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1
       BEFORE THE ILLINOIS POLLUTION CONTROL BOARD
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     IN THE MATTER OF:
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     PETITION OF ARGONNE NATIONAL ) AS 03-4
     LABORATORY FOR AN ADJUSTED
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     STANDARD FROM 35 ILL. ADM.
                                  )
     CODE 218.182
                                  )
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             The following is the transcript of a
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     hearing held in the above-entitled matter taken
     stenographically by MICHELE J. LOSURDO, CSR, a
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12
     notary public within and for the County of
13
     DuPage and State of Illinois, before BRADLEY P.
14
    HALLORAN, Hearing Officer, at 414 North
     Wood Dale Road, Wood Dale, Illinois, on the
15
16
     16th day of September, 2003, A.D., commencing
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    at 10:35 a.m.
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1	APPEARANCES:
2	HEARING TAKEN BEFORE:
3	ILLINOIS POLLUTION CONTROL BOARD
4	BY: MR. BRADLEY P. HALLORAN 100 West Randolph Street
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14	Appeared on behalf of Respondent.
15	
16	ALSO PRESENT:
17	Anand Rao and Lisa Liu.
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1 HEARING OFFICER HALLORAN: Good morning. My name is Bradley Halloran. I'm a 2 3 hearing officer with the Illinois Pollution 4 Control Board and I'm also assigned to this 5 matter and this matter is the petition of б Argonne National Laboratory for an adjusted 7 standard from 35 Illinois Administrative Code 8 218.180 documented by the Board of adjusted 9 standard 3-04.

Today is Tuesday, September 16th the 10 year 2003. It's approximately 10:35. I note 11 aside from the parties and the witnesses, there 12 do not appear and, in fact, there are not any 13 14 members of the public present, but we are privileged to have with us Anand Rao and Lisa 15 Liu from the technical unit of the Illinois 16 17 Pollution Control Board. They may or may not 18 be asking questions later of the witnesses.

19 The hearing was scheduled and noticed 20 pursuant to section 104.400, subpart D of the 21 Board's procedural rules and will be governed 22 in accordance with section 101.600 of the 23 Board's procedural rules. Also note for the 24 record this hearing is intended to develop a

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record for review by the seven members of the 1 2 Illinois Pollution Control Board. I will not 3 be making the ultimate decision in this case. 4 That's left to the seven members of the Board. 5 They will review the transcript of this б proceeding and the remainder of the record and 7 will render a decision. 8 My job is to ensure an orderly hearing 9 and a clear record and to rule on any 10 evidentiary matters that may arise. After the hearing, the parties may have an opportunity 11 to -- they will have an opportunity to submit 12 13 posthearing briefs and also we'll hold a public 14 comment period. With that said, Mr. Luck for 15 petitioner, would you like to introduce 16 17 yourself, please? 18 MR. LUCK: Yes. My name is William Luck. I'm assistant general counsel at Argonne 19 National Laboratory. I'm here representing the 20 21 University of Chicago. The University of 22 Chicago is the operator of Argonne National 23 Laboratory. The site is run by the United 24 States government. We have a contract to

operate the laboratory with the United States
 Department of Energy. Gloria
 Wallick (phonetic) who's here this morning is
 representing the United States Department of
 Energy in this proceeding.

6 Argonne National Laboratory is seeking 7 an adjusted standard from the cold cleaning 8 rule provisions at 35 Illinois Administrative 9 Code 218.182. For many common garden variety 10 applications, we are able to use compliant solvents that meet the 1 millimeter vapor 11 pressure standard, but there are a number of 12 13 applications involving research activities and 14 equipment that's used to do research at the 15 laboratory for which it's not possible for the laboratory to use solvents compliant with the 16 17 1 millimeter vapor pressure standard.

18 There are a couple of regulatory 19 exceptions in the regulation, but those are not 20 feasible for Argonne. Wipe cleaning, which is 21 allowed under the regulations, leaves a residue 22 which interferes with certain research 23 applications and while there is an exception in 24 the regulations for electronic component

1 cleaning, there are pieces of equipment and an associated apparatus that don't meet the 2 3 definition of electronic component which make 4 that exception unavailable to the laboratory. 5 So as a result, Argonne is proposing an б adjusted standard to enable it to conduct its 7 activities and I'm going to read from our 8 petition as to what the standard is that we're 9 proposing. The adjusted standard from 35 10 Illinois Administrative Code 218.182 applies to Argonne National Laboratory, a research 11 laboratory located in Aurora Falls Land Forest 12 13 Preserve in DuPage County, Illinois. The requirements of this adjusted 14 standard shall apply only to cold cleaning 15 16 involving the preparation of sample materials 17 and associated apparatus used for research and 18 development testing and analysis activities. These activities are subject to the following 19 requirements: One, the research and 20 21 development related cleaning activities 22 include, but are not limited to, washing and 23 rinsing slides, drying glassware, sample preparation, specimen cleaning, gel 24

1 stain/destaining, membrane rinsing and the cleaning of small parts and equipment 2 3 associated with the preparation of sample 4 materials for testing and analysis; two, the 5 requirements of this adjusted standard do not б apply when the solvents meeting the vapor 7 pressure limits of 35 Illinois Administrative 8 Code 218.182 can be used without compromising 9 the quality of the equipment being used or the 10 validity of research results.

This standard was arrived at after 11 Argonne had consultations with the Illinois 12 13 Environmental Protection Agency. The two 14 entities worked together in developing the 15 standard. Argonne believes that the factors relating to Argonne are significantly different 16 17 from the factors replied upon in the adoption 18 of the regulation. More specifically -- I'm sorry. And we also believe that the impact on 19 20 the environment from the adjusted standard 21 would not be significant particularly when 22 compared to the impacts for same solvents that 23 are used for other routine and research and development activities. 24

1 It's also the case that the adjusted standard would not be inconsistent with any 2 3 provision of federal law and all of those three 4 points are expanded upon somewhere in our 5 petition. Mr. Gregory Barrett who's with б Argonne's regulatory compliance group has 7 prepared testimony addressing the expected 8 Argonne National Laboratory activities that 9 would be subject to the adjusted standard and 10 the impacts that would be anticipated from those activities and that testimony has been 11 prefiled, but we're also submitting it today 12 13 and Mr. Barrett is here to take the stand and 14 to answer questions. 15 HEARING OFFICER HALLORAN: Thank you, 16 Mr. Luck. 17 Ms. Doctors of the IEPA, would you like 18 to introduce yourself and opening statement? MS. DOCTORS: Good morning. My name is 19 Rachel Doctors and I am representing the 20 21 Illinois Environmental Protection Agency in 22 this matter. The Illinois EPA has reviewed 23 Argonne's petition for an adjusted standard from the requirements of cold cleaning 24

degreaser rule act, 35 Illinois Administrative
 Code 218.182. They requested an adjusted
 standard for certain activities.

4 The Illinois EPA is recommending that 5 the Board grant the requested relief. As б further explained in Mr. Rogers' prefiled testimony and the Agency's recommendation, the 7 8 Agency believes relief is warranted because 9 this facility has met the required levels 10 pursuant to section 28.1 of the Illinois Environmental Protection Act. The agency 11 believes the petitioner has demonstrated that 12 13 there are factors that are significantly and 14 substantially different than those relied upon 15 by the Board when it adopted this regulation. 16 Argonne is a research and development 17 laboratory. Certain activities require that 18 surfaces be completely free of residual 19 contamination. Argonne presented information and documentation necessary for the Agency to 20 21 conclude that there are no technically feasible 22 or economically reasonable alternatives 23 available for compliance with this rule. The 24 Illinois EPA also agrees with the petitioner

1 that the estimated additional 1 ton per year of -- excuse me -- estimated emissions of --2 3 the Illinois EPA also agrees with the 4 petitioner that its estimated additional 5 emissions of 1 ton of volatile organic material б is minimal, hence, the environmental impact 7 from the adjusted standard will be minimal. 8 The cold cleaning degreasing rules are 9 part of Illinois' rate of SIP, State 10 Implementation Plan, for achieving the one hour ozone national ambient air quality standard in 11 the Chicago ozone nonattainment area. If the 12 Board grants this petition, the result in 13 14 adjusted standard will be submitted by the 15 Illinois EPA to U.S. EPA as a SIP provision. As a preliminary matter, the Illinois 16 17 EPA has discussed the proposed adjusted 18 standard with U.S. EPA and they have agreed 19 that this seems appropriate. The Agency requests at this time that Mike Rogers' 20 21 prefiled testimony be admitted into the record 22 as read. He is also available to answer any 23 additional questions that the Board may have. HEARING OFFICER HALLORAN: Thank you 24

1 and I'll address that motion and request when 2 Mr. Rogers takes the stand. 3 With that said, Mr. Luck, would you 4 like to call your first and I think only 5 witness to the stand and the court reporter б will swear him in, please. 7 GREGORY BARRETT, 8 having been first duly sworn, was examined and 9 testified as follows: 10 EXAMINATION by Mr. Luck 11 12 Q. Can you tell us your name, please? My name is Gregory Barrett. 13 Α. 14 And you're employed where? Q. I'm employed at Argonne National 15 Α. Laboratory in the environmental compliance 16 17 group. And can you say just a little bit about 18 Q. what you do in that capacity? 19 My primary responsibility in the group 20 Α. 21 is to ensure that the laboratory is in 22 compliance with all federal and state regulations derived from the Clean Air Act. 23 24 Q. And can you say a little bit about how

you may interact with other operating groups
 within the laboratory?

A. My primary responsibility with respect to research and other operating divisions is to ensure that their day-to-day activities and future activities are evaluated to ensure that we will comply with current and future federal and state regulations.

9 So when the regulation came out and was Ο. 10 about to become effective, did you have some communication with the other operating 11 divisions within the laboratory at that time? 12 Α. Yes, I did. Back in 1997 when we 13 14 realized what the impact of the cold cleaning rule would have on our operations, we started 15 interacting with research and operations group 16 17 there to alert them to the potential problems 18 we might have with not being able to use 19 solvents with vapor pressures that would be prohibited by the cold cleaning rule. 20 21 Q. And can you describe what kind of 22 responses you might have gotten from some of

23 those groups?

24 A. We were successful in some operations.

1 A lot of the routine operations at the laboratory machine shops, automotive 2 3 maintenance, these operations were already able 4 to use solvents that would comply with the 5 upcoming regulations. 6 Also with some of the research groups, 7 we were able to evaluate their operations and 8 get them to substitute to a solvent that would 9 comply with both the 2 millimeter and 10 1 millimeter vapor pressure limits. However, for some which involved sample preparation also 11 with a number of groups that deal with 12 13 accelerators, it became apparent that they were 14 not going to be able to find an acceptable substitute that they could use without 15 16 compromising the research and the equipment 17 that they were using. And it was that information that got 18 0. back to you that became the basis for this 19 petition; is that correct? 20 21 Α. That's correct. 22 In the course of putting together the Q. 23 petition, did you go back to these operating

24 groups to try to get some more precise

1 information about their particular needs? Yes, I did. I alerted them to the fact 2 Α. 3 that upon receipt from the Illinois EPA of our 4 Title V Clean Air Program permit that we would 5 now not be in compliance with the specific б section of that permit which related to cold 7 cleaning and that, as a result, we had to find a remedy to address this situation, so we 8 9 discussed this at length with divisions that 10 had continued to have problems with the vapor pressure limit of the solvents that they were 11 using and their inability to find an adequate 12 substitute that would meet the regulation. 13 14 There are two exhibits that are Q. 15 attached to the petition and they're attached to your testimony as well. Can you tell us how 16 17

17 those came to be and your role in their coming
18 to be?
19 A. What we did for the two exhibits were

to really go across the laboratory division by division to find out where people were using solvents that did not meet the vapor pressure limits specified by the cold cleaning rule and in cases where they were not able to find a

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1 substitute that would be considered a compliant solvent, we detailed a list of various 2 3 buildings and rooms in the divisions where this 4 occurred and also put together an estimated 5 usage by the types of noncompliant solvents б that people were expecting to continue to keep 7 using. 8 And is the list of the current Q. 9 activities that would need to use noncompliant 10 solvents, is that a comprehensive list? This is pretty comprehensive for all 11 Α. operations that were currently under way at the 12 time we put this together. 13 14 And while the research and development Q. 15 activities at any given time at the laboratory might be different than a month before or a 16 17 month later or a year before or a year later, 18 is it your view that this is a representative 19 list and is likely to be representative as time 20 goes on? 21 A. Yes, it is. It asks people to really 22 look at worse case operating scenarios, as best as they could project future operations and try 23 to come up with what they thought was a maximum 24

1 usage level of the types of solvents that would not be considered in compliance. 2 3 Ο. With respect to the second of the two 4 exhibits that talks about or has the 5 information in it about the quantitative б information that's in it, could you speak to 7 that a little bit in how those -- how you 8 obtained those numbers and how the use of 9 different kinds of solvents may be tracked at 10 Argonne National Laboratory? Well, Argonne does track chemical usage 11 Α. site-wide, but that is usage for whatever 12 particular reason a person may want to use it, 13 14 so many of these solvents are used in day-to-day research operations which is 15 considered an insignificant activity and one of 16 17 the difficulties that we noted was the fact 18 that a researcher may use methanol for research 19 activity and then material from that same container to do some cold cleaning and trying 20 21 to maintain separate records on that would be 22 very burdensome. 23 So we looked at the total usage which

we can track for the solvents that had been

24

1 identified as ones that would be used for cold cleaning and took a very conservative 2 3 determination as to how much of that might be 4 used for cold cleaning to come up with our 5 estimated usage number. 6 Q. And can you quantify what that 7 conservative determination would have been? 8 We estimated that it would be Α. 9 approximately 1 ton per year. 10 Is it possible to speak to what Ο. percentage of the overall usage was estimated 11 to be used for cold cleaning? 12 Α. We estimated about one-third of all the 13 14 total usage of the solvents would be employed for cold cleaning activities. 15 And is that considered to be a 16 ο. 17 conservative estimation? 18 I think it's a conservative estimate, Α. 19 yes. When the people were communicating with 20 ο. 21 you about their use of these solvents for cold 22 cleaning activities, did they convey to you 23 some sense of how much might be used at any given time and what kind of containers or 24

1 apparatus they my use to do the cold cleaning 2 operation? Yes, they did. Typically they would be 3 Α. 4 talking in milliliter amounts or perhaps a half 5 a liter or so, but, again, that sense of amount б versus gallons and gallons of material. 7 ο. Would this cold cleaning typically -would it ever actually be done in conventional 8 9 cold cleaning equipment or would it be done in 10 some other kind of apparatus? Typically it would not be done in a 11 Α. conventional cold cleaner. A bench top 12 researcher might simply just take beaker, add a 13 few milliliters of a solvent and clean. For 14 15 some of the other types of apparatus, especially research equipment, their components 16 17 might be removed from equipment and then 18 cleaned but not as a rule would they be using a typical cold cleaning degreaser system. 19 And I think you already addressed this, 20 Ο. 21 but to keep track of a few millimeters used for 22 cold cleaning here and a few milliliters used

23 there, would that be difficult to do and would 24 it seem to make any sense to do that?

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It would be difficult it do because we 1 Α. are dealing with literally hundreds of 2 3 researchers at the facility and to place the 4 burden upon them to kind of keep track of every 5 type of solvent milliliter by milliliter with б respect to how it's being used I think is an 7 unreasonable and unfair burden to place on 8 them. 9 Is that usage comparable to the Ο. 10 research and development usage that's already accepted under the Title V permit? 11 12 Α. The solvent usage that is employed under research and development is considered an 13 14 insignificant activity under our Title V permit, so really the amount that's used for 15 cold cleaning we have categorized as actually a 16 17 subset of the total amount that's being used. MR. LUCK: I have no furthers 18 19 questions. HEARING OFFICER HALLORAN: Thanks, 20 21 Mr. Luck. As agreed on and stipulated to 22 beforehand, the written testimony of Mr. Barrett will be allowed and taken into 23 evidence as if read into the record. I'm going 24

to mark it Petitioner's Exhibit Number 1 and I 1 also understand the court reporter will attach 2 3 the written testimony of Mr. Barrett to the 4 transcript. 5 With that said, Ms. Doctors, do you б have any questions of Mr. Barrett? 7 MS. DOCTORS: No, I do not. 8 HEARING OFFICER HALLORAN: Mr. Rao? 9 MR. RAO: Yes, we do. Thank you, Brad. 10 My name is Anand Rao and I'm with the technical unit and Lisa Liu. I think Brad introduced us 11 earlier also with the technical unit and we 12 13 have a few clarifying questions, some of them 14 deal with the background information that you had provided in your testimony and the petition 15 16 which Lisa will go through and then we have 17 some questions on the recordkeeping 18 requirements, so Lisa, do you want to go 19 through? MS. LIU: Good morning, Mr. Barrett. 20 21 MR. BARRETT: Good morning. 22 MS. LIU: In Exhibit 2 of your prefiled 23 testimony, you list the different divisions with Argonne and their activities on an R and D 24

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scale. I was wondering if you could describe
 how the waste solvents that come from the cold
 cleaning process are collected, stored and
 disposed of.

5 MR. BARRETT: They would be handled б much the same way as if they were being used 7 for research activity which is if they meet the 8 criteria of a hazardous waste, they are 9 collected and stored at a satellite 10 accumulation area. There are records kept on that they are kept in a closed container as is 11 12 required by regulations and then would be 13 handled through the waste management division 14 at Argonne for proper disposal.

15 MS. LIU: When you are using very small 16 quantities as you had discussed earlier of a 17 milliliter or two, would they actually pour 18 that waste into a container for disposal or 19 would they simply let it evaporate?

20 MR. BARRETT: Well, I certainly can't 21 speak for every particular operation. The 22 laboratory practice is to treat solvents such 23 as that, as waste, and handle them accordingly, 24 so that is the directive that is given to all

operating personnel at the laboratory.

1

2 MS. LIU: I know there are several 3 different kinds of laboratory setups there. I 4 was wondering if these cold cleaning activities 5 typically took place under a fume hood? 6 MR. BARRETT: My understanding is that 7 in many cases they do. With respect to some of 8 the larger components, I am not sure whether or 9 not they would use one or not. It might depend 10 upon the volume of solvent that's being used and just the physical difficulties in whether 11 or not a particular component could be used in 12 13 a hood situation. MS. LIU: Otherwise would it be in a 14 well-ventilated area? 15 16 MR. BARRETT: Obviously the health and 17 safety concerns would dictate the fact that 18 they would be used in a well-ventilated area particularly if we're talking about a flammable 19 solvent which would be true in most cases with 20 21 alcohols that would be used. 22 MS. LIU: Exhibit 3 of your prefiled 23 testimony lists the different solvents that you have currently identified that are used for 24

1 cold cleaning and they include ethanol, hexane, 2 isopropanol, methanol and toluene. I was 3 wondering under the adjusted standard if 4 Argonne would be using any other solvents that 5 might exceed the 1.0 millimeters of mercury 6 limit besides those five that you already 7 identified?

MR. BARRETT: Well, these are the ones 8 9 that we have identified as currently being used 10 and have been using in the past. I don't know that there would be any future operations that 11 would require any additional solvents. Most of 12 these are used in operations that will be 13 14 ongoing. The sample preparation, cleaning of 15 equipment and accelerator systems do employ the use of alcohols for cleaning, so while I can't 16 17 say categorically that no other solvent would 18 be used, I don't think there would be a large addition to be made to this list of other type 19 of solvents. 20

21 MS. LIU: As far as the emissions from 22 the cold cleaning practices whether they occur 23 through the fume hood or just in a 24 well-ventilated area, could you explain how

1 those emissions are exhausted? Do they simply go to the outside? 2 3 MR. BARRETT: They would eventually go 4 to the outside either through a fume hood being 5 used specifically to vent them off or if it's б in just a well-ventilated area they would be 7 obviously exhausted outside for health and 8 safety reasons. 9 MS. LIU: Thank you. 10 MR. RAO: I have a few questions regarding this recordkeeping requirement and 11 how that applied to your cold cleaning process. 12 13 In your prefiled testimony, you mentioned about how it's difficult to track the usage of these 14 solvents in some of the research activities and 15 I was taking a look at the applicable 16 17 regulations. The first is can you clarify 18 whether the recordkeeping requirement that applies to the research activities, is it 3511 19 code 218.182 (D) (2), is that the section that 20 21 applies? 22 MR. BARRETT: I would probably need to 23 take a look at that citation. 24 MR. LUCK: Could I show him, your

1 Honor?

2	MR. RAO: Section 182 (D) has
3	recordkeeping requirements that apply for
4	people selling the solvents and for people
5	using the solvents. I am assuming that you
б	will be subject to the requirement that applies
7	to people that use the solvents?
8	MR. BARRETT: The issue with the
9	recordkeeping with respect to the regulation
10	again is the fact that it is the solvents
11	are employed for a number of uses, not only for
12	cold cleaning but for regular research
13	activities, so to try to distinguish when a
14	particular container of solvent was purchased
15	as to whether it would be used for a research
16	activity or for cold cleaning or for both would
17	be very difficult to track on a
18	container-by-container basis.
19	MR. RAO: My question was first for you
20	to clarify which regulation applies to you. If
21	you look at section 182, there are two
22	subsections, (D) (1) and (D) (2). (D) (1)
23	applies to entities that sell these solvents
24	and (D) (2) applies to persons who use these

1 solvents.

2 MR. BARRETT: We would be the users in 3 this case, right. 4 MR. RAO: Now, if you look at the 5 section (D) (2) which applies to you, I didn't б see any requirement for tracking of usage in 7 that rule, so I was just looking at your 8 testimony and wanted clarification as to why 9 you think you need to track the usage or is 10 that something that the rule is not very clear 11 about?

MR. BARRETT: I looked at it from the 12 13 standpoint that if a researcher buys a bottle 14 of methanol, he may or may not know at that 15 particular time exactly how that's going to be 16 used so that if we were required at some future 17 time to determine which of those bottles of 18 methanol were used for cold cleaning by date of purchase and name and address of supplier, that 19 might not be information we could easily 20 21 obtain.

22 MR. RAO: So individual researchers are 23 the ones that buy these solvents or is it 24 Argonne National Lab has some central facility

1 that purchases all these solvents?

2 MR. BARRETT: The researchers generally 3 order these things through a central ordering 4 system, but they do not come from the central 5 repository at the laboratory. 6 MR. RAO: Then can you explain a little 7 bit more about how the -- you did mention that 8 you have some kind of a central tracking 9 system? 10 MR. BARRETT: Yes. What happens with

the central tracking system is that when a 11 bottle of any type of laboratory chemical comes 12 13 in, it receives a bar code and through that bar 14 code, we are able to track it in terms of who ordered it, where it's located and if that 15 material is ever transferred from one division 16 17 to another, then that is -- that change is 18 effected through the chemical management system, so everything is done through bar 19 coding. 20

21 MR. RAO: So does the central tracking 22 system keep track of the volume or the amount 23 of solvent that Argonne has purchased or 24 obtained?

1 MR. BARRETT: It will keep track of the original amount that comes in with respect to 2 3 what was ordered, the size of the container and 4 who ordered it and where it will be used. 5 MR. RAO: Is that information in some б way -- could that be used as an alternative to 7 section 182 (D) (2) as a way of tracking the 8 amount of solvents that are being used at the 9 facility itself? MR. BARRETT: Well, again, as we 10 mentioned, we can track total usage of the 11 solvent, but that's going to include usages 12 13 other than cold cleaning. It will be all the 14 usages of that material regardless of what it 15 is. 16 MR. RAO: Is that information required 17 as a part for your Clean Air Act permit or is that information required in the permit to be 18 submitted to the Agency? 19 MR. BARRETT: No, it isn't. 20 21 MR. RAO: It's not? 22 MR. BARRETT: No. 23 MR. RAO: Do you think that information could be made available to the Agency as a part 24

of this adjusted standard like including a 1 2 condition in that says the total usage of 3 solvent is tracked and if the Agency wishes to 4 see it, it could be made available to the 5 Agency? 6 MR. BARRETT: I think total usage 7 numbers could be made available if it was 8 necessary. 9 MR. RAO: I'd like to direct the question to the Agency, is that okay or should 10 I wait? 11 HEARING OFFICER HALLORAN: The Agency 12 13 witness? MR. RAO: Yeah, either Ms. Doctors 14 15 or --16 HEARING OFFICER HALLORAN: Well, he's 17 going to be -- he could step up and be sworn under oath because Ms. Doctors was going to 18 19 introduce him next. MR. RAO: I thought since we were 20 21 asking these questions. 22 HEARING OFFICER HALLORAN: Well, we 23 could swear Mr. Rogers in now and you could ask 24 him.

1 (Witness duly sworn.) MR. RAO: As I was asking Mr. Barrett, 2 3 I just wanted to get your opinion as to whether 4 the Agency -- would it help the Agency to have 5 that kind of information about the total б solvent usage? 7 MS. DOCTORS: Could we go off the record for just one second? 8 9 HEARING OFFICER HALLORAN: Sure. We'll 10 take a five-minute break. (Recess taken.) 11 HEARING OFFICER HALLORAN: We're back 12 on the record. Mr. Rao I think was asking a 13 14 question of Mr. Rogers. MS. DOCTORS: Mr. Rao, would you like 15 to clarify your question? 16 17 MR. RAO: Yes, I was asking Mr. Barrett 18 about how to keep track of the solvents that comes in to Argonne in terms of where they get 19 it from, the day of purchase and type of 20 21 solvent and basically based on Mr. Barrett's 22 explanation about how it's difficult to track 23 the use of solvents for individual research applications, I was wondering if they would be 24

1 able to keep track of the total usage of the 2 solvents and make that information available to 3 the Agency as part of an extended condition and 4 I just wanted to get Mr. Rogers' opinion as to 5 whether that kind of information is useful to 6 the Agency if we want to make it a part of the 7 adjusted standard.

8 MR. ROGERS: That information we do not 9 require of any other entity subject to the cold 10 cleaning rule. If total gallonage purchase was made available, we still wouldn't know exactly 11 what was used for cold cleaning because as we 12 13 understand it, it's used in both research 14 activity and cold cleaning so we would be 15 getting a total amount which, again, we do not require of anybody else. It might give us a 16 17 picture of what Argonne is doing, but it 18 doesn't really help us with any compliance activity towards Argonne in this situation. 19 MR. RAO: Thank you. 20 21 HEARING OFFICER HALLORAN: Thank you, 22 Mr. Rao. 23 Ms. Liu? MS. LIU: Along those lines, would it 24

help if for some reason Argonne were to expand its cold cleaning operations and research applications such that they're actually using more than the 1 ton per year that they're presenting here today for the Agency to perhaps re-evaluate the environmental impact in terms of SIP?

8 MS. DOCTORS: Can I speak on the 9 record? I'd like to indicate that Argonne I 10 believe is or would be subject to the ERMS program because they're in the Chicago ozone 11 nonattainment area. If there's a dramatic 12 change in the types of operations in activities 13 14 at that facility, they would be subject to a 15 host of regulations that are designed to keep the area in attainment or help the area make 16 17 progress to the one-hour ozone nonattainment 18 standard and later on beginning next year or 19 the year after the eight-hour ozone NOx. So I don't -- I hope that's responsive. Mr. Rogers 20 21 has something he would like to add. 22 MR. ROGERS: I think it would be 23 helpful if Argonne kept track of how much activity takes place with the use of -- just 24

1 projected use of noncompliance solvent in the event that research activities would double or 2 3 triple in the future and if the current 4 estimate of 1 ton per year would be subject to 5 an increase over the course of time just due to б increased activity if they had some kind of 7 information available for inspectors to look at 8 during IEPA inspections, that would give us a 9 handle on if we're still within the framework 10 of the adjusted standard we're discussing now. MR. RAO: So along those lines, how do 11 you envision this working in terms of how would 12 13 Argonne inform the Agency if their usage of the 14 solvents goes like doubles or goes beyond 15 1 ton, do you want to have a condition in the adjusted standard that says that if the usage 16 17 increases above 1 ton, there needs to be notice 18 sent to the Agency or limited to 1 ton? MS. DOCTORS: If we're going to start 19 putting limits, I'm going to need to speak with 20 21 Mr. Luck. 22 HEARING OFFICER HALLORAN: We'll go off 23 the record. 24 (Recess taken.)

HEARING OFFICER HALLORAN: We're back
 on the record after about an eight-minute break
 and I think Mr. Rao was, again, asking
 Mr. Rogers a question. Do you remember the
 question?
 MR. RAO: Basically I wanted to know

7 what the Agency's position about including a
8 condition in the adjusted standard which
9 requires notification to the Agency if Argonne
10 goes beyond 1 ton.

MR. ROGERS: During our discussions 11 12 with Argonne National Labs on the preparation of this adjusted standard, we had several 13 14 questions similar to that about setting a cap 15 on a high end or some kind of a notification process if emissions or usage would increase 16 17 and we were informed similar to Mr. Barrett's 18 testimony that the difficulties in tracking the usage of noncompliant cold cleaning solvents 19 20 because of their interrelationship with the 21 bench testing kind of came to the point where 22 there would be no real way of finding out the 23 amount of increase of those noncompliant 24 solvent usage. Even though total solvent usage

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1 might increase, it could be under a compliant 2 situation or bench testing within the bench 3 testing and cold cleaning at the bench were so 4 intermixed that it would be difficult to 5 understand that. 6 MR. RAO: So if Argonne's cold cleaning

7 usage doubles or triples, is there any way the
8 Agency will find out about it?

9 MR. ROGERS: I am not sure what our 10 field inspectors look at when they come to the facility to inspect, but there would be no 11 condition on our permits that I'm aware of that 12 would limit their purchasing of solvents for 13 14 compliant usage or for lab testing purposes 15 and, again, with that difficulty in determining what is noncompliant cold cleaning usage, it 16 17 would be difficult for us to say that there 18 would be a problem.

MR. RAO: As a part of this State Implementation Plan when this rule was adopted, was there a specific kind of volatile organic material that the Agency had estimated that would be reduced in the Chicago nonattainment area as a part of, you know, implementation of

1 this rule?

2	MR. ROGERS: Yes. Before the
3	implementation of the rule, the Agency
4	estimated there were about 33 tons per day of
5	volatile organic material emission that
6	occurred each summer day. Through Phase 1 of
7	the rule, we estimated approximate 11.3 tons
8	per day reduction when we went down to the
9	2 millimeter mercury limit and then when we
10	went down to the 1 millimeter mercury limit in
11	March 2001, there was another roughly 11.3 tons
12	per day emission reduction.
13	MR. RAO: So in terms of Argonne
14	doubling or tripling its usage, it won't have a
15	significant effect on what was counted by the
16	Agency on a nonattainment daily basis about the
17	reductions that you had estimated?
18	MR. ROGERS: Based on a 1 ton per
19	day excuse me 1 ton per year increase in
20	VOM emissions that Argonne estimates
21	conservatively could occur through the use of
22	noncompliant solvents compared to the 660 tons
23	per day that are emitted in the Chicago area,
24	an increase of even from 1 ton per year to

1 2 tons per year would be relatively 2 insignificant and we do not believe it would 3 affect air quality. 4 MR. RAO: Thank you. 5 HEARING OFFICER HALLORAN: Ms. Liu, any б further questions? 7 MS. LIU: No, thank you. 8 HEARING OFFICER HALLORAN: Any 9 redirect, Mr. Luck, so to speak of Mr. Barrett? 10 MR. LUCK: I don't believe so, no. HEARING OFFICER HALLORAN: You may step 11 down. Thank you, Mr. Barrett. 12 13 Mr. Rogers, you could take the stand 14 and I reminded you you are under oath and this document will give a little foundation 15 16 regarding your written testimony. 17 MICHAEL D. ROGERS, having been first duly sworn, was examined and 18 19 testified as follows: 20 EXAMINATION 21 by Ms. Doctors 22 Mike, can you state your name and your Q. position with Illinois Environmental Protection 23 24 Agency?

1 Α. My name is Michael Rogers. I am in the Illinois Environmental Protection Agency's 2 3 Bureau of Air. 4 Q. What is your position? 5 Α. I am an environmental specialist. б Ο. Were you involved in the development of 7 the cold cleaning decreasing rule? 8 Yes, I was. Α. 9 In what capacity? Q. 10 Α. I was the technical representative from the air quality planning section that 11 researched the rule and worked with our 12 13 attorneys to develop the language of the rule 14 amending the old cold cleaning rule to include 15 use of vapor pressure requirements. 16 And have you been involved in Q. 17 discussions with Argonne Labs and the recommendation of the Agency in this matter? 18 Yes, I have. 19 Α. Did you prepare this testimony? 20 Ο. 21 Α. Yes, I did. 22 I'd like to ask that Mike Rogers' Q. 23 prefiled testimony be admitted as if read. 24 HEARING OFFICER HALLORAN: That is

1 allowed. As Mr. Barrett's testimony was allowed and admitted into evidence, Mr. Rogers 2 3 written testimony will be allowed and admitted 4 into evidence as well as if read into the 5 record. My understanding is that the court б reporter will also attach the written testimony 7 of Mr. Rogers to the transcript itself and I'm 8 also marking it as IEPA Exhibit Number 1. 9 Thank you. BY MS. DOCTORS: 10 Q. Let me just ask one other question. 11 Have you been involved in the preparation of 12 13 the rate of progress plans and SIP submittals for the Illinois Environmental Protection 14 15 Agency? Yes, I have. 16 Α. 17 Specifically this was submitted -- the Ο. 18 cold cleaning degreasing rule was submitted as part of the 9 percent rate of progress plan? 19 That is correct. 20 Α. 21 MS. DOCTORS: I have no further 22 questions. 23 HEARING OFFICER HALLORAN: Thank you, 24 Ms. Doctors.

1 Mr. Rao, Ms. Liu? MR. RAO: I don't have any. Mr. Rogers 2 3 has already answered questions. 4 HEARING OFFICER HALLORAN: You may step 5 down. Thank you. We'll go off the record for б a split second. 7 (Discussion had off the record.) 8 HEARING OFFICER HALLORAN: We're back 9 on the record. We were talking a little bit 10 about posthearing briefing schedules and as of now, it's the intention of the parties not to 11 file a posthearing brief. However, I'm going 12 13 to set a public comment period for Friday, October 10th and that's when the record closes. 14 By my calculation, the transcript 15 16 should be ready by Friday, September 26th; 17 however, if public comment is filed, then the 18 parties may or may not revisit their posthearing briefing schedule or they may be 19 allowed to file a response, but until that 20 21 happens, we're not going to address it and 22 we'll leave it at that. 23 So I guess with no other further comments or issues -- Ms. Doctors? 24

MS. DOCTORS: Could I go off the record 1 2 for one second? I made a misstatement. I'd 3 like to correct it on the record. 4 (Discussion had off the record.) 5 HEARING OFFICER HALLORAN: We're back on the record. Ms. Doctors would like to add б 7 something further in this proceeding. 8 MS. DOCTORS: I'd just like to ask 9 Mr. Barrett a question. Is Argonne Labs an 10 ERMS source for VOM? 11 MR. BARRETT: No, it is not. MS. DOCTORS: What are its VOM 12 13 emissions? 14 MR. BARRETT: Our permitted emissions under Title V are a little over 18 tons per 15 16 year. Our actual emissions tend to be 17 somewhere around 1 to 2 tons per year. MS. DOCTORS: Thank you. That's my one 18 19 question. HEARING OFFICER HALLORAN: Thank you, 20 21 Ms. Doctors. 22 Before I forget, I'm supposed to make a 23 credibility determination and based on my 24 judgment and observation and legal experience,

I find that there are no issues of credibility with the witnesses that have testified here today. With that said, I want to thank you all for your professionalism and civility throughout and have a safe trip home to Argonne, Illinois and Springfield, Illinois. Thanks. (End of proceeding.) 

1	STATE OF ILLINOIS ) ) SS:
2	COUNTY OF DUPAGE )
3	
4	I, Michele J. Losurdo, Certified
5	Shorthand Reporter of the State of Illinois, do
6	hereby certify that I reported in shorthand the
7	proceedings had at the taking of said hearing,
8	and that the foregoing is a true, complete, and
9	accurate transcript of the proceedings at said
10	hearing as appears from my stenographic notes
11	so taken and transcribed under my personal
12	direction and signed this day of
13	, 2003.
13 14	, 2003.
	, 2003.
14	, 2003.
14 15	Notary Public, DuPage County, Illinois
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14 15 16 17	Notary Public, DuPage County, Illinois CSR No. 084-004285
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14 15 16 17 18 19 20	Notary Public, DuPage County, Illinois CSR No. 084-004285 Expiration Date: May 31, 2005.
14 15 16 17 18 19 20 21	Notary Public, DuPage County, Illinois CSR No. 084-004285 Expiration Date: May 31, 2005. SUBSCRIBED AND SWORN TO before me this day