

Comments and Responses from August 11, 2006 Public Meeting

The following comments were received by Velsicol during the Public Meeting, which was held at the Hollywood Community Center at 6:00 p.m. on August 11, 2006. The comments are followed by Velsicol's response. Most of the comments were hand written on comment forms and have been edited for clarity and typed for ease of reading. Most addresses and all phone numbers have been removed from the comments as presented here to protect privacy. All of these comments and responses have been provided to the Tennessee Department of Environment and Conservation (TDEC) in this typed form and as a photocopy of the original hand written comment forms. The address and phone number information is included in the information submitted to TDEC.

Comment No. 1

Name: Not given

Comment: Is there a cost to the homeowners for the cleanup?

Response: No. All work is done at no cost to the homeowners. If the resident allows the clean-up workers to use water from the house, the cost of the water is reimbursed.

Comment No. 2

Name: Rev. Wendall Coward (Greater Mt. Zion Baptist Church)

Comment: Although no waste, what about runoff? What about the air that is breathed?

Response: During the clean-up work, rainwater that contacts contaminated soil in the digging area will be controlled to prevent runoff. In addition, the chemicals of concern in soils along Cypress Creek bind tightly to soil particles so only very small amounts wash off with rainfall or are given off into the air. In addition these chemicals degrade faster in soils near the surface that are exposed to sunlight and to oxygen in the plant root zone than they do in deeper soils. The human health risk assessment included protective assumptions about the amount of wind blown dusts that residents are exposed to. All of these factors went into the TDEC's selection of a remedial action level of 2.5 parts per million (ppm) for dieldrin.

Comment No. 3

Name: Rev. Wendall Coward (Greater Mt. Zion Baptist Church)

Comment: Since you say that you don't know how the chemicals got to the various properties, you must assume that it is absorbed by the soil.

Response: Yes, the contaminants of concern are generally held tightly to the soil particles.

Comment: How did you determine that 15 inches, just over 1 foot, is sufficient?

Response: The clean soil provides a barrier to human exposure to any underlying contaminated soils. Although just a few inches of clean soil would provide an adequate barrier, it is impractical with large excavation equipment to dig less than about one foot deep. Tillage for gardening is usually limited to about six inches. One foot is also adequate to allow for any erosion of the soil surface before corrective action could be taken to stop the erosion. Velsicol recommended one foot of depth, but the Tennessee Department of Environment and Conservation is requiring a thicker depth of clean soil barrier (i.e., 15 inches) as an extra measure of safety.

Comment No. 4

Name: Shirley Patton

Comment: How does this affect people with vegetables?

Response: The Human Health Risk Assessment included consideration of chemical uptake in vegetables grown in backyards along Cypress Creek in developing the Remedial Action Level. Velsicol tested for contaminants in vegetables from one Cypress Creek property and found them to be far below levels that could present a health concern. TDEC established the 2.5 parts per million dieldrin Action Level, as safe for all residential activities, including growing gardens and eating the vegetables. If residents have concerns about their vegetables, they are encouraged to contact TDEC or Velsicol.

Comment No. 5

Name: Arthur Ores

Comment: What if my property soil test result is 2.0 ppm and not 2.5? What happens then?

Response: Properties with average dieldrin concentrations below 2.5 parts per million (ppm) will not need to be cleaned up. The human health risk assessment was conducted following established U.S. Environmental Protection Agency (USEPA) procedures and was reviewed and approved by scientists at the USEPA, the Tennessee Department of Environment and Conservation (TDEC), and the Tennessee Department of Health (TDOH). The risk assessment included many built in layers of conservatism to insure that potential health risks were not underestimated. Based on the risk assessment, Velsicol determined that a remedial action level of 3.0 ppm is protective of human health. TDEC considered this recommendation, but ultimately selected a remedial action level of 2.5 ppm.

Comment No. 6

Name: Richard Kesling

Comment: I support Velsicol's plan and endorse their application for permit modification. Science, fact and proven technology should be considered in the approval process and prevail.

I am concerned that the City of Memphis appeared to have avoided any responsibility and clean up cost. It was the City's Public Works Department that dredged Cypress Creek and subsequently used the sludge (sanitary waste and chemicals) to backfill on homeowner's property.

Response: Comments acknowledged.

Comment No. 7

Name: James Cooper

Comment: His property is one of the 15 that will require clean-up. He has met with TDEC/TDOH and has agreed to provide access for clean-up. He asked about how his dogs will be handled and he has two sheds that Velsicol will need to work around.

Response: Velsicol will provide a temporary dog run or other means to keep dogs away from the area where the work will be performed. The sheds will be looked at with the property owner to determine if they can be moved for the digging work, or left in place.

Comment No. 8

Several individuals asked that their property be tested, or asked why their property had not been tested. The same response applies to all and is presented below. It is noted that most of those who made this comment also made other comments and their entire set of comments are presented later in this document.

Response: The Tennessee Department of Environment and Conservation (TDEC) decides where soil testing should be performed. This decision is based on soil test data from nearby properties and information on whether or not the property may have received soil from Cypress Creek. Velsicol has forwarded each request and relevant information on nearby soil testing results to TDEC, who will use the available information to determine if testing is warranted.

Comment No. 9

Name: Jannie R. Winfrey

Comment: Has there been a hold up of the houses recently been built on Jackson, east of Hollywood and have they been released for families to live in them?

Response: Yes, there was a hold up on the completion of the apartments at 2510 Jackson Ave. The developer has received Tennessee Department of Environment and Conservation and Health Department approvals for families to move into the apartments in the southern portion of the site.

Comment: I still want someone to come and test the soil at my address.

Response: See Comment No. 8.

Comment No. 10

Name: Janice Quinn and James Quinn

Comment: My father needs to be on your mailing list. Currently you are sending mail addressed to my mother, who is deceased (March 8, 2002 Brain Tumor Cancer). Please correct your data base with the correct information. I would also like to receive mailings addressed to me individually.

Response: Velsicol's mailing list is being changed as requested.

Comment No. 11

Name: Jearline

Comment: Has my property been tested? If not, why not?

Response: Soils at your property have not been tested. See Comment No. 8.

Comment: Neighbor's water is gritty. (This question was raised in a follow-up phone call to Ms. Jearline.)

Response: Memphis Light Gas and Water (MLGW) provides drinking water for all of Memphis. They treat and test the water to ensure that it is safe for drinking. Questions concerning the quality of drinking water should be directed to MLGW or the Memphis Shelby County Health Department.

Comment No. 12

Name: Not given

Comment: Did Velsicol dump any chemicals into the former junkyard on Jackson, now known as Springdale Creek Apartments?

Response: No, Velsicol did not dump any chemicals into the former junkyard at 2510 Jackson Ave. Based on the site investigations, the soil contamination is thought to have come from sediments that were dug from Cypress Creek when the concrete liner was constructed during the 1960's.

Comment No. 13

Name: Not given

Comment: Springdale Creek Apartments – did they clean it up?

Response: Yes, about three fourths of the former junkyard area has been cleaned up and construction of the buildings in the clean area has been completed. Velsicol has been advised by the developer that most of the available units have been rented.

Comment No. 14

Name: Ms. Hayslett

Comment: My property was not tested. The property that you cleaned up is about 6 houses from my house. I (am) wondering why mine was not tested. I have children and grandchildren that play in my yard. I would like to know that they are playing on safe and healthy soil.

Response:

See Comment No. 8. We assume that the commenter is referring to 920 Bingham as the house that was cleaned up. Note that 920 Bingham has not been cleaned up because Velsicol was denied access to do so.

Comment No. 15

Name: Not given

Comment: Comments were made on Tuesday and also tonight regarding the protective gear workers were wearing merely to prevent breathing dust and getting dirty. Is that true? Does handling or working in the contaminated soil have anything to do with them wearing the protective gear?

Response: The Occupational Safety and Health Administration (OSHA) establishes requirements for personal protective equipment to be used during the cleanup of sites containing contaminated soils. These requirements are normally met with a certain level of defined protection. A health and safety plan is prepared for each project that evaluates the work area conditions and determines the type of protective gear that workers should use. On the Cypress Creek clean-up work, long-sleeved disposable coveralls were used to keep the workers take-home clothes clean and to reduce contact with contaminated soil. Dust masks were used to reduce inhalation of dust and contaminants that may be in the dust.

Comment No. 16
Name: Not given

Comment: Why did they move the contaminated dirt from one spot to another spot in our neighborhood?

Response: We assume that this question relates to the consolidation of the contaminated soil at Velsicol's manufacturing plant at 1199 Warford Ave. The system for consolidation of the contaminated soil at Velsicol's property was developed with the input and oversight of the Tennessee Department of Environment and Conservation. The soil is placed in a secure area to ensure that it is properly managed to protect public health and the environment.

Comment No. 17
Name: Arthur Ores

Comment: What if a house has a basement that floods every time it rains?

Response: Per discussion with Mr. Ores after the meeting, it was determined that the City has installed a backflow preventer on a storm drain in an attempt to stop the basement flooding, but the problem has not been resolved. While this flooding problem is not considered to be an environmental problem related to historic contamination in Cypress Creek, Velsicol agreed to meet Mr. Ores at his property to review the basement conditions relative to the location of the Cypress Creek channel.

Comment No. 18
Name: Arthur Ores

Comment: What if no one lives in the house next door and it may be may contaminated?

Response: All residential properties suspected of being contaminated above the remedial action level near your property on Meagher Street have been sampled. Should new information be discovered to indicate a property is in need of testing, the property owner

will be contacted for access to do the testing and/or clean-up work. Contact information for the property owner will be obtained from Shelby County records.

Comment No. 19

Name: Arthur Ores

Comment: Please mail questions and answers directly to Arthur Ores.

Response: We will comply with this request.

Comment No. 20

Name: Arthur Ores

Comment: How did the soil contamination get dispersed to different properties along Cypress Creek (such as Springdale School, new apartments, Edward St., Meagher St.)?

Response: The contamination would have been spread along the bottom of Cypress Creek by the flow of the drainage waters. Then it is thought to have been moved from the creek bottom to the overbank areas by the construction of the concrete liner during the 1960's, by flooding, and by other activities such as filling of low areas at the former junkyard on Jackson Ave.

Comment: Why was his property not tested?

Response: See Comment No. 8.

Comment No. 21

Name: Rev. Wendall Coward (Greater Mt. Zion Baptist Church)

Comment: When did Velsicol first began measuring risks possibly caused by Velsicol?

Response: Velsicol began its soil testing and risk evaluation work under TDEC direction and oversight during 2001.

Comment No. 22

Name: Rev. Wendall Coward (Greater Mt. Zion Baptist Church)

Comment: Have you found any properties that were so much at risk that you would purchase the property or subsidize land owners because of diminished property value?

Response: No. Velsicol's engineers and consultants are certain that all properties with contamination exceeding the remedial action level can be cleaned up using the methods approved by TDEC and explained during the meeting.

Comment No. 23

Name: Rev. Wendall Coward (Greater Mt. Zion Baptist Church)

Comment: Would you want your children to breathe the air?

Response: (As answered by Mr. Hanson) My children do breath air that contains chemicals and actually we all do everyday. We breathe hydrocarbons each time we fill our gasoline tanks. We breathe solvents each time we use cleaners and waxes around our houses. Our automobiles are constructed of plastic materials and we breathe their vapors each time we drive. We breathe chemicals each time we apply cosmetics or stand next to someone who does.

The real issue is not over the fact that we are exposed to chemicals, but is the exposure enough to cause a problem. In the case of the contaminants along Cypress Creek, the answer is that breathing the air does not pose a risk. A risk assessment was conducted, which the regulatory agencies used to establish a protective remedial action level of 2.5 parts per million (ppm) dieldrin. This risk assessment took into account all avenues of exposure including inhalation, skin adsorption and ingestion.

Comment No. 24

Name: Shirley Patton

Comment: What about properties north of Chelsea Ave. between Warford – Watkins – McLean?

Response: Properties north of Chelsea are too far away from Cypress Creek for there to be any concern about contamination related to Cypress Creek, unless you know of areas that were filled with soils dug from the Creek. Anyone that knows of areas where soils from the Cypress Creek concrete liner construction work were placed during the 1960's is asked to provide that information to Velsicol or go the Tennessee Department of Environment and Conservation so that it can be investigated.

Comment No. 25

Name: Shirley Patton

Comment: Is water contaminated or affected?

Response: Memphis Light Gas and Water (MLGW) provides drinking water for all of Memphis. They treat and test the water to ensure that it is safe for drinking. Questions

concerning the quality of drinking water should be directed to MLGW or the Memphis Shelby County Health Department.

Comment No. 26

Name: Arena Williamson

Comment: Is there an estimated rate of decreased soil chemical concentration yearly over 30 years?

Response: Scientists who have measured the degradation of dieldrin and other chemicals of concern have found that the specific breakdown rate can change based on many different factors, but is generally very slow. However, these chemicals do degrade faster in soils near the surface that are exposed to sunlight and to oxygen in the plant root zone than they do in deeper soils. At Cypress Creek this has been shown by soil test results that compared concentrations in the top 3 inches of soil to deeper samples.

Comment No. 27

Name: Arena Williamson

Comment: My undeveloped parcel at Cypress Creek was not tested. Transfer of ownership and property value has been compromised due to concern for chemical concentrations. It is located on Edward Street between McLean & University Street, where two properties have been remediated. I would like to ensure my parcel is tested.

Response: The subject property was tested during 2003 and test results were mailed to the property owner at that time. Velsicol will send a copy of the test results to Ms Williamson.

Comment: Installation of the concrete liner caused a new concern, erosion. What can be done to correct this?

Response: Velsicol has visited this property, with representatives of the Tennessee Department of Environment and Conservation. Based on that site visit, it appears that the soil erosion is being caused by the poor condition of the Cypress Creek concrete liner. The City of Memphis Drain Maintenance Department is responsible for the concrete liner, so this question has been forwarded to them.

Comment No. 28

Name: Brenda Chism-Love

Comment: I have been renting property for 2 years come October 2006. Does this matter concern me? Who is at risk? And how long do you have to be exposed to cause environmental health hazards?

Response: The property in question has been tested and the average dieldrin concentration was found to be 0.65 ppm (parts per million), which is much cleaner than the remedial action level of 2.5 ppm approved by TDEC and the USEPA. The action level includes many safety factors including the assumption that residents live at one home for 30 years starting at birth and that nearly all of the soil contacted during that period comes only from the residence. The use of these protective assumptions in the risk assessment ensures that the selected remedial action level is safe for all residents.

Comment No. 29

Name: Not given

Comment: In 1964, I was very active gardening, hanging out laundry, cutting grass; my children playing in the Creek. I started coughing, visiting doctor after doctor. Last summer I had surgery for kidney cancer. They lucked upon my condition because I put myself in the hospital. In 1996, I stopped gardening at your suggestion. Question - Why could you find bad soil down the street from me, but my yard is okay? I have been sick, my husband died in 1983. That was rather young. I am afraid to use my yard again.

Response: Velsicol asked for the person submitting this question to identify herself so that we could answer this in the context of the location of the property. The questioner did not identify the property, so the question has been forwarded to the Tennessee Department of Health and the Memphis/Shelby County Health Department for information and/or follow-up.

Comment No. 30

Name: Not given

Comment: This is about human life. Do you all really know how precious life really is? There is no amount of money that can measure human life. In all due respect, I don't think you or your family live in this part of this community. We need concern. God loving people that really care about human beings, whatever race or color it doesn't matter. God loves all of us, even the ones who do us wrong. We have been living in our house at least 30 years. I just thank God, he sits high and looks low and sees and knows everything. All of the community that is involved should be cleaned up. This is a time to get back to basics and do what God wants all of us to do. Thank you. God Bless you!

Response: Comments acknowledged. Velsicol shares this commenter's concern for the neighborhood and its residents. This concern has led to a multi-year program of sampling and analyses designed to investigate the location of Cypress Creek soils and, now, to remediate any that may pose a potential health risk.

Comment No. 31

Name: Darrell F. Wright (HHPSNA- Sec. / Community Advocate)

Comment: The only thing that went wrong was the screen was changed to fast. The presentation was very informative.

Response: Comments acknowledged.

Comment No. 32

Name: Darrell F. Wright

Comment: My prayer is that this clean-up is done by community residents to help solve this situation and get a lot of unemployed residents off the streets.

Response: Velsicol is talking to a minority business owner who does this type of clean-up work about the possibility of doing some of the work. Velsicol will also commit to discussions with other remedial contractors about hiring locally for the project. Velsicol will identify the selected contractors on the www.CypressCreekMemphis.com website, so that community members can apply to them for jobs.

Comment No. 33

Name: Not given

Comment: How will the questions that were asked tonight and Tuesday be answered so that the public will know your answers?

Response: All of tonight's comments and our responses will be posted on Velsicol's Cypress Creek website at www.CypressCreekMemphis.com and a copy will be placed in the information repository at the Hollywood Branch Library. If you do not have Internet service and would like us to mail a copy to you, please let us know and give us your mailing address. In addition, comments and questions relating to the clean-up plans will be provided to TDEC as part of Velsicol's application for the Permit Modification.

Comment No. 34

Name: Rev. Wendall Coward (Greater Mount Zion Baptist Church)

Comment: Whatever answers that you will give to the questions should be available to all concerned, possibly at the community center or some central area in the neighborhood. I would like to have that information sent to me.

Response: All of tonight's comments and our responses will be posted on Velsicol's Cypress Creek website at www.CypressCreekMemphis.com and a copy will be placed in the information repository at the Hollywood Branch Library. If you do not have Internet

service and would like us to mail a copy to you, please let us know and give us your mailing address. In addition, comments and questions relating to the clean-up plans will be provided to TDEC as part of Velsicol's application for the Permit Modification.

Comment No. 35

Name: Gladys Coins

Comment: Can I get my yard tested. For 3 years or more, I've had problems. I do have lawn service. I did not get a clear understanding because the presentation was going to fast. I did not receive a full explanation of some things,. My daughter had cancer before she passed. Please add me to mailing list.

Response: See Comment No. 8.

Upon request, Velsicol will meet with individuals to provide more information. The second comment is being forwarded to the Tennessee Department of Health and the Memphis/Shelby County Health Department for information and/or follow-up regarding health questions. You will be added to Velsicol's mailing list.

Comment No. 36

Name: Not given

Comment: These meetings need to have a minute taker and need to be recorded and an official report needs to be sent to the community.

Response: All of tonight's written comments and questions and our responses will be posted on Velsicol's Cypress Creek website at www.CypressCreekMemphis.com and a copy will be placed in the information repository at the Hollywood Branch Library. If you do not have Internet service and would like us to mail a copy to you, please let us know and give us your mailing address. In addition, comments and questions relating to the clean-up plans will be provided to TDEC as part of Velsicol's application for the Permit Modification.

Comment No. 37

Name: Andre Mathews

Comment: What compensation will be made to people who were affected health-wise. Land sold for below value. Can I be placed on the mailing list?

Response: Most health conditions have multiple potential causes. Velsicol is not aware of any scientific study linking specific health conditions to dieldrin or Cypress Creek. You will be being added to Velsicol's mailing list.

Comment No. 38

Name: Wilnikka Henderson

Comment: The Creek has a lot of trash and it smells. My property backs up to Creek, lived there 50 years.

Response: Comments acknowledged.

Comment No. 39

Name: Vickie Melvin

Comment: The Creek smells, it's nasty

Response: Comments acknowledged.

Comment No. 40

Name: Not given

Comment: Will there be another meeting with the Tennessee Department of Health (TDOH) or Memphis/Shelby County Health Department to answer additional health risk questions?

Response: This question is being forwarded to the Tennessee Department of Health and Memphis/Shelby County Health Department for information and/or follow-up.

Comment No. 41

Name: Steve Gadbois

Comment: Some members of the Vollintine – Evergreen Community Association would like to know whether Velsicol is willing to support and pay for blood test of residents living in the Sub Area III, to establish the level of chemicals such as dieldrin in their systems?

Response: This question goes to the subject of the health study proposed by the Tennessee Department of Health on August 8. Velsicol will forward this comment to them for inclusion in their considerations as they design the study.

Comment No. 42

Name: Joe & Doris McCray

Comment: Our property is just 2 houses away from the point on Bingham Street that is marked for clean up. I am not satisfied with the reports given tonight for several reasons. (1) From the property that tested high on Bingham, water runs directly into my backyard . I would like to personally see the test results for my property. (2) I along with my family have lived at this location for the past 24 plus years. I worked all the yards in this area for 10 plus years. I was never sick, didn't have a doctor, but all of sudden, I developed a nervous condition. I stayed at the doctors or hospital for 2 years straight. In February 1994 I went to the hospital and doctor 21 times. I was diagnosed as having Chronic Nervous Syndrome. I know that the chemicals from Velsicol are known to cause that. I need some answers please. I have other comments.

Response: (1) The commenter's property has not been tested. See Comment No. 8.

(2) This question is being forwarded to the Tennessee Department of Health and the Memphis/Shelby County Health Department for information and/or follow-up regarding health questions.

Comment No. 43

Name: Willye Curry

Comment: The creek overflowed up to my backyard door at my former address near Cypress Creek. It needed cleaning up and fenced in so that no child will fall in and get drowned like one year when I lived there. There was a risk for all children who lived there and no safety zone was provided for them. Clear out the channel so that water won't rise up into the backyard. Before it was concreted, there were a lot of rash, infections and colds and other hazardous diseases thru ingesting.

Response: These comments are being forwarded to the Tennessee Department of Health and Memphis/Shelby County Health Department and to the Memphis Public Works Department for their information and/or follow-up.

Comment No. 44

Name: Tamara Webb

Comment: I just wanted to know, does the chemical have something to do with deaths last year in the 38108 area? For some reason this community's death rate for kids is the highest in all of Shelby County.

Response: The Risk Assessment included evaluations of potential risks to young children and the Remedial Action Level was established by TDEC to protect the health of those young children. This comment is being forwarded to the Tennessee Department of

Health and Memphis/Shelby County Health Department for information and/or follow-up.

Comment No. 45

Name: Rose Mary Smith

Comment: This area needs to be cleaned up to clear away all brush, tress, bushes and chemicals. Not good for your health. These products from Cypress Creek will cause cancer and other diseases.

Response: This comment is being forwarded to the Tennessee Department of Health (TDOH) and Memphis/Shelby County Health Department for information and/or follow-up. As discussed in its Health Consultation, the TDOH has concluded that dieldrin cannot be linked with cancer.

Comment No. 46

Name: Not given

Comment: Was the land at Cypress Creek School tested before the school was built and since I bought a house a half mile south of Cypress Creek. One daughter attended Cypress Creek School. One son is attending Cypress Creek School. My wife passed in 2003, one daughter passed in 2000.

Response: Velsicol is not aware of any information on soil testing before the school was constructed. Velsicol tested the schoolyard and nearby park soils at Cypress Middle School during 2002 and that information has been provided to Memphis City Schools. The Tennessee Department of Environment and Conservation placed a clean soil barrier over some playground areas at the school during 2003. We are not aware of any soil testing a half mile south of Cypress Creek. The comments on health conditions are being forwarded to the Tennessee Department of Health and Memphis/Shelby County Health Department for information and/or follow-up.

Comment No. 47

Name: Dr. Muhammad Salaam

Comment: Thank you for your presence tonight! I am Dr. Muhammad Salaam, President and founder of the Citizen's Council for Human Rights; and member of the American Bar Association. Firstly, of the 11 products you produce, a few of them such as organochlorine insecticides, heptachlor and chlordane, are environmentally persistent toxins, that are probable human carcinogens and nerve toxins. Secondly, Shelby County Tennessee ranks "worst" in the US in chemical releases or waste generated properties, with zip code 38108, as the highest risk. Shelby County also ranks 4th in the Nation in regards to releases rating at 10,449,977 pds of chemical and toxic poisons. What is your

plan to eliminate risk factors relevant to cancer and non-cancer (air and water releases), recognized carcinogens, as well as developmental and reproductive toxicants? Thank you Dr. Salaam

Response: The Memphis plant produces 2 products, hexachlorocyclopentadiene (hex) and chlorendic anhydride. The plant produced heptachlor and chlordane in the past but has not produced them for more than 10 years. Neither hex nor chlorendic anhydride are known carcinogens or nerve toxins.

The activities at Velsicol's Memphis plant are subject to federal, state and local regulations and the Facility is fully permitted for its operations. Velsicol has implemented a system of continuous improvements, which has made its operations even more secure. We are confident that our operations are not affecting human health or the environment.

Comment No. 48

Name: Tommy and Versie Hollingshed

Comment: Asked that we test their soil.

Response: See Comment No. 8.
