1	BEFORE THE ILLINOIS POLLUTION CONTROL BOARD					
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4	IN THE MATTER OF:					
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6	PETITION OF SHELL WOOD RIVER REFINING					
7	COMPANY FOR AN ADJUSTED STANDARD FROM No. AS 98-6					
8	35 ILL. ADM. CODE 725.213 and 725.321					
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13	Proceedings held on November 19, 1998 at 10:05					
14	4 a.m., at the Madison County Administration Building,					
15	5 157 North Main Street, Board Room 203, Edwardsville,					
16	6 Illinois, before the Honorable Charles A. King,					
17	Hearing Officer.					
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20						
21	Reported by: Darlene M. Niemeyer, CSR, RPR CSR License No.: 084-003677					
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## 1 PROCEEDINGS

- 2 (November 19, 1998; 10:05 a.m.)
- 3 HEARING OFFICER KING: Good morning, everyone.
- 4 This is the hearing on the petition of Shell Wood
- 5 River Refining Company for an Adjusted Standard from
- 6 35 Illinois Administrative Code, Section 725.213 and
- 7 725.321. This is proceeding AS 98-6 for the Pollution
- 8 Control Board.
- 9 I am Charles King, the Hearing Officer. Also here
- 10 this morning from the Pollution Control Board is Anand
- 11 Rao from the Board's technical unit.
- 12 The purpose of this hearing is to create a record
- 13 for the Board to consider when they are evaluating
- 14 this petition. There is not going to be any decision
- 15 made this morning. All we are here to do today is to
- 16 get the evidence on the record.
- 17 First we will hear from Shell, and they will put
- 18 on their case explaining what they want to do and why
- 19 they think they are entitled to it. Then we will hear
- 20 from the Illinois Environmental Protection Agency.
- 21 After we have heard from the Agency, if anyone else
- 22 wants to put any comments on the record, they will
- 23 have that opportunity.
- 24 Does anyone have any questions about the procedure
- 25 we are going to follow this morning?

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- 1 MRS. WILLIAMS: They didn't get a packet like we
- 2 did. Is there anymore that was given to us? We need
- 3 about three more.
- 4 HEARING OFFICER KING: Any other questions? Does
- 5 everyone have a packet now that needs them?
- 6 MRS. WILLIAMS: We need just one more.
- 7 HEARING OFFICER KING: Okay. Do you have
- 8 anymore?
- 9 Okay. Then we will now go ahead and begin with
- 10 Shell's case.
- 11 MR. HARRINGTON: Good morning. My name is James
- 12 Harrington. I am an attorney for Shell Wood River
- 13 Refining Company, as it is named in the petition. And
- 14 really the first order of business is to ask if we
- 15 could amend on the record the name of the petitioner
- 16 to Wood River Refining Company, a Division of Equilon,
- 17 L.L.C, due to a corporate reorganization, which will
- 18 be explained by Mr. Brewster in his testimony. There
- 19 has been a change in the name of the entity operating
- 20 the facility.
- 21 HEARING OFFICER KING: We will put that in the
- 22 record, and then we will deal with it in whatever
- 23 order is entered after this hearing.
- 24 MR. HARRINGTON: Thank you. At the Hearing
- 25 Officer's suggestion, I will make a brief statement as

- 1 to the nature of the relief we are seeking, and then
- 2 we will proceed with our testimony. If the audience
- 3 has trouble hearing me or any of the witnesses, please
- 4 call my attention or the Hearing Officer's attention
- 5 to it, and we will try to take steps to make sure that
- 6 everyone can hear us.
- 7 Essentially this is a petition for what is called
- 8 an Adjusted Standard under Illinois law. That means
- 9 that a generally applicable standard, in this case a
- 10 standard on closing a certain water treatment
- 11 facility, will be modified pursuant to the law to
- 12 allow that facility to continue operating. The
- 13 facility that we are dealing with in this case is part
- 14 of Shell's wastewater treatment operation.
- 15 At one time this facility, as Mr. Brewster and the
- 16 other witnesses will explain, this facility treated
- 17 the wastewater from the refinery and removed benzene
- 18 through biological treatment, biologically breaking
- 19 down the waste. Because of a change in the hazardous
- 20 waste law, this type of treatment could no longer be
- 21 done in this pond, and was moved to a new system of
- 22 tank treatment where it is treated biologically and
- 23 benzene is removed to meet all the federal standards.
- 24 The wastewater from the new treatment facility then is
- 25 discharged to the pond where there is additional

- 1 treatment to remove ammonia and other biological
- 2 degradable materials with no hazardous waste.
- 3 The reason for the petition is that the law would
- 4 require what is officially called closure, and that's
- 5 a technical term in the law to -- for the pond, once
- 6 it stopped receiving the benzene waste. However, the
- 7 law also provides that the operator can ask the
- 8 Pollution Control Board to allow them to continue to
- 9 use the pond, provided that the hazardous waste has
- 10 been removed, and there is no danger to the
- 11 environment.
- 12 That is what this petition is about, the right to
- 13 continue to use this pond to treat nonhazardous
- 14 waste. That is really the only issue that is before
- 15 the Board at this time, and the only relief that Shell
- 16 is seeking, is the right to continue to use this pond
- 17 as a wastewater treatment system. The Agency, of
- 18 course, is the respondent. They have a chance to
- 19 respond to anything that the refinery advances at this
- 20 hearing, and they have had a chance to file a written
- 21 response to Shell's petition.
- 22 They have made certain suggestions as to the
- 23 relief that the refinery has sought, and those
- 24 suggestions, in large part, have been agreed to by
- 25 Shell, although there is one -- I think there is

- 1 basically one minor difference left in the wording
- 2 that the Board will have to resolve. Of course, the
- 3 Board will consider all of the evidence in front of
- 4 them, and whether it meets the requirements of the law
- 5 in deciding whether relief is appropriate.
- 6 With that, I would like to -- we have three
- 7 witnesses present, and I would ask if we can swear in
- 8 all three witnesses at this time.
- 9 HEARING OFFICER KING: Ms. Niemeyer, could you
- 10 please swear the witnesses.
- 11 (Whereupon Mr. Brewster, Mr. Stephenson, and Mr.
- 12 Petersen were sworn by the Notary Public.)
- 13 MR. HARRINGTON: I propose that I present the
- 14 direct testimony of all three witnesses to start, and
- 15 that then they can be questioned after all three have
- 16 testified, if that is acceptable to the Hearing
- 17 Officer.
- 18 HEARING OFFICER KING: Does anyone have any
- 19 problems with that? Okay. That will be fine.
- 20 MR. HARRINGTON: Okay. The first witness is Mr.
- 21 Brewster.
- 22 Mr. Brewster, will you state your full name for
- 23 the record, please.
- 24 MR. BREWSTER: Joseph Nathan Brewster.
- 25 MR. HARRINGTON: I will show you what has been --

- 1 what is labeled, Testimony Before the Illinois
- 2 Pollution Control Board, J.N. Brewster, Manager.
- 3 Is this your prepared testimony in this
- 4 proceeding?
- 5 MR. BREWSTER: Yes, it is.
- 6 MR. HARRINGTON: I will ask you now to read it for
- 7 the record.
- 8 MR. BREWSTER: My name is Joe Brewster. I am the
- 9 Manager of Environmental Conservation at the Wood
- 10 River Refining Company and manage a staff of ten
- 11 persons who are responsible for environmental
- 12 regulatory compliance at the facility. My experience
- 13 spans nearly 30 years, both at Wood River and in
- 14 Shell's corporate offices in Houston. Almost all of
- 15 this experience has been in the environmental area,
- 16 including operations, process design, project
- 17 engineering, regulatory development, environmental
- 18 auditing, and in technical management.
- 19 My professional qualifications include a
- 20 Bachelor's degree in Civil Engineering and a Master's
- 21 degree in Sanitary Engineering. Additionally, I am a
- 22 registered professional engineer in the State of
- 23 Illinois, and I hold membership in the American
- 24 Academy of Environmental Engineers.
- 25 My purpose this morning is to explain the reason

- 1 that Wood River Refining Company has requested this
- 2 adjusted standard for its continued use of Pond #2 at
- 3 the wastewater treatment plant, and to cover the
- 4 recent change in ownership of this facility to Equilon
- 5 Enterprises, L.L.C.
- 6 The reason for the change in Pond #2 Operation.
- 7 The influent to Pond #2 historically received
- 8 wastewater which at times exceeded the Toxicity
- 9 Characteristic Leaching Procedure regulatory level for
- 10 benzene, 0.5 milligrams per liter, and as such, Pond
- 11 #2 was identified as an interim status hazardous waste
- 12 surface impoundment effective September 1990.
- 13 Pond #2 continued in interim status, meeting the
- 14 definition of an aggressive biological treatment unit,
- 15 until the end of March of 1995, when a tank-based
- 16 biological system was placed into operation. From
- 17 March 1994 until March 1995, Pond #2 was operated
- 18 based on Shell's application for a RCRA Minimum
- 19 Technology Requirements waiver, and the granting of a
- 20 draft exemption from MTR by United States
- 21 Environmental Protection Agency Region V. During this
- 22 period, Shell met all of the conditions of the draft
- 23 Minimum Technology Requirements waiver.
- 24 A delay of closure for Pond #2 was initially
- 25 submitted for Illinois Environmental Protection Agency 10

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- 1 review on September 28, 1994. The review was complete
- 2 on June 19, 1995, with a request for Shell to address
- 3 certain concerns regarding sludges remaining in the
- 4 pond prior to filing a final petition. Shell Wood
- 5 River Refining Company, Wood River Refining Company
- 6 had been working with IEPA on the final review and
- 7 format of the petition until its filing with the Board
- 8 on March 16th, 1998.
- With the promulgation of the final Phase III Land
- 10 Disposal Restrictions rule, issued by U.S. EPA on
- 11 April 8, 1996, the receipt and treatment of
- 12 characteristically hazardous wastewater in Pond #2 was
- 13 prohibited. However, Pond #2 may still operate and
- 14 receive nonhazardous wastewater provided that various
- 15 conditions are met. In Illinois, the Pollution
- 16 Control Board has retained the authority to make this
- 17 decision. That is will to allow decharacterized
- 18 wastewater to be received, using the adjusted standard
- 19 as a procedural mechanism, 35 Illinois Administrative
- 20 Code 725.213(e).
- 21 In order for Wood River Refining Company to
- 22 continue use of Pond #2 for treatment of nonhazardous
- 23 wastewaters prior to discharge under its NPDES permit,
- 24 a delay of closure must be granted by the adjusted
- 25 standard process.

- 1 Without this adjusted standard, Wood River
- 2 Refining Company would be required to initiate RCRA
- 3 interim status closure on Pond #2 and replace it with
- 4 a tank-based system at a cost currently estimated at
- 5 \$32 million dollars, which is wholly disproportionate
- 6 to any environmental benefit which can be achieved by
- 7 closure of the unit.
- 8 Compliance with federal law. The proposed relief
- 9 complies with federal laws and regulations found at 40
- 10 CFR 265.113. It is our understanding that the United
- 11 States Environmental Protection Agency has been
- 12 consulted on this issue and has indicated that this
- 13 facility qualifies for the relief being sought.
- 14 Company name change. Effective July 1st, 1998,
- 15 Shell Oil Company, or Shell, and Texaco, Inc., have
- 16 combined the major elements of their Western and
- 17 Midwestern U.S. refining and marketing assets, as well
- 18 as their total U.S. transportation and lubricants
- 19 businesses into a new company called Equilon
- 20 Enterprises, L.L.C., or Equilon, a Delaware Limited
- 21 Liability Company. The Shell Wood River Refining
- 22 Company, a legal entity separate from Shell but still
- 23 a subsidiary of Shell, was transferred to Equilon on
- 24 the aforementioned date of July 1, 1998. All
- 25 references to the Shell Wood River Refining Company or 12

- 1 Shell in the adjusted standard petition AS 98-6 should
- 2 be changed to reflect the new ownership and new name
- 3 of the subject facility. The facility name is now the
- 4 Wood River Refining Company, a Division of Equilon
- 5 Enterprises, L.L.C..
- 6 Comments on IEPA's May 29, 1998 response. The
- 7 Wood River Refining Company received a copy of IEPA's
- 8 response, filed on May 29th, 1998, to our petition for
- 9 an adjusted standard. After review, the Wood River
- 10 Refining Company accepts their proposed modifications
- 11 to the adjusted standard language which we proposed;
- 12 however, Wood River Refining Company prefers to drop
- 13 the last sentence of the language that IEPA proposed
- 14 to add to the adjusted standard. The sentence
- 15 proposed by IEPA that is at issue is: quote, in no
- 16 event shall Shell allow the introduction of hazardous
- 17 wastewaters into any portion of or appurtenance to
- 18 Pond #2 which is unlined, close quote.
- 19 The Wood River Refining Company does not have TCLP
- 20 data on the wastewater until several days after the
- 21 fact; therefore, the proposed language sets an
- 22 impossible standard to guarantee given current plant
- 23 conditions. The Wood River Refining Company believes
- 24 it would be forced into lining the inlet ditch to Pond
- 25 #2 in order to comply with an adjusted standard

- 1 containing this sentence. The Wood River Refining
- 2 Company believes that IEPA's concerns can be addressed
- 3 adequately with the first sentence proposed for
- 4 addition to the adjusted standard, which is: In the
- 5 event that the Staged Biological Treatment tank system
- 6 becomes inoperable or malfunctions, Shell shall take
- 7 all appropriate measures to prevent the introduction
- 8 of hazardous wastewaters into Pond #2.
- 9 Proposed adjusted standard language. Based on the
- 10 above comments, the Wood River Refining company is
- 11 proposing the following adjusted standard:
- 12 The Wood River Refining Company located near
- 13 Roxana, Illinois, in Madison County is hereby granted
- 14 an adjusted standard to the requirements of 35
- 15 Illinois Administrative Code 725.213 for its Treatment
- 16 Pond #2 that will allow Pond #2 to operate as a
- 17 second-stage biological treatment unit, including
- 18 nitrification, without closure, subject to the
- 19 requirement that it file an adjusted standard with the
- 20 Illinois Pollution Control Board, implement the
- 21 contingent corrective measures plan in less than one
- 22 year or cease accepting waste until the contingent
- 23 corrective measures plan is implemented as indicated
- 24 by the Board, and file reports with the Agency within
- 25 35 days after a confirmed detection by the groundwater

- 1 monitoring system of any release of hazardous
- 2 constituent from the ponds. Wood River Refining
- 3 Company shall also file semiannual reports with the
- 4 Agency following a confirmed detection. If Wood River
- 5 Refining Company fails to file said adjusted standard
- 6 petition with the Board, and/or fails to implement the
- 7 contingent corrective measures plan, this adjusted
- 8 standard will terminate and closure of Pond #2 shall
- 9 begin pursuant to the terms of the Closure Plan. In
- 10 the event that the Staged Biological Treatment Tank
- 11 system becomes inoperable or malfunctions, Wood River
- 12 Refining Company shall take all appropriate measures
- 13 to prevent the introduction of hazardous wastewaters
- 14 into Pond #2. Finally, Wood River Refining Company
- 15 shall test the influent to Pond #2 for benzene using
- 16 the TCLP on a monthly basis, close quote.
- 17 The correctness of Petition. We have reviewed the
- 18 Petition for Adjusted Standard in this case, which is
- 19 Exhibit Number 1, and find that except for the
- 20 ownership change and change in proposed adjusted
- 21 standard language, it was correct when filed and
- 22 remains correct today.
- 23 Thank you for your attention. I will be happy to
- 24 answer any questions that you might have regarding my
- 25 testimony. Mr. Kevin Stephenson will follow with a

- 1 description of the operation of the wastewater
- 2 treatment plant before and after the installation of
- 3 our tank-based biological treatment system; and then
- 4 Mr. Eric Petersen will conclude with the steps the
- 5 Wood River Refining Company has taken to comply with
- 6 the adjusted standard requirements and to answer
- 7 concerns raised by the Illinois Environmental
- 8 Protection Agency regarding the adjusted standard.
- 9 Thank you.
- 10 MR. HARRINGTON: Please state your full name for
- 11 the record.
- 12 MR. STEPHENSON: Kevin Michael Stephenson.
- 13 MR. HARRINGTON: I will show you what is labeled,
- 14 Testimony Before the Illinois Pollution Control Board,
- 15 K. M. Stephenson, Operations Support Engineer, Wood
- 16 River Refining Company.
- 17 Is this your testimony in this proceeding?
- 18 MR. STEPHENSON: Yes, it is.
- 19 MR. HARRINGTON: Is it true and correct?
- 20 MR. STEPHENSON: Yes.
- 21 MR. HARRINGTON: Would you please read your
- 22 testimony for the record.
- 23 MR. STEPHENSON: My name is Kevin Stephenson. I
- 24 have a B.S. in Chemical Engineering from the
- 25 University of Illinois. I have been employed at the

- 1 Wood River Refining Company since 1988 and have held
- 2 various assignments in project engineering and as a
- 3 process engineer at several processing units. Since
- 4 August of 1996, I have been assigned as the operations
- 5 support engineer for the Environmental Operations and
- 6 Utilities areas.
- 7 My purpose this morning is to explain the
- 8 operation of the wastewater treatment plant before and
- 9 after the installation of the tank-based staged
- 10 biological treatment system and to discuss the benzene
- 11 exceedance from the Staged Biological Treatment
- 12 System, or SBTS, on June 6, 1998.
- 13 Former wastewater treatment operation. Between
- 14 the second quarter of 1994 and March 1995, the
- 15 Wastewater Treatment Plant was configured and operated
- 16 as described below:
- 17 Process wastewaters and first-flush stormwater
- 18 entered the lift station where pumps raised the
- 19 wastewater to neutralization and primary oil/water
- 20 separation units including corrugated plate
- 21 interceptor units and dissolved nitrogen flotation
- 22 units. Following the primary section, the wastewater
- 23 flowed to a large equalization tank where any spikes
- 24 in hydraulic and/or organic material loading were
- 25 dampened in order to minimize any upsets to downstream

- 1 processes. In this original design, the wastewater
- 2 leaving the equalization tank was then sent to the
- 3 aggressive biological treatment unit, Pond #2.
- 4 Pond #2 construction and function. Pond #2 was
- 5 constructed by below-grade excavation in a clay bed
- 6 and placed into service in 1972. It was constructed
- 7 to be approximately 12 feet deep, and was originally
- 8 lined with a three inch layer of asphalt, but did not
- 9 meet the double liner and leachate collection
- 10 standards currently applicable to hazardous waste
- 11 units as specified in 35 IAC 725.321(a).
- 12 Pond #2 is an aerated surface impoundment
- 13 occupying approximately one and a half acres with a
- 14 holding capacity in excess of 4 million gallons. As
- 15 originally operated, activated sludge in Pond #2
- 16 treated organic contaminants in the wastewater.
- 17 Nitrification of the effluent also occurred such that
- 18 the treated water met NPDES discharge limits. As
- 19 originally configured and currently operated, from
- 20 Pond #2 the treated water went and still goes to the
- 21 clarifiers for solids removal and then is routed to
- 22 the final polishing lagoons prior to discharge to the
- 23 Mississippi River.
- 24 Current wastewater treatment operation. Since the
- 25 installation and startup of the tank-based Staged

- 1 Biological Treatment System in March of 1995, the
- 2 Wastewater Treatment Plant is configured and operated
- 3 as described below:
- 4 Compounds treated and method of treatment.
- 5 Process wastewaters and first-flush stormwater enter
- 6 the lift station where pumps raise the wastewater to
- 7 neutralization and primary oil/water separation units
- 8 including CPI, corrugated plate interceptor, units and
- 9 any dissolved nitrogen flotation units. Following the
- 10 primary section, the wastewater flows to a large
- 11 equalization tank where any spikes in hydraulic and/or
- 12 organic material loading are dampened in order to
- 13 minimize any upsets to downstream processes. The
- 14 wastewater leaving the equalization tank is then sent
- 15 to the first-stage biological treatment unit upstream
- 16 of Pond #2 for treatment and removal of the hazardous
- 17 characteristic.
- 18 The first-stage unit is a system of two tanks in a
- 19 series. The first is a basin in which return
- 20 activated sludge from the clarifiers mixes with the
- 21 raw effluent from the equalization tank; and the
- 22 second is the aeration tank in which the mixture from
- 23 the first tank is subjected to jet aeration, such that
- 24 the biodegradation of benzene and other components in
- 25 the wastewater occurs. The treated and

- 1 decharacterized water exits the second tank and is
- 2 conveyed via the inlet ditch to Pond #2 for secondary
- 3 aggressive biotreatment.
- 4 Pond #2 function. In the current mode of
- 5 operation, Pond #2 is used for secondary aggressive
- 6 biological treatment of parameters in the wastewater
- 7 that have a longer biodegradation time period and also
- 8 for nitrification of the wastewater in order for the
- 9 effluent from Pond #2 to meet NPDES discharge limits.
- 10 From Pond #2, the treated water goes to the clarifiers
- 11 for solids removal and then on to the final polishing
- 12 lagoons prior to discharge to the Mississippi River.
- 13 Explanation of June sampling anomaly. Enclosed as
- 14 Table 1 to my testimony are the SBTS inlet and outlet
- 15 data from March of 1997 to present, through October of
- 16 1998. The SBTS outlet is analyzed by the TCLP in
- 17 accordance with the Wood River Refining Company's
- 18 waste analysis plan. Of the 60 samples, other than an
- 19 apparent mislabeling of the inlet and outlet samples
- 20 from June 7, 1997, there is only one result indicating
- 21 that the SBTS outlet wastewater or inlet to Pond #2
- 22 via the inlet ditch, met or exceeded the regulatory
- 23 level of 0.5 milligrams per liter of benzene.
- 24 This sample result from June 6, 1998 is believed
- 25 to be real and related to a spike in oil and grease 20

- 1 loading in the wastewater being processed on this
- 2 date. Higher levels of oil and grease in the
- 3 wastewater entering the SBTS without concurrent
- 4 increases in oxygen supply impact the ability of
- 5 biomass to degrade organic constituents such as
- 6 benzene. One way to measure oil and grease loading in
- 7 the field is by turbidity units. On the evening of
- 8 June 5th, at approximately 10:00 p.m., a spike in
- 9 turbidity on the DNF units occurred indicating a
- 10 substantially higher than normal O&G loading passing
- 11 through the system. We believe the source to be
- 12 either the wastewater from the distilling unit
- 13 desalters or from draining high total organic carbon
- 14 waters from the holding tanks located at the
- 15 wastewater treatment plant. This spike would have
- 16 reached the SBTS during the daylight hours on June
- 17 6th.
- 18 Several steps have been implemented to prevent a
- 19 recurrence of inadequate treatment levels in the
- 20 SBTS. First, the turbidity of the water coming into
- 21 the wastewater treatment plant via the enclosed
- 22 wastewater header is being monitored each shift. This
- 23 was not monitored prior to September of 1998.
- 24 Guidelines have been put into place with the treatment
- 25 plant operators to limit turbidity impacts of draining

- 1 water from the holding tanks at the wastewater
- 2 treatment plant. Lastly, a test run is underway to
- 3 see if a new polymer additive will improve DNF oil and
- 4 grease removal efficiencies. Any unusual increase in
- 5 turbidity will trigger upstream source control
- 6 investigation to find and stop the source. If a spike
- 7 does occur, steps can be taken to reduce the forward
- 8 flow rate into the biotreater in order to increase
- 9 residence time for biotreatment as well as placing an
- 10 additional blower on-line to increase air flow into
- 11 the SBTS.
- 12 Thank you for your attention. Eric Petersen will
- 13 now discuss steps that Wood River Refining Company has
- 14 taken to comply with the adjusted standard
- 15 requirements and to address IEPA's comments and
- 16 concerns regarding the regulatory status of inlet
- 17 ditch to Pond #2. I will be happy to answer any
- 18 questions that you might have regarding my testimony.
- 19 Thank you.
- 20 MR. HARRINGTON: Mr. Petersen, will you please
- 21 state your full name for the record.
- 22 MR. PETERSEN: Eric Scott Petersen.
- 23 MR. HARRINGTON: I will show you what is labeled,
- 24 Testimony Before the Illinois Pollution Control Board,
- 25 November 19, 1998, E. S. Petersen, Senior Engineer.

- 1 Is that your testimony in this proceeding?
- 2 MR. PETERSEN: Yes, it is.
- 3 MR. HARRINGTON: Is it true and correct?
- 4 MR. PETERSEN: Yes, it is.
- 5 MR. HARRINGTON: Would you please read your
- 6 testimony into the record? Thank you.
- 7 MR. PETERSEN: My name is Eric Petersen. I have a
- 8 B.E. in Chemical Engineering from Vanderbilt
- 9 University and a Juris Doctor from St. Louis
- 10 University, and am a member of both the Illinois and
- 11 Missouri Bar. I have been employed at Shell's Norco,
- 12 Louisiana refinery and also the Wood River Refining
- 13 Company since 1984 and have held various assignments
- 14 as a computer support engineer, project engineer, and
- 15 process engineer at several processing units. Since
- 16 January of 1990 I have been assigned to the
- 17 Environmental Conservation Department at Wood River
- 18 specializing in RCRA and benzene waste operations
- 19 NESHAP regulatory compliance.
- 20 My purpose this morning is to explain the steps
- 21 that Wood River Refining Company has taken to comply
- 22 with the adjusted standard requirements, to respond to
- 23 Illinois EPA's comments and concerns regarding the
- 24 operation and regulatory status of the inlet ditch at
- 25 the wastewater treatment plant, and to explain the

- 1 steps that Wood River Refining Company will take to
- 2 prevent releases of hazardous waste to the environment
- 3 under this adjusted standard.
- 4 Steps taken to comply with requirements of 35
- 5 Illinois Administrative Code 725.213(e). Pond #2 does
- 6 not have a double liner or leachate collection
- 7 system. In order for Pond #2 to receive nonhazardous
- 8 wastes as authorized under an adjusted standard, Wood
- 9 River Refining Company has complied with the following
- 10 requirements:
- 11 A, sludge removal. There are no hazardous waste
- 12 sludges, solids or liquids in Pond #2 to be removed.
- 13 The pond, an aggressive biological treatment unit,
- 14 acts as a continuous-mix reactor and degrades the
- 15 organic contaminants as they enter the units. The 14
- 16 aerators in the pond provide adequate horsepower to
- 17 keep the biosolids in suspension and to keep the pond
- 18 mixed. Information supporting this statement was
- 19 provided to the Illinois EPA by letter on May 28,
- 20 1997, which is attached hereto as Attachment A.
- 21 B, sampling. What little sludge that may settle
- 22 to the bottom of the pond has been sampled and tests
- 23 out as nonhazardous. During 1993, sludge samples were
- 24 obtained from the bottom of Pond #2 for the express
- 25 purpose of TCLP hazardous characteristics testing.

- 1 Three sampling locations were used. All the sample
- 2 results showed the sludge to be RCRA nonhazardous.
- 3 Additionally, the biological sludge has been tested
- 4 after it has been filter pressed to create a solid for
- 5 landfill disposal. The test results for the material
- 6 show it to be nonhazardous. This information and the
- 7 analytical results were provided to the Illinois EPA
- 8 via facsimile and mail on January 15th, 1998, a copy
- 9 of which is attached hereto as attachment B.
- 10 C, contingent corrective measures plan. The
- 11 contingent corrective measures plan incorporates the
- 12 requirements of a corrective action plan, details of
- 13 which were provided to the Illinois EPA for Pond #2 in
- 14 the RCRA Part B submittals for this unit. This
- 15 document is Attachment Number 5 of the Adjusted
- 16 Standard Petition. Additionally, a groundwater
- 17 detection monitoring program for this area was
- 18 initiated in the third quarter of 1991. The Wood
- 19 River Refining Company is committed to following this
- 20 program throughout the period of the adjusted
- 21 standard. If any contamination is found in the
- 22 groundwater which could have come from the use of the
- 23 pond, the Wood River Refining Company is proposing to
- 24 implement a program of Corrective Measures Study in
- 25 order to develop the appropriate corrective measures

- 1 for the detected contamination. This proposal was
- 2 made in conjunction with the Alternate Source
- 3 Demonstration sent to the U.S. EPA on August 11,
- 4 1993. The Alternate Source Demonstration is
- 5 Attachment Number 7 of the Adjusted Standard
- 6 Petition.
- 7 Response to Illinois EPA concerns regarding inlet
- 8 ditch. A, background and additional sampling
- 9 completed. During an on-site visit on January 21,
- 10 1998, IEPA representatives raised several issues and
- 11 concerns regarding the operation of the SBTS/Pond #2
- 12 and the status of the conveyance between the two, the
- 13 inlet ditch. IEPA's concerns, the numbered questions,
- 14 and our responses, which were sent February 10, 1998,
- 15 follow in both this and the following section.
- 16 Question number 1, are any other wastewater
- 17 streams mixed with the SBTS outlet prior to the
- 18 effluent entering the inlet ditch? Similarly, is
- 19 sampling at the inlet ditch equivalent to sampling the
- 20 overflow weir at the SBTS tank.
- 21 There are no other wastestreams which tie into the
- 22 treated effluent from the SBTS prior to entering the
- 23 inlet ditch to Pond #2. Sampling at the pipe
- 24 discharge to the inlet ditch is equivalent to sampling
- 25 the overflow weir in the SBTS.

- 1 Is the inlet ditch lined? What would it take to
- 2 line the ditch? Are there any hazardous wastes in the
- 3 ditch?
- 4 The response, the inlet ditch to Pond #2 was also
- 5 constructed via below-grade excavation within a
- 6 predominately clay layer of approximately 12 foot
- 7 thickness. The inlet ditch to pond #2 is roughly 6
- 8 feet deep, half as deep as the pond, and is unlined
- 9 except with the natural clay into which it was dug.
- 10 In order to line the inlet ditch to Pond #2, Shell
- 11 would have to isolate the ditch from the Pond via
- 12 sewer plugs or "balloons" and pump out the ditch and
- 13 allow it to dry. Temporary piping and diesel pumps
- 14 would have to be installed in order to transfer the
- 15 SBTS effluent to the inlet to Pond #2. Grading and
- 16 preparation of the ditch for either an asphalt liner
- 17 or concrete tile would have to occur prior to actual
- 18 placement of the liner.
- 19 The delay of closure provisions do not require
- 20 that the inlet ditch be lined in order to receive
- 21 nonhazardous wastes under an adjusted standard. The
- 22 inlet ditch may continue in its current use so long as
- 23 all the hazardous liquids/sludges have been removed,
- 24 without impairing the integrity of a liner, if any
- 25 existed. 35 Illinois Administrative Code

- 1 725.213(e)(2). The inlet ditch never received any
- 2 listed hazardous wastes. The ditch was scoured and
- 3 emptied of waste biosludges and silt in 1994 for
- 4 hydraulic capacity reasons, in conjunction with
- 5 various RCRA and NESHAP activities at the wastewater
- 6 treatment plant.
- 7 Wood River Refining Company implemented a sampling
- 8 program in October of 1998 to test both the sludges
- 9 and underlying clay in the inlet ditch. The results
- 10 of that testing are included as Attachment C to this
- 11 testimony. The sludges do not fail any hazardous
- 12 characteristic test parameters. There is no hazardous
- 13 waste stored in the inlet ditch.
- 14 B, efforts taken to prevent releases to inlet
- 15 ditch. The unlined inlet ditch receives the treated
- 16 effluent from the first-stage SBTS tanks. At this
- 17 point in the process, the benzene characteristic of
- 18 the wastewater will have been removed. Wood River
- 19 Refining Company samples the SBTS effluent at the
- 20 inlet ditch on three consecutive days each month and
- 21 analyzes the stream via the TCLP, specifically for
- 22 benzene.
- 23 The SBTS process was designed with extra equipment
- 24 and redundant systems to guard against loss of
- 25 biological treatment. Under normal operating

- 1 conditions, all major equipment and systems,
- 2 recirculation pumps, blowers, return activated sludge
- 3 and incoming electrical supply, have available
- 4 spares. The system is designed to meet treatment
- 5 requirements for benzene under normal organic loading
- 6 conditions even if both recirculation pumps are out of
- 7 service and two of three blowers are out of service.
- 8 If there is a known operating problem at the SBTS
- 9 which could jeopardize treatment efficiency, or if
- 10 there is a maintenance need, the Wood River Refining
- 11 Company would store all wastewater in diversion tank
- 12 A-149 at the front end of the wastewater treatment
- 13 plant and cease forward flow to the treatment
- 14 section. A-149 has the capacity to store 24 hours of
- 15 normal wastewater flow from the refinery. Maintenance
- 16 on the SBTS would occur on an expedited basis during
- 17 this timeframe.
- 18 Question number three, what contingencies are in
- 19 place to handle an extended outage, greater than 24
- 20 hours, of the SBTS such that the inlet ditch would not
- 21 receive characteristically hazardous wastewater?
- In the event that the SBTS was out for an extended
- 23 or greater than 24 hour period of time such that we
- 24 exceed our ability to contain all wastewater from the
- 25 refinery in tank A-149, the Wood River Refining

1	Company	would ele	ct to discharg	e from A	-149 directly

- 2 into Pond #2. In the event that A-149 held off-spec
- 3 wastewater, the Wood River Refining Company would
- 4 discharge from the DNF effluent sumps directly to Pond
- 5 #2 and tank A-149 would be full and bypassed. The
- 6 inlet ditch to Pond #2 would be used to receive and
- 7 transport return activated sludge from the clarifiers
- 8 to Pond #2. As such, the inlet ditch would not see
- 9 any forward flow of untreated wastewater although the
- 10 level of the ditch would ride on the level of Pond
- 11 #2.
- 12 Under this scenario, impact on the environment
- 13 would be very minimal. Any benzene in the wastewater
- 14 will be biodegraded in Pond #2 which has an asphalt
- 15 liner and is situated in a clay bed. The inlet ditch
- 16 to Pond #2 will not manage untreated wastewater. Any
- 17 hypothetical release of a hazardous constituent of
- 18 wastewater from the inlet ditch to groundwater would
- 19 be unlikely due to the nonporous nature of the clay
- 20 underlying the ditch. Regardless, the set of
- 21 monitoring wells surrounding the impoundments at the
- 22 wastewater treatment plant will indicate whether or
- 23 not a release to the environment has occurred, which
- 24 will trigger further actions on the part of the Wood
- 25 River Refining Company under an adjusted standard.

- 1 C, regulatory status of unlined inlet ditch. The
- 2 Illinois Environmental Protection Agency has raised
- 3 the issue regarding the regulatory status of the inlet
- 4 ditch in the context of whether it needs to be
- 5 incorporated as a new unit in the RCRA Part B permit
- 6 application for the ponds at the wastewater treatment
- 7 plant, which is pending final review and action. Wood
- 8 River Refining Company considers the inlet ditch to
- 9 Pond #2 to be an appurtenance to the pond, and not as
- 10 a separate unit. Wood River Refining Company intends
- 11 for the adjusted standard to cover the inlet ditch as
- 12 well as Pond #2 and that this pond and ditch
- 13 combination be handled as one distinct unit for
- 14 permitting and closure purposes.
- 15 An updated Part B permit application will be
- 16 submitted in May of 1999 and will incorporate the
- 17 decision of the Board regarding the regulatory status
- 18 and future uses of Pond #2.
- 19 Thank you for your attention. This concludes the
- 20 testimony of the Wood River Refining Company. I will
- 21 be happy to answer any questions that you might have
- 22 regarding my testimony. Thank you.
- 23 MR. HARRINGTON: This concludes our presentation
- 24 at this time. The witnesses will be happy to take
- 25 questions before I move for the admission of the

- 1 exhibits.
- 2 HEARING OFFICER KING: All right. Are there any
- 3 questions for any of Shell's witnesses?
- 4 MR. PERZAN: Mr. Hearing Officer, I have some
- 5 questions.
- 6 HEARING OFFICER KING: I note there are questions
- 7 up here, too. We will get to you --
- 8 MR. WILLIAMS: I want to ask a question about this
- 9 asphalt liner.
- 10 HEARING OFFICER KING: All right. Please state
- 11 your name for the court reporter.
- 12 MR. WILLIAMS: Darrell Williams, south of Roxana,
- 13 a neighbor to Shell. The asphalt liner, three inches
- 14 of asphalt, we have all walked on asphalt and seen
- 15 asphalt. It is not safe. One cold joint -- see, I
- 16 laid asphalt for years. One cold joint, hot asphalt,
- 17 the next load comes in cold, when it hooks together it
- 18 don't bind. You are going to have seepage in your
- 19 waterways and get into the water and travel. That is
- 20 not a proper way. The liner is the best way to go. I
- 21 would never buy an asphalt liner of three inches.
- 22 HEARING OFFICER KING: Well, sir, there will be an
- 23 opportunity at the end of the hearing for you to make
- 24 any comments you want. At this point it is if you
- 25 have specific questions for any of these gentlemen.

- 1 MR. WILLIAMS: Well, I asked them about the
- 2 asphalt. Do they think that is safe or not?
- 3 HEARING OFFICER KING: Okay. Does anyone want to
- 4 respond to that?
- 5 MR. BREWSTER: The integrity of the Pond really
- 6 depends on the combination of the asphalt liner and
- 7 the clay layer in which it is situated, and then the
- 8 assurance that is provided by the groundwater
- 9 monitoring system that there has not been releases to
- 10 the groundwater from the Pond. It is a combination of
- 11 all of these which is the assurance.
- 12 MR. RAO: May I ask a follow-up question? Could
- 13 you tell us a little bit more about the clay liner,
- 14 explain how thick it is, and how it protects the
- 15 groundwater?
- 16 MR. BREWSTER: Those exact details I don't recall
- 17 from memory. They are available and can be gotten for
- 18 the Board?
- 19 MR. RAO: Yes, if it is helpful for the public to
- 20 understand how the clay liner protects the
- 21 groundwater.
- 22 MR. BREWSTER: It is not a clay liner. It is a
- 23 clay --
- 24 MR. RAO: Yes, situated in clay.
- 25 MR. BREWSTER: Right.

- 1 HEARING OFFICER KING: Mr. Perzan, I think you
- 2 were next.
- 3 MR. PERZAN: Thanks. My name is Christopher
- 4 Perzan. I am an attorney with the Illinois EPA. I
- 5 have a few questions, first for Mr. Brewster.
- 6 In regard to your comment on our proposed
- 7 condition that you objected to, I have one sort of
- 8 related question. Do the terms of the adjusted
- 9 standard that Shell has requested allow Shell to --
- 10 actually I am saying Shell. I should say Wood River
- 11 Refining Company. Sorry. But do those terms allow
- 12 Wood River to accept hazardous wastes in any portion
- 13 of Pond #2 or the inlet ditch?
- 14 MR. BREWSTER: My understanding would be no.
- 15 MR. PERZAN: So that the condition which said that
- 16 no hazardous wastewater shall go into any unlined
- 17 portion is actually something that would be required
- 18 anyway under the terms of this adjusted standard,
- 19 would you agree with that statement?
- 20 MR. HARRINGTON: I think we are getting into legal
- 21 interpretation, and I can state the adjusted standard
- 22 does not make a provision to allow it, absent the
- 23 condition that the Agency is asking for, and wouldn't
- 24 be a specific prohibition of the adjusted standard.
- 25 It would be found in the general environmental law.

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- 1 If that answers the question, or Mr. Brewster can give
- 2 his understanding of it.
- 3 HEARING OFFICER KING: Does that answer your
- 4 question, Mr. Perzan?
- 5 MR. PERZAN: I would like to hear from Mr.
- 6 Brewster.
- 7 MR. BREWSTER: That would be my understanding
- 8 also. The prohibition is in the regulations.
- 9 MR. PERZAN: Thank you.
- 10 HEARING OFFICER KING: Any other questions?
- 11 MR. PERZAN: One follow-up question, I guess. Is
- 12 it your understanding that that condition adds
- 13 anything beyond what is otherwise required?
- 14 MR. BREWSTER: The sentence at issue here, the
- 15 last sentence that was proposed for addition?
- 16 MR. PERZAN: Yes.
- 17 MR. BREWSTER: It would appear to us that you
- 18 would add something above and beyond what is required
- 19 under the adjusted standard.
- 20 MR. PERZAN: So you do think that this condition
- 21 imposes something beyond what would otherwise be
- 22 required?
- 23 MR. BREWSTER: In reality, it puts us in an
- 24 untenable position, we believe. Where, as I explained
- 25 in my testimony, testing would show after the fact

- 1 that something occurred.
- 2 MR. PERZAN: Okay. Thank you. I have a couple
- 3 other quick questions. You mentioned the draft MTR
- 4 waiver from the U.S. EPA. Was that ever finalized?
- 5 MR. BREWSTER: No, sir. To our understanding it
- 6 was not.
- 7 MR. PERZAN: You also mentioned that it was your
- 8 understanding that the U.S. EPA had been consulted and
- 9 has indicated that the facility qualifies for the
- 10 relief being sought. On what do you base that
- 11 understanding?
- MR. BREWSTER: We had earlier discussions with the
- 13 U.S. EPA, and it is also our understanding that the
- 14 Illinois EPA had discussions with the U.S. EPA and
- 15 came to the same conclusion.
- 16 MR. PERZAN: Okay. Thank you.
- 17 HEARING OFFICER KING: Do you have any other
- 18 questions?
- 19 MR. PERZAN: Yes, I have questions for each of the
- 20 witnesses.
- 21 Mr. Stephenson, I would like to refer you to the
- 22 exhibit that you have attached to your testimony.
- 23 When you look at the sampling results over time,
- 24 occasionally you see, and example is February 6th, 7th
- 25 and 8th, and you see slightly higher numbers than at 36

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- 1 other times.
- 2 MR. STEPHENSON: Uh-huh.
- 3 MR. PERZAN: Do you have any kind of explanation
- 4 or understanding as to why that happens?
- 5 MR. STEPHENSON: I think it is just normal
- 6 variations.
- 7 MR. PERZAN: So it is fairly common?
- 8 MR. STEPHENSON: Yes, it is common to have
- 9 fluctuations.
- 10 MR. PERZAN: Is it related to anything other than
- 11 the oil and gas incident that you discussed, do you
- 12 think?
- 13 MR. STEPHENSON: Not to the best of my knowledge.
- 14 MR. PERZAN: I should have said oil and grease.
- 15 Have you done any steps to assess the overall
- 16 functioning of the SBTS other than the ones you have
- 17 covered in your testimony recently, say last year?
- 18 MR. STEPHENSON: Yes, we have. We have done some
- 19 testing of the oxygen transfer efficiency.
- 20 MR. PERZAN: Can you explain that a little, as to
- 21 why that came up and what you found.
- 22 MR. STEPHENSON: That was as a follow-up to the
- 23 benzene results. We wanted to look at -- the oxygen
- 24 transfer was a function of grading the benzene, if it
- 25 was limiting us. The conclusions that we have come to

- 1 so far is it is not a major function.
- 2 MR. PERZAN: Okay. Thank you. Mr. Petersen,
- 3 first I have a quick clarification question. You
- 4 recited some of the questions that we had, some
- 5 communications that we had back and forth during the
- 6 pendency of this. And I would just like to ask you
- 7 whether you think that the response that we filed
- 8 required or requested that the Board require that Wood
- 9 River Refining Company line the inlet ditch.
- 10 MR. PETERSEN: No, I don't believe that it
- 11 required that.
- 12 MR. PERZAN: Okay. With regard to the inlet
- 13 ditch, how deep is that?
- 14 MR. PETERSEN: I believe it is approximately six
- 15 feet deep.
- 16 MR. PERZAN: Now, it is our understanding, and I
- 17 guess you can confirm this for us, that based on some
- 18 documents submitted with the petition that there is a
- 19 layer of film material composed of a mixture of sand
- 20 and construction debris and some clay that goes from
- 21 about four to five feet from grade, about four to five
- 22 feet down throughout the area where the wastewater
- 23 treatment plant is located specifically where the
- 24 ponds are. Would you agree with that?
- 25 MR. HARRINGTON: Would you read back the question, 38

- 1 please?
- 2 MR. PERZAN: Well, let me rephrase the question.
- 3 Is there a film material consisting of clay, sand and
- 4 some construction debris extending four to five feet
- 5 below grade at the location of the ponds?
- 6 MR. PETERSEN: I don't have the detailed soil
- 7 borings in front of me, so I really can't answer that
- 8 question right now.
- 9 MR. PERZAN: Would it help if you had a document?
- 10 I have a copy of a document that was included as part
- 11 of the draft MTR waiver determination or the response
- 12 to that.
- 13 MR. PETERSEN: Yes, it should.
- MR. PERZAN: Now, this document is titled,
- 15 generalized subsurface profile for Pond #1 and Pond
- 16 #2. Would you please take a look at that.
- 17 MR. PETERSEN: Based on the figure that was given,
- 18 it appears that the upper of several feet ranged
- 19 anywhere from clay, silty clay, to gravel, that is
- 20 correct.
- 21 MR. PERZAN: Thank you. I have marked this as
- 22 Respondent's 1. I would like to -- would you like me
- 23 to offer this for the record? I think I would like to
- 24 make this part of the record.
- 25 HEARING OFFICER KING: Is there any objection to 39

- 1 the admission of this as Respondent's Exhibit Number
- 2 1?
- 3 MR. PERZAN: I will state that it is part of the
- 4 petition now, and part of the attachments --
- 5 MR. HARRINGTON: No objection.
- 6 MR. PERZAN: -- just to make the record clear.
- 7 HEARING OFFICER KING: Okay. Do you have an
- 8 official copy for the record?
- 9 (Whereupon said document was admitted into
- 10 evidence as Respondent's Exhibit 1 as of this
- 11 date.)
- MR. PERZAN: So the ditch now, Mr. Petersen, does
- 13 not have a liner, correct?
- 14 MR. PETERSEN: That is correct.
- MR. PERZAN: Would you agree that to the extent
- 16 that the ditch is located within the fill material
- 17 there might be the potential for a lateral migration
- 18 of constituents that were in the ditch into the fill
- 19 material?
- 20 MR. HARRINGTON: Would you read back the
- 21 question.
- 22 (Whereupon the requested portion of the record was
- read back by the Reporter.)
- 24 MR. PETERSEN: The potential for lateral migration
- 25 into the fill material, in my opinion, would exist,

- 1 but remember that there is still a clay layer between
- 2 it and the groundwater.
- 3 MR. PERZAN: One more question with regard to the
- 4 sampling of the inlet ditch that you performed. Would
- 5 you know the volume of the sludges that were collected
- 6 during the -- when the soil samples were taken?
- 7 Apparently, some sludge was taken as a part of that.
- 8 Would that information be available somewhere.
- 9 MR. PETERSEN: Are you asking for the amount of
- 10 sample that the consultants pulled up and sent to the
- 11 laboratory? Is that what you are asking?
- 12 MR. PERZAN: I think what we are trying to get at
- 13 is how much sludge is in the ditch.
- 14 MR. PETERSEN: I don't have the information. If
- 15 you are asking about a sludge profile along the length
- 16 of the inlet ditch, I can go back and see if we had
- 17 actual thickness, if that is what you are looking for.
- 18 MR. PERZAN: Yes.
- 19 MR. PETERSEN: I don't have that with me right
- 20 now, but I will go back and see if I can get that and
- 21 submit it to you after the hearing.
- 22 MR. PERZAN: Thank you. That's all I have.
- 23 HEARING OFFICER KING: Okay. Thanks. We have
- 24 some more questions from audience members in the
- 25 back. Please state your name for the court reporter,

- 1 sir.
- 2 MR. HUBBARD: Thank you. Good morning. My name
- 3 is Edward Hubbard. I am a resident of south Roxana.
- 4 I don't know which one of you gentlemen for the
- 5 refinery spoke, but you said due to current plant
- 6 conditions it was not cost effective for you to
- 7 basically delete or get rid of your pond. How much
- 8 would that cost?
- 9 MR. BREWSTER: This is Joe Brewster. I made that
- 10 statement. We made an estimate of that. It is \$32
- 11 million dollars, as I attested to in my testimony.
- 12 MR. HUBBARD: You say \$32 million dollars to fill
- 13 in a nonhazardous pond.
- 14 MR. BREWSTER: No, sir. That is mostly the cost
- 15 of replacing its functionality with another unit.
- 16 MR. HUBBARD: Okay. Also in your Tank A, you said
- 17 that if things did go wrong you had a 24 hour capacity
- 18 for the refinery itself. Does this include the waste
- 19 from Roxana or the proposed new power plant that is
- 20 going to be built?
- 21 MR. BREWSTER: The waste from the Village of
- 22 Roxana does not enter into Shell Wood River Refining
- 23 Company's wastewater treatment plant at this stage.
- 24 It discharges below this wastewater treatment plant,
- 25 so that's not a factor. The proposed plant, the

- 1 levels of wastewater have not been established yet
- 2 from it. But I believe from the numbers that I have
- 3 been seeing that the 24 hours would still be the
- 4 correct figure.
- 5 MR. HUBBARD: So for your testimony now that it
- 6 held a 24 hour capacity was wrong, correct?
- 7 MR. BREWSTER: I am sorry? What was the
- 8 question?
- 9 MR. HUBBARD: The question was I guess it was you,
- 10 sir, that made a statement that you currently had a 24
- 11 hour capacity in Tank A for the refinery itself. I
- 12 asked you whether or not that included the proposed
- 13 power plant waste also.
- MR. BREWSTER: And the answer is, no, it does not
- 15 include the proposed power plant.
- 16 MR. HUBBARD: Are there plans to build another
- 17 tank so you do have 24 hour capacity whenever the
- 18 power plant goes into full swing?
- 19 MR. BREWSTER: The design details around the power
- 20 plant are not at that stage. They are still very
- 21 preliminary.
- 22 MR. HUBBARD: Do you believe that the Illinois EPA
- 23 has been unfair with Shell over the years?
- 24 MR. BREWSTER: What was the question?
- 25 MR. HUBBARD: Do you believe that the EPA

- 1 standards that has been set forth to you have been
- 2 unfair?
- 3 MR. BREWSTER: No, sir.
- 4 MR. HUBBARD: Do you believe that the EPA itself
- 5 works for all of our best interests, as far as
- 6 protecting the environment?
- 7 MR. BREWSTER: Yes, sir.
- 8 MR. HUBBARD: Thank you.
- 9 HEARING OFFICER KING: Any other questions for the
- 10 petitioner's witnesses?
- 11 Yes, sir. Go ahead.
- 12 MR. WILLIAMS: This is Darrell Williams from south
- 13 Roxana. Back to these ponds and this ditch, my
- 14 opinion is that it should have a line in them, and why
- 15 they don't think there should be a liner.
- 16 HEARING OFFICER KING: Sir, at this point we are
- 17 only taking questions for these witnesses.
- 18 MR. WILLIAMS: Well, there is going to be a
- 19 question.
- 20 HEARING OFFICER KING: After the Agency puts on
- 21 their presentation, you will have an opportunity to
- 22 make any statements you want on the record. At this
- 23 point we just want questions for these three
- 24 gentlemen.
- 25 MR. WILLIAMS: That is what I want to ask Mr.

- 1 Brewster. Why don't they go ahead and put a liner in
- 2 it? I mean, a safe environment is what we all live
- 3 for.
- 4 MR. BREWSTER: We don't believe a liner is
- 5 necessary to accomplish the objective or to meet the
- 6 standard at issue in this hearing.
- 7 MR. WILLIAMS: I have one other question.
- 8 MR. RAO: Can I ask a follow-up question? This is
- 9 the testimony of Mr. Petersen. In response to one of
- 10 the Agency questions about what would it take to line
- 11 the ditch, you explained, you know, that it would be
- 12 more to line the ditch, but you haven't given any cost
- 13 figures as to how much it would cost to line the
- 14 ditch. Do you have such cost figures?
- 15 MR. PETERSEN: We had put together a preliminary
- 16 estimate of what that cost would be, and submitted
- 17 that in correspondence with the Illinois EPA, and I
- 18 don't recall the date, but we had estimated a cost up
- 19 to \$400,000.00 to accomplish that.
- 20 MR. RAO: Okay. Would it be possible for you to
- 21 provide that preliminary estimate into the record or
- 22 is it in the record?
- 23 MR. BREWSTER: Is the answer to the question here
- 24 enough to get it into the record or do you want some
- 25 other --

- 1 MR. RAO: No, if you have something --
- 2 MR. HARRINGTON: We can make a copy of the
- 3 statement.
- 4 MR. PERZAN: If I can interject, I think I have
- 5 copies of that letter. That was in the February 10th
- 6 letter. I have extra copies of it.
- 7 MR. RAO: Yes, it could be -- you know, it could
- 8 be helpful if it is in the record so people know what
- 9 it would cost to line the ditch. All right. Thank
- 10 you.
- 11 HEARING OFFICER KING: Were there other
- 12 questions? Ma'am, please state your name.
- 13 MRS. DHUE: I am Doris Dhue. I am a neighbor in
- 14 south Roxana. On Mr. Petersen's report it said the
- 15 inlet ditch never received any hazardous waste. But
- 16 on the response to the Illinois Environmental
- 17 Protection Agency to petition for adjusted standard,
- 18 it says in here Pond #2 is a lined surface impound.
- 19 And it also says in here the wastewater received from
- 20 the pipeline to unlined ditch runs the length of Pond
- 21 #2 and discharges into Pond #2 at the east end. And
- 22 Pond #2 becomes hazardous from the benzene toxic
- 23 characteristic. And it also appears that the unlined
- 24 ditch became regulated as well. So it means that they
- 25 did have a benzene spill in the pond by this one 46

- 1 application or from the pond into the ditch, but on
- 2 this testimony it states that there hasn't been any.
- 3 So I am kind of confused by it.
- 4 HEARING OFFICER KING: Could you clarify that, Mr.
- 5 Petersen?
- 6 MR. PETERSEN: The testimony that I gave indicates
- 7 that the inlet ditch never received any listed
- 8 hazardous wastes, and in RCRA there is a difference
- 9 between listed and characteristic hazardous waste.
- 10 Listed wastes are wastestreams that the Agency defines
- 11 as hazardous, and characteristic wastes are wastes
- 12 that aren't defined necessarily as hazardous, but when
- 13 you test them they fail either a toxicity
- 14 characteristic or reactivity or ignitabilty. And the
- 15 testimony is that it never received any listed
- 16 hazardous waste, which it did not.
- Now, during the period of time before the SBTS was
- 18 active, it would have seen, as did Pond #2, untreated
- 19 wastewaters from the wastewater treatment plant which
- 20 may have failed the hazardous characteristic for
- 21 benzene. That's the distinction.
- 22 MRS. DHUE: There is another question I have. It
- 23 was also about the 24 hours normal wastewater flow
- 24 from the refinery. We have had some really fantastic
- 25 rains in the last few years. They are not normal 24

- 1 hour flows lately. As you know, the weather has
- 2 changed so much. Is there a contingency plan to
- 3 overcome the over more than 24 hours of normal
- 4 wastewater flow? Will that ditch be overflowing every
- 5 time that there is more rain than usual with that
- 6 pond?
- 7 And it also said the impact, in his report, on the
- 8 environment would be very minimum. Well, I don't know
- 9 what you consider minimum. I think that anytime that
- 10 you have toxic chemicals that go into the ground that
- 11 go to our aquifer, it cannot -- how can any spills be
- 12 considered minimum?
- 13 MR. STEPHENSON: The 24 hour number is based on a
- 14 total containment. Typically with the big rains we
- 15 had we have continued forward flow. We have not lost
- 16 treatment. So we continue forward flow, and put the
- 17 level in the convergent tank. We certainly don't
- 18 overflow into the ditch or pond.
- 19 MR. HUBBARD: This is Edward Hubbard again. This
- 20 summer we lost power down there for about three or
- 21 four days. Did your tank A and pond or whatever that
- 22 you were doing, were they still in operation.
- 23 MR. STEPHENSON: Yes, they continued operation.
- 24 We did not loose power at that section of the plant.
- 25 MR. HUBBARD: Okay. Thank you.

- 1 HEARING OFFICER KING: Yes, sir.
- 2 MR. DHUE: My name is Forrest Dhue. I am a
- 3 neighbor of Shell. I live within less than a quarter
- 4 of a mile from this pond that they are talking about,
- 5 and I have a couple of questions. In my place I can
- 6 drill 18 feet and I hit seep sand, and I mean seep
- 7 sand, fine as like face powder. How deep do they have
- 8 to go to hit sand? That's the first question.
- 9 MR. BREWSTER: The refinery itself covers some
- 10 2,000 acres, and the answer to that is that it varies
- 11 throughout the site.
- MR. DHUE: I am talking about the pond area, the
- 13 ditch area and the pond area.
- 14 MR. BREWSTER: The profile which is in the earlier
- 15 question would indicate that is about 20 to 25 feet.
- 16 MR. DHUE: Why would it be deeper there than where
- 17 I am at, and I am 15 feet above where this pond is at
- 18 least.
- 19 MR. BREWSTER: There is probably a mile between
- 20 your residence and the location of the --
- 21 MR. DHUE: No, no, two blocks.
- MR. BREWSTER: These ponds are located in our
- 23 western -- it is along Rand Avenue on the west side of
- 24 Route 111.
- 25 MR. DHUE: Then we will say it is a mile. Now I

- 1 have another question for you. You said you keep
- 2 mixing this stuff to keep it from getting to where it
- 3 is a hazardous material with water; is that correct?
- 4 MR. BREWSTER: The mixing is to accomplish the
- 5 biodegradation to keep close contact to the bacteria
- 6 in the system and the organic waste in the system and
- 7 oxygen. Those all three have to come together to
- 8 accomplish the process purpose here, which is to
- 9 biodegrade the organic molecules.
- 10 MR. DHUE: Then my next question is if you have
- 11 any hydrocarbons at all in this water, what is the
- 12 evaporation rate of those hydrocarbons into the
- 13 atmosphere?
- 14 MR. BREWSTER: The primary section of this plant
- 15 where we remove the -- any free oil is totally
- 16 enclosed and vent controlled, as required by current
- 17 federal regulations and also adopted by the state.
- 18 MR. DHUE: Then why do you need the pond?
- 19 MR. BREWSTER: Because after the primary section
- 20 you will still have some dissolved organic materials
- 21 in the water, and it is those dissolved organic
- 22 materials that must be removed to meet the criteria in
- 23 our NPDES permit. Those can't be removed by a
- 24 physical means, so we use this biological process to
- 25 degrade those remaining organic materials.

- 1 MR. DHUE: Thank you.
- 2 HEARING OFFICER KING: Are there any other
- 3 questions for the petitioner's witnesses?
- 4 MR. WILLIAMS: Yes. This is Darrell Williams. I
- 5 wanted to ask you a question about -- I don't know
- 6 which one said it -- but one day a month they run a
- 7 test on this pond. Don't that seem like a long time?
- 8 If you had a benzene leak, and you wait three or four
- 9 weeks to run a test, or any other toxic chemical
- 10 leak? Why wait for 30 days before they check it, or
- 11 only check it once a month? I mean, if I wanted to be
- 12 a good person -- I mean, I mow my grass more often
- 13 than that.
- 14 HEARING OFFICER KING: Do you want to respond to
- 15 that?
- 16 MR. PETERSEN: We analyze the outlet at the
- 17 biological treatment tank on three consecutive days
- 18 each month. That is for just -- just for regulatory
- 19 requirements and record keeping. However, for the
- 20 operation of the wastewater treatment plant, we have
- 21 monitoring that occurs at least on every shift basis
- 22 to check and make sure that there are no excessive
- 23 loads of organics or any other upsets to the
- 24 wastewater treatment plant. So we do monitoring on a
- 25 very frequent basis, every day, for the operation of

- 1 the wastewater plant, but for regulatory compliance
- 2 purposes, we do not -- we do not monitor, you know,
- 3 more than a couple times per shift, like we do for
- 4 regular operations.
- 5 MR. WILLIAMS: Okay. I have another question
- 6 there. I know everybody is human and everybody makes
- 7 mistakes. Once in awhile I have to call the
- 8 environmentals and tell them about leaks they had that
- 9 they have overlooked, and then they thank me for it.
- 10 But I still think the ditch ought to be fixed, because
- 11 no one would have an open sewer at home running down
- 12 the street. You should have the ditch fixed proper
- 13 and safe.
- 14 HEARING OFFICER KING: Are there any other
- 15 questions for the petitioners?
- 16 MRS. DHUE: I am Doris Dhue. I am from south
- 17 Roxana. Also in this one report it says that Pond #2
- 18 lost status authority operating when the MTRs were not
- 19 achieved and waiver was not granted or closure
- 20 performed. Why was the pond and the ditch allowed to
- 21 still be opened when there was no waiver granted or
- 22 closure performed, either one? If they already broke
- 23 this, it was granted to them that they had to either
- 24 close it or get a waiver, then why were they allowed
- 25 to keep operating, and you are having a hearing now on 52

- 1 this when they already broke their permit?
- 2 MR. BREWSTER: Our legal opinion was that the
- 3 waiver was effective during that time period.
- 4 MRS. DHUE: Is it your place, as an attorney, to
- 5 make sure the waiver was in place?
- 6 HEARING OFFICER KING: I wonder if Counsel for the
- 7 Petitioner could explain how that whole procedure
- 8 works, because I don't know that it was laid out real
- 9 clearly in this testimony. I know that you discussed
- 10 it in the petition.
- 11 MR. HARRINGTON: Yes. There was a provision in
- 12 the law that allowed a request for minimum technology
- 13 waiver to the permitting authority. At the time that
- 14 the application was made it was made to the U.S. EPA.
- 15 They issued a document which said that they approved
- 16 the waiver. They called it a draft. The opinion of
- 17 Shell's inhouse counsel at that time, as I understand
- 18 it, and my opinion was that the determination that
- 19 this facility met the requirements of the law was all
- 20 that was required to fulfill that requirement. It may
- 21 differ with the IEPA. The statements were quoted by
- 22 the questioner about the legal effect of that. But
- 23 that's the opinion -- our opinion concerning that.
- 24 And as to the adjusted standard, the practical effect
- 25 of seeking the adjusted standard and the way it has

- 1 practically come to be developed in this state is that
- 2 it is desired that the company work with the IEPA to
- 3 eliminate as many potential issues as possible before
- 4 presenting it to the Board. And this has been done in
- 5 this case, and the draft application was prepared and
- 6 was submitted and it has been developed with the IEPA
- 7 and then submitted to the Board. The Board can act on
- 8 it now, which has the affect of validating the
- 9 operation.
- 10 HEARING OFFICER KING: All right. Are there any
- 11 other questions. Yes, Mr. Dhue?
- 12 MR. DHUE: Yes, I have got a question. If I have
- 13 a car and it will not pass the emission test that the
- 14 EPA demands in this area, the St. Louis metropolitan
- 15 area, and they tell me, okay, you can't pass the test,
- 16 so we won't put no license -- your license will be
- 17 revoked. You can't drive that vehicle. Right?
- 18 Okay. Say I buy another car to replace it or whatever
- 19 and it passes the EPA test, and then I go back to them
- 20 and I say, hey, I want to keep the license on that car
- 21 just in case this other one doesn't work. It doesn't
- 22 work that way for me. Why should it work that way for
- 23 them?
- 24 HEARING OFFICER KING: I think that you want to
- 25 pose that question to the Agency instead of these

- 1 gentlemen.
- 2 MR. DHUE: Well, either way.
- 3 HEARING OFFICER KING: Are there any other
- 4 questions? Yes, ma'am. Please state your name.
- 5 MS. SANDERS: My name is Henrietta Sanders. I
- 6 live in south Roxana. I have for the last 20 years.
- 7 At one time Shell talked about buying out south
- 8 Roxana. We are bordered by oil companies all around
- 9 us. We have had this a number of times, we have had
- 10 this hearing here. My city -- you couldn't have this
- 11 hearing unless you write to the clerk and get
- 12 permission to talk. That's the kind of city we have
- 13 got, the kind of mayor we have got. In my opinion he
- 14 stinks. But I have to say here that with all of the
- 15 work that needs to be done at Shell, and whoever
- 16 bought into Shell, has my sympathy, because they
- 17 should have scoured the neighborhood and found out
- 18 what it was all about there before they put their
- 19 bucks down. But buying out south Roxana, this little
- 20 area, where we now have a bridge there and we have got
- 21 all different kinds of trucking companies coming in
- 22 there, that I think it would be more feasible putting
- 23 in a liner in one part of the company that you people
- 24 got.
- 25 HEARING OFFICER KING: Ma'am --

- 1 MS. SANDERS: I don't think you are too good of
- 2 business men not to see that.
- 3 HEARING OFFICER KING: There will be an
- 4 opportunity later in the hearing to make a statement.
- 5 But at this point all we are talking are specific
- 6 questions for the petitioner's witnesses.
- 7 MS. SANDERS: Well, this is for all of you.
- 8 HEARING OFFICER KING: If you just want to make a
- 9 statement to put forth your views, you will have a
- 10 chance to do that later. Right now --
- 11 MS. SANDERS: Yes, I have a specific question.
- 12 HEARING OFFICER KING: Okay. What is your
- 13 question?
- MS. SANDERS: I had a son that died of cancer last
- 15 February, and I think they had a suit going with
- 16 Shell. I don't know what come of that, because him
- 17 and his wife divorced after he -- well, after he died,
- 18 I don't know what come of that, the lawsuit, what
- 19 happened. But I know one thing, when they pay you
- 20 off, whoever they pay, there is a stipulation in there
- 21 that you are not to tell anything about this.
- 22 HEARING OFFICER KING: Ma'am, do you have a
- 23 question for any of these gentlemen?
- 24 MS. SANDERS: I hope all of you have heard what I
- 25 had to say. That is all.

- 1 HEARING OFFICER KING: All right. Are there any
- 2 more questions for any of the petitioner's witnesses?
- 3 Yes, Mr. Dhue.
- 4 MR. DHUE: I didn't get an answer on what I asked
- 5 about awhile ago on the EPA thing.
- 6 HEARING OFFICER KING: Well, they have not put on
- 7 their part of the case yet.
- 8 MR. DHUE: Okay.
- 9 HEARING OFFICER KING: Mr. Rao has some more
- 10 questions.
- 11 MR. RAO: I have a couple of questions for
- 12 clarification.
- 13 This question is for Mr. Brewster. In your
- 14 testimony when you talked about the alternative
- 15 treatment, you can remove the pond from service and
- 16 spend \$32 million dollars, and in the petition itself,
- 17 you know, a cost figure in excess of \$5 million
- 18 dollars has been quoted. Could you explain what
- 19 exactly is involved in replacing the Pond #2 and how
- 20 this cost is arrived at?
- 21 MR. BREWSTER: When we filed the petition in May
- 22 we had not done a complete engineering study on what
- 23 the replacement alternative might be. So at that
- 24 point we knew it was more than \$5 million dollars.
- 25 Since that time we put together a team of process

- 1 engineers and project engineers to take a further look
- 2 at that and draw out what that in reality would be.
- 3 And basically it is replacing that 4 million gallon
- 4 reactor with two used tank structures, and then those
- 5 tank structures would have the same capacity as the
- 6 existing pond, and then putting an aeration system in
- 7 and plus the necessary pumps to bring the wastewater
- 8 into that tank and to take it back out and additional
- 9 piping and facilities to run all of that. But that is
- 10 what we looked through and put together that estimate,
- 11 like we would any other project if we were to build
- 12 another unit, and we completed that recently.
- 13 MR. RAO: Do you have some kind of prepared cost
- 14 estimate that you could submit into the record.
- 15 MR. BREWSTER: We can provide that to the Board
- 16 subsequent to this hearing, yes.
- 17 MR. RAO: You can do that?
- 18 MR. BREWSTER: Yes.
- 19 MR. RAO: Okay. Thank you. My next question is
- 20 for Mr. Petersen. In the last page of your testimony,
- 21 you say that the Wood River Refining Company petition
- 22 for adjusted standard to include the inlet ditch as
- 23 well as Pond #2. And I just wanted to ask you whether
- 24 the language that you are proposing now, the language
- 25 for the adjusted standard, does that reflect this

- 1 intent?
- 2 MR. HARRINGTON: It is our understanding that it
- 3 does. If there was any question in anyone's mind, it
- 4 should be clarified.
- 5 MR. RAO: The reason I ask the question is that
- 6 since the Agency is in issue concerning the inlet
- 7 ditch, and since you have subsequently said that you
- 8 wanted the inlet ditch considered as part of the pond,
- 9 and in looking at the proposed language, and it
- 10 doesn't say that the inlet ditch is part of the Pond
- 11 #2, so I just wanted to make sure that your intent is
- 12 reflected in the proposed adjusted standard language.
- 13 MR. HARRINGTON: We will examine that and in post
- 14 hearing comments we will clarify it.
- 15 MR. RAO: Okay. Thank you. That's all I have.
- 16 HEARING OFFICER KING: Yes, Mr. Hubbard.
- 17 MR. HUBBARD: Edward Hubbard again. You are going
- 18 to save \$30 million dollars if you keep this pond in
- 19 use. Couldn't you spend some of that \$30 million
- 20 dollars and put a liner in it?
- 21 Do I need to rephrase that?
- 22 MR. BREWSTER: No, I am thinking. We think that
- 23 the -- apparently, the only thing at issue is the
- 24 inlet ditch and whether that needs a liner in it or
- 25 not. And we are prepared, if that's the final

- 1 outcome, to make that addition. But the cost of
- 2 replacing the functionality of Pond #2 in total, the
- 3 \$32 million dollars, we certainly think is
- 4 disproportionate to any benefit.
- 5 MR. HUBBARD: And for that \$32 million dollars
- 6 that you are going to save, it has already been noted
- 7 that asphalt does leak, and if it is not laid as one
- 8 continuous batch, it will develop leaks and seep into
- 9 our groundwater. Would it be worth peace of mind to
- 10 maybe spend some of that \$32 million dollars, other
- 11 than closing the pond, to line it with maybe a rubber
- 12 skin or whatever the EPA may say is correct to do?
- 13 MR. BREWSTER: It would be physically impossible
- 14 to do that, simply because we have no alternative
- 15 other than to run the pond to meet our discharge
- 16 permits, and to install an additional liner in that
- 17 pond would require drying it out and removing all the
- 18 contents to do that, and probably many months of
- 19 construction.
- 20 MR. HUBBARD: If you are allowed to keep the pond
- 21 as is, are you going to put any of that \$32 million
- 22 dollars back into the area, the communities that are
- 23 going to be affected by the possible leakage, towards
- 24 our environment? You are wanting to save yourselves
- 25 the \$32 million dollars. I think the least you could 60

- 1 do is maybe help out our communities. If you can't
- 2 give us peace of mind, then maybe have plans for maybe
- 3 some parks, green areas, or other ideas such as that.
- 4 MR. BREWSTER: I think there probably are, Mr.
- 5 Hubbard. We recently reached an agreement with both
- 6 the state and the U.S. government to make major
- 7 investments along this line, separate and apart from
- 8 this whole matter at this hearing.
- 9 MR. HUBBARD: Do you know if Shell has come to an
- 10 agreement with the 170 homes that were affected on the
- 11 west side of town that were sprayed with your
- 12 pollutants out of your crackers?
- 13 MR. BREWSTER: Could you please repeat the
- 14 question?
- 15 MR. HUBBARD: It was 120 homes that were affected
- 16 by a fuel oil spill. Have you reached settlements
- 17 with any of those homeowners on the west side of town,
- 18 up on Velma, in that area.
- 19 MR. BREWSTER: It is my understanding all of those
- 20 claims have been settled.
- 21 MR. HUBBARD: I see one person up here shaking
- 22 their head no, so I don't know. That's why I am
- 23 concerned with the \$32 million dollars that you are
- 24 going to save, as to whether or not you are going to
- 25 either put it back into our community or line the

- 1 pond, to give us peace of mind for our future
- 2 generations. Thank you.
- 3 MR. RAO: May I ask a question? In terms of
- 4 groundwater contamination, earlier you mentioned how
- 5 there is clay, and also you have a groundwater
- 6 monitoring system which acts as an early detection
- 7 system. Is any of this site geological information in
- 8 the record which shows how thick the layer is and how,
- 9 you know, any seepage would be retarded through the
- 10 clay liner if there was a seepage?
- 11 MR. BREWSTER: I am sure in the record is the soil
- 12 boring information and the general construction
- 13 details of the pond. The actual estimates of seepage,
- 14 I don't know that has ever been done and is anywhere
- 15 in the record.
- 16 MR. RAO: All right.
- 17 MR. BREWSTER: The more direct evidence by the
- 18 groundwater monitoring wells I believe is in the
- 19 record.
- 20 MR. RAO: Okay. This groundwater monitoring
- 21 system that you have now, I assume that has been
- 22 evaluated by the Illinois EPA and approved?
- 23 MR. BREWSTER: It was put together to meet the
- 24 RCRA requirements, yes, under the RCRA standards.
- 25 MR. RAO: Okay.

- 1 MR. BREWSTER: And it continues to be sampled and
- 2 reported in that fashion.
- 3 MR. RAO: Thank you.
- 4 HEARING OFFICER KING: Yes, Mr. Dhue.
- 5 MR. DHUE: My name is Forrest Dhue. You already
- 6 know that. I have lived in the shadow of Shell -- and
- 7 excuse my use of that word, because they have changed
- 8 it around, but I can't help myself -- for 43 years.
- 9 The question I have is they don't have any idea of
- 10 what the ground seepage is. Then how did all of the
- 11 hydrocarbons get in the water in the aquifer
- 12 underground? They are there. They don't know how
- 13 many is there. They don't know how thick it is. But
- 14 it is there. Where did it come from?
- 15 MR. BREWSTER: Shell has a very extensive
- 16 groundwater monitoring program throughout the entire
- 17 site that has been in place since the late 1970s and
- 18 has been under the auspices of RCRA since about 1984,
- 19 I believe. And we do quarterly monitoring and report
- 20 all of this information to the IEPA. I think we have
- 21 described in considerable detail the groundwater
- 22 quality in the area and any plumes that may exist in
- 23 the area. And that is in the record with the IEPA.
- 24 And, furthermore, we have implemented a corrective
- 25 action program for areas where there is some

- 1 contamination, and that corrective action program is
- 2 described in the RCRA permit. And that's the program
- 3 that we follow continuously to insure compliance with
- 4 that.
- 5 MR. DHUE: Groundwater and aquifer is two
- 6 different things. The groundwater stays above
- 7 ground. The aquifer is below ground.
- 8 HEARING OFFICER KING: Actually, the way those
- 9 terms are defined in the State regs, groundwater
- 10 refers to below groundwater and water on the surface
- 11 is referred to as surface water. So groundwater, as
- 12 being used in these proceedings, means water under the
- 13 surface.
- MR. DHUE: He still didn't answer where those
- 15 hydrocarbons came from.
- 16 MR. BREWSTER: They came from historical leaks
- 17 dating -- you know, this refinery is some 80 years
- 18 old. There are underground lines and many, many of
- 19 those -- most of that system has been replaced.
- 20 MR. DHUE: May I ask another question?
- 21 HEARING OFFICER KING: Yes.
- MR. DHUE: How come those lines were never taken
- 23 out.
- MR. BREWSTER: They were all emptied and purged at
- 25 the time that they were replaced and many have been

- 1 removed.
- 2 MR. DHUE: Many, but there is a lot still there;
- 3 is that not true?
- 4 MR. BREWSTER: I don't have the exact details.
- 5 MR. DHUE: Thank you.
- 6 MRS. WILLIAMS: My name is Jenny Williams, and I
- 7 would like to ask this of Joe Brewster. Now, you say
- 8 in no event shall Shell allow the introduction of
- 9 hazardous wastewaters into any portion of Pond #2
- 10 which is unlined, but the water has to come through
- 11 the ditch. Say there is a leak and the ditch is
- 12 unlined. So do you go and dig the dirt up at that
- 13 time and remove it? What do you do with it? Could I
- 14 rephrase that?
- 15 MR. BREWSTER: There continues to be the
- 16 groundwater monitoring program there, which would
- 17 detect if there ever were any leakage, but the ditch
- 18 resides above this clay layer, which would prevent it
- 19 from getting into the groundwater. It is actually dug
- 20 into the clay layer also. But operationally, the
- 21 intention is to operate the plant so that none of the
- 22 system sees any of the benzene above the
- 23 characteristic level.
- 24 MRS. WILLIAMS: What about over rain, like if it
- 25 rains?

- 1 MR. BREWSTER: The wastewater treatment plant is
- 2 designed to handle those additional loads that do
- 3 occur during a rain storm. In fact, it has done that
- 4 quite well over the years.
- 5 MRS. WILLIAMS: Okay. Thank you.
- 6 MR. HARRINGTON: Just a couple of questions to
- 7 clarify the record. In the vicinity of Pond #2 and
- 8 the ditch, there is the groundwater monitoring as to
- 9 that?
- 10 MR. BREWSTER: That's correct.
- 11 MR. HARRINGTON: That monitoring has existed for
- 12 how long?
- 13 MR. BREWSTER: It went into place in the fall of
- 14 1991.
- 15 MR. HARRINGTON: Has any benzene been detected in
- 16 the groundwater or aquifer in that area?
- 17 MR. BREWSTER: There was one detection I think in
- 18 one sampling round. I forget the year.
- 19 MR. HARRINGTON: Has it ever been repeated?
- 20 MR. BREWSTER: No, it has not been repeated and at
- 21 the time we reviewed the data through an alternate
- 22 source demonstration it was determined that it was not
- 23 the ponds that were the source of that.
- 24 MR. HARRINGTON: So when you talked earlier about
- 25 the groundwater water monitoring system operated by

- 1 the refinery, and the corrective action plan, that did
- 2 not refer to the area where the ponds are, but the
- 3 refinery area on the other side?
- 4 MR. BREWSTER: That's correct.
- 5 MR. HARRINGTON: And in that area there has been
- 6 some organics detected, and those are captured by a
- 7 groundwater pumping system?
- 8 MR. BREWSTER: That's correct.
- 9 MR. HARRINGTON: In fact, in the area of the
- 10 refinery, the system is operated so that the
- 11 groundwater flows into the Shell wells and is
- 12 recovered for treatment?
- 13 MR. BREWSTER: That is correct, and that whole
- 14 element is reflected in the RCRA permit itself,
- 15 Section 2 of the permit.
- 16 MR. HARRINGTON: Okay. In fact, that water is
- 17 under an agreement with the U.S. EPA that that water
- 18 is treated for benzene if any is present; is that
- 19 correct?
- 20 MR. BREWSTER: That's correct.
- 21 MR. HARRINGTON: All right. That's all I have.
- 22 Thank you.
- 23 HEARING OFFICER KING: Did you want to have any of
- 24 these documents admitted as exhibits?
- 25 MR. HARRINGTON: Yes, I did. At this time I would 67

- 1 like the Petition for the Adjusted Standard and its
- 2 attachment, marked as Exhibit Number 1, and there is a
- 3 copy that I have handed the court reporter that bears
- 4 the adjusted petition that already has a typed exhibit
- 5 page on the front of it. I will ask, if the Hearing
- 6 Officer will agree, that we incorporate the exhibits
- 7 that were attached to the petition when it was filed
- 8 as part of this record and as part of the exhibit.
- 9 HEARING OFFICER KING: Are there any objections?
- 10 MR. PERZAN: No objection.
- 11 HEARING OFFICER KING: Okay. The attachments to
- 12 the petition will be incorporated as attachments to
- 13 the Petitioner's Exhibit 1 from this hearing.
- 14 (Whereupon said document was admitted into
- evidence as Petitioner's Exhibit 1 as of this
- 16 date.)
- 17 MR. HARRINGTON: I also then ask that the
- 18 testimony of Mr. Brewster be marked as Exhibit Number
- 19 2, and incorporated into the record as an exhibit.
- 20 HEARING OFFICER KING: Is there any objection to
- 21 Mr. Brewster's prepared testimony being admitted as
- 22 Exhibit Number 2?
- 23 MR. PERZAN: No objection.
- 24 HEARING OFFICER KING: All right. It will be
- 25 admitted as Petitioner's Exhibit Number 2.

- 1 (Whereupon said document was admitted into
- 2 evidence as Petitioner's Exhibit 2 as of this
- 3 date.)
- 4 MR. HARRINGTON: I ask that the testimony of Mr.
- 5 Stephenson be marked as Exhibit Number 3 and
- 6 incorporated into the record.
- 7 HEARING OFFICER KING: Is there any objection to
- 8 the testimony of Mr. Stephenson being admitted as
- 9 Petitioner's Exhibit Number 3?
- 10 MR. PERZAN: No objection.
- 11 HEARING OFFICER KING: All right. That is
- 12 admitted as Petitioner's Exhibit Number 3.
- 13 (Whereupon said document was admitted into
- evidence as Petitioner's Exhibit 3 as of this
- 15 date.)
- 16 MR. HARRINGTON: Finally, I ask that the testimony
- 17 of Mr. Petersen, together with the attachments, be
- 18 marked as Exhibit Number 4 and incorporated into the
- 19 record.
- 20 HEARING OFFICER KING: Is there any objection to
- 21 Mr. Petersen's testimony being admitted as
- 22 Petitioner's Exhibit Number 4?
- 23 MR. PERZAN: No objection.
- 24 HEARING OFFICER KING: All right. That will be
- 25 admitted as Petitioner's Exhibit Number 4, and there 69

- 1 are Attachments A, B, and C, which are May 28th, 1997
- 2 correspondence, January 15th, 1998 correspondence, and
- 3 Inlet Ditch Sampling Report, November of 1998, which
- 4 are now attachments to Petitioner's Exhibit Number 4
- 5 admitted.
- 6 (Whereupon said documents were admitted into
- 7 evidence as Petitioner's Exhibit 4 as of this
- 8 date.)
- 9 MR. HARRINGTON: Thank you very much.
- 10 HEARING OFFICER KING: Before we continue, we are
- 11 going to take a break. Why don't we come back in
- 12 about ten minutes, and then we will hear from the
- 13 Agency.
- 14 (Whereupon a short recess was taken.)
- 15 HEARING OFFICER KING: All right. We will go back
- 16 on the record now.
- 17 Before we start again, I would just like to state
- 18 that the purpose of these proceedings is to make a
- 19 record that the Members of the Pollution Control Board
- 20 will review when they are making their decision on the
- 21 petition that has been filed here. And to that end,
- 22 if Mr. Rao or I ask any questions, the purpose of that
- 23 is to help make a complete record, and it does not
- 24 necessarily indicate that there is any predisposition
- 25 on our part or the part of the Board to go one way or 70

- 1 another on this petition application.
- 2 All right. Having said that, now we will hear
- 3 from the Environmental Protection Agency.
- 4 MR. PERZAN: Thank you. I think as an initial
- 5 matter I would like to offer the February 10th letter
- 6 from Shell to -- actually to me, which addresses the
- 7 question of the inlet ditch lining and the cost, that
- 8 the Board requested earlier.
- 9 MR. HARRINGTON: No objection.
- 10 HEARING OFFICER KING: I will mark this as
- 11 Respondent's Exhibit Number 2.
- 12 (Whereupon said document was duly marked for
- purposes of identification as Respondent's Exhibit
- 14 2 as of this date.)
- 15 HEARING OFFICER KING: Do you have any extra
- 16 copies of this for any members of the public?
- 17 MR. PERZAN: I have two extra copies.
- 18 HEARING OFFICER KING: If you can pass those up
- 19 there and maybe they can look at them. Could you just
- 20 summarize briefly on the record what is in this
- 21 letter?
- 22 MR. PERZAN: Well, with regard to specifically --
- 23 this was a letter written from Mr. Petersen to myself
- 24 in response to some questions I believe on the inlet
- 25 ditch, and it goes over the relevant part to what the

- 1 Board requested. It goes over what it would take to
- 2 line the inlet ditch and the cost, a cost of
- 3 \$400,000.00, and it basically sketches out what
- 4 technically would have to be done. The rest of it,
- 5 frankly, I don't recall offhand.
- 6 HEARING OFFICER KING: Is there any objection to
- 7 accepting this into the record as Respondent's Exhibit
- 8 Number 2?
- 9 Okay. Then this will be admitted as Respondent's
- 10 Exhibit Number 2.
- 11 (Whereupon said document was admitted into
- evidence as Respondent's Exhibit 2 as of this
- 13 date.)
- 14 MR. PERZAN: If we are admitting exhibits, we had
- 15 one earlier that was Respondent's Number 1.
- 16 HEARING OFFICER KING: Yes, that was admitted at
- 17 that time, so that is in the record as well.
- 18 MR. PERZAN: Okay. For the Agency's part, I think
- 19 to a large extent we will rely on our response for our
- 20 overall position on the adjusted standard petition,
- 21 but specifically with regard to some questions or some
- 22 concerns that we had about the inlet ditch, we would
- 23 like to offer the testimony of Mr. Chris Cahnovsky.
- 24 HEARING OFFICER KING: All right. Ms. Niemeyer,
- 25 would you please swear the witness.

- 1 (Whereupon Mr. Cahnovsky was sworn by the Notary
- 2 Public.)
- 3 MR. PERZAN: Could you please state your full name
- 4 for the record.
- 5 MR. CAHNOVSKY: Christopher Neal Cahnovsky.
- 6 HEARING OFFICER KING: Could you spell your last
- 7 name.
- 8 MR. CAHNOVSKY: C-A-H-N-O-V-S-K-Y.
- 9 HEARING OFFICER KING: Thank you.
- 10 MR. PERZAN: Could you give us a brief outline of
- 11 your educational background and job description now?
- 12 MR. CAHNOVSKY: Yes. I have a Bachelor of Science
- 13 in animal science from Southern Illinois University in
- 14 Carbondale. I have a Master's of Science in
- 15 environmental science from SIU in Edwardsville. I am
- 16 a Certified Hazardous Materials Manager from the
- 17 Institute of Hazardous Materials Managers. I serve on
- 18 the Board of Directors of the Gateway Society of
- 19 Hazardous Materials Managers. I am currently employed
- 20 by the Illinois EPA as a field inspector out of the
- 21 Collinsville regional office. I do compliance
- 22 inspections pursuant to the Resource Conservation &
- 23 Recovery Act. My job duties specific to the Wood
- 24 River Refinery is I do the compliance inspections
- 25 pursuant to RCRA on their generator, generation

- 1 treatment and transportation and storage of hazardous
- 2 waste on their Part B permit except for the
- 3 groundwater financial requirements.
- 4 MR. PERZAN: You heard Mr. Petersen's testimony
- 5 regarding the fill layer and the inlet ditch earlier?
- 6 MR. CAHNOVSKY: Yes.
- 7 MR. PERZAN: Would you agree that there is a
- 8 potential for a lateral migration of constituents from
- 9 the inlet ditch into the fill?
- 10 MR. CAHNOVSKY: Yes, I do.
- 11 MR. PERZAN: Are you comfortable, based on what
- 12 you have seen, in terms of the record here, that there
- 13 is no pathway to groundwater from the fill material
- 14 below the clay?
- MR. CAHNOVSKY: According to the record that has
- 16 been presented, I can't make a determination whether
- 17 there is no migration present there. It is possible
- 18 that somewhere along this conveyance there may be a
- 19 pathway present that would cause a release.
- 20 MR. PERZAN: Okay. I don't think I have any
- 21 further questions.
- 22 HEARING OFFICER KING: Okay. Are there any
- 23 questions for Mr. Cahnovsky?
- 24 MRS. DHUE: I am Doris Dhue. Do you feel like
- 25 that that ditch is a hazard to our water table, and

- 1 our aquifer and spills due to the fact that it can
- 2 have infiltration?
- 3 MR. CAHNOVSKY: If there was infiltration present,
- 4 if it did leak and it did penetrate the clay layer,
- 5 yes, there would be potential for groundwater
- 6 contamination.
- 7 MRS. DHUE: Isn't it a thin clay layer? Isn't it
- 8 only three inches?
- 9 MR. CAHNOVSKY: According to the documentation
- 10 that was submitted by Shell at the time, and I believe
- 11 the documentation is around 1993, it shows that the
- 12 clay layer is approximately twelve feet deep in that
- 13 area.
- 14 MRS. DHUE: Isn't that the pond, though, that's
- 15 not the ditch?
- 16 MR. CAHNOVSKY: Are you referring to the liner or
- 17 the ditch.
- 18 MRS. DHUE: The ditch. There is no liner in the
- 19 ditch. Is there a clay liner? Isn't the ditch lower
- 20 than the pond, too?
- 21 MR. CAHNOVSKY: The ditch is approximately six
- 22 feet deep and on the pond it is approximately twelve
- 23 feet deep. As far as a liner in the pond -- I am
- 24 sorry -- as a far as a liner in the inlet ditch, from
- 25 the information submitted, there is no engineered

- 1 liner in the ditch. Was that your question?
- 2 MRS. DHUE: Basically. Also, this whole area sits
- 3 on seep sand, so if there is infiltration from the
- 4 ditch, isn't it more apt to go right straight through
- 5 the seep sand and into the aquifer?
- 6 MR. CAHNOVSKY: From the information submitted, it
- 7 appears that from the ditch there is approximately ten
- 8 to twelve feet of clay. So the release would have to
- 9 go through that before it got to the silty sand. But
- 10 in the information submitted, there is a possibility
- 11 that if there was a release and it did get through the
- 12 clay, that, yes, there would be a release to
- 13 groundwater.
- 14 MRS. DHUE: Okay. Thank you.
- 15 MR. WILLIAMS: Could I ask a question? Is the
- 16 name Jim?
- 17 HEARING OFFICER KING: It is Mr. Cahnovsky.
- 18 MR. WILLIAMS: What is your name?
- 19 MR. CAHNOVSKY: Chris.
- 20 MR. WILLIAMS: Chris. Okay. I am sorry. I am
- 21 Darrell Williams. I have one question that has not
- 22 been asked here. What about the vapors off this that
- 23 carries through the air? How many feet could that
- 24 carry if you have a wind that is 18 or 20 miles an
- 25 hour or 30?

- 1 MR. CAHNOVSKY: Mr. Williams, I don't think I am
- 2 qualified to answer that because, frankly, I don't
- 3 know.
- 4 MR. WILLIAMS: One more question that maybe you
- 5 could answer. I don't know how long the ditch has
- 6 been there. It has probably been there for years.
- 7 Over a period of years a ditch is like anything and it
- 8 will wear. Anything going down it, water or slush or
- 9 anything, after a period of years it is like an old
- 10 water pipe and it can get thin. How do we know how
- 11 much clay is in that ditch? Over a period of years it
- 12 can get thin.
- 13 MR. CAHNOVSKY: That's quite possible. I am
- 14 afraid I don't have an exact answer of over time what
- 15 the erosion rate of the clay in that area would be.
- 16 With the documentation submitted, it would -- it
- 17 appears that that clay is about twelve feet deep.
- 18 MRS. WILLIAMS: My name is Jenny Williams, and I
- 19 would like to know this question here, on here it says
- 20 water in the inlet ditch can enter the pond in two
- 21 methods. There is two ways to come in. Now, is that
- 22 tested on both ends of that as it is going in? I
- 23 don't understand that.
- 24 MR. PERZAN: Excuse me, ma'am. What document are
- 25 you referring to?

- 1 MRS. WILLIAMS: I don't know. I am reading this.
- 2 I am reading this one, the one you just gave us.
- 3 MR. PERZAN: The February 10th letter.
- 4 HEARING OFFICER KING: Respondent's Exhibit 2 she
- 5 is talking about?
- 6 MR. PERZAN: Yes, Respondent's Exhibit Number 2.
- 7 HEARING OFFICER KING: Okay.
- 8 MRS. WILLIAMS: It just states water in the inlet
- 9 ditch can enter the Pond #2 in two methods. If it is
- 10 entered in two different directions, is it tested in
- 11 all these directions? This might have been a good
- 12 question for the Shell men, wouldn't it?
- 13 MR. CAHNOVSKY: This letter is in response to an
- 14 inspection that we did, or I should say a site visit
- 15 back on January 21st, and at that time we were
- 16 discussing where the best place to take the sample for
- 17 the influent to Pond #2. And, apparently, Mr.
- 18 Petersen was answering that there is two places, two
- 19 ways this could get into the ditch. But it is my
- 20 understanding that there is only one area right now
- 21 where the influent to the ditch is entering, and that
- 22 is through the 36 inch culvert that crosses -- I guess
- 23 from the biological treatment it goes to a manhole.
- 24 From that manhole it goes into the inlet ditch. And
- 25 to my knowledge, that is what they are using

- 1 currently, and where they are sampling from.
- 2 MRS. WILLIAMS: It states here that it is 70
- 3 feet. Is that how long the ditch is or how long is
- 4 that? Approximately 70 feet from the east boundary.
- 5 Or is that the culvert?
- 6 MR. CAHNOVSKY: I believe they are referring to
- 7 the culvert in that sentence.
- 8 MRS. WILLIAMS: All right.
- 9 HEARING OFFICER KING: Are there anymore
- 10 questions? Mr. Rao, do you have some questions?
- 11 MR. RAO: Yes, I have a couple of questions. Mr.
- 12 Cahnovsky, you mentioned this fill material and
- 13 construction debris. Now, is that located beneath the
- 14 clay or is it along the sides of the ditch?
- 15 MR. CAHNOVSKY: It is my understanding that from
- 16 the approximate elevation of the ditch, which is
- 17 around 432 mean sea level, which would be about the
- 18 top of the ditch, and the top of the pond, to about
- 19 426 or so mean sea level, there is a fill layer. And
- 20 the boring logs show anywhere from one to four feet of
- 21 fill layer in certain areas around the ponds.
- MR. RAO: So was your concern anything to do with
- 23 the lateral migration?
- MR. CAHNOVSKY: Yes, there would be a concern due
- 25 to lateral migration of contaminants in the fill.

- 1 These borings records are found in Attachment 79 of
- 2 the MTR waiver that is part of the petition.
- 3 MR. PERZAN: Actually, that is Attachment 9 to the
- 4 petition.
- 5 HEARING OFFICER KING: Okay.
- 6 MR. RAO: What is your position with regards to,
- 7 you know, placing a liner on the ditch? Do you
- 8 believe that the liner would be protective of the
- 9 groundwater, or what is the Agency's position with
- 10 regard to the liner for the ditch?
- 11 MR. CAHNOVSKY: We will evaluate that as part of
- 12 the permitting process to determine whether a liner is
- 13 the best option for this ditch.
- MR. RAO: So that is not something that is part of
- 15 the adjusted standard? When you say, you know, you
- 16 are going to evaluate it as part of the permitting --
- 17 because concerns have been raised about the inlet
- 18 ditch, and I just want to make sure what your position
- 19 is so that the Board has something to rely on, what
- 20 the Agency feels about the inlet ditch.
- 21 If you cannot answer this question right now that
- 22 is fine. You can send something in writing also to
- 23 help the Board if you want to take time to evaluate
- 24 this.
- 25 MR. PERZAN: Yes, that may be best. Our most 80

- 1 comprehensive response could be done in comments. We
- 2 will address that question.
- 3 MR. RAO: Another question about this inlet ditch
- 4 is in your response to Wood River's petition on page
- 5 four, you mention that the inlet was not, you know,
- 6 tested for the possibility of any hazardous material
- 7 remaining in the ditch. And I think that -- let me
- 8 see. You recommended that Shell produce any existing
- 9 data about the hazardous materials being removed from
- 10 the ditch, or being present in the ditch. Have you
- 11 received any such data from Wood River Refining
- 12 Company so far?
- 13 MR. CAHNOVSKY: If your question is has -- have
- 14 they submitted data about the hazardous
- 15 characteristics of the sludge within the ditch?
- 16 MR. RAO: Yes.
- 17 MR. CAHNOVSKY: Yes, this morning I received a
- 18 copy of a document called the Pond #2 inlet ditch
- 19 sampling, in which three samples were taken of the --
- 20 I would have to look back again, because I knew they
- 21 couldn't take one sample because of some rocks. I
- 22 don't know if it was a soil sample or sludge sample,
- 23 but there were samples taken of the sludge within the
- 24 ditch.
- 25 HEARING OFFICER KING: For the record I will note 81

- 1 that that document is Attachment C to Petitioner's
- 2 Exhibit Number 4.
- 3 MR. RAO: So would the Agency be evaluating this
- 4 information and providing comments to the Board as to
- 5 what --
- 6 MR. PERZAN: If you would like us to we could.
- 7 MR. RAO: It could be helpful, because you raise
- 8 this issue about concerns about the ditch being not
- 9 tested previously. So it could help us to know.
- 10 MR. PERZAN: Yes.
- 11 HEARING OFFICER KING: Does anyone else have any
- 12 questions for the Agency?
- 13 MS. CAMPBELL: I am Sarah Campbell. Are those the
- 14 same samples in this report here that has been given
- 15 to us?
- 16 HEARING OFFICER KING: What was your name, ma'am?
- 17 MS. CAMPBELL: Sarah Campbell.
- 18 HEARING OFFICER KING: Thank you.
- 19 MR. CAHNOVSKY: Is what you have labeled
- 20 Attachment C in the ditch sampling report of November
- 21 of 1998?
- 22 MS. CAMPBELL: Yes, sir.
- 23 MR. CAHNOVSKY: Yes.
- 24 MS. CAMPBELL: Okay. Thank you.
- 25 HEARING OFFICER KING: I have one question. Mr.

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- 1 Perzan, is it the Agency's position that the disputed
- 2 last sentence in the proposed adjusted standard adds
- 3 something beyond what the law already requires?
- 4 MR. PERZAN: Well, I would refer to our response,
- 5 and I would add that, no, it isn't our position that
- 6 it adds anything. That it articulates what is already
- 7 required in the adjusted standard.
- 8 HEARING OFFICER KING: Okay. Thank you.
- 9 All right. If there are no further questions for
- 10 the Agency, and if anyone else here wants to make a
- 11 statement on the record you can do that at this time.
- 12 If you want to put in factual information, you need to
- 13 be sworn in by the court reporter. If you just want
- 14 to give your opinion about anything you have heard,
- 15 you can just make that statement on the record. Also,
- 16 you can file written comments with the Board after
- 17 this is over. Yes, Mr. Dhue.
- 18 MR. DHUE: I still have a question. They know
- 19 there is hydrocarbons in our area that extend from the
- 20 testing location on Shell's property 5,000 feet north
- 21 and south and 8,000 feet east and west. Now, that's a
- 22 long ways for hydrocarbons. What I would like to know
- 23 is how thick that is, if that's possible. They say
- 24 they are doing a great job on testing the groundwater
- 25 and that. And if they are, they should know how thick 83

- 1 that pollutant is.
- 2 HEARING OFFICER KING: To whom are you posing that
- 3 question?
- 4 MR. DHUE: To Shell.
- 5 MR. BREWSTER: This is Joe Brewster from Shell.
- 6 We provide semi-annual reports to the Agency as a
- 7 result of the requirements on the RCRA permits which
- 8 delineate the locations of the plume and the thickness
- 9 of the plume. That data resides with the Agency.
- 10 HEARING OFFICER KING: Just to follow-up on that,
- 11 Mr. Perzan, if you know, does that information or are
- 12 those documents things that Mr. Dhue could get from
- 13 the IEPA's offices in Springfield?
- 14 MR. PERZAN: Anything that has been submitted to
- 15 us by Shell is a report that -- you could request that
- 16 under the Freedom of Information Act. If you would
- 17 like to know how to get it, I can tell you later and
- 18 give you the address.
- 19 MR. DHUE: Okay.
- 20 MR. WILLIAMS: I would like to ask this question
- 21 of Mr. Brewster. This would be a hardship, I guess, I
- 22 understand, if Shell put this liner in and had to redo
- 23 this pond and put this liner in the ditch or culvert,
- 24 whatever they need, sewer pipe. It is a hardship, I
- 25 know. But Shell had another hardship just a few

- 1 months ago when they took a tax break out of this
- 2 county for about \$3 million bucks. I figured it would
- 3 help them out when the taxpayers picked up the load.
- 4 Does he still feel like this would be a hardship
- 5 to them, fixing this liner in this pond if it would
- 6 help the environment and the ditch? Or are they more
- 7 interested in spending \$350 million dollars for a new
- 8 power plant? I think helping the citizens of Madison
- 9 County should come first. Would you answer that
- 10 question?
- 11 MR. BREWSTER: Again, we believe that the total
- 12 replacement of Pond #2 by a tank based biological
- 13 treatment system at a cost of what we estimate to be
- 14 \$32 million dollars would be totally disproportionate
- 15 to any benefit that there would be. The other sub
- 16 issue in that whole thing is the lining of the inlet
- 17 ditch. And we have estimated the cost of that at
- 18 \$400,000.00. That physically could be done with the
- 19 system in service, we believe. We have taken a
- 20 preliminary look at that. But, again, we don't think
- 21 it is necessary because the treatment system itself
- 22 will keep contaminants from getting into the inlet
- 23 ditch. We think the controls we have in place and how
- 24 the treatment system operates, we can prevent that.
- 25 MRS. DHUE: Can I ask Mr. Brewster a question? 85

- 1 That is also -- is that pond not near your sulfur
- 2 plant?
- 3 MR. BREWSTER: Please repeat.
- 4 MRS. DHUE: Is that pond not near your sulfur
- 5 plant?
- 6 MR. BREWSTER: That is correct.
- 7 MRS. DHUE: All right. How can you keep the pond
- 8 from getting polluted? Before you put your privacy
- 9 fence up you can drive down Rand Avenue and there was
- 10 just chunks of green stuff laying all over the ground
- 11 over there. How can you feel like this ditch will
- 12 never be contaminated when you have that on top your
- 13 soil and that might run into it anyway.
- 14 MR. BREWSTER: Well, I think the point at issue
- 15 here is whether benzene at levels greater than half a
- 16 ppm would ever enter that ditch. Again, we have
- 17 designed that system to remove that benzene before the
- 18 wastewater would enter that ditch. And we feel we can
- 19 be sure that the biological treatment system will
- 20 prevent that.
- 21 MRS. DHUE: Wouldn't it be better to line that
- 22 ditch rather than to take the chance of contaminating
- 23 our drinking water, which is not too far from there.
- 24 If you get the benzene in the aquifer then our
- 25 drinking water is contaminated. Wouldn't it be less 86

- 1 expensive in the long run to line that ditch than to
- 2 take the risk and chance to the public?
- 3 MR. BREWSTER: There is several elements in place
- 4 there. Again, the treatment of removing the benzene
- 5 before it enters the ditch we think is the best
- 6 solution.
- 7 MRS. DHUE: But that failed.
- 8 MR. BREWSTER: There is still the groundwater
- 9 water monitoring system in place which would detect if
- 10 there ever was a release because of this or other
- 11 reasons and which would trigger the implementation of
- 12 a corrective measure to prevent any impact.
- 13 MRS. DHUE: But your monitoring system to see if
- 14 there is benzene is already after the fact, not before
- 15 the fact.
- 16 MR. BREWSTER: That is correct and that -- the
- 17 basic element in place here is to remove the benzene
- 18 before it enters the ditch.
- 19 MRS. DHUE: Thank you.
- 20 HEARING OFFICER KING: Yes, sir.
- 21 MR. WILLIAMS: I have another question of Mr.
- 22 Brewster. This pond is over by the sulfur plant. It
- 23 has been known for years that it is about the lowest
- 24 spot in the plant. And when we have hard rains, Rand
- 25 Avenue is shut off. The water is two to three feet

- 1 deep. If that Rand Avenue has two or three feet of
- 2 water on it, how much is coming out of the ditches,
- 3 because the ditches cannot hold that. There is a very
- 4 poor sewer system in that area. It is in the flood
- 5 land.
- 6 MR. BREWSTER: I think the flooding that occurs on
- 7 Rand Avenue is totally unrelated to what happens in
- 8 our west property where the treatment plant is
- 9 located. The basic elevation there is several feet
- 10 higher than Rand Avenue. Rand Avenue is in a
- 11 depression outside of our property and the -- we don't
- 12 have any flooding which overflows that ditch during
- 13 rain storms.
- 14 HEARING OFFICER KING: Does anyone else want to
- 15 make any comments on the record?
- 16 MS. CAMPBELL: Mr. Brewster, can you guarantee
- 17 that there will be no ground contamination in the
- 18 future, guarantee?
- 19 MR. BREWSTER: I don't think anyone can guarantee
- 20 that. The Agency and regulators have formulated
- 21 regulations which we follow closely to detect if that
- 22 ever happened and prevent it from happening, and if it
- 23 ever did happen then remediate it to protect the
- 24 public.
- 25 MS. CAMPBELL: Mr. Brewster, can you give me an 88

- 1 approximate count of individuals that live in the
- 2 south Roxana area, the population count, what you
- 3 think it is?
- 4 MR. BREWSTER: I don't know exactly what it is. I
- 5 would estimate 3,000 to 4,000, but I don't know.
- 6 MS. CAMPBELL: Thank you.
- 7 HEARING OFFICER KING: Does anyone else have any
- 8 comments? I would like to stress that at this point
- 9 that this is your chance to put your views in the
- 10 record. Before when the Agency was -- or the
- 11 petitioner's witnesses were testifying, several people
- 12 wanted to make general statements on what they thought
- 13 about Shell and what was going on. At that time I
- 14 said we are restricted to just questions to them, and
- 15 you will have a chance later, if you want to put what
- 16 you think about anything involved in this petition on
- 17 the record. This is your chance to do that now.
- 18 All right. Mr. Dhue.
- 19 MR. DHUE: The only thing I would like to say is
- 20 that anything that man creates is not perfect. It
- 21 does have fallacies. There are things that can
- 22 happen. So I really don't understand why, if they
- 23 have to leave this ditch open -- and I realize it
- 24 would save them money, but is that the only reason?
- 25 If that's the only reason that they want to keep this 89

- 1 open, then I think they are wrong. I think they are
- 2 wrong for the very simple reason that things are more
- 3 valuable than money. The environment is more
- 4 valuable. Human life and animal life is more
- 5 valuable. And what you leave your grandchildren and
- 6 your great grandchildren in the future is more
- 7 valuable than money. So to me to say that's the only
- 8 reason they want to keep that thing open, that is not
- 9 a valid reason. Thank you.
- 10 HEARING OFFICER KING: Thank you. Does anyone
- 11 else have any comments to put on the record?
- 12 All right. In that case, I would like to say that
- 13 often Members of the Board attend these meetings and
- 14 wanted to be here today, but today is the date of a
- 15 scheduled Board meeting in Chicago, and they all had
- 16 to be there for that.
- 17 Are we going to do another round of briefing on
- 18 this?
- 19 MR. HARRINGTON: I think a short comment period
- 20 would be in order to answer some of the questions that
- 21 were raised during the hearing.
- 22 HEARING OFFICER KING: How much time do you want
- 23 to respond to the questions that were raised today?
- 24 MR. PERZAN: I think we had a lot of questions,
- 25 too.

- 1 HEARING OFFICER KING: Let's go off the record for
- 2 a minute.
- 3 (Discussion off the record.)
- 4 HEARING OFFICER KING: Back on the record. We
- 5 will establish a comment period. Today is the 19th,
- 6 and we have the Thanksgiving holidays coming up next
- 7 week. So why don't we go through --
- 8 MR. PERZAN: December 11th is three weeks and one
- 9 day.
- 10 HEARING OFFICER KING: Is that a Friday?
- 11 MR. PERZAN: Yes.
- 12 HEARING OFFICER KING: Okay. December 11th for
- 13 public comments or for comments from any of the
- 14 participants here.
- MRS. DHUE: Where would the comments be sent to?
- 16 HEARING OFFICER KING: Comments are filed with the
- 17 Board's office in Chicago.
- 18 MRS. DHUE: Like I did for the hearing?
- 19 HEARING OFFICER KING: Yes. The address for
- 20 filing public comments is mailed to the office of the
- 21 Clerk of the Board, Illinois Pollution Control Board,
- 22 100 West Randolph street, Suite 11-500, Chicago,
- 23 Illinois, 60601.
- I think that takes care of everything, then. That
- 25 will conclude this hearing, and we look forward to

1	getting everyone's comments, and hopefully get this					
2	turned around quickly after we receive them.					
3	I thank you all for coming out today and					
4	participating.					
5	(Hearing exhibits were retained by					
6	Hearing Officer King.)					
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1	STATE OF ILLINOIS )
2	) SS COUNTY OF MONTGOMERY)
3	
4	CERTIFICATE
5	
6	I, DARLENE M. NIEMEYER, a Notary Public in and for
7	the County of Montgomery, State of Illinois, DO HEREBY
8	CERTIFY that the foregoing 92 pages comprise a true,
9	complete and correct transcript of the proceedings
10	held on the 19th of November A.D., 1998, at the
11	Madison County Administration Building, Edwardsville,
12	Illinois, in the Matter of: Petition of Shell Wood
13	River Refining Company for an Adjusted Standard from
14	35 Ill. Adm. Code, 725.213 and 725.321, in proceedings
15	held before the Honorable Charles A. King, Hearing
16	Officer, and recorded in machine shorthand by me.
17	IN WITNESS WHEREOF I have hereunto set my hand and
18	affixed my Notarial Seal this 3rd day of December
19	A.D., 1998.
20	
21	N. D.W.
22	Notary Public and Certified Shorthand Reporter and Registered Professional Reporter
23	·
	CSR License No. 084-003677 My Commission Expires: 03-02-99
25	