ORIGINAL

	1	ILLINOIS POLLUTION CONTROL	Page 1	
	2	June 14th, 2006	BOARD	
	3	IN THE MATTER OF:)	
	4	IN THE MATTER OF.	,	
			,	
	5	REVISIONS TO WATER QUALITY)	
	6	STANDARDS FOR TOTAL DISSOLVED		
	7	SOLIDS IN THE LOWER DES PLAINES)	
	8	RIVER EXXONMOBIL OIL)	
	9	CORPORATION: PROPOSED 35 ILL. ADM.)	
:	10	CODE 303.445.)	
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=	12			
:	13			
:	14	TRANSCRIPT OF PROCEEDINGS	had in the	
:	15	above-entitled cause on the 14th day of June, A.D.		
:	16	2006, at 9:30 a.m.		
] :	17			
:	18	BEFORE: MR. JOHN KNITTLE, Hearing	Officer,	
:	19	MR. THOMAS E. JOHNSON, Boa	rd Member	
	20	MR. ANAND RAO, Technical S	upport.	
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) :	23			
} :	24			
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    ALSO PRESENT:
2
        MS. ALEXANDRA HOLT, Summer Intern;
3
4
        MS. STACEY FORD, NSR Consent Decree Coordinator;
5
        MR. ROBERT G. MOSHER,
        MR. SCOTT TWAIT,
6
       MS. SAMANTHA HUFNAGEL,
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        MR. DAN MOSHER, Bureau of Water;
        MR. JAMES E. HUFF, P.E., Consultant.
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   REPORTED BY: SHARON BERKERY, C.S.R.
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                 CERTIFICATE NO. 84-4327.
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THE HEARING OFFICER: I'm going to give a little background on the proposal, generally I do for members of the public that are here. Of course, I want to note for the record, that there are no members of the public here. But some of them, from time to time, may read the transcript, so I'm going to say that right away.

(WHEREUPON, Mr. Rao enters.)

THE HEARING OFFICER: I also want to note for the record that Anand Rao is now present.

MR. RAO: Sorry for being late.

THE HEARING OFFICER: That is not a problem. Traffic around here is pretty horrendous.

MR. RAO: Parking.

THE HEARING OFFICER: ExxonMobil is seeking a site-specific rule to authorize discharges of total dissolved solids from the Joliet Refinery during the months of November through April. The discharge from the Joliet Refinery is located at Interstate 55 and Arsenal Road in Will County.

1	And on March 2nd, 2006, the Board
2	issued an order granting a motion for
3	expedited review and accepting this
4	rulemaking for hearing. We also sent the
5	proposal to the first notice without a
6	decision being reached on the merits of the
7	proposal, and granted the motion for
8	expedited review.
9	That's the only summary I'm going

That's the only summary I'm going to give. If Mr. Fort would like to give one later on, he's more than welcome to do so.

I do want to know that this rulemaking is also being held to comply with the requirements of Section 27.5 of the Illinois Environmental Protection Act that requires that the Board asks that the Department of Commerce and Community Affairs, which I am just going to refer to as DCEO from here on out, conduct an economic impact study on certain proposed rules prior to the adoption of those rules. This is one of those rules.

If they choose to conduct the economic impact study, the DCEO has 30 to

1st, not to conduct a study. The Board's

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These lists are periodically updated and everyone here is on the list.

But if anyone reading the transcript at a later point in time wants to be added to the list, please contact me at the Board's

offices in Champaign, Urbana.

Of course, besides witnesses for the parties, anybody can testify, they're able to do so at a rulemaking proceeding.

And fortunately, as I've noted already, there are no members of the public here today. And so, we will not be having anybody else testify.

There will also be a written public comment period, if anyone here does not wish to testify or anyone at a later point wishes to testify, but -- that didn't make any sense. If anybody who is not here and cannot testify wishes to provide public comment, they can do so via the written public comment avenue.

Part 102 of the Board's procedural rules governing this hearing, all information is relevant, not repetitious. The privilege will be admitted and all witnesses will be sworn.

Anyone here can ask a question of any witness, just let's try to do it in an orderly fashion, especially you interns. And

1	For the Agency?
2	MR. ANDRYK: My name is Tom Andryk,
3	I'm with the division of legal counsel with
4	the Illinois EPA. And I have here with me
5	today Scott Twait, T-W-A-I-T, who is an
6	environmental protection engineer in the
7	standards unit of Division of Water Pollution
8	Control within the Bureau of Water and
9	Illinois EPA.
10	Scott will be our witness today,
11	and I have also available for questions by
12	the Board Scott's supervisor, Bob Mosher, who
13	is also an environmental protection engineer
14	in the standards unit.
15	I may need to ask perhaps one or
16	two questions to Bob to lay the foundation
17	for the Agency's Exhibit F. But primarily,
18	it will be Scott Twait testifying today from
19	our agency.
20	THE HEARING OFFICER: Thank you, sir.
21	Mr. Fort, do you want to proceed
22	with your case?
23	MR. FORT: Yes, thank you. As you've
24	noted, this is a site-specific rule request

This is going to have a substantial reduction in emissions from the refinery. Of course, we have to deal with everything that results from that. And due to other causes in the Illinois River of elevated total dissolved solids and conversations with the Agency, it was determined that we needed to have regulatory relief for ExxonMobil.

The testimony here today comes from a result of an extended dialogue and discussions that ExxonMobil has had with Illinois EPA. We'd like to acknowledge that input and discussions, and in particular, the work that Illinois EPA has been doing over many years on total dissolved solids. That evidence is going to be brought before you

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think that that covers what I would like to say today.

We look forward to answering any questions that the Board may have, and we

	Page 15
1	appreciate everybody's participation in
2	getting this project done on time.
3	THE HEARING OFFICER: Thank your, sir.
4	Do you want to swear in your
5	witness?
6	MR. FORT: Sure. Our witnesses are
7	Stacey Ford and Jim Huff. So can you swear
8	the witnesses please?
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	1	Page 16 (WHEREUPON, the witnesses were duly
	2	sworn.)
	3	MR. FORT: Okay. Mr. Hearing officer,
	4	we have prepared testimony that's been
	5	prefiled on behalf of Ms. Ford and Mr. Huff.
I	6	We would like we would propose that that
	7	testimony be entered into the transcript as
	8	if read. And I'm not sure you need to have
	9	these marked as exhibits.
	10	THE HEARING OFFICER: We don't. But
	11	let's do it anyway. We generally do it.
	12	Can we make them Petitioner's
	13	Exhibits 11 and 12?
	14	MR. FORT: That would be fine.
	15	THE HEARING OFFICER: And, Mr. Andryk,
	16	do you have any objection as to having those
	17	read?
	18	MR. ANDRYK: No objection.
	19	THE HEARING OFFICER: The Board will
	20	accept those as if read into the record.
	21	(WHEREUPON, certain documents were
	22	marked Petitioner's Exhibit
	23	Nos. 11, 12 for identification, as
	24	of 6/14/06.)

Page 17

- 1 STACEY FORD,
- 2 called as a witness herein, having been first duly
- 3 sworn, was examined and testified as follows:
- 4 DIRECT EXAMINATION
- 5 BY MR. FORT:
- 6 Q. Ms. Ford, you have prepared prefiled
- 7 testimony in this matter?
- 8 A. Yes.
- 9 Q. And I believe we've marked that or
- 10 will mark it as Exhibit 11; is that correct?
- 11 A. Yes.
- 12 Q. And is that testimony true and correct
- 13 to the best of your knowledge and belief?
- 14 A. Yes.
- JAMES HUFF,
- 16 called as a witness herein, having been first duly
- 17 sworn, was examined and testified as follows:
- 18 DIRECT EXAMINATION
- 19 BY MR. FORT:
- Q. Okay. Mr. Huff, you have prepared
- 21 prefiled testimony submitted to the Board in this
- 22 matter; have you not?
- A. Yes, sir.
- Q. And that testimony has been marked or

- 1 will be marked as Exhibit No. 12?
- A. That's correct.
- Q. And is that testimony true and correct
- 4 to the best of your knowledge and belief?
- 5 A. Yes, sir.
- 6 THE HEARING OFFICER: We will accept
- 7 that as testimony in those exhibits.
- Well, Mr. Andryk, do you have any
- 9 objection to the admission of Petitioner's
- 10 Exhibits 11 & 12?
- MR. ANDRYK: No.
- 12 THE HEARING OFFICER: Those will be
- admitted, as well.
- 14 (WHEREUPON, said document,
- 15 previously marked Petitioner's
- 16 Exhibit Nos. 11-12, for
- 17 identification, was offered and
- 18 received in evidence.)
- MR. FORT: Let me just talk, if I may
- about the exhibits that -- other exhibits, 1
- through 10. The exhibits, 1 through 8,
- correspond to the exhibits attached to our
- petition.
- 24 Exhibit No. 1 to our petition was

- the consent decree with USEPA. We filed that
- with the Board with leave not to file ten
- 3 copies of it because of its extensive length.
- 4 And we would like to have the exhibit, one,
- 5 to the petition considered as Exhibit 1 to
- 6 this proceeding, as well.
- 7 Exhibit Nos. 2, 3 and 4 are
- 8 referenced in Ms. Ford's testimony. And
- 9 again, those exhibits are identical to what
- 10 are with the petition.
- 11 Exhibit No. 5 is revised from the
- exhibit that we had attached to the petition.
- 13 BY MR. FORT:
- Q. And Ms. Ford, I am going to show you
- 15 what we have marked as revised Exhibit 5 and ask if
- 16 you if you can identify that document.
- 17 A. Yes. Actually, it is our waste
- 18 treatment plant schematic.
- 19 Q. And why is that revised in this
- 20 exhibit today from the exhibit that we submitted
- 21 with the petition however many months ago?
- 22 A. It incorporates changes we will be
- 23 doing to meet the consent decree requirements by the
- 24 EPA.

- 1 Q. So basically, you've made a proposal
- 2 to USEPA, and as a result of the discussions under
- 3 the consent decree, the exact layout of the waste
- 4 water treatment plant has been modified?
- 5 A. Yes. And it is identified here in
- 6 Exhibit 5.
- 7 MR. FORT: Thank you.
- 8 With respect to Exhibit 6 for the
- hearing today, it's the same as the petition
- 10 Exhibit 6. Exhibit 6A, 6B and 6C, however,
- 11 are new. It is updated information that is
- part of Mr. Huff's testimony.
- 13 BY MR. FORT:
- Q. Mr. Huff, can you describe for us why
- 15 you have done Exhibits 6A, 6B and 6C?
- 16 A. Yes, I can.
- 17 Exhibit 6A includes the water
- 18 quality and effluent data collected by the
- 19 ExxonMobil refinery. This was in the original
- 20 petition as Exhibit 6, and it's just been updated
- 21 with additional sampling data since the time of
- 22 submission of the original petition.
- Q. Thank you.
- 24 How about Exhibit 6B?

- 1 A. Exhibit 6B is new information that was
- 2 provided by the Metropolitan Water Reclamation
- 3 District on the Chicago Sanitary and Ship Canal.
- 4 They have continued to monitor for chlorides and
- 5 total dissolved solid, not sulphates at Lemont.
- 6 So I've included that data as
- 7 additional data that I didn't have previously.
- 8 O. What Exhibit 6C?
- 9 A. Exhibit 6C is material balance on what
- 10 the predicted TDS levels will be at the beginning of
- 11 the Illinois River under, basically, worst case
- 12 assumptions, low flow conditions on all streams and
- 13 maximum TDS levels in all of those streams.
- 14 O. And does that document include
- 15 estimates of the increased discharges from the Citgo
- 16 Refinery?
- 17 A. It does indeed. And so, it takes into
- 18 account both ExxonMobil's contribution and Citgo's.
- 19 Q. Thank you.
- 20 Exhibits 7 and 8 today are the
- 21 same as Exhibits 7 and 8 to the petition. Exhibit 9
- 22 is part of Mr. Huff's testimony, and it is,
- 23 essentially, his curriculum vitae.
- 24 Exhibit 10 today is the corrected

- 1 version of the exhibit that we filed in prefiled
- 2 testimony. It is simply for ease of reference.
- 3 The language proposed for first
- 4 notice by the Board in the Board's order. And as of
- 5 that, we have had a discussion previously that,
- 6 apparently, there was some editorial changes made by
- 7 the time it got into the Illinois register. But we
- 8 will assume that everybody can figure out those
- 9 editorial changes.
- 10 So I think that covers our
- 11 exhibits. Have those been entered then?
- 12 THE HEARING OFFICER: No. Do you want
- to -- you've already addressed about
- 14 Petitioner's 11 and 12. You addressed and
- that's the testimony. Those have been
- 16 admitted.
- 17 But Petitioner's Exhibits 2
- through 10, are you offering those now?
- MR. FORT: Yes.
- THE HEARING OFFICER: Mr. Andryk, do
- 21 you have any objection to those?
- MR. ANDRYK: No objection.
- 23 THE HEARING OFFICER: Those will all
- be admitted, Petitioner's Exhibits 2-6, 6A, B

23

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it.

MR. FORT:

Fine.

Thank you.

I have one other question then to

- 1 Ms. Ford, and that relates to the schedule
- 2 under the consent decree.
- 3 BY MR. FORT:
- Q. Can you tell the Board and the Agency,
- 5 for that matter, where you stand in terms of
- 6 implementation of the consent decree?
- 7 A. Yes.
- 8 The project is on time, but the
- 9 dates are extremely challenging. We must begin
- 10 construction by July of '07. And before that time
- 11 we need an NPDS permit, a construction permit and
- 12 the TDS relief.
- In order to get that, we would ask
- 14 that the Board make a final decision by October of
- 15 '06.
- 16 Q. And that is in order to do what?
- 17 A. In order to have enough time to
- 18 complete the necessary mechanics of getting the
- 19 construction permit and then revised NPDS permit for
- 20 the refinery.
- Q. So you arrived at that date by looking
- 22 at when you need to start construction and then
- 23 backing up to do the permitting actions --
- 24 A. Yes.

			Page 27
	1	record for a second.	3
	2	(WHEREUPON, a recess was had.)	
	3	THE HEARING OFFICER: Back on the	
	4	record.	
	5	Mr. Andryk, do you went to	
	6	proceed?	
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And following that, did you prepare

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Q.

- 1 testimony for filing with the Pollution Control
- 2 Board in this matter?
- 3 A. Yes, I have.
- Q. And do you believe all that testimony
- 5 to be true and accurate to the best of your
- 6 knowledge and belief?
- 7 A. Yes.
- Q. At this time, I would like you to read
- 9 your testimony into the record.
- 10 A. Okay.
- 11 "My name is Scott Twait, and I
- 12 have been employed with Illinois EPA for over nine
- 13 and a half years. I have been assigned to the water
- 14 quality standards unit for all those years.
- And I have participated in
- 16 adjusted standard site-specific water quality
- 17 standards rulemakings and variances. I hold a BS
- 18 degree in civil engineering from the University of
- 19 Illinois where I specialized in environmental
- 20 engineering.
- My testimony today will be in
- 22 support of the ExxonMobil Oil Corporation
- 23 site-specific relief from the total dissolved solids
- 24 secondary contact and Indigenous Aquatic Life

- 1 Standard, 35 IAC 302.407, and the Total Dissolved
- 2 Solids General Use Standard, 35 IAC 302.208G, in the
- 3 Des Plaines River.
- 4 The petitioner is adding a
- 5 Catalytic So2 Additive Technology, called DESOX,
- 6 system followed by a wet gas scrubber and a
- 7 Selective Catalytic Reduction, SRC, system to remove
- 8 SO2 and NOX from air emissions as part of a consent
- 9 decree with USEPA and Illinois EPA. The addition of
- 10 the DESOX will allow the removal of SO2 from the
- 11 emissions by transferring sulphur, in stable form,
- 12 from the generator to the reactor, where it is
- 13 released as hydrogen sulfide for downstream recovery
- 14 as elemental sulphur, thereby reducing sulfate in
- 15 the plant wastewater and minimizing dissolved solids
- 16 discharged into the Des Plaines River.
- 17 The DESOX, wet gas scrubber and
- 18 SCR system will remove 95 percent of SO2 and
- 19 50 percent of NOX at 130,000 and 9,800 pounds per
- 20 day respectively. As indicated in our November
- 21 15th, 2005 meeting, ExxonMobil is adding a third
- 22 tank into the activated sludge wastewater treatment
- 23 plant and will configure the process to provide an
- 24 anoxic zone to denitrify. Therefore, total nitrogen

- 1 loading to the stream will be reduced rather than
- 2 increased as a result of the air scrubbing.
- 3 Loading of sulfates and TDS will
- 4 be increased to the receiving stream. However,
- 5 sulfates will meet water quality standards after
- 6 mixing.
- 7 Total dissolved solids will not
- 8 always meet the water quality standards, due to
- 9 seasonal loading of chlorides found in road salt
- 10 from the Chicago metropolitan area that has affected
- 11 concentrations upstream of ExxonMobil. The subject
- 12 facility discharges to the Des Plaines River at a
- 13 point where 1,503.0 cfs of flow exists upstream of
- 14 the outfall during critical 7Q10 low-flow
- 15 conditions.
- The Des Plaines River is
- 17 classified as secondary contact and indigenous
- 18 aquatic life use water at the point of discharge and
- is a general use water downstream of the I-55
- 20 bridge. The Des Plaines River is rated a C stream
- 21 under the Agency's biological stream
- 22 characterization program.
- The Des Plaines River, water body
- 24 segment G-24, is found on the 2004 Illinois 303(d)

- 1 list. The uses impaired for this segment was
- 2 aquatic life and fish consumption.
- 3 The potential causes of impairment
- 4 given for this segment at the time were copper,
- 5 sedementation/siltation, other flow regime
- 6 alterations, total suspended solids, DDT, PCBs,
- 7 Mercury and total phosphorus. The potential sources
- 8 associated with the impairment are industrial point
- 9 sources, municipal point sources, urban runoff/storm
- 10 sewers, hydrologic/habitat modification, flow
- 11 regulation/modification, contaminated sediments and
- 12 source unknown. The additional constituents to be
- discharged by ExxonMobil, sulfate and TDS, therefore
- 14 have no bearing on the 303(d) status of the water
- 15 body.
- The Illinois Department of Natural
- 17 Resources was contacted on November 17, 2005 with
- 18 regard to the presence of any threatened or
- 19 endangered species that may be impacted by the
- 20 standards change. IDNR terminated the consultation
- 21 process on December 19th, 2005 with a finding of no
- 22 threatened and endangered species or natural areas
- 23 effected.
- 24 The Agency cannot grant mixing for

- 1 a discharge if the receiving stream is not meeting
- 2 the water quality standard. Since the necessary
- 3 NPDES permit would require the recognition of mixing
- 4 in the Des Plaines River and the Des Plaines River
- 5 has occasionally violated water quality standards
- 6 for TDS, the Agency cannot issue an NPDES permit
- 7 that will accommodate this new ExxonMobil discharge.
- 8 Mixing for sulfate is allowable, however, and will
- 9 extend into the general use portion of the river.
- 10 The petitioners have demonstrated
- 11 that TDS is not toxic to aquatic life at the
- 12 concentrations that will be found in the river,
- 13 provided that sulfate is a predominant anion.
- 14 Toxicity test results on TDS with chloride to
- 15 sulfate ratio that will result from the proposed
- 16 discharge indicate that even the most sensitive
- 17 species tested can easily tolerate the levels likely
- 18 to be found in the receiving waters.
- In the petition for the
- 20 site-specific rulemaking, the petitioner discussed
- 21 compliance alternatives that were all rejected due
- 22 to costs and/or technical feasibility. We believe
- 23 that the petitioners have shown that there are no
- 24 cost-effective compliance alternative.

- 1 The Agency is in the process of
- 2 proposing to change the general use water quality
- 3 standard for sulfates and eliminate the general use
- 4 standard for TDS, but has not yet filed its petition
- 5 before the Board. New aquatic life toxicity data
- 6 indicates the level of sulfate that sensitive
- 7 species tolerate.
- 8 This information was not available
- 9 when the original water quality standards were
- 10 adopted for sulfate and TDS. Our new understanding
- of you sulfate toxicity can be coupled with the
- 12 existing chloride standard to predict a protective
- 13 level of TDS.
- 14 Given the hardness of 205
- 15 milligrams per liter as calcium carbonate and the
- 16 maximum chloride concentration of 450 milligrams per
- 17 liter known for the Des Plaines River, the proposed
- 18 water quality standard, based on the aquatic life
- 19 toxicity of sulfate, is 1,138 milligrams per liter.
- 20 If we add up the major anions, we get 450 plus 1,138
- 21 is equal to 1,588 milligrams per liter of TDS.
- 22 Adding in the major cations, a
- 23 total dissolved solids concentration of about 3,000
- 24 milligram per liter is protective. Therefore, it

- 1 has been demonstrated that the 1,686 milligrams per
- 2 liter TDS requested as relief by ExxonMobil is well
- 3 within the TDS toxicity threshold.
- 4 The 1,686 milligrams per liter TDS
- 5 in the stream in this case consists of chloride and
- 6 sulfate, plus adding in the sodium, magnesium,
- 7 calcium, and all the minor ions. This site-specific
- 8 rulemaking will not result in aquatic life toxicity.
- 9 For the above conclusions we relied on the studies,
- 10 listed as Exhibit A, B, C, D and E.
- 11 Q. Just a question here real quick.
- I put before you what has been
- 13 marked as Exhibits A through E. Can you just
- 14 briefly look through those.
- 15 Are those the studies you're
- 16 referring to?
- 17 A. Yes.
- 18 Q. Go on.
- 19 A. "This site-specific rulemaking
- 20 consisting of new calculations of the protective
- 21 level of TDS is consistent with 40 CFR
- 22 131.11(b)(1)(ii). Specifically a federal
- 23 site-specific water quality criterion would be
- 24 allowed in this case because sensitive species of

- 1 aquatic life have been demonstrated to be protected
- 2 by the new standard through laboratory test toxicity
- 3 tests. USEPA Region 5 has given preliminary
- 4 approval of the ExxonMobil site-specific standard
- 5 under its obligation to review state water quality
- 6 standards under the Clean Water Act.
- 7 The Agency is currently reviewing
- 8 the secondary contact and indigenous aquatic life,
- 9 water quality standards for the lower Des Plaines
- 10 River, through the use attainability analysis
- 11 process. This site-specific rulemaking should
- 12 remain in effect if the water quality standard for
- 13 TDS is not revised to at least 1,686 milligrams per
- 14 liter for the lower Des Plaines River under the use
- 15 attainability analysis.
- There are no other existing
- 17 discharges in this stretch of the river, which have
- 18 elevated discharges of TDS. The Channahon
- 19 wastewater treatment facility, BASF, ExxonMobil tank
- 20 farm, Loder Cronklaan and Dow Chemical polystyrene
- 21 plant are the Des Plaines River dischargers
- 22 downstream of the subject facility.
- 23 Channahon is the only municipal
- 24 discharger and TDS expected in an STP discharge

- 1 would be expected to be 500 to 600 milligrams per
- 2 liter. So, in effect, they are diluted.
- The BASF plant, visibile from the
- 4 I-55 bridge, discharges process water and storm
- 5 water which are not expected to have elevated TDS.
- 6 There is also another ExxonMobil facility that is a
- 7 tank farm and/or pipeline terminus. They have
- 8 boiler blowdown, but this would be minor in size and
- 9 not likely to have extremely high TDS wastewater.
- 10 Loder Cronklaan makes vegetable oil products and has
- 11 no likelihood for high TDS wastewater.
- 12 Finally, a Dow Chemical
- 13 polystyrene plant, which has cooling and sanitary
- 14 wastewater, has no potential for high TDS waste
- 15 waters of significant size. None of these
- industries is categorized by the IEPA as a major
- 17 discharger. None of these dischargers exhibit a
- 18 need for water quality based effluent limits past or
- 19 present. Regardless of the dischargers to this
- 20 section of the Des Plaines River, the water quality
- 21 standard that is proposed is more stringent than
- 22 what the Agency believes is protective of aquatic
- 23 life.
- 24 This site-specific rulemaking,

evidence.)

	D 20
1	Page 39 MR. ANDRYK: Thanks, Scott. I believe
2	I'm done with this witness, unless Mr. Fort
3	has questions.
4	MR. FORT: I have no questions. As
5	long as you're going to introduce Exhibit F,
6	that's
7	MR. ANDRYK: Yes. I was going to I
8	need to lay foundation on that, so I thought
9	I'd call my next witness just to ask two
10	questions or a couple questions.
11	THE HEARING OFFICER: You my proceed.
12	But let's you want to swear him
13	in; right?
14	MR. ANDRYK: Yes.
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- 1 A. Yes.
- Q. And did you also have occasion to
- 3 discuss the request of relief with USEPA?
- 4 A. Yes, I did.
- 5 Q. And can you identify this document
- 6 that's been marked as Exhibit F?
- 7 A. Yes. This is a letter from Linda
- 8 Holst, who is the manager of the USEPA Region 5
- 9 water quality standards branch. And this is a
- 10 letter giving tentative USEPA approval to the
- 11 site-specific rule.
- 12 Q. And was that based on the language as
- 13 outlined in the petition filed in this matter?
- 14 A. Yes. We will have to submit the
- 15 Board's adopted rule back to USEPA Region 5 for
- 16 their final approval under the Clean Water Act.
- 17 Q. Is this -- a copy of this letter and
- 18 the e-mail attached to it, are these true and
- 19 accurate copies of the letter and its attachment
- 20 that were sent to you from USEPA in this matter?
- 21 A. Yes. Yes, it is.
- MR. ANDRYK: At this time I'd like to
- offer Agency's Exhibit F into the record.
- 24 THE HEARING OFFICER: Mr. Ford?

	Page 4*
1	MR. FORT: No, sir.
2	THE HEARING OFFICER: We do have some
3	questions. Everybody has been sworn in, and
4	I think as long as nobody has any objection,
5	we're just going to ask them to the room at
6	large and let people answer as they see fit.
7	MR. RAO: That's fine.
8	THE HEARING OFFICER: Generally,
9	Mr. Rao has been asking these questions, but
10	Member Johnson and I may chime in as we see
11	fit.
12	MR. JOHNSON: I'll give you all the
13	caveat we typically have on here for
14	45 minutes before the hearing so we can run
15	what are stupid questions by him and he can
16	wave this off. So we might have questions
17	that don't appear to come from a scientist,
18	because they are not coming from a scientist.
19	MR. RAO: And most of the time they're
20	not stupid, so
21	THE HEARING OFFICER: He's just saying
22	that because he was late.
23	MR. JOHNSON: This is a stupid

question.

In the ExxonMobil's proposed TDS

Page 47
TDS discharged?
MS. FORD: We are considering several
possible refinery expansions. To be combined
with those expansions, obviously, we would
insure that all proper permitting would be
completed with the EPA and the Illinois EPA
and meeting all new source review
requirements.
None of those potential expansions
would lead to an increase of the TDS into the
river.
MR. RAO: Would you care to comment on
any of those proposed expansions, or is it
something that's confidential at this moment,
in terms of just the barrels relate, you
know.
MS. FORD: I'm not certain on the
exact details of those expansions, but the
USEPA has been working with us to ensure that
we have the capability to possibly expand
some of our crude units in the future.
THE HEARING OFFICER: And this would
be something, as I think about it here, that

you ought to be more concerned about than we

MR. RAO: Okay. At Page 9 of the

provides the water quality impact, no provides the water quality protection is not only for the ExxonMobil facility refinery, but for the Citgo Lemont Refinery. I think we addressed this in one of -- 6A, B or C.

incorporates in Citgo's proposed loadings

1	Page 5 the I-55 bridge.
2	THE HEARING OFFICER: Specifically the
3	I-55 bridge? Especially during, you know,
4	low flow conditions, so
5	That's the concern that we
6	identified. And Anand, you can correct me if
7	I am wrong.
8	MR. RAO: No
9	MR. FORT: I think the issue here gets
10	back to the mixing zone analysis and what the
11	concentrations would be at the edge of the
12	ExxonMobil mixing zone from the refinery. So
13	I think and that mixing zone, as I
14	understand it, is very near or underneath the
15	I-55 bridge.
16	MR. HUFF: It passes under it.
17	MR. RAO: Yeah. That's our next
18	question about the mixing zone.
19	THE HEARING OFFICER: Right.
20	MS. FORD: So you would like to see
21	that mixing study without the Citgo
22	contribution; is that correct?
23	THE HEARING OFFICER: Well, possibly.
24	We'd also like to know where the edge of the

picture it now, you've got the confluence of the Kankakee and the Des Plaines about five miles below that; right?

23

refineries and we just wanted to get an idea

as to what the ExxonMobil refinery...

23

1	Page 56 And we have a few questions for
2	Mr. Twait, you know, depending on who wants
3	to answer this.
4	Mr. Twait, on Page 2 of your
5	prefiled testimony, you stated that the
6	Des Plaines River is rated as a C it's
7	alphabet C stream under the Agency's
8	biological stream characterization program.
9	Could you please explain for the record what
10	C rating means in the present context?
11	MR. TWAIT: The biological stream
12	characterization, BSC, ratings go from A
13	to
14	MR. MOSHER: E.
15	MR. TWAIT: E. And the A-rated
16	streams are high quality streams, and the
17	E streams are low quality streams. So it's
18	right about in the middle.
19	MR. MOSHER: That rating system is
20	based on the fish population. It's a system
21	that, for years, has been a cooperative
22	effort between Illinois Department of Natural

24 Mostly it's IDNR biologists that

Resources and Illinois EPA.

		Page 57
	1	do the fish surveys, collect the data. And
	2	then the two agencies sit down and analyze
	3	the data and then put the alphabetical rating
	4	on the stream.
	5	You may have heard of the index of
	6	biotic integrity, IBI, that's numerical
	7	values that are obtained from this fish
	8	sampling. And then those numeric values and
	9	other considerations go into the A, B, C, D,
	10	E rating.
	11	So the C-rated stream is a fair
	12	quality.
	13	THE HEARING OFFICER: Okay. You do
	14	that for lakes, too?
	15	MR. MOSHER: No, just for streams.
	16	MR. RAO: With this rating, should we
	17	be more or less concerned about any change in
	18	water quality standards with the stream?
	19	MR. MOSHER: Probably it's not of
	20	great consequence. What we are finding with
	21	our investigations of total dissolved solids
ļ	22	is that fish are not sensitive.
	23	It's the invertebrate organisms in
	24	the waters that are really sensitive. And
П		

	Page 56
1	those constitute the most sensitive species.
2	So things like daphnids, and other
3	crustaceans called hyalella, those turned out
4	to be sensitive organisms.
5	MR. RAO: Okay.
6	Mr. Twait, on the same page you
7	note that IDNR made a finding of no
8	threatened and endangered species or natural
9	areas affected by the proposed water quality
10	standard. Could you please identify whether
11	IDNR made any written finding on species in
12	natural areas?
13	If so, would it be possible for
14	the Agency to submit a copy of the IDNR into
15	the record?
16	MR. TWAIT: Yes, we got a written
17	correspondence back from them on the 19th of
18	December, 2005. They indicated that no
19	threatened or endangered species or natural
20	areas are present in the vicinity of this
21	action.

And they circled no under the question could the proposed action adversely affect the endangered or threatened species

1	change in water quality standards?
2	MR. TWAIT: The change in water
3	quality standard that will be proposed is
4	currently under consideration for the general
5	use section, which is all downstream of I-55.
6	MR. RAO: So, in effect, any
7	discharger of the river, it will be subject
8	to the proposed water quality standard?
9	MR. TWAIT: Oh, yes. Yes.
10	MR. RAO: Okay.
11	MR. TWAIT: As let me clarify that.
12	They would be subject to the water quality
13	standard of 1,686, as long as the water
14	quality standard is still met in the Illinois
15	River, which goes back to the 1,000
16	milligrams per liter.
17	MR. RAO: Okay. So if there's any
18	other discharger existing or someone new
19	comes in, they have to show you know, just
20	like Exxon has submitted its report here
21	that they would comply with 1,000 milligrams
22	per liter downstream and the confluence of
23	the Kankakee River and the Des Plaines River?
24	MR. TWAIT: Yes. I do not believe

24 THE HEARING OFFICER: Do you -- could

to demonstrate that.

22

23

come, a mixing zone study would be required

1,500 milligram per liter TDS water quality

1	standard on the secondary contact. And that
2	would still apply up to the point of
3	ExxonMobil's discharge.

The 2001 -- there were several exceedances of that 1,500 number. So in the variance that Citgo received -- they are to start this winter, I believe November 1st, with sampling three times a week at the I-55 bridge.

So I think that would have to proceed, because they're going to either have to make a demonstration that they now comply with both the 1,500 and the 1,686 or proceed with their variance. And I think, right now, there's not sufficient data available to conclude they're going to meet the 1,500 milligram per liter on that stretch of the river, based on data from 2001.

But maybe after a couple years of intensive monitoring, that data may be sufficient to say that they no longer need that variance.

THE HEARING OFFICER: What about the Agency, do you think they are going to have

for 1,686, and all of a sudden, you know, you don't have even that. You might want to address that.

22

23

1	MR. FORT: Well, I think I can speak
2	for the petitioner here, that if that were a
3	realistic scenario to happen on the schedule
4	that they have with the consent decree, we
5	would embrace that. But right now you
6	know, and after the extensive consultation
7	that Illinois EPA has had with USEPA, I'm
8	reluctant to suggest any tweeks to the
9	language here in this rulemaking.
10	THE HEARING OFFICER: Understanding
11	that you may have to come in later if they
12	get rid of the TDS water quality standards
13	MR. FORT: Right.
14	THE HEARING OFFICER: and those
15	would be applicable, your rule will still be
16	applicable regardless of what happens to the
17	TDS water quality.
18	MR. FORT: If we get to the scenario
19	that ExxonMobil has a tighter limit in the
20	lower Des Plaines than does everybody else
21	MR. JOHNSON: Right. That's what
22	would
23	MR. FORT: Yeah. I think the company
24	will figure out what it needs to do.

24

may not.

	Page 68
1	Go ahead Mr. Mosher.
2	MR. MOSHER: We assumed that
3	ExxonMobil would participate in that
4	rulemaking and say, "Hey, if you're going to
5	do this, then take ours back." But
6	THE HEARING OFFICER: That's all
7	speculation at this point.
8	MR. MOSHER: Yeah. Technically, we're
9	ready to go with that proposed those
10	proposed changes. We are waiting for agency
11	policy decisions and the preparation of the
12	petition.
13	But I'm guessing that within a
14	month, the Agency will be filing that
15	petition. And that will be to change sulfate
16	total dissolved solids, standards for general
17	use waters, among some other housekeeping
18	things.
19	It's a shame that we weren't a
20	year ahead of ourselves in doing that, and

we -- this proceeding here today would be a

lot simpler. We also expect to change the

total dissolved solids.

secondary contact water quality standard for

21

22

23

1	But that is in another what do
2	you call it it's in a UAA, use attainable
3	analysis, right now. So that's kind of got a
4	life of its own and it will probably take
5	longer to resolve, certainly, than our
6	proposed petition a month from now.
7	MR. TWAIT: Yes.
8	MR. RAO: Actually, that was our next
9	question about the UAA process as to what the
10	status of that process is.
11	MR. TWAIT: We have been doing a use
12	attainability analysis for the lower
13	Des Plaines River and the Chicago area
14	waterway system, which encompasses all of the
15	secondary contact. And we are hoping to
16	upgrade those water quality standards.
17	Most of the outreach and the
18	reports have been done, the Agency is working
19	on proposed language and a few outstanding
20	issues yet.
21	MR. RAO: Is that analysis that's
22	being done with the Metropolitan Water
23	Reclamation District?
24	MR. TWAIT: Yes. They are part of the

1	Page 71 monitoring provisions provided for during
2	permitting process, since this proposed
3	site-specific rule don't carry such
4	conditions?
5	MR. TWAIT: Could you ask that again?
6	THE HEARING OFFICER: Was that not
7	clear?
8	This proposed site-specific rule
9	doesn't carry any conditions, like monitoring
10	requirements to planning for temporary
11	storage, things like that. Will those
12	provisions be provided for during the
13	permitting process, the Agency permitting
14	process?
15	MR. TWAIT: I would think that we will
16	have just limits in the permit to ensure
17	compliance outside of the mixing zone.
18	THE HEARING OFFICER: Okay.
19	Is that okay with you, Anand?
20	MR. RAO: Yeah.
21	I see missed some questions
22	regarding temporary storage. This is for
23	ExxonMobil.
24	At Page 16, the statement of

MR. RAO: Okay. Can you explain how
ExxonMobil estimated the amount of episodic
storage to be 200,000 barrels?

MS. FORD: We took the number of weeks that we would have to hold of our purge treatment stream that comes from the wet gas scrubber, I believe it was a four-week period. So we determined the 200,000 barrels by the amount of water we would have to hold during what we know now to be worse case of TDS in the river in order to meet the water quality standards.

MR. RAO: Thank you.

attainable analysis issue, the Agency noted on Page 4 of your profile, testimony that the site-specific rulemaking should remain in effect if water quality standards for TDS is not revised to at least 1,686 milligrams per liter for lower Des Plaines River under the UAA. Could you explain why the site-specific rule should remain in effect, especially if the Agency moves to eliminate the TDS standard?

24

We should let that process unfold

1	Page 78 opportunity to submit posthearing comments.
2	Thank you for your attention and
3	consideration.
4	THE HEARING OFFICER: Sure.
5	July 11th.
6	Mr. Johnson, do you have anything
7	further?
8	MR. JOHNSON: No.
9	THE HEARING OFFICER: Mr. Rao?
10	MR. RAO: No.
11	THE HEARING OFFICER: All right.
12	Thank you very much. I'd like to thank
13	everyone.
14	And this hearing is adjourned.
15	MR. FORT: Thank you.
16	MR. ANDRYK: Thank you.
17	(WHICH WERE all the matters heard
18	in the above-entitled cause this
19	date.)
20	
21	
22	
23	
24	