

1           BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

2                               VOLUME I

3   IN THE MATTER OF:                               )  
4   9% ROP PLAN CONTROL MEASURES                )  
5   FOR VOM EMISSIONS TIGHTENING                )  
6   COLD CLEANING REQUIREMENTS:                )   R97-24  
7   AMENDMENTS TO 35 ILL. ADMIN.                )   (RULEMAKING)  
8   CODE PARTS 211, 218 AND 219,                )  
9   SUBPART E                                       )

7

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9           The following is the transcript of a rulemaking  
10   hearing held in the above-entitled matter, taken  
11   stenographically by GEANNA M. IAQUINTA, CSR, a  
12   notary public within and for the County of Cook and  
13   State of Illinois, before K.C. Poulos, Hearing  
14   Officer, at 100 West Randolph Street, Room 9-040,  
15   Chicago, Illinois, on the 4th day of March, 1997,  
16   A.D., commencing at the hour of 10:00 o'clock a.m.

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1 A P P E A R A N C E S :

2 HEARING TAKEN BEFORE :

3 ILLINOIS POLLUTION CONTROL BOARD,  
4 100 West Randolph Street  
5 Suite 11-500  
6 Chicago, Illinois 60601  
7 (312) 814-4925  
8 BY: MS. K.C. POULOS  
9 HEARING OFFICER.

10 ILLINOIS POLLUTION CONTROL BOARD MEMBERS PRESENT :

11 Mr. J. Theodore Meyer  
12 Mr. Hiten Soni

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16 ILLINOIS ENVIRONMENTAL PROTECTION AGENCY MEMBERS  
17 PRESENT :

18 Ms. Christina L. Archer  
19 Mr. Richard A. Forbes  
20 Mr. Michael D. Rogers  
21 Ms. Karen L. Barancik

22

23 OTHER AUDIENCE MEMBERS WERE PRESENT AT THE HEARING,  
24 BUT NOT LISTED ON THIS APPEARANCE PAGE.

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1 (Hearing Exhibit No. 1 marked  
2 prior to the commencement of  
3 the proceedings.)

4 MS. POULOS: My name is K.C. Poulos, and I'm  
5 the hearing officer in this matter. It's entitled,  
6 In The Matter of Nine Percent ROP Plan Control  
7 Measures for VOM Emissions Tightening Cold Cleaning  
8 Requirements Amendments to 35 Illinois  
9 Administrative Code Parts 211, 218, and 219 Subpart  
10 E. This is Docket Number R97-24.

11 Present today on behalf of the Illinois  
12 Pollution Control Board and seated to my right is  
13 Board Member J. Theodore Meyer. Also present from  
14 the board is a technical staff is Hiten Soni, and  
15 this hearing will be governed by the board's  
16 Procedural Rules for Regulatory Proceedings.

17 All information which is relevant and not  
18 repetitious or privileged will be admitted. All  
19 witnesses will be sworn and subject to  
20 cross-questioning.

21 This proceeding is a fast-track rulemaking,  
22 which was filed on December 13th, 1996, by the  
23 Illinois Environmental Protection Agency pursuant to  
24 Section 28.5 of the Act.

1           Pursuant to the provisions of that section,  
2 the board is required to proceed with this  
3 rulemaking under set time frames. Section 28.5 also  
4 establishes specific purposes for each hearing and  
5 other procedure requirements.

6           Pursuant to Section 28.5, this first  
7 hearing is reserved for the agency's presentation of  
8 its proposal and questions directed to the agency's  
9 witnesses.

10           The agency witnesses have prefiled  
11 testimony, which will be entered into the record as  
12 if read.

13           Today the agency witnesses will provide  
14 summaries of their prefiled testimony. Questioning  
15 of the witnesses will then take place. Anyone may  
16 ask a question of any witness. During the  
17 questioning period, I would like persons with  
18 questions to raise theirs hands and wait for me to  
19 acknowledge them.

20           What we're going to do today is start out  
21 with the prefiled questions, and then we'll go into  
22 other questions from members of the audience, if  
23 they have any.

24           Please note that any questions asked by

1 board members and staff are not intended to express  
2 any preconceived notions or bias, but only to build  
3 a complete record for review by the other board  
4 members who are not present today.

5 Pursuant to my February 21st, 1997, hearing  
6 officer order, a second and third hearing have been  
7 scheduled in this matter. The second and third  
8 hearings may be canceled without further notice if  
9 the effected entities are in agreement on the rule  
10 and the U.S. EPA has not informed the board of any  
11 unresolved objection to the rule.

12 However, within seven days after the first  
13 hearing, any person may request that the second  
14 hearing be held. Such a request must be made either  
15 on the record at this hearing or in writing filed  
16 with the board and served upon those on the service  
17 list.

18 The second hearing, if necessary, shall be  
19 devoted to presentation testimony, documents, and  
20 comments by effected entities and all other  
21 interested parties.

22 The third hearing, if necessary, shall be  
23 devoted to interagency response to material  
24 presented at the second hearing and to any response

1 by other parties.

2 Mr. Meyer, do you have any comments at this  
3 time?

4 MR. MEYER: No, thanks.

5 MS. POULOS: Okay. We will then turn to the  
6 agency's presentation of its proposal.

7 Ms. Archer, do you have any opening  
8 statement?

9 MS. ARCHER: Yes, I do.

10 MS. POULOS: Proceed, please.

11 MS. ARCHER: Thank you. Good morning. My name  
12 is Christina Archer, and I represent the Illinois  
13 Environmental Protection Agency in this rulemaking  
14 proposal, R97-24 regarding cold cleaning degreasing  
15 operations.

16 The rulemaking is being submitted to the  
17 Illinois Pollution Control Board to satisfy  
18 Illinois' commitment under the Clean Air Act to  
19 reduce emissions of volatile organic material by  
20 three percent each year from 1990 baseline levels  
21 until attainment is reached.

22 This rulemaking will cover both the Chicago  
23 severe ozone nonattainment area and the Metro-East  
24 St. Louis moderate ozone nonattainment area.

1           While the Metro-East area is not  
2 immediately subject to the rate of progress  
3 requirements under the Clean Air Act, additional  
4 control measures will assist the area in reaching  
5 attainment, and further Metro-East is at risk of  
6 being bumped up to the next higher classification or  
7 serious, which would implicate the rate of progress  
8 requirements.

9           Since the rate of progress provisions are  
10 mandated by the Clean Air Act and sanctions can  
11 apply for a state's failure to adopt such rules,  
12 this proposal is being submitted to the Illinois  
13 Pollution Control Board pursuant to the fast-track  
14 provision set forth in Section 28.5 of the  
15 Environmental Protection Act.

16           This proposal will amend 35 Illinois  
17 Administrative Codes Sections 218 and 219 182 to add  
18 more stringent requirements for solvents sold or  
19 used in cold cleaning degreasers along with  
20 associated recordkeeping provisions.

21           The proposal will also add a definition at  
22 35 Illinois Administrative Code 211.1085 for  
23 electronic components. The cleaning of electronic  
24 components will be exempt from the proposal.



1           The proposal will be implemented in two  
2 phases. Initially, the vapor pressure of solvents  
3 sold for or used in cold cleaning degreasing will be  
4 limited to two millimeters of mercury measured at 20  
5 degrees Celsius in the year 1999 and then it will be  
6 limited to one millimeter of mercury measured at 20  
7 degrees Celsius in the year 2001.

8           The Illinois EPA believes that this is a  
9 reasonable approach. Solvents at a 2.0 millimeters  
10 per mercury vapor pressure are readily available and  
11 the phase-in approach will allow additional time for  
12 manufacturers and suppliers to switch to the lower  
13 vapor pressure solvents.

14           The proposal is patterned after a similar  
15 rule in the state of Maryland, which also adopted a  
16 phase-in approach, and sources in Maryland are  
17 currently meeting a 1.0 vapor pressure limit.

18           The Illinois EPA further believes that the  
19 recordkeeping provision of the rule are reasonable.  
20 The type of information we are seeking is a type of  
21 information currently being retained. Usually, this  
22 would be on material safety data sheets or other  
23 type of technical information.

24           The exclusion for electronic components is

1 being included in the proposal due to concerns  
2 raised by several parties that solvents with low  
3 vapor pressure would not adequately clean such  
4 components.

5 Maryland also recognized that the cleaning  
6 of electronic components was a general concern and  
7 limited its rule to the cleaning of metal parts  
8 only.

9 This proposal is intended to cover the  
10 manufacturers, suppliers, and recyclers of solvent  
11 used in cold cleaning degreasing as well as the  
12 users of such solvent such auto repair and  
13 refinishing shops and metal finishing shops.

14 Since the number of sources potentially  
15 subject to the proposal is quite large, the Illinois  
16 EPA is proposing a five-gallon de minimus cut off.  
17 This means that suppliers only need to keep records  
18 of sales of solvent in quantities over five gallons.

19 The Illinois EPA believes this would exempt  
20 most over-the-counter retail sales of such  
21 solvents. The Illinois EPA has conducted extensive  
22 outreach in this proposal and understands that  
23 solvents meeting the proscribed vapor pressure  
24 limits are readily available and are also cost

1 effective.

2           The cost of controlling a ton of VOM range  
3 from \$238 to \$779. In addition, the Illinois EPA  
4 has sent a copy of this proposal to U.S. EPA Region  
5 Five for parallel processing. The Illinois EPA  
6 believes that Region Five is in substantial  
7 agreement with the proposal.

8           With me today to my immediate left is Dick  
9 Forbes. He's the manager of the Ozone Regulatory  
10 Unit, and Mr. Mike Rogers, next to him, who is an  
11 Environmental Protection Specialist. Both are in  
12 the Illinois EPA's Air Quality Planning Section.

13           Both Mr. Forbes and  
14 Mr. Rogers have prepared brief oral testimony in  
15 this matter. Mr. Forbes will be giving a brief  
16 general overview of the Clean Air Act provisions  
17 required in this proposal, and Mr. Rogers will be  
18 addressing the specifics of the proposal.

19           At this time, I would make a motion to the  
20 board to accept Illinois EPA's prefiled testimony  
21 into the record as if read, and ask that both Mr.  
22 Forbes and Mr. Rogers be sworn in and give their  
23 oral testimony.

24           The Illinois EPA would then be happy to

1 answer any questions. Thank you.

2 MS. POULOS: Any objections? Okay. We'll enter  
3 your testimony as Exhibit 1 of this proceeding.

4 Would you please swear the witnesses?

5 (Witnesses sworn.)

6 WHEREUPON:

7 R I C H A R D F O R B E S ,

8 M I C H A E L R O G E R S ,

9 called as witnesses herein, having been first duly  
10 sworn, depose and saith as follows:

11 MR. FORBES: My name is Dick Forbes. I am  
12 employed by the Illinois Environmental Protection  
13 Agency as the manager of the Ozone Regulatory Unit  
14 in the Air Quality Planning Section, Bureau of Air.

15 I've been employed by the Illinois EPA in  
16 this capacity for eleven years. Prior to that, I  
17 served as analysis unit manager and new source  
18 review unit manager both in permit section -- both  
19 in the permit section of the Illinois EPA's Bureau  
20 of Air.

21 Prior to that, I served as an environmental  
22 protection engineer in the permit section of  
23 Illinois EPA's Bureau of Water. In all, I have been  
24 employed by the Illinois EPA for 24 years.

1           My educational background includes a  
2 bachelor of science degree in general engineering  
3 from the University of Illinois at Urbana-Champaign  
4 and a master of science degree in environmental  
5 engineering from Southern Illinois University at  
6 Carbondale.

7           I hold a professional engineering license  
8 and I'm registered as a professional engineer in the  
9 state of Illinois.

10          My prefiled testimony addresses the need  
11 for improved ozone air quality in Illinois, and the  
12 Federal Clean Air Act requirements which served as  
13 the driving force for Illinois EPA developing and  
14 proposing regulations for controlling emissions of  
15 volatile organic material or VOM from certain  
16 categories of emission sources.

17          The proposal being presented today, control  
18 of VOM emissions from cold cleaning degreasing  
19 operations, is one such category. Illinois has made  
20 steady progress in achieving the various  
21 requirements of the 1990 Clean Air Acts.

22          Substantial reductions have been achieved  
23 to date with the implementation of the various board  
24 adopted 15 percent rate of progress control measures

1 and the various federal measures. However, ozone  
2 modeling results show that substantial reductions in  
3 VOM emissions will still be required to reach  
4 attainment of the ozone air quality standard.

5           Based on the preliminary results of the  
6 ozone transport assessment group, widespread  
7 transport of ozone and ozone precursors is  
8 occurring, and with a reasonable reduction in  
9 background ozone levels across the OTAG domain, a  
10 more realistic reduction target is predicted.

11           In the meantime, the Clean Air Act requires  
12 and the U.S. EPA has called for a demonstration that  
13 Illinois is making reasonable further progress in  
14 Chicago in reducing emissions of VOM to satisfy the  
15 three percent per year rate of progress provisions  
16 of the Clean Air Act.

17           This demonstration must be made within 18  
18 months of the effective date of the federal  
19 registered notice containing the SIB call in order  
20 to avoid federal sanctions.

21           Illinois EPA has evaluated available  
22 controls and assessed the needed reductions and  
23 concluded that this proposal and an emissions  
24 trading program for VOM emission sources in the

1 Chicago ozone nonattainment area is a reasonable  
2 approach to solving part of this requirement and  
3 that the reductions from implementing this rule in  
4 the Metro-East nonattainment area will further  
5 assist it in meeting the ozone national ambient air  
6 quality standards.

7 Mike Rogers of the Illinois EPA Bureau of  
8 Air will provide details of the specific  
9 requirements of the proposed cold cleaning  
10 degreasing rule in his testimony, and that concludes  
11 my overview.

12 MS. POULOS: Okay. Thank you.

13 MR. ROGERS: Good morning. My name is Mike  
14 Rogers, and I am an Environmental Protection  
15 Specialist in the Air Quality Planning Section of  
16 the Illinois Environmental Protection Agency  
17 ("Illinois EPA") Bureau of Air. Technical regarding  
18 the proposed regulation R97-24 before you today, I  
19 was involved in the development of the regulation  
20 and was responsible for preparing the technical  
21 support document.

22 The Illinois EPA is proposing a  
23 modification in Sections 218.182 and 219.182 to  
24 limit the vapor pressures of solvents sold or used

1 in cold cleaning. These reductions and solvent  
2 vapor pressure will substantially decrease volatile  
3 organic material, VOM, emissions from cold cleaning  
4 operations. Emissions of VOM from cold cleaning  
5 solvent degreasing result from the evaporation of  
6 VOM from solvents both during periods when parts are  
7 being cleaned and when the degreasing unit sits  
8 idle.

9 Solvent cleaning or degreasing as it is  
10 commonly called is a process using aqueous liquids  
11 or non-aqueous organic solvents to clean and remove  
12 soils from surfaces. Solvent cleaning is divided  
13 into the following three major types: Cold  
14 cleaning, open-top vapor degreasing, and  
15 conveyORIZED degreasing.

16 Cold cleaning is defined in 35 Illinois  
17 Administrative Code 211.1310 as the process of  
18 cleaning and removing soils from surfaces by  
19 spraying, brushing, flushing, or immersion while  
20 maintaining the organic solvent below its boiling  
21 point. Wipe cleaning is not included in this  
22 definition.

23 Cold cleaning degreasing takes place at  
24 auto repair shops, car dealerships, marine shops --



1 excuse me -- machine shops, and other metal  
2 fabrication and manufacturing businesses. Cold  
3 cleaning equipment suppliers estimate that there are  
4 between 50,000 and 60,000 cold cleaning units in  
5 operation in the Chicago area. Using this estimate,  
6 approximately 5,000 to 6,000 units could be use in  
7 the Metro-East area. Solvent degreasing equipment  
8 and degreasing materials are typically supplied by  
9 the same companies.

10           The Illinois EPA estimates that 1990 VOM  
11 emissions from cold cleaning were approximately 32  
12 tons per day in the Chicago ozone nonattainment area  
13 and two and a half tons per day in the Metro-East  
14 area.

15           The Illinois EPA is proposing a  
16 modification to the current cold cleaning solvent  
17 degreasing regulations 35 Illinois Administrative  
18 Code, Part 218 and 219, Subpart E, Solvent Cleaning,  
19 to limit the vapor pressure of solvents sold or used  
20 in cold cleaning to 2.0 millimeters of mercury  
21 measured at 20 degrees centigrade, 68 degrees  
22 Fahrenheit beginning on March 15th, 1999, and to 1.0  
23 millimeters of mercury measured -- beginning March  
24 15th, 2001.

1           The proposed vapor pressure limits are  
2 identical to those adopted in the state of Maryland  
3 as a part of its 15 percent rate of progress plan.  
4 Discussions with the major suppliers have indicated  
5 that solvents meeting this vapor pressure limit are  
6 available and in use in Illinois.

7           The phased-in compliance dates will allow  
8 solvent users and suppliers time to acquire and  
9 adjust to the use of the lower vapor pressure  
10 solvents.

11           Also proposed are recordkeeping provisions,  
12 which require that solvent suppliers and users of  
13 solvents in cold cleaning degreasers maintain  
14 documents which indicate the solvent's vapor  
15 pressure at the prescribed temperature.

16           The marketers of cold cleaning solvents  
17 must keep records indicating the name and address of  
18 the solvent purchaser, the date of purchase, the  
19 type of solvent purchased, the solvent unit  
20 quantity, the total volume purchased, and the vapor  
21 pressure of the solvent purchased measured in  
22 millimeters of mercury at 20 degrees centigrade, 68  
23 degrees Fahrenheit.

24           Solvent users must maintain records for

1 each solvent purchased indicating the name and  
2 address of the solvent supplier, the date of the  
3 purchase, the type of solvent purchased, and  
4 the vapor pressure of the solvent measured in  
5 millimeters of mercury at 20 degrees centigrade, 68  
6 degrees Fahrenheit.

7           These records must be kept for three  
8 years. It is the Illinois EPA's understanding that  
9 these types of the records are generally already  
10 being maintained as solvent users are given material  
11 safety data sheets or other product technical  
12 information by the marketer which includes much of  
13 the information requested.

14           The supplier sales and recordkeeping  
15 requirements only apply to the sale of solvents in  
16 units greater than five gallons. Although cleaning  
17 solvents are sold at various stores specializing in  
18 auto products, including department stores with auto  
19 supply sections, such consumer products are not  
20 intended to be included in the scope of this  
21 regulation.

22           The Illinois EPA believes that the  
23 five-gallon cut off will exclude the over the  
24 counter auto supply store solvent sales and limit

1 the applicability to the bulk suppliers for which  
2 the regulation is intended.

3           The state of Maryland estimated that  
4 reducing the vapor pressure of solvents used in cold  
5 cleaning to one millimeter of mercury would result  
6 in a 67 percent reduction in such VOM emissions.  
7 Emission reductions occur since lower vapor pressure  
8 solvents evaporate more slowly than solvents with a  
9 higher vapor pressure.

10           Applying the same percentage reduction  
11 estimates developed in Maryland, the Illinois EPA  
12 estimates that VOM emissions will be reduced by 23  
13 tons per day in the Chicago nonattainment area and  
14 1.6 tons per day in the Metro-East nonattainment  
15 area in the year 2001.

16           There are two primary cost elements  
17 associated with lowering the solvent vapor pressure;  
18 the cost of the solvent itself and costs associated  
19 with changes in the solvent distillation process for  
20 recycling. The cost estimates contained in the  
21 technical support document are based on information  
22 collected from the state of Maryland and from  
23 solvent suppliers during the rule development  
24 outreach process.

1           The total annual cost estimated for the 1.0  
2 millimeter mercury solvent in both nonattainment  
3 areas range between \$1.8 million and \$6 million.  
4 Dividing the total estimated cost by the annual VOM  
5 emission reduction of 7,675 tons yields a cost  
6 effectiveness range of between \$238 and \$779 per  
7 ton.

8           The Illinois EPA believes these costs to be  
9 conservative because they do not take into  
10 consideration the fact that solvent meeting the 1.0  
11 millimeter mercury limit is already being used. In  
12 addition, the figures do not include an anticipated  
13 cost reduction due to an expected extended life of  
14 the solvent.

15           Since the vapor pressure of the solvent is  
16 lower, it evaporates more slowly, thereby extending  
17 the average service interval and reducing disposal  
18 costs.

19           In fact, the state of Maryland estimated  
20 that the use of a 1.0 millimeter mercury solvent  
21 would result in an overall savings.

22           As stated previously, other areas have  
23 tightened or proposed to tighten their cold cleaning  
24 regulations in order to comply with Clean Air Act

1 rate of progress requirements. Most notable are the  
2 state of Maryland and the South Coast Air Quality  
3 Management District, which is responsible for air  
4 quality planning for Los Angeles, California area.

5           As previously mentioned, the state of  
6 Maryland included the same cold cleaning vapor  
7 pressure limits in its 15 percent rate of progress  
8 plan. This 1.0 millimeter mercury limit is  
9 currently in effect and such solvent is being  
10 provided and effectively used.

11           The South Coast Air Quality Management  
12 District is currently proposing a solvent cleaning  
13 regulation which would require that beginning in  
14 1999 the volatile organic compound, VOC, limit of  
15 solvents used in general repair and maintenance  
16 cleaning be reduced from 900 grams per liter or  
17 seven and a half pounds per gallon to 50 grams per  
18 liter or 0.42 pounds per gallon.

19           This proposal essentially requires the use  
20 of aqueous cleaners for such cleaning which do work  
21 well for certain applications, but not for all  
22 cleaning operations.

23           As previously mentioned, the Illinois EPA  
24 sought and incorporated the input of numerous

1 parties involved in solvent cleaning. The Illinois  
2 EPA sent out copies of the rule proposal to over 20  
3 persons representing individual businesses, solvent  
4 suppliers, degreasing equipment manufacturers, and  
5 industrial trade associations.

6           Several issues were raised during this  
7 rule development process, which resulted in rule  
8 modifications as it is being proposed. Examples  
9 include the phased-in vapor pressure limits and the  
10 exemption for the cleaning of electronic  
11 components. Both of these situations were  
12 encountered by the state of Maryland during its rule  
13 development and were incorporated into its  
14 regulation.

15           In summary, the Illinois EPA believes that  
16 the proposed cold cleaning solvent vapor pressure  
17 limits are both a practical and cost-effective means  
18 of obtaining necessary VOM emission reductions in  
19 the Chicago and Metro-East ozone nonattainment  
20 areas. Solvents meeting the proposed limits are  
21 currently in use and the state of Maryland has  
22 adopted a similar regulation requiring the same  
23 vapor pressure limits.

24           Use of the 2.0 and 1.0 millimeter mercury

1 vapor pressure solvent is expected to reduce 1990  
2 cold cleaning emissions by 33 percent and 67 percent  
3 respectively.

4           The 1999 and 2001 compliance dates also  
5 allow solvent users and suppliers time to make the  
6 transition to the 1.0 millimeter mercury vapor  
7 pressure solvent. The Illinois EPA estimates that  
8 the worst case cost effectiveness of the 1.0  
9 millimeter mercury vapor pressure requirement limit  
10 is between \$238 and \$779 per ton.

11           Therefore, the Illinois EPA believes that  
12 the proposed solvent vapor pressure limits are a  
13 reasonable means for reducing VOM emissions in the  
14 Chicago and Metro-East nonattainment areas.

15           This concludes my prepared testimony.

16       MS. POULOS: Ms. Archer, is there anything  
17 else?

18       MS. ARCHER: No. We're ready to answer any  
19 questions.

20       MS. POULOS: Okay. Ms. Faur, why don't we start  
21 with your prefiled questions if that's all right?

22       MS. FAUR: That's fine with me.

23           Good morning. I'm Cindy Faur. I'm here on  
24 behalf of Cerro Copper Products Company.



1           These first questions are going to be from  
2 my prefiled questions dated February 28th. Number  
3 one, in your testimony, Mr. Rogers, you indicated  
4 that you're responsible for the development of  
5 emission estimates for area sources. These are the  
6 wrong questions. One second. I apologize. Strike  
7 that.

8           Number one, the proposed rule concerns cold  
9 cleaning operations. Certain conveyORIZED  
10 degreasing operations, however, also utilize cold  
11 cleaners. Will the material requirements contained  
12 in the proposal also apply to conveyORIZED  
13 degreasing units which utilize cold cleaning.

14       MR. ROGERS: The question correctly points out  
15 that some conveyORIZED degreasing operations utilize  
16 the cold cleaning process.

17           The definition of conveyORIZED contained in  
18 Sections 211.1550 states conveyORIZED degreasing  
19 means the continuous process of cleaning and  
20 removing soils from surfaces utilizing either cold  
21 or vaporized solvents. The differentiation in the  
22 regulation deals with the continuous nature of  
23 conveyORIZED degreasing.

24           Based on this differentiation, regulations

1 for conveyorized degreasing operations were included  
2 in a separate section, 218 and 219.184. The  
3 proposed regulation only includes material  
4 requirements in Subsections 218.182 and 219.182, so  
5 the Illinois EPA did not intend the solvent vapor  
6 pressure limits to apply to conveyorized degreasing  
7 operations.

8 MS. FAUR: Thank you. This is my second  
9 question. This question concerns Sections  
10 218.182(f) and 219.182(f).

11 These sections contain an exemption from  
12 the material requirements for cold cleaning of  
13 electronic components. Under Section 211.1885 of  
14 the proposal, electric components is defined as,  
15 quote, all portions of an electric assembly,  
16 including, but not limited to circuit board  
17 assemblies, printed wire assemblies, printed circuit  
18 boards, soldered joints, ground wires, bus bars, and  
19 associated electronic component manufacturing  
20 equipments such as screens and filters, end quote.

21 Could electrical motors be included in the  
22 definition of electric components for the purposes  
23 of the exemption in Sections 218.182(f) and  
24 219.182(f)?

1       MR. ROGERS: Yes. It is the Illinois EPA's  
2       opinion that electrical motors could be considered  
3       as within the definition of electric components.

4       MS. FAUR: Could electrical contacts be included  
5       in the definition of electric components for  
6       purposes of this exemption?

7       MR. ROGERS: Based on conversations with Cerro  
8       Copper about their operation revolving around  
9       electronic components, we understand that this --  
10      this operation is a spray and wipe-type operation  
11      and wipe cleaning is specifically exempt from the  
12      cold cleaning requirements. So that  
13      would -- the cleaning of electrical contacts would  
14      not be included in this regulation.

15      MS. FAUR: Finally, could electrical control  
16      panels be included in the definition of electronic  
17      components for the purposes of this exemption?

18      MR. ROGERS: Similarly, we understand that wipe  
19      cleaning is performed on the electrical control  
20      panels, and wipe cleaning is not included in the  
21      scope of this regulation.

22      MS. FAUR: Thank you. And before going on to my  
23      supplemental questions, which were filed on Monday,  
24      I'd like to ask a few clarifying questions. Those

1 supplemental may not be necessary.

2 MS. POULOS: That's fine.

3 MS. FAUR: First, is the agency aware of Cerro  
4 Copper's cold cleaning operations for ACR and other  
5 copper tubing? Specifically, is the agency aware of  
6 the Detrex cold cleaning degreaser for which Cerro  
7 Copper has recently received a construction permit?

8 MR. ROGERS: Yes, we are.

9 MS. FAUR: Does the agency intend this Detrex  
10 degreaser or other substantially similar units to be  
11 subject to this rule?

12 MR. ROGERS: Due to the nature of the Detrex  
13 unit, we do not -- we feel that an exemption for  
14 that would be appropriate.

15 MS. FAUR: Is the agency currently working on  
16 such an exemption?

17 MR. ROGERS: Yes. Based on comments received  
18 from Cerro Copper during the outreach portion of  
19 this rule development, we are working with them to  
20 craft the proper exemption.

21 MS. FAUR: Based on those responses, I don't  
22 believe that my supplemental questions need to be  
23 asked at this time. However, Cerro may be  
24 requesting a second hearing, and at that time, if

1 the hearing is necessary, we would like to be able  
2 to ask these questions.

3 MS. POULOS: Okay. That's fine.

4 If I could just ask the agency to prepare  
5 an errata sheet documenting this exemption and the  
6 proposed language for this exemption.

7 MS. ARCHER: That would be fine.

8 MS. POULOS: Okay. Thank you. Anything else?

9 MS. FAUR: That's the last of my questions.  
10 Thank you.

11 MS. POULOS: Okay. Thank you.

12 We also have prefiled questions from  
13 Sunnyside Corporation.

14 Would you like to ask your questions?

15 MR. BUCHANAN: Yes.

16 MS. POULOS: Okay. If you could, state your  
17 name and your organization and speak up because  
18 you're kind of in the back of the room, that would  
19 be great.

20 MR. BUCHANAN: Okay. That's fine.

21 MS. POULOS: Thanks.

22 MR. BUCHANAN: My name is Bill Buchanan. I am  
23 vice-president for Sunnyside Corporation. We are a  
24 packager and distributor of various chemicals, oils,

1 and solvents, particularly in the Chicagoland area.

2 Included in uses of those solvents are  
3 solvents for cold cleaning and degreasing, and the  
4 questions I have here are directed to that portion  
5 of our business.

6 My first question is what is the reason for  
7 restricting the sale of solvents with vapor  
8 pressures at two millimeters of mercury and 20  
9 degrees centigrade or one millimeter of mercury by  
10 March 15th, 2001?

11 MR. ROGERS: Regulations in several states,  
12 including the state of Illinois, contain compliance  
13 requirement for sale of products which are widely  
14 used. Section 10(d) of the Illinois Environmental  
15 Protection Act contains restrictions on the sale of  
16 certain products.

17 Also, the Illinois Pollution Control Board  
18 regulations regarding the sale of summertime  
19 gasoline at 35 Illinois Administrative Code Section  
20 219.585 state that, quote, no person shall sell,  
21 offer for sale, dispense, supply, offer for supply,  
22 or transport for use in Illinois gasoline whose read  
23 vapor pressure exceeds the applicable limitations,  
24 close quotes.

1           Other examples include the states of  
2 California, Massachusetts, New York, Rhode Island,  
3 and Texas requirements for consumer products.

4           Such supply requirements increase the level  
5 of use of compliant products and the result in air  
6 quality benefit.

7       MR. BUCHANAN: Shouldn't the control be on  
8 emissions instead of on sale? Aren't you penalizing  
9 those people who use these solvents in cold cleaning  
10 and degreasing now and control their emissions?

11       MR. ROGERS: The control requirement in the  
12 proposed regulation is the vapor pressure limit of  
13 the solvent. As the solvent vapor pressure  
14 decreases, the emissions decrease.

15           Therefore, the proposed control focuses on  
16 the source of the emissions. Although cold cleaning  
17 degreasers are typically equipped with a cover,  
18 emissions still occur. The lower vapor pressure  
19 solvents will reduce these emissions.

20           The Illinois EPA believes that any further  
21 capture and control of control emissions is unlikely  
22 due to the expense associated with installing and  
23 operating control equipment and since there is no  
24 requirement that such emissions be controlled.

1       MR. BUCHANAN: Question number three, control of  
2 the sale of the product and the associated  
3 recordkeeping for cold cleaning puts an unnecessary  
4 burden on sellers of these products. Aren't we  
5 being used as a policing body for the Illinois EPA?

6       MR. ROGERS: The Illinois EPA is responsible for  
7 the enforcement of the regulations adopted by the  
8 Illinois Pollution Control Board. As mentioned  
9 previously, including requirements targeting the  
10 sale of products that are widely used is a common  
11 regulatory approach to achieving greater compliance  
12 with the regulations.

13               Regarding the recordkeeping requirements  
14 for suppliers, it is the Illinois EPA's  
15 understanding through conversations held with  
16 solvent suppliers during the rule development  
17 process that many of the records required to be kept  
18 are already being maintained. Customer names,  
19 dates, and quantities of product sold seem to be  
20 fairly standard records to maintain.

21               The Illinois EPA does not believe that  
22 maintaining the additional solvent characteristic  
23 data would be unreasonably burdensome.

24       MR. BUCHANAN: Question number four, why



1 restrict the sale to five-gallon units? If a  
2 customer wants a 55-gallon drum of a product, why  
3 wouldn't he buy five-gallon -- 11 five-gallon  
4 pails.

5 MR. ROGERS: The purpose of limiting the  
6 recordkeeping requirements to suppliers who sell  
7 solvent in units greater than five gallons is to  
8 relieve retail facilities from keeping records on  
9 sales of solvents in small unit quantities to  
10 individuals.

11 The Illinois EPA believes that the  
12 five-gallon unit is a reasonable indicator of break  
13 between commercial and individual users, and it is  
14 the commercial cleaning operations from which we are  
15 seeking the emission reductions.

16 If a customer wanted to purchase a 11  
17 five-gallon pails rather than a 55-gallon drum, that  
18 person would still be subject to the requirements of  
19 the proposed regulation.

20 The Illinois EPA does not believe that this  
21 situation will arise often due to the additional  
22 expense and inconvenience associated with buying the  
23 smaller quantities.

24 MR. BUCHANAN: Question number five, exempt VOCs

1 such as Acetone and Methylene Chloride appear to be  
2 included in the regulation.

3           Why are there no exemptions for these  
4 products?

5           MR. ROGERS: Sections 218.181 and 219.181, the  
6 Subpart E solvent cleaning requirements, quote,  
7 apply to all cold cleaning open-top vapor degreasing  
8 and conveyORIZED degreasing operations, which use  
9 volatile organic material, close quotes.

10           Based on the definition of VOM contained in  
11 Section 211.7150, Acetone and Methylene Chloride are  
12 exempt. Therefore, the proposed regulation would  
13 not affect cold cleaning operations using Acetone or  
14 Methylene Chloride.

15           MR. BUCHANAN: Thank you. Question six, Mineral  
16 Spirits has a vapor pressure of two millimeters of  
17 mercury at 20 degrees centigrade. This product is  
18 low cost, it's easily recycled, and has a low impact  
19 on ozone formation.

20           Why force numerous businesses, large and  
21 small, into high cost options for, what we consider,  
22 minimal benefit?

23           MR. ROGERS: A solvent with a vapor pressure of  
24 2.0 would comply with the first phase of the

1 regulation. The phase-in approach of the proposed  
2 regulation was included to allow these performing --  
3 those performing cold cleaning until March 2001 to  
4 fine a one-millimeter mercury solvent alternative.

5           Based on information gathered during the  
6 development of the rule, solvents meeting the  
7 proposed 1.0 millimeter mercury can also be  
8 recycled. According to the state of Maryland,  
9 reducing the solvent vapor pressure to 1.0  
10 millimeters of mercury would reduce cold cleaning  
11 emissions by 67 percent.

12           This will result in a VOM emissions  
13 reduction of 23 tons per day in the Chicago  
14 nonattainment area and 1.6 tons per day in the  
15 Metro-East nonattainment area in the year 2001.

16           The Illinois EPA does not consider these  
17 emission reduction totals to be minimal. The cost  
18 figures contained in the technical support document  
19 indicate a cost effectiveness of the proposed 1.0  
20 millimeter mercury standard at between \$238 and \$779  
21 per ton of VOM.

22           Based on this information and compared to  
23 other board-adopted reasonably available control  
24 technology regulations, the Illinois EPA believes

1 that the costs associated with the use of lower  
2 vapor pressure solvents are reasonable.

3 MR. BUCHANAN: Okay. Thank you.

4 Question number seven, we still feel that  
5 we are being forced into a policeman's role if we  
6 had to control the sale of products to cold cleaning  
7 and cold degreasing operations who are prohibited  
8 from selling those products.

9 How do we determine a customer's use of the  
10 solvent? We sell numerous products. For example,  
11 we sell several lacquer thinners and other paint  
12 solvents. They can be and often are used for cold  
13 degreasing.

14 Do we need written statements from all of  
15 our customers as to the use of the products they  
16 purchase? Will it do to verbally question these  
17 customers as to the use? What do you expect us to  
18 do in recordkeeping when we don't know to what use  
19 these customers put these solvents.

20 MR. ROGERS: The proposed regulation is not  
21 intended to use the solvent suppliers as an  
22 enforcement mechanism. The solvent suppliers are  
23 subject to the proposed requirements and should do  
24 whatever they believe is necessary in order to

1 demonstrate their own compliance.

2           From an enforcement prospective, if an  
3 agency inspector found that a shop was performing  
4 cold cleaning using a solvent exceeding the proposed  
5 limits under the proposed section, Subsection 218,  
6 219.182(c)(1), both the solvent user and the solvent  
7 supplier could be considered as violating the  
8 regulation.

9           If the solvent supplier -- if solvent  
10 suppliers feel that the additional information is  
11 necessary from the solvent purchaser, such as is  
12 this solvent going to be used for cold cleaning,  
13 then they should request such information.

14           A reasonable way to comply would be for a  
15 supplier who sells a solvent that does not meet the  
16 vapor pressure limit to provide information to the  
17 purchaser indicating that such solvents should not  
18 be used for cold cleaning.

19           In addition, some appropriate documentation  
20 of this notification should be kept.

21       MR. BUCHANAN: That statement -- it seems to me  
22 that that is putting us in a policing role.

23       MR. ROGERS: We believe that you are subject to  
24 the regulation, and whatever you would need to do to

1 document your compliance would cover your own  
2 interests. If you have documentation that you could  
3 show to an agency inspector that you were led to --  
4 that you informed your customer that such solvents  
5 would not meet the unit -- meet the requirements for  
6 cold cleaning, you could be considered as properly  
7 doing your duty.

8 MR. BUCHANAN: It becomes very difficult when we  
9 sell a product that isn't even related to cold  
10 cleaning, but people buy that product for cold  
11 cleaning.

12 We sell to thousands of customers in the  
13 Chicago area, and we would be forced to question  
14 these people. We might be force to send our  
15 salespeople to their place of business to determine  
16 what it is they're doing.

17 You're saying that we could be subject to  
18 violation of the regulations if we sell these  
19 solvents to people that use them in cold degreasing  
20 even if we're unaware that they're using them in  
21 cold degreasing, and the products aren't even  
22 intended for cold degreasing.

23 That appears to me to require us to do the  
24 work of the Environmental Protection Agency in

1 controlling the use of these products.

2 MR. ROGERS: I believe if a product is logically  
3 not used, in your belief, as a cold cleaning product  
4 and some customer of yours chooses to use that, you  
5 would be safe in assuming that you would not have to  
6 inform him that every product that you sell should  
7 not be used for cold cleaning. I think if they were  
8 using some product not intended for such a process,  
9 you would logically not be liable for that.

10 MR. BUCHANAN: Okay. I understand your  
11 statement, but my concern is that the regulation  
12 doesn't say anything like that, and would I like to  
13 see the regulations modified to not restrict the  
14 sale of the product, first of all, but that not  
15 being the case, I would like to see the regulations  
16 modified to take into consideration what you've just  
17 explained.

18 MS. ARCHER: Mr. Buchanan, we'd be happy to  
19 address that in our comments.

20 MR. BUCHANAN: Okay. Thank you. That concludes  
21 my questions at this time.

22 MS. POULOS: Okay.

23 MR. BUCHANAN: I would also like to say that I  
24 did not get an opportunity to read the EPA's

1 testimony prior to this hearing. If there is  
2 another hearing, I would like to be able to  
3 address --

4 MS. POULOS: That's fine.

5 MR. BUCHANAN: -- the issues more directly at  
6 that time.

7 MS. POULOS: That's fine.

8 Okay. Are there any other questions from  
9 members of the audience?

10 Okay. Would you state your name and your  
11 organization?

12 MR. HOMER: Sure.

13 MS. POULOS: Thank you.

14 MR. HOMER: I'm Mark Homer from the Chemical  
15 Industry Council of Illinois.

16 I have a question for either Mr. Forbes or  
17 Mr. Rogers. Is this -- is it the agency's intent  
18 that this proposed rule in any way removes any  
19 exemptions currently on the books for cold cleaning  
20 degreasing operations?

21 MR. ROGERS: The only exemption I'm aware of is  
22 that currently cold cleaning degreasing units are  
23 not required to be permitted, and this rule would  
24 not effect that exemption in any way.



1 MR. HOMER: Okay. That's all I have. Thanks.

2 MS. POULOS: Okay. Do you have a question?

3 MR. CALLAHAN: I do.

4 MS. POULOS: All right.

5 MR. CALLAHAN: A brief question.

6 Hi. My name is Mike Callahan, and I'm a

7 project engineer with Safety-Kleen Corporation.

8 We're a nationwide provider of parts -- parts,

9 cleaning equipment, and solutions. We offer a

10 variety of parts cleaning solutions, including

11 several hydrocarbon and solvent cleaners as well as

12 several aqueous solutions.

13 We also offer a large variety of parts

14 cleaning equipment tailored to the many needs of our

15 customers.

16 We've reviewed the proposed regulations

17 addressing the restrictions on solvents that can be

18 used in parts cleaning activities. We find these

19 regulations to be very reasonable and appreciate the

20 effort and considered thought that went into

21 developing them.

22 We also expect that our services and

23 products will allow our customers to be in total

24 compliance long before the March 15th, 2001,

1 deadline.

2           My question is related specifically to the  
3 vapor pressure. You mentioned, you know, the one  
4 and the two millimeters. My question is, is there a  
5 specific method that you wish to specify as to the  
6 measuring of vapor pressure?

7           I know various agencies, you had indicated  
8 South Coast, they allow determination by  
9 calculation. Another one is is the isoteniscope  
10 method. Is -- I guess have you considered  
11 specifying a particular method and possibly  
12 referencing a nationally recognized standard to do  
13 so.

14       MR. ROGERS: According to -- Section 218.111  
15 includes the vapor pressure testing methods for  
16 volatile organic material, and I believe that is  
17 referenced within the rule as to the method to  
18 properly test for the VOM content. It's a standard  
19 U.S. EPA --

20       MR. CALLAHAN: Oh, okay.

21       MR. ROGERS: -- test method.

22       MR. CALLAHAN: All right.

23           Thank you.

24       MR. ROGERS: We'll clarify that in written

1 comment.

2 MR. CALLAHAN: Good. Because it is mentioned --  
3 you know, it is referred to  
4 as -- so great. Thank you.

5 MS. POULOS: Are there any other questions?

6 Do you have any questions, Mr. Meyer?

7 Mr. Meyer, do you have any questions?

8 MR. MEYER: No.

9 MS. POULOS: Okay. I have just one clarifying  
10 question. When Ms. Faur was asking her questions --  
11 let me just pull them out for a second. In  
12 218.182(f) and 219.182(f), I just want to make sure  
13 that we're talking about electronic components; is  
14 that correct?

15 MS. ARCHER: Correct.

16 MS. POULOS: Okay. Good. All right. We'd  
17 mentioned electrical at one point. So I thought,  
18 well, let's just make sure that on the record it  
19 says electronic.

20 I also have a question. Is there any  
21 mention in the proposed rules about manufacturers of  
22 these solvents placing a warning on their product  
23 that these should not be used as degreasers in cold  
24 cleaning processes?

1       MR. ROGERS: There is no requirement for any  
2 labeling requirements. Such a warning would maybe  
3 assist in this situation, but there is no  
4 requirement for labeling.

5       MS. POULOS: I think it might be helpful in  
6 terms of the Sunnyside Corporation's concerns about,  
7 you know, where their responsibility ends. If  
8 there's something on the product label that says it  
9 right there and points to the regulation, we could  
10 have comments on that --

11       MS. ARCHER: Definitely, yes.

12       MS. POULOS: -- to address.

13               Yes?

14       MR. HOMER: I have a follow-up to that --

15       MS. POULOS: Yes. That's fine.

16       MR. HOMER: -- comment.

17               I'm Mark Homer with the Chemical Industry  
18 Council. Isn't it true that certain operations  
19 obtain their solvent directly via trucks so some  
20 type of packaging requirement would not be available  
21 to that type of situation.

22       MR. ROGERS: Do you mean in like a large  
23 quantity it is pumped in?

24       MR. HOMER: Exactly.

1       MR. ROGERS: That's our understanding.

2       MR. HOMER: So it doesn't come in a package, so  
3 obviously you wouldn't be able to put some type of  
4 label on the product.

5       MR. ROGERS: That's our understanding as well.  
6 Perhaps some statement of what you're thinking, a  
7 line on a receipt or bill of labeling or  
8 something --

9       MR. HOMER: Sure.

10      MR. ROGERS: -- an invoice would serve the same  
11 purpose.

12      MS. POULOS: Okay. Mr. Buchanan?

13      MR. BUCHANAN: It's not unusual when delivering  
14 transport loads of product to include labeling  
15 information with the delivery paperwork, even though  
16 it is a bulk shipment.

17      MS. POULOS: Okay. If we could just get  
18 comments on that then --

19      MS. ARCHER: Yes.

20      MS. POULOS: -- that would be much appreciated.

21             Okay. If there are not any other  
22 questions, we have reached the end of this  
23 proceeding. I note that there has been a request --  
24 let me clarify that.

1           Has there been a request for a second  
2 hearing at this point?

3           MS. FAUR: We are not requesting a second  
4 hearing at this point.

5           MS. POULOS: Okay.

6           MS. FAUR: We are continuing to discuss with the  
7 agency the applicability of this rule and certain  
8 operations of Cerro's facility. If a second hearing  
9 is necessary, we will request it within seven  
10 days --

11          MS. POULOS: Okay.

12          MS. FAUR: -- pursuant to the board rules.

13          MS. POULOS: Terrific. And just so you know  
14 that it is March 11th of '97.

15                 Just for your clarification, the request  
16 must be made in writing. It must be filed with the  
17 board and served upon those on the service list.

18                 What else do we need to know? If the board  
19 receives a written agreement to the proposal from  
20 the agency and the affected parties that they wish  
21 to cancel the second hearing, that hearing will be  
22 canceled.

23                 The record in this matter will close 14  
24 days after receipt of the transcript from the final

1 hearing.

2 Are there any other matters which need to  
3 be addressed at this time?

4 Okay. The hearing is adjourned. Thank you  
5 very much.

6 (Whereupon, the above-entitled  
7 proceedings were adjourned  
8 pursuant to agreement, to be  
9 continued sine die.)

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