

A letter dated April 12, 1979 from Mr. H. E. Kaufman to Mr. William E. Mott, was in answer to the above questionnaire sent to Mr. Kaufman, and states in part that the Olin site near Pasadena, Texas was used to operate a small pilot plant which extracted uranium

from wet process phosphoric acid produced for fertilizer manufacture. The Project Manager was Dr. M. E. Miller, the contract number is unknown, and all records were destroyed after legal time limits expired. The letter also states that there were no offsite locations involved. Phosphoric acid was piped from process to the pilot plant and treated acid returned to fertilizer processing. Less than 50 pounds of yellow cake was produced. This was recycled back into the acid. Also, according to this letter, no radioactivity monitoring was done during the test period. None was required by the then existing regulations. The equipment which consisted of vessels, pumps, and lines was removed after completion of the project. Presumably it was scrapped. Also, according to Mr. Kaufman, no records relating to this are available. Mr. Kaufman states further that the current status of this disposition is unknown, the contamination in the area is what would be expected in a phosphate producing plant, a survey made by Mr. Lewis M. Cook of the Texas Department of Health is enclosed, and no specific decontamination was undertaken at any time. As to references, Mr. Kaufman states that, "No records were retained. The above information was developed from conversations with some of the people involved in the project." Please note that this information was given on April 12, 1979 which is more than 25 years later. (See Exhibit I.)

I also call your attention to the fact that, in these letters, this operation has changed from a small, one-room "bench type Lab" with "glassware" and "sink" and "chemical hood" to a "small pilot plant" with "vessels, pumps, and lines". A report shows that in 1977, radioactive substances were located in a sink drain and supposedly removed to a safe location. The report continues to state that whether that clean-up was followed up on is unknown. Were these vessels, pumps and lines also in that one room (12 x 14 ft) in the Administration Building which was a one-story building? Bear in mind that this room was not air conditioned. Where was the other end of that drain? Did this drain pipe extend out of that room? The location and dimensions of these "vessels, pumps, and lines" or to where this drain pipe extended seem to be of no interest. Please explain. No one seems to question the fact that no records were kept.

This site (formerly occupied by Mathieson Chemical Company, which became Olin Mathieson Chemical Company and also known as Olin Corporation) was acquired in 1979 by Pasadena Chemical Corporation, a subsidiary of Mobil Oil Corporation. In 1983 the name of the facility was changed to Mobil Mining and Minerals Company. The site is now occupied by Agrifos Chemical Plant.

A letter dated 16 July 1980 from Mr. Edmund A. Vierzba, Environmental Control and Analysis, Directorate to Dr. William E. Mott, Acting Director, Environmental & Safety Engineering Division, U. S. Department of Energy, Germantown, Maryland 20767, regarding COMMENTS ON THE REPORT ENTITLED "PRELIMINARY SURVEY OF OLIN MATHIESON CHEMICAL CORPORATION, PASADENA, TEXAS" states that "In view of the fact that the State of Texas would like additional survey assistance from the Department of Energy, and in view of the minor contamination found, it is suggested that no survey be conducted until after removal of the sink and drain-line is completed. The site is currently used, but mainly for storage purposes. Contrary to the plans at the time of the survey, there are no plans to demolish the building, according to

John L. Murray, Jr., Manager of Environmental Affairs with Pasadena Chemical Corporation. There is the possibility that this site may warrant consideration as a candidate for remedial action. It is also recommended that the State be notified of suggested restrictions regarding the removal of the sink and drain-line." An attachment to this letter states, "The letter report is concise and well-written. A question and a comment were raised by the report. 1. Is there any explanation for the high ac-227 concentration in the sink? The value of 185 pCi/g appears high for a phosphate operation. 2. It is not clear from the report that only the bench, drain-line and sink were found to have surface contamination above background. It should be stated that the floor and walls were found within typical background levels, if such is the case." Did anyone ever explain these two comments? (See Exhibit J.)

This letter has an enclosure titled "Preliminary Survey of Olin Mathieson Chemical Corporation, Pasadena, Texas" This also shows "Work performed by the Health and Safety Research Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37830" and is dated March 1980. This is the survey that was performed on November 18, 1977 by F. F. Haywood of the Oak Ridge National Laboratory and W. T. Thornton of the Department of Energy - Oak Ridge Operations Office. This survey was made "to assess the radiological status of those facilities utilized under an Atomic Energy Commission raw materials contract for a period determined to be during the early 1950s. M. S. Davenport, Plant Manager, provided information as to the nature of work performed and the location of facilities utilized. T. Cook, who worked in Quality Assurance also provided information as to the history of material processed at this site."." Also "No information was available as to the exact amounts of U₃0₈ produced nor as to the radiological conditions of the facility at the culmination of the project at which time the pilot plant was dismantled (believed to have been in 1955)." This survey (See Exhibit I.) repeats the premise that the facility utilized in the project consisted of a single room approximately 12 x 14 ft and "This survey consisted of (1) direct alpha and beta-gamma measurements and (2) collection of residue samples from the areas of the sink where elevated alpha and beta-gamma readings were noted". Also "The maximum direct alpha reading was 3000 dpm/100 cm² on inside surfaces of the sink and presumed to be inside the drain opening of the sink. The inside of this opening was inaccessible beyond about 15 cm, which prohibited further assessment of the contamination level. The corresponding beta-gamma and dose-rate reading was about 0.4 mrad/hr at the same location and was also the highest reading found in the facility. Analytical results of a residue sample taken from the bench area around the sink and from an inside surface of the sink are presented in Table 1. No information was obtained as to the disposition of pilot plant equipment contained in this facility following culmination of the project.". Also "In view of survey results, when the sink and accessible drain are removed from this facility, they should be handled as contaminated material with disposal at an approved burial site, prior to the release of the site for unrestricted use.". Pages are attached showing Fig. 1 - Location of the Olin Mathieson Chemical Corporation in Pasadena, Texas, Fig. 2 - Views of inside of room showing lab bench with sink and chemical hood, and Fig. 3 – Plan view of the former Olin Pilot Plant (which is a drawing showing the location of the hood, bench and sink (with figures) inside the room. Table 1 is shown on the last page. This entire survey is regarding a single room (approximately 12 x 14 – one

story) and its contents. This room actually appears to be more like a big closet. In fact, in the report dated March 1980 of the preliminary Survey of Olin Mathieson Chemical Corporation, Pasadena, Texas which was made November 18, 1977 by Oak Ridge National Laboratory, under "Present Use of Facilities", "The room is currently used for storing janitorial equipment." My claim was denied based on information given by company officials that this room was the actual, complete, plant site for the pilot plant at Mathieson Chemical to extract uranium oxides out of phosphoric acid compounds for the Atomic Energy Commission for the time period of 1951 - 1953. Would any reasonable person conclude that this one room operation warrants top secret security (including sworn statements from the few who were told about it) for the period of 1951 – 1953, as well as for approximately 25 additional years, and more, subsequent to that period?

I would like to have some information about the other parts of the plant at that time. The survey of this site (this room) was made in 1977, documented in 1980, and still, the general public, including former employees, were not aware of uranium being in the plant until approximately 2000, which is almost 50 years later. Some former employees have only recently been made aware of this. Most former employees and/or surviving spouses have died, moved away, or have bad health problems. Please bear in mind that this happened almost sixty years ago. At this point in time, we can not depend on the expectation of any of us being around for do-overs. We need attention now.

A letter dated January 8, 1986 (See Exhibit J) from Mr. Edward G. Delaney, Director, Division of Facility and Site Decommissioning Projects, Office of Nuclear Energy to Mr. John Murray, Manager of Environmental Affairs, Mobil Mining and Minerals Company, Pasadena, Texas (formerly the Mathieson Chemical site) Mr. Delaney states in part, 'The Department of Energy (DOE), as part of its Formerly Utilized Sites Remedial Action Program (FUSRAP), has reviewed information on the Mobil Mining and Minerals Company (formerly Mathieson Chemical Company) to determine whether it contains residual radioactivity traceable to activities conducted on behalf of the Atomic Energy Commission (AEC) (a predecessor to DOE). The enclosed radiological survey indicated that a sink and associated drain and workbench area are contaminated with uranium actinium, and radium. However, available information regarding the nature of the operations and the contractual relationship between AEC and Mathieson is not sufficient to establish DOE's authority under the Atomic Energy Act of 1954, as amended, to perform any remedial action required at the site. Therefore, DOE is eliminating it from further consideration under FUSRAP. It should be noted that the survey data indicated that the contamination does not pose a significant health hazard to workers or the general public under the use of the site at the time of the survey. However, in accordance with Department policy, the Environmental Protection Agency and the State of Texas Department of Health are being notified and provided a copy of the survey report by copy of this letter so that they may take whatever action they deem appropriate.". Please note that information is not sufficient to establish authority for DOE to perform any remedial action at the site, although remedial action should be taken. Please bear in mind that NIOSH, based on all these unknowns, including the fact that no records are available, no on-site information was used, and no other worksite is comparable, has determined that

making a Dose Reconstruction Report using a Technical Bulletin is appropriate for this claim. I believe that making a Dose Reconstruction Report is not feasible.

In the 1950s, Mathieson Chemical, based on what I have been told, was already getting phosphate rock from Florida. Mathieson Chemical already had the capability and other components necessary for this uranium contract. The reasonable assumption is that Mathieson Chemical Company and Blockson Chemical Company due to their business association had the same production procedures and produced the same products. Why not? They were in the same business and had the same objective. AEC had the patent for processing. Why not use the Mathieson Chemical plant which was already in business for this type of operation and was already equipped to start production? These employees were trained as operators, pipefitters, etc. . They knew very little technical information about chemicals and chemical compounds. They were not physicists. I'm told that when they were told to "run" a product, they performed their jobs according to the specifications, directions, and names of materials given to them. They were not told of the dangers involved. (See Exhibit B and Exhibit C.) So, if everything in that operation was so "innocent and harmless" why was it considered top secret back then and for approximately 50 years? Employees did not know about it and I've been told that the few people who did know about it were sworn to secrecy. Why were the details concerning the sudden death of a Lab employee, so mysterious?

This would be amusing if there had been no victims. However, it is not amusing because many employees in that plant have suffered and died from cancer now believed to be due to conditions in that plant. Why is the figure (at least 50 pounds) given so readily now? How many pounds would "at least 50 pounds" be if an unannounced, unbiased, inspector had arrived at that time? What else would have been in evidence other than "glassware", and what would have been found if other areas of the plant had been inspected? No one knows how much uranium was in the plant. No one knows the sizes, the capacity or durability, the locations, or how many vessels, pumps and lines, or anything else that was used. No one knows the job duties, work assignments, routes taken, or exposure along those routes. No one knows planned or unplanned events that occurred, or anything else about what happened in that plant. No one really knows wbat actually happened in that plant. As one of the Congressmen who worked to pass the EEOICPA said, "They simply do not know.". No records were kept.

The earliest documentation that I can find about activities on this site during the period 1951-1953 is Appendix A-3 Residual Radioactivity Evaluations for Individual Facilities, page 126 of 236, (See Exhibit A) which states in part "Facility Description: Mathieson Chemical extracted uranium oxides out of phosphoric acid compounds in a pilot study for the Atomic Energy Commission. Discussion: Documentation describes the activities as bench-top type experiments for extracting uranium oxides from phosphoric acid compounds, which would most likely have been conducted under laboratory controls. There is no description of the quantities of uranium extracted or radiological conditions immediately after cessation of activities. But it is reasonable to believe that laboratory work would not have resulted in widespread distribution or residual contamination post-operations. A radiological survey was performed for the DOE in 1977, with the only

finding of residual contamination on inside surfaces of one sink and possibly the drain line, which poses no significant exposure to personnel based on the low activity levels discovered. Informational Sources: Sources of information reviewed during this evaluation included the DOE ES&H Website along with documentation provided by the DOE ES&H Group consisting of written communications by or for the DOE and FUSRAP documentation. Evaluation Findings: Documentation reviewed indicates that there is little potential for significant residual contamination outside of the period in which weapons-related production occurred.". Please bear in mind that this evaluation was made for the DOE in 1977 which is approximately 25 years after the time period addressed, and was made from information furnished by officials of a company who had kept everything secret for approximately 25 years. This is precisely the information that would be given by those in management who would be interested in perpetuating this dirty secret that was shared by those in power. They only gave information which would protect them and their actions. Surveys were done using only information which was provided by these informants. Surveys were done only in the area where investigators were directed. This area was one small room. To my knowledge, articles in our local newspapers about this survey in 1977 did not appear until approximately 2000, which is approximately another 25 years after the survey was made.

No one knows. No records were kept. We do know now that uranium was placed in the plant, employees did not know uranium was there, employees were exposed to uranium, no safety precautions were taken, no warning signs were posted, no protective equipment was used, no monitoring was done, and many employees were later diagnosed with cancer. Some employees, as in the case of had more than one of the 22 specified cancers.

As mentioned earlier, Agrifos Fertilizer is presently located on the site which was formerly Mathieson Chemical Company. The Plant Manager also says that he has never seen any information pertaining to the experiments or their results. The article (dated September 13, 2000) also states that the Texas Natural Resources Conservation Commission retains no records on the Mathieson Chemical Corporation, nor does the City of Pasadena. (See Exhibit B.)

In 1977, according to the above-mentioned article, the plant was part of a federal survey that checked for residual contamination. At that time radioactive substances were located in a sink drain and supposedly removed to a safe location. A study of the site in more recent years did result in the discovery of the presence of low levels of radiation. As well as I can find out, no on-site investigation was made prior to 1977 which is over 25 years after uranium was placed in the plant. I can find no record that these radioactive substances were removed.

On a "Preliminary Survey of Olin Mathieson Chemical Corporation, Pasadena, Texas – Work performed by the Health and Safety Research Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37830, the date is shown as March 1980. This report refers to a survey performed on November 18, 1977 to assess the radiological status of those facilities utilized under an Atomic Energy Commission raw materials contract for a

period determined to be during the early 1950s, and states in part, "M. S. Davenport, Plant Manager, provided information as to the nature of work performed and the location of facilities utilized. T. Cook, who worked in Quality Assurance also provided information as to the history of material processed at this site. From information obtained from review of files of contracts and in discussions held during the survey, the work conducted at the Pasadena site involved a bench-type pilot operation designed to extract U₃ O₈ from phosphoric acid generated during the processing of phosphate rock. No information was available as to the exact numbers of U₃ O₈ produced nor as to the radiological conditions of the facility at the culmination of the project at which time the pilot plant was dismantled (believed to have been in 1955). The facility utilized in the project consisted of a single room approximately 12 x 14 ft (see Fig. 2)." Also, the survey consisted of (1) direct alpha and beta-gamma measurements and (2) collection of residue samples from the areas of the sink where elevated alpha and beta-gamma readings were noted (see Fig.3). The maximum direct alpha reading was 3000 dpm/100 cm on inside surfaces of the sink and presumed to be inside the drain opening of the sink. The inside of this opening was inaccessible beyond about 15 cm, which prohibited further assessment of the contamination level. The corresponding beta-gamma dose-rate reading was about 0.4 mrad/hr at the same location and was also the highest reading found in the facility. No information was obtained as to the disposition of pilot plant equipment contained in this facility following culmination of the project. In view of survey results, when the sink and accessible drain are removed from this facility, they should be handled as contaminated material with disposal at an approved burial site, prior to the release of the site for unrestricted use. (See Exhibit I.)

FUSRAP prepared an Elimination Report for this plant site in 1985 which reveals some residual contamination in a sink and drain line that exceeds current DOE radiological guidelines. However, on the basis of a review of available historical information, DOE has determined that it does not have legal authority to conduct remedial actions at this site. An investigation of AEC-related operations at the former Mathieson Chemical Company site in Pasadena, Texas, was conducted to determine if the site was eligible for remedial action under FUSRAP. Records of the AEC Feed Materials Division stored in Oak Ridge, Tennessee, and in Suitland, Maryland, were reviewed along with contract files. Analysis of the information collected resulted in the conclusion that the available data was insufficient to provide DOE with authority to conduct remedial action at this site (see March 8, 1984, letter Wallo to Whitman, in Exhibit J.). AEC had an obligation to purchase any uranium produced, but had no responsibility for the operation of the sites or their final condition. The contractors were handling the same materials they normally handled in their everyday operations and AEC provided no special guidance (other than that pertaining to uranium accountability if any was to be produced). For the same reason, AEC did not specify any requirements for cleanup.

A letter dated June 29, 1981 to Mr. William E. Mott from Mr. M. Edgar D. Bailey, P. E., Director, Division of Licensing, Registration and Standards, The Texas Department of Health, states, "We are disturbed that you feel that this site is not eligible for Department of Energy (DOE) remedial activities. It is our opinion that the contamination present at

the site is a direct result of the Federal Government's nuclear energy program conducted under the auspices of the Manhattan Engineer District (MED) and the Atomic Energy Commission (AEC). The Preliminary Survey attached to your letter clearly reflect the presence of radionuclides that one would expect to be associated with an uranium recovery facility of that time period." Also "Based upon our investigation of this site, we cannot help but conclude, even in the absence of copies of contracts between MED or AEC and Mathieson Chemical Company, that the radioactive contamination measured at the facility exists as a result of the contact work performed by Mathieson Chemical Company for MED/AEC. Therefore, we cannot accept your implied conclusion that DOE has no responsibility for remedial action at the site. We fail to see how the inability to locate paperwork can in any way relieve DOE of its legal responsibility (or authority) to conduct remedial action activities at this site. See Exhibit J.

A letter dated January 26, 1984 from Mr. John E. Baublitz, Director, Office of Nuclear Energy to Mr. Edgar D. Bailey, Director, Texas Department of Health states in part, "I am replying to your letter of December 6, 1983, relative to maintaining the Pasadena Chemical Company, Pasadena, Texas, in the Formerly Utilized Sites Remedial Action Program (FUSRAP). Dr. Mott's letters of March 27, 1981, and August 11, 1981, stated that, although the site was "designated" for remedial action on March 19, 1981 (that is, it should be considered for remedial action), the Department of Energy's (DOE) Office of General Counsel concluded from review of available records that there is insufficient documentation to provide us the necessary authority to conduct remedial action at the site. Therefore, DOE has no plans to conduct remedial action at the Pasadena Chemical Company site.

The "Formerly Utilized Sites Remedial Action Program Ineligibility Report – Former Mathieson Chemical Company (Pasadena Chemical, Pasadena, Texas" states in part, that the analysis of information collected indicated there was insufficient data identified to provide DOE authority to conduct remedial action at this site. Cursory review of other records groups further indicates that it is not likely that the contract or any other supportive materials will be found in future records searches.". Also "No contract for this operation has been identified." This also states that drains are contaminated with uranium and its daughter products in excess of NRC guidelines for surface contamination at facilities released for unrestricted use; however, they presently pose no health hazard. See Exhibit J.)

At this Mathieson Chemical Company plant site in Pasadena, Texas, a huge pile of waste products exists. This pile can be seen for miles and is locally referred to as the "gyp pond", or gypsum. According to an article in the September 14, 2007 edition of the Pasadena Citizen, I quote "The United States Coast Guard, Environmental Protection Agency, Texas Commission on Environmental Equality, and Agrifos Fertilizer, Ind., among others, have set up a multi-agency command center in Pasadena in response to a recurring incident at Agrifos." (See Attachment 3) As I stated earlier, the Agrifos Fertilizer Plant is presently located at the site formerly occupied by Mathieson Chemical Company. The article further states, "According to officials, over 10 million gallons of

contaminated water has spilled or been pumped into Cotton Patch Bayou, which feeds into the Houston Ship Channel. There has been one spill and two authorized discharges into the bayou. Agrifos is a phosphate based fertilizer plant. One of the by-products of their production process is gypsum, which sits in large piles on company premises. Around these piles of gypsum are containment walls, designed to keep the gypsum on site in the case of rains instead of washing into the bayou or channel. On August 16, said Chuck Wolf, spokesperson for the command center, eight inches of heavy rains fell in a few short hours and filled up the containment wall around the gypsum storage pile. It (essentially) overflowed the containment wall and went into Cotton Patch Bayou. Wolf explained that the problem with the containment wall is that the water is seeping out from underneath the wall. The people from Agrifos detected the leak, stopped the leak and then notified the (respective) agencies, said Wolf. They were sandbagging around the wall, and even built a coffer dam around the wall to stop the leak. That was done by August 20. Wolf explained that the second leak occurred Sept 1 when heavy rainfall sat over Pasadena again. The four inches of rainfall caused another overflow and that's when they started an emergency pumping operation to relieve the pressure on the containment wall so it wouldn't collapse. That release was stopped Friday, Sept.," said Wolf. The threat of Tropical Storm Humberto prompted yet another release of contaminated water into Cotton Patch Bayou. The decision was made to release the excess water so that the containment wall did not fail, resulting in even more phosphoric acid contaminate leaving the site. Wolf explained that the water was being treated at the release site with limestone gravel and soda ash, both designed to level out the pH of the phosphoric acid which will hopefully lessen the environmental impact of the release on aquatic life in the area. Our environmental concerns are that this is essentially a phosphoric acid spill, said a spokesperson with the Environmental Protection Agency. It could possibly affect the aquatic life in the Houston Ship Channel area. The Coast Guard reported that the area was showing "impacts from the acidic release, including dead vegetation and marine life".

Also, "In January of 2001, the EPA reported a similar situation on the same site when the mote that contains the processed water around the gypsum pile failed after heavy rainfall, and 36,000 pounds of phosphoric acid was reported to have left containment and flow into a Harris County Flood Control ditch and into an outfall of Cotton Patch Bayou. The second release has resulted in 19 million gallons of contaminated water being discharged into Cotton Patch Bayou. The containment wall holds between 25 and 35 million gallons, estimates officials. The spokesman explained that there is no projected impact to public health as a result of the release." For the remainder of the article, please see Attachment 3.

According to an article in the September 20, 2007 edition of the Houston Chronicle, (See Attachment 4.) six governmental agencies were present the previous week when the Agrifos Fertilizer Plant released contaminated water into Cotton Patch Bayou and the Houston Chip Channel. The U.S. Environmental Protection Agency's on-scene coordinator at the release said the contaminated water was not harmful to human health and that they did not see anything that was immediately threatening to the public. The contaminate release began Sept. 12 to help prevent the collapse of a rain-weakened

containment wall. The wall surrounds a two hundred and forty (240) acre pile of waste products which is encircled by water used in the manufacture of chemical fertilizer. Pipes have been placed to drain liquids from the pile. Usually, water, or some type of fluid is in a ditch and is separated from the containment wall by a road. The manager of supply and production for the Agrifos plant said that an eight-inch rain Aug. 16 caused the ditch to overflow, and the concrete wall began leaking. The same thing had happened in early September. Also, officials said that the previous week when Tropical Storm Humberto, later Hurricane Humberto, threatened the Houston area with 5 to 15 inches of rain, Agrifos began releasing water on September 12 to stave off a "catastrophic failure" of the wall. They thought the release was critical to preventing a major issue. They regretted any damages that may have been done to the environment, but thought this was a situation that required this type of action. The water's acidity level was temporarily lowered, causing some fish to die.

This article appears to refer to the same 240 acres as a harmless pile of gypsum in one sentence and the possibility of a "catastrophic failure" in another sentence. Please consider the size of this pile of toxic waste. I mention this because other "Covered Facility" plant sites also disposed of their waste materials in a similar manner.

Blockson Chemical Company in Joliet, Illinois who was bought by Olin Mathieson Chemical Company in 1955 had a contract with the government which was similar to the contract Mathieson had. Mallinckrodt Chemical Company near St. Louis, Missouri had an agreement with Olin Mathieson Chemical Corp. in the early 1960s to produce certain nuclear products for the Federal Government. These companies, in addition to Mathieson Chemical Company in Pasadena, Texas were among those "Covered Facilities" who disposed of their waste products in a manner which seemed to be common for facilities having these government contracts.

In 2003 the state of Missouri filed a federal lawsuit seeking damages from the federal government and companies who had owned the alleged contaminated plant site at Hematite, Missouri (another "Covered Facility" under the EEOICPA). Mallinckrodt Chemical Works had been one of the former owners. The state alleged that during the 1950s and 1960s nearly 60 pounds of potentially dangerous radioactive uranium,-235-and other radioactive material was dumped into approximately 40 unlined pits from the late 1950's through the early 1960s. This seems to be the usual way that Atomic Worker Employers disposed of toxic waste products. Sites contained unlined waste burial pits and unlined evaporation ponds. The danger at Hematite was not found until December 2001, when tests found trichloroethylene – a cancer-causing chemical used as a solvent – in the first of eight private wells used for drinking water. Each party in the lawsuit blamed someone else, indicating that each party was complicit individually as well as collectively as a member of this group. Each was actively involved and contributed to the harm created. Their actions, while profitable at the time, later proved to be dangerous and shameful. Nothing could be done with the property.

The Blockson Chemical Company in Joliet, Illinois, like Mathieson Chemical Company, was also an Atomic Weapons Employer and a "Covered Facility" under the EEOICPA.

The Facility List for Blockson Chemical Company shows "Facility Description: Blockson Chemical Company operated a plant which produced uranium from phosphoric acid. The AEC contracted with Blockson for the recovery of the uranium, which was ultimately used in weapons production. The pilot plant at Blockson which produced the patent for production, was done in Building 40 which in no way compares to the one room area at Mathieson Chemical which was alleged to be used. The AEC Uranium production performed by Blockson was conducted in a brick structure known as Building 55. (See Exhibit H.) This listing is also intended to cover the AEC-funded laboratory, pilot plant and oxidation process, which also occurred at Blockson and was related to the work in Building 55.". Blockson Chemical Company, also known as Olin and also known as Olin Mathieson, also disposed of waste in this manner, as stated above. Piles of waste became bigger as waste products were added. Blockson Chemical Company has been designated as a Special Exposure Cohort under the EEOICPA.

I mention these companies because documentation describes them as Atomic Weapons Employers who had contracts similar to the contract Mathieson Chemical Company had with the government. Their business relationships show a connection. Work at their plant sites was similar. They used the same method to dispose of their waste products. This manner of disposal was said to be harmless until here we are many years later and surviving former workers as well as occupants of nearby locations do not have that feeling of safety anymore. These sites are the locations of huge piles of waste products where chemical companies once had government contracts for work involving radioactive materials. Nobody knows what to do with these properties. The owners cannot find buyers. This is not residential property. It seems the only place for these piles and ponds to go is to a special governmental disposal site, but they are too big to be moved. It appears that these piles have not been stirred up because no one knows what might happen. Some sources of drinking water near sites are said to be contaminated.

In an article dated November 5, 2010 in the Houston Chronicle, the title is "Chemical Company agrees to pay penalty" and "Sulfuric acid storage, transport broke waste laws". The article states "A Pasadena chemical manufacturer has agreed to pay \$1.5 million in penalties for violations of Texas and federal waste disposal laws, officials said Thursday. The penalties stem from Air Product LLC's failure to properly store, transport and manage sulfuric acid at its Pasadena Plant between 1990 and 2009, according to legal filings by the Texas Attorney General's Office and the U.S. Environmental Protection Agency. The used acid is classified as a hazardous waste under state and federal law. Air Products maintains that the acid was "purposefully produced" and not a waste, according to legal documents filed in Houston federal court. The company sent the spent acid to a nearby plant that was not a permitted storage or disposal facility for the waste. In 2007, the fluid breached a retaining wall and reached the Houston Ship Channel, officials said. Under the settlement, Air Products is prohibited from sending spent acid to the plant, Agrifos, Fertilizer, Inc. It must also notify state and federal regulators if it ships the waste off site." This is the plant site which was formerly Mathieson Chemical. This retaining wall referred to is around the 240 acre pile of contaminated waste which has been deemed to be "harmless". This is the pile of contaminated toxic waste that is referred to as the possibility of a "catastrophic failure" by officials in an article above

dated September 20, 2007. This is the pile of materials which includes dangerous products from the presence of uranium in the plant in the 1950s. This is the pile of waste which is similar to the waste piles in other areas of the country where it has been determined that "There is a reasonable likelihood that such radiation dose may have endangered the health of members of the class.". This is the waste that was piled in unlined pits, and as in similar pits in other parts of the country, could be contaminating our water supply. This is the pile of waste materials that cannot be moved because it is too big and there is no place to move it. No one wants the responsibility for it. This plant is not a permitted storage or disposal facility for the waste. Do we just wait until more damage is done and more people die?

Investigators wondered for years why radioactive technetium-99 was turning up in drinking water wells near the Hematite site. Mallinckrodt Chemical Works was one former occupant who used recycled uranium for fabrication there. Technetium was not expected there because it is said to be produced only when uranium is irradiated in a nuclear reactor. Hematite had no reactor. Technetium is said to require special disposal because it has a half-life of 213,000 years and moves easily into soil and water. Mallinckrodt Chemical Works has been designated as a Special Exposure Cohort under the EEOICPA.

The owners and some inspectors say these sites are harmless. I believe that is the same response that workers at each of the "Covered Facilities" have gotten at some time. As everyone knows, many of those workers died many years ago due to illnesses caused by their contaminated worksites. Some sites have not had the type of inspection required to determine what is present. It seems that nobody knows or will say or wants to find out what is there. The situation described above is the same situation that exists at the plant site which was formerly Mathieson Chemical Company in Pasadena, Texas. The uranium work in that plant might not have been confined to that little "12 x 14 ft room" and might not have been so harmless

told me many years ago that the Company had tried to find a use for this material but had not been successful. Some employees (including) were told by company officials that they could take bags of this material home with them to use on their plants and vegetable gardens. Many employees (including bags of this material home with them because they had been told it might be good for their gardens. They also used this, as top soil is used, to fill small holes in their yards and other areas. Then the employees were told by company officials not to take this material anymore. Some say that this material was used when a parking lot was made at the plant. Some say that a contractor at one time wanted to use material from this pile in the construction of a road to the plant but did not use it because the material had been tested to be radioactive. No one will say if this material is contaminated or how harmful it is, but the huge pile remains. Local residents, during hurricane season, cannot stop worrying about the consequences if a tornado or category 5 hurricane would hit that area. As indicated above, Plant Managers are not comfortable either. Why were no records kept? Employees at this plant site had more uranium exposure than was produced in a oneroom operation.

Employees were exposed to the dangers of radiation exposure without their knowledge or consent. Employees did not know about the presence of uranium in the plant. No monitoring was done, no safety precautions were taken, no warning signs were posted, no safety equipment was provided. Nothing was done to let these employees know they were in danger. And no records were kept.

Members of the U. S. Senate took positive compassionate action when they voted to pass the EEOICPA in 2000, to compensate DOE nuclear weapons workers who suffered occupational illnesses as a result of exposure to the unique hazards in building the Nation's nuclear defense. This was great news for workers who had been employed at certain site locations where they had been exposed to the dangers of radiation exposure. Many workers have worked, suffered, and received well deserved compensation. However, as in most programs which cover large numbers of people, some workers were left out. worked, suffered, and died. I and our family and friends have been deprived of the love, companionship, kindness, support and all the other things that go with having with us. Many other families where a family member was an employee of Mathieson Chemical Company faced the same situations. No employee or survivor of employee of Mathieson Chemical Company has been compensated due to this EEOICPA. Mathieson Chemical Company seems to be the "forgotten" plant site.

According to Senate proceedings, "At the time the bill passed in 2000, Congress recognized that there were likely to be more situations where it was simply not feasible to reconstruct workers' doses because the records don't exist, or they are inadequate, because it might take so long to reconstruct a dose for a group of workers that they would all be dead before we would have an answer to determine their eligibility.", "When Congress passed this law, they explicitly said workers could be added to a cohort when the records didn't exist to make it feasible to do dose reconstruction.", and "The Government simply doesn't know what went on at these facilities and to what the workers were exposed. That makes it impossible to do timely dose reconstruction.". In these proceedings, statements regarding the workers were "They are faced with a situation where the bureaucrats are asking them to go back and help them reconstruct the dosages over 50 years ago—or more. They have no records. They are very sick people. They are dying of multiple cancers, the kinds of cancers and other problems caused by exposure to radioactivity. It is not feasible for them to go back and reconstruct. Without the records, we know that these people are seriously ill and are afflicted with all kinds of cancers.". Since the original Act was passed, The EEOICPA has been revised several times. No action has been taken on my claim since February 9, 2005.

Attachments (5):

- (1) EEOICPA Facility List Updated June 04, 2008
- (2) EPA Environmental News October 9, 1997-9815 Test Wells To Monitor Ground Water At Olin Superfund Site Near Saltville, Va.

- (3) Article dated Sept. 14, 2007 in Pasadena Citizen(4) Article dated Sept. 20, 2007 in Houston Chronicle(5) Article dated Nov. 5, 2010 in Houston Chronicle

Energy Employees Occupational Illness Compensation Program

Facility List

There was one record found for the facility: Mathieson Chemical Co. .

Text size Smaller - Normal - Larger - Largest

You are Here: DOE: HGS - HoolinGafety: FVMLD

1 - Mathieson Chemical Co.

Also Known As: Pasadena Chemical Corp Also Known As: Olin Mathieson Chemical Co Also Known As: Mobil Mining and Minerals Co

State: Texas Location: Pasadena

Time Period: 1951-1953, Residual Radiation 1954 - October 2004

Facility Type: Atomic Weapons Employer

Facility Description: Mathieson Chemical extracted uranium oxides out of phosphoric acid compounds in a pilot study for the Atomic Energy Commission

This page was last undated on June 04. 2008



Note: This information is provided for reference purposes only. Although the information provided here was accurate and current when first created, it is now outdated.

EPA Environmental News

Contact: Patrick Gaughan (304) 234-0238

October 9, 1997-9815

TEST WELLS TO MONITOR GROUND WATER AT OLIN SUPERFUND SITE NEAR SALTVILLE, VA

PHILADELPHIA —The U.S. Environmental Protection Agency has approved the construction of monitoring wells at the Olin Superfund site near Saltville, Va. The wells will tell EPA scientists if mercury has contaminated the ground water running beneath the site.

The site, a former chlorine plant located in Smyth County on the North Fork of the Holston River, is heavily contaminated with mercury. Sediments, contaminated with mercury were dredged from the bottom of the river and placed in containment on land. It is suspected that mercury may be leaching back into the soil. The monitoring wells will reveal if mercury has entered the ground water.

The Olin Superfund site was first added to the EPA's National Priorities List of the worst hazardous waste sites in the country in 1982, after an initial investigation revealed the presence of mercury in the soil and river sediment.

Field work on construction of the monitoring wells will begin in mid-October and be completed, weather permitting, by the end of November. After the wells have been installed on the old chlorine plant area, several rounds of ground water samples will be collected over a year and a half and analyzed for contaminants.

The primary objective of the sampling is to see what impact the mercury may have on the North Fork of the Holston River which remains under a fish consumption advisory. Once this information has been gathered, EPA will decide whether a long-term remedy is required at the former chlorine plant location, and if so, what the remedy will be.

As with the remedy decision for waste ponds on the site, any potential remedy that EPA deems necessary will be documented and made available for public comment prior to making final decisions. Olin, under EPA oversight, is continuing the investigation process into the river system.

From 1895 to 1972, the Saltville Waste Disposal Site was occupied by Olin Corporation and predecessors, Mathieson Chemical Corporation and Mathieson Alkali Works. Olin estimated that 100 pounds of mercury a day were lost from 1951 to 1970 into the ground and the river. Wastes from the plant were pumped into large settling basins or waste ponds.

In 1970, Olin modified its operation to cut mercury losses to a quarter pound per day. In 1970 the Virginia State Water Control Board adopted a new standard for dissolved solids which Olin indicated they could not meet. Olin shut down the Saltville operations in 1972. The chlorine plant was demolished in 1973 and buried between waste ponds.

The Commonwealth of Virginia and Olin signed an agreement requiring that Olin divert a 1,300-foot section of the North Fork of the Holston River and dredge 1,000 feet of the exposed river bed. These dredged sediments were deposited onto the former chlorine plant site, covered with a cap, and fenced off.

In 1988, EPA and Olin signed an agreement whereby Olin constructed a treatment plant, performed surface water management controls, and continued to conduct detailed studies of the overall site including adjacent and downstream sections of the North Fork of the Holston.

Olin, with EPA oversight, has completed the detailed study for the waste ponds. Long-term remedies for the ponds have been selected by EPA and documented in a Record of Decision that was signed in September of 1995. Preliminary negotiations are underway between EPA and Olin which will lead to the design of a remedy for the waste ponds.

LPA Region Hi Press Release Atain Menn or: F2 V Region (1) House Pre-

Backyard chef

Your award-winning newspaper se www.thepasadenacitizen.com Friday, Se

CONTAMINATED WATER.

Over 19 million gallons of water contaminated with phosphoric acid were pumped into Cotton Patch Bayou as a result of a containment wall at Agrifos Fertilizers Inc.

Photo by Orozco



Equine events set for Saturday

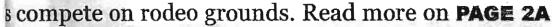
By YVE/TE OROZCO Reporter

This Saturday and Sunday, the Pasadena Livestock Show and Rodeo is kicking off its first equine events.

Barrel racing, pole bending and showing horses will be three of the main events for the events starting on Saturday, along with the winning buckles, ribbons and trophies.

Held in a closed arena on the fairgrounds of the Pasadena Convention Center, the show will go with or without rain, as weather forecast medict an arm





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rving Pasadena, South Houston and surrounding areas 50 cents ptember 14, 2007 Vol. 60, No. 184



By JENNIFER BRANCH News Editor

The United States Coast Environmental Guard, otection Agency, Texas Commission on Environmental Equality, and Agrifos Fertilizer, Inc., among others, have set up a multi-agency command center in Pasadena in response to a recuring incident at Agrifos.

According to officials, over 10 million gallons of contaminated ater has spilled or been umped into Cotton Patch layou, which feeds into the Houston Ship Channel.

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Around these piles of gypsum are containment walls, designed to keep the gypsum on site in the case of rains instead of washing into the bayou or channel.

"On August 16," said Chuck Wolf, spokesperson for the command center "eight inches of heavy rains fell in a few short hours and filled up the containment wall around the gypsum storage pile.

"It (essentially) overflowed the containment wall and went into Cotton Patch Bayou."

Wolf explained that the problem with the containment wall is that the water is seeping out from underneath the wall.

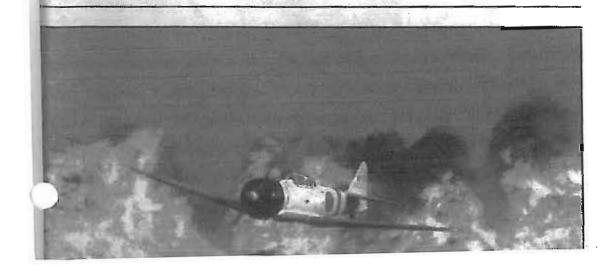
"The people from Agrifos detected the leak, stopped the leak and then notified the (respective) agencies," said Wolf.

"They were sandbagging around the wall, and even built a coffer dam around the wall to stop the leak. That was done by August 20."

Wolf explained that the secand leak occurred Sept. 1 when heavy rainfall sat over Pasadena again.

"The four inches of rainfall

See BAYOU, PAGE 3A



ie front

Pasadena Citizen Friday, Sept. 14, 2007

BAYOU

from page '1

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The Coast Guard reported that the area was showing "impacts from the acidic release, including dead vegetation and marine life".

In January of 2001, the EPA reported a similar situation on the same site when the mote that contains the processed water around the gypsum pile failed after heavy rainfall, and 36,000 pounds of phosphoric acid was reported to have left containment and flow into a Harris County Flood Control ditch and into an outfall of Cotton Patch Bayou.

The second release has resulted in 19 million gallons of contaminated water being discharged into Cotton Patch Bayou. The containment wall holds between 25 and 35 million gallons, estimates officials.

The spokesman explained that there is no projected impact to public health as a result of the release.

According to Wolf, Agrifos has hired engineers to come out and study the containment wall to see what can be done to prevent breaches of this nature in the future and the EPA and Texas Coast Guard are calling for a contingency plan that extends beyond the precautionary measures of sandbags.

"During normal operating conditions, the containment wall would not present any kind of problem, but because of the rainfall, Agrifos has been asked to develop a plan for how to deal with this issue and how to prevent it from reoccurring during the next tropical storm or hurricane," he said.

Terry Clawson, a spokesman for TCEQ, explained that the first point of concern for any of the agencies involved is to deal with the problem at hand.

"First we have to deal with the emergency," he said. "Then several agencies, including the TCEQ, will do some investigating."

WINGS

from page 1

41

19

show. As well as bringing history alive, the event celebrates military aircraft ingemuity and salutes the men and women in service past and present.

"It's about patriotism, showing off the modern military aircrafts and supporting our troops overseas," said Roach.

Six hours of flying demonstrations will leave a

and military, often referred to as the 'greatest generation'.

"It was the fight for freedom we went through in World War II and the greatest generation," said Roach Melding aluminum, steel, metal, fabric and wood, the U.S. started the war with biplanes and ended it with the fastest, most technicallyadvanced aircraft.

Pulled from lakes and riverbeds, these vintage planes represent not only the ingenuity of American avia"We restore famous aircraft."

Bill Roach Executive director Wings Over Houston HOUSTON CHRONICLE

HURSDAY, SEPTEMBER 20, 2007 •

PARK | SOUTH HOUSTON | JACINTO CITY

3 RATING VICTORY

FANNIE WILLIAMS PHOTOS: FOR THE CHRONICLE I, prepares for his ride on a mechanical bull, just one of the many ay at Bicentennial Park in Baytown.

Pasadena plant puts contaminate in channel

■ Heavy rainfall blamed for threat to retaining wall

By CAROL CHRISTIAN

HOUSTON CHRONICLE

Six governmental agencies were present last week when a Pasadena fertilizer plant released contaminated water into Cotton Patch Bayou and the Houston Ship Channel.

The Agrifos Fertilizer Plant began the contaminate release Sept. 12 to help prevent the collapse of a rain-weakened containment wall.

The U.S. Environmental Protection Agency's on-scene coordinator at the release said the contaminated water was not harmful to human health.

"We had people monitoring and testing to check the conditions in the ship channel," Chris Ruhl said. "We did not see anything that was immediately threatening to the public."

AGRIFOS FERTILIZER INC.

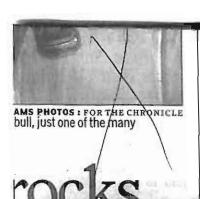
w Where: Phosphate fertilizer plant at 2001 Jackson Road; in Pasadena since 1998.

■ What: Heavy rain in January 2001 contributed to a phosphoric acid release into Cotton Patch Bayou outfall.

any damages that may have been done to the environment, we think this was a situation that required this type of action."

Several agencies on board

The U.S. Environmental Protection Agency, U.S. Coast Guard, Texas Commission on Environmental Quality, Harris County Public Health and Environmental Services, Texas Parks and Wildlife and National Oceanographic and Atmospheric Administration set up a unified command at the





losa, lead singer for La Maffa,



ed the second annual event.

Helping make the rules

Baytown City
Council is looking
at annexing a
portion of the land
along Cedar Bayou
to oversee

not harmful to human health.

"We had people monitoring and testing to check the conditions in the ship channel," Chris Ruhl said. "We did not see anything that was immediately threatening to the public."

The wall surrounds a 240acre pile of gypsum, which is encircled by water used in the manufacture of chemical fertilizer, said Steve Pierce, manager of supply and production.

Usually, the water is in a ditch and is separated from the containment wall by a road.

Wall began leaking

An eight-inch rain Aug. 16 caused the ditch to overflow, and the concrete wall began leaking, Pierce said. The same thing happened in early September. Repairs to the wall are under way.

Last week, when Tropical Storm Humberto, later Hurricane Humberto, threatened the Houston area with 5 to 15 inches of rain, Agrifos started releasing water at about noon on Sept. 12 to stave off a "catastrophic failure," of the wall, officials said.

"This is not something we wanted to do, but we think the release was critical to preventing a major issue," Pierce said Monday. "Although we regret

Guard, Texas Commission on Environmental Quality, Harris County Public Health and Environmental Services, Texas Parks and Wildlife and National Oceanographic and Atmospheric Administration set up a unified command at the plant to oversee the release.

Throughout the three-day release and into this week, agency representatives and Agrifos measured the acidity level in Cotton Patch Bayou and the ship channel, Pierce said.

Because the water's acidity level was temporarily lowered, some fish died, but not in large numbers, Pierce said.

"There was not a fish kill in the normal sense of the word," he said. "But I certainly will not say there was no impact."

Pierce said workers treated as much of the released water as they could with soda ash, a base chemical to neutralize the acid.

In the manufacture of fertilizer, water is continuously recycled; as it's used up, it's replaced by rain, Pierce said.

Normal rainfall amounts typically balance out loss to manufacturing, but this summer's heavy rains exceeded storage capacity, Pierce said.

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FANNIE WILLIAMS : FOR THE CHRONICLE

Roasting the comish

ORT Commissioner Steve Phelps, right, was

ad; heion

Some big shoes to fill

RAYDON Colvin, 3, tries on some firefighter's gear as 3-year-ol enjoys a field trip by St. Paul's United Methodist Church Youth Museum, where members of the Houston Fire Department fron surprise visit Thursday.

Howston CHRONICLE - NOVEMBOR 5, 2010

Chemical company agrees to pay penalty

Sulfuric acid storage, transport broke waste laws

By MATTHEW TRESAUGUE

HOUSTON CHRONICLE

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A Pasadena chemical manufacturer has agreed to pay \$1.5 million in penalties for violations of Texas and federal waste disposal laws, officials said Thursday.

The penalties stem from Air Product LLC's failure to properly store, transport and manage sulfuric acid at its Pasadena plant between 1990 and 2009, according to legal filings by the Texas Attorney General's Office and the U.S. Environmental Protection 'Agency.

The used acid is classi-

fied as a hazardous waste under state and federal law. Air Products maintains that the acid was "purposefully produced" and not a waste, according to legal documents filed in Houston federal court.

The company sent the spent acid to a nearby plant that was not a permitted storage or disposal facility for the waste. In 2007, the fluid breached a retaining wall and reached the Houston Ship Channel, officials said.

Under the settlement, Air Products is prohibited from sending spent acid to the plant, Agrifos Fertilizer Inc. It also must notify state and federal regulators if it ships the waste off site.

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Perry: Voters want 'freedoms back'

ASSOCIATED PRESS

NEW YORK - American voters sent a clear message in need to listen to the people. this week's midterm elections that they reject big government, Texas Gov. Rick Perry said Thursday.

Appearing on NBC's Today show, the Republican governor said his party's return to a majority in the House and its gains in the Senate indicate that voters "want (their) freedoms back."

"The work's in front of

ed as governor on Tuesday.

"I think Republicans just And people were very clear on Tuesday night. We've got more government than we can pay for. ... We want our freedoms back," he said.

Perry is promoting his new book, Fed Upl: Our Fight to Save America from Washington. Asked if he plans to run for president, Perry said his zeal against big government, shown in his book, is a good

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