

March 13, 2012

Mr. Edgar C. Gentle, III, Esq. Claims Administrator Perrine v. DuPont Settlement Remediation Program 501 Riverchase Parkway East, Suite 100 Hoover, AL 35244

Subject: Follow-up information from March 12, 2012 bid interview

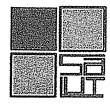
Dear Mr. Gentle:

On behalf of the NCM-SaLUT team I would like to express our sincerest gratitude for allowing us to discuss our proposal with you yesterday. We feel we bring a great deal of technical and financial value to the Settlement and property owners, and look forward to demonstrating that for you.

Please find below the few items that the NCM-SaLUT team was to provide follow-up data on based on our interview:

	NCM-SaLUT confirms that any accessible flex duct encountered during duct cleaning will be removed and replaced at no additional cost
	NCM-SaLUT will endeavor to reduce the number of days the property owner will be relocated by performing interior tasks concurrently.
	Pursuant to our discussion, NCM-SaLUT will be flexible in working with the Settlement in receiving wipe sample samples within 24-48 hours after collection.
<b>.</b>	As part of the pre-work inspection of each property, NCM-SaLUT will check for the presence of exposed wiring in the accessible attic spaces. Should exposed wiring be present, a de-energization procedure for the wiring will be created and followed prior to any work commencing in the attic space. For those properties with un-accessible attic spaces, the first step after creating an attic access will be to check for exposed wiring, and if present, follow the de-energization procedure for that wiring.
<b>Q</b>	As part of the pre-work inspection of each property NCM-SaLUT will create a traffic flow plan to be provided to each person working on that property.
<u> </u>	NCM-SaLUT confirms that mobile sanitary facilities will be present for use of our employees, and at no time will the sanitary facilities within a property be used by NCM-SaLUT employees.
	NCM-SaLUT acknowledges that no TCLP testing of the soil to be removed has been performed. NCM-SaLUT will do TCLP testing as required. Should the TCLP results reveal the soil has to be disposed of as a hazardous waste, the unit pricing for hazardous waste on the Uniform Price Bid Form item B3 would apply.
	NCM-SallIT





Demolition and Remediation, LP

- NCM-SaLUT will water the sod for each property as necessary, for up to two weeks after installation.
- The blown in R-19 attic insulation will be of an industry standard depth of 10-12 inches. Should a property owner request additional levels of insulation, NCM-SaLUT will work with the Settlement on logistical and financial matters to accommodate such request.
- NCM-SaLUT acknowledges that Uniform Price Bid Form item B2 has been removed from the Scope of Work and will now be performed by a third party hired directly by the settlement.
- Requested 2007-2011 EMR ratings for NCM-SaLUT:

NCM	Į.	SaLUI	SaLUT		
2011-2012	0.83	2011-2012	1.00		
2010-2011	0.67	2010-2011	1.09		
2009-2010	0.69	2009-2010	1.04		
2008-2009	0.79	2008-2009	0.79		
2007-2008	0.99	2007-2008	0.94		

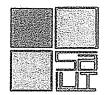
We hope the above provide the answers the Settlement needs to answer the few items from yesterday's meeting. In the event you need any additional data, please feel free to contact me. NCM-SaLUT is very excited about this opportunity, and wishes to perform this project and exceed the expectations of both the Settlement and property owners.

Sincerely, **NCM-SaLUT** 

Dennis Raver

Program Manager





March 16, 2012

Mr. Edgar C. Gentle, III, Esq. Claims Administrator Perrine v. DuPont Settlement Remediation Program 501 Riverchase Parkway East, Suite 100 Hoover, AL 35244

Subject: Follow-up information for March 14, 2012 Memorandum

Dear Mr. Gentle:

On behalf of the NCM-SaLUT team please find below our responses to your March 14, 2012 Memorandum:

- NCM-SaLUT has modified the all-inclusive bid to include replacing the attic insulation in 10% (60) of the homes with R-38 insulation.
- NCM-SaLUT confirms that the all-inclusive bid has only the carpet in Zone 1 to be replaced and the carpets in all other zones HEPA vacuumed.
- NCM-SaLUT has modified the all-inclusive bid to include both watering and sod maintenance for 30 days. NOTE: mowing is not considered part of sod maintenance and is the property owner's responsibility.
- 4. NCM-SaLUT has modified the all-inclusive bid to include disposing of 40,000 tons of non-hazardous soil and replacing such with topsoil.
- 5. NCM-SaLUT confirms that post-remedial sampling is not included in our all-inclusive bid.
- 6. NCM-SaLUT accepts responsibility for "re-do's" for activities performed by NCM-SaLUT.

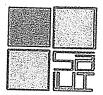
NCM-SaLUT all inclusive bid......\$14.520.000.00

NCM-SaLUT remains very excited about this opportunity, and is eager to perform this project for both the Settlement and property owners.

Sincerely, NCM-SaLUT

Dennis Raver Program Manager





March 23, 2012

Mr. Edgar C. Gentle, III, Esq. Claims Administrator Perrine v. DuPont Settlement Remediation Program 501 Riverchase Parkway East, Suite 100 Hoover, AL 35244

Subject: Follow-up information for March 21, 2012 Memorandum

Dear Mr. Gentle:

On behalf of the NCM-SaLUT team please find below our responses to your March 21, 2012 Memorandum:

#### Guide Line #1

Absent a post remediation quality assurance/quality control sampling protocol for NCM-SaLUT to review and approve, NCM-SaLUT will accept the responsibility of "re-do's" for soil remediation based on the following parameters:

- Maximum number of homes in Zone 1A requiring soil remediation is 160, with an average lot size of 1/3 of an acre
- Post remediation sampling is of imported soils only, with assurances that non-remediated soils will not be sampled
- Soil sample results will be provided within 24 hours

#### Guide Line #2

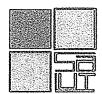
NCM-SaLUT's pricing is based on the average house size of 1,500 square feet as specified in the Request for Proposal. NCM-SaLUT proposes using the following clearance sampling criteria for lead wipe sample as published by HUD in Chapter 15 of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing:

- Floors 40 μg/ft<sup>2</sup>
- Interior window sills 250 µg/ft²
- Window troughs 400 μg/ft²

#### Guide Line #3

NCM-SaLUT does not intend to disturb any asbestos containing materials or lead based painted surfaces. In the event that NCM-SaLUT identifies the potential to disturb surfaces that may contain asbestos or lead based paint in order to complete the Scope of Work, NCM-SaLUT will notify the Settlement before proceeding. In addition, if there are pre-existing asbestos containing materials or lead based paint surfaces that have already been disturbed or are in poor condition, NCM-SaLUT will notify the Settlement to determine the appropriate course of action. If asbestos or lead paint renediation work needs to be performed, NCM-SaLUT can perform those services turnkey under separate proposal.





#### Guide Line #4

NCM-SaLUT confirms that any water necessary for outdoor remediation purposes will be provided from a local supply (i.e. fire hydrant) at no charge to NCM-SaLUT, and that necessary water for such will not be provided by the property owners.

#### Guide Line #5

NCM-SaLUT confirms that any and all ducts will be cleaned to a standard agreed to by both the Settlement and NCM-SaLUT, or replaced if cleaning can't be performed.

#### Guide Line #6

NCM-SaLUT confirms that all vacuum equipment will be HEPA equipped and that no vacuum exhaust will be discharged to the atmosphere without HEPA filtration. The discharge from the insulation vacuum will be directly into a covered roll off dumpster equipped with HEPA filters to allow exhaust air to be released.

#### Guide Line #7

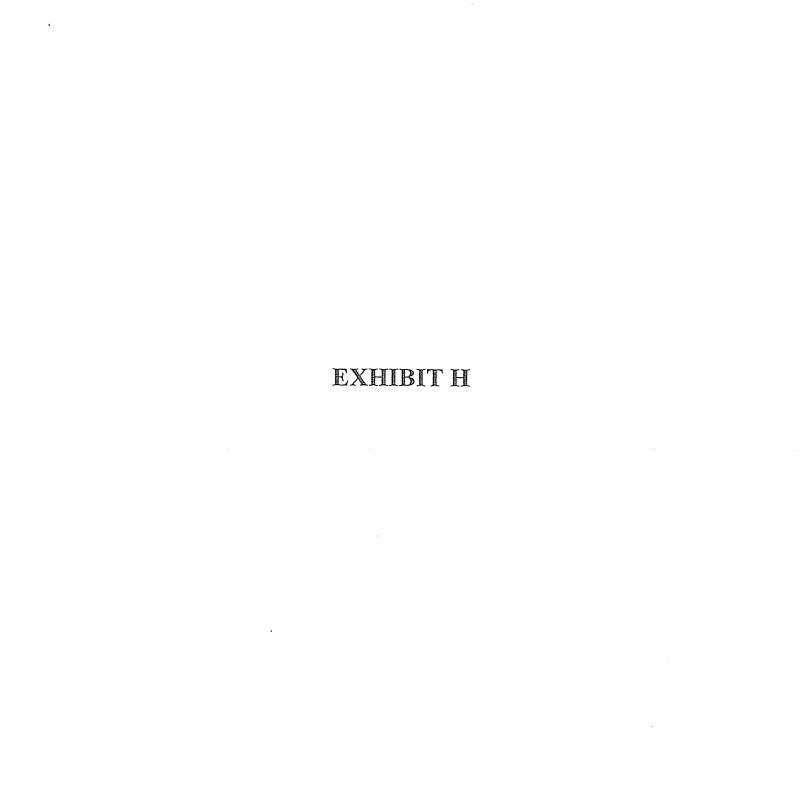
NCM-SaLUT accepts responsibility for "re-do's" for activities performed by NCM-SaLUT in accordance with our proposal and as noted above.

NCM-SaLUT all inclusive revised bid. \$14,820,000.00

NCM-SaLUT appreciates the opportunity to provide this revised bid, and can't wait to perform this project for both the Settlement and property owners.

Sincerely, NCM-SaLUT

Dennis Raver Program Manager



55 B Street
P. O. BOX 257
Spelter, West Virginia 26438
(304) 622-7443
(800) 345-0837
www.perrinedupont.com
perrinedupont@gtandslaw.com

February 8, 2012

The Perrine DuPont Settlement
Property Clean-Up RFP
Potential Bidder Questions and Answers Raised or Resulting
from February 3, 2012 Orientation Call

- Q1: Who are the known potential bidders, and how may another interested remediation company be added to the bidder list?
- A1: The known potential bidders are listed in Attachment B to the January 18, 2012 Report to the Court respecting the Property Clean-Up RFP (the "Report"), which is found on the <a href="https://www.perrinedupont.com">www.perrinedupont.com</a> website in the remediation subsection. All additional remediation companies are welcome to join as a bidder. To join as a bidder, merely timely submit your proposal under the terms of the RFP, which is Attachment A to the Report.
- Q2: When and where is the remediation site visit for potential bidders?
- A2: February 14, 2012 at 3:00 p.m. Eastern Time, beginning at the Spelter Fire Station on 55 B Street in Spelter, West Virginia 26438, at the Claims Office inside the Fire Station. When you get to Spelter, cross the bridge and drive into town. You will see the Fire Station on the right. It is a large yellow building. There are signs directing you to the Claims Office entrance at the Fire Station. You may call us at (304) 622-7443, if you need directions. If you plan to participate in the site visit, please call Ed Gentle at (205) 716-3000 or e-mail Ed Gentle at escrowagen@aol.com, so that we can accommodate all participants.
- Q3: Following the site visit, will there be another opportunity for bidders to ask questions?
- A3: Yes. Please submit all remaining questions in writing to Ed Gentle by February 17, 2012 at the close of business. We will provide our written answers by February 23, 2012.

- Q4: Because of the date of the site visit and the additional round of questions, will the bidder proposal deadline and the bidder interview date be changed?
- A4: Yes. The bidder proposal deadline is hereby extended to March 5, 2012 at the close of business, and the tentative bidder interview date, which could be changed, is March 12, 2012.
- Q5: Will the Settlement indemnify/hold harmless the winning bidder from claims brought as a result of the clean-up activities by class members or non-class members?
- A5: No. The winning bidder should have appropriate liability insurance covering any potential claims that might arise as a result of the clean-up work.
- Q6: What is the name of the entity with whom the successful bidder will be contracting?
- A6: The name of the entity is the Perrine DuPont Property Remediation Qualified Settlement Fund, an <u>Internal Revenue Code of 1986</u> Section 468(B) Qualified Settlement Fund, approved by the Court in this Settlement. Its immediate representative is Ed Gentle, the Special Master and Claims Administrator appointed by the Court. Mr. Gentle works for the Honorable Thomas A. Bedell, Circuit Judge of Harrison County, West Virginia, who supervises the Settlement.
- Q7: Will there be a third party hired by the Settlement to manage the contract?
- A7: Possibly. We are considering this possibility.
- Q8: Will the bid be awarded to one contractor or more than one? For example, may there be a soil contractor and a house contractor, or more than one soil or house contractor? Or, may the bid be awarded in pieces over time, by, for example, first awarding a Zone 1A soil contract only, followed by one or more house contracts? May I bid on only a part of the project?
- A8: Yes. All of these are possible. We will consider all possibilities as we review the bids.
- Q9: Have any sources for off-site borrow soils been approved?
- A9: The Settlement has not performed testing to identify suitable soils for replacement of excavated soils. However, as identified on pages 23 and 24 of the RFP (b. Pre-Construction Soil Testing), minimum criteria for demonstrating suitable replacement soils are presented. Also, please note on page 22 of the RFP (r. Sampling and Testing Procedures, the Settlement will also require one 5-point composite sample per remediated property to be analyzed for As, Cd, Pb, Zn by Inductively Coupled Plasma Mas Spectrometry (ICP-MS) by EPA Methods 200.8 & 6020. This shall be performed after the soil is placed as backfill for each property and results shall be provided to the Settlement in their efforts to provide property specific data to each property owner.

- Q10: On page 13 of the RFP, at the top, subparagraph b., it states, "The Contractor will provide a one (1) year warranty for all work completed." What is being warranted?
- A10: The contractor will warrant that the work was done in accordance with the RFP and the contract.
- Q11: Should the contractor post bond for the entire job or phase being contracted for or just the part that the contractor is working on?
- All: The whole contracted job.
- Q12: Does the project already have the money?
- A12: Yes.
- Q13: If the money runs out, what happens?
- A13: There is no more money.
- Q14: What are the Grasselli properties?
- A14: These are properties that are not in the clean-up program, because the owners of these properties in the 1920s or 1930s entered into written releases with DuPont.
- Q15: What's the size of the houses and the lots?
- A15: Make the assumptions in the RFP in submitting your bid.
- Q16: Will the soil and house test results be made available at this time, so as to allow the bidder to characterize the waste to be generated in carrying out the project to help determine the disposal location?
- A16: No. We do not have a date specific as to when test results will be provided.
- Q17: Should the bid depend on the character of the house, its size, and condition? How can we determine the condition of the house?
- A17: Assume the average dimensions of the houses described in the RFP. We will try to make a few participating houses available for inspection when the site inspection is conducted on February 14. However, we cannot warrant that the houses inspected will be representative.
- Q18: Will HVAC duct work be cleaned or replaced, and how will that be determined?
- A18: The scope of work presented by Dr. Brown's Report attached to the RFP, and in the RFP, indicates that HVAC duct work will be removed and replaced.

- Q19: What is the steepest slope where excavation may be performed?
- A19: We do not recommend that slopes greater than 2:1 should be disturbed. For any areas excavated by contractors, we require that any slopes be restored to not steeper than 2:1.
- Q20: For areas that are excavated, how close to buildings are contractors expected to excavate?
- A20: Contractors will be expected to maintain a 2-foot safe working distance for excavation equipment from any existing structure foundation or footing. Contractors will not be required to excavate beneath paved driveways, decks or crawlspaces. Hand digging may be utilized to recover accessible sod layers and attached soils at distances closer than 2-feet, but in no case should a structure be contacted.
- Q21: Will silt fencing or other best management practices be required for this project to control erosion?
- A21: For soil disturbed during excavation, follow the normal criteria to determine erosion and sediment control best management practices (BMP's). As indicated in the RFP, the WVDEP provides a guidance document for BMP's.
- Q22: Are there areas available to contractors for staging of equipment or temporary office shelters?
- A22: There are parcels of private property in Spelter which, due to location and topography, may be well suited for equipment staging or location of temporary office facilities. The Settlement recommends that Contractors inspect these areas during the scheduled site visit opportunity on February 14, 2012.
- Q23: If a contractor has complied fully with the clean-up specs, but a soil or house owner does not sign-off, will the Settlement assist the contractor in obtaining proper sign off that the job is complete as required by the Settlement and by the contract?
- A23: Yes.
- Q24: Will the Settlement accommodate the contractor in providing a reasonable time to obtain necessary permits in connection with grading and other matters involving the soil clean-up?
- A24: Yes.
- Q25: Will the Settlement provide the necessary access agreements.
- A25: Yes. Participating class members have already signed an access agreement contained in the Claim Forms attached to the June 27, 2011 Order that is attached to the RFP. In addition, the Settlement will provide other necessary forms to carry out the project, such as the owner sign-off agreement when the clean-up is completed for the soil or the house.

- Q26: Is there a mandatory completion date driven by a regulatory body or the Court?
- A26: No. However, we will try to complete the project in a timely manner, and the contract will have deadlines with penalties for noncompliance.
- Q27: What are the clearance criteria for post-remediation sampling?
- A27: These are being developed. In your bid, please provide the clearance criteria which you would recommend and give authority or precedent.
- Q28: When a homeowner is asked to sign-off on the clean-up, do the clearance criteria govern or subjective standards?
- A28: If the homeowner refuses to sign, then the clearance criteria govern.
- Q29: What will the contract look like?
- A29: In Attachment A we provide the Property Testing Contract, which will give you a good idea, as modified by this RFP.
- Q30: What are the addresses of the soil parcels to be cleaned and the houses to be cleaned?
- A30: The soils are in Zone 1A in the Class Area Map provided, which is generally the town of Spelter. The houses are throughout the Class Area. The soil parcels and houses will be specifically described to the Contractor, with GPS coordinates and photos for each house.
- Q31: The RFP mentions a Fairness Hearing. Where will it be?
- A31: At the Harrison County Courthouse in Spelter, West Virginia, in Judge Bedell's Courtroom.
- Q32: I have more questions that you have not answered. What do I do?
- A32: Please submit the questions to Ed Gentle in writing at <a href="mailto:escrowagen@aol.com">escrowagen@aol.com</a>. We will include them in the second round of questions following the site visit.

55 B Street
P. O. BOX 257
Spelter, West Virginia 26438
(304) 622-7443
(800) 345-0837
www.perrinedupont.com
perrinedupont@gtandslaw.com

February 23, 2012

The Perrine DuPont Settlement
Property Clean-Up RFP
Potential Bidder Questions and Answers Following
the February 14, 2012 Site Visit

- Q1: For bid submission, will the Settlement accept an electronic submission via email by 5:00 p.m. Monday, March 5<sup>th</sup> with a hard copy to follow on Tuesday, March 6<sup>th</sup>?
- A1: Yes.
- Q2: Who will coordinate access to properties?
- A2: The Settlement. The Settlement will provide the Contractor with an inventory of houses\* that are ready for soil and/or house\* remediation.
- Q3: Who is responsible for contents removal and staging?
- A3: The Contractor. When house\* clean-up activities require that house\* contents are removed from the house\* interiors, the Contractor will be responsible for packing and staging.
- Q4: Who will decide if contents are to be discarded (thrown away) or cleaned?
- A4: The house\* owner. Contractor will not be required to dispose of contents other than those specified in the RFP. Personal property will otherwise not be disposed of as part of the clean-up.

<sup>\*</sup>As defined in the June 27, 2011 Property Remediation Order in Exhibit A to the RFP, which may include some commercial structures that are fit for human occupancy and regularly occupied by people. The Settlement will make all determinations as to which structures will be remediated.

- Q5: Could you clarify for which zones carpet will be replaced and for which it will be cleaned?
- A5: See Attached Addendum.
- Q6: Will garages be cleaned as part of the Property Remediation Program?
- A6: No. The Settlement will define houses\* eligible for cleaning and make this information available to Contractor.
- Q7: Will wetland areas be included in the soil excavation program?
- A7: No.
- Q8: Will the Contractor be allowed to access attic spaces from the exterior even if a method for interior access is available?
- A8: Possibly. This will be determined on a case-by-case basis in agreement with the house\* owner and the Settlement.
- Q9: Will the Contractor be required to remove all duct work from houses\* where duct replacement is indicated in the RFP?
- A9: This will need to be determined on a case-by-case basis in agreement with the house\* owner. If portions of the duct work are inaccessible or housed within wall cavities and cannot be replaced, then only reasonably accessible duct work will be replaced.
- Q10: How many square feet should we assume when estimating carpet replacement?
- A10: The RFP asks that Contractor assume an average home size of 1,500 sq. ft. and that prices for carpet removal, and replacement for pad and carpet be provided in cost per sq. ft. units. The amount of carpeted surface will vary from house\* to house\*.
- Q11: How will the Contractor determine if furniture needs to be cleaned or replaced?
- All: The Settlement will not be replacing furniture. Please include reasonable time estimates for cleaning of furniture in your response.
- Q12: The RFP requests that the Contractor provide costs for post-clean-up verification sampling for house\* interiors. Will the selected clean-up Contractor(s) be performing sampling for work they have also cleaned?

<sup>\*</sup>As defined in the June 27, 2011 Property Remediation Order in Exhibit A to the RFP, which may include some commercial structures that are fit for human occupancy and regularly occupied by people. The Settlement will make all determinations as to which structures will be remediated.

- A12: No. Sampling will be performed by a third-party. Please do not provide a cost estimate.
- Q13: Which house\* will be cleaned first and which house\* will be cleaned last?
- A13: The Settlement will decide which houses\* are cleaned and when.
- Q14: Will some houses\* take cash instead of clean-up?
- A14: No.
- Q15: Will dirt floors be cleaned?
- A15: No.
- Q16: Will right-of-ways and alleys and other areas not owned by Class Members be cleaned?
- A16: No.
- Q17: Can you please provide a summary of the laboratory data collected thus far, or at the very least can you provide the geospatial distribution and degree of impact of the sampled properties?
- A17: The RFP already describes how many houses\* to bid on and how, approximately, they are distributed throughout the Class Area in the different zones. Remediation methods are the same regardless of the level of contamination, once we identify the target soil and houses\* to clean. We state in the RFP that bids are to account for both hazardous and non-hazardous disposal costs at an approved waste disposal facility, so the bidders need to prepare for both.
- Q18: As a practical matter, submitting proposals on Mondays is not preferred. Will you consider a bid extension until Wednesday March 7<sup>th</sup>?
- A18: No. Bids are due March 5.
- Q19: Can you confirm that direct cost for and management of resident relocation is the responsibility of the Settlement?
- A19: Please see the RFP Addendum in Attachment A to these Questions and Answers. Yes, relocation is and will be the Settlement's responsibility.
- Q20: During our site visit, the Settlement indicated a preference for a per unit (as opposed to hourly, equipment use, materials and other variable costs) quote. Please explain.

<sup>\*</sup>As defined in the June 27, 2011 Property Remediation Order in Exhibit A to the RFP, which may include some commercial structures that are fit for human occupancy and regularly occupied by people. The Settlement will make all determinations as to which structures will be remediated.

- A:20 Yes, we encourage Bidders to provide a fixed bid per house\* in each Zone and per lot of soil in Zone 1A, using assumptions in the RFP. The preferred unit bid would be all inclusive.
- Q21: You mentioned during the site visit that the Settlement is looking at alternative yard restoration methods in connection with the soil clean-up. Please Explain.
- A21: Yes, we are looking at seed and sod. Please provide alternative quotes. Please also suggest other restorative means you wish considered, including a per lot quote.

<sup>\*</sup>As defined in the June 27, 2011 Property Remediation Order in Exhibit A to the RFP, which may include some commercial structures that are fit for human occupancy and regularly occupied by people. The Settlement will make all determinations as to which structures will be remediated.

# Attachment A to February 23, 2012, Questions and Answers Following February 14, 2012 Site Visit

#### Addendum to RFP

In light of the questions posed at the February 14, 2012, site visit and information meeting, the Settlement has prepared the following Addendum to the Request for Proposals ("RFP"). As mentioned at the meeting, bids are due on or before March 5, 2012.

- 1. Documents granting the Settlement and the Contractor legal access to the properties will be procured by the Settlement.
- 2. The Settlement will review and analyze the current property sampling and the results will be disclosed to the Claimants before initiation of the remediation project. The Contractor is not responsible for dealing with or distributing these sampling results to the Claimants.
- 3. Before any work is started on a property, an individualized Property Report will be provided to the Contractor. The Property Report will include a photo of the property, a GPS way point providing the location of the property, and the Claimant's contact information. Other information may be included in the Report at the Contractor's reasonable request, depending on need and after a consideration of confidentiality concerns. The format of the Property Report will be evaluated with the successful bidder(s) during contract negotiations.
- 4. The Settlement will provide the Contractor with a list of eligible properties and will coordinate the scheduling of remediation with the Contractor and the Claimants. Pacing of remediation will depend on the abilities and personnel of the Contractor and will be discussed during the bidder interview process. A timeline and completion date for the project will be set during contract negotiation, with non-compliance penalties.
- 5. The first step of any individual property remediation will be an investigation of the property by the Contractor, the Settlement representative, and the Claimant. During this investigation, the Claimant will be invited to discuss

concerns with the process, individual characteristics and issues with the remediation of the property, and any special places or valuables of concern located in the house or on the soil property. The Contractor will photograph and/or videotape the property to document the condition of the property prior to the commencement of remediation. The Contractor will provide a digital copy of the photographs and videos to the Settlement to facilitate detailed recordkeeping. Individual records of the condition of the property both pre and post remediation, must be kept to insure that any potential Claimant complaints as to the condition of the property or alleged damage to the property are valid and are not pre-existing conditions. Contractor costs anticipated for the activities referenced in this paragraph should be included in the property unit price bid schedule.

- 6. After the above investigation of the property is complete, the Contractor, the Settlement representative, and Claimant will discuss the scope of the property's remediation plan as well as a starting date and proposed timeline for completion. At this time, specific remediation issues such as attic access, will be discussed and a case-by-case determination as to interior versus exterior access of attics will be made. After agreeing to the plan, the Contractor, the Settlement representative, and the Claimant will sign off on remediation plan. Contractor costs anticipated for the activities referenced in this paragraph should be included in the property unit price bid schedule.
- 7. The Contractor, the Settlement representative, and the Claimant will determine whether or not Claimant relocation is necessary. If relocation of Claimants and/or pets is necessary and desired by the Claimants, the Settlement will pay for and coordinate the relocation.
- 8. If the Claimant disagrees with the individualized property remediation plan, the Settlement will resolve the disagreement, with an appeal process if necessary.
- 9. The removal of personal property from the yard and/ or house\* that is necessary to conduct the remediation process is the responsibility of the Contractor. If the Claimant refuses to allow the removal of personal property, the Settlement and the Contractor will work with the Claimant to resolve the issue, including obtaining a written waiver of remediation as to any areas rendered

inaccessible. The Settlement does not expect small personal items such as clothing in a dresser or the contents of a closet or boxes or other containers to be removed to remediate a house\*.

- 10. As to the determination of whether the contents of the house\* should be thrown away or stored for safekeeping during remediation, the Contractor is responsible for the disposal of the materials generated by the remediation process, such as removed carpets, construction materials, removed attic insulation and removed duct work.
- 11. Under this Addendum to the RFP, the RFP now requires removal and replacement of carpets in residential houses\* and commercial structures in Zones 1 only. Carpets in residential houses\* and in commercial structures in Zone 2 and 3 will be cleaned, not replaced. Any inconsistency as to carpet removal versus carpet cleaning in the RFP is expressly replaced by this Addendum. Carpet cleaning and replacement is to be bid on a per square foot basis and the RFP assumes 1500 square feet per house\* or commercial structure, for purposes of the bidding process. There are no house\*/commercial structure differences in cleanup.
- 12. Duct work is to be replaced where feasible but cleaning will be considered on a case-by-case basis if a substantial cost savings can be realized.
- 13. There should be no estimation of cost for replacing furniture in Zone 1 or anywhere in the Class Area. All upholstered furniture throughout the Class Area is to be cleaned, not replaced.
- 14. The remediation efforts will be directed to habitable houses\* and commercial structures fit for human occupancy and regularly occupied by people, as solely determined by the Settlement. In this regard, adjoining structures such as garages and outbuildings will NOT be remediated.
- 15. There has been no determination or delineation of any wetland areas that may affect soil remediation in Zone 1A. The Settlement does not intend to remediate or disturb any soil in wetland areas. Contractors are not to excavate or encroach on any wetland areas.

- 16. During every day of the Project the work day will begin with a meeting where the Contractor will report to the Settlement's Remediation Superintendent, and sign in. The meeting will be held at a mutually agreed upon location. During the meeting the properties to be remediated that day will be identified and discussed, and the timelines for the individual properties and the project as a whole will be reviewed. Safety meetings will occur on a weekly basis.
- 17. At the end of remediation for a property, the Contractor, the Settlement representative, and the Claimant will review the property and sign a form stating what work has been completed. The Claimant will agree that the work has been completed and that there has been no damage to home and sign a waiver to that effect. If there are any disputes as to the completion of the work, the Settlement will mediate the disputes and provide an appeal process if necessary. Contractor costs anticipated for the activities referenced in this paragraph should be included in the property unit price bid schedule.
- 18. A third party Sampling Contractor will test the property to confirm that hazardous levels of heavy metals have been remediated. Please note that this portion of the Addendum represents a change from the RFP. The Settlement has decided to remove any ethical concerns or potential conflict of interests in the post-remediation sampling by having a third party Sampling Contractor conduct the sampling. Bidding on post-remediation sampling is no longer a required part of the response to the RFP.
- 19. The post-remediation sampling results will be communicated to the Contractor, the Settlement, and the Claimant. If hazardous levels of the tested heavy metals are present after the initial remediation, althorative remedial approaches and costs will be discussed with the Contractor at that time.
- 20. Once the Settlement verifies that remediation is complete, a final completion form for the property will be executed by the Contractor, the Settlement, and the Claimant.
- 21. Although terms of payment will be negotiated during Contract finalization, the Settlement is proposing a 20/60/20 payment process whereby 20% of payment will be made when work on a property commences, 60% of payment will be made when work is completed and initial sign-off from the Contractor,

Settlement representative, and Claimant is obtained, and the final 20% will be paid when post-remediation sampling confirms that hazardous levels of heavy metal contamination have been removed and final sign-off is obtained.

22. The Contractor is required to have a drug-free work force, whether employees or sub-contractors.

55 B Street P. O. BOX 257 Spelter, West Virginia 26438 (304) 622-7443 (800) 345-0837

www.perrinedupont.com perrinedupont@gtandslaw.com

#### **MEMORANDUM**

## VIA E-MAIL CONFIDENTIAL

TO:

Alert Environmental, Tim Callison Alerteci@aol.com

AMEC, Vicki Acker Vicki.acker@amec.com

Apex Environmental, Eric Rager erager@apexcos.com

Bear Contracting, LLC, Chad Hammond chammond@bear-contracting.com

Burnham Industrial Contractors, Tim Burnham twb@binsul.com

C.J. Hughes Construction Co, Christopher Randolph <u>crandolph@cjhughes.com</u> CODE Environmental Services, Martin Brubaker, meb@codeenvironmental.com

Core Environmental, Tom Rebar trebar@core-env.com

Crest Environmental Services, Dennis Bincarosky dennis@crestenv.com

CTL Engineering, Roy Loucks rloucks@ctleng.com

ENTACT, LLC, Tina Raap traap@entact.com

Envirocon, Lori Matthews missoula1150@gmail.com

Environmental Specialty Services, Richard Berg richberg@essdirect.com

Exposure Assessment, Inc, Jon Anderson jbaanderson@yahoo.com

GVH Environmental, Inc. Frank Armanini farmanini@hamiltongv.com

Kemron Environmental, Benjamin Greene bgreene@kemron.com

Lewis Environmental, Inc, Robert Hilliard rhilliard@lewisenvironmental.com

Miller Environmental. Bob Kleinschmidt bob.k@millerenv-wv.com

Mistick Construction, Leo Makosky lmakosky@mistickconstruction.com

MSEA Consulting, Rick Wyont v.not@msesinc.com

National Environmental Contracting, Kelley Fisher kelleyf@necontracting.com

NCM Demolition and Remediation, Daniel Raver Draver@ncmgroup.com

Ontario Specialty Contracting, Jill Copeland jcopeland@oscinc.com

Pace Analytical Services, Paul Painter paul.painter@pacelabs.com

Panhandle Restoration, Gwen Porter gwen@panhandlecr.com

Panther Technologies, Inc. Don Lamparella diamparella@panthertech.com

Panther Technologies, Inc. Chris Miller cmiller@panthertech.com

Puroclean, John Woods jwoods@puroclean.com

Remediation Services, Inc, Butch Holum bholum@rsi-ks.com

Ryan Environmental, Al Anderson aanderson@ryanenviro.com

SCS Environmental Contracting, Mark Matson mmatson@scscontracting.net

Servpro, Ralph Grimm, sp9348@verizon.net

Shaw Group, Brian Beattie brian.beattie@shawgrp.com

Spikes Chimney, Mike Adams <a href="mailto:spikeschimneysweep@frontiernet.net">spikeschimneysweep@frontiernet.net</a>
Sturm Environmental Services, Vicki Hoops <a href="mailto:vhoops@sturmenvironmental.com">vhoops@sturmenvironmental.com</a>
SWS Environmental Services, Eric Brown <a href="mailto:eric.brown@swsenvironmental.com">eric.brown@swsenvironmental.com</a>
SWS Environmental Services, Brian Metcalf<a href="mailto:brian.metcalf@swsenvironmental.com">brian.metcalf@swsenvironmental.com</a>
Thrasher Engineering, Andy Kincell <a href="mailto:akincell@thrashereng.com">akincell@thrashereng.com</a>
Triad Engineering, Jim Maurin <a href="mailto:jmaurin@triadeng.com">jmaurin@triadeng.com</a>
Viasant, Tom Swart <a href="mailto:tswart@viasant.com">tswart@viasant.com</a>
Viasant, Rich Wood <a href="mailto:rwood@viasant.com">rwood@viasant.com</a>

Waste Management, John Wakin jwakin@wm.com

FROM:

Edgar C. Gentle, III, Esq.

DATE:

March 8, 2012

RE:

<u>Perrine DuPont</u> Settlement; Property Remediation Request for Proposals - Follow-Up Questions After Preliminary Bid Analysis; Our File No. 4609-1 {DD-19}

#### Dear Bidders:

In order to help us evaluate your bids, please consider the following questions:

- 1. For those who bid on both the soil and the house remediation, please consider providing a separate stand alone all-inclusive bid for each.
- 2. For those bidding on soil remediation, please consider providing a bid using sod instead of seed and include an all-inclusive waste disposal quote assuming there are 40,000 tons of non-hazardous waste and include ALL waste disposal costs in your quote.

Yours very truly,

ECGIII/kah

cc: (by e-mail)(confidential)

Stephanie D. Thacker, Esq., DuPont Representative on the Settlement Finance Committee Virginia Buchanan, Esq., Plaintiff Class Representative on the Finance Committee

Diandra Debrosse, Esq. Katherine A. Harbison, Esq.

Michael Jacks, Esq. Mr. Marc Glass Mr. Billy Sublett

55 B Street P. O. BOX 257

Spelter, West Virginia 26438

(304) 622-7443

(800) 345-0837

www.perrinedupont.com perrinedupont@gtandslaw.com

#### **MEMORANDUM**

## VIA E-MAIL CONFIDENTIAL

TO: Alert Environmental, Tim Callison Alerteci@aol.com

AMEC, Vicki Acker Vicki.acker@amec.com

Apex Environmental, Eric Rager erager@apexcos.com

Bear Contracting, LLC, Chad Hammond chammond@bear-contracting.com

Burnham Industrial Contractors, Tim Burnham twb@binsul.com

C.J. Hughes Construction Co, Christopher Randolph <u>crandolph@cjhughes.com</u>

CODE Environmental Services, Martin Brubaker, meb@codeenvironmental.com

Core Environmental, Tom Rebar trebar@core-env.com

Crest Environmental Services, Dennis Bincarosky dennis@crestenv.com

CTL Engineering, Roy Loucks rloucks@ctleng.com

ENTACT, LLC, Tina Raap traap@entact.com

Envirocon, Lori Matthews missoula1150@gmail.com

Environmental Specialty Services, Richard Berg richberg@essdirect.com

Exposure Assessment, Inc, Jon Anderson jbaanderson@vahoo.com

GVH Environmental, Inc, Frank Armanini farmanini@hamiltongv.com

Kemron Environmental, Benjamin Greene bgreene@kemron.com

Lewis Environmental, Inc, Robert Hilliard rhilliard@lewisenvironmental.com

Miller Environmental, Bob Kleinschmidt bob.k@millerenv-wv.com

Mistick Construction, Leo Makosky Imakosky@mistickconstruction.com

MSEA Consulting, Rick Wyont v.not@msesinc.com

National Environmental Contracting, Kelley Fisher kelleyf@necontracting.com

NCM Demolition and Remediation, Daniel Raver <u>Draver@ncmgroup.com</u>

Ontario Specialty Contracting, Jill Copeland jcopeland@oscinc.com

Pace Analytical Services, Paul Painter paul.painter@pacelabs.com

Panhandle Restoration, Gwen Porter gwen@panhandlecr.com

Panther Technologies, Inc. Don Lamparella dlamparella@panthertech.com

Panther Technologies, Inc, Chris Miller cmiller@panthertech.com

Puroclean, John Woods iwoods@puroclean.com

Remediation Services, Inc., Butch Holum bholum@rsi-ks.com

Ryan Environmental, Al Anderson aanderson@ryanenviro.com

SCS Environmental Contracting, Mark Matson mmatson@scscontracting.net

Servpro, Ralph Grimm, sp9348@verizon.net

Shaw Group, Brian Beattie brian.beattie@shawgrp.com

Spikes Chimney, Mike Adams <a href="mailto:spikeschimneysweep@frontiernet.net">spikeschimneysweep@frontiernet.net</a>
Sturm Environmental Services, Vicki Hoops <a href="mailto:yhoops@sturmenvironmental.com">yhoops@sturmenvironmental.com</a>
SWS Environmental Services, Eric Brown <a href="mailto:eric.brown@swsenvironmental.com">eric.brown@swsenvironmental.com</a>
SWS Environmental Services, Brian Metcalf <a href="mailto:brian.metcalf@swsenvironmental.com">brian.metcalf@swsenvironmental.com</a>
Thrasher Engineering, Andy Kincell <a href="mailto:akincell@thrashereng.com">akincell@thrashereng.com</a>
Triad Engineering, Jim Maurin <a href="mailto:jmaurin@triadeng.com">jmaurin@triadeng.com</a>
Viasant, Tom Swart <a href="mailto:tswart@viasant.com">tswart@viasant.com</a>
Viasant, Rich Wood <a href="mailto:rwood@viasant.com">rwood@viasant.com</a>
Waste Management, John Wakin <a href="mailto:jwakin@wm.com">jwakin@wm.com</a>

FROM:

Edgar C. Gentle, III, Esq.

DATE:

March 9, 2012

RE:

<u>Perrine DuPont</u> Settlement; Property Remediation Request for Proposals - Additional Question Posed by Bidder; Our File No. 4609-1 {DD-19}

#### Dear Bidders:

Please see the below Question posed by one Bidder, and our response to the same.

Q1. Should soil remediation bids assume 40,000 tons of clean replacement soil?

A1. Yes.

Edgar C. Gentle, III

Yours verwtru

#### ECGIII/kah

cc: (by e-mail)(confidential)

Stephanie D. Thacker, Esq., DuPont Representative on the Settlement Finance Committee Virginia Buchanan, Esq., Plaintiff Class Representative on the Finance Committee Diandra Debrosse, Esq.

Katherine A. Harbison, Esq.

Michael Jacks, Esq. Mr. Marc Glass

Mr. Billy Sublett

55 B Street P.O. BOX 257

Spelter, West Virginia 26438

(304) 622-7443

(800) 345-0837

www.perrinedupont.com perrinedupont@gtandslaw.com

#### **MEMORANDUM**

#### VIA E-MAIL CONFIDENTIAL

TO:

Alert Environmental, Tim Callison Alerteci@aol.com

AMEC, Vicki Acker Vicki.acker@amec.com

Apex Environmental, Eric Rager erager@apexcos.com

Bear Contracting, LLC, Chad Hammond chammond@bear-contracting.com

Burnham Industrial Contractors, Tim Burnham twb@binsul.com

C.J. Hughes Construction Co, Christopher Randolph crandolph@cjhughes.com

CODE Environmental Services, Martin Brubaker, meb@codeenvironmental.com

Core Environmental, Tom Rebar trebar@core-env.com

Crest Environmental Services, Dennis Bincarosky dennis@crestenv.com

CTL Engineering, Roy Loucks rloucks@ctleng.com

ENTACT, LLC, Tina Raap traap@entact.com

Envirocon, Lori Matthews missoula1150@gmail.com

Environmental Specialty Services, Richard Berg richberg@essdirect.com

Exposure Assessment, Inc, Jon Anderson jbaanderson@yahoo.com

GVH Environmental, Inc, Frank Armanini farmanini@hamiltongv.com

Kemron Environmental, Benjamin Greene bgreene@kemron.com

Lewis Environmental, Inc, Robert Hilliard rhilliard@lewisenvironmental.com

Miller Environmental, Bob Kleinschmidt bob.k@millerenv-wv.com

Mistick Construction, Leo Makosky Imakosky@mistickconstruction.com

MSEA Consulting, Rick Wyont v.not@msesinc.com

National Environmental Contracting, Kelley Fisher kelleyf@necontracting.com

NCM Demolition and Remediation, Daniel Raver <u>Draver@ncmgroup.com</u>

Ontario Specialty Contracting, Jill Copeland icopeland@oscinc.com

Pace Analytical Services, Paul Painter paul.painter@pacelabs.com

Panhandle Restoration, Gwen Porter gwen@panhandlecr.com

Panther Technologies, Inc., Don Lamparella dlamparella@panthertech.com

Panther Technologies, Inc. Chris Miller cmiller@panthertech.com

Puroclean, John Woods iwoods@puroclean.com

Remediation Services, Inc., Butch Holum bholum@rsi-ks.com

Ryan Environmental, Al Anderson aanderson@ryanenviro.com

SCS Environmental Contracting, Mark Matson mmatson@sescontracting.net

Servpro, Ralph Grimm, sp9348@verizon.net

Shaw Group, Brian Beattie brian.beattie@shawgrp.com

Spikes Chimney, Mike Adams spikeschimneysweep@frontiernet.net

Sturm Environmental Services, Vicki Hoops <a href="https://www.com">whoops@sturmenvironmental.com</a>
SWS Environmental Services, Eric Brown <a href="mailto:eric.brown@swsenvironmental.com">eric.brown@swsenvironmental.com</a>
SWS Environmental Services, Brian Metcalf <a href="mailto:brian.metcalf@swsenvironmental.com">brian.metcalf@swsenvironmental.com</a>
Thrasher Engineering, Andy Kincell <a href="mailto:akincell@thrashereng.com">akincell@thrashereng.com</a>
Triad Engineering, Jim Maurin <a href="mailto:jmaurin@triadeng.com">jmaurin@triadeng.com</a>
Viasant, Tom Swart <a href="mailto:tswart@viasant.com">tswart@viasant.com</a>
Viasant, Rich Wood <a href="mailto:rwood@viasant.com">rwood@viasant.com</a>
Waste Management, John Wakin <a href="mailto:jwakin@wm.com">jwakin@wm.com</a>

FROM:

Edgar C. Gentle, III, Esq.

DATE:

March 9, 2012

RE:

<u>Perrine DuPont</u> Settlement; Property Remediation Request for Proposals - Additional Questions Posed by Bidder; Our File No. 4609-1 {DD-19}

#### Dear Bidders:

Please see the below Questions posed by a Bidder, and our responses.

- Q1. Do you want separate Bid Sheets for soil remediation and house remediation, or one long sheet with different options?
  - A1. We want a separate stand alone bid for soil, the same for house remediation, and a consolidated one if a Bidder desires to make any or all of them.
- Q2. Do you want one price for soil remediation using seed/fertilizer and mulch (or hydroseeding) and a separate price with sod included, or are you looking for a unit price for sod or just the additional cost for using sod instead of hydroseeding?
  - A2. We are considering using sod instead of seed, so we want soil bids with sod how ever the Bidder thinks it is best to present it.

Edward Continu

#### ECGIII/kah

cc: (by e-mail)(confidential)

Stephanie D. Thacker, Esq., DuPont Representative on the Settlement Finance Committee Virginia Buchanan, Esq., Plaintiff Class Representative on the Finance Committee

Diandra Debrosse, Esq. Katherine A. Harbison, Esq.

Michael Jacks, Esq.

Mr. Marc Glass

Mr. Billy Sublett



## PERRINE DUPONT SETTLEMENT REMEDIATION PROJECT UNIFORM PRICE BID FORM

NAME OF FIRM:	NCM-Salui
al .	
DATE OF STIRMIS	SION: March 5, 2012 Pay 2 April 23 2012

#### Preamble

Class Member participation in the Settlement's remediation program is voluntary and ongoing. Testing is on-going to determine the exact total number of properties that need to be remediated based on contamination levels and available limited monies. Accordingly, the final number of properties that need to be remediated is not finalized. <u>Bid assumptions</u>: (i) <u>Soil</u>: Assume that, for purposes of your bid only, the average property size for <u>soil remediation</u> is 1/3 of an acre and that 160 parcels of soil will be remediated to a depth of 6 inches in Zone IA only of the Class Area (the immediate Spelter area around the old zine smelter site). These properties are referred to below as the "Soil Properties." (ii) <u>Houses</u>: Assume that, for purposes of your bid only, 600 houses, averaging 1500 square feet, will be remediated throughout the Class Area, broken down by Zone as described below. See attached Class Area map.

#### A. Quality Assurance

1. Fixed Fee to develop Quality Assurance Project Plan, Health and Safety Plan, and/or any other Project documentation required by this RFP.

\$ 18.000.00

#### B. Soil Remediation

Per Soil Property price for remediation, as described in the RFP. At this time, the Settlement
intends to remediate contaminated soil to a depth of 6 inches, to include soil excavation,
loading, removal, and transportation of excavated soil to an acceptable disposal location, and
purchase of and replacement with clean soil, import and placement of the clean soil from an
approved off-site source, and property restoration.

\$ 28,625.00

 Per Soil Property price for the soil property wrap-up sampling and laboratory analysis of the samples of the clean replacement soil after Remediation is complete for each Soil Property.

\$ Deleted from SOW

3.	Per Ton price for disposal of contaminated soil (provide both hazardous and non-hazardous price scale) at an acceptable site.
	(Non-Hazardous Per Ton Disposal Fee) \$ 63.50 *40,000 tons = \$2,540,000
	(Hazardous Per Ton Disposal Fee) \$ 215.00
4.	Total general costs for soil project charged on a <u>Per Soil Property basis</u> not included in 1, 2, or 3 ( <u>i.e.</u> air quality monitoring, staging, etc.)
	\$ <u>3,250.00</u>
	C. House Remediation (Complete Attached Worksheet Also)
Wanted .	Per House price for Remediation, Zone 1 Intensive Interior Remediation, per the Brown Expert Report attached to RFP (assume 235 houses).
	\$ <u>15,100.00</u>
2.	Per House price for Remediation, Zone 2 Moderate Interior Remediation, per the Brown Expert Report attached to RFP (assume 210 houses).
	\$ 9.850.00
3.	Per House price for Remediation, Zone 3 Lesser Interior Remediation, per the Brown Expert Report attached to RFP (assume 155 houses).
	\$_9,800.00
4.	Per liouse price for wrap-up sampling and laboratory analysis of the samples after house Remediation is complete for each boose.
	\$ Deleted from SOW
	D. Other
1.	Per Soil Property and per house price for removal and disposal of investigation derived waste and decontamination waste disposal fee (if any) and any other charges not included above.

Page 2 of 10

(Per	Soil	Pro	operty	Fee)	2	50.00
	(F	er)	House	Fee)	\$	30.00

#### E. Total Estimate

(A + B + C + D) (Assume 160 Soil Properties and 600 Houses [with House per Zone breakdown above])

1. Total Project Estimate if you obtain the Entire Award (More than one Bidder may be chosen) NOT TO EXCEED FEE QUOTE

\$ 14	820	.000	.00	

NOTE: All pricing shall be based upon the Request for Proposal Statement of Work and all unit costs must include labor, materials, travel costs, meals and incidental expenses, PPE costs, and project oversight/management, any applicable permit fees, with permitting being the Bidder's responsibility. All analytical fees shall include sampling materials, containers, preservatives, shipping & handling charges, stock items, and all consumables. Although this bid is based upon the above assumptions, the Bidder agrees to be flexible and to maintain the above unit prices unless the assumption numbers or amounts vary by more than 20%.

PLEASE COMPLETE ATTACHED HOUSE WORKSHEET



### IN THE CIRCUIT COURT OF HARRISON COUNTY, WEST VIRGINIA

	LENORA PERRINE, CAROLYN HOLBERT, WAUNONA MESSINGER, REBECCAH MORLOCK, ANTHONY BEEZEL, MARY ELLEN MONTGOMERY, MARY LUZADER, TRUMAN R. DESIST, LARRY BEEZEL, and JOSEPH BRADSHAW, individuals residing in West Virginia, on behalf of themselves and all others similarly situated,	,
--	---	---

Plaintiffs,

VS.

Case No. 04-C-296-2

E.I. DU PONT DE NEMOURS AND

COMPANY, a Delaware corporation doing
business in West Virginia, MEADOWBROOK

CORPORATION, a dissolved West Virginia
corporation, MATTHIESSEN & HEGELER

ZINC COMPANY, INC., a dissolved Illinois

Corporation formerly doing business in West

Virginia, NUZUM TRUCKING COMPANY,

a West Virginia corporation, T. L. DIAMOND

& COMPANY, INC., a New York corporation

doing business in West Virginia, and JOSEPH

PAUSHEL, an individual residing In West

Virginia,

Defendants.

EXPERT REPORT OF KIRK W. BROWN, PH.D.

(Signature)

April 2, 2007

## TABLE OF CONTENTS

Secti		Page
1.0	INTRODUCTION	1
1.1 1.2 1.3 1.4 1.5	Personal Background/Qualifications Prior Expert Testimony Compensation Exhibits	2
2.0	DATA OR OTHER INFORMATION CONSIDERED	3
3.0	SITE BACKGROUND	4
3.1 3.2 3.3 3.4	SITE HISTORY AND OPERATIONS  ADJACENT COMMUNITIES  WASTE CHARACTERIZATION AND COMPOSITION  WIND DISPERSION AND TRANSPORT.	4 4 5
4.0	SOIL SAMPLING	8
5.0	HOUSE DUST SAMPLING	8
6.0	INDOOR AIR QUALITY SAMPLING RESULTS	9
6.1 6.2	COMPARISON TO NAAQ STANDARDS	9 . 10
7.0 7.1 7.2 7.3 7.4	DATA HANDLING  REMOVAL OF OUTLIERS.  CORRECTION FOR BACKGROUND CONCENTRATIONS.  DATA CORRELATION  LIMITATION OF FIELD MEASURED AIR CONCENTRATIONS.	. 10
8.0	FINGERPRINT OF WASTES	
8.1	COMPARISON THROUGHOUT CLASS AREA	. 16
9.0	RISK DUE TO SMELTER METAL CONTRIBUTION	
10.0	REMEDIATION STRATEGY	. 19
10.2 10.3 10.4 10.5	ELIGIBILITY  DESIGNATION OF REMEDIATION ZONES  SOIL REMEDIATION.  INTENSITY OF REMEDIATION.  PRECEDENCE FOR REMEDIATION.  REMEDIAL COSTS	.20 .20 .21
11.0	OPINIONS AND BASIS OF OPINIONS	. 25

11.2 AREA	-WIDE IMPACT. 25					
11.2 Area-wide Impact						
11.4 RISK						
11.5 NECE:	11.4 RISK					
11.7 REME	DIATION COSTS 26					
	27					
	TAIDEN OF MANY TO					
	INDEX OF TABLES					
Table						
	<u>Description</u>					
Table 1	Summary of Dust Sample Results					
	•					
	•					
	INDEX OF FIGURES					
<b>y</b> 4.						
<u>Figure</u>	<u>Description</u>					
Figure 1	Site Map					
Figure 2	Wind rose					
Figure 3	Dust Sampling Locations					
Figure 4	Remediation Zones					
, ,						
	INDEX OF APPENDICES					

**Appendix** 

Appendix 1

Appendix 2

Appendix 3

Appendix 4
Appendix 5

Appendix 6

Description

Resume with Listing of Publications Authored

Statistical Correlation Procedures

Waste Characterization Analysis

Risk Assessment

Listing of Previous Testimony at Trial and Deposition Documents Relied upon for Preparation of this Report

#### 1.0 INTRODUCTION

I have been retained by the firm of Levin, Papantonio, Thomas, Mitchell, Echsner, & Proctor on behalf of the plaintiffs in this matter to provide my professional opinions concerning the need for remediation and restoration of the properties including soils and structures within the class area ("CA"), the extent of the impact of the toxic metals, the incremental contribution of metals to the CA as a result of the smelter operations, the cancer risk to class residents, the extent of remediation needed, and the remediation costs. I reserve the right to update my analysis as other witnesses, including opposing experts, provide additional data for my review.

#### 1.1 Personal Background/Qualifications

From 1970 through 2001, I was employed as a Professor of Soil and Crop Sciences in the Soil and Crop Sciences Department, Texas A&M University, College Station, Texas. My educational background includes a Bachelor of Science degree in Agronomy from Delaware Valley College (1962), Masters of Science degree in Agronomy/Plant Physiology from Cornell University (1964), and Doctor of Philosophy degree from University of Nebraska (1969). My résumé is attached as Appendix 1. It includes my complete list of publications.

While a member of the faculty at Texas A&M University, I have conducted numerous research efforts. As a result of this research, I have authored or co-authored more than 190 scientific articles including numerous articles dealing with the disposal and treatment of waste materials, including Resource Conservation and Recovery Act ("RCRA") hazardous wastes and metals including arsenic, cadmium, lead and zinc contained therein and the problems arising therefrom. I have conducted numerous research projects for the U.S. Environmental Protection Agency ("EPA") on the fate and transport of contaminants, including RCRA hazardous wastes and Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") hazardous substances, in the environment. I also served on panels for EPA, where I reviewed the fate and transport of hazardous substances as well as risk assessment procedures for development of EPA's Hazardous Ranking Score for Superfund Sites.

I have conducted research in a national center funded by the EPA to study the fate of hazardous substances in the environment. I taught courses in Soil Physics which include topics on the movement of air, water, and other fluids in the soil, and a graduate course on the land disposal of wastes, which includes consideration of the principles and practices applicable to the fate, mobility, risk, and clean-up of contaminated sites. Students in these classes included engineers, soil scientists, chemists, and geologists. I have served on hundreds of advanced degree committees in these and related disciplines.

I founded K. W. Brown and Associates, Inc. in February 1980, and served as President through January 2000. In January 2000, SI Group, LP ("SI Group") purchased the consulting interests of K. W. Brown and Associates, Inc. and I am currently retained as a principal consultant to this firm. Through these years of consulting, I have been employed by numerous private and public clients. My expertise has been utilized for site assessments, data review and interpretation, the study of fate and transport of contaminants in the environment, air dispersion of dust, assessment of exposure concentrations, calculation of health risks and other related environmental matters. I have also reviewed and interpreted a large quantity of analytical data for soils, dust, air, and water, as well as borings logs, field logs, technical reports, and other information related to the environmental conditions of a site. As a consultant, I have evaluated or analyzed numerous waste disposal and landfill sites including the following: Laurel Park Landfill, Beacon Heights Landfill, Lone Pine Landfill, Ft. Bend County Landfill, and Sinton Landfill, among others. In addition, I have also worked on the following Superfund sites: Hardage Criner, Love Canal Landfill, Lowrey Landfill, Montana Pole, National Gypsum, Riley Tar, Sharon Steel, Metal Bank of America, Sikes Pits, Turtle Bayou, Tar Creek, Boarhead Farms, and the West Dallas Lead Site.

#### 1.2 Prior Expert Testimony

A list of cases in which I have rendered opinions is included in Appendix 2.

#### 1.3 Compensation

My company is being compensated at customary rates for its work in these cases. My hourly rate of compensation is \$300 per hour for non-testimony time and \$350 per hour for testimony time.

#### 1.4 Exhibits

I may use as exhibits any document contained or referred to in this report, or supplements to this report, including but not limited to the appendices; any document needed as foundation for or illustration of my testimony; any document listed as an exhibit or provided in discovery by Plaintiffs or any other party; any document considered by any of the Plaintiffs' or any other party's experts; or any document needed to respond to or to rebut testimony on behalf of Defendants or any other party. I reserve the right to provide lists of exhibits as permitted by the West Virginia Rules of Civil Procedure and the Scheduling Orders in this case.

### 1.5 Reservation of Rights

I reserve the right to supplement or modify opinions expressed herein upon which I expect to testify, to add to or modify the bases and reasons for my opinions and supplement the exhibits that I may use at trial for any of the following reasons: (1) to respond to expert reports, including but not limited to rebuttal reports, conducted for Defendants or for any other party; (2) to respond to new information; (3) to respond to information obtained in discovery, including but not limited to depositions and interviews; and (4) as permitted by West Virginia Rules of Civil Procedure.

## 2.0 DATA OR OTHER INFORMATION CONSIDERED

This report was developed as a result of discovery of data, which I have obtained or has been provided to me by counsel. As part of my work in this matter, I visited the CA and conducted field investigations on three occasions. As a result of these field activities, I am intimately familiar with the characteristics of and the hazardous substances contained in the soils and indoor dust located throughout the CA (SI Group, 2005a, SI Group, 2005b, SI Group, 2007). Previously, I have prepared two expert reports, which detail my opinions of the former smelter and the communities within the CA (Brown, 2005; Brown, 2006), which were submitted to the Court on November 11, 2005 and February 28, 2006. I have also provided deposition testimony on my opinions in this matter on January 25-26, 2006 and February 10, 2006. The opinions I have formed in this case are based on my education and experience listed in Section 1.0, as well as the information listed in Appendix 3.

## 3.0 SITE BACKGROUND

## 3.1 Site History and Operations

The former DuPont smelter began operations in 1911 and continued through 2001. The smelter is situated in the northeast portion of Harrison County, roughly seven miles north of Clarksburg, West Virginia, on the banks of the West Fork River in the unincorporated town of Spelter (Figure 1). The smelter is bounded by the West Fork River bluff on the north, west, and southwest sides and abandoned rail lines on the north and east.

The smelter began operating as a primary zinc smelter in 1911. Slab zinc was produced in 8 horizontal retort coal-fired furnaces from 1916 through 1930. In 1929, sixteen vertical retort furnaces were constructed and became operational in 1930 (Morrison, 1964). In 1951, the plant was upgraded and modernized with numerous modifications. Upgrading and modernization continued through the 1960s including the construction of a 175-foot stack in 1964 (Morrison, 1964). In 1971, the smelter was converted into a secondary smelting facility and continued to operate until 2001.

Site restoration activities included demolishing the smelter and most onsite buildings along with removing the debris for off-site disposal (W-C Diamond, 2000a). Additional dust containing toxic metals was released to the air during demolition and remedial activities (DPZ0011344 – DPZ0011472). On-site excavation removed contaminated soils and debris, which were placed on the smelting operation residue pile. The pile's dimensions, as measured in August of 1971, were approximately 40 feet deep by 600 feet wide by 2,600 feet long for a total volume of approximately 2,300,000 cubic yards of waste materials (SPEPUB05684). The residue pile with the excavated waste materials was capped and closed in 2004 (Sperduto, 2003).

#### 3.2 Adjacent Communities

The towns of Spelter, Meadowbrook, and Erie adjoin the smelter with the communities of Gypsy, Seminole, Lumberport, Lambert's Run, Smith Chapel, and Haywood among others located within the CA. These communities consist primarily of residential dwellings with a small component of commercial facilities. Based on the statistics provided in the June 2000 Site Characterization Report (W-C Diamond, 2000b), an estimated 3000 residents live within one

mile of the smelter. Many of the homes in the northeast portion of Harrison County date back to 1906 and have been exposed to contaminated dust from the smelter and the facilities' residue pile throughout their existence.

## 3.3 Waste Characterization and Composition

From the beginning of operations at the smelter, smoke, dust and furnes were emitted from the furnaces used for smelting zinc. As indicated by H. A. Gronomeyer, the plant superintendent for the smelter, furnes, smoke, and dust were emitted to the air and were deposited on the surrounding land surface (SPEBAR00919; SPEBAR00924; SPEBAR00929). A study conducted in 1919 by Bear and Morgan, documented the widespread distribution of zinc from the smelter. In their study Bear and Morgan (1919) interviewed residents, collected soil samples, conducted phytotoxic testing on plants, and conducted assessments of vegetation and livestock. The conclusion of the study indicated that zinc from the smelter had contaminated a wide area which included the CA. Further, in the matter of Bartlett v. Grasselli Chemical Company, the plaintiffs established that airborne emissions from the smelter contained zinc, arsenic, and other metals which were deposited on the soil and caused injury to the health of the residents living near the smelter (SPEBAR00172 - SPEBAR00178).

Smoke from the smelter stack was observed in aerial photographs of the facility dated April 23, 1939, April 8, 1955, October 22, 1967 and April 5, 1970 (USEPA, 1996). Later reports, including the inspection reports prepared for the WVAPCC, detail the characteristics of the emissions from the retort furnaces as light to dense white smoke, comprised of zinc oxides and other materials (Lee, 1975; Pride, 1984a; Pride, 1984b; Huss, 1974; Pellerite, 1975). The smoke plumes were noted to trail from the stack at distances up to 1/4 mile on days with light or calm wind conditions (Mullins, 1975) indicating the off-site dispersion of particulates to the surrounding communities. Given the operations of the smelter over the period from 1906 through 2001, the smelter emitted metal contaminated dust and produced wind-blown residue materials and smoke throughout the neighboring communities for over 90 years.

An estimated three million tons of residue material, which were produced at the facility, were disposed of in the residue pile that covered approximately 50 acres in the south and southeastern portions of the site. The highest point of the residue pile was just over 120 feet

from the base of the pile (W-C Diamond, 2000b). The residue pile was mainly composed of silt and sand-sized particles but included waste materials up to three inches in diameter (W-C Diamond, 2000b).

The ore and coke used to charge the retorts and furnaces were very finely ground, producing a very small particle size in the residue and waste produced by the smelter (Amter, 2006 and references cited within). This residue from the retorts was highly friable due to the low temperatures of operation at the smelter (Amter, 2006) and would result in residue materials that were highly susceptible to wind erosion and transport when placed on the residue pile. As indicated in the report of Steven Amter (2006), for operations where the hot residue was removed from the retort and placed on the residue pile, the hot waste materials would burn, producing smoke of very fine particle sizes which was dispersed throughout the CA. The burning and smoking of the residue pile was a continuous source of emission from the initiation of operations through the remediation of the site (Beard, 1970; Pellerite and Dicken, 1977; Pellerite and Lee, 1977; W-C Diamond, 1999).

An investigation of the site by the US Department of Health and Human Services and the Agency for Toxic Substances and Disease Registry in 1995 indicated elevated concentrations of toxic metals in the residue pile. Lead concentrations in the residue pile ranged from 400 to 6,100 milligrams per kilogram ("mg/kg"). Arsenic and cadmium concentrations ranged from 320 to 3,500 mg/kg and 4.2 to 1,400 mg/kg, respectively. Zinc concentrations ranged from 23,000 mg/kg to 55,000 mg/kg (ATSDR, 1996). As part of the remedial investigation ("RI") conducted in 2000, dust samples from the main smelter building were analyzed and found to contain arsenic, cadmium, lead, and zinc at elevated concentrations. The concentration of arsenic ranged from 17.7 mg/kg to 74.0 mg/kg, cadmium ranged from 97.8 mg/kg to 3,830 mg/kg, lead ranged from 440 mg/kg to 20,500 mg/kg, and zinc ranged from 180,000 mg/kg to 571,000 mg/kg (W-C Diamond, 2001b).

#### 3.4 Wind Dispersion and Transport

Wind was a major factor in transporting and dispersing the emitted dust from the smelter and the residue pile. Wind also acted as a scouring agent, dislodging fine particulates containing toxic metals from the residue pile for transport. Particulates emitted from the smelter stack, bag house, and retort buildings as well as the waste pile were blown as dust onto the properties and into homes throughout the CA. As a result of this wind blown dust, the homes and properties, including accessible surfaces such as indoor floors, furniture, play areas and toys, patios, driveways, railings, plants, lawns and bare soils were contaminated with toxic metals from the site.

A wind rose diagram showing the direction and frequency of wind speeds for the weather station at Clarksburg, West Virginia is presented in Figure 2. Based on the wind rose diagram, the predominant wind direction was from the west-southwest; however, the wind blew from all points of the compass at wind speeds ranging from calm to approximately 20 miles per hour. Due to the friable nature of the retort residue, all structures and properties within the CA have been invaded by wind blown dust and smoke from the site.

Two separate air dispersion modeling studies have been conducted for the smelter and the adjacent area. As part of their work in this matter, Environmental Health and Engineering, Inc. ("EH&E") conducted air dispersion modeling using the CALPUFF model (Earth Tech, Inc., 2000), which accounted for the complex terrain in the vicinity of the former smelter (EH&E, 2005; EH&E, 2006). The distribution of particulate matter deposition depicted by EH&Es' modeling effort, demonstrated that the deposition of particles occurred across and throughout the CA. The deposition rate of the model was nearly linearly related with emission rate and the distribution of particulate matter deposition does not change with emission rate. In their report, EH&E stated, "the air dispersion modeling shows a pattern of deposition that is consistent with the pattern of the metal concentrations measured in the soil sampling conducted by Dr. Flowers" (EH&E, 2006).

Similarly, air dispersion modeling using the ISC model conducted by the USGS (Crimi, 2005) indicated distribution of particulate matter and metals from the former smelter throughout the CA. Though not as sensitive to elevation differences and terrain, the ISC model predicted a broad deposition pattern across Harrison County, including the CA. This deposition pattern, coupled with the modeling conducted by EH&E and the downwind sampling and monitoring conducted by the USGS (Goldhaber, et al., 2004) clearly shows the impact of emissions from the former smelter throughout the CA.

#### 4.0 SOIL SAMPLING

During February and June 2005, soil sampling was conducted by Dr. George Flowers at representative locations within the CA (Flowers, 2005a; Flowers, 2005b). For his assessment, Dr. Flowers collected 1,068 shallow surface soil samples and completed a series of eight shallow soil borings within the town of Spelter to determine the maximum depth of metal contamination in the soils. In addition, Dr. Flowers collected 150 samples from an unimpacted background area located approximately 16.3 miles southwest of the CA.

Based on the background samples, Dr. Flowers determined the 95% upper confidence limit soil background concentration of arsenic was 8.8 mg/kg with background concentrations of 0.5 mg/kg for cadmium, 25 mg/kg for lead, and 88 mg/kg for zinc.

#### 5.0 HOUSE DUST SAMPLING

SI Group conducted indoor dust sampling events in June 2005, August 2005 and January 2007. The results from these sampling events were reported in "Preliminary Report, Dust Sampling in Spelter, West Virginia, June 2005" (SI Group, 2005a), "Dust Sampling in Harrison County, West Virginia, June and August 2005" (SI Group, 2005b) and "Final Report, Dust Sampling in Harrison County, West Virginia, June 2005, August 2005 and January 2007" (SI Group, 2007). The dust sampling locations are illustrated in Figure 3.

Four different types of dust samples were collected from a total of 100 property locations during the three sampling events. The types of dust samples included bulk attic dust samples; bulk living space dust samples; area specific, living area dust wipe samples; and wipe living space dust samples. Bulk attic dust samples were collected from 82 of the 100 properties. A total of 100 bulk living space dust samples were collected from 85 of the 100 properties.

Area specific, living area wipe samples were collected from either windowsills or floors in the living space. A standardized template was used for collection of samples from floors and windowsill sample areas were measured following sample collection. Area specific, living area wipe samples were collected from 19 of the 100 properties.

A total of 53 wipe samples of dust were collected from the living space at 26 of the 100 sampling locations. All wipe living space dust samples were analyzed to provide the metal content in the dust.

Analytical results of the dust samples are summarized in Table 1. All bulk dust sample results were compared to the 95% upper confidence limit of soil background concentrations (Flowers, 2005a) and the WVDEP residential standards for metals in soil. The arsenic, cadmium, and lead results from the area specific wipe samples and the wipe samples of dust from the living space were compared with the dust sample results presented in the Region 3 National Human Exposure Assessment Survey ("NHEXAS") conducted by the EPA, Office of Research and Development from 1995 to 1997 (USEPA, 1995) and 40 CFR 745.

## 6.0 INDOOR AIR QUALITY SAMPLING RESULTS

Air particulate samples were collected during the dust sampling events in June 2005, August 2005, and January 2007 (SI Group, 2005a; SI Group, 2005b; SI Group, 2007). Particulate samples were collected through the use of personal air samplers worn by field personnel during dust sampling. Analyses of the particulate samples were performed for arsenic, cadmium, lead, and zinc, in order to determine the concentration of toxic metals in the indoor ambient air and compare the air-borne metal concentrations with the EPA National Ambient Air Quality Standards (NIOSH, 1990).

#### 6.1 Comparison to NAAQ Standards

The concentration of arsenic exceeded the National Ambient Air Quality ("NAAQ") standard of 0.00041 micrograms per cubic meter ("µg/m³") in 47 of the 100 sampled locations. The arsenic concentrations ranged from below detection limits to 7.6 ug/m³. The concentration of cadmium in 35 of the 100 sampled locations exceeded the NAAQ standard of 0.00099 ug/m³. The cadmium concentrations ranged from below detection limits to 5.7 ug/m³. The concentration of lead in 58 of the 100 sampled locations exceeded the NAAQ standard of 1.5 ug/m³. The lead concentrations ranged from below detection limits to 46.3 ug/m³. Zinc was detected in 95 of the 100 sampled locations. However, the concentrations of zinc did not exceed the NAAQ standard of 1,100 ug/m³.

## 6.2 Comparison to On-site Air Sampling During Remediation

Beginning on September 26, 1998 and ending on December 10, 1998, Corporate Remediation Group conducted high volume air sampling at the site during remediation. Arsenic, cadmium, lead, and zinc, as well as total suspended particulates ("TSP") concentrations were determined for each sample collected from September 26 to November 30, 1998 (DPZ 0011344 – DPZ 0011472). The maximum concentrations of arsenic, cadmium, lead, zinc, and TSP were found to be 0.0184 ug/m³, 0.0636 ug/m³, 0.166 ug/m³, 37.1 ug/m³, 91.8 ug/m³, respectively, with the maximum concentrations of arsenic and cadmium in excess of the respective NAAQ standards (W-C Diamond, 1999).

On the basis of exposure concentrations, the concentration of metals in the indoor air samples greatly exceeded the risk-based standards developed for air exposure during the on-site remediation of the smelter. The concentration of arsenic in the air samples collected by SI Group exceeded the maximum concentration reported by the Corporate Remediation Group for arsenic at 47 of the 100 sample locations, with the maximum reported concentration for arsenic of 7.6 ug/m³. For cadmium, of the 100 locations sampled by SI Group, 35 had concentrations of cadmium greater than the maximum concentration reported by the Corporate Remediation Group with the highest level of cadmium measured at 5.7 ug/m³. For lead, SI Group samples exceeded the maximum value collected by Corporate Remediation Group at 87 of the 100 sample locations. The highest level of lead found by SI Group was 46.3 ug/m³. Zinc values measured by SI Group exceeded the maximum value collected by Corporate Remediation Group at 20 of the 100 sample locations. The maximum reported concentration for zinc by SI Group was 533 ug/m³. The measured indoor air sample concentrations indicated that the exposure to metals was accentuated in the confined spaces of the homes of the CA.

#### 7.0 DATA HANDLING

#### 7.1 Removal of Outliers

In keeping with a conservative approach to data analysis, outlying observations which exhibited extreme values, on the high end, but not the low end, were examined for removal from the dataset. The definition of an outlier for the purposes of analysis is "an observation that

appears to deviate markedly in value from other members of the sample population in which it appears" (ASTM, 2002). The American Society for Testing and Materials ("ASTM") Standard E 178-02 was used to identify and remove the outlying observations. The data was entered into a Microsoft Excel spreadsheet and analyzed using the mathematical functions provided by the software. Following the ASTM standard, the subsequent formula was applied to each measurement in the dataset:

## Test Criterion = (Observed Measurement - Mean of Dataset) Standard Deviation of Dataset

The resulting test criterion statistic was then compared to the respective critical t-value based on the number of recorded observations identified in Table 1 of ASTM Standard E 178-02. If the test criterion exceeded the value of the critical t-value for 5% upper significance, the measured value was identified to be an outlier and was therefore removed from the dataset. As a result of truncating the data in this manner, the mean of the dataset was effectively lowered and further statistical analysis of the dataset produced more conservative results. A listing of data points removed as outliers is provided in Table 4-1 of Appendix 4.

### 7.2 Correction for Background Concentrations

The comparison of house dust metal concentrations with background data has no relevance in determining toxicity or exposure. Toxicity is based on the total concentration of metals in the dust and is not mitigated by the fact that the observed concentrations are similar to those found elsewhere. In the NHEXAS study, EPA presented no correlation between concentration and risk-based exposure (USEPA, 1995).

Throughout this proceeding, the Defendants' experts have claimed multiple sources, both native and anthropogenic, other than the former smelter have been responsible for contributing metals to the contaminated soils and house dust. In order to account for the non-smelter related metal concentrations, I determined the incremental contributions of metal exposure from smelter operations within the CA. Each category of sample type was calculated using the average soil background levels to adjust for each type of sample and metal. In this manner, the measured

concentrations were adjusted to remove the background concentrations leaving the exposure concentrations representative of smelter operations.

For this assessment, I utilized the mean soil background concentrations from the report of Dr. Flowers (2005a) and the protocols developed by EPA (USEPA, 1994).

	Mean Soil Background Levels (mg/kg)
As	8.2
Cd	0.36
Pb	24
Zn	84

For the soil sample concentrations, the adjusted soil concentration was determined by subtracting the mean soil background concentration from each of the measured or observed soil concentrations using the following formula:

Incremental Soil Concentration = Measured Concentration - Mean Soil Background Level

For the living bulk dust sample concentrations, the adjusted living bulk dust sample concentration was determined by subtracting the mean soil background concentration multiplied by a factor of 70% (0.70) from each of the measured living bulk dust sample concentrations. My adjustment of the living bulk dust sample concentrations by 70% of the mean soil background level, followed the established protocol by EPA (USEPA, 1994) to determine the contribution of metals present in the indoor bulk dust from the soil. The adjusted living bulk dust sample concentration for each location was calculated using the following formula:

Incremental Bulk Dust Concentration = Measured Concentration - (Mean Soil Background Level \* 0.70)

For cases where 70% of the mean soil background level exceeded the measured living bulk dust sample concentration, a value of zero (0.0) was recorded for the adjusted living bulk dust sample concentration.

For the attic bulk dust sample concentrations, the adjusted attic bulk dust sample concentration was determined by subtracting the mean soil background concentration from each of the measured attic bulk dust sample concentrations using the following formula:

Incremental Bulk Dust Concentration = Measured Concentration - Mean Soil Background Level

Adjusted attic bulk dust concentrations were calculated in a similar fashion to the adjusted soil concentrations due to both media having similar exposure to airborne emission.

For the attic air sample concentrations, the adjusted attic air sample concentration was determined by multiplying the measured air concentration by the ratio of the adjusted attic bulk dust sample concentration. For this assessment, the ratio of adjusted bulk dust to observed bulk dust for each given sample location was utilized to determine the air concentrations for that specific sample location. In this manner, I have accounted for the accumulation of metal concentrations due to the native soil and secondary sources at each individual location. The adjusted attic air sample concentration was calculated for each location using the following formula:

Incremental Air Concentration = Measured Concentration \* (Adjusted Attic Bulk Dust)

Measured Attic Bulk Dust

Similar to the attic air sample concentrations, the adjusted living air sample concentration was determined by multiplying the measured living air concentration by the ratio of the adjusted living bulk dust sample concentration. For this assessment, the ratio of adjusted bulk dust to observed bulk dust for each given sample location was utilized to determine the air concentrations for that specific sample location. In this manner, I have accounted for the accumulation of metal concentrations due to the native soil and secondary sources at each individual location. The adjusted living air sample concentration was calculated for each location using the following formula:

Incremental Air Concentration = Measured Concentration \* (Adjusted Living Bulk Dust)

Measured Living Bulk Dust

#### 7.3 Data Correlation

In their previous reports, the Defendants' experts have suggested that my results were biased because more samples were collected in Spelter close to the smelter than at greater distance from the smelter (Shields, 2006). In this report, I have presented the sample results

from three separate sampling events conducted in the CA. The first sampling event included 15 homes from the community of Spelter only. In the second event, a total of 72 homes were sampled in a radial distribution from the smelter. For the third sampling event, a total of 26 homes were sampled from Spelter and extending to the boundary of the CA. I intentionally collected samples from all points of the compass extending from the smelter with distance into the CA, focusing on the populated areas around the smelter.

In order to account for the perceived sampling bias, I correlated the measured soil and dust concentrations from the sampling events with the deposition rate predicted at the grid nodes of EH&E's air dispersion model (EH&E, 2005; EH&E, 2006). The objective of this analysis was to develop a uniform distribution of metal concentrations in each media across the CA. For my analysis, I correlated the measured zinc concentrations in each media with the zinc deposition rate from the model. Similarly, I correlated the measured cadmium and lead concentrations in each media with their respective deposition rates. For the case of arsenic, I used the deposition rate for lead since EH&E did not model the deposition of arsenic, but stated that the lead deposition rate was a representative surrogate for arsenic. By using this methodology, I was able to predict a representative concentration of metals in the soils, house dust and indoor air for each property location within the CA. A summary of the statistical correlations and the data input files are presented in Appendix 4. Contour plots of the correlated concentrations for the exposure of arsenic, cadmium, lead, and zinc in the soils, attic dust, living area dust, attic air, and living area air are presented in Figure 4-1 through Figure 4-20 in Appendix 4. Contour plots of the background adjusted correlated concentrations for the exposure of arsenic, cadmium, lead, and zinc in the soils, attic dust, living area dust, attic air, and living area air are presented in Figure 4-21 through Figure 4-40 in Appendix 4.

The use of statistical correlations is a commonly used methodology for predicting trends and gradients in large populations (Ott and Longnecker, 2001; PFC, 2007). This methodology is a conservative approach to data interpretation in that the predicted values from the correlation trend toward the mean of the data set, thus reducing the variability of the data and the frequency of occurrence for abnormally high and low data values. This approach was also conservative in that the correlation under-predicted the concentration values because the high-end, outlier data was removed. The statistical correlations with the air dispersion model deposition rates are to be

expected because the field measured metal concentrations have been associated with the emissions from the source contributing the metals.

## 7.4 Limitation of Field Measured Air Concentrations

Due to the short duration of air sample collection and the limited volume of particulate material collected with each air sample, a portion of the air samples had metal concentrations below the method detection limit of the analytical procedure. The attic air sample dataset and the living area air sample dataset both contained a number of samples that were below the analytical detection limit for arsenic and cadmium.

A number of different approaches were considered to estimate the values of the non-detects from the detectable data. For my assessment, I first considered that the non-detect values could be calculated from the metal ratios (Zn:As and Zn:Cd) in the bulk dust of a given location. It was then possible to apply these ratios to the measured air concentrations for zinc in order to calculate concentrations of arsenic and cadmium. Secondly, by using the average metal ratios (Zn:As and Zn:Cd) from the detectable air samples, I was able to calculate concentrations for arsenic and cadmium by multiplying these ratios to the measured zinc concentrations. Thirdly, I substituted one half of the detection limit for all values below the detection limit as recommended by EPA (USEPA, 2000). As stated by EPA, "If the data are used to develop an emission factor, half of the limit of detection is typically substituted for BDL [below detection limit] results" (USEPA, 2007).

From my assessment, calculations for the non-detect values using metal ratios from both the measured air data and the bulk dust data generated concentrations above the detection limit for certain sampling locations. So instead of using either of these methods, I chose to use the EPA protocol for substitution of one half of the detection limit for values of air concentrations of arsenic and cadmium which were reported below the detection limits.

#### 8.0 FINGERPRINT OF WASTES

The feedstock used by the facility when it was operated as a primary zinc smelter contained arsenic, cadmium, lead, and zinc. The waste materials produced by the retorting and

smelting processes and disposed in the residue pile also contained these metals. For the soil and dust samples collected from the CA, all samples contained concentrations of each of the four metals. As such, the qualitative fingerprint of metals was present throughout the CA. From a quantitative perspective, the concentrations of all four metals in the soil and house dust were detected at enriched concentrations relative to the 95% upper confidence limit of the background concentrations in the soil.

## 8.1 Comparison throughout Class Area

As shown in Figures 5-1 through 5-4 of Appendix 5 and Figures 5-5 through 5-8 of Appendix 5 for the bulk attic dust and the bulk living space dust respectively, the concentration of these metals in the homes decrease with distance in all directions from the smelter. These plots clearly show that the smelter was the source of the elevated concentration on these metals in homes throughout the CA.

The commonality of the source of the metals in the dust in the homes is also demonstrated by the ratio of metals in the bulk dust in the attics. As shown in Figures 5-9 and 5-10 of Appendix 5, the ratios of Zn:Cd in the attic dust and the bulk living space dust were independent of distance from the smelter. Although the concentration of all metals decreased with distance from the smelter, the independence of the metal ratios from distance demonstrated that the smelter was the source of the metals.

The distribution of the Zn:Cd ratios for bulk attic dust did not differ significantly from the distribution of Zn:Cd ratios in the bulk living space dust, and the distribution of the Zn: Pb ratios for bulk attic dust did not differ significantly from the distribution of Zn:Pb ratios in the bulk living space dust. These results clearly demonstrate that the metals in the living space are from the same source as the contaminants in the attic. Furthermore, the continued presence of elevated levels of hazardous metals found in dust samples from the living space of these homes, years after the smelter has been closed and remediated, indicates an ongoing source of exposure to metal contamination in the living space of these homes.

The decreased concentration with distance from the smelter for all metals combined with the similarity of metal ratios found in the attic and living space indicates that the dust in the attic is an ongoing source of metal contamination in the living space throughout the CA. This evidence clearly indicates the need to remove the contaminants from the attics in the homes in the CA.

#### 9.0 RISK DUE TO SMELTER METAL CONTRIBUTION

To characterize potential health effects, the probability that an individual will develop cancer over a life-time of exposure was calculated from the exposure concentrations of arsenic and cadmium presented in Appendix 4. The risk calculations were based on the EPA standard protocol of a 30 year exposure duration averaged over a lifetime of 70 years (USEPA, 1989) and chemical-specific cancer uptake slope factors (USEPA, 2006). As stated in the Risk Assessment Guidance for Superfund (USEPA, 1989), a linear low-dose cancer risk caused by exposure to one chemical through an individual pathway is expressed as:

$$Risk = CDI \times SF$$

where CDI is the chronic daily intake expressed in milligrams per kilogram per day ("mg/kg-day"), and SF is the cancer uptake slope factor expressed in kilogram day per milligram ("kg-day/mg"). For my assessment, I developed a framework for conducting the risk analysis which included a diagram of the potential pathways of exposure shown in Figure 6-1 of Appendix 6. The algorithms used in my analysis of risk are described in detail in Appendix 6. A contour plot of the calculated risk for each pathway is presented in Figure 6-2 through Figure 6-8 of Appendix 6.

As part of my assessment, I characterized the cancer risk due to exposure from arsenic ingestion and inhalation and cadmium inhalation based on the analytical results of the onsite data collected during the previous three sampling events. For the risk characterization, I considered only the pathways of exposure that have been universally accepted as intake sources known to cause cancer. Although there is a substantial amount of epidemiological evidence that the ingestion of cadmium (IARC, 2007c; NIOSH, 2007) and the uptake of lead can cause cancer (IARC, 2007a; IARC, 2007b), I only considered the pathways for which the evidence was irrefutable (Figure 6-1). By limiting this assessment to the cancer risk from the ingestion of

arsenic and the inhalation of arsenic and cadmium, I have developed a minimum risk level for each of the properties within the CA.

The risk incurred by exposure to indoor dust should be based on the total mass of metal in the dust and not adjusted for background dust concentrations. There are numerous documents and published papers, such as "Risk Assessment Guidance for Superfund" (USEPA, 1989) and IEUBK Model (USEPA, 1994) that provide reference to guide the risk assessment for exposure to indoor dust. None of these documents provide any reference to the concept that the exposure and risk caused by exposure to indoor dust should be adjusted or diminished due to comparison with the background concentration levels.

Regardless, the Defendants' experts (Rodricks, 2006a) have suggested that only the incremental contribution of metals from the smelter should be considered for property damages and increased health effects risk. In response to the Defendants' suggestions, I calculated the cancer risk resulting from the ingestion of arsenic and the inhalation of arsenic and cadmium based on the background adjusted concentrations of arsenic and cadmium in the soils and house dust to provide a measure of risk due to the incremental contribution of metals from the smelter (Figures 6-9 through 6-15 in Appendix 6).

Once the risk for each pathway was determined, the combined risk for each metal across the individual exposure pathways was determined by taking the sum of the cancer risks for each exposure pathway contributing to exposure of the same individual. An aggregate risk for the combination of risk due to arsenic and cadmium was calculated as the sum of the risk for each metal. As explained by EPA, "although the exact equation for combining risk probabilities includes terms for joint risks, the difference between the exact equation and the approximation described is negligible for total cancer risk of less than 0.1" (USEPA, 1989). For example, the on-site risk assessment for the remediation of the former smelter presented a cumulative cancer risk which was calculated as the sum of the individual cancer risk from all pathways of exposure (W-C Diamond, 2001). Further, Dr. Rodricks, the Defendants' expert indicated in his testimony (Rodricks, 2006b) that the risks from different pathways and from different metals can be added when the target organs are the same.

As shown in Figures 6-16 through 6-21 of Appendix 6, my calculations of both total and incremental risk, demonstrated that all residents within the CA have been and are exposed to elevated concentrations of arsenic and cadmium in the dust from the smelter that would pose a significant risk to human health. For comparison purposes, I also present the total cancer risk calculated from the measured dust concentrations (Figure 6-22 of Appendix 6). The calculated risk from the measured concentrations exceeds the risk calculated from the correlated data and as shown in Figure 6-22, all of the properties within the CA have a cancer risk greater than or equal to  $1\times10^{-4}$ , with approximately 70% of the CA at a risk greater than  $1\times10^{-3}$ .

The minimum cancer risk due to the incremental exposures of arsenic and cadmium is greater than  $1\times10^{-5}$ , the cancer risk-based criteria proposed by Dr. Werntz, for all properties within the CA. Based on the incremental concentration of metals from the smelter, approximately 54% of the CA has a cancer risk greater than  $1\times10^{-4}$  and approximately 2% of the area within the CA has a cancer risk greater than  $1\times10^{-3}$ . The calculated risk levels within the CA exceed the range of cancer risk recommended by EPA (USEPA, 1989).

#### 10.0 REMEDIATION STRATEGY

As part of my assessment, I was asked to develop a plan and strategy to remediate the properties within the CA to minimize the metal concentrations for exposure and thus mitigating the risk of cancer. The objective of this strategy was twofold. First, the purpose of the remedial actions is to remove to the greatest extent practicable, all soil and dust contamination, which would pose a cancer risk greater than  $1x10^{-5}$  (Werntz, 2007). Secondly, the purpose of the remedial actions was to encapsulate or seal any residual contamination that could possibly be suspended and transported into the living areas of the homes within the CA. By eliminating and isolating the sources of dust within the homes, the adverse risk to the residents of the CA can be abated.

#### 10.1 Eligibility

For the purposes of remediation, all properties within the CA were classified, based on the property use codes provided with the Harrison County tax records (Greenfield, 2007). In order to be eligible for remedial actions, I considered only the properties with residential dwellings and commercial/industrial buildings constructed prior to 2005, the completion of the on-site remediation of the smelter facility. I further classified the commercial/industrial properties based on the types of industry and the potential daily exposure for occupants of the building. Based on these criteria, the number of properties within the CA that are eligible for remediation is approximately 3,500.

## 10.2 Designation of Remediation Zones

Based on the risk due to the incremental contribution of metals from the smelter, the properties within the CA were subdivided into three zones for remediation. Remediation Zone 1 consists of all areas within the CA with a cancer risk greater than  $5\times10^{-4}$  (Figure 4). Remediation Zone 2 incorporates all properties within the CA with a cancer risk between  $5\times10^{-4}$  and  $1\times10^{-4}$ . Remediation Zone 3 includes all properties within the CA with a cancer risk greater than  $7\times10^{-5}$ , but less than  $1\times10^{-4}$ .

#### 10.3 Soil Remediation

Based on the recommendation by Dr. Werntz (2007), an incremental risk of 1x10<sup>-5</sup> was used as the risk-based criteria for soil remediation following the EPA protocol for determining substantial difference (USEPA, 2002b). As shown in Figure 6-8 of Appendix 6, the soil concentrations of arsenic associated with a cancer risk greater than 1x10<sup>-5</sup> fall within an approximate 285-acre area of Remediation Zone 1. This subset area, designated as Remediation Zone 1A will be excavated to a depth of 6 inches and replaced with clean backfill to mitigate the risk associated with soil exposure to arsenic. The area outside of Zone 1A but within the boundary of Zone 1 is designated Remediation Zone 1B and will not be subject to soil remediation. In addition, the excavation and removal of soil to reduce the risk due to arsenic will also remove lead contamination from Zone 1A.

The necessity for remediation in Zone 1A is due in part to two factors, the direct ingestion of soil, particularly for infants and children, and the potential for re-contamination of the indoor living space of remediated houses. The concentration of arsenic associated with an incremental cancer risk of  $1\times10^{-5}$  was determined to be 12.5 mg/kg (4.3 mg/kg for the  $1\times10^{-5}$  risk plus the mean background concentration of 8.2 mg/kg). Based on the relationships developed by

EPA (USEPA, 1994) for the cross-contamination of indoor dust and air by soil, the concentration of arsenic in the house dust would be 70% of the soil concentration (8.75 mg/kg) which is associated with a  $1.5 \times 10^{-6}$  cancer risk. Further, with an indoor dust concentration of 8.75 mg/kg, the predicted indoor air concentration of arsenic would be  $0.09 \,\mu\text{g/m}^3$ , which is associated with a  $1.4 \times 10^{-4}$  cancer risk. For the residents within Zone 1A, remediation of the soil is necessary to mitigate this incremental cancer risk due to soil exposures of arsenic.

#### 10.4 Intensity of Remediation

For the remediation strategy, eligible properties with structures in each of the three remediation zones will be remediated to mitigate exposures to metals causing unacceptable risk. The level or intensity of remediation will be dependant on the location of the property within the CA. The residential houses within Remediation Zone 1 will receive an intensive interior physical remediation, including remediation of attics, replacement of carpets and upholstered furniture, and a thorough professional cleaning of all surfaces in the living spaces and basements of the home in addition to structural repairs to mitigate transport of contaminated dust into the living space. Mobile homes in Zone 1 will receive the same intensity of remediation as the residential house except for remediation activities associated with attics and basements. Eligible non-residential properties will receive a thorough professional cleaning with structural repairs to mitigate transport of contaminated dust.

For properties within Remediation Zone 2, eligible structures will receive a moderate interior physical remediation to remove all sources of contaminated dust practicable and structural repairs to prevent recontamination of the interior from any residual unabated sources. In Remediation Zone 3, eligible structures will receive a professional interior cleaning to mitigate sources of contamination and reduce the exposure to cancer causing metals.

Many of the houses originally had exterior surfaces covered with lapped boards. Later, various types of siding have typically been applied to houses. Board siding is notoriously porous, and metal contaminated dust would have penetrated the surface and is trapped between the stude in the walls. Rather than removing the interior or exterior wall covering to remove the contamination, the interior surface of the wall should be repaired and sealed. This should be

done to cracks in the plaster, holes around electrical fittings, gaps around windows and door frames, and other cracks where dust can find its way from the wall cavity into the living spaces.

Thorough professional cleaning of the home interiors will be needed to remediate the houses. This consists of cleaning all the contents and all the surfaces in the houses. Cleaning is to be done using a HEPA vacuum, followed by a wet detergent wash, and a second HEPA vacuuming. The second vacuuming is needed to remove the particles dislodged by the wet washing. In instances where dirt is still visible, repeated washing and vacuuming will be needed. The cleaning is to include ceilings, light fixtures, fans, HVAC vents, doors, windows, door and window frames, walls, stairs, railings, electrical outlets, baseboards, cupboards, cabinets, sinks, appliances, including all surfaces of stoves, refrigerators, washing machines, dryers, HVAC units, dehumidifiers, space heaters, etc., as well as floors. Basements will be cleaned similarly, with particular attention paid to the top of exposed walls between floor joists, the top of pipes, wires, HVAC ducts, beams, and other locations which are prone to accumulate dust.

Since large volumes of air have passed through the HVAC system and ducts, these must also be cleaned and sealed or replaced. Since the cost of cleaning and sealing ducts exceeds the cost of replacement, all HVAC ductwork will be replaced. Cleaning of the HVAC unit will include intake ducts, grills, registers, diffusers, heat exchangers, cooling coils, drip pans, fan motors, and fan housings to minimize future discharge of toxic metals into the homes.

Porous furniture in the homes in Zone 1 is to be removed and replaced. In Zones 2 and 3, porous furniture is to be professionally cleaned. Drapes, blinds, shades, and other window treatments are to be professionally cleaned or removed and replaced as appropriate.

Dust containing metals from the smelter must be removed from the attics of the homes in the CA to prevent exposure to the residents. This will be done by removing bat insulation and using a truck-mounted vacuum system to remove loose insulation and dirt. Following cleaning, the attics will be sprayed with a sealer and reinsulated.

Exposure to dust in the attic results from people going into the attic, exchange of air and thus dust between the attic and living space, and instances where the ceiling below the attic is breached. Ceilings below an attic may be breached deliberately when electrical or sound

systems are installed or modified, when HVAC ducts are installed or modified, or when a ceiling is removed for replacement as part of a remodeling activity. Ceilings are also breached occasionally as a result of storm damage to roofs, water leaks from water heating or supply systems, or as a result of failure of the fasteners, which hold the ceiling up. Occasionally also, people entering an attic will step on the plaster, causing it to collapse.

Breaches of ceilings contaminated with hazardous metals will result not only in immediate exposure to the occupants of the house, but also spread dust throughout house which will cause an on-going exposure. A case in point was House No. 122, which had been partially renovated. As part of the renovation, the resident had removed the ceiling in the living room. He reported that black soot-like dust fell out of the ceiling when the plasterboard was removed the previous year. The concentrations of arsenic, cadmium, lead, and zinc in the bulk living space dust sample collected from this house are among the greatest concentrations found in any house.

In instances where it is not possible to gain access to the upper surface of the ceiling from the attic, it will be necessary to remove the ceilings in order to remove the accumulated dust. Such ceilings, which are either against the roof rafters, or where the attics have been enclosed to create a living space, will then need to be removed to gain access to the dust.

Some of the houses which have greater than nine (9) foot ceilings have been retrofitted with drop ceilings typically consisting of 2 ft x 4 ft tiles in tracks suspended from wires. Typically, the original ceilings were tongue and groove boards, which have deteriorated and have gaps or openings between the boards. Black dust typical of that found in the attic was seen on the ceiling tiles. Thus, in those instances, the porous tiles will need to be removed and replaced and the original ceiling may need to be repaired to prevent future exchange between the attic and the living space.

Mobile homes and eligible commercial/industrial buildings will be professionally cleaned with carpets removed and replaced. All cracks and crevices in the walls, ceilings, and floors will be caulked and sealed to encapsulate residual dust. As with other properties within the same remediation zone, all HVAC ductwork will be replaced with new filters installed for each location.

#### 10.5 Precedence for Remediation

The remedial strategy described follows the protocol established by EPA at similar Superfund sites. For example, at the Jacobs Smelter Superfund site, located in Stockton, Utah, a remedial option that included excavation and off-site disposal of contaminated soil was used. According to the EPA Record of Decision ("ROD") for the site, 90 houses were remediated, along with alleys, right-of-ways, construction of ditches, and asphalt paving. The total cost, including unidentified construction costs and construction management expenses, was \$13,627,649 (USEPA, 1999). These figures yield an estimated cost per house of \$151,418. At the Davenport and Flagstaff Smelters Superfund site, the selected remedy included excavation, disposal and placement of clean soil in residential lots, replacement of selected roads, and landscaping of remediated areas. The cost estimate presented in the ROD for the site was based on 20 lots requiring remediation and identified a total cost of \$11,871,927 (USEPA, 2002a), yielding a unit cost per house of approximately \$593,596. Finally, at the Omaha Lead Superfund site in Omaha, Nebraska, the selected remedial option involved excavation of soils at residentialtype properties, child-impact areas, and at properties with a child exhibiting an elevated bloodlead level; exterior lead-based paint stabilization; high-efficiency interior cleaning; and health The ROD presented a cost estimate based upon the assumption that 50% of residences where soil remediation is conducted, voluntary exterior lead-based paint stabilization and interior cleaning will be performed. With a total of 5,600 houses requiring soil remediation and the assumed 2,800 houses volunteering for the exterior lead-based paint stabilization and interior cleaning, the total remediation cost was \$77,370,700 (USEPA, 2004). Therefore, the cost per house of homes receiving only soil remediation was \$13,205.60 and the cost per house of homes receiving soil remediation and exterior lead-based paint stabilization and interior cleaning was \$14,205.60.

According to the ROD published by the USEPA for Palmerton Zinc Pile Superfund Site (Operable Unit 3), the contingent remedy is a combination of excavation, potential in-situ treatment of soil, re-vegetation, interior house cleaning, and possible carpet removal and replacement (Alternative 5A/3). It was assumed that no more than 2/3 of the properties eligible for interior cleaning would require carpet removal and replacement. The cost estimated in the ROD is based on 778 residences in Palmerton and 252 residences out of the Borough requiring

soil remediation and interior cleaning and the assumed 690 residences (approximately 2/3 of 1,030 houses) also requiring carpet replacement (USEPA, 2002c). The total cost listed in the ROD is \$14,883,120 (USEPA, 2002c). The cost per house is therefore determined to be \$16,446.10 per house requiring exterior remediation, interior cleaning and carpet removal and replacement and \$10,398.10 per house eligible for soil remediation and interior cleaning.

#### 10.6 Remedial Costs

Based on the multiple tasks described above that are required for remediation of the structures within the CA, unit costs were developed to account for the labor and materials required to complete the remediation. The unit costs for materials and equipment required for the remediation strategy were prepared based on a per square foot cost which can be readily scaled to accommodate the differences in size between structures. Similarly, the soil remediation costs were developed to be scaled to fit any size property. For costing purposes, labor costs have been consolidated to maximize the efficiency and utilization of the workforce, while minimizing down-time between remediation locations.

The total project cost estimated for the remediation of the CA was approximately \$71,000,000, which represents a cost per eligible structure of approximately \$20,000.

### 11.0 OPINIONS AND BASIS OF OPINIONS

#### 11.1 Source of Contamination

It is my opinion to a reasonable degree of scientific certainty that the former DuPont smelter is the principal source of arsenic, cadmium, lead, and zinc in the contaminated soils and house dust in the CA. Further, it is my opinion that alternative sources of arsenic, cadmium, lead, and zinc cannot account for the massive loading of metals observed in the CA.

#### 11.2 Area-wide Impact

It is my opinion to a reasonable degree of scientific certainty that the toxic metals from the smelter have invaded and contaminated all properties and structures within the CA.

#### 11.3 Exposure Pathways

It is my opinion that the ingestion of arsenic from the house dust in the living areas and attics and ingestion of arsenic from the soils of the CA are significant pathways of exposure to the individuals living in the CA. Further, it is my opinion that the inhalation of arsenic and cadmium from the air in the living areas and attics of residences within the CA are significant pathways of exposure to the individuals living in the CA.

#### 11.4 Risk

It is my opinion that the dust containing arsenic, cadmium, lead, and zinc, which were deposited both indoors and outdoors during the time the smelter was in operation, provides an ongoing source of exposure and an unacceptable level of risk to structures in the CA constructed prior to 2005.

It is my opinion that the incremental contribution of metals from the former smelter resulted in concentrations of metals in the soils and house dust at levels which pose an unacceptable risk to the residents of the CA.

#### 11.5 Necessity for Remediation

It is my opinion to a reasonable degree of scientific certainty that the contaminated soils and structures within the CA require remediation to reduce the risk resulting from metals from the smelter. As indicated in Section 9.0, my calculations of both total and incremental risk, demonstrated that all residents within the CA have been and are exposed to elevated concentrations of arsenic and cadmium in the dust from the smelter that would pose a significant risk to human health. Other than remediation, the only acceptable alternative for mitigation of risk to the residents is to leave the CA permanently and never return.

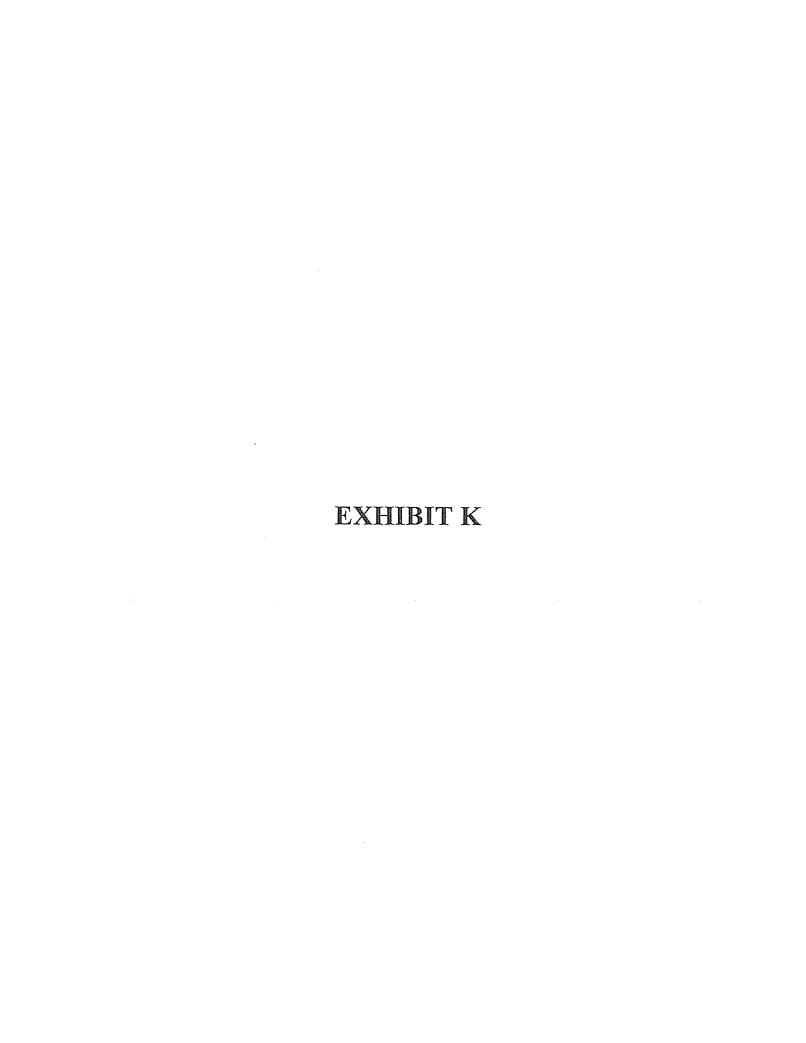
#### 11.6 Remediation Required

It is my opinion that remediation of the CA must be designed to remove and/or encapsulate the source of dust containing metals in the houses. Further, it is my opinion that remediation of the CA must be designed to remove soils which cause an unacceptable risk and can recontaminate the remediated houses. As indicated in Section 10.4, dust containing toxic

metals is present throughout the structures and remediation of the structures must account for all of the locations in which dust from the smelter has invaded the property. If the remediation is incomplete or not thorough, recontamination of the structure will occur with time thus exposing the occupants again to unacceptable risks.

### 11.7 Remediation Costs

It is my opinion to a reasonable degree of scientific certainty that the estimated cost to remediate all of the eligible properties within the CA will be approximately \$71,000,000. This estimated cost includes the cost of remediation, coordination, and remediation oversight; the cost for temporary relocation of residents during the remediation; the cost for removal and temporary storage of personal belongings and furnishings from the structures to be remediated; and the cost savings associated with the economy of scale for implementation of remediation on a class-wide basis.



Field (

## PERRINE DUPONT SETTLEMENT CLAIMS OFFICE SPELTER VOLUNTEER FIRE DEPARTMENT OFFICE

55 B. STREET P.O. BOX 257 SPELTER WV, 26438 304-622-7443 1-800-345-0837

#### **Soil Remediation Agreement**

This Remediation Agreement defines the soil remediation to be completed at the subject property, which is described below, and represents the sole and complete Agreement between the Claimant, who owns the subject property, the Perrine DuPont Settlement, and the Contractor, who will perform the work.

	Offique Property Identification Number				
	Тах	Map	Parcel	Sub-Parcel	
		Pro	perty Addr	<u>ess</u>	
Street		AAT was AA ug -oo ay Aay ahaa aa waa	1981 P. B. P. Labor, L. C.		
City	Zip	State			
GPS Waypoint Numl	per and Coor	<u>dinates</u>			
Waypoint:	_ Latitude: (	N39)		Longitude: (W80)	
Contact Owner's Nai	<u>me</u>				
Cell Phone		**************************************	Ho	ome Phone	
()			(_		
Notes:					

Temporary nousing K	ecommended for Re	<u>esidents?</u>	Yes		No
Residents Requiring R	elocation:				
NAME	AGE		INDIV	IDUAL ROOM	REQUESTED
1					
2					
3					
4					
5					
6					
7					
8					
Notes:					
Temporary Housing Ro	ecommended for Pe	ets?	Yes		No 🔲
Pets Requiring Reloca	tion:				
NAME	AGE	SPECIES		Health/Speci	al Concerns
				Health/Speci	al Concerns
1			The second secon	Health/Speci	al Concerns
12				Health/Speci	al Concerns
1				Health/Speci	al Concerns
1 2 3				Health/Speci	al Concerns
1. 2. 3. 4.				Health/Speci	al Concerns
1. 2. 3. 4.				Health/Speci	al Concerns
1. 2. 3. 4.				Health/Speci	al Concerns
1. 2. 3. 4.				Health/Speci	al Concerns
1. 2. 3. 4.		Special Care :			al Concerns

#### **Itemized Soil Clean-Up Tasks**

#### Soil Remediation:

Remove six (6) inches of top soil, replace six (6) inches of top soil, lay sod, and maintainsod, including watering, for thirty (30) days:

#### Before removal:

- 1. The Contractor will perform a visual inspection of property lines with the Claimant Owner(s).
- The Contractor will facilitate a professional survey and will mark the property lines and slope of the property to determine the elevation to return the property to its original position after remediation.
- 3. The Contractor will identify areas of special concern to the Claimant Owner, including any areas that will not be remediated.
- 4. The Contractor will identify access points to property for equipment.
- 5. The Contractor will identify any fence lines within remediated area, and determine whether fence will need to be removed.
- 6. The Contractor will mark all utility lines.
- 7. The Contractor will create a site sketch indicating the access points for equipment, areas of special concern, areas for equipment removal of soil, areas for hand digging, and location of utility lines.
- 8. The Contractor will identify large trees which will not have equipment used under the drip line to reduce risk of damage to root systems.

#### Removal of Soil:

- 1. All soil within marked areas will be removed to a depth of six (6) inches.
- 2. Soil within two feet (24 inches) of foundations, utility lines, or other areas of special concern will be removed by hand digging.

#### Replacement of Soil with Sod, Maintenance of Sod:

- All removed top soil will be replaced with soil classified as sandy loam, loam, and/or silt loam.
- All new soil will have a one (1) inch maximum particle size and will be clean (free of metal, debris, foreign objects, large rock fragments, stumps, vegetation and invasive or non-native species).
- 3. All new soil will have a pH balance typical of Harrison County.

- 4. All new soil will have sufficient organic matter to promote new growth.
- 5. All new soil will be tested, via EPA methods, for metals, including Arsenic, Lead, Cadmium, and Zinc; VOCs "Volatile Organic Compounds" (examples include benzene and formaldehyde); semi VOCs, PCBs and pesticides, to make sure that the new soil is safe. We will make sure that your new soil is not contaminated.
- 6. All new top soil will be rolled in place to reduce settling and erosion.
- 7. After top soil is replaced, sod will be laid on top. Sod will be appropriately laid and staked, if necessary, to keep it in place.
- 8. The Contractor will water the sod for a period of thirty (30) days after the remediation ends.
- 9. The Owner is responsible for mowing of the grass, and for watering and maintenance of the yard after thirty (30) days from the end of remediation.

I agree to havingsoil remediation of my property and I understand the

Yes No

Areas of Special Concern to Property Owner (any special instructions?):

Other Items:

terms of remediation as described above.

having a	as the Claimant Owner of the eligible property, as provided about all of the Remediation Tasks itemized above, which I have a set on the property during the estimated school and appropriate	•
completi	ed on the property during the estimated scheduled period.	Owner
		Initials
F	urther, I certify that for any items that declined by checking th	e "No" box above;
(i	I understand that the Settlement and the Contractor the remediation is necessary but that despite this kn the remedial action; and	•
(i	i) I understand that my refusal to allow the remedial house which is still contaminated above the levels re Remediation Program.	•
(i	ii) I also understand that this is my last opportunity u	nder this Settlement to
	receive remediation of my home.	Owner
		Initials
about the	certify that I have had an opportunity to ask any and all quo he remediation of my home, and that I have met with ent and the Contractor, and that I have been provided with t	representatives of the
my nome	e remediated.	
		Owner
		Initials
l these de	also certify that I have the consent of any other owners of	the property to make
tilese de	usions.	Owner
		Initials
	inally, I certify that I understand and accepted that the estimanate, and that if relocated, I may be relocated for less or dispose.	•
***************************************	-	
Name (S	Sign) Name (Print)	Date

As the Perrine DuPont Settlement Representative who visited the property and spoke with the Claimant Owner of the eligible property on this date, I certify that I have explained all of the tasks described above to the Owner to the Owner's satisfaction, and that I have informed the Claimant Owner of the risks associated with failure to follow the Contractor's proposed remediation plan, as provided above.

proposed remediation plant, as provided above.	
I certify that all of the remediation to Contractor and which have been accepted by the and within the scope of this remediation program have met with the Claimant Owner and that any recommended remediation tasks as indicated about Claimant Owner of his/her own volition.	m. I certify that both I and the Contractor refusal of the Claimant Owner to any and all
Settlement Representative	Date
Owner on this date, I certify that I have explain above to the Claimant Owner in detail, including the tasks, and the risks associated with the Claimathe recommended remediation tasks. I certify the "Yes" for appear to be reasonable and necessary I and the Settlement Representative have met wir of the Claimant Owner to any and all recommend voluntary, and was entered into by the Claimant Owner to	the timeline of the tasks, the purposes of ant Owner's refusal to accept any and all of at all of the tasks which the Owner checked under the circumstances. I certify that both the Claimant Owner and that any refusal ded remediation tasks as indicated above is owner of his/her own volition.  erform the tasks itemized above with good practices within the scheduled time frame.
Contractor Representative	Date

## PERRINE DUPONT SETTLEMENT CLAIMS OFFICE SPELTER VOLUNTEER FIRE DEPARTMENT OFFICE

55 B. STREET P.O. BOX 257 SPELTER WV, 26438 304-622-7443 1-800-345-0837

#### **HOUSE REMEDIATION AGREEMENT**

This Remediation Agreement is entered into as part of the Perrine Dupont Settlement and defines the clean-up work to be completed at the property described below. This Remediation Agreement represents the sole Agreement between the Property Remediation Claimant, who owns the subject property, the Perrine DuPont Settlement, and the Remediation Contractor, who will perform the work.

		Unique Prope	erty Identif	ication Number		
		Tax Map	Parcel	Sub-Parcel	<del></del>	
		Pro	perty Add	<u>ress</u>		
Street Address						
City	Zip	State	······································	·		
GPS Waypoint Nu	mber and	Coordinates				
Waypoint:	Latitu	de: (N39)		Longitude: (W	30)	
Contact Owner's N	<u>lame</u>					
Cell Phone			<u>H</u>	ome Phone		
			()	***************************************	TOTAL CONTROL AND THE CONTROL	
Notes:						
Temporary Housin	g Recomn	nended for Resi	dents?	Yes	No No	
Residents Requirin	g Relocati	on:				

NAME	AGE		INDIVIDU	JAL ROOM REQUESTED
1.				
Notes:				
	using Recommended fo			No L
NAME	AGE	SPECIES	He	alth/Special Concerns
1				
	•			
Valuables in the	e House which require	Special Care :		
	Estimated	Clean-Up Schedule a	and End Date	<del></del>
Clean-Up to be	gin on / /		n-Up to end or	n / /

#### **ITEMIZED CLEAN-UP TASKS**

# Attic Cleaning: Remove insulation in the attic, clean with HEPA Vacuum, seal and repair cracks, encapsulateattic with sealant, and install new insulation. Yes Attic Cleaning: If the attic is inaccessible, create an access point through the ceiling or the exterior of the home to allow cleaning of attic as described above, and repair attic access point to a like or better condition. Notes: Yes **Zone 1: Carpet Replacement:** Remove and replace bonded carpet and padding, and install new carpet and padding. Yes Zone 2 and Zone 3: Carpet Cleaning: Perform a thorough HEPA vacuuming of all carpeted areas. Yes

Furniture Cleaning:

	Clean all upholstered furniture with a HEPA vacuum. Clean all hard surface furniture withwet wipes.
	Notes:
	Yes No No
Base	ment Cleaning:
	HEPA vacuum (not including dirt floors), wipe surfaces such as wires, tops of pipes, beams, and other areas prone to collect dust, seal and repair cracks.
	Wipe surfaces of (please fill in):
	Notes:
HVA	Yes No Company Company Company Company No Co
	Additional actions under this section:
	Notes:
	Yes No No
Thor	ough Interior Cleaning & Repairs:
	Thorough wet wipe clean-up of hard surfaces such as ceilings, walls, floors, baseboards, stairs, railings, light fixtures, ceiling fans, windows, doors, electrical outlets, cupboards, cabinets, sinks, stoves, countertops, appliances, also repair and seal cracks in walls and ceiling, and paint walls if repaired.

Additional actions under this section:

No	tes:
Ye	s No
Ceiling Til	e Replacement:
	move and replace acoustic ceiling tile, and HEPA vacuum cavity between ceiling tile and ling.
Ad	ditional actions under this section:
No	tes:
Ye	s No
Disposal o	f Clean-Up Waste:
rec cre	sposal of all generated clean-up wastes, such as insulation, carpet, construction materials, covered interior dust.  The Contractor will remove any waste and debris which is ated and will dispose of any other items as you wish, as long as you provide the ntractor with the itemized list of items that you would like removed.
Ye	s No
Ite-	ms to be Removed:
No	tes:

	ial Concern to Property Owner (let us know eeds to look out for):	about special items or things that the
	,	
***************************************		
Other Items (	anything else we should know about?):	
**************************************		
As the	e Claimant Owner of the eligible property,	, as provided above, I hereby consent to
having all of t	he Remediation Tasks itemized above, which	
the property of	luring the estimated scheduled period.	Owner
		Initials
Furth	er, I certify that for any items that declined t	by checking the "No" box above;
(i)	remediation is necessary but that des	the Contractor have represented that the pite this knowledge, I am declining the
(ii)	remedial action; and I understand that my refusal to allow t	the remedial action may result in a house
()		the levels recommended under this
(iii)	<b>3</b> ,	portunity under this Settlement to receive
	J	Owner
		Initials
I certi	fy that I have had an opportunity to ask any	y and all questions that I may have about
	on of my home, and that I have met with r	_
Contractor, as	nd that I have been provided with the opport	tunity to have my home remediated.
		Owner
		Initials

decisio		hat I have the consent of any other	er owners of the property to make the
			Owner
			Owner Initials
		d that if relocated, I may be rele	d that the estimated scheduled period located for less or more time than th
Name	(Sign)	Name (Print)	Date
tasks Claim	aimant Owner o described above	f the eligible property on this date, to the Owner to the Owner's sat the risks associated with failure	who visited the property and spoke wi e, I certify that I have explained all of t tisfaction, and that I have informed to e to follow the Contractor's propose
scope Claims remed	hich have been a of this remediat ant Owner and	accepted by the Claimant Owner a ion program. I certify that both l that any refusal of the Claiman	re being recommended by the Contract are reasonable, necessary and within the I and the Contractor have met with the I owner to any and all recommenders entered into by the Claimant Owner
Settler	nent Representat	ive	Date

As the Contractor Representative who visited the property and met with the Claimant Owner on this date, I certify that I have explained all of the remediation tasks described above to the Claimant Owner in detail, including the timeline of the tasks, the purposes of the tasks, and the risks associated with the Claimant Owner's refusal to accept any and all of the recommended remediation tasks. I certify that all of the tasks which the Owner checked "Yes" for appear to be reasonable and necessary under the circumstances. I certify that both I and the Settlement Representative have met with the Claimant Owner and that any refusal of the Claimant Owner to any and all recommended remediation tasks as indicated above is voluntary, and was entered into by the Claimant Owner of his/her own volition.

and reasonable care using standard industry practices within the scheduled time frame. I cert that I have the authority to bind the Contractor to this House Clean-Up Agreement.			d time frame. I certify
	/	/_	A-11-11-11-11-11-11-11-11-11-11-11-11-11
Contractor Representative			Date

# EXHIBIT L

55 B. STREET P.O. BOX 257 SPELTER WV, 26438 304-622-7443 1-800-345-0837

### Soil Remediation Completion Verification Agreement

	Son Remodile	on completion ver	MICHELIANI I ACA COMMONIC		
Representative ar	nd Contractor Repr	esentative executed ecuting this Remedi	Claimant Owner and/or the Remediation Agree ation Completion Verifupleted.	ement applicable to	
Unique Property	Identification Numb	<u>er</u>	Contact Owner's N	Jame .	
Tenant's Name					
The Tasks itemized on the Remediation Agreement were completed to the satisfaction of the Owner, Settlement Representative, and Contractor Representative on/  The completion of said Tasks was inspected on/  Pre-Remediation Levels of Arsenic, Lead, Cadmium, and Zinc					
Sample	Arsenic (mg/kg)	Lead (mg/kg)	Cadmium (mg/kg)	Zinc (mg/kg)	
1					
2					
Post-Remediation Levels of Arsenic, Lead, Cadmium, and Zinc					
Sample	Arsenic (mg/kg)	Lead (mg/kg)	Cadmium (mg/kg)	Zinc (mg/kg)	
1					
2					

List any Tasks not successfully resolve those unresolved Tasks or com "NONE."	-	
By signing this Remediation C Tasks listed on the attached Remediat that the remediation has placed my ho of 400 mg/kg, and cadmium risk level of	ion Agreement have been con ome below the arsenic risk leve	npleted to my satisfaction, and
In signing this Agreement administrative or other claims, and or may not develop as an alleged Settlement".	l any and all "actions for a	ny and all issues which may
I certify that I have been provarsenic, lead, cadmium, and/or zinc or hereby consider the remediation tasks	or in my property at or belo	w the levels indicated above. I
LEAD BASED PAINT: I certi used lead-based paint and that my h hazardous to human health and the en of this Settlement is designed to add cleaning, but is not designed to identif that the deterioration or release of lead contaminate my home's interior after it	nome may similarly contain lowironment. I understand the ress indoor dust contaminating or abate lead-based paint hell-based paint chips that contributed in the cont	ead-based paint that could be remedial action offered as part on present at the time of the azards. Further, I understand
		/
Owner Name (Sign)	(Print)	Date
Tenant Name (Sign)	(Print)	Date

Settlement Representative Name	(Sign)	(Print)	Da	te
Contractor Representative Name	(Sign)	(Print)	Da	te

55 B. STREET P.O. BOX 257 SPELTER WV, 26438 304-622-7443 1-800-345-0837

### **House Remediation Completion Verification Agreement**

Representative applicable to the Verification Agree	and Contractor F ne below described	Representative exect of the contract of the co	the Claimant Ovecuted the Remedicuting this Remedication tasks have been contact Owner's I	iation Agreement iation Completion en completed.	
			ent were completed or Representative o		
The comp	oletion of said Tasks	was inspected on _		•	
	Levels of Arsenic, I				
Sample	Arsenic (μg/ft²)	Lead(µg/ft²)	Cadmium(µg/ft²)	Zinc(µg/ft²)	
1					
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		· · · · · · · · · · · · · · · · · · ·			
2 3					
4					
5					
6					
Post-Remediation Levels of Arsenic, Lead, Cadmium, and Zinc					
Sample	Arsenic(μg/ft²)	Lead(µg/ft²)	Cadmium(µg/ft <sup>2</sup> )	Zinc(µg/ft <sup>2</sup> )	
1					
2					
3	**************************************				
4					
5					
6					

			complaints, and the planned
process to resolve those unreso	lved Task	s or complaints. If	there are no complaints or
unresolved Tasks, write "NONE."			
	**************************************		
			***************************************
			eement, I hereby certify that
all Tasks listed on the attached satisfaction, and that the remedi			
35.95μg/ft <sup>2</sup> , lead risk level of 40μg	/ft <sup>2</sup> , and c	admium risk level of	f 144.65µg/ft <sup>2</sup>
I also certify that I have v	vaived any	INSERT PROPER IN	NDEMINFICATION LANGUAGE
HERE to include "actions for any a result of the remediation performe			_
I further certify that I have	e been pro	ovided with test res	ults indicating the successful
reduction in arsenic, lead, cadmiu			
indicated above. I hereby cons			
completed to my satisfaction.			
***************************************			
Owner Name (Sign)		(Print)	Date
			, ,
Settlement Representative Name	(Sign)	(Print)	Date
Contractor Representative Name	(Sign)	(Print)	Date

## EXHIBIT M

### APPENDIX A ACCEPTANCE OF MANDATORY RFP REQUIREMENTS

# FOR REQUEST FOR PROPOSAL (RFP) FOR REMEDIATION OF SOIL and HOUSES\* IN THE CLASS AREA IN THE PERRINE DUPONT SETTLEMENT

The following are the mandatory RFP requirements that shall be met by the successful Bidder(s):

#### <u>General</u>

 Bidder agrees that the response to the RFP and any subsequent documentation (best and final offer, and interview responses) shall be considered part of the final agreement and contract.

#### Account Management

- Bidder will provide a representative to attend meetings as necessary in Spelter, West Virginia.
- 3. Bidder will maintain a database regarding the remediation of each and every soil parcel remediated by Bidder in Zone 1A, and of each every house\* remediated by Bidder in Zone 1A, 1B, 2, and 3.
- 4. Bidder will assign a main contact person to interface with the Claims Administrator throughout the project and as long as the Bidder's contract is in effect. This person will be charged with providing requested information and documentation within twenty-four (24) hours following notice from the Claims Administrator.

#### Data\_Systems, and Reporting

- 5. Bidder will accept electronic data transfer and administer information regarding remediation of claimant soil or houses in a confidential manner.
- Bidder will provide periodic data updates to the Claims Administrator in electronic format.

#### **Audit Rights**

7. Bidder agrees to provide unrestricted audit rights to the Claims Administrator in relation to the cleaning of soil in Zone 1A, and the houses\* in Zones 1A, 1B, 2, and 3.

<sup>\*</sup>As defined in the June 27, 2011 Property Remediation Order in Exhibit A, which may include some commercial structures that are fit for human occupancy and regularly occupied by people. The Settlement will make all determinations as to which structures will be remediated.

#### Financial Proposal

8. Bidder guarantees the financial elements of its proposal throughout the term of the contract.

#### Consent to Jurisdiction and Waiver of Objections

9. Bidder, by its execution of the Agreement, submits to the jurisdiction of the Circuit Court of Harrison County, West Virginia in Perrine, et al., v. E. I. DuPont De Nemours and Company, et al., Case No. 04-C-296-2, (the "DuPont Case") for all purposes related to or arising out of Bidder's proposal to provide, or, if Bidder is selected as a provider, Bidder's provision of soil heavy metals clean-up services in Zone 1A, and house\* heavy metals remediation and testing in Zones 1A, 1B, 2, and 3. In addition, Bidder hereby waives any and all objections it might otherwise assert to the aforesaid jurisdiction, venue, or authority of the Court in the <u>DuPont</u> Case to hear and determine any and all disputes that might arise out of or be related to the services described herein, reserving its rights to be heard in connection therewith and to appeal, it may be advised, from any adverse determination of the Court in the <u>DuPont</u> Case.

#### Confidentiality Agreement

10. Bidder understands that the Court in the <u>DuPont</u> Case has ordered that the data resulting from any clean-up of soil in Zone 1A, and of houses\* in Zone 1A, 1B, 2, and 3 be maintained in a confidential manner, and state that Bidder will not reveal this information to anyone outside of authorized personnel in the Bidder company unless Bidder has express permission to do so from the Honorable Thomas A. Bedell or the Claims Administrator. Bidder further understands that if Bidder violates this pledge of confidentiality, Bidder is subject to being brought before the Honorable Thomas A. Bedell for investigation and possible sanctions for this breach.

Company Name:

NCM Demolition and Remediation, LP		
By: Inothy of Miller	3/2/2012	
Sign Name	Date	
Timothy J. Miller		
Print Name of Signing Person		
Vice President ·		
Title With the Company		

# EXHIBIT N

55 B. STREET P.O. BOX 257 SPELTER WV, 26438 304-622-7443 1-800-345-0837

### **Temporary Relocation Agreement**

I understand that due to potential health and convenience considerations, the Settlement recommends that all residents of the below identified property be relocated to a local hotel. I acknowledge that my relocation is mandatory, and that I have to relocate in order to have my property and/or house remediated.

Unique Proper	rty Identification Number	Contact Owner's Name
l speci	ifically request relocation forasks being performed on my property.	people for the duration of the
Residents Req	uiring Relocation:	
NAME	AGE	INDIVIDUAL ROOM REQUESTED
•		
2		
8		
The Se	ttlement has agreed to provide hoto	el accommodations for people,
requiring	number of rooms with do	uble queen beds in each room at
	hotel from//	to/ which is the
estimated time	e required to complete the Tasks itemi	zed in the attached Clean-Up Agreement.

The Settlement shall provide for payment of the following:

- 1. Any and all hotel room rental fees and taxes;
- 2. A per diem for food purposes of \$100 per family per day. A "family" for these purposes means all of the residents of the home, regardless of specific relationship.

The Settlement shall NOT be responsible for:

- 1. Any charges aside from those itemized above.
- 2. Any room service charges (which are not covered by the per diem).
- 3. Television, Movie, or Entertainment charges of any type.
- 4. Transportation to and from work or school.
- 5. Damage or misuse of the hotel accommodations.

PLEASE NOTE THAT FAILURE TO COMPLY WITH THE TERMS OF THIS AGREEMENT MAY RESULT IN TERMINATION OF YOUR RELOCATION AGREEMENT. IF YOU ARE REMOVED FROM THE PREMISES BY THE HOTEL, THE SETTLEMENT WILL NOT BE RESPONSIBLE FOR FINDING ANOTHER TEMPORTARY RESIDENCE FOR YOU, YOUR FAMILY, OR THE OTHER RESIDENTS OF YOUR PROPERTY. PLEASE COMPLY WITH ALL HOTEL POLICIES.

I certify that I understand and accept the terms of this Temporary Relocation Agreement. I further certify that all of the terms of this Temporary Relocation Agreement have been explained to me and that all of my questions were answered. I certify that I have the authority to make this relocation decision for all of the residents of the property.

Owner Name (Sign)	(Print)	Date
	the eligible property on t	ive who visited the property and spoke this date, I certify that I have explained the Claimant Owner.
any refusal of the Claiman	t Owner to any and all	net with the Claimant Owner and that I recommended remediation tasks as by the Claimant Owner of his/her own
***************************************	****	
Settlement Representative		Date

# EXHIBIT O

55 B. STREET P.O. BOX 257 SPELTER, WV 26438 304-622-7443 1-800-345-0837

### **Uniform Complaint**

I am filing this Complaint with the Perrine DuPont Settlement Claims Office because the remediation (clean-up) is not proceeding as I want it to at my house or property for the reasons listed below.

property for the reasons hatea below.	•
Unique Property Identification Numb	er
Contact Owner's Name	
Cell Phone	Home Phone
	()
	COMPLAINT

spoke with the Claimant Owner of the eligible certify that I have listened to the complaint of the	e Claimant Owner.  ne Contractor will address this Complaine Claimant Owner is not satisfied with the coordinate an appeal to the Hon. Thomas
Owner Name (Sign)	Date
O N (C')	//