Answers to the questions received from the community during the July 7, 2020 Dresser Facility Hearing and via <u>Dressercommunitymeeting@LA.GOV</u>

The EDMS documents referenced in the answers may be obtained online at <u>https://edms.deq.louisiana.gov/app/doc/querydef.aspx</u> using Agency Interest Number 2920.

Tal Walker 8156 Titleist Drive

1. Question: How is Dresser going to address our Property Values?

Answer: LDEQ cannot answer questions intended for Dresser, LLC.

Marty Evans 1521 East Medalist Drive

2. Question: Can you test our home? If we ask to have our home tested, what does it harm to have it tested for our peace of mind?

Answer: Dresser has determined, based on the sampling results received to date and the proximity of your home to other sampled locations, to collect indoor air samples at this address. This work was completed and the results of the sampling activities were furnished to you.

3. Question: Can the contaminant continue to creep? If you test one day, then 2 or 5 years from now, could it have expanded further and now present an indoor air problem for us in our homes?

Answer: Yes, the contaminant plume will continue to move as a soluble phase within the groundwater. The delineation of the plume is nearing completion. Plume-defining wells have, or will be, installed adjacent to the boundaries of the groundwater plume and sampled on a continual basis to monitor the location of the groundwater plume as well as any movement of that plume while remediation is occurring. Should the groundwater plume move beyond the plume-defining wells, additional indoor air sampling may need to be conducted if the criteria set forth in the protocol are met. Refer to EDMS Doc. No. 12164183 for the Indoor Air Sampling Protocol.

The goals of the groundwater and soil vapor remedial efforts are to reduce the amount of TCE at the release area and the amount of TCE migrating offsite in groundwater and soil vapor. In addition, vapor recovery is planned for select offsite locations thus further reducing the potential for vapor intrusion into buildings. Soil gas and indoor air sampling will continue in the areas surrounding the facility until TCE concentrations in groundwater, soil gas, and indoor air comply with regulatory levels or applicable health-based guidelines.

Andree Jacques 1525 East Medalist Drive

4. Question: What happened between 2013 and 2019?

Answer: During the period between 2013 and 2019, an assessment of the subsurface contamination was conducted. The responsible party submitted an investigation plan to the LDEQ which was approved and implemented. The objective of the plan was to investigate the horizontal and vertical extent of the contamination. To properly delineate the extent of the contamination, groundwater had to be tested, its movement charted, the relative concentrations of the contaminant determined so that the source could be located, and then it can be determined whether any off-site impacts were present. That investigation is how the current plume under homes was located.

5. Question: What citations were given to Dresser?

Answer: Since the contamination found at the site is from a historic release, to date, no citations have been issued by the LDEQ. The responsible party continues to follow the regulations in addressing the release from the site.

6. Question: What preventative measures could have been taken to stop this plume from going offsite?

Answer: The facility operated from the early 1960s until 2015. No known release(s) of chlorinated hydrocarbons has been identified during this time period. Therefore, it cannot be determined when or how the chlorinated release occurred or when groundwater contamination migrated offsite.

7. Question: Contamination is 25 feet below, many people have gardens of fruit trees, orchards, pecan trees. None of that has been tested. Nobody has even thought about that.

Answer: LDEQ understands your concern however your statement does not include adequate information for LDEQ to provide a response at this time.

8. Question: Are there any financials set aside for the rest of this testing, for the 20 – 30 year period it might take to clear this out of groundwater?

Answer: No, LDEQ's rules and regulations only require cleanup of the site.

Tanya Story 1509 East Medalist Drive

9. Question: I'm suffering from auto-immune issues for several years, what's going to be done about that? What about the cumulative damage that's been done to my health?

LDEQ Answer: LDEQ is not a qualified health care provider and is unable to answer questions regarding personal health issues or concerns. It is recommended that you discuss your health

issues and concerns with your physician. LDEQ does provide standards for cleanup that are riskbased and are patterned on EPA and other professional guidance. Since your question is healthrelated, your question was forwarded to LDH for comment.

LDH Answer: There is evidence that trichloroethylene (TCE) plays a role in autoimmune issues, but details about this role and the specific autoimmune effects of TCE vapors in humans is limited. There is some evidence that occupational (workplace) exposure to high levels of TCE may cause scleroderma in humans. Speak with your physician about any health concerns related to your current situation. If your home has been sampled and you are offered an air purifier, please accept the air purifier as it will reduce TCE vapors from your indoor air.

Melissa Munger 321 King's Drive

10. Question: Why didn't you tell us that you were injecting chemicals in the ground in 2018?

Answer: Offsite notification is not generally needed for remedial activities conducted and contained within facility property boundaries where there is no anticipated impact to offsite locations. All of the reports and correspondence pertaining to remediation at the Dresser facility are available in LDEQ's EDMS. Information related to the remedial action pilot studies and remedial action plans are in LDEQ's EDMS.

11. Question: Is what you are injecting into the groundwater going to affect our health in 20 years?

Answer: Since your question is health-related it has been forwarded to LDH for comment.

12. Question: Can you come test my house? I give you my permission.

Answer: An indoor air sampling protocol was established to provide guidelines for identifying the homes or other buildings most likely to be impacted by vapor intrusion based on available groundwater, soil vapor, and indoor air sampling results. Like groundwater sampling, the sampling of soil vapor and indoor air is also a phased process, i.e., sampling is conducted in multiple steps. This phased approach to sampling is common to all environmental investigations. Results generated by one phase of sampling directs where to proceed with additional sampling. When groundwater and/or soil vapor sampling results indicate the possibility of the vapor intrusion occurring in an area, residents of nearby homes are contacted to obtain permission to conduct additional sampling on the property.

Groundwater sampling has been conducted at three locations in the King's Drive area in Grant Parish. There are plans to sample groundwater at six additional locations along King's Drive in Rapides Parish. Additional sampling, including soil gas and indoor air, may be conducted based on the groundwater sampling results.

13. Question: Why isn't Kings Drive being tested when there is contamination surrounding the area on four sides?

Answer: Groundwater was sampled at three locations in the King's Drive area in Grant Parish. There are plans to sample groundwater at six additional locations along King's Drive in Rapides Parish. Additional sampling, including soil gas and indoor air, may be conducted based on the results from the groundwater sampling.

14. Question: When Dresser first contacted the LDEQ regarding the spill in June of 2012, when did Dresser submit a plan as directed by LDEQ?

Answer: There is no documented spill of TCE associated with the groundwater contamination at the Dresser facility; groundwater contamination was discovered while the responsible party (or simply Dresser) was conducting maintenance work at the facility. Dresser submitted an investigation workplan for delineation of the groundwater contamination dated February 12, 2013 (EDMS Doc. No. 8715497), which was approved by LDEQ with stipulations in a letter dated March 14, 2013 (EDMS Doc. No. 8777060). Dresser responded to those stipulations in a letter dated April 3, 2013 (EDMS Doc. No. 8798666), and subsequently began the investigation on June 17, 2013.

15. Question: What plan did Dresser submit and in what ways did the LDEQ monitor the plan Dresser submitted?

Answer: Dresser submitted an investigation workplan for delineation of the groundwater contamination dated February 12, 2013 (EDMS Doc. No. 8715497) which was approved by LDEQ with stipulations in a letter dated March 14, 2013 (EDMS Doc. No. 8777060). Dresser responded to those stipulations in a letter dated April 3, 2013 (EDMS Doc. No. 8798666) and subsequently began the investigation on June 17, 2013. LDEQ conducted periodic inspections of the field work addressed in the workplan.

16. Question: Contamination (of TCE) was confirmed by Dresser and reported to LDEQ in 2014. TCE has been listed in the report of carcinogens since 2000. Why was testing not done around the facility at that time to see if the spill was contained to the property owned by Dresser?

Answer: Chemical releases to the environment are investigated using a phased approach, i.e., multiple sampling events are conducted. To define the extent of the contamination, sample locations are selected by stepping outward from the area known to be impacted by the release. Based upon the sampling results of each phase of sampling, this process is continued until the boundaries of the contamination are defined (i.e., delineated). With regard to releases to groundwater, the direction of contaminant migration is primarily dependent on groundwater flow direction. Often information on groundwater flow direction is not available early in the investigation process. Without knowing the direction of groundwater flow and the lateral extent of a contaminated groundwater plume, there is no scientific basis on which to select sampling locations at the facility's property boundary. In many remediation cases overseen by the LDEQ, contamination is confined to the facility. In this case, the sampling being conducted to determine

the extent of the plume has not been completed. Dresser continues to "step out" to determine where the contamination is no longer present in the groundwater. The responsible party did start its investigation on site and after determining groundwater flow, continued to "step out" to determine the extent of the migration of the contaminants.

17. Question: Why was the spill and/or the findings reported to LDEQ in 2014 not considered a triggering event? Shouldn't LDEQ have notified the public back in 2014 that the spill (which had TCE) had occurred years earlier?

Answer: The discovery of groundwater contamination by the owner of a facility is required by our statutes and regulations to be reported to LDEQ. It is not uncommon for a facility to report a groundwater detection of a constituent of concern (CoC) on their facility to the LDEQ. The detection of groundwater contamination within the facility property boundaries does not trigger notifications to areas offsite. The groundwater contamination is what Dresser reported to LDEQ in 2012. LDEQ directed Dresser to identify, delineate, and determine the source of the reported CoC. That phased investigation process began in the fall of 2013 and continues today. In the fall of 2016, DEQ became aware that the groundwater contamination had extended offsite. In August 2016, a water well survey was conducted in the western portion of the residential neighborhood east of the Dresser facility. The purpose was to determine if there was a reasonable concern for health impact from the ingestion of migrating TCE contamination in groundwater. A reasonable concern would necessitate a written offsite notification by LDEQ. The survey indicated that the neighborhood was being serviced by municipal water services and that there were no private domestic wells in the area (refer to LDEQ EDMS Doc. No. 10355457). Therefore, written notification was not required at that time. In December of 2019, the Department received the soil gas sampling results from the Vapor Monitoring Points that were installed near the Aurora Park subdivision. Based on this data, LDEQ concluded that there was a reasonable concern for health impact due to the migration of soil vapor into nearby residences. In January 2020, written notifications were hand-delivered by LDEQ staff to each residence in Aurora Park subdivision and adjacent homes and businesses along Shreveport Highway. If no one was home when LDEQ visited, the notice was taped to the front door.

18. Question: Was the groundwater remediation done with the consent of the LDEQ? Why was the public not notified in 2018 when groundwater remediation began?

Answer: In September 2016, the remedial technology evaluations began by the responsible party collecting data to evaluate available remediation methods by means of a small scale pilot test in the source area near the southeast corner of the onsite Dresser building. The responsible party submitted a workplan for two pilot test remedial technology evaluation plans for remediation of the onsite identified contamination (EDMS Doc. No. 10878298 dated 11/22/17). The pilot testing work plan was approved by LDEQ on 11/30/17 (EDMS Doc. No. 10886738). The pilot tests indicated that the two technologies evaluated had yielded positive results for use in remediation. The two technologies evaluated included in-situ chemical oxidation and soil vapor extraction, both known environmental cleanup methods. Refer to the report dated July 31, 2018 (EDMS Doc. No. 11253941). Offsite notification is not generally needed for remedial activities conducted and

contained within facility property boundaries where there is no anticipated to impact to offsite locations.

19. Question: How were the test results that spurred the groundwater remediation not considered a triggering event as groundwater doesn't stay contained to any one piece of property?

Answer: The testing results reported to the LDEQ from the source area indicated that chemical concentrations present were above the LDEQ Risk Evaluation/Corrective Action Program (RECAP) standards established for this site. The results indicated that further investigation was needed and that remediation would be necessary. The LDEQ did not know the lateral extent of the contaminant plume, and requested that source area remediation begin while investigation work continued to determine the vertical and horizontal extent of the contamination groundwater plume. Generally, when contamination is found onsite but is not delineated, the LDEQ will allow remediation to begin to reduce further spread of the contamination in groundwater while additional sampling is being conducted to delineate the extent of the plume.

20. Question: Why haven't all homes been tested for air quality and all properties tested for possible contamination?

Answer: An indoor air sampling protocol was established to provide guidelines for identifying the homes or other buildings most likely to be impacted by vapor intrusion based on available groundwater, soil vapor, and indoor air sampling results. Like groundwater sampling, the sampling of soil vapor and indoor air is also conducted using a phased approach. This phased approach to sampling is common to all environmental investigations. Sampling results generated by one phase of sampling directs where to proceed with additional sampling. When groundwater and/or soil vapor sampling results indicate the possibility of vapor intrusion in an area, residents of nearby homes are contacted to obtain permission to conduct additional sampling on the property.

21. Question: Does Dresser feel like it has acted in good faith towards the residents of the community throughout this process?

Answer: LDEQ cannot answer questions intended for Dresser, LLC.

22. Question: Does LDEQ feel like it has acted in good faith to protect the residents of this community and state throughout this process?

Answer: LDEQ has followed the statutes and the regulations, as well as standard remediation procedures, to ensure that the response to the Dresser TCE release was timely and conducted in accordance with the law.

Richard Spurgeon Hooper Road behind Mary Goff School

23. Question: How are you going to treat the ground and the water?

Answer: Remediation tools implemented to date include soil excavation and removal, soil vapor extraction, and in-situ chemical oxidation. In-situ chemical oxidation involves the use of an oxidizing agent, sodium permanganate, which is introduced into the groundwater to breakdown the TCE to naturally-occurring constituents. It is also being used to clean up residual TCE at the soil excavation areas. The Interim Remedial Action Plan was submitted on 12/21/18 (EDMS Doc. No. 11463927), and was approved by LDEQ on 1/28/19. The Exploratory Source Investigation Work Plan was submitted on 4/13/20 (EDMS Doc. No. 12156999), and approved by LDEQ on 4/14/20.

24. Question: How will you establish how much its devalued our property?

Answer: The LDEQ is not an expert on property evaluation. The law and regulations require a responsible party to remediate the contamination to the legally required standard. LDEQ is supervising Dresser's carrying out of that mandate. LDEQ's role in the response actions is to oversee the investigation and remediation of the release and ensure that the work complies with LDEQ regulations.

25. Question: Is Hooper Road in the area that you are going to test? And has it been tested?

Answer: Based on available groundwater and soil vapor sampling results reported to LDEQ, the Mary Goff School on Hooper Road appears to be outside of the area affected by the groundwater contamination. No testing has been conducted in the area around the Mary Goff School. Should any additional sampling suggest that the area might be subject to contamination, additional sampling would be required.

Peter Leboeuf 8359 Highway 71N

26. Question: When do you think the leak started?

Answer: LDEQ does not know when the release began.

Shelly Barton 350 Kings Drive

27. Question: Why do ya'll feel like our street directly across from Dresser and adjacent to Greystone Subdivision is perhaps not at all contaminated? Why do ya'll think we're out of the Loop, if we're not having the opportunity to be tested?

Answer: Dresser sampled groundwater at three locations in the King's Drive area in Grant Parish. Dresser has informed the LDEQ of its plan to sample groundwater in six additional locations along

King's Drive in Rapides Parish. This additional sampling should provide an answer to whether the contamination has reached the area.

28. Question: I was told that trailers across from Cougar Stop were Highly Positive, it's what triggered the Class Action Suit. Is this true?

Answer: Dresser conducted indoor air testing at 6 trailer homes located at 21692, 21688, 21684, 21676, 21668, and 21662, Louisiana Highway 167. The sampling results for five of the trailers reported no concentrations of chlorinated solvents in the indoor air. Indoor air sampling results for 21676 Louisiana Highway 167 reported PCE in the indoor air at a concentration of 1.15 ug/m³ which is below the ATSDR health-based guideline of 3.8 ug/m³ (EDMS Doc. No. 12241287).

Scott Byer 415 Kings Drive

29. Question: How many people on Kings Drive didn't get a 1st Notification letter because they weren't home?

Answer: Based on LDEQ field notes, delivery of the first notification was completed at all homes in the area but one due to the presence of a dog that prevented access to the home. Notification was provided to this home the following week.

30. Question: If contamination has been going on since 2014 and there was some kind of chemical being injected in the ground in 2018 to try to neutralize the contamination, why weren't people notified?

Answer: Offsite notification is not generally needed for remedial activities conducted and contained within facility property boundaries where there is no anticipated impact to offsite locations. All reports, correspondence, and related information pertaining to the TCE release at the Dresser facility are available to the public in LDEQ's EDMS. These reports document all activities pertaining to the investigation and remediation of the TCE release.

Jonell Whistine Email on 7-13-20

31. Question: We have been wanting to sell our home for several months, I have not received a letter from DEQ so I wonder if I'm safe in selling home I live on WEST Medalist.

Answer: First notifications were distributed to homes on West Medalist from 1600 to 1706 West Medalist. If your home is not included among these addresses, a notification was not required to be issued to your location based on the current sampling results provided to LDEQ for your area. The LDEQ is not an expert in real estate law. You should contact an attorney to discuss the prospective sale of your home.

Ryan McClure Email on 7-6-20

32. Question: I own a 45 acre property east of the facility with a creek that runs through the property we use it as a homestead raising food and harvesting wildlife. What is the chance of pollution on my property that would affect the wildlife and quality of soil for the food I raise?

Answer: Without knowing the location of your property, it is not possible to address your concerns regarding potential impacts to your property.

Darlenedu4@aol.com Email on 7-3-20

33. Question: I live near the former Dresser facility in Pineville. I am concerned about the health impacts of TCE. When will DEQ test the air quality of my home at 178 Moss Ridge Drive?

Answer: An indoor air sampling protocol was established to provide guidelines for identifying the homes or other buildings most likely to be impacted by vapor intrusion based on available groundwater, soil vapor, and indoor air sampling results. Like groundwater sampling, the sampling of soil vapor and indoor air is also conducted using a phased approach. This phased approach to sampling is common to all environmental investigations. Results generated by one phase of sampling directs where to proceed with additional sampling. When groundwater and/or soil vapor sampling results indicate the possibility of the vapor intrusion pathway being complete in an area, residents of nearby homes are contacted to obtain permission to conduct additional sampling on the property.

Based upon sample results reported to the LDEQ, it appears that 178 Moss Ridge Drive is not within the area of contamination that would require the sampling of indoor air. If you have concerns regarding the quality of the indoor air at your residence related to the presence of TCE in your area, please call the Dresser Pineville Information Line at 713-879-1230 to discuss the testing of your home.

Billy W. & Linda D. Edwards 181 South Dogwood Ln. Dry Prong, Louisiana 71423 Home: 318-704-1502 Email: bedwards02@suddenlink.net Email on 7-2-20

34. Question: I live near the former Dresser Facility. I am concerned about the health impacts of TCE. When will DEQ test the air quality of my home.

Answer: An indoor air sampling protocol was established to provide guidelines for identifying the homes or other buildings most likely to be impacted by vapor intrusion based on available groundwater, soil vapor, and indoor air sampling results. Like groundwater sampling, the sampling of soil vapor and indoor air is also conducted using a phased approach. This phased approach to sampling is common to all environmental investigations. Results generated by one phase of sampling serve to direct where to proceed with additional sampling. When groundwater and/or soil vapor sampling results indicate the possibility of the vapor intrusion pathway being complete in an area, residents of nearby homes are contacted to obtain permission to conduct additional sampling on the property.

To date, groundwater has been sampled at five locations in the vicinity of Dogwood Lane. The sample results did not indicate the presence of TCE at these locations. Based upon sample results reported to the LDEQ, it appears that 181 South Dogwood Lane is not within the area of contamination that would require the sampling of indoor air. If you have concerns regarding the quality of the indoor air at your residence related to the presence of TCE in your area, please call the Dresser Pineville Information Line at 713-879-1230 to discuss the testing of your home.

Janna and Adam Gatlin 106 Kiwanis Road Pineville La Email on 7-2-20

35. Question: I live near the former Dresser plant facility. I am concerned about the health impacts of TCE. When will DEQ test the air quality of my home?

Answer: An indoor air sampling protocol was established to provide guidelines for identifying the homes or other buildings most likely to be impacted by vapor intrusion based on available groundwater, soil vapor, and indoor air sampling results. Like groundwater sampling, the sampling of soil vapor and indoor air is also conducted using a phased approach. This phased approach to sampling is common to all environmental investigations. Results generated by one phase of sampling directs where to proceed with additional sampling. When groundwater and/or soil vapor sampling results indicate the possibility of the vapor intrusion pathway being complete in an area, residents of nearby homes are contacted to obtain permission to conduct additional sampling on the property.

Based upon sample results reported to the LDEQ, it appears that 106 Kiwanis Road is not within the area of contamination that would require the sampling of indoor air. If you have concerns regarding the quality of the indoor air at your residence related to the presence of TCE in your area, please call the Dresser Pineville Information Line at 713-879-1230 to discuss the testing of your home.

Cindy Bennet Email on 6-12-20

36. Question: I live in Country Club Fairway Estate Subdivision. It connects to Timber Trails. Is that subdivision being tested? Or are we included with Timber Trails?

Answer: No, the Country Club area is not part of the investigation.

Carol and Ray Dickens	and	Leslie and William Bowman
Email on 7-16-20		Email on 7-15-20

37. Question: Due to the issues at Dresser/DEQ issues, our attorneys stated this will take years to fix this problem. We do not fill safe on our own property. We are asking that you force DEQ to pay monthly costs for relocating til issues are resolved and safe. Anything you can do will be much appreciated.

Answer: The Louisiana Department of Environmental Quality (LDEQ) understands the concerns of the residents in the area affected by the Dresser release. Based on groundwater and soil vapor sampling results, Dresser, LLC is conducting indoor air sampling at homes located within the area of the contaminant plume. Indoor air results are being compared to health-based guidelines provided by the Centers for Disease Control and Prevention (CDC) Agency for Toxic Substances and Disease Registry (ATSDR) to the Louisiana Department of Health (LDH). For homes where indoor air results indicate chlorinated solvent vapors are present at levels above the health-based guidelines, Dresser, LLC is taking measures to reduce the vapor levels inside the home. Such measures may include the installation of an air purifier or modification of the HVAC system of the home. Mitigation measures or other health-protective actions such as relocation are generally not considered to be necessary when the levels of chlorinated solvents detected in the indoor air are at or below the health-based guidelines.

Under the direction of the LDEQ, Dresser, LLC has implemented sampling of groundwater, soil vapor, and indoor air in the areas surrounding the facility. Through extensive groundwater testing, the company's consultants are close to completing delineation of the contaminant plume. Groundwater remedial efforts are underway at the facility and there are plans to expand these efforts to address offsite locations. Once remediation measures are fully implemented, LDEQ expects a steady decline in the amount of contaminant in the groundwater plume. However, as was presented by LDEQ at the public hearing, it will take years to complete remediation of the groundwater. During this time, monitoring of groundwater, soil vapor and indoor air will continue as determined to be necessary to ensure the protection of human health.

The Louisiana Department of Environmental Quality (LDEQ or Department) does not have the legal authority nor the appropriation to pay monthly costs of relocating people from contaminated sites, whether those sites contain contamination above the health-based guidelines, or for sites where the contamination levels are below health-based guidelines. Generally, those responsible

for the contamination are charged by law with cleaning up the site. In this case, Dresser is making all efforts to identify and clean up the contamination.