

1 BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

2

3

IN THE MATTER OF: )

4 )

PETITION OF SUN CHEMICAL ) AS 99-4

5 CORPORATION FOR AN ADJUSTED) (Adjusted Standard - Air)  
STANDARD FROM 35 ILL. ADM. )

6 CODE 218.626(b) )

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11 The following is the transcript of a hearing

12 held in the above-entitled matter, taken

13 stenographically by GEANNA M. IAQUINTA, CSR, a

14 notary public within and for the County of Cook and

15 State of Illinois, before JOHN KNITTLE, Hearing

16 Officer, at 100 West Randolph Street, Room 11-512,

17 Chicago Illinois, on the 15th day of April, 1999,

18 A.D., commencing at 1:30 p.m.

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

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HEARING TAKEN BEFORE:

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ILLINOIS POLLUTION CONTROL BOARD,

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BY: MS. CYNTHIA FAUR and MS. LORENA NEAL

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Appeared on behalf of Sun Chemical,

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,

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Appeared on behalf of the Illinois  
Environmental Protection Agency.

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18

19 ALSO PRESENT:

20 Mr. Grant Bush

21 Mr. Yoginder Mahajan

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1            I N D E X

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3                            P A G E S

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                          E X H I B I T S

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12                            Marked for  
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13 Petitioner's Exhibit No. 5..... 17

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1 HEARING OFFICER KNITTLE: Hello. My name is  
2 John Knittle, Hearing Officer with the Illinois  
3 Pollution Control Board. We're having a hearing  
4 today, which is April 15th, 1999, at 1:30 p.m., an  
5 adjusted standard entitled In The Matter Of Petition  
6 of Sun Chemical Corporation For Adjusted Standard  
7 from 35 Illinois Administrative Code 218.626(b).  
8 It's adjusted standard 99-2. Actually, it's 99-4.

9 MS. FAUR: That's right.

10 MS. WILLIAMS: Yes.

11 HEARING OFFICER KNITTLE: My apologies. We  
12 refiled on this one. If we could have the parties  
13 identify themselves -- the attorneys for the parties  
14 identify themselves for the record starting with  
15 Sun.

16 MS. FAUR: Cynthia Faur for Sun Chemical.

17 MS. NEAL: And Lorena Neal for Sun Chemical.

18 MS. WILLIAMS: And Deborah Williams with the  
19 Illinois EPA.

20 HEARING OFFICER KNITTLE: I'll also note for  
21 the record that there are no members of the public  
22 here aside from representatives of Sun Chemical. He  
23 works for the Illinois Environmental Protection  
24 Agency?

1 MS. WILLIAMS: Uh-huh.

2 HEARING OFFICER KNITTLE: Okay. I'm going  
3 to conduct this hearing pursuant to Board  
4 regulations, specifically Section 106.806, which is  
5 the adjusted standard, basic adjusted standard  
6 procedures. So the first thing we're going to deal  
7 with is any motions preliminary to hearing. I don't  
8 think we have any.

9 MS. FAUR: No.

10 MS. WILLIAMS: No.

11 HEARING OFFICER KNITTLE: So we're going to  
12 move on to opening statements. If you'd like to  
13 make an opening statement, now is your opportunity  
14 to do so.

15 MS. FAUR: I would like to make an opening  
16 statement. My name is Cynthia Faur. I'm from  
17 Sonnenschein, Nath & Rosenthal here today on behalf  
18 of Sun Chemical.

19 Under Section 28.1 of the Illinois  
20 Environmental Protection Act, the Illinois Pollution  
21 Control Board may grant an adjusted standard to a  
22 company that can demonstrate that the factors  
23 considered by the Board in adopting a rule of  
24 general applicability are substantially and

1 significantly different from the factors facing the  
2 company in implementing the general rule; that the  
3 existence of those factors justifies an adjusted  
4 standard; that the requested adjusted standard will  
5 not result in environmental and health effects  
6 substantially and significantly more adverse than  
7 the effects considered by the Board in adopting the  
8 rule of general applicability; and that the adjusted  
9 standard is consistent with applicable federal.

10 Sun Chemical comes before the Board  
11 today to request an adjusted standard from 35 Ill.  
12 Admin. Code Section 218.626(b), as that section  
13 applies to 17 resin storage tanks at Sun's facility  
14 in Northlake, Illinois. Section 218.626(b) requires  
15 certain ink manufacturers to install either  
16 submerged fill pipes or other approved equivalent  
17 control on any volatile organic liquid or VOL  
18 storage tank with a capacity of greater than 250  
19 gallons.

20 Currently, there are 17 resin storage  
21 tanks at Sun's Northlake facility that do not have  
22 submerged or bottom fill pipes. Only 14 of these  
23 tanks currently contain volatile organic materials  
24 or VOM, but since Sun's production changes from time

1 to time and any of the 17 tanks can contain VOM at a  
2 given time, Sun requests an adjusted standard from  
3 Section 218.626(b) for all 17 storage tanks at the  
4 resin storage tank farm without control.

5           As the evidence presented at this  
6 hearing will show, the installation of submerged  
7 fill pipes on these 17 tanks is not feasible, and  
8 the factors related to the installation of bottom  
9 fill pipes on these tanks are so significantly  
10 different from the factors and costs relied upon by  
11 the Board in adopting Section 218.626(b) that an  
12 adjusted standard is justified. Additionally, the  
13 evidence will show that the environmental impact, if  
14 any, from the proposed adjusted standard is  
15 minimal.

16           Sun is a manufacturer of printing  
17 inks. It manufactures several different types of  
18 printing inks and bases at its Northlake facility.  
19 Many of the raw materials used in the manufacture of  
20 these inks are stored in the tanks at issue in this  
21 adjusted standard petition. The tanks in the resin  
22 tank farm were installed in 1962, well before the  
23 installation of the emission control on storage  
24 tanks was contemplated.

1           As a consequence, these tanks are  
2 configured in such a way that the installation of  
3 control is far more onerous than the installation of  
4 control on other tanks.

5           Today you will hear testimony from  
6 Grant Bush, a manufacturing services engineer for  
7 Sun. He will testify as to the factors present at  
8 the Sun resin tank farm that are substantially and  
9 significantly different from the factors considered  
10 by the Board in adopting Section 218.626(b).

11           Specifically, he will testify as to the  
12 age of the tank farm, the configuration of the  
13 tanks, and the nature of the materials stored in the  
14 tanks, all of which make the costs to install  
15 control on the 17 tanks so much greater than the  
16 cost considered to be reasonable by the Board in  
17 adopting the general rule.

18           He will also testify as to the vapor  
19 pressure of the materials stored in the tanks and  
20 the minimal emissions associated with the tank farm.  
21 This evidence will show that there will be minimal,  
22 if any, adverse impact on the environment associated  
23 with the proposed adjusted standard. Grant will  
24 testify that in 1997, there were approximately .02

1 tons or 50 pounds of VOM emissions from the 17  
2 storage tanks at issue in this adjusted standard.

3           He will also testify that the cost to  
4 install bottom fill pipes on these tanks  
5 approximately \$1.8 million per ton of VOM removed.  
6 In considering the cost of controlling emissions  
7 from the storage tanks at ink manufacturing  
8 facilities generally, the Board most likely  
9 considered the cost of control to be a few thousand  
10 dollars per ton of VOM removed.

11           In this instance, the Cost for Sun to  
12 control emissions from the 17 tanks contained in the  
13 resin storage tank farm is over 360 times the cost  
14 that is considered typical -- typically considered  
15 reasonable by the Board. In 1996, in *The Solar*  
16 *Corporation v. IEPA*, PCB 96-239, the Board found  
17 control costs in the range of 10,000 to \$25,000 per  
18 ton removed to be excessive.

19           In this instance, Sun's control costs  
20 are more than 72 times greater than the control cost  
21 of \$25,000 per ton removed that was found  
22 unreasonable by the Board in *Solar*.

23           In addition, this adjusted standard  
24 would be consistent with applicable federal law.

1 There is presently no Control Techniques Guideline  
2 for controlling VOM emissions from ink manufacturing  
3 facilities, and Sun anticipates that this adjusted  
4 standard would be submitted to USEPA as a  
5 supervision.

6 Sun Identified Section 218.6269(b) as a  
7 potentially applicable requirement in 1995 in its  
8 Clean Air Act Permit Program application, and in  
9 that application, it requested a permitting  
10 exemption from that requirement due to exorbitant  
11 costs associated with controlling emissions from its  
12 resin storage tank.

13 It met with the Agency to discuss the  
14 requested exemption, and the Agency determined that  
15 it could not grant a permitting exemption, but  
16 recommended that sun pursue adjusted standard relief  
17 from the Board.

18 The Agency has recommended that Sun  
19 receive an adjusted standard for 17 tanks in its  
20 resin storage tank farm without submerged or bottom  
21 fill pipes. The adjusted standard proposed by the  
22 Agency differs from the adjusted standard proposed  
23 by Sun in its original petition for adjusted  
24 standard. In its petition, Sun proposed an adjusted

1 standard that would enable it to comply with the  
2 general VOL storage tank requirements contained in  
3 35 Ill. Admin. Code Section 218.122 in lieu of the  
4 requirements in Section 218.626(b).

5 Under Section 218.122, Sun's storage  
6 tanks would be exempt from control requirements so  
7 long as there was no odor nuisance and the vapor  
8 pressure of the material stored in its tanks was  
9 less than 2.5 psia. It is our understanding that  
10 the Agency discussed this proposed adjusted standard  
11 with USEPA, and as a result of those discussions,  
12 proposed different terms for an adjusted standard.

13 Specifically, the Agency proposed an  
14 exemption for Sun from the requirements of Section  
15 218.626(b) as long as the material stored in the 17  
16 storage tanks had a vapor pressure of less than .5  
17 psia and there was no odor nuisance.

18 As Grant Bush will testify, he has  
19 reviewed the materials currently stored in Sun's  
20 storage tanks, and he believes that Sun can comply  
21 with the adjusted standard as proposed by the  
22 Agency.

23 Therefore, Sun respectfully requests  
24 that the Board grant it an adjusted standard

1 consistent with the Agency proposal for the 17 tanks  
2 currently without submerged or bottom fill pipes in  
3 its resin storage tank farm.

4 HEARING OFFICER KNITTLE: Thank you very  
5 much. Anything from the IEPA?

6 MS. WILLIAMS: Good afternoon. I'm Debbie  
7 Williams from the Illinois EPA, and I'd just like to  
8 introduce Yoginder Mahajan from the Agency. He's an  
9 Environmental Protection engineer in the air quality  
10 planning section of our Bureau of Air, and I will  
11 try not to repeat a lot of the stuff that Cindy  
12 already went over, but on January 29th of this year,  
13 the Agency did file its response to Sun's petition  
14 in which the Illinois EPA recommended that the  
15 petitioner's request be granted to obtain an  
16 adjusted standard from 35 Illinois Administrative  
17 Code 218.626(b) with a few conditions. This  
18 provision is found in Subpart AA of 218 which covers  
19 paint and ink manufacturing facilities.

20 Now, just briefly, I'll for the record  
21 what that provision says. Stationary VOL storage  
22 containers with a capacity greater than 946 liters  
23 or 250 gallons shall be equipped with submerged fill  
24 pipe or bottom fill. These controls shall be

1 operated at all times. An alternative control  
2 system can be allowed only if approved by the Agency  
3 and approved by USEPA as a supervision.

4         Sun has requested this adjusted  
5 standard for a total of 17 such volatile organic  
6 liquid storage tanks, which are not currently  
7 equipped with either submerged fill or bottom fill  
8 pipes. You will hear from Yoginder Mahajan today as  
9 a representative of the Agency technical staff with  
10 responsibility for evaluating Sun's petition. He'll  
11 explain that after thorough review of the petition,  
12 the supporting documents, and analysis of the cost  
13 figures and regulatory requirements, the Agency came  
14 to the conclusion that this conditional adjusted  
15 standard would be reasonable.

16         In developing its recommendation, we  
17 looked at the factors that the Board is to consider  
18 under 28.1 of the Act, which Cindy outlined for you  
19 already. Both of today's witnesses are going to  
20 give you facts which the Board will be able -- from  
21 which the Board should be able to conclude that the  
22 factors relating to Sun's Northlake facility are  
23 substantially and sufficiently different from those  
24 relied upon by the Board in developing this

1 regulation.

2           The witnesses from Sun will testify to  
3 the age of the tanks, their configuration, the  
4 viscosity of the materials stored within them, and  
5 the extremely low vapor pressure of the materials  
6 stored.

7           The agency has been convinced that no  
8 adverse environmental or health effects should  
9 result if this adjusted standard is granted. This  
10 is part in base because of the conditions that were  
11 placed in the Agency's recommendation. There are --  
12 there's one primary condition, which is that the  
13 vapor pressure of the materials stored within the  
14 tanks be limited to a level of 0.5 psia, and there  
15 are several other minor conditions that relate to no  
16 odor nuisance being in existence at the facility,  
17 that any new or existing tanks not identified in the  
18 petition are equipped with the controls required by  
19 the regulation, that the other provisions of Subpart  
20 AA beyond this one subsection are still applicable  
21 to the facility, and that the facility keeps records  
22 for a period of three years that will demonstrate  
23 that the vapor pressure of the materials stored  
24 within the tanks have maintained the level in the

1 adjusted standard.

2 Today's hearing is required to fulfill  
3 one of the requirements of 28.1 of the Act, which is  
4 that this adjusted standard be consistent with  
5 federal law. In order to be consistent with federal  
6 law, the adjusted standard must be approved by USEPA  
7 as a revision to the State of Illinois' State  
8 Implementation Plan for controlling emissions that  
9 cause ozone formation.

10 Preliminary discussions between the  
11 Agency and USEPA indicate that they are supportive  
12 of this adjusted standard on the condition that the  
13 Board includes limitation, that the petition does  
14 not store volatile organic liquids with a vapor  
15 pressure greater than 0.5 psia or pounds per square  
16 inch absolute.

17 In conclusion, the Illinois EPA  
18 recommends that the petitioner be granted this  
19 adjusted standard pursuant to 28.1 of the Act from a  
20 single subsection of the Board's regulations, 30 --  
21 35 Illinois Administrative Code 218.626(b) for the  
22 17 storage tanks specified in the petition. Thank  
23 you.

24 HEARING OFFICER KNITTLE: Thank you,

1 Ms. Williams. Can we go off for a second, please?

2 (Discussion had

3 off the record.)

4 HEARING OFFICER KNITTLE: We've had a

5 discussion off the record about the amended petition

6 which was filed on April 13th, and the Agency's

7 response thereto, and I think Ms. Williams wants to

8 make a response orally, the Agency's amended

9 response to the amended petition now.

10 MS. WILLIAMS: That's correct. The Illinois

11 EPA would just like to clarify for the record that

12 our initial response, which we filed on January

13 29th, 1999, incorporates the changes that have been

14 made in Sun's petition that was filed -- Sun's

15 amended petition that was filed on April 14th.

16 Therefore, we have no changes to our response.

17 The amended petition merely clarified

18 the factual aspect that there are only 17 tanks at

19 issue in this proceeding instead of 19, and those

20 facts were included in the Agency's response. So

21 there's no need to amend our response.

22 MS. FAUR: And since at this time we're

23 discussing the amended petition, we would like to

24 enter this amended petition into the record as an

1 exhibit. We would request that it be marked as  
2 Exhibit 5 to correspond with petitioner's other  
3 exhibit.

4 HEARING OFFICER KNITTLE: Is there any  
5 objection from the IEPA?

6 MS. WILLIAMS: No objection.

7 HEARING OFFICER KNITTLE: Do you have  
8 something to mark that with?

9 THE REPORTER: Uh-huh.

10 HEARING OFFICER KNITTLE: Or is it marked  
11 already?

12 MS. FAUR: This is not marked because this  
13 is your copy.

14 HEARING OFFICER KNITTLE: Oh, that's my  
15 copy. I forgot.

16 MS. FAUR: Let's mark it Exhibit 5 just so  
17 that we have Exhibits 1 through 4.

18 HEARING OFFICER KNITTLE: Let me just give  
19 it to you and you can -- my handwriting is not  
20 great.

21 (Petitioner's Exhibit No. 5  
22 marked for identification,  
23 4-15-99.)

24 HEARING OFFICER KNITTLE: This is just

1 Exhibit No. 5?

2 MS. FAUR: That's Exhibit No. 5.

3 HEARING OFFICER KNITTLE: There's no

4 objection from the Agency. So we will admit this

5 into evidence. It's your case. We're done with

6 opening statements. So you can proceed. How do you

7 wish to, Ms. Faur?

8 MS. FAUR: Well, we have one witness today,

9 Grant Bush, and I would like to call him. He is a

10 manufacturing services engineer with Sun Chemical.

11 HEARING OFFICER KNITTLE: Could you swear in

12 Mr. Bush, please?

13 (Witness sworn.)

14 MS. FAUR: Grant has prepared written

15 testimony, and at this time, if the Agency has no

16 objections, I would like him to read it into the

17 record.

18 HEARING OFFICER KNITTLE: Not a problem?

19 MS. WILLIAMS: No problem.

20 MS. FAUR: Go ahead, Grant.

21 MR. BUSH: My Grant Bush. I'm a

22 manufacturing services engineer for Sun Chemical.

23 I've been at Sun Chemical for three and a half

24 years. My duties include providing oversight for

1 environmental, safety, and manufacturing engineering  
2 at Sun Chemical plants in North America.

3       As part of these duties, I develop  
4 permit applications, negotiate with agencies,  
5 compile annual reporting documentation, and ensure  
6 that our facilities are in compliance with our  
7 permits.

8       The Northlake plant is located at 135  
9 West Lake Street in Northlake, Illinois. It was  
10 constructed in 1962. The Northlake facility  
11 manufactures solvent-based printing inks,  
12 water-based printing inks, and oil-based varnishes.  
13 Sun's manufacturing operations at the Northlake  
14 plant consist primarily of batch processes which  
15 involve mixing or blending of resins, solvents,  
16 pigments, and varnishes to produce finished inks and  
17 bases.

18       The raw materials for these processes  
19 are received in tank trucks, drums, and bulk  
20 cartons. Liquid raw materials are stored in storage  
21 tanks, some of which are outside, while the drums  
22 and other bulk cartons are kept inside the  
23 facility.

24       The resin storage tank farm at the

1 Northlake facility consists of a total of 37 storage  
2 tanks, all of which were constructed in 1962. The  
3 storage tanks are used to store liquid raw materials  
4 which are used in the production processes.

5           These materials are delivered to the  
6 various manufacturing departments at the Northlake  
7 plant via a hard pipe. Seventeen of the storage  
8 tanks are not equipped with submerged or bottom fill  
9 lines and 14 of these 17 tanks are currently being  
10 used to store VOMs.

11           However, since any of the 17 tanks  
12 without submerged or bottom fill lines could be put  
13 into use at any time for the store of any raw  
14 material, whether VOM or non-VOM, Sun is seeking an  
15 adjusted standard for all 17 tanks that are without  
16 submerged or bottom fill lines.

17           A variety of materials, both VOM and  
18 non-VOM, are currently being stored in the 17 tanks  
19 in question. These materials include resin  
20 solutions, VOM and non-VOM, varnish, and oils. The  
21 vapor pressure of the materials stored in the  
22 affected storage tanks range from 0.0002 to 0.0043  
23 psi. I have prepared a table which shows the  
24 materials stored in the tanks and their respective

1 vapor pressures. This table is Exhibit 1.

2           Prior to my employment with Sun and  
3 before the Title application, the most appropriate  
4 emission factor available at the time was used to  
5 calculate the emissions from the Northlake plant.  
6 As a result, emissions reported as follows on the  
7 DAPC report filed with the state; 1992, 56.8 tons;  
8 1993, 53.9 tons; 1994, 64.2 tons; 1995, 95.1 tons.

9           For the Title V permit application, Sun  
10 used better methodologies to calculate its  
11 emissions. A batch act modeling program called  
12 Emission Master was used to model the batch  
13 processes, and Sun used emission factors from a  
14 study done by NAPIN, National Association of  
15 Printing Ink Manufacturers, for the calculation of  
16 other processes.

17           Using the emission factors identified  
18 in the facility's Title V permit application, the  
19 corrected VOM emissions for the facility since 1992  
20 are as follows: 1992, 56.9 tons; 1993, 57.4 tons;  
21 1994, 70 tons; 1995, 63.4 tons; 1996, 64.14 tons;  
22 1997, 63.3 tons.

23           Of the 63.3 tons of VOM released in  
24 1997, only 0.0203 tons came from the storage tanks

1 in question. The VOM released from the storage  
2 tanks as a result of the tanks in question being  
3 splash loaded from the top and was calculated using  
4 the splash loading loss calculation.

5           Thus, the amount of VOM that would be  
6 reduced by installing bottom fill lines on these  
7 tanks would be minimal. In fact, the amount of VOM  
8 that would be reduced by controlling emissions from  
9 the tank farm is only 0.03 percent of Sun's total  
10 emissions. This is based upon 1997 emissions of  
11 63.3 tons, 0.0203 tons divided by 63.3 tons.

12           It is extremely difficult to install  
13 submerged or bottom fill on the 17 affected storage  
14 tanks at the Northlake facility because these tanks  
15 are three chamber storage tanks and are located very  
16 close together.

17           In addition, some of the materials  
18 stored in these tanks are high viscosity, which  
19 makes them unpumpable at normal temperatures. As a  
20 result, Sun is required to install bottom fill as  
21 opposed to submerged fill. These high viscosity  
22 materials would clog submerged fill pipes, which  
23 would then require frequent cleaning.

24           In order to install the bottom fill, it

1 is necessary to empty and clean each tank, perform a  
2 confined space entry, perform welding and grinding  
3 in a Class I, Division II hazardous environment,  
4 shut down nearby equipment while the welding and  
5 grinding is performed, shut down all downstream  
6 processes serviced by the storage tanks in the work  
7 area, and establish alternative storage for the raw  
8 materials contained in the storage tanks while the  
9 work is conducted.

10           A great part of the cost for converting  
11 all 17 tanks are associated with the fact that only  
12 one set of tanks can be shut down at a time because  
13 of the need to keep the resin storage tank farm in  
14 partial operation. This means that multiple  
15 installations will be required. Cleaning each  
16 individual tank out is an expensive part of the  
17 installation because of the high viscosity of the  
18 materials stored.

19           Sun did an engineering estimate on the  
20 cost to install submerged or bottom fill for each  
21 tank. Based upon those numbers, Sun requested an  
22 exemption from the submerged or bottom fill line  
23 control requirement for these tanks in its Title V  
24 permit application.

1 I have brought a copy of request with  
2 me today. This is Exhibit 2. As a result of the  
3 state's review of the Title V applications, the  
4 state came back to Sun with a Notice of Violation of  
5 the storage tank requirements of 35 Illinois  
6 Administrative Code 626(b).

7 After receiving the notice of  
8 violation, Sun requested a meeting with the Agency  
9 to discuss the tank issue. Before the meeting, Sun  
10 obtained three quotes for installation of bottom  
11 fill on the tanks in question. These costs range  
12 from \$12,450 to \$14,470 for nonheated tanks to  
13 \$18,590 to \$21,100 for heated tanks.

14 The bottom fill needs to be heated as  
15 the material has a high viscosity and the added heat  
16 makes the material pumpable. I have prepared a  
17 table outlining these costs. This is Exhibit 3. Of  
18 the 17 tanks for which submerged or bottom fill  
19 would be required, eight are nonheated and nine are  
20 heated tanks. Based on these estimates, Sun  
21 determined that the total cost to install submerged  
22 fill on all 17 tanks would be \$254,630.

23 The ten year annualized cost came to  
24 \$36,259. Based upon these estimates and the amount

1 of VOM that would be reduced through installing  
2 submerged fill, Sun determined that the cost per ton  
3 of VOM reduced would be \$1,803,946. I have prepared  
4 a table outlining these costs. This is Exhibit 4.

5           It is my understanding that this is  
6 significantly more expensive than the cost typically  
7 considered reasonable by the Agency for installing  
8 controls and also far greater than what similar  
9 facilities have had to pay.

10           It should be noted that at the time Sun  
11 filed its petition for an adjusted standard, there  
12 were 19 tanks without submerged or bottom fill.  
13 Since then, Sun has installed bottom fill on two  
14 tanks while performing other modifications.

15           This was because of the incremental  
16 cost to install bottom fill lines on these two tanks  
17 while they were already having other necessary  
18 process modifications done was minimal. Therefore,  
19 Sun proceeded to install bottom fill at that time on  
20 these two tanks, since the tanks had already been  
21 cleaned out and shut down and work crews were  
22 available.

23           There are no plans to do any further  
24 piping modifications in the tank farm area. So Sun

1 still needs to adjust the standard for the 17 tanks  
2 in the resin storage tank form that do not have  
3 submerged or bottom fill pipes. However, Sun has  
4 agreed that if any new tanks are installed at the  
5 Northlake facility, they will conform to the storage  
6 tank standards in 35 Illinois Administrative Code  
7 626(b).

8 Sun is requesting an adjusted standard  
9 in which it would be able to operate the 17 storage  
10 tanks without installing additional control  
11 equipment. In its petition, Sun requests an  
12 adjusted standard under which it would continue to  
13 store materials in these tanks at a vapor pressure  
14 of less than 2.5 psia and will comply with the  
15 general storage tank requirements contained in 35  
16 Illinois Administrative Code 218.122. It is my  
17 understanding that the Agency discussed this  
18 requested adjusted standard with the USEPA.  
19 Following these discussions, the Agency proposed a  
20 revised adjusted standard under which Sun would be  
21 required to store materials in the tanks with a  
22 vapor pressure of 0.5 psia or less.

23 I have reviewed the materials that Sun  
24 would currently use in its operations and have

1 determined that Sun can limit the vapor pressure of  
2 these materials stored in these tanks to less than  
3 0.5 psia based on Sun's current operations.  
4 Therefore, Sun agrees that the adjusted standard  
5 recommended by the agency is appropriate.

6 In summary, because the cost to install  
7 bottom fill lines on the tanks at Sun's Northlake  
8 facility and the resulting costs per ton of VOM  
9 emission reductions are so high, while the amount of  
10 environmental impact from these emissions is so low,  
11 Sun requests that the Board grant it an adjusted  
12 standard from 35 Illinois Administrative code  
13 626(b).

14 MS. FAUR: At this time during his  
15 testimony, Mr. Bush discussed several exhibits, and  
16 I would like to lay the foundation and enter them as  
17 exhibits now.

18 THE COURT: Okay.

19 MS. FAUR: This will be marked as  
20 Petitioner's Exhibit 1.

21 Mr. Bush, what is this?

22 MR. BUSH: This exhibit identifies the  
23 tanks, the vapor pressures, and their emission lost  
24 for the storage tanks in question.

1 MS. FAUR: Did you prepare this table?

2 MR. BUSH: Yes, I did.

3 MS. FAUR: Is this table the same as when  
4 you prepared it?

5 MR. BUSH: Yes.

6 MS. FAUR: It's a true and accurate  
7 representation. At this time, we would like to  
8 enter this table as Petitioner's Exhibit 1.

9 (Petitioner's Exhibit No. 1  
10 marked for identification,  
11 4-15-99.)

12 HEARING OFFICER KNITTLE: This is -- Exhibit  
13 No. 1 has the title 1997 Throughput Numbers, and  
14 it will be admitted.

15 MS. FAUR: This will be marked as  
16 Petitioner's Exhibit No. 2.

17 Mr. Bush, can you tell me what this  
18 is?

19 MR. BUSH: This was a request for approval  
20 of exemption from submerged fill line control  
21 requirements that was included in our Title V permit  
22 application.

23 MS. FAUR: Did you work to prepare this  
24 table?

1 MR. BUSH: Yes, I did.

2 MS. FAUR: Is this an accurate copy of the  
3 table you prepared?

4 MR. BUSH: Yes, it is.

5 MS. FAUR: This table is being marked as  
6 Petitioner's Exhibit 2. We would request that it be  
7 admitted into evidence.

8 (Petitioner's Exhibit No. 2  
9 marked for identification,  
10 4-15-99.)

11 THE COURT: Thank you. Exhibit No. 2 is  
12 entitled Request for Approval Exemption from  
13 Submerged Filling Control Requirement.

14 MS. FAUR: Put the little sticker on it.

15 HEARING OFFICER KNITTLE: Fill line control  
16 requirement, and will also be admitted into  
17 evidence.

18 MS. FAUR: This is being marked as  
19 Petitioner's Exhibit No. 3.

20 Mr. Bush, can you tell me what this  
21 is?

22 MR. BUSH: This is identification of the  
23 tanks and the costs for installation of bottom fill,  
24 break out also on heated costs and nonheated costs.

1 MS. FAUR: Did you prepare this table?

2 MR. BUSH: Yes, I did.

3 MS. FAUR: Is this an accurate

4 representation of the table you prepared?

5 MR. BUSH: Yes.

6 MS. FAUR: At this time, we would like to

7 have this admitted as Petitioner's Exhibit No. 3.

8 (Petitioner's Exhibit No. 3

9 marked for identification,

10 4-15-99.)

11 THE COURT: Thank you. Exhibit 3 is two

12 pages, the first page a table, Thinning Room and

13 Resin Storage Tanks at the top of the page. It is

14 also admitted.

15 (Petitioner's Exhibit No. 4

16 marked for identification,

17 4-15-99.)

18 MS. FAUR: Our final exhibit has been marked

19 Petitioner's Exhibit 4.

20 Mr. Bush, can you tell me what this

21 is?

22 MR. BUSH: This table gives a total cost for

23 the installation of the bottom fill and then gives a

24 cost per ton of \$1,803,946.

1 MS. FAUR: Did you prepare this table?

2 MR. BUSH: Yes, I did.

3 MS. FAUR: Is this an accurate copy of the  
4 table you prepared?

5 MR. BUSH: Yes, it is.

6 MS. FAUR: Okay. At this time, we'd like to  
7 enter this as Petitioner's Exhibit 4.

8 HEARING OFFICER KNITTLE: Okay.  
9 Petitioner's Exhibit No. 4 is admitted, and it's a  
10 one page table with no title.

11 MS. FAUR: Yeah. We have additional copies  
12 of these as well. Do you need more than one for the  
13 Board?

14 HEARING OFFICER KNITTLE: No. At this time,  
15 that's okay. We'll -- we can make copies because we  
16 have the exhibit stickers on there, and I have to  
17 sign and date them and put the case number. You  
18 will be more than welcome to have copy of these if  
19 you so desire.

20 Ms. Faur, do you have any questions for  
21 the witness?

22 MS. FAUR: No, I do not.

23 HEARING OFFICER KNITTLE: Ms. Williams, do  
24 you have any questions for the witness?

1 MS. WILLIAMS: Just one really minor  
2 clarifying thing.

3 Mr. Bush, in several places in your  
4 testimony, you refer to an adjusted standard from 35  
5 Illinois Administrative code 626(b). I just want to  
6 clarify it's correct that you meant 218.626(b).

7 MR. BUSH: Yes, I did.

8 MS. WILLIAMS: That's it. Thank you.

9 THE COURT: Okay. Thank you, sir. You can  
10 step down. Of course, you're not going to move.  
11 You are no longer a witness.

12 Do you have any other witness you wish  
13 to call at this time, Ms. Faur?

14 MS. FAUR: No, I do not.

15 HEARING OFFICER KNITTLE: Thank you very  
16 much. Ms. Williams, do you have any witnesses you  
17 would like to call?

18 MS. WILLIAMS: We just have one witness,  
19 Yoginder Mahajan, and Yoginder has also prepared  
20 written testimony which I was hoping to have entered  
21 as an exhibit and maybe for the purpose of the court  
22 reporter anyway as well as having him read it aloud.

23 HEARING OFFICER KNITTLE: Okay. Let's enter  
24 it after he's read it. Is there anything else

1 before we swear the witness?

2 Can you swear him in, please?

3 (Witness sworn.)

4 MR. MAHAJAN: Good afternoon. My name is

5 Yoginder Paul Mahajan, and I am employed as an

6 Environmental Protection engineer in the Air Quality

7 Planning Section in the Bureau of Air of the

8 Illinois Environmental Protection, hereafter called

9 the Agency.

10 I have been employed in this capacity

11 since March 1992. Prior to my employment with the

12 Agency, I worked for various metal fabrication

13 industries for nine years. My educational

14 background includes a bachelor of engineering degree

15 in mechanical engineering from Bhopal University at

16 Bhopal, India.

17 As part of my regular duties in the Air

18 Quality Planning Section, I was involved with

19 preparing emission estimates for various source

20 categories used in the development of the 1990 ozone

21 season weekday emissions inventories; evaluating

22 control technologies applicable to volatile organic

23 material, hereafter called VOM emissions sources

24 utilized in the preparation of the 15 percent

1 Rate-of-Progress plans for the Chicago and St. Louis  
2 ozone nonattainment areas; and assisting in the  
3 development of regulations for the control of VOM  
4 emissions from source categories included in the 15  
5 percent Rate-of-Progress plans.

6           Regarding the proposal before you  
7 today, I have personally reviewed the proposal in  
8 which Sun Chemical Corporation, hereafter called  
9 Sun, is seeking an adjusted standard from the  
10 control requirements for storage tanks found in 35  
11 Illinois Admin. Code 218.626(b) for its Northlake,  
12 Illinois, facility.

13           Sun's tanks store materials used in the  
14 production of printing inks; therefore, they are  
15 regulated under 35 Illinois Administrative Code 218,  
16 Subpart AA, which applies to paint and ink  
17 manufacturing. Section 218.626(b) of Subpart AA  
18 requires Sun to install submerged or bottom fill  
19 pipes on storage tanks with a capacity of greater  
20 than 250 gallons. Currently, Sun's Northlake  
21 facility operates 17 uncontrolled storage tanks.

22           The viscosity of the materials stored  
23 in Sun's tanks makes use of submerged fill loading  
24 infeasible, while the age and close configuration of

1 the tanks in Sun's tank farm makes the installation  
2 of bottom fill pipes more difficult than was  
3 contemplated in adopting Subpart AA.

4           In 1997, Sun emitted 63 tons of VOM  
5 from its Northlake facility. Only.0203 tons of this  
6 figure was attributable to Sun's storage tanks.  
7 This low figure is due, in part, to the extremely  
8 low vapor pressure of the materials stored in Sun's  
9 storage tanks.

10           The estimated cost to install bottom  
11 fill on the 19 included in Sun's petition ranges  
12 from \$285,960 to \$298,510. The Illinois EPA  
13 decreased this estimate by the cost of controls for  
14 those tanks which are not currently storing volatile  
15 organic liquids, tanks numbers 26, 27, and 67, and  
16 the cost of controls for those tanks that are  
17 already in compliance with 218.626(b) since bottom  
18 fill loading pipes have been installed, tanks  
19 numbers 122 and 123. This decreases Sun's lowest  
20 cost estimate to \$205,000 or \$29,192 per year when  
21 annualized over ten years.

22           Based on the emissions figures  
23 submitted by Sun, the emissions associated with the  
24 loading of the uncontrolled tanks is, at most,

1 about.02 tons per year. Therefore, the cost of  
2 compliance with 218.626(b) is at \$1,452,338 per ton  
3 of VOM emissions reduced. The Agency believes this  
4 compliance cost to be excessive.

5           The Agency consulted with staff from  
6 Region V of USEPA, and USEPA has agreed that this  
7 adjusted standard is reasonable so long as a  
8 condition is placed in the adjusted standard which  
9 limits the vapor pressure in Sun's storage tanks to  
10 no more than 0.5 pounds per square inch absolute.

11           This condition is necessary because an  
12 increase in vapor pressure will result in an  
13 increase in emissions, and Sun has not examined what  
14 impact a higher vapor pressure will have on current  
15 emissions. Allowing Sun a vapor pressure limit  
16 of .5 psia on its storage tanks gives Sun the  
17 flexibility to change materials to meet the needs of  
18 its customers without causing harm to the  
19 environment.

20           The Agency has reviewed the petition  
21 and supporting documents submitted in request of  
22 this adjusted standard and concurs with the proposal  
23 submitted by Sun Chemical Corporation. The Agency  
24 recommends that Sun Chemical Corporation be granted

1 an adjusted standard from the control requirements  
2 of 35 Illinois Administrative Code 218.626(b) for 17  
3 tanks at its Northlake facility on the condition  
4 that a vapor pressure limit of .5 psia is  
5 maintained, no odor nuisance is allowed to exist at  
6 the facility, submerged or bottom fill will be  
7 installed on any new tanks, and proper records are  
8 kept to verify the vapor pressure of materials  
9 stored.

10 (Illinois EPA Exhibit No. 1  
11 marked for identification,  
12 4-15-99.)

13 MS. WILLIAMS: Yoginder, I'm showing you a  
14 document that's been marked Illinois EPA Exhibit 1.  
15 Could you tell me what this is?

16 MR. MAHAJAN: This is my testimony for  
17 this.

18 MS. WILLIAMS: And is that what you just  
19 read into the record?

20 MR. MAHAJAN: Yes.

21 MS. WILLIAMS: I move that Illinois EPA  
22 Exhibit 1 be entered into the record.

23 HEARING OFFICER KNITTLE: Is there any  
24 objection?

1 MS. FAUR: No objection.

2 HEARING OFFICER KNITTLE: We will enter this  
3 into the record. This is admitted. This is just a  
4 document entitled Testimony of Yoginder --

5 MR. MAHAJAN: Mahajan.

6 HEARING OFFICER KNITTLE: -- Mahajan. Thank  
7 you. Paul Mahajan. This is admitted.

8 Do you have any questions for the  
9 witness, Ms. Williams? Ms. Williams, are you  
10 finished?

11 MS. WILLIAMS: Oh, I'm finished, yes.

12 HEARING OFFICER KNITTLE: Ms. Faur, does the  
13 petitioner have any questions for this witness?

14 MS. FAUR: We just have a few clarifying  
15 questions.

16 Mr. Mahajan, the Agency examined its  
17 compliance cost using 14 tanks?

18 MR. MAHAJAN: Yes.

19 MS. FAUR: Yet it's correct that the Agency  
20 recommends that the adjusted standard be granted for  
21 17 tanks?

22 MR. MAHAJAN: Yes. If those tanks store the  
23 material, similar material, with low vapor pressure,  
24 yes.

1 MS. FAUR: Is it the Agency's position that  
2 if low vapor pressure of VOM materials were stored  
3 in the three tanks now that don't store VOM, the  
4 factors would be the same which lead to the  
5 adjusted -- your recommendation for the adjusted  
6 standard?

7 MR. MAHAJAN: Yes, yes.

8 MS. FAUR: That's it.

9 HEARING OFFICER KNITTLE: Ms. Williams,  
10 anything to add?

11 MS. WILLIAMS: Nope.

12 HEARING OFFICER KNITTLE: Okay. Thank you  
13 very much, sir.

14 Do you have any rebuttal testimony or  
15 statements --

16 MS. FAUR: No, we do not.

17 HEARING OFFICER KNITTLE: -- you wish to  
18 make?

19 Anything else at this time that the  
20 petitioner wants to bring up?

21 MS. FAUR: No.

22 HEARING OFFICER KNITTLE: The Agency?

23 MS. WILLIAMS: That's all we have.

24 HEARING OFFICER KNITTLE: Okay. Let's go

1 off the record for a second.

2 (Discussion had

3 off the record.)

4 THE COURT: We've had an off-the-record

5 discussion about post-hearing comments and closings,

6 and both the petitioner and the agency are going to

7 waive their closing arguments at this point in time;

8 is that correct, Ms. Faur?

9 MS. FAUR: That is correct.

10 HEARING OFFICER KNITTLE: Ms. Williams?

11 MS. WILLIAMS: Yes, we waive closing.

12 HEARING OFFICER KNITTLE: We've also talked

13 about the public comments. The public comment

14 period will be open for 14 days after the receipt of

15 the transcript in the Board's offices. The

16 petitioner will have seven days after the close of

17 that 14 days to file any post-hearing brief they

18 wish to file if, in fact, there is a public comment.

19 If there's no public comment, we are

20 not going to have a briefing period at all. There

21 only will be briefs if, in fact, there's a public

22 comment within that 14 day period.

23 If, however, there is a public comment,

24 you'll have seven days after the end of the public

1 comment period. The agency will then have seven  
2 days to respond to the petitioner's brief, and then  
3 there will be a seven-day reply period for the  
4 petitioner.

5           We don't expect that to happen, but if,  
6 in fact, it does, that's how we're going to do it,  
7 and I'll put that in an order that summarizes the  
8 hearing so you'll have that in written form. I'm  
9 not really required to make a credibility  
10 determination in adjusted standard proceedings, but  
11 for what it's worth be advised that based on my  
12 legal judgment and experience and my observations of  
13 the hearing, I find that both witnesses were  
14 credible, and I don't find any credibility issues  
15 here today.

16           So thank you very much. I also want to  
17 note for the record that no members of the public  
18 did come into the hearing after we started up, and  
19 no members of the public attended at all. Thank you  
20 all for coming. I appreciate it.

21           (Whereupon, these were all the  
22           proceedings held in the  
23           above-entitled matter.)

24

1 STATE OF ILLINOIS )

) SS.

2 COUNTY OF C O O K )

3

4 I, GEANNA M. IAQUINTA, CSR, do hereby

5 state that I am a court reporter doing business in

6 the City of Chicago, County of Cook, and State of

7 Illinois; that I reported by means of machine

8 shorthand the proceedings held in the foregoing

9 cause, and that the foregoing is a true and correct

10 transcript of my shorthand notes so taken as

11 aforesaid.

12

13

14 \_\_\_\_\_  
Geanna M. Iaquina, CSR  
Notary Public, Cook County, IL  
15 Illinois License No. 084-004096

16

17 SUBSCRIBED AND SWORN TO

before me this \_\_\_\_ day  
18 of \_\_\_\_\_, A.D., 1999.

19 \_\_\_\_\_  
Notary Public

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