Exhibit 11

Clyne, Gaye

From: Johnson, Mark
Sent: Friday, January 16, 2009 2:57 PM
To: Dan Shiel (shiel.daniel@epa.gov)
Cc: Peterson.Mary@epamail.epa.gov; Cecilia Tapia (tapia.cecilia@epa.gov); Williams, Brian
Subject: Titan Tire/Dico-SIM Site-Ltr. to EPA (Dan Shiel) 01-16-09 and Exhibits A-I
Attachments: Titan/Dico-Ltr. to EPA (Dan Shiel) 01-16-09.PDF; Ex. A.PDF; Ex. B.PDF; Ex. C.PDF; Ex. D.PDF; Ex. E.PDF; Ex. F.PDF; Ex. G.PDF; Ex. H.PDF; Ex. I.PDF

Dan, attached are the written response of Titan Tire and Dico and Exhibits A through I. We are sending this to you today by both e-mail and hand-delivery. Please let me know if you have any questions.

Mark

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Via E-Mail and Hand-Delivery

January 16, 2009

Daniel J. Shiel
Assistant Regional Counsel
United States Environmental Protection Agency Region 7
901 North 5th Street
Kansas City, KS 66101

Re: Written Submittal In Response to Order for Removal Response Activities, Southern Iowa Mechanical Site, CERCLA Docket No. CERCLA-07-2009-0006

Dear Dan:

This letter is written in response to: (1) the Unilateral Administrative Order for Removal Response Activities ("UAO") issued on December 30, 2008, In the Matter of the Southern Iowa Mechanical Site, CERCLA Docket No. CERCLA-07-2009-0006, pursuant to paragraph 79 of the UAO, (2) the Enforcement Action Memorandum ("Action Memo"), requesting a Time-Critical Removal Action at the Southern Iowa Mechanical Site, approved by Cecilia Tapia on December 30, 2008, and (3) the cover letter from Ms. Tapia, dated December 30, 2008, which accompanied the UAO and the Action Memo ("Cover Letter"). The UAO states that it will become effective on January 23, 2009, unless the date is modified in writing by EPA, and the Cover Letter encourages my clients to enter into a settlement with EPA before the effective date of the UAO. On behalf of my clients, DICO, Inc. ("DICO") and Titan Tire Corporation ("Titan Tire"), I formally request that you include this letter and each of the attached exhibits in the administrative record for this matter.

In order to make certain that the administrative record for this matter is complete, I reiterate my previous requests, and formally request that you place into the administrative record for this matter each of the following documents:

- All of DICO's and Titan Tire's responses to EPA's section 104 requests with respect to this matter;
- All written correspondence and e-mail exchanged between EPA and Cheri Holley, on behalf of DICO, with respect to this matter, including but not limited to Ms. Holley's letters dated May 20, 2008, addressed to Glenn Curtis, and July 11, 2008, addressed to Cecila Tapia, together with all documents and materials enclosed or submitted with each of those letters;

- All Freedom of Information Act ("FOIA") requests my firm has made to EPA with respect to this matter, including but not limited to letters dated October 6 and October 17, 2008, and January 9, 2009;

- All written correspondence and e-mail exchanged between EPA and me with respect to this matter, including but not limited to my letters dated October 2, 2008, October 17, 2008, November 10, 2008, and this letter, together with all documents and materials enclosed or submitted with each of these letters.

I respectfully request that EPA consider this letter and each of the documents submitted with this letter, as well as each of the above-referenced documents. I further request that EPA reconsider this matter in light of the information, arguments, and proposals presented in all of these documents, and engage in good faith negotiations to resolve this matter before the effective date of the UAO. We believe that the TSCA-compliant solvent wash process outlined in my November 10 letter is the most appropriate remedy for the alleged contamination at the Southern Iowa Mechanical ("SIM") Site, and my clients remain willing to negotiate a resolution which would include their undertaking to perform that remedy, without admitting any liability.

For each of these reasons stated in this letter, and in each of our previous letters, we believe that EPA's administrative actions with regard to this matter, including the proposed UAO and the selected remedy, are arbitrary, capricious and contrary to law. Nonetheless, in order to avoid the punitive financial penalties which may be imposed if my clients fail to comply with EPA's mandates, my clients will comply with the UAO if EPA refuses to consider the matters discussed in this letter and to negotiate in good faith. My clients reserve all of their rights to challenge EPA's administrative actions in this matter, including the UAO and the selected remedy, and to seek restitution or reimbursement of all monies paid to comply with EPA's mandates under the UAO, and any other remedies available to them in equity or at law. This letter will summarize the numerous bases for our contention that the EPA's administrative actions in this matter are, and have been, arbitrary, capricious, and contrary to law.

As a preliminary matter, I am surprised by Ms. Tapia's comment on page 2 of the Cover Letter, which states: "You have now had the proposed Settlement Agreement for over two months, and EPA does not believe it would be fruitful to engage in further negotiations." Since receiving the proposed settlement agreement in late September, I have written three letters to you, dated October 2, October 17, and November 10, 2008, detailing various concerns about the legal basis for asserting liability against my clients, the validity of data relied upon by EPA, and the appropriateness of EPA's proposed remedy. In each of those letters – without admitting any liability – I have expressed my clients' willingness to cooperate with EPA in negotiating a resolution to this matter, and in my November 10 letter, I proposed an alternative remedy which complies with the TSCA regulations. During the weeks following my November 10 letter, I called you on two occasions and left

messages offering to discuss this matter with you in further detail. EPA has never responded to any of my letters, and you never returned either of my phone calls.

EPA's unwillingness to respond to the issues and concerns expressed in my October 2, October 17, November 10 letters, to discuss or consider the alternative remedy I proposed, or to return my phone calls, before issuing the UAO, demonstrates a lack of good faith on the part of the EPA.[1] Any argument by EPA that there is no time for good faith negotiations because this is a time-sensitive matter requiring urgent action, is belied by the fact that EPA first visited the SIM Site in April 2008, conducted a site assessment and field sampling in May 2008, waited until September 2008 to send a proposed administrative settlement agreement to my clients, and then waited until December 30, 2008, to prepare the Action Memo and issue the UAO – which is not to become effective until January 23, 2009. EPA's insistence upon issuing the UAO without valid or reliable data and without a legal basis for liability, demonstrates that EPA's actions in this connection with this matter are arbitrary, capricious and contrary to law.

The UAO Has No Factual or Legal Basis, and Therefore Will Be Arbitrary, Capricious and Contrary to Law If Allowed to Become Effective

Rather than responding directly to my letters, returning my phone calls, or otherwise engaging in good faith negotiations, EPA appears to have used the Action Memo and the Cover Letter to respond to some of the concerns raised in my October 2, October 17, and November 10 letters with respect to the validity of sampling data relied upon by EPA, the legal basis for asserting liability against my clients, and the appropriateness of the alternative remedy proposed in my November 10 letter. The Cover Letter and the Action Memo also raise new issues which contradict earlier positions taken by EPA with regard to this matter. I will respond to each of these matters in order below.

1. The Sampling Data Relied Upon By EPA Is Invalid, Unreliable, and Has Been Improperly Manipulated

The sampling data relied upon by EPA is invalid and unreliable for several reasons. First, as discussed in my October 2 letter, the sample collection process was conducted without any notice to my clients, and without any opportunity to monitor or participate in the sampling process. Second, the secret sampling process failed to comply with EPA protocols and procedures – there was no written sampling plan; no map, sketch or permanent marking was made to identify the location where each

[1] In fairness, I acknowledge that you, and other EPA representatives, agreed last week to participate in a conference call with me and other representatives of Titan Tire and DICO, in accordance with the provisions of section XXVII. of the UAO. That call took place yesterday afternoon. However, at the outset of the call, you made it clear that, while we were welcome to present any information or arguments we desired, EPA had already made up its mind with respect to the selected remedy, and that issue was foreclosed to any further discussion. With all due respect, we did not consider your position with respect to that critical issue, or your perfunctory approach to the conference call, to comply with the purpose or the spirit of section XXVII. of the UAO.

sample was collected and the precise dimensions of the area from which wipe samples were taken; and no field blanks, replicates, or other quality assurance samples were collected or tested in accordance with 40 C.F.R. § 123, to help verify the reliability of the data. *See* Dr. John H. Smith, PCB Disposal Section, Chemical Regulation Branch, United States Environmental Protection Agency, "Wipe Sampling and Double Wash/Rinse Cleanup as Recommended by the Environmental Protection Agency PCB Spill Cleanup Policy," at 8, 10 (June 23, 1987, revised and clarified on April 18, 1991)(excerpts attached as Ex. A).

Third, in his field notes, sampler Todd Campbell reports that some of the wipe samples were taken from Z channel beams which were too small for a standard 100 square centimeter sampling area, so the samples were taken in "side by side" areas of 5x10 centimeters. *See* Field Notes, attached as Exhibit B. Mr. Campbell does not identify which – or whether all – samples were taken in this manner, or what, if any, instruments he used to accurately measure the 5x10 centimeter areas (since most standard wipe samples use a fixed, unadjustable 10x10 template). Obviously, if he "guessed" at the size of the wipe sample areas – and we cannot determine whether or not he did, since my clients were not afforded any notice or opportunity to attend and participate in the secret sampling, and since he failed to permanently mark the area from which he took the samples – the sampling results would be meaningless when attempting to compare them to the TSCA action levels for samples taken from 100 square centimeter areas.

Additionally, EPA has failed to provide all of the documents we requested in FOIA requests sent on October 6 and October 17, 2008, and January 9, 2009, and thus additional errors, flaws, discrepancies or deviations from standard operating procedures may be discovered when we obtain all of the information requested. We reserve the right to supplement the record with any additional information obtained from EPA in response to our outstanding FOIA requests.

A. Three-Day Gap In Chain of Custody

The identity and integrity of the samples purportedly collected at the SIM Site were severely compromised when the samples were apparently left unattended somewhere at or outside the Regional Lab over the weekend of May 16-19, 2008. According to Todd Campbell's field notes, attached as Exhibit B:

- he called "Nicole" sometime during the day on May 16, "to tell her that we would not be able to make" the 4:00 drop-off deadline for delivering the samples to the Regional Lab;

- Nicole told Todd to call Mary Peterson to "get her OK" to leave the samples in the sample cooler over the weekend; and

- "Mary gave us her blessing". (Ex. B).

The "EPA Chain of Custody Record" for these samples is attached as Exhibit C. This record indicates that:

• Todd Campbell relinquished custody of the samples to "Adam R" at 1752 (5:52pm) on Friday, May 16, for the purpose of "delivering the samples to the lab";

• Adam R. relinquished custody of the samples at 2039 (8:39pm) on May 16 (apparently making the 225 mile drive from 3043 Pawnee Drive in Ottumwa, Iowa, to Kansas City, Kansas, in two hours and 47 minutes); and

• Nicole Roblez signed the Chain of Custody Record indicating that she "received" the samples on Monday, May 19. (Ex. C).

Todd Campbell's field notes indicate that he called and left a voice message for "Nicole" at 1400 (2:00pm) on May 19, "**to make sure samples were found.**" Obviously, he understood that the samples had been left unattended somewhere at or near the Regional Lab since Friday evening, and was concerned that they might not be discovered or located. He received a voicemail reply at 5:00pm, reporting that the samples had been located. (Ex. B) (emphasis added).

The purpose of the chain-of-custody requirement is to ensure that the sample has been in the possession of, or secured by, a responsible person at all times. The field notes show a three-day gap in which no responsible person was in custody of the samples. EPA has provided no documentation indicating exactly where the samples were located during the three-day gap in the Chain of Custody, between Friday evening, May 16, and Monday, May 19. EPA has provided no documentation indicating what efforts were made to protect the samples from tampering, or to preserve the integrity, authenticity, and temperature of the samples. This critical gap in the chain of custody violates the procedures required by the August 2004 *Polychlorinated Biphenyl Inspection Manual*, published by EPA's Office of Compliance, Office of Enforcement and Compliance Assurance, sections 6.5 (Sample Documentation) and 6.5.2 (Chain-of-Custody), and invalidates the reliability of the analysis of the putative samples.[2] Excerpts of the *Inspection Manual* are attached as Exhibit D.

EPA has also failed to produce any documentation evidencing that these samples were maintained at temperatures below 4° C. at all times throughout the weekend of May 16-19, as required by EPA procedures for PCB samples. *See* EPA's *Polychlorinated Biphenyl Inspection Manual*, section 6.4.2 (Sample Preservation) (Ex. D). *See also* 40 C.F.R. § 136.3, Table II. Since the temperature reached a high of 86° over that weekend (*see* Weather History, attached as Ex. F), the failure to secure and preserve the samples in accordance with EPA procedures further invalidates the reliability of any lab results.

Finally, there is no evidence that the samples were ever logged in at the laboratory where the integrity of the samples was checked, the chain-of-custody documentation was verified, and the holding times were determined to fall within specified

[2] The Maine Department of Environmental Protection describes the effect of a failure to follow chain-of-custody procedures as follows: "Your results are worthless for legal purposes." Tim Loftus, Maine Dept. of Env. Protection, *Chain of Custody Procedure* at http://www.lagoonsonline.com/laboratory-articles/custody.htm (2003) (attached has Exhibit E).

requirements. *See* Loftus, *Chain of Custody Procedure*, attached as Ex. E. In fact, there is no documentation explaining what happened to the putative samples between the time Ms. Roblez signed the Chain of Custody Record indicating that she "received" them on Monday, May 19, and the time they were analyzed by Lorraine Iverson several days later.

Failure to establish links in the chain of custody results in the inadmissibility of the samples and lab reports. *See, e.g., Thomas v. Martin*, 202 F.Supp. 540, 543-44 (E.D. Va. 1961) (holding that blood test results were inadmissible where "defendant failed to establish every link in the chain of identification between the taking and analysis" of the blood sample); *Todd v. United States*, 384 F.Supp. 1284, 1293 (M.D. Fla. 1974), *aff'd*, 553 F.2d 384 (5th Cir. 1977) (holding that the "chain of custody is so replete with gaps and unexplained circumstances" that the evidence has no probative value); *Amaro v. City of New York*, 351 N.E.2d 665, 671 (N.Y. 1976) (holding that a lab report on a blood sample was inadmissible because no chain of custody could be established); *Durham v. Melly*, 14 A.D.2d 389, 392-93 (N.Y. App. Div. 1961)(holding that a blood test was inadmissible where the chain of possession and the unchanged condition of the sample, from the taking of the sample from the hospital to the performance of the analysis, could not be established). In *Williams v. Halpern*, No. 111138/02, 2006 WL 1371691 at *3 (N.Y. Sup. Ct. Apr. 12, 2006), the court declared: "Inquiries involving chain of custody of evidence sought to be used in legal proceedings are made in order to insure that a proffered specimen has the same identity and is in the same condition as it was when first produced or seized from an individual. . . In other words, there must be certainty that the evidence used is truly what it is purported to be. Where that is not the case, then the entire integrity of the legal result is in question.") Therefore, EPA's samples and lab report are inadmissible, and no basis exists for EPA's enforcement action against Titan and DICO.

B. Laboratory Irregularities

EPA procedures require that PCB samples "should be analyzed as soon as possible after collection," but the maximum time that "samples may be held before analysis and still be considered valid" is 7 days (168 hours). 40 C.F.R. § 136.3, Table II & n.4. *See also* EPA's *Polychlorinated Biphenyl Inspection Manual*, section 6.4.2 (Sample Preservation) (Ex. D). While an email from lab technician Lorraine Iverson indicates that the wipe samples were analyzed on May 22, the sixth day after collection, and the soil samples were analyzed approximately 165 hours after extraction (i.e., at the end of the seventh day), the delays in analysis, when coupled with the initial three-day break in the chain-of-custody, the subsequent failure to log the samples into the laboratory, and the failure to document preservation of the temperature of the samples during the week following collection, further compromises the validity of the lab results.

More disconcerting, however, is EPA's acceptance of results which were fraught with instrument malfunctions, errors and guesswork. For example:

• On May 22, Ms. Iverson reported that some of the wipe samples contained concentrations of either Aroclor 1248 or 1254, but that "it is difficult to see the difference in pattern" at such levels. (Email are attached as Exhibit G).

• On May 23, Ms. Iverson had to guess that Sample 9 (the insulation sample, mislabeled as a soil sample) "contains Aroclor 1254 **(?)**". (Ex. G) (emphasis added).

• On May 23, Ms. Iverson reported that Sample 9 "completely blew my instrument." Consequently, she warned that "[t]hese (especially the soils) may be late, as I have to perform instrument maintenance and rerun them." (Ex. G).

• On May 23, Ms. Iverson continued: "The maintenance I did on my instrument did not correct my problem with the baseline." (Ex. G).

• On May 27, Ms. Iverson consoled Mary Peterson that it is "not your fault that my instrument could not handle the sample extracts." (Ex. G).

• In the May 30 report of the sample analysis results, Sample 9 (the insulation sample) is repeatedly described as a soil sample, and the results for Sample 115 were coded with a "J", meaning that the reported value failed to meet the established quality control criteria for either precision or accuracy.

In my October 6, 2008, FOIA request, I requested the technician's raw data and calculations relating to each of the samples, together with all lab notes, records, data, electronically stored information, printouts and documents of any kind reflecting or regarding the EPA lab work in connection with the SIM Site. EPA has produced no documentation as to how Ms. Iverson's instrument malfunctioned while analyzing the samples purportedly taken from the SIM Site so as to require the referenced maintenance, or whether the instrument was ever fully repaired. Nor has EPA ever produced any documentation certifying that the instrument used to analyze the samples purportedly taken from the SIM Site was properly calibrated. We have received no lab notes, logs, records, data, or any other documents relating to the lab work performed by Ms. Iverson, other than a handful of emails and the final lab report.

On January 9, 2009, I repeated my FOIA request for all documents relating to the lab work and calculations performed on the samples from the SIM Site. We were advised earlier this week by EPA's FOIA Officer that EPA has produced everything that it has, and that no other documents exist with respect to this matter. During our conference call yesterday afternoon, you confirmed that EPA will not produce any additional documents responsive to our FOIA requests.

Because EPA has not produced any of Ms. Iverson's lab notes, logs, raw data, calculations, records, applicable software, electronically stored information, printouts or other documents relating to each of the samples, I requested during our conference call yesterday that EPA permit me to interview Ms. Iverson to gain a better understanding of exactly what she did with each of these samples, how she addressed each of the problems or issues reflected in her emails, what if any steps she undertook

to attempt to verify that her machine was properly calibrated and functioning when she analyzed each of the samples, what if any steps she undertook to assess or establish the validity and reliability of each of her results, and exactly what policies or procedures she followed in making the data manipulations reflected in the May 30 lab report. You advised me that EPA would not authorize any such interview.

C. Mis-Matched Aroclor "Fingerprint"

The three-day break in the chain-of-custody, and Ms. Iverson's difficulty in discerning the difference between Aroclor 1248 and 1254, are particularly relevant to the discrepancy in the chemical fingerprint between those PCB's reportedly found at the SIM Site, and the PCB's which were reported in the buildings on the DICO property in Des Moines. In the Action Memo, EPA attempts to dismiss the discrepancy in the chemical fingerprint by declaring that Aroclor 1254 was found in the insulation sample purportedly taken from the SIM Site (Sample 9), and Aroclor 1254 was found in insulation samples taken from the DICO property in Des Moines. This comparison over-simplifies the chemical fingerprint of the sample analyses, and disregards the critical flaws, errors, and irregularities associated with EPA's handling of the SIM Site investigation.

In 1992, Eckenfelder Inc. reported an association between Aroclors 1254 and 1260 in all of the samples containing detectable levels of PCBs at the DICO property.[3] None of the Eckenfelder samples detected the presence of any Aroclor 1248. In other words, Aroclor 1260 is a "marker" which, when found present with Aroclor 1254, uniquely identifies the PCBs reportedly identified at the DICO property. *See* Eckenfelder report attached to Ms. Holley's May 20, 2008, letter to Glenn Curtis. In the May 30, 2008, report of samples purportedly taken from the SIM Site, all of the detected Aroclors were either 1248 or 1254. Ms. Iverson reported that Sample 9 (the insulation sample mislabeled as a soil sample) "blew her instrument," and she was not certain whether it was "Aroclor 1254 (?)" or 1248 ("it is difficult to see the difference in the pattern"). None of the samples Ms. Iverson analyzed detected the presence of any Aroclor 1260.

Each Aroclor has its own chemical fingerprint, and the association of unique Aroclors can be used to forensically trace PCB's to a particular source. The Aroclor 1254/1260 association reported by Eckenfelder does not match – and is distinctly different from – the Aroclor 1248/1254 association reported in EPA's May 30, 2008, analysis of samples purportedly collected at the SIM Site. The crucial "marker" of

[3] The 1992 Eckenfelder Inc. report is the only test which ever reported actionable levels of PCBs in any buildings on the DICO property, and the validity of this report has been substantially undermined. As detailed in Ms. Holley's May 20, 2008, letter to Mr. Curtis, EPA conducted at least 5 separate site investigations of the DICO property between 1993 and 2000, and in each of the tests conducted during those investigations, no actionable levels of PCBs were found. Nonetheless, DICO complied with the removal action mandated by EPA in 1994, and completed the removal action in early 1997 by removing all of the insulation suspected of containing PCBs, and encapsulating all of the beams which were believed to have come in contact with adhesive containing PCBs.

Aroclor 1260 is not present in the samples purportedly taken from the SIM Site. This mismatch in the chemical fingerprint of the PCB's at the two different sites – and the absence of the Aroclor 1260 marker – demonstrate that the PCB's purportedly found at the SIM Site did not come from the DICO property. We cannot discount the possibility that someone tampered with the samples during the three-day break in the chain-of-custody, which would explain the different chemical fingerprint.

EPA's refusal to discuss this mismatch in the chemical fingerprint between the two sites, and its insistence upon using invalid and unreliable data to support its findings, further demonstrates that the EPA's decision in this matter is arbitrary and capricious and contrary to law.

D. EPA's Manipulation of Data

In both my October 2 and my November 10 letters to you, I discussed at considerable length our concern that each of the lab results for the wipe samples were improperly multiplied by 100, purportedly because each sample was taken from a standard 100 square centimeter sampling area. **But for the improper manipulation of the lab results by a factor of 100, none of the reported results would exceed the action levels mandated by TSCA.**[4] There is no indication in any of the documents produced by EPA that the laboratory instrument or software used to analyze the SIM Site wipe samples divides the quantity of the sampled chemical by 100 in generating the lab result – thus creating the need for a laboratory procedure of multiplying the lab value by 100 to reflect the total amount of the chemical of concern collected from the sampled area.

In other words, suppose a sample collection cloth is wiped over a 100 square centimeter area. The wipe sample is analyzed by extracting all of the chemical of concern from the cloth, and measuring the amount of chemical in the sample. The resulting value – suppose it is 1 microgram – is the total amount of chemical collected from the entire 100 square centimeter area sampled. The sample result is 1 microgram per 100 square centimeters.

Only if, for some inexplicable reason, the laboratory instrument is programmed to divide the total amount of chemical in the sample by 100 – in order to report the quantity in micrograms per square centimeter (in the case of the example, .01 micrograms per square centimeter) – would it be necessary to multiply the reported value by 100 in order to report the quantity in micrograms per 100 square centimeters. On the other hand, if the instrument is programmed to report the result *as if* the entire amount of chemical collected from the 100 square centimeter sample was concentrated in a single square centimeter (in the case of the example, if it was

[4] We also note, that one of the wipe sample results relied upon by EPA – in addition to being improperly multiplied by a factor of 100 – is reported with a J-code, meaning that the reported value failed to meet the established quality control criteria for either precision or accuracy. There is no explanation in the report as to why the lab could only provide a J-coded value, but it certainly undermines the credibility and reliability of the lab analysis of these samples. Such an estimated, J-coded result should not be the basis upon which EPA takes any administrative action.

incorrectly reported as 1 microgram per square centimeter), then the calculation required to correct the misreported value would be to ***divide*** the area by 100, so that the reported result is correctly stated for the true area sampled. We have repeatedly requested, pursuant to FOIA, that EPA produce any documents evidencing that the laboratory instrument is programmed to make any such divisions, including the software that might make any such divisions, all procedures or calculations which show any division by 100 of any sampled material, and all policies, procedures or protocols which describe the circumstances under which reported laboratory results are to be multiplied by a factor of 100, and any lab manuals or procedures discussing or describing any such process. EPA has repeatedly responded that no such documents exist.

In the Cover Letter, Ms. Tapia states that the procedure for multiplying lab results by 100, to account for the area from which the sample was collected, is specified in the laboratory's standard operating procedures produced by EPA in response to one of our FOIA requests. However, Ms. Tapia does cite any section or page of the lab's standard operating procedures which describes this procedure.

We have thoroughly reviewed all of the documents produced to us by EPA, including the lab's standard operating procedures, and cannot find any mention or discussion of any circumstance under which lab results are to be multiplied by any factor – to account for the area from which the sample was collected, or for any other reason. On January 9, 2009, I wrote to you and EPA's FOIA officer, requesting that you either identify the page or section of any documents previously produced where that procedure is specified, or produce the document which contains the procedure if it has not been previously produced. We were advised this week that we have received everything that EPA has with respect to this issue.

During our conference call yesterday afternoon, we raised this issue with you again, and asked you to identify the specific pages of the lab's standard operating procedures referenced in Ms. Tapia's Cover Letter. Following our call, you sent me an email, attaching a copy of the RLAB Method No. 3210.1D, previously produced in response to our FOIA request, and citing pages 7 of 9 and Attachment 1 as the support for this argument. Neither of these referenced pages, nor any other provisions of this procedure manual, contain any procedures for reducing the concentration of chemicals extracted from a sample cloth wiped over an area greater than square centimeter to a value reported in micrograms per square centimeter. Nor do either of the reference pages, or any other provisions of this procedure manual, contain any procedures for multiplying the value reported by the gas chromatography instrument by a factor of 100 after analyzing a wipe sample.

As mentioned above, during our conference call yesterday, you refused my request for permission to interview Ms. Iverson with regard to this, or any of the other issues and irregularities outlined in this letter. It is incomprehensible that EPA lab technicians would manipulate lab results by a factor of 100 without a detailed and specific written procedure, protocol or guideline expressly authorizing such

manipulation and specifying the circumstances under which such manipulation is to take place – unless they are instructed to do so in order to support a pre-determined outcome. Manipulating data to support a pre-determined outcome, or to justify a personal agenda, is indisputably arbitrary and capricious and contrary to law.[5]

2. EPA's Manipulation of the Applicable Soil Cleanup Standard Further Demonstrates the Arbitrary and Capricious Nature of This Enforcement Action

In the Action Memo, Ms. Peterson contends – for the first time in any communications relating to the SIM Site – that the lab results for one of the six soil samples exceeds a cleanup standard, which has never before been identified as applying to the SIM Site. At various places in the Action Memo, Ms. Peterson describes this standard as either the "any-use cleanup standard," or the "unrestricted use" standard, and describes the threshold for this standard as being either "1 part per million," or "1 mg/kg, " or "1,000 ug/kg." Setting aside the problems created by the three-day gap in the chain of custody, the lab result reported for the referenced soil sample was 3.1 mg/kg.

However, in the Quality Assurance Project Plan ("QAPP") for the May 2008 sampling of the SIM Site, attached as Exhibit H, EPA declared: "Soil sampling data will be compared to the cleanup standard of **25 mg/kg** for bulk remediation and porous surfaces for low occupancy areas suggested by the November 2005 guidance [*Polychlorinated Biphenyl (PCB) Site Revitalization Guidance Under the Toxic Substances Control Act (TSCA).*]" Ex. G (emphasis added). Excerpts from the November 2005 Guidance referred to in the QAPP is attached as Exhibit I.

Pursuant to the November 2005 Guidance, "low occupancy areas" are defined as any area where annual occupancy for any individual not wearing dermal and respiratory protection is less than 840 hours (an average of 16.8 hours per week) for non-porous surfaces and less than 330 hours (an average of 6.7 hours per week) for bulk PCB remediation waste – including in-situ soil or sediment. The Guidance explains: "Examples include ... a location in an industrial facility where a worker spends small amounts of time per week **(such as an unoccupied area outside a building**, ... or in the non-office space in a warehouse where occupancy is transitory.)" Ex. I, at p.4 (emphasis added). By contrast, examples of "high occupancy areas" include bulk PCB remediation waste inside a residence, a school, a day care center, a cafeteria in an industrial facility, a control room, and a work station at an assembly line. *Id.* at pp. 3-4. The staging area at the SIM Site where the steel beams are currently stored is in the middle of a large open field, in the middle of an industrial park, with no

[5] In the Cover Letter, Ms. Tapia suggests that if we would prefer that the lab results not be arbitrarily multiplied by 100, then EPA's alternative would be to reduce the cleanup standard by a factor of 100 to 0.10 micrograms. The mere suggestion that EPA can (or will) lower the applicable action levels by a factor of 100 in order to compel one company to shoulder the burden of a site cleanup costing several hundred thousand dollars, while not lowering the regulatory action levels for anyone else or any other site, further demonstrates that EPA's actions in this matter are completely arbitrary and capricious and contrary to law.

residences within at least a quarter mile. There is no evidence to support any characterization of this area as anything other than a "low occupancy area," as EPA correctly stated in the QAPP. The QAPP also stated the appropriate and applicable cleanup standard of 25 mg/kg. *See* 40 C.F.R. § 761.61(a)(4)(1)(B).

EPA's reported lab results for the soil samples purportedly collected at the SIM Site were well below the QAPP cleanup standard. In a number of conversations with representatives of DICO this summer and fall, Ms. Peterson repeatedly stated that the soil sample results were far below the applicable action levels, that EPA had no concern about soil contamination at the SIM Site, and that no further action will be required with respect to the soil. As EPA observed both before and after the QAPP was prepared, the SIM Site is a large open field in a low-density industrial park setting. However, after I expressed our various concerns about the legal basis for asserting liability against my clients, the validity of data relied upon by EPA, and the appropriateness of EPA's proposed remedy, Ms. Peterson has made an abrupt, 180° change in position. Without citation to any regulations or guidance documents which explain or describe the new cleanup standard she relies upon, or the criteria under which it should be applied – and without any explanation as to why she apparently now believes that the QAPP was wrong, and why she apparently now believes that she was wrong every time she told DICO representatives that the soil sample results were well below the applicable cleanup standards – Ms. Peterson appears to have arbitrarily and capriciously selected a different cleanup standard, simply to punish DICO for questioning her authority and the validity of her data.

3. EPA Has No Evidence Supporting Its Notion That DICO Sold the Buildings At Issue With the Intent to Dispose of Hazardous Substances

My clients have submitted sworn affidavits from representatives on both sides of the transactions, detailing the purpose and reasons for selling the various buildings to SIM (and for which SIM paid sums exceeding $150,000). Neither the president of Titan Tire, acting on behalf of DICO, nor the president of SIM knew that the buildings contained any hazardous substances or intended to dispose of any hazardous substances as part of the transactions. The president of Titan Tire, acting on behalf of DICO, and the president of SIM have both declared, under oath, that they believed that they were selling on behalf of DICO, and buying on behalf of SIM, commercially useful buildings which SIM intended to disassemble, relocate to Ottumwa, Iowa, and reassemble on SIM's property for use in SIM's business operations. *See* Affidavits of William Campbell and James Hughes, attached to my October 2, 2008, letter.

In the Cover Letter, Ms. Tapia simply rejects the sworn affidavits and uncontroverted evidence as "not acceptable." Instead, she declares: "Considering the totality of the circumstances, DICO's intention was to get rid of the buildings including the contaminated insulation without incurring considerable expense to dispose of the insulation properly. Disposition of the contaminated insulation was an integral part

of the transaction." Ms. Tapia does not – and cannot – cite a single document, witness, or other piece of evidence to support this baseless and unwarranted belief.[6]

The only evidence that actionable levels of PCBs were ever located in any of the buildings on the DICO property was the 1992 Eckenfelder report. At least five subsequent tests of the buildings on the DICO property conducted by EPA between 1993 and 2000 failed to detect any actionable levels of PCBs. DICO complied with an EPA-mandated removal action between 1994 and 1997, removing and encapsulating all of the material suspected of containing any PCBs. *See* Ms. Holley's May 20, 2008, letter to Mr. Curtis and enclosures. Additionally, at least 3 tests were conducted between January and April 2008 on insulation removed from the DICO buildings, and each of these tests found no PCB contamination at or above action levels. *Id.*

There is simply no evidence to support Ms. Tapia's bald conclusion that DICO sold buildings to SIM – for amounts exceeding $150,000 – not as useful products and materials to be used by SIM as commercial buildings, but with the "intention" of disposing of hazardous substances. All evidence – including the sworn affidavits of the president of Titan Tire, action on behalf of DICO, and the president of SIM – squarely and completely contradict Ms. Tapia's unsupported belief.

In addition to having no facts or evidence to support its position, EPA has ignored and refused to address any of numerous cases cited and discussed in my October 2 letter establishing that there is no legal basis for asserting "arranger" liability in this matter. These cases have repeatedly held, on very similar facts, that the mere sale of property containing hazardous substances is insufficient to impose arranger liability on the seller, and that the sale of a useful product, even though the product contains a hazardous substance, does not constitute a "disposal" subjecting the seller to CERCLA liability. *See, e.g., Ashland Oil, Inc. v. Sonford Prod.*, 810 F. Supp. 1057, 1061 (D. Minn. 1993); *G.J. Leasing Co., Inc. v. Union Elec. Co.*, 854 F. Supp. 539, 560), *aff'd*, 54 F.3d 379 (7th Cir. 1995); *U.S. v. B&D Elec., Inc.*, 2007 WL 1395468 (E.D. Mo. May 9, 2007); and each of the other cases cited and discussed in my October 2 letter.

It appears from the Action Memo that this administrative action may be motivated by a perceived slight suffered by Ms. Peterson when she discovered that DICO had sold the buildings to SIM without notifying her. *See* Action Memo at 2 ("Neither Dico nor SIM provided any notice to EPA that the buildings with PCB-contaminated insulation

[6] During our telephone conference yesterday afternoon, I asked you what evidence EPA had to support the belief that Titan Tire or DICO sold the buildings with the intent to dispose of hazardous substances. You could not cite any evidence to support this conclusion, but simply fell back on the argument that DICO demolished buildings which were "known to contain PCBs." This unsupported argument is flatly contradicted by the affidavits submitted with my October 2 letter. The only evidence in the administrative record establishes that the buildings were sold as useful products, for reassembly and use on the SIM property, and that neither Titan Tire, acting on behalf of DICO, nor SIM knew that the buildings contained any hazardous substances at the time of the sale. These facts are uncontroverted by any evidence in the administrative record, and as far as we know, no contrary evidence exists.

were going to be dismantled.") This complaint is misplaced for two reasons: (1) as demonstrated by the sworn affidavits discussed above, no one involved in the sale of the buildings knew that the buildings contained PCB-contaminated insulation; and (2) neither DICO nor SIM were required to provide any advance notice to EPA regarding the sale or disassembly of the buildings, or the relocation of the buildings to SIM's property for re-assembly.

The alleged request for advance notice was contained in a September 3, 2003 letter from Ms. Peterson to DICO's consultant, Dr. George, in which she stated that EPA "urges Dico to coordinate any plans for demolition of the buildings with EPA." EPA encouraged, but did not require, DICO to give advance notice to EPA, and only in the event that DICO planned to demolish the buildings. The buildings were not demolished, but sold to a buyer with the intent to relocate and reassemble the buildings on the buyer's property for use as commercial buildings. In any event, DICO has apologized to Ms. Peterson for any misunderstanding, and submits that retribution for hurt feelings or a personal pique is no basis for subjecting a company to hundreds of thousands of dollars in administrative actions which are unsupported by any valid evidence or law.

4. EPA's Decision To Disregard All Facts and Evidence and To Reject the Proposed Alternative Remedy Is Arbitrary and Capricious

Even though we dispute the factual, scientific and legal basis for requiring my clients to undertake any remedial action with respect to the steel beams on SIM's property, I outlined an alternative remedy in my November 10 letter which my clients would be willing to undertake. As acknowledged in the Action Memo, this solvent wash remedy is expressly authorized under 40 C.F.R. § 761.79(b)(3), and we believe that it is the most applicable remedy.

Without reference to any facts, evidence or other basis for its belief, EPA summarily rejects this alternative remedy because EPA does not believe that the beams were ever in contact with liquid PCBs. Assuming that there are PCBs above action levels on the beams (a fact which my clients strenuously dispute, and for which EPA has failed to collect any valid or reliable supporting data), the only potential source for the PCBs would have been in the liquid adhesive which would have been brushed or sprayed onto the beams to affix the insulation when it was installed. While some of the beams have been subsequently painted in certain areas, the only areas where PCBs have been detected are on unpainted surfaces. EPA has presented no evidence that any PCBs have been detected above action levels on any painted surfaces.

Because PCBs have only been detected on unpainted, nonporous metal surfaces, which most likely came into contact with liquid PCBs in the form of liquid adhesive (if they came into contact with any form of PCBs at all), there is no factual or evidentiary basis for EPA's declaration that "EPA does not consider this [the solvent wash process authorized under 40 C.F.R. § 761.79(b)(3)] to be an acceptable option." In spite of my offer, in the November 10 letter, to discuss this option with EPA in further detail, and in spite of my two unanswered voicemail messages requesting an

opportunity to discuss this option in further detail, EPA has summarily rejected this TSCA-compliant remedy and refused to engage in any good faith negotiations to resolve this matter. EPA's baseless refusal to consider my clients' proposed alternative remedy, and refusal to respond to my requests for an opportunity to discuss this remedy, further demonstrates that EPA's administrative actions in this matter are arbitrary and capricious and contrary to law.

Conclusion

For each of the foregoing reasons, and for all the reasons stated in Ms. Holley's May 20 and July 11, 2008 letters, and my October 2 and November 10, 2008 letters, EPA has no valid or reliable data or other evidence to support its administrative decisions and actions in this matter, including the UAO and the selected remedy, and it has no factual or legal basis for requiring Titan Tire and DICO to perform the remedial actions specified in the UAO. Moreover, EPA chose a selective enforcement action directed only at Titan Tire and DICO without any action against SIM, the company which: purchased the buildings at DICO, selected the manner in which to disassemble and transport the buildings to its property in Ottumwa, selected the manner in which and where to store the disassembled buildings until they were reassembled, owns the property on which the SIM Site is located, owns the purportedly contaminated steel beams, and was a party to these proceedings until the UAO was issued.

EPA's conduct throughout this matter has demonstrated a personal bias and vendetta against my clients and a motivation to use CERCLA as a vehicle to punish my clients for perceived slights or to pursue a personal agenda, rather than to effectuate appropriate remediation of actionable contamination based upon valid data and reliable evidence. To borrow Ms. Tapia's phrase, "the totality of circumstances" in this matter leads to the inescapable conclusion that EPA's decisions and actions have been arbitrary and capricious and contrary to law.

Nonetheless, as stated at the outset of this letter, Titan Tire and DICO will comply with the UAO, under protest, if EPA refuses to engage in good faith negotiations to resolve this matter. They reserve all of their rights to challenge EPA's administrative decisions and actions in this matter, including the UAO and the selected remedy, and to seek restitution or reimbursement of all monies paid to comply with EPA's mandates under the UAO, and any other remedies available to them in equity or at law.

Please contact me if EPA decides to reconsider its position in this matter, or if you have any questions.

Sincerely,

STINSON MORRISON HECKER LLP

Mark E. Johnson

cc: Cecilia Tapia
Mary Peterson

WIPE SAMPLING AND DOUBLE WASH/RINSE CLEANUP

AS RECOMMENDED BY

THE ENVIRONMENTAL PROTECTION AGENCY PCB SPILL CLEANUP POLICY

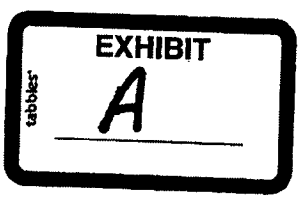
June 23, 1987

Revised and Clarified on April 18, 1991

Written By:

John H. Smith, Ph.D.
Chief, PCB Disposal Section
Chemical Regulation Branch
United States Environmental Protection Agency
Washington, D.C.

D0493



CONTENTS

I. WIPE SAMPLING ACCORDING TO THE PCB SPILL CLEANUP POLICY

Introduction:

This document was prepared following the publication of the PCB Spill Cleanup Policy in the Federal Register on April 2, 1987. The procedures were demonstrated by EPA PCB program technical staff at PCB Forum '87 and PCB Forum '88. These PCB forums were privately sponsored seminars discussing the requirements of the recently issued PCB Spill Cleanup Policy. The seminars were publicly announced and held in eight cities near the EPA Regional Offices.

The revisions and clarifications to the document include the addition of an Introduction heading, the addition of three paragraphs to the Background heading, and the amendment to item 4 in "An Example of a Wipe Sampling Procedure."

This document was revised and clarified because it did not clearly and completely state EPA's intentions in an area where details were essential, that is the original version of this document assumed that a gloved hand would apply the gauze with moderate pressure, but inadvertently this requirement was never explicitly stated in the example of the wipe sampling procedure. The gloved-hand application of the gauze might have been assumed since the gloves were to be discarded after each sample. The procedure clearly did not say to apply the gauze to the surface with forceps. The EPA demonstrations and discussions at the PCB Forums clearly emphasized the pressurized application of moistened cotton gauze to the surface with a gloved hand.

Background:

The PCB spill Cleanup Policy requires wipe sampling for the determination of surface levels of PCBs resulting from PCB spills onto hard, "smooth", surfaces such as metal, wood, concrete, plastic, and glass (see Tables 1 and 2). There are several activities surrounding a PCB spill cleanup where wipe sampling may be used: (a) site characterization; (b) interim evaluation of the progress of the cleanup; and (c) the final process to verify that the cleanup has met requirements of the PCB Spill Cleanup Policy.

Wipe sampling has a number of advantages. The most apparent advantage is that wipe sampling is probably the best way to determine smooth "impervious" surface concentrations. Wipe sampling is most effective in areas with relatively large, flat, easily accessible surfaces where an accidental and/or short time

exposure to PCBs has occurred. The surfaces which are sampled by wipe sampling in many cases will have been (or will be) cleaned by wiping or wiping-related activities.

Wipe sampling is best used in conjunction with statistical random sampling and/or area sampling techniques. Reduction in sampling errors for all kinds of sampling procedures can be accomplished by statistical selection of the smaller sampling sites selected to represent a larger area. Non-sampling errors may be reduced by maintaining consistency within the sampling activities; use of comprehensive quality control procedures and samples; and wherever possible, establishing a reference point for comparison.

Unfortunately, wipe sampling is not quantitative because of the fairly large variability in several component parts of sampling and the relative inefficiency of extraction of the analyte of interest from the wipes. Wipe sampling evaluation study results are known to vary widely, for example, when the same sampling is done (1) by different samplers; (2) on similarly contaminated surfaces having different textures or porosities; (3) using no solvent or solvents having different polarities; and (4) using different kinds of wiping material such as filter paper or cotton gauze.

When a decision is made to use wipe sampling, (1) it should be assumed that the results are not always reproducible; (2) extra care should be used to minimize the variability and optimize quantitation; and (3) even if representative sampling is employed, wipe sampling results can indicate residual levels substantially below true surface levels. In developing the PCB Spill Cleanup Policy, EPA has considered the advantages and disadvantages of wipe sampling and accordingly has established allowable residual PCB levels as measured by wipe sampling.

Since the objective of surface sampling is to remove PCB liquids and particles, which may be adhering to the surface, from the surface an aggressive sampling procedure is necessary. The aggressive sampling is appropriate since often the surfaces being samples have been aggressively cleaned and may drive residual PCBs into the surface. For determining the PCB surface concentrations on smooth surfaces, EPA recommends wipe sampling using cotton gauze as the wipe medium and using a gloved or doubly gloved hand to apply the wipe to the surface. This procedure requires changing into new/clean gloves between samples. EPA recognizes that there may be some transport of PCBs from the gauze to the surface of the gloves. However, this potential loss is considered more acceptable than the problems from the disadvantages of other wipe sampling procedures.

Procedures employing filter paper and/or glass fiber pads and application of these pads to surfaces by swabbing, dipping, or brushing with a pair of forceps are unacceptable. EPA

recognizes that this kind of wipe sampling technique may be

widely applied to address other kinds of surface sampling objectives. However, to meet EPA's PCB surface sampling objectives, these procedures are less efficient and less effective than hand wiping with the more absorbent cotton gauze.

Any compositing of wipe samples or sampling of areas larger than 100 cm^2 may not address the intent of PCB Spill Cleanup Policy verification sampling.

Answers to Questions on Wipe Sampling Procedures:

Why is does it take so much care to wipe sample correctly?

There is a considerable variability possible among wipe sampling results due to (a) the sampling technique of the sampler and (b) the efficiencies of removing PCBs from several matrices and placing the PCBs into several other matrices. Therefore it is important to reduce this variability to the maximum extent possible, so that in the event of a verification analysis by quality control samplers or government enforcement inspectors, similar wipe sampling results will be obtained for a clean site.

Two factors increase the probability of reducing errors introduced by the sampler's technique: consistency and quality control. Consistency is aided by proper training, easily understood sampling procedures, immediate availability of proper supplies, and whenever possible, using the same sampler to do all sampling at a particular site. Quality control procedures provide reference points and comparisons for the field sample results. When the analytical results from quality control samples indicate potential sampling and analysis problems, there is often sufficient time to reexamine field results. Quality control sampling can reduce or eliminate additional sampling and analysis start up and/or additional cleanup costs.

The reproducibility and efficiency of transferring residual PCBs from one place to another require that such residual PCBs must have a much greater affinity to partition, in one or more steps, from the place of origin to the ultimate destination. For all transfer steps, PCBs must exhibit a much greater propensity to be in the destination medium than in the medium of origin. There are several transfer steps in the process which starts from the removal of PCBs from the surface sampled and ends with the production of a PCB surface concentration by way of instrumental analysis.

The first of these transfer steps is removing residual PCBs from the surface to be sampled and transferring them into the sampling medium*. Gauze pads are sturdier, allow better surface to surface contact, and absorb more solvent (and more PCBs) than filter paper. Therefore, gauze pads are the absorbent/sampling medium of choice. Since PCBs are very soluble in organic solvents, organic solvent is used to moisten the gauze pads to ease the transport of PCBs from the sampled surface into the sampling media. Once the areas of where the spill occurred have been sampled (after cleanup) and the residual PCBs have been transported to the moistened gauze, then the gauze is air dried and stored/shipped for chemical analysis. The gauze is dried so as to facilitate transfer by organic solvent from the gauze to another medium during the laboratory extraction step.

In the extraction step the PCBs must be isolated from the gauze in a form amenable to the chemical analysis methods to be used. The PCBs now in the gauze are usually extracted into a solvent by repeated rinsing with and subsequent collection of organic solvent. The extraction solvent is removed from the PCBs by evaporation of the solvent prior to chemical analysis. The more volatile organic solvent evaporates and leaves the less volatile PCBs in a more concentrated solution for further treatment or instrumental analysis.

What is the best way to wipe sample for PCBs on smooth surfaces?

There are several steps in a wipe sampling procedure. The first step is to prepare the sampler for the sampling activity. The sampler may have to be advised of (through a briefing or a refresher course), or trained in, the objectives of the sampling program and the procedures to be used to accomplish those objectives.

Once advised of the objectives and sampling procedures, the sampler must either prepare or obtain the sampling plan and sampling materials. The sampler must know the exact sampling sites or know the exact procedure for selecting those sites. The sampling supplies must be sufficient in quantity and quality for all normally expected occurrences. Provisions should be also made for quality assurance samples, chain of custody forms, and shipping materials for storage.

* When PCB-contaminated office paper has been solvent rinsed, then wipe sampled and bulk sampled, some recent chemical analysis results indicate that the PCB concentration in the surface wipes is not the same as the concentration in the bulk samples. PCB levels in uncontaminated paper were used as a control. The difference in PCB levels in the wipe samples and bulk samples may

be explained by PCB migration into the paper either during cleanup to remove PCBs or during the wipe sampling step.

An important series of quality assurance measures taken before on-site sampling occurs may save considerable expense from collecting contaminated or unusable wipe samples. Sampler training can include practice sampling of surfaces spiked with PCB surrogate compounds, such as tri- and tetrachlorobenzenes to sharpen skills (a) in wiping thoroughly and consistently, and (b) avoiding cross contamination. In addition, before field sampling is conducted, method blanks can be used to verify that sampling equipment supplies and procedures do not introduce PCBs or analytical interferences to the wipe samples. Complete supplies for sampling should be cleaned, a fraction of the supplies sampled individually or through method blanks, and, if clean, the supplies should be protected against contamination or destruction while being transported to the sampling site and while at the sampling site before actual sampling occurs.

The sampler arrives at a sampling site and determines the exact location where the 100 square centimeter (cm^2) sample will be taken. The sample location may be marked or framed by a template. The sampler must be conscious of possibility of cross contamination during all stages of the sampling activity. All surfaces should be wiped with as uniform a pressure as possible. It is important to use the appropriate pressure to thoroughly wipe materials off the surface. Wiping proceeds from left to right in rows from the top to the bottom of the framed sampling area. The sampling area is wiped again with the same uniform pressure in columns from the top to the bottom from the left side to the right side of the entire framed area. It is not critical whether wiping starts at the top left or with rows first and then columns. The objective is to systematically, thoroughly, and consistently wipe the entire framed area twice, each time from a different direction and orientation.

Once the area has been wiped, the sampling gauze is allowed to air dry and is replaced in the sample vial. The sample vial is then labelled, the chain of custody filled out, and the sample prepared/stored for shipping.

0715 DISCUSSED FIELD QA/QC OPTIONS W/ OSC SCHAEUMAN HE WAS OK W/ FORGOING FIELD DUPLICATE AS HE THINKS EPA PROCEDURES ARE GOING AWAY FROM DUPLICATE SAMPLING (LATE EDIT) SKyE

5/16

1115 Met w/ Jim at site & had him sign access. To Buy Ice & back at site @ 1200 to begin sampling. GPS N 41.06982 W 92.40237

1545 Finished Sampling COLLECTED 15 wipes, 8 soils & 1 bulk insulation sample. Some of the wipe samples for the Z channel were done by sampling 5x10 grids side by side due to configuration of the area

1751 Signed samples over to Adam Ruiz @ Cave who was to deliver them to lab sample center. Earlier in day we contacted Nicole to tell her that we would not be able to make Wed drop off. She advised we call Mary Peterson & get her OK to leave them in lab sample center w/ COC's in place. Mary gave us her blessing & Also agreed to collecting a bulk insulation sample (3867-9)

Photolog

TAG	DATE	TIME	DIR	INIT.	DESCRIPTION
1	5/16/08	1210	N	AR	Piles of Building materials directly behind office
2	5/16/08	1210	N	AR	Piles of Building materials from within staging area behind office
3	5/16/08	1218	SE	AR	Staging area above hill from behind office
4	5/16/08	1220	SW	AR	Building Materials staging Area behind office
5	5/16/08	1222	N	AR	Staging Area north of the building
6	5/16/08	1233	N	TC	Wipe Area Sample 3867-109
7	5/16/08	1239	N	TC	Sample 3867-110 Wipe Area
8	5/16/08	1247	S	TC	Sample 3867-111

D0503

tabbies EXHIBIT 8

Sample Log 3867-10E-FB Wipe Field Blank

Sample 3867-109	Wipe sample from side of the pile of building materials southern most pile 2ft height (50cm² x 2)
Sample 3867-110	Wipe sample from side of building materials southern most pile 6 inch from the ground (50cm² x 2)
Sample 3867-111	Wipe sample from top of a Steele beam from southern most pile one foot above ground (50cm² x 2)
Sample 3867-112	Wipe sample side of beam 1 Foot above ground
Sample 3867-113	Wipe Sample from top center of beam (50cm² x 2)
Sample 3867-114	Wipe sample side of beam (50 cm² x 2)
Sample 3867-115	Wipe sample I beam side
Sample 3867-116	Wipe Sample top of steel
Sample 3867-117	Wipe Sample middle of steel pile north row. (50cm² x 2)
Sample 3867-118	Wipe sample outer Face of steel
Sample 3867-119	Wipe sample north pile row bottom of Beam

Photolog

9	5/16/08	1257	E	AIR	Sample 3867-112	
10	5/16/08	1304	N	AIR	Sample 3867-113	
11	5/16/08	1312	E	AIR	Sample 3862-114	
12	5/16/08	1321	E	AIR	Sample 3862-115	
13	5/16/08	1329	N	AIR	Sample 3867-116	
14	5/16/08	1336	N	AIR	Sample 3867-117	
15	5/16/08	1347	N	AIR	Sample 3867-118	
16	5/16/08	1357	E	AIR	Sample 3867-119	
17	5/16/08	1404	E	AIR	Sample 3867-120	
18	5/16/08	1427	W	AIR	Sample 3867-121	
19	5/16/08	1441	W	AIR	Sample 3867-1	
20	5/16/08	1452	N	AIR	Sample 3867-2	
21	5/16/08	1458	E	AIR	Sample 3867-3	
22	5/16/08	1505	E	AIR	Sample 3867-4	
23	5/16/08	1515	N	AIR	Sample 3867-5	
24	5/16/08	1524	E	AIR	Sample 3867-6	
25	5/16/08	1525	S	AIR	Insulation attached to beam	
~~26~~	~~5/16/08~~	~~1530~~	~~N~~	~~AIR~~		
26	5/16/09	1533	N	AIR	Sample 3867-9	
27	5/16/08	1534	S	AIR	~~Sample~~ Adhesive on beam	
28	5/16/08	1535	E	AIR	Insulation on the ground	

D0504

Sample Log

Sample	3867-120	Pile North of office directly east wipe sample top of beam
Sample	3867-121	Wipe sample from pile closest to the office
Sample	3867-122	Double 121
Sample	3867-123	Triple 121
Sample	3867-~~001~~	Soil sample upgradient 10ft from first pile row
~~Sample~~	~~3867-2~~	
Sample	3867-2	Soil sample west of southern most pile
Sample	3867-3	Soil sample center of staging area behind office
Sample	3867-4	Soil sample west/center of staging area
Sample	3867-5	Soil sample down gradient of piles
Sample	3867-6	Soil Sample North west most pile behind the office
Sample	3867-7	Double 6
Sample	3867-8	Triple 6
Sample	3867-9	Insulation off beam

D0505

5/19/E

1480 left Nicole Voice message to make sure samples were found

1720 Voicemail reply that sample integrity OK & that they are being processed

Mary Peterson SLSPR

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION (DAY / MONTH / YEAR)	SHEET
Todd A. Campbell	SOUTHERN DICE SAMPLING AT TOWER HEIGHTS	16 / 5 / 8	1 of 2

CONTENTS OF SHIPMENT

SAMPLE NUMBER	TYPE OF CONTAINERS: CUBITAINER	BOTTLE	BOTTLE	BOTTLE	VOA SET (2 VIALS EA)	SAMPLED MEDIA: water	soil	sediment	dust	other	RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER										
3867-FB	NB	1-8oz								✓	Wipe Sample (Field Blank)
3867-109		1-8oz								✓	Wipe Sample
3867-110		1-8oz								✓	Wipe Sample
3867-111		1-8oz								✓	Wipe Sample
3867-112		1-8oz								✓	Wipe Sample
3867-113		1-8oz								✓	Wipe Sample
3867-114		1-8oz								✓	Wipe Sample
3867-115		1-8oz								✓	Wipe Sample
3867-116		1-8oz								✓	Wipe Sample
3867-117		1-8oz								✓	Wipe Sample
3867-118		1-8oz								✓	Wipe Sample
3867-119		1-8oz								✓	Wipe Sample
3867-120		1-8oz								✓	Wipe Sample
3867-121		1-8oz								✓	Wipe Sample — One pooled sheet 5/19/08
3867-121MS		1-8oz								✓	Wipe Sample
3867-121MSD		1-8oz								✓	Wipe Sample
3867-1		1-8oz					✓				
3867-2		1-8oz					✓				
3867-3		1-8oz					✓				
3867-4		1-8oz					✓				
3867-5		1-8oz					✓				
3867-6		1-8oz					✓				One pooled sheet 5/19/08
3867-6-MS		1-8oz					✓				
3867-6-MSD		1-8oz					✓				Client Rec'd @ 2°C & Sealed 5/19/08

DESCRIPTION OF SHIPMENT: Hand delivery sealed Cooler

___ PIECE(S) CONSISTING OF ___ BOX(ES)

1 ICE CHEST(S): OTHER ___

MODE OF SHIPMENT

___ COMMERCIAL CARRIER: ___

___ COURIER

___ SAMPLER CONVEYED

(SHIPPING DOCUMENT NUMBER)

PERSONNEL CUSTODY RECORD * Note MARY PETERSON OK w/ leaving Samples in Cooler w/ COC seals intact

RELINQUISHED BY (SAMPLER)	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
[signature] ☒ SEALED ☐ UNSEALED	5/16/08	1952	Adam [illegible] ☐ SEALED ☐ UNSEALED	Delivering samples to the Lab
RELINQUISHED BY	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
[signature] ☒ SEALED ☐ UNSEALED	5/16/08	2039	Nicole Robles 5/19/08 ☐ SEALED ☐ UNSEALED	Analysis
RELINQUISHED BY	DATE	TIME	RECEIVED BY	REASON FOR C
☐ SEALED ☐ UNSEALED			☐ SEALED ☐ UNSEALED	

7-EPA-9262(Revised 5/85)

D0506

EXHIBIT C

Mary Peterson (STOP)

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION (DAY / MONTH / YEAR)	SHEET
Todd A. Campbell	Dioxin Sampling at Times Mechanical	16 / 5 / 8	1 of 2

CONTENTS OF SHIPMENT

SAMPLE NUMBER	TYPE OF CONTAINERS: CUBITAINER	BOTTLE	BOTTLE	BOTTLE	VOA SET (2 VIALS EA)	SAMPLED MEDIA: water	soil	sediment	dust	other	RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER										
3867-9		1-8oz								✓	INFORMATION Bulk Sample

DESCRIPTION OF SHIPMENT

_____ PIECE(S) CONSISTING OF _____ BOX(ES)

1 ICE CHEST(S): OTHER _____

MODE OF SHIPMENT

_____ COMMERCIAL CARRIER: _____

_____ COURIER

✓ SAMPLER CONVEYED (SHIPPING DOCUMENT NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
☒ SEALED ☐ UNSEALED	5/16/08	1952	☐ SEALED ☒ UNSEALED	Transport 5/19/08
RELINQUISHED BY	5/19/08 5/16/08	TIME 2039	RECEIVED BY 5/19/08	REASON FOR CHANGE OF CUSTODY
☒ SEALED ☐ UNSEALED			☒ SEALED ☐ UNSEALED	Analysis
RELINQUISHED BY	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED			☐ SEALED ☐ UNSEALED	

D0507

*U.S. GPO: 2002-756-917/40053

EPA-305-X-04-002

Polychlorinated Biphenyl Inspection Manual

August 2004

Office of Compliance
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2224-A)
Washington, D.C. 20460

http://www.epa.gov/compliance/resources/publications/monitoring/manuals.html

- Sample preservation and handling
- Type and frequency of calibration and maintenance of field analytical procedures
- Calibration and maintenance of field instruments
- Identification and documentation of samples
- Custody of samples collected
- Decontamination of sampling equipment
- Date and time when each sample was collected.

6.5.2 Chain-of-Custody

The purpose of chain-of-custody procedures is to be able to trace possession of a sample from the time it was collected until the time it is introduced as evidence in a legal proceeding. Case development personnel should be able to demonstrate that none of the samples involved have been tampered with or contaminated during collection, transit, storage, or analysis. The various handlers should maintain an accurate written record to trace the possession of each sample from the moment of collection through its introduction as evidence. The concept of custody requires the maintenance of several procedures to ensure the authentication of the sample. These procedures begin with the identification of the sample and continue through the laboratory analysis process.

- Establishing Custody. Sample custody is initiated at the time of collection by sealing the sample with an official seal. The inspector should place evidence tape onto the sample and initial and date the tape in ink/waterproof pen.

- Preparing Sample Documentation. The inspector and lab personnel must prepare the documentation. Properly maintained, this documentation will serve as a clear and complete account indicating that the sample offered into evidence was the same one that was collected.

  The documentation includes the entries in the inspector's field logbook, the Official Sample Seal, and the Chain-of-Custody Record (see Appendix O for blank sample seals and a Chain-of-Custody Record). The inspector needs to assure that the relationship between the physical sample and the related documentation is clear, complete, and accurate. The sample number, date, and inspector's initials should appear on all documents, and the inspector should fully and accurately complete all forms.

- Ensuring custody during transit. Shipment of samples to the laboratory should involve the following procedures:

  - Samples must be accompanied by the Chain-of-Custody Record. The originator retains copies of documents.

  - If sent by common carrier, the inspector must obtain and keep a bill of lading.

- The inspector must keep all receipts and shipping documents and include them in the Chain-of-Custody documentation.

! Initiating Chain-of-Custody Record. Inspectors initiate the process that controls and records access to the sample once it has left their possession by filling out the Chain-of-Custody Record. The sample number relates the sample to the Chain-of-Custody Record which accompanies the sample through all the processing stages.

! Field Logbook Entry. The inspector's entry in the field logbook is the principal reference for the sample. Note this record may be maintained electronically such as in a PC tablet. The following information should be included about each sample collected:

- Sample identification number
- Any other unique identifying marks on the container
- Date and time of collection
- Type of matrix (e.g., oil, sludge, sediment, etc.)
- Description of specific location of collection
- Collection method (should include collection equipment; field analytical equipment; and all calculations, results, and calibration data for field sampling analytical and physical measurement equipment. All sampling and field analyses must be traceable to the type of equipment used and the inspector who did the work.)
- Rationale for selecting the sample and representativeness considerations
- Description of any deviations from standard protocols
- A note regarding provision to the facility of duplicate or split samples, if appropriate.

6.5.3 Sample Identification

Tag each sample container immediately upon collection with a standard EPA sample tag. In some cases, particularly with biological samples such as vegetation, the tag may have to be included with or wrapped around the sample. Fill out appropriate sample tag and/or field data sheet.

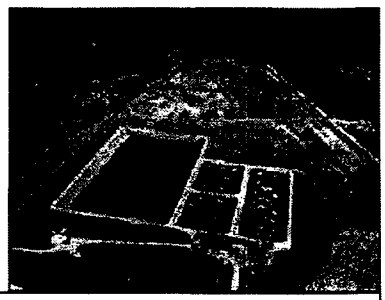
The following basic considerations govern identification of samples:

! Use one sample number for each sample. Assign only one number to one sample consisting of several subsamples or units.

! Inspectors may seal subsamples in a single bag if they are part of one sample and if adequate packaging protection is provided.

LAGOON SYSTEMS IN MAINE

An Informational Resource for Operators of Lagoon Systems



Chain of Custody Procedure

Tim Loftus

Design & Operation
Lagoon Aeration
Tech Papers
Operation Articles
Lagoons In Maine
The Laboratory
Maine Lagoon News
Lagoon Biology
Resources
Biosolids

new 2003 Maine Wastewater Salary Survey as conducted by the Maine Wastewater Control Association

new 2003 Maine Wastewater Rate Survey conducted by the Maine Rural Water Association

One of your industrial users under the Industrial Pretreatment Program is disputing your sampling results. They say they have never discharged the level of PCBs that you claim they have. They may even have lawyers involved and perhaps a court date to resolve this. You know that you took the samples properly and that there is no doubt about the accuracy of the results. Unfortunately you didn't follow **chain of custody** procedures. Therefore, according to the law, you didn't sample their effluent. Your results are worthless for legal purposes.

The **chain of custody procedure** incorporates a number of controls to assure the integrity of a sample. These procedures, along with the required written documentation, provide you with the necessary backing to defend the integrity of the sample in any litigation - whether it is to resolve an NPDES issue or an Industrial Pretreatment Program one.

The chain of custody procedure starts with sample collection and follows through to the destruction of the sample. The purpose of the procedure is to ensure that the sample has been in possession of, or secured by, a responsible

EXHIBIT tabbies E

D0511

Maine DEP Monthly O & M Newsletter

Maine and WEF's Operation Forum

Penobscot Watershed and Development of a TMDL

EPA Binational Toxics Strategy

Maine Rural Water Association

Maine Wastewater Operator Certification Guide

Maine Is Technology Newsletter

Maine Wastewater Control Association

Maine Wastewater Engineering Firms

person at all times. It should remove any doubt about sample identification or that the sample has been tampered with. While every laboratory's procedures may be different, there are certain aspects that should be present to assure an adequate chain of custody procedure. Below are the most common aspects of a chain of custody program developed from a survey of ***Standard Methods***..., the Sacramento series, WEF's Manual of Practice series, and various EPA publications:

Sample Number. All samples must be assigned a sample number. This number will follow the sample through all the analyses to the final report. It should be used to identify the sample on the container, the chain-of-custody form, in all data sheets, in computer entry, and reports. In our lab for example, if we were to sample an industrial user named Bay Coast Services, on February 28, 2003, we would assign the composite sample an identification number of BCC022803 The first two letters, BC, are an abbreviation of the company's name. The fourth letter will either be a C (for composite) or a G (for grab). The numbers represent the date the sample was collected. For grab samples we add the time to the end of the sample number. This is how we identify samples. Whatever way you choose to develop sample numbers, it must be consistent.

Sample Tag or Label. Attach to every sample container a tag or label with the following information written in waterproof ink: sample number, location where sample was taken, date and time of collection, what preservation is used, and your initials. Sample containers are often sealed with a tamperproof seal at this point.

Field Notebook. Record in your field notebook all the basic information such as sample number, location, times and dates of sampling, addresses, types of samples taken, volume of composite sample collected, and composite sample

D0512

temperature. Also record anything about the sample and sampling event that you may need for future reference. These can include calculations, who you spoke to at the company you sampled, what processes they were running at the time of sampling, and anything else that relates to the sampling event. A recent example of where I needed to record information in my notebook happened while I was trying to sample for VOCs at a local industrial user. This company neutralizes their waste stream with carbon dioxide. So trying to take a VOC sample without gas bubbles in the vial was like trying to sample a can o ginger ale. Recording this information like this is not only important to help explain potential erroneous lab results, but to warn future samplers of what to expect at that sample location.

Chain of Custody (or Chain-of-Possession as some other sources suggest). This form is filled out at sample collection and follows the sample through every person involved in the chain of possession until it reaches the laboratory. It includes information such as sample number, location where sample was taken preservative used in each container, type and size of container for each sample (1 L glass, 500 mL amber glass, 250 mL plastic, 40 mL VOC vials, etc), dates and times of collection, type of sample (water, soil, wastewater, etc), and the name of person collecting the sample. Every time the sample changes possession, the person relinquishing the sample and the person receiving it must sign and date/time the Chain-of-Custody form. For example, the sampler may relinquish the sample to a courier. At the transfer, both parties sign and date/time the form. Then the courier delivers the sample to the laboratory where now the courier and lab representative sign and date/time the form.

Log-in at Laboratory. All samples should be logged in at the laboratory where the integrity of the samples are checked (correct preservation was used, tamperproof seals are intact, the proper signatures are present, the holding

times fall within the requirements, and so on). If you deliver to a contract lab, they may assign their own ID number at this point.

Chain-of-custody procedures seem like a lot of work. But considering the amount of time spent calibrating and cleaning equipment, the labor of placing samplers in manholes or at industrial users, and the time spent doing lab work or the cost of sending it out to a contract lab, then the little bit of extra paperwork to make this a "legal" sample is well worth the time.

The information in this article is very general. As usual, check your federal, state, and local regulations. You may have additional regulations or requirements that you must meet.

If you have any questions, suggestions, or comments, please contact NEWEA Lab Practices Committee Chair Phyllis Arnold Rand 207-782-0917 (prand@lawpca.org) or Tim Loftus at (508) 949-3865 (timloftus@msn.com).

•Acidity and Alkalinity	•Normality
•Ammonia Nitrogen	•Making Normal Solutions
•BOD Test Requirements	•Phosphorus 1
•BOD Test Requirements 2	•Phosphorus 2
•BOD Test Requirements 3	•QC Samples
•Chain of Custody Procedure	•Record Keeping
•Chemical Storage	•Rounding Digits
•Coliform and E. Coli Testing 1	•Sample Contamination
•Coliform and E. Coli Testing 2	•Significant Digits

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•Coliform and E. Coli Testing 3	•Sample Handling for NPDES
•Control Charts	•Signs of Toxicity
•Dilution Solutions	•SOPs
•Matters of Perspective pH Part 1	•Total Chlorine Residual
•Matters of Perspective pH Part 2	•Total Chlorine Residual-2
•Method Detection Limits	•Total Suspended Solids
•Molarity	
•pH Measurements	
•Nitrogen	

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D0515

History for Kansas City, MO

Friday, May 16, 2008

Daily Summary

	Actual:	Average :	Record :
Temperature:			
Mean Temperature	**66** °F	-	
Max Temperature	**78** °F	**74** °F	**90** °F (2001)
Min Temperature	**53** °F	**55** °F	**46** °F (2005)
Growing Degree Days	16 (Base 50)		
Moisture:			
Dew Point	**46** °F		
Average Humidity	47		
Maximum Humidity	77		
Minimum Humidity	25		
Precipitation:			
Precipitation	**0.00** in	-	- ()
Sea Level Pressure:			
Sea Level Pressure	**30.00** in		
Wind:			
Wind Speed	**5** mph (WSW)		
Max Wind Speed	**13** mph		
Max Gust Speed	**18** mph		
Visibility	**10** miles		
Events			

Averages and records for this station are not official NWS values.

Click here for data from the nearest station with official NWS data (KMCI).

T = Trace of Precipitation, **MM** = Missing Value **Source:** NWS Daily Summary

Seasonal Weather Averages

D0516

EXHIBIT F

History for Kansas City, MO

Saturday, May 17, 2008

Daily Summary

	Actual:	Average :	Record :
Temperature:			
Mean Temperature	**72** °F	-	
Max Temperature	**86** °F	**74** °F	**89** °F (1997)
Min Temperature	**59** °F	**55** °F	**46** °F (2002)
Cooling Degree Days	6		
Growing Degree Days	22 (Base 50)		
Moisture:			
Dew Point	**43** °F		
Average Humidity	38		
Maximum Humidity	55		
Minimum Humidity	21		
Precipitation:			
Precipitation	**0.00** in	-	- ()
Sea Level Pressure:			
Sea Level Pressure	**29.76** in		
Wind:			
Wind Speed	**3** mph (West)		
Max Wind Speed	**14** mph		
Max Gust Speed	**23** mph		
Visibility	**10** miles		
Events			

Averages and records for this station are not official NWS values.

Click here for data from the nearest station with official NWS data (KMCI).

T = Trace of Precipitation, **MM** = Missing Value **Source:** NWS Daily Summary

Seasonal Weather Averages

D0517

History for Kansas City, MO

Sunday, May 18, 2008

Daily Summary

	Actual:	Average :	Record :
Temperature:			
Mean Temperature	**66** °F	-	
Max Temperature	**79** °F	**74** °F	**91** °F (1997)
Min Temperature	**55** °F	**55** °F	**44** °F (2002)
Cooling Degree Days	2		
Growing Degree Days	16 (Base 50)		
Moisture:			
Dew Point	**41** °F		
Average Humidity	38		
Maximum Humidity	69		
Minimum Humidity	22		
Precipitation:			
Precipitation	**0.00** in	-	- ()
Sea Level Pressure:			
Sea Level Pressure	**29.74** in		
Wind:			
Wind Speed	**3** mph (NNW)		
Max Wind Speed	**8** mph		
Max Gust Speed	**16** mph		
Visibility	**10** miles		
Events			

Averages and records for this station are not official NWS values.

Click here for data from the nearest station with official NWS data (KMCI).

T = Trace of Precipitation, **MM** = Missing Value **Source:** NWS Daily Summary

Seasonal Weather Averages

D0518

History for Kansas City, MO

Monday, May 19, 2008

Daily Summary

	Actual:	Average :	Record :
Temperature:			
Mean Temperature	**72** °F	-	
Max Temperature	**82** °F	**74** °F	**96** °F (1998)
Min Temperature	**61** °F	**55** °F	**44** °F (2002)
Cooling Degree Days	6		
Growing Degree Days	22 (Base 50)		
Moisture:			
Dew Point	**47** °F		
Average Humidity	43		
Maximum Humidity	60		
Minimum Humidity	34		
Precipitation:			
Precipitation	**0.00** in	-	- ()
Sea Level Pressure:			
Sea Level Pressure	**29.54** in		
Wind:			
Wind Speed	**6** mph (NW)		
Max Wind Speed	**16** mph		
Max Gust Speed	**23** mph		
Visibility	**10** miles		
Events			

Averages and records for this station are not official NWS values.

Click here for data from the nearest station with official NWS data (KMCI).

T = Trace of Precipitation, **MM** = Missing Value **Source:** NWS Daily Summary

Seasonal Weather Averages

D0519

----- Forwarded by Daksha Dalal/R7/USEPA/US on 05/23/2008 11:49 AM -----

Lorraine Iverson/R7/USEPA/US
05/22/2008 08:59 AM

To Daksha Dalal/R7/USEPA/US@EPA
cc
Subject ASR 3867 quick TAT criminal

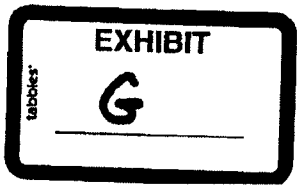
I've gotten most of the wipe samples through the instrument analysis, and many will require significant dilutions. Not sure yet if any of the soil samples will need dilutions, but I'll evaluate them tomorrow and put dilutions on the instrument over the weekend.

The following samples are very high for Aroclor 1248 or 1254 (it is difficult to see the difference in pattern at such high levels): 109; 110; 112; 113; 114; 115.

Samples 108FB; 111; 116; 117; 118; and 119 are either clean or have relatively low levels of aroclors. The rest haven't gotten through the instrument yet.

Assuming all goes well over the weekend, I'll have a data package to turn in to somebody for peer review on Tuesday the 27th. No one but Susy has current proficiency demonstrations for PCBs, so choosing a peer reviewer may be difficult. I'd suggest Jen (as she has some experience with GC and pattern matching) or Barry Miller (as he is a very experienced GC chemist, although he may be busy).

Lorraine



---- Forwarded by Daksha Dalal/R7/USEPA/US on 05/23/2008 03:02 PM ----

Lorraine Iverson/R7/USEPA/US
05/23/2008 02:51 PM

To Daksha Dalal/R7/USEPA/US@EPA
cc
Subject ASR 3867 PCBs

Samples 108FB, 111, 116, 117, 118, 119, and 121 are low for PCBs.

Samples 2, 3, 5, and 6 are low for PCBs.

Samples 109, 110, 112, 113, 114, 115, and 120 are relatively high for wipe samples at roughly 1 microgram per cm2.

Samples 1 and 4 are above my curve, but are not really high in PCBs.

Sample 9, however, is a different story. It contains Aroclor 1254 (?) at roughly 1000 mg/kg.

The maintenance I did on my instrument did not correct my problem with the baseline. I started a run on Susy's instrument. If I can't get my instrument problem corrected, I'll run the dilutions on Susy's instrument.

Mary Peterson/SUPR/R7/USEPA/US
05/27/08 12:08 PM

To Daksha Dalal/R7/USEPA/US@EPA
cc Lorraine Iverson/R7/USEPA/US@EPA
Subject Re: Fw: ASR 3867 PCBs

I noticed that Lorraine's e-mail refers to the wipe sample results in microgram per cm2. Aren't wipe sample results usually reported as microgram per 100 square centimeters? I really need the results reported this way (ug/100 cm2) if possible. Maybe that is what she meant. Please clarify. Thanks.
Daksha Dalal/R7/USEPA/US

Daksha Dalal/R7/USEPA/US
05/23/2008 03:03 PM

To Mary Peterson/SUPR/R7/USEPA/US@EPA
cc Lorraine Iverson/R7/USEPA/US@EPA
Subject Fw: ASR 3867 PCBs

Lorraine Iverson/R7/USEPA/US
05/23/2008 12:24 PM

To Daksha Dalal/R7/USEPA/US@EPA
cc Mary Peterson/SUPR/R7/USEPA/US@EPA, Nicole Roblez/R7/USEPA/US@EPA
bcc
Subject Re: Fw: ASR 3867 quick TAT criminal

"High" and "low" levels are relative terms, as sample 4 requires dilution, but the level found probably would not concern Mary. Sample 9 completely blew my instrument.

These (especially the soils) may be late, as I have to perform instrument maintenance and rerun them.

Lorraine

Daksha Dalal/R7/USEPA/US

Lorraine Iverson/R7/USEPA/US
05/27/2008 02:06 PM

To Mary Peterson/SUPR/R7/USEPA/US@EPA
cc
bcc
Subject Re: Fw: ASR 3867 PCBs

It is, of course, not your fault that the instrument couldn't handle the sample extracts! I only hope everyone handling that insulation was wearing gloves.

I will get the data to you as quickly as I can, but I have informed my boss that it will likely be Friday before I have usable results.

Lorraine

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

0 8 MAY 2008

MEMORANDUM

SUBJECT: Quality Assurance Project Plan for the PCB Soil and Wipe Sampling of the Des Moines TCE Superfund Site – Approved

FROM: Diane Harris Diane Harris
Regional Quality Assurance Manager
ENSV/IO

TO: Mary Peterson
EPA Project Officer
SUPR/IANE

The review of the subject document has been completed according to "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations," EPA QA/R-5 March 2001. The document was also reviewed for consistency with the site addendum template included as Appendix A to the "Generic Quality Assurance Project Plan for the Superfund Integrated Site Assessment and Targeted Brownfields Assessment Programs," August 2007 (QA document number: 2007203).

The document, in combination with the generic QAPP, complies with R-5, is consistent with the site addendum template, and is approved.

If you have any questions, please contact me at x7258 or the Lead Reviewer, Leslye Werner at x7858.

R7QAO Document Number: 2008157

EXHIBIT
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H

GLOBE 100% RECYCLED FIBER

D0525

Quality Assurance Project Plan
Beam Wipe Sampling and Soil Sampling for PCBs
Des Moines TCE Site
Des Moines, Iowa
May 2008

This QAPP supports the collection of surface wipe samples and soil samples by the EPA Region 7 in response to the relocation of steel beams from the Dico property in Des Moines, Iowa to another location in Ottumwa, Iowa. The steel beams resulted from the demolition of certain buildings on the Dico property which contained PCB contaminated insulation. The beams were then relocated to another property in Ottumwa and are currently stored on the ground. Due to the urgency of response, the generic Site Assessment QAPP is being used, along with this site-specific addendum. The project leader for this sampling effort is Mary Peterson, Iowa/Nebraska Branch in the Superfund Division. The field sampling leader is Todd Campbell, Emergency Response and Removal North Branch in the Superfund Division.

The purpose of this sampling effort is to determine whether residual PCBs remain on the surfaces of beams taken from the Dico property to Southern Iowa Mechanical in Ottumwa, Iowa, and to collect soil samples from areas where the beams have been stored for the past several months. Results of the wipe sampling will be used to determine appropriate cleanup and/or reuse options for the beams. Wipe sampling data will be compared to the cleanup standard of 10ug/100 cm2 for non-porous surfaces suggested in the November 2005 *Polychlorinated Biphenyl (PCB) Site Revitalization Guidance Under the Toxic Substances Control Act (TSCA).* Results of the soil sampling will be used to determine whether any soil cleanup is necessary. Soil sampling data will be compared to the cleanup standard of 25 mg/kg for bulk remediation waste and porous surfaces for low occupancy areas suggested by the November 2005 guidance identified above.

The Dico facility in Des Moines, Iowa is the main source area of contamination associated with the Des Moines TCE Superfund site. A number of removal and remedial actions have been completed at the Dico facility. In 1994, Dico conducted a removal action to address pesticides on interior surfaces of several onsite buildings, as well as insulation containing PCBs. The PCBs in the insulation had been discovered during investigations on the Dico property. The PCBs are believed to be associated with an adhesive used to secure the foil backing onto the insulation material. Historical sampling results show concentrations of PCBs in the insulation ranging from about 150 mg/kg to 29,000 mg/kg. The removal action included encapsulating the PCBs in the insulation by sealing areas which had been compromised (torn). Following the removal action, Dico was obligated to conduct certain operation and maintenance activities on the buildings.

In late September 2007, EPA discovered during a site inspection that Dico had begun to demolish some of the buildings containing the PCB contaminated insulation. Dico had not notified EPA prior to starting demolition activities. Since the site inspection, EPA has been working with Dico to ascertain where the insulation and other materials such as the steel beams were taken. In January 2008, Dico informed EPA that

some of the insulation was taken to a local landfill and some was transported to a farm in Iowa. The steel beams were reportedly taken to Southern Iowa Mechanical in Ottumwa, Iowa. In April 2008, EPA met with the owner of Southern Iowa Mechanical who confirmed that the steel beams have been stored in an open field on his property in Ottumwa since November 2007.

Surface wipe samples will be collected by swabbing the surface of the steel beams from areas where there appears to be insulation adhered to the surface of the beam. This will be biased sampling to present a worst-case scenario regarding any PCBs residues remaining on the beams. The wipe sampling will be conducted in accordance with SOP 4231.2011 covering chip, wipe, and sweep sampling. It is anticipated that up to 20 wipe samples will be collected depending on the number of beams.

Soil sampling will be conducted by collecting surface soils (0-2" depth) from areas that are likely to have collected runoff from the steel beams, or from areas near beams with visible insulation residues. This will be biased sampling to represent a worst case scenario regarding PCB residues that may have impacted the soil where the beams have been stored. Soil sampling will be conducted in accordance with SOP 4231.2012. It is anticipated that up to 10 soil samples will collected.

The analytical method to be used is SW846 Method 8082 (RLAB Method 3240.02). Given the limited scope of this sampling event, no field QC samples will be collected.

OPPT-2004-0123-

November 2005

Polychlorinated Biphenyl (PCB) Site Revitalization Guidance Under the Toxic Substances Control Act (TSCA)

This policy addresses cleanup and disposal requirements for polychlorinated biphenyls (PCBs) only. This document is intended to be used as an informal reference, and as such, is not a complete statement of all of the applicable PCB requirements. This document does not replace nor supplant the requirements of the Toxic Substances Control Act (TSCA) PCB regulations. Please refer to the regulations at 40 CFR Part 761 for specific regulatory and legal requirements.

EXHIBIT
tabbies
I

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EXECUTIVE SUMMARY

This document was developed as a guide for complying with the Toxic Substances Control Act (TSCA) regulations for the cleanup and disposal of polychlorinated biphenyl (PCB) contamination. The purpose of the document is to provide assistance in navigating the TSCA PCB regulations in Title 40 of the Code of Federal Regulations at Part 761 (40 CFR Part 761).[1] The primary focus of this guidance is the *PCB Remediation Waste* provision at 40 CFR 761.61 which governs the management of PCB waste generated as the result of PCB spills and associated cleanup activities (e.g., contaminated environmental media, rags, debris). Additional PCB requirements that may apply also are mentioned.

This document may be useful to Brownfields grant recipients and other individuals involved in PCB cleanups under TSCA. The document discusses the factors that must be taken into consideration when determining appropriate cleanup levels (e.g., intended use and type of PCB waste). Prescriptive procedures on how to achieve the cleanup levels however are generally not addressed. The requirements for verifying that the cleanup standard has been met and for establishing deed restrictions (where necessary), and the options available for disposing of PCB wastes are discussed. In addition, other relevant TSCA PCB requirements, such as caps, waste storage, marking, manifesting, and recordkeeping requirements, are mentioned. All PCB concentrations are based on total PCBs, rather than individual PCB Aroclors.[2]

Examples are provided on how the "typical" and "worst case" PCB waste cleanup situations may be addressed. Additional examples in the form of a matrix on various PCB contamination and reuse scenarios and applicable TSCA PCB requirements are provided at the end of the document (see Table 7). Finally, the appendices offer guidance on sampling concrete in the field (Appendix A) and excerpts of relevant self-implementing provisions of the PCB regulations for the cleanup and disposal of PCB waste (Appendix B). Appendix A is not a substitute for Subpart O of Part 761 where the regulations require compliance with Subpart O. The cleanup and reuse of property previously contaminated with PCBs may vary widely and will be specific to each site. Therefore, this document is not intended to provide the answer to every question that could surface during the remediation of the site. The reader is encouraged to consult the statute, regulations and the Regional PCB Coordinator whenever questions concerning acceptable remediation practices arise.

This document does not replace or supplant the requirements of the TSCA PCB regulations. Use of this document does not establish a presumption against enforcement should violations of the cleanup and disposal requirements or the PCB use authorizations be discovered. Please refer to the regulations at 40 CFR Part 761 for specific regulatory and legal requirements. The entire text of the Code of Federal Regulations for 40 CFR Part 761 can be found on the U.S. Government Printing Office's website at www.gpo.gov, under "Legislative Resources" and on the PCB website at www.epa.gov/pcb under "Laws and Regulations." Additional assistance on the

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[1] Unless otherwise provided, the terms and abbreviations used herein have the meanings as defined in the PCB regulations at 40 CFR §761.3.

[2] See the definition of PCBs in 40 CFR §761.3 and "Response to Comments Document on the Proposed Rule – Disposal of PCBs; OPPTS Docket #66009A," May 1998, p. 11, Response #5.

TSCA PCB waste requirements is available from the Regional PCB Coordinators. The phone numbers and addresses for each Regional office are provided in this document (see Section VI), and a current listing of the Regional PCB Coordinators is available from the PCB website at www.epa.gov/pcb under "EPA Regional Contacts."

Polychlorinated Biphenyl (PCB) Site Revitalization Guidance Under the Toxic Substances Control Act (TSCA)

Introduction

This Polychlorinated Biphenyl (PCB) Site Revitalization Guidance (the Guidance) provides information on characterizing, cleaning up, containing, and disposing of PCB waste (e.g., soil and other debris generated as a result of any PCB spill cleanup). It has been developed as a guide to assist individuals engaging in PCB remediation efforts in complying with the Toxic Substances Control Act (TSCA) PCB regulations at 40 CFR Part 761. Individuals should contact the Regional PCB Coordinator for additional guidance on the regulatory requirements for site-specific situations or scenarios (see Section VI, pages 28-31).

Some cleanup sites may contain lead-based paint or asbestos which has been contaminated with other compounds such as PCBs, pesticides or mercury. In order to reduce exposure at these sites, it is generally recommended that a balance be struck between a manage-in-place strategy for lead-based paint and asbestos and the removal of other contaminants. Guidance and/or links to information for managing lead-based paints and asbestos contamination are available at EPA's websites at www.epa.gov/lead for lead, and www.epa.gov/asbestos for asbestos. In addition, several States have cleanup requirements that, in conjunction with the requirements addressed in 40 CFR Part 761, must be followed when undertaking a voluntary cleanup under a State response program. Therefore, individuals also are encouraged to consult with their State environmental officials regarding any additional State cleanup requirements.

PCB waste management at properties that have been contaminated with PCBs as a result of a spill, release or other unauthorized disposal requires compliance with the requirements for *PCB remediation waste* as specified in the TSCA PCB regulations at 40 CFR 761.50(b)(3) and 761.61. Refer to those regulations for specific regulatory and legal requirements regarding *PCB remediation waste*. An electronic version of the PCB regulations at 40 CFR Part 761 can be found on the PCB website at www.epa.gov/pcb under "Laws and Regulations." Many of the cleanup examples discussed in this Guidance are based on information regarding known federal Brownfields grant application scenarios available at the time of its development.

Background

Real property contaminated with PCBs may be sold or transferred by a current owner to another party. The transfer is not a release of any obligations of either the seller or the purchaser regarding proper handling, cleanup, or disposal of contaminated material. See August 14, 2003 Memo from Robert Fabricant and Susan Hazen to Barry Breen, John Peter Suarez and the Regional Administrators on the PCB website at www.epa.gov/pcb under "Interpretive Guidance," Policy Statements and Letters. The responsibility for the initial PCB contamination (e.g., spill or other release) resides with the person(s) who caused the contamination or who owned or operated the PCBs or PCB-containing equipment at the time of the contamination. However, after the property transfer, the new owner becomes responsible for controlling and mitigating any continuing and/or future releases of PCBs. In addition, because the use of contaminated portions of real property constitutes the use of PCBs on it, such use is prohibited under section 6(e)(2)(A) of TSCA, unless the owner of

the property contaminated with PCBs complies with all applicable use authorizations. In general, this means that the owner must first clean up the property or decontaminate it before it can be used (see 40 CFR §761.30(u)). As previously mentioned, the individual who caused the PCB contamination, which may or may not be the seller of the property, can generally be held liable for violations of the PCB disposal requirements.

I. Overview of TSCA's Waste Management Approach for PCB Wastes

This Guidance was developed by EPA to assist individuals who are planning or are engaged in PCB remediation activities (e.g., the redevelopment of a Brownfields site with PCB contamination), as well as State officials who are implementing state response programs, in complying with the PCB waste management requirements promulgated under the TSCA PCB regulations.

This Guidance describes the TSCA cleanup and disposal requirements for *PCB remediation waste* as specified under 40 CFR §761.61. Section 761.61 provides several options for cleaning up and disposing of PCB remediation wastes: 40 CFR §761.61(a) establishes requirements for self-implementing cleanups and disposal; 40 CFR §761.61(b) establishes requirements for performance-based disposal; and 40 CFR §761.61(c) establishes a procedure for applying for a risk-based cleanup or disposal approval where an individual wishes to conduct PCB cleanup or disposal in a manner other than prescribed in either 40 CFR §761.61(a) or (b). This guidance is primarily intended to assist individuals in complying with the self-implementing requirements in 40 CFR §761.61(a).

This Guidance also provides information on an activity that has been found to be acceptable to the Agency when PCB cleanup and related activities were conducted in a manner other than prescribed at 40 CFR §761.61(a) or (b); i.e., a risk-based disposal approval for the sampling, cleanup or disposal of PCB remediation waste (see 40 CFR §761.61(c)). Section 761.61(c) requires individuals to submit to the Regional Administrator an application which provides a risk-based demonstration that other procedures or cleanup standards will result in a commensurate level of protection for human health and the environment. In the example at Section III.A. of this guidance, the contaminated site was to be used for industrial purposes after the cleanup. In this particular industrial use scenario, the Agency determined that the proposed sampling procedures, cleanup standards, and engineering and institutional controls were sufficient to protect against an unreasonable risk of injury to health or the environment. EPA expects that these sampling procedures, cleanup standards, and engineering and institutional controls would likely be appropriate for other sites presenting comparable exposure scenarios, although each risk-based application will be evaluated on its merits and approved or disapproved on a site-specific basis.

Waste materials contaminated with PCBs as the result of a spill, an intentional or accidental release or uncontrolled discharges of PCBs, or other unauthorized disposal of PCBs are called *PCB remediation waste*. There are four types of *PCB remediation waste*: *bulk PCB remediation waste*, *porous surfaces*, *non-porous surfaces*, and *liquid PCBs*. Cleanup levels for an area contaminated with PCBs depend upon the degree of exposure to an area with residual contamination. Exposure is measured by the amount of time that people will be spending in the area, and the type of PCB contamination that will remain in place after remediation. The length of occupancy (or how long a person is expected to be exposed to an area of contamination) is generally dependent upon the intended use of the area. Areas that are in continuous or semi-continuous use, such as residences or schools, are generally classified as "high occupancy areas." Under the self-implementing provisions

of Section 761.61(a), areas that are used to a limited extent, such as an electrical substation, are considered to be "low occupancy areas." These terms are defined in 40 CFR 761.3 and discussed in Section II.

To further illustrate how these factors relate, this Guidance provides: 1) examples to illustrate how these variables are applied; and 2) a matrix that provides cleanup levels by waste type and occupancy level (see Table 2, p. 22).

II. What are the Appropriate Cleanup Levels for Self-Implementing Cleanups?

The extent of cleanup required for a property contaminated with PCBs will depend primarily upon two factors: 1) the use of the property (characterized by the length of occupancy); and 2) the type of waste material that is contaminated with the PCBs. The self-implementing procedures may not be used to clean up: surface or ground waters, sediments in marine and fresh water ecosystems, sewers or sewage treatment systems, any private or public drinking water sources or distribution systems, grazing lands, and vegetable gardens (see 40 CFR §761.61(a)(1)(i)). As described below, the required cleanup level for self-implementing cleanups is determined by the type of occupancy after the cleanup is completed. All PCB concentrations are based on total PCBs, rather than individual PCB Aroclors. Within each occupancy group, cleanup levels are supplied for the different types of waste materials. The intended reuse scenarios for a facility or property may result in a cleanup which utilizes a combination of cleanup standards (e.g., high occupancy and/or low occupancy area), depending on whether certain conditions are met (e.g., access is limited in duration; entry is secured, for example, by a key or combination lock). Therefore, consultation with the Regional PCB Coordinator is encouraged. Post-cleanup sampling is also required; sampling requirements are discussed in paragraph D of this Section. The process for determining the applicable PCB cleanup level can generally be broken down into three basic steps:

- Step 1 – How will the contaminated property be used?
- Step 2 – What is the type of waste material that is contaminated with PCBs?
- Step 3 – What are the appropriate cleanup levels?

Step 1: How will the contaminated property be used?

The new use of a property is classified as a high or low occupancy area under the self-implementing cleanup provisions of 40 CFR §761.61(a). The requirements for both the high occupancy and low occupancy area can be found at 40 CFR §761.61(a).

High occupancy area is generally defined as any area where *PCB remediation waste* has been disposed of on site (including but not limited to any building, any floor/wall of the building, any enclosed space within the building), and where annual occupancy for any individual not wearing dermal and respiratory protection is 840 hours or more (an average of 16.8 hours or more per week) for non-porous surfaces and 335 hours or more (an average of 6.7 hours or more per week) for *bulk PCB remediation waste*. Examples include a residence,

school, day care center, sleeping quarters, a single or multiple occupancy 40 hours-per-week work station, a school classroom, a cafeteria in an industrial facility, a control room, and a work station at an assembly line.

Low occupancy area is generally defined as any area where *PCB remediation waste* has been disposed of on site (including but not limited to any building, any floor/wall of the building, any enclosed space within the building), and where annual occupancy for any individual not wearing dermal and respiratory protection is less than 840 hours (an average of 16.8 hours per week) for non-porous surfaces and less than 335 hours (an average of 6.7 hours per week) for *bulk PCB remediation waste.* Examples include an electrical substation or a location in an industrial facility where a worker spends small amounts of time per week (such as an unoccupied area outside a building, an electrical equipment vault, or in the non-office space in a warehouse where occupancy is transitory).

Step 2: What is the type of waste material that is contaminated with PCBs?

Waste materials contaminated with PCBs as the result of a spill, an intentional or accidental release or uncontrolled discharges of PCBs, or other unauthorized disposal of PCBs are called *PCB remediation waste. PCB remediation waste* is managed at its "as-found" PCB concentration and includes, but is not limited to: soil, rags, and other debris generated during a cleanup; environmental media containing PCBs, such as soil and gravel; buildings and other man-made structures contaminated with PCBs; and *porous* and *non-porous surfaces* upon which PCBs were spilled or released (see the definition at 40 CFR §761.3). *PCB remediation waste* sampling should be based on in-situ characterization data (i.e., "as found" per 40 CFR §761.61) rather than post-excavation or demolition composite samples collected from waste piles and roll-off containers.

The four classes of *PCB remediation waste* commonly found at PCB remediation sites include:

- **bulk PCB remediation waste** including, but not limited to, existing piles of soil, in-situ soil, sediments, dredged materials, muds, PCB sewage sludge, and industrial sludge;

- **porous surfaces** including, but not limited to, **non-coated (e.g., unpainted) or coated** structural surfaces such as floors, walls, and ceilings made of concrete, brick, wood, plaster, plasterboard, etc., that have been subsequently contaminated by spills from PCB liquids. Porous surfaces also include paints or coatings that have been applied to a non-porous surface such as metal.

- **non-porous surfaces** including smooth unpainted solid surfaces that limit penetration of liquid containing PCBs beyond the immediate surface (e.g., smooth uncorroded metal, natural gas pipe with a thin porous coating originally applied to inhibit corrosion, smooth glass, smooth glazed ceramics, impermeable polished building stone such as marble or granite, and high density plastics such as