

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

VIA UPS, Next Day Air

December 23, 2011

Hon. Barbara A. Gunning, A.L.J. EPA Office of Administrative Law Judges 1099 14th Street, N.W. Suite 350 Franklin Court Washington, D.C. 20005



Re: IMO Chemsolv, Inc. and Austin Holdings-VA, L.L.C. EPA Docket No. RCRA-03-2011-0068

Dear Judge Gunning:

Enclosed please find Complainant's Motion for to file the original Declaration of Dr. Joe Lowry *Nunc Pro Tunc*. A proposed form of Order is enclosed.

Respectfully, Howell

Sr. Assistant Regional Counsel

Enclosures

cc: Lydia Guy, Regional Hearing Clerk

Charles L. Williams, Esq. Max Wiegard, Esq. Gentry, Locke, Rakes & Moore 800 Sun Trust Plaza 10 Franklin Road Roanoke, VA 24011

BEFORE THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

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In the Matter of:	
CHEMSOLV, INC., formerly trading as Chemicals and Solvents, Inc.	
and	
	: ORIGINAL DECLARATION NUNC PRO
AUSTIN HOLDINGS-VA, L.L.C.	:
	:
Respondents,	: EPA Docket No. RCRA-03-2011-0068
Chemsolv, Inc.	
1111 Industrial Avenue, S.E 1140 Industrial Avenue, S.E Describer Viscinia 24012	
Koanoke, virginia 24015	: Proceeding under Section 3008(a)
	: Recovery Act, as amended, 42 U.S.C.
Facility.	: Section 6928(a) :

Complainant herewith respectfully moves this Court, pursuant to 40 C.F.R.

§ 22.16 for an order allowing Complainant to file the original Declaration of Dr. Joe Lowry nunc

pro tunc. Complainant submits the following in support of this motion.

- A copy of the Declaration of Dr. Joe Lowry was filed yesterday, December 22, 2011 with Complainant's Rely Brief as well as other papers in further support of Complaint's Motion for Partial Accelerated Decision.
- 2. The copy of the Declaration of Joe Lowry is a true copy of the original.

- 3. The original Declaration is attached herein and is submitted within the time allowed under the Consolidated Rules for Complainant to file its Reply Brief.
- 4. Dr. Lowry lives and works in the State of Colorado. The original Declaration was delayed in arriving at the office of the undersigned due to an injury suffered by Dr. Lowry which confined him to his home, combined with twelve inches of snowfall which fell overnight in the Denver, Colorado area, rendering travel hazardous for a large portion of the day.
- 5. Allowing the original of the Declaration of Dr. Joe Lowry to be filed will not prejudice Respondents since it is identical to the copy filed yesterday and is being filed within the time allowed by the Consolidated Rules for Complainant's Reply.

WHEREFORE, Complainant requests that the Court issue an Order allowing the original Declaration of Joe Lowry be filed *nun pro tunc*. A proposed Order is annexed hereto.

Respectfully submitted,

12/23/2011 Dated:

In the Handle

Joyce A. Howell Sr. Assistant Regional Counsel (3RC30) U.S. Environmental Protection Agency, Region III

BEFORE THE UNITED STATES	
ENVIRONMENTAL PROTECTION AGENCY	;
REGION III	l

In the Matter of:	
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and	
AUSTIN HOLDINGS-VA, L.L.C.	
Respondents, :	
Chemsolv, Inc. 1111 Industrial Avenue, S.E 1140 Industrial Avenue, S.E	EPA Docket No. RCRA-03-2011-0068
Facility.	Proceeding under Section 3008(a) of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. Section 6928(a)

DECLARATION OF DR. JOE LOWRY IN SUPPORT OF COMPLAINANT'S MOTION FOR ACCLERATED DECISION

I, Joe Lowry, hereby declare that:

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- 1. I am employed as the Chief Scientist, and I am a National Technical Expert for the United States Environmental Protection Agency (EPA), in the National Enforcement Investigations Center (NEIC) in Lakewood, Colorado. I have been in this position for 14 years. I have been employed by EPA for 33 years.
- 2. As part of my duties, I have worked to develop EPA sampling guidance. I assisted in drafting the guidance document titled *RCRA Waste Sampling Draft Technical Guidance*, August 2002 (Complainant Exhibit 59, EPA 1638 1667). I also worked on the Federal Register Notice set forth at 55 Federal Register 4440 (February 8, 1990) (Complainant Exhibit 60, EPA 1697 1702). I have testified about representative sampling at civil and criminal legal proceedings, some of which involved the sampling guidance provided in

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chapter 9 of the EPA method manual *Test Methods for Evaluating* Solid Waste, *Physical/Chemical Methods*, EPA Publication SW-846 (Complainant Exhibit 61, EPA 1703 – 1780). I used these publications in part to formulate my opinion set forth herein.

- 3. I was asked by EPA Region 3 to review the sampling and analytical results for the samples taken by EPA at the Chemsolv Facility on May 23, 2007, of the subgrade tank known as the 'Pit."
- In addition, I reviewed the May 23, 2007, EPA Compliance Evaluation Inspection (Complainant Exhibit 18, EPA 331 – 371) and the EPA analytical results (Complainant Exhibit 15, EPA 241 – 283; Complainant Exhibit 16, EPA 284 – 294), the response to the EPA Information Request submitted by the Environmental Quality Company (Complainant Exhibit 63, EPA 1791 -1801), together with the Declarations of Jose Reyna, George Houghton, Kenneth Cox and Peggy Zawodny.
- 5. I have reviewed the expert report of Defendant's Expert, Scott Perkins, P.E., (Respondent Exhibit 30, CS 315 316), as well as the materials included in Respondent's Pre-Hearing Exchange upon which Mr. Perkins relied in making his report:

Respondent Exhibit 21, CS 239. Sampling Geometry Graphic

Respondent Exhibit 22, CS 240, 40 C.F.R. § 261.20

Respondent Exhibit 23, CS 241, 40 C.F.R Appendix I

Respondent Exhibit 24, CS 242 – 256, EPA Tank Sampling SOP # 2010

Complainant Exhibit 29, EPA 1209 - 1229 (entire document) and Respondent Exhibit 25, CS 257 - 258, (excerpt) EPA field notes

Respondent Exhibit 26, CS 259 – 261, ASTM D5495-03 Standard Practice for Sampling with a Composite Liquid Waste Sampler (Coliwasa)

Respondent Exhibit 27, CS 262 – 302, Complainant Exhibit 59, EPA 1638 - 1677 RCRA Waste Sampling Draft Technical Guidance, August 2002

Respondent Exhibit 28, Photograph, CS 303 - 304

Respondent Exhibit 29 ASTM D5358-93 Standard Practice for Sampling with a Dipper or Pond Sampler CS 305 - 306

- 6. I have also reviewed an affidavit of Scott Perkins, P.E. and two affidavits of Jamison G. Austin as well as Respondents' Response to Complainant's Motion for Partial Accelerated Decision as to Liability.
- 7. Based on my review of the materials listed above, together with my own knowledge and experience, I have formed an opinion concerning the soundness of the sampling of the subgrade tank at the Facility known as the "Pit," conducted by EPA inspectors on May 23, 2007, and as to the reliability of the determination that the material in subgrade tank at the facility known as the Pit, contained hazardous waste.
- 8. It is my opinion that the sampling of the liquid and solid material in the Pit conducted by EPA Inspectors George Houghton and Jose Reyna on May 23, 2007, at Respondents' Facility, obtained material from which a hazardous waste determination of the Pit could

be made.

- 9. Appendix I to 40 CFR Part 261 titled "Representative Sampling Methods" provides that the sample tool appropriate for the form and consistency of the waste should be used, but the regulations do not require the protocols referenced. The sampling tools employed by EPA inspectors Houghton and Reyna were appropriate for the form and consistency of the waste. The pond sampler is appropriate for the liquid, and the tank scraper is appropriate for settled solids. The devices were manufactured with intent of sampling the media sampled.
- 10. The definition of representative sample provided at 40 CFR §260.10 is, "Representative sample means a sample of a universe or whole (e.g. waste pile, lagoon, ground water) which can be expected to exhibit the average properties of the universe or whole." The sampling technique used by EPA inspectors Houghton and Reyna involved multiple sampling increments of each media, the liquid and the settled solids. The multiple sampling increments were collected with the expectation of providing physical coverage. The sample increments were composited with the expectation of allowing translation of the physical coverage via measurement in the laboratory to the average properties of the media.
- 11. In my opinion, that the samples are suitably representative to determine whether a hazardous constituent is present. As noted in the Section 2.2.4. of the EPA Guidance Document *RCRA Waste Sampling Draft Technical Guidance*, August 2002:

An enforcement official, when conducting a compliance sampling inspection to evaluate a waste handler's compliance with a "do not exceed" standard, take(s) only one sample. Such a sample may be purposively selected based on professional judgment. This is because all the enforcement official needs to observe for example to determine that a waste is hazardous – is a single exceedance of the standard.

- 12. Based on my review of the materials listed above, together with my own knowledge and experience, it is my opinion that the sampling conducted by EPA obtained sufficient data upon which EPA could conclude that chloroform, tetrachloroethene, and trichloroethene were identified as being present in the Pit at the Respondents' facility in sufficient concentrations to exceed the regulatory levels set forth at 40 CFR § 261.24.
- 13. I am especially confident that the samples are reliable given the level of concentration indicated by the EPA analysis of the samples. As noted in Complaint Exhibits15 and 16, the analysis of the May 23, 2007, Pit settled solids sample indicated the Pit settled solids contained 457 milligram per liter (mg/L) tetrachloroethene and 15.5 mg/L trichloroethene. As stated in the Preamble to the proposed rule at 55 Federal Register 4440, "Hazardous Waste Management System: Testing and Monitoring Activities." February 8, 1990:

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If a sample possesses the property of interest, or contains the constituent at a

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high enough level relative to the regulatory threshold, then the population from which the sample was drawn must also possess the property of interest or contain that constituent. Depending on the degree to which the property of interest is exceeded, testing of samples which represent all aspects of the waste or other material may not be necessary to prove that the waste is subject to regulation.

- 14. Consistent with the above, the concentration of tetrachloroethene found in the Pit solids sample was so large (457 mg/L) that representativeness of the sample is demonstrated. It would be necessary to take more than 653 additional samples, all with an analytical result of zero, to bring the mathematical average concentration below the regulatory contaminant threshold of 0.7 mg/L tetrachloroethene for toxicity characteristic hazardous waste identified with EPA hazardous waste No. D039. The likelihood of this occurrence is beyond reasonable expectation.
- 15. Similarly, the concentration of trichloroethene found in the Pit solids sample was so large (15.5 mg/L) that representativeness of the sample is demonstrated. It would be necessary to take more than 31 additional samples, all with an analytical result of zero, to bring the mathematical average concentration below the regulatory contaminant threshold of 0.5 mg/L trichloroethene for toxicity characteristic hazardous waste identified with EPA hazardous waste No. D040. The likelihood of this occurrence is beyond reasonable expectation.
- 16. The reliability of EPA sampling and analysis for the Pit settled solid sample is also demonstrated by the close agreement of tetrachloroethene and trichloroethene concentrations with a sample of the Pit settled solids collected on January 24, 2008, by or for the defendants. The EPA laboratory reported 37,100 milligrams per kilogram (mg/kg) tetrachloroethene and 835mg/kg trichloroethene for the EPA Pit settled solids sample. These are dry weight values and based on the reported 43.1 percent solids content of the sample; the wet weight values are 16,000 mg/kg tetrachloroethene and 360 mg/kg trichloroethene. A certificate of analysis dated January 30, 2008, from ProChem Analytical Incorporated of Ellison, Virginia, for a Pit sludge sample collected on January 24, 2008, reports 21,000 mg/L tetrachloroethene and 590 mg/L trichloroethene.
- 17. The EPA Toxicity Characteristic Leaching Procedure (TCLP) SW-846 Method 1311 causes a sample that is 100 percent solids to be extracted at a volume-to-mass ratio of 20. That is, for a 25-gram subsample for the zero headspace extracts, a 500-milliliter extract volume is produced. Therefore, if all the tetrachloroethene and trichloroethene in EPA's Pit settled solids sample were solubilized into the TCLP extract, then the 16,000 mg/kg tetrachloroethene and 360 mg/kg trichloroethene would result in TCLP extract concentrations of 780 mg/L tetrachloroethene and 18 mg/L trichloroethene. The EPA laboratory reported concentrations of 457 mg/L tetrachloroethene and 15.5 mg/L trichloroethene. The close agreement of the calculated values and the measured values demonstrates the reliability of the results.
- 18. For the EPA Pit settled sample, essentially all of the trichloroethene was solubilized by

the TCLP, while only about 57 percent of the tetrachloroethene was solubilized. This suggests that even if another Pit settled solid sample had a tetrachloroethene concentration of one-half or a much greater concentration than that reported by EPA, the TCLP tetrachloroethene could be the same because the aqueous solubility would still be at saturation. That is, variability in the tetrachloroethene content of samples would not result in variability of the TCLP results. Tetrachloroethene saturation of the TCLP extract demonstrates reliability of the TCLP result.

- 19. The aqueous liquid above the settled solids was found to contain about 0.7 mg/L tetrachloroethene. Because this concentration is not near saturation, the tetrachloroethene of the settled solids must not have had good communication with the aqueous liquid. Tetrachloroethene is a liquid and has a specific gravity of about 1.6. Being heavier than water, if a free nonaqueous liquid phase of tetrachloroethene were present in the Pit, it would be expected to pool near the bottom. Depending on the permeability of the settled solids, the tetrachloroethene might percolate through particulate solids. This may account for the lack of communication with the aqueous liquid in the pit. Hence, samples not incorporating the very bottom of the settled solids might cause measurement to underestimate the tetrachloroethene concentration of the settled solids.
- 20. The EPA laboratory reported 9.5 mg/L chloroform for the Pit liquid and 6.1 mg/L chloroform for the TCLP extract of the Pit liquid. The contaminant threshold limit for chloroform is 6 mg/L for toxicity characteristic hazardous waste identified with EPA hazardous waste No. D022. Although the ZHE of the TCLP was intended to mitigate volatility loss during filtering, losses occurred. This is evidenced by the 9.5 mg/L chloroform for the sample and 6.1 mg/L chloroform for the sample TCLP extract. However, the closeness of the values demonstrates the reliability of each result.
- 21. Although EPA inspectors Houghton and Reyna did not conduct sampling specifically for the purpose of determining the applicability of 40 CFR Subpart CC to the Pit, the analytical results from the Pit samples indicated that the requirements of 40 CFR Subpart CC apply to the Pit.
- 22. The analysis of the May 23, 2007, samples of the material in the Pit was sufficient to support a conclusion that the requirements of 40 CFR Subpart CC would apply to the Pit because the concentration of volatile organic (VO) compounds was large enough that if even three additional samples had a value of zero, the VO concentration in the material from the Pit would still exceed the regulatory threshold of 500 parts per million by weight (ppmw, which is equal to mg/kg).
- 23. Respondents' response to Complainant's motion at page 16 declares "the EPA failed to incorporate sufficient quality control steps to ensure reliability." As discussed above, the reliability of the EPA sampling and analysis of the Pit liquid and solid is demonstrated in various manners. Further, the custody record provides that the Pit samples were collected on May 23, 2007, and transferred to the laboratory on May 24, 2007. This document provides that there were 17 containers for the liquid and nine containers for the sludge (settled solids). The document also shows three containers for the trip blank and five

containers for the equipment blank. The preparation and the analysis of trip and equipment blanks are quality control steps taken to ensure reliability. The analytical results for the blanks provide assurance that the Pit sample analytical results are not attributed to contamination by the sample containers, sampling handling, preparation, or analysis.

- 24. Moreover, the analytical records provide the samples were analyzed by EPA for semivolatile and volatile organic compounds by gas chromatography coupled to mass spectrometry. TCLP extracts of the samples were analyzed for volatile organic compounds by the same technology. This technology is widely accepted in the scientific community and is considered reliable. Proper application of the technology is demonstrated by the matrix and surrogate organic compound known additions of the samples as well as laboratory control sample results.
- 25. The laboratory records show that the Pit samples were prepared for volatile and semivolatile organic compound analyses on June 7, 2007, and analyzed on June 7, 2007, June 26, 2007, and June 27, 2007. Because very high concentrations of volatile organic compounds were found by these determinations, the laboratory records show that TCLP zero headspace extracts were prepared on August 16, 2007, and volatile organic compounds were determined for the extracts on August 22, 2007. The laboratory identified that the recommended holding time for samples for such analyses of 14 days was exceeded. Exceeding recommended holding time does not detract from the reliability of the determination that the waste exhibits the toxicity characteristic because contaminant concentrations are considered to be minimum values, and concentrations could only have been higher or the same if holding times were met. This is because the concentration of organic compounds can be lowered by various degradation pathways (biological activity, volatility, etc.). EPA has provided this guidance in rulemaking preamble (55 Federal Register 4443, 1990 and 58 Federal Register 46045, 1993) and in chapter 2 at page 2-5 of its methods manual Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846.

Analylical data generated outside of the recommended holding times should typically be considered as minimum values only. Such data may be used to demonstrate that a waste is hazardous where it shows the concentration of a constituent to be above the regulatory threshold, but cannot be used to demonstrate that a waste is not hazardous.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on: $\frac{12|21|201|}{100}$ Name: $\frac{00}{100}$ AUM Joe Lowry, PhD

BEFORE THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

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and	:	
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AUSTIN HOLDINGS-VA, L.L.C.	:	
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Respondents,	:	
-	:	EPA Docket No. RCRA-03-2011-0068
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Chemsolv, Inc.	:	
1111 Industrial Avenue, S.E	:	
1140 Industrial Avenue, S.E	:	
Roanoke, Virginia 24013	:	
-	:	Proceeding under Section 3008(a)
	:	of the Resource Conservation and
	:	Recovery Act, as amended, 42 U.S.C.
	:	Section 6928(a)
Facility.	:	
	:	

ORDER

This matter having been opened to the Court upon Complainant's Motion for an Order allowing the Declaration of Dr. Joe Lowry to be filed *nunc pro tunc*, and Complainant having filed a true copy on December 22, 2011, and the Court having considered the argument of counsel and for good cause shown, it is hereby:

ORDERED that the original Declaration is of Dr. Joe Lowry be filed nunc pro tunc. SO ORDERED.

Hon. Barbara A. Gunning, A.L. J.

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

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EPA Docket No. RCRA-03-2011-0068

Proceeding under Section 3008(a) of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. Section 6928(a)

CERTIFICATE OF SERVICE

I certify that I hand delivered the original and one copy of the Motion to Allow the Filing of the Original of the Declaration of Dr. Joe Lowry *Nunc Pro Tunc*, together with the original of the Declaration of Dr. Joe Lowry, and a proposed form of Order to the Regional Hearing Clerk, U.S. EPA Region III, 1650 Arch Street, Philadelphia, PA 19103-2029. I further certify that a copy of the same was sent by UPS, next day delivery, to the addressees listed below.

Hon. Barbara A. Gunning, A.L.J. EPA Office of Administrative Law Judges 1099 14th Street, N.W. Suite 350 Franklin Court Washington, D.C. 20005

20/201 Dated: /2

Charles L. Williams, Esq. Gentry, Locke, Rakes & Moore 800 Sun Trust Plaza 10 Franklin Road Boanoke, VA/24011

Joyce/A. Howell Senior Assistant Regional Counsel U.S. EPA - Region III 1650 Arch Street Philadelphia, PA 19103-2029