2 COMMENT DOCUMENTS

This section provides copies of the actual letters or other documents containing public comments on the draft EISs that were submitted to DOE, including comments extracted from the transcripts of the public hearings. Table 2.1 contains an index of the comment documents by document number. Table 2.2 provides an index of comment documents by the commentors last name. Table 2.3 contains an index of comment documents by company or organization. Individual comments are denoted with vertical lines in the right margin.

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Document D0001

From: Mike Driver [gizmo@brtc.net]
Sent: Tuesday, November 25, 2003 12:14 PM
To: DUF6_Ports
Cc: Vina Colley; Gai Oglesbee
Subject: Handling of DUF6 and DU4

Dear Mr. Hartman,

If there is anyone qualified to discuss the handling of DUF6 and DU4, it would be the persons who have handled it before and are now suffering from the effects of that handling. D0001-1

Safe containment, packaging and storage of these elements, along with Health Physics monitoring radiation levels of the four types of radioactive isotopes and the study of how persons might be exposed, is being addressed by DOE better than ever before. Even before I was forced into premature disability retirement at age 49, almost six years ago, Health Physics was doing a great job of monitoring each job for "radiation concerns". I, and my co-workers have always commended the HP Dept. for exceeding their responsibilities in monitoring, surveying and overseeing each job, since about 1991, when our HP Dept. staff was increased from two persons that almost never left their office to eventually a large crew of more than 60, if my memory serves me correctly.

My concern centers around the continued claim of upper management, distributed through middle management and on down the line to Front Line Managers who still tell employees that, "This is a clean plant. The dust out in the buildings is just DUST and there is nothing in it that will hurt you. Radiation is the only concern here and it is monitored. If their was any other danger, they would tell us about it."

I'm sorry, but that is a outright lie. DOE and its managing subcontractors have known for generations that the dust in Process Buildings, storage buildings and the ground surrounding these buildings contains deadly elements such as Arsenic, Lead, Nickel, Silver and a long list of other deadly substances. Many of these elements are "laced" with secondary substances, such as Mercury, Zinc, Chromium and others, compounds that do not break down in the natural environment, pollution so intense that it is overwhelming. D0001-2

I actually feel sorry for DOE and subcontractor managers that have inherited these problems, created years ago, but now having to be faced by persons not originally responsible for the pollution and contamination. Locally, many of these folks have been and, I consider, still are friends of mine. DOE Manager, Greg Bazzell is one of the finest men I know.

What I don't understand and remain confused about is the continued denial that these deadly elements, byproducts from the processing of nuclear material and the substances used in cleaning and maintaining the facilities, are the root cause of the cancers and other poisonings that both workers and other downwind victims suffer from. D0001-2 (cont.)

DOE is long overdue to stop crying about potential "free-loaders" possibly getting compensation and using that excuse for not providing health care, nor paying the thousands of true victims the Congressionally appointed compensation they are supposed to be receiving. The claimed "lack of information" on applicants, lost employment and medical records is absolutely false. We, that worked in certain departments, know that the DOE and the subcontractors have stacks of records and computer files on every employee and individual that ever entered the plant. D0001-3

I have personally seen files up to a quarter-inch thick, just on a "delivery person". On employees, with the security background checks, interviews, updates and annual physical exams, each employee has a mountain of historical records. DOE, for some reason, wants to slow the process down, thus allowing more victims to die in despair, never knowing if they could have been saved by alternative medical treatments, nor if their families received any compensation for the pain, severe loss of income and suffering.

As my good friend, Rod Cook says, "I agreed to give the company a good days work for a good days pay. I never agreed to be secretly poisoned and then ignored." (Paraphrased, direct quote not at hand)

I, myself never agreed to unknowingly be exposed to elements that would kill me, nor destroy my life and ability to provide for my family, enjoy the God given wonders of Nature through activities I no longer can do, nor to have my life cut short, preventing me from watching my grandchildren grow up.

There are thousands of innocent victims all across this nation that are being systematically ignored and allowed to suffer needlessly. I implore you to take caution as you explore the methods of safe handling of these Depleted Radioactive Elements, the containers they are stored in, and remember that the byproducts, the dust and cleaning agents can be as deadly as the DU itself. D0001-4

Blessings and thank you,
Charles M. Driver
Poisoned Disabled Worker
Paducah Gaseous Diffusion Plant

10455 Old Lovelaceville Rd.
Paducah KY 42001
270-488-3999

Document D0002

DUF6 DEIS comments; by phone 1/15/2004

John Kilrod
700 S Kentucky St
Kingston, TN

I understand that there is a public meeting and public comments on the UF6 cylinder project (and that is the transferring of UF6 cylinders from K25 to Portsmouth or Paducah).

I understand that Bechtel-Jacobs has offered up a barge remedy to barge those cylinders from K25 to Paducah and/or Portsmouth or vice versa.

The one thing that concerns me is if you load barges at K25 facilities or any facilities upstream of Kingston, you will have to do some dredging to do that. If that dredging interferes or some way mucks up the residues in the bottom of the Clinch River in which there is known contaminants and it reaches the water tables and water systems in Kingston and downstream users, how is the Department of Energy prepared to reimburse or give us clean water?

This has been thought of before and has been tried before. And I think the only thing that Bechtel-Jacobs wants is a quick fix under Incentive C, not looking out for downstream users and downstream people. D0002-1

1) So one of the things that I'd like to see is some definitive data, not comments or professional judgments, definitive data, that there is no residue disturbance that will occur in a barge transfer.
2) Even if there is no dredging needed wouldn't that disturb the sediment in the water and wouldn't that make it intrusive into the downstream users' water table?
3) I would like to know what happens if a cylinder falls off the barge, and
4) How would you remediate that?
5) How are going to protect it and provide adequate security down through the Tennessee River into Alabama and back up through Tennessee and Kentucky?

I'd like answers to those questions before I would be willing to support any kind of action that Bechtel-Jacobs would suggest. I assume they have a conflict of interest because they are going to propose the least cost alternative in order to maximize their incentive fee under incentive contract.
I would like to know about this and DOE's views.
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Document D0003[1] - -

Draft Environmental Impact Statements

For the Construction and Operation

of Depleted Uranium Hexafluoride Conversion

Facilities at the Paducah, Kentucky and

Portsmouth, Ohio Sites

- -

PUBLIC HEARING

JANUARY 7, 2004

- - -

LOCATION: Pike County YMCA
400 Pride Drive
Waverly, Ohio

TIME: 6:00

- - -

RENO & ASSOCIATES
273 LITTLE THEATRE ROAD WAVERLY, OHIO 45690
(740) 947-9001

[1]Note that pages from the public hearing transcripts that do not contain comments have been omitted from this comment response volume.

to me random order, as I understand it. Vina Colley.

Ms. Colley, if you would come forward. To insure that everybody has an equitable opportunity to speak, I am using a timer. So when you hear that little beep-beep go off, that's me, don't worry.

MS. COLLEY: First of all I want to say that I didn't have time to write up something. They said this would be a question-and-answer session here at the last meeting we came to. So we weren't prepared to write up anything.

My name is Vina Colley, and I'm president of the Portsmouth Piketon Residents for Environmental Safety and Security and also co-chair of the National Nuclear Works for Justice.

We feel that the oxide conversion facility was here from '57 to '78 and it was one of most hazardous radiological chemical operations at Portsmouth. There were high levels of transuranium problems there, and the report explains that the oxide conversion process was originally established as a waste recovery process. We feel that the depleted uranium hexafluoride plant is another process in establishing waste. It will put workers and the community at risk. D0003-1

Mounting evidence of health effects of the depleted uranium on humans and the environment is showing up in the Gulf War, and now lawsuits have started. So this is going to be another big issue here if we have this conversion plant. D0003-2

In 1997 the National Institution of Occupational Safety and Health, NIOSH, evaluated the cylinder yard and they found that there was neutron exposures there. They concluded that there was potential and chronic neutron exposures in the area where uranium was stored, and the cylinder yard was just one of the areas that neutron exposures occurred. D0003-3

Documents indicated that there's various slips associated with the valves on the HF cylinders deactivation and the coupling welds. So we're concerned that this could be a huge problem when they start moving these cylinders around. We've also been told that they really don't have any expertise that knows how to get these cylinders moved from place to place. D0003-4

In 1992 there was a valve that was knocked off of one of these cylinders in the yard and there was an airborne plume that left the site. The workers were told to stay in the building, and I D0003-5

monitored it on my own radio at home but no one in the community was even notified. At no time have we ever had a release in this community that the alarm went off to warn the community. D0003-5 (cont.)

We lack stakeholder involvement here. At Piketon they made a mockery of the real public involvement. I'm a stakeholder, and I've not been invited to one stakeholder meeting for probably a couple years. D0003-6

I know that they're going to keep accumulating more and more waste. We had a Russian scientist that came here and we did soil samples off-site, and some of the community residents want their land and water and things cleaned up. We found radiation levels a hundred times the background level and we sent some of these samples to Russia to get them analyzed further. D0003-7

There's a foam that's coming down through Mr. West's property where his cows are grazing and drinking out of these creeks and the foam has little brown particles that has radiation and uranium in it.

We scored -- double scored the superfund list here at this site, and we're asking D0003-8

that we do an environmental impact statement on the property and the air and the releases and the community health that's been affected from here. D0003-8 (cont.)

There's not enough time. I wasn't prepared to do this.

And I looked in the book and it says something about mines underground where they might think about doing some storage of this waste and we're concerned about that. D0003-9

We're also concerned about maybe burning this -- heating up these cylinders again because, like I said, in 1979 we lost a cylinder here and we lost 24,000 pounds of uranium hexafluoride to the air, to the creeks, and to this day there's never been an impact statement on the health effects of this cylinder. And according to the lawsuit and the community residents, it's been compared to Three Mile Island. D0003-10

I want to remind you we do have -- that there is a citizen lawsuit that's tied up in court. I didn't see it anywhere in that book. I still have to read it. I want to give more comments later. D0003-11

But last time we came to the last meeting last month they said that we would be asking

Document D0004

you questions and you would respond because they couldn't answer any questions. So that's why we're not prepared for this meeting tonight.

MR. ARMSTRONG: Thank you. Linda Howell.

MS. HOWELL: Hello. My name's Linda Howell, and I'm just a private concerned citizen with some questions about some of the things that I read in the EIS statement.

In 1995, the Defense Nuclear Safety Board gave three recommendations on the cylinders, and the first one was that the coating be renewed, the second one was that there be steps taken to protect the cylinders from the elements, and the third was a study be conducted on more suitable chemical form for storage. My question is: Have these things been done? D0004-1

Another page in the EIS stated that there have been 11 breaches or holes in the cylinders and nine of those were caused from mishandling. Again, that shows lack of expertise in training the workers to handle the cylinders. Only two were caused form corrosion. D0004-2

Again, from the EIS, another question D0004-3

says that many of the containers no longer meet DOT requirements for physical -- for transportation because of the physical deterioration or because documentation has been lost and some might also violate more than one requirement of DOT. D0004-3 (cont.)

And it said that some of the breaches could go undetected for up to four years because that's the period between planned inspections and, you know, I'm not real familiar with nuclear handling requirements and so forth, but just as a person using their common sense, one would think that four years between inspections shows a lack of responsibility. D0004-4

And again one further question: If the requirements and the criteria that they're supposed to be meeting have not been done to this point, how can the public be assured that those plans that are being made for the facility now will be carried out to specification? D0004-5

And one other thing, you asked for this to be submitted if we have it in writing but mine is partially in shorthand. That's why I had such a hard time reading it. So I can't think you can read that.

MR. ARMSTRONG: Thank you.

Last name is Minter. I'm not sure the

Document D0005

spelling of the first name.

MR. MINTER: Dave.

MR. ARMSTRONG: Dave Minter.

MR. MINTER: Good evening. My name's Dan Minter, and I'm the vice chairman of the Southern Ohio Diversification Initiative as well as the worker representative of the workforce at the Piketon enrichment site.

Regarding the conversion activity, when you consider the options of these cylinders sitting and having no activity, decaying, and the environmental insult that they potentially might cause, there was a reference to how many breaches there may have been, those would continue with the surveillance and maintenance process. D0005-1

Ultimately the final dispossession of these materials from this site and the conversion process would be the best end state and removing this material once and for all from the site certainly is in the best interest. It must be done in a safe manner both for the workforce, the public, the safety and health of the community as well as the environment at the site. That is clearly something that has to be done. D0005-2

Document D0006

The rest of my comments, just making that comment, I do have in writing and I'll submit them in writing. That was just a general statement. There you go.

MR. ARMSTRONG: Thank you, sir.

MR. MINTER: I've never been so brief.

MR. ARMSTRONG: Ms. Colley, Ms. Howell, and Mr. Minter, thank you very much. Please feel free if you would like at the end to come up and extend your comments one on one with the court reporter.

Let me ask, is there anyone who has not spoken that wishes to that did not sign up outside?

Please state your name for the record.

MR. JUSTICE: Sure. Thank you. T.J. Justice, Governor Taft's economic development representative for southern Ohio.

I have no specific comments on the EIS. Those are, I believe, the responsibility of the Ohio E.P.A. as well as possibly the Ohio Department of Health. But I did want to enter as a matter of record our support for both DUF6 facilities. D0006-1

We have worked very hard with the administration in Washington to secure funding for the

Documents D0006 & D0003

construction of these facilities, as Dan said, to responsibly dispose of the material in question here as well as look at the tremendous economic impact it's going to have with regard to job creation.

I just want the record to reflect, as is evidenced by many letters which have been sent to the department of the administration, our support for the project, and I believe there will be a separate submission coming from the Ohio E.P.A. relative to the specific EIS. Thank you. D0006-1 (cont.)

MR. ARMSTRONG: Is there anyone else who would like to make comments that did not sign up?

Yes, ma'am.

MS. COLLEY: Since there is time left over, I just wondered -- we were told that there would be some experts here to answer some of these questions if we ask them. I wondered if we could ask some, like the person here, he talked about E.P.A. We would like to know how much authority does the E.P.A. really have because if they don't have authority on transportation problems and releases from this plant, then who does have? D0003-12

MR. ARMSTRONG: What I would suggest to you, I'm quite confident that the DOE folks will

remain here as long as they need to and I would suspect the state folks' representatives will be available to discuss these type of issues with you.

If there is anything else you wish to enter into the record, Ms. Colley, I encourage you to come up afterward and visit with the court reporter.

Is there anyone else? This is the third call, so to speak, to the altar.

Let me remind you, please, that comments can be submitted after this meeting up until February the 2nd. They must be received by that date either by mail, electronic mail, or fax. That information on how to submit those comments are here on this poster as well as on these handouts.

Also I would like to encourage you to, if you would like to have a personal copy of these statements or a CD copy, to pick those up before you leave tonight or let anyone that you know of that may wish to have a copy of these know they will be available at the reading room.

I thank you for your time and your attention. I have to honestly say it's probably the shortest public hearing I've conducted in 20 years of my existence. I believe something, though, that Dr.

Margaret Meade, the imminent sociologist, said that's ringing true, "Never doubt that a small group of people can change the world, indeed, it is the only thing that ever does."

And I thank you for your time and your attention. I appreciate your participation tonight, and I encourage you to drive safely going home. Thank you.

It is now 5 minutes to 7:00 and this public hearing is officially adjourned. DOE representatives and folks from the state will be available for a while after this meeting.

MS. CHANDLER: Jennifer Chandler, I'm with Southern Ohio Diversification Initiative, and we want to submit these comments for public record.

- - -

(Whereupon, the proceedings were concluded at 8:00 p.m.)

- - -

R E P O R T E R ' S C E R T I F I C A T E

I hereby certify that the transcript of the proceedings and evidence contained herein are a true and accurate transcription of my stenographic notes taken by me at the time and place of the within case; that the transcription was reduced to printing under my direction; and that this is a true and correct transcript of the same.

_____
DENISE L. SHOEMAKER, Notary Public
in and for the State of Ohio.

My Commission Expires: January 25, 2004.

- - -

Document D0007

UNITED STATES
DEPARTMENT OF ENERGY

PUBLIC HEARING

SUBJECT: DOE Release of DUF6 Conversion Facility Draft Environmental Impact Statements

DATE: January 13, 2004

LOCATION: Department of Energy
Environmental Information Center
115 Memorial Drive
Paducah, Kentucky 42001

TIME: 6:00 p.m. to 9:00 p.m.

FACILITATOR: Darryl Armstrong

REPORTED BY: Amy S. Caronongan, RPR, CSR

Registered Professional Reporters

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PADUCAH, KY 42001 FAX: (270)443-9561

other folks that have signed up. Remember, I need for you to come to this microphone and speak towards the court reporter.

Is there anyone who doesn't understand how I will conduct the comment period?

(No response)

Now, the $64,000 question of the night. Is there anyone who's not willing to help me conduct the comment period in a courteous and mannerly method?

(No response)

Very good. Let's begin.

Are there any local, state, or federal officials or representatives present this evening that wish to make a comment at this time?

If you would, please step up to the microphone, state your name clearly.

MR. ORAZINE: Thank you. My name is Danny Orazine. I'm the county judge executive here in McCracken County. I can't speak to the document, but I can speak about the project, because the local civic leaders and elected leaders here have long worked with DOE and our other elected representatives in

D0007-1

Washington -- Senators McConnell and Bunning and Representative Whitfield -- on this project. And we very much view this as a positive project for our community, and we'd very much like to see and hope that you can stick to the schedule that you showed on the board, and construction starts in July of '04. D0007-1 (cont.)

We view this as good for the community in a couple of ways. It's going to clean up the environment, but we also look at the economic impact of building the plant and the jobs that will operate the DUF6 plant.

I'm not going to belabor this. I don't need five minutes. But we, the elected people and what people we speak for in this county and also the region, very much would like to see this project happen. Thank you. D0007-2

MR. ARMSTRONG: Thank you, sir. Would you spell your last name for the record, please?

MR. ORAZINE: O-R-A-Z-I-N-E.

MR. ARMSTRONG: Thank you.

Are there any other elected officials or representative from the federal, state, or local level that wish to speak at this time?

(No response)

I wanted to make sure there. I'll call -- this is like church. I'll call the third time. Anybody I'm missing in terms of representatives or elected officials?

(No response)

Okay. Then let me introduce Vickie Jurka, J-U-R-K-A.

MS. JURKA: Thank you for this opportunity. Active Citizens for Truth is a local citizens organization interested in the health effects of industrial emissions in their community near the Paducah Gaseous Diffusion Plant. In the spring of 2003, they collaborated with staff at the University of Kentucky for their first mini-seminar at Heath High School regarding chemicals and health.

During their September meeting, members developed the list of health-related topics for which they are seeking speakers for future seminars. And from that meeting, I would like to read from the minutes.

The health effects of chronic exposures to multiple environmental contaminants: Chemicals, metals, and radionuclides.

Document D0008

The second was kidney disease associated with environmental contaminants found in drinking water wells near Paducah Gaseous Diffusion Plant.

The third was lung nodules: Cause, short- and long-term health effects, types of treatment.

Number four, health effects of neptunium, plutonium, and beryllium, how they enter the body, what organs they target, and how the organs are damaged, and how they're excreted.

Number five, health effects of long-term exposure to low levels of radiation.

Number six, environmental contaminants as the cause of chronic diarrhea.

Number seven, kidney disease damage associated with the exposure to radionuclides.

Number eight, how environmental contaminants damage human blood: Chemical, metal, and radionuclides.

The eight topics in this list concern community members because they represent health conditions found in the community. It is my opinion that this Draft Environmental Impact Statement does not adequately address D0008-1

Documents D0008 & D0009

the health effects on an already exposed population, those living closest to the plant. This is of special concern, because expected emissions are known to target the lungs and kidneys, what was already of concern to this community. D0008-1 (cont.)

I would like to say that I'm not opposed to the conversion process, but I do think that the community this time needs to be taken into account. I will be submitting written comments at a later date. Thank you. D0008-2

MR. ARMSTRONG: Thank you.

For the record, David Mast from Congressman Ed Whitfield's office is present.

That's all the speakers I have signed up. However, it would be inappropriate for me to close without first asking, is there anyone who wishes to speak that has not signed up?

Please step to the microphone and state your name, please.

MR. DONHAM: Yes. My name is Mark Donham, D-O-N-H-A-M. I just have a few questions I want to put on the record. I know they won't get answered tonight, but they can possibly be addressed through the response to D0009-1

26

comments.

One has to do with the marketing of the hydrogen fluoride. And it gives a figure in the EIS for the demand, the national demand for this particular product, aqueous hydrogen fluoride. And it says that there's another plant in, I believe, Geismar -- is that Louisiana? -- that produces the same product, but it doesn't -- it gives a total amount of hydrogen fluoride that it produces, but it doesn't divide it up into the two different kinds.

D0009-1 (cont.)

And then it talks about importing hydrogen fluoride from Mexico, but it never does say exactly how much that Louisiana plant produces. And it leaves this whole question about demand and whether something -- whether this product can actually be sold or not. And that's a huge -- that's a huge gap in knowing what's really going to happen.

So that's something that, I think, the EIS should address. I wanted -- there was one paragraph in here about transuranics -- if I can find the section here -- that I made some notes on.

D0009-2

Okay. It says: The transuranic contaminants that are dispersed throughout the depleted uranium hexafluoride might be entrained in the gaseous DUF6 during the cylinder emptying operation and carried out of the cylinders. These contaminants could be captured in filters between the cylinders and the conversion units.

And then it says: These filters would be monitored and changed out periodically to prevent buildup of transuranics. They would be disposed of as low-level waste. D0009-2

Well, that seems inconsistent, because if you're going to be capturing all the transuranics, and they're going to be concentrated in a certain place, why would that be that low-level waste then?

And also, I don't like this, "... might be entrained in the gaseous DUF6 ..." "... could be captured in filters," that's not the kind of language that I like to hear when I'm talking about -- when you're talking about pollution controls. D0009-3

There's also some assumptions, such as it says: It is also expected that the

nonvolatile forms of technetium that exist in the cylinders would remain in the heels --

MR. ARMSTRONG: Two minutes.

MR. DONHAM: -- or be captured in the filters.

And then it goes on, but there's no citations. There's no references to any studies. You've got a bibliography that gives your references, but it's extremely hard to pin what reference comes from what place, because there doesn't seem to be a citation after the particular sentences.

D0009-3 (cont.)

And also, you know, I've got an ongoing concern about a cumulative impact analysis, similar to the previous commenter, that NEPA requires a cumulative impact look of past, present, and reasonably foreseeable future action. And that would include everything that's been going on in the past and the things that you think in the future, which would be all of the cleanup activities that you would expect, all the decontamination. And I've never seen all of that in one document as far as cumulative impact. So those are my comments.

D0009-4

Document D0010

MR. ARMSTRONG: Thank you.

Also, I acknowledge, for the record, Tim Thomas from Senator Mitch McConnell's office is present this evening.

Is there anyone else who has not signed up that wishes to speak at this time?

Please step to the microphone and state your name for the record.

MR. KLEBE: Thank you. My name is Michael Klebe, K-L-E-B-E. I'm an engineer with the Illinois Emergency Management Agency, Division of Nuclear Safety. However, here, I am representing this evening the Central Midwest Interstate Low Level Radioactive Waste Commission.

The commission, who recently met this past December, is very concerned about the transportation of low-level radioactive waste within its region. Clearly, the commission acknowledges that this radioactive material that would be shipped from the ETTP to either Portsmouth or Paducah is federal waste and is not, clearly, under the commission's jurisdiction. The commission is concerned about its safe transport nonetheless. D0010-1

30

Now, I admit that I have not made it through the entire Draft Environmental Impact Statement for both of the facilities to know whether or not these issues that I'd like to address this evening are included. But as part of the -- as part of the Environmental Impact Statement, I would hope that it would include the potential impacts for transportation hazards, transportation accidents, and the impacts that this would represent to local first responders, whether or not these first responders are adequately trained, adequately supplied, adequately funded to respond to a transportation accident of the 4,000-plus casts that would be shipped from the ETTP to either Portsmouth or Paducah. D0010-2

I would hope that the Department of Energy would make some very specific commitments, time frames, in terms of providing the necessary support for the first responders along the path as it travels through Kentucky, not only in terms of transpor -- not only in terms of training, but also in terms of funding for equipment and necessary materials that would be needed to D0010-3

respond to any sort of transportation accident.

Obviously, along the path, the path is both rural, the path is urban. Certain districts, fire departments, are more technically capable than others, but certainly they all should be -- they all should be on a relatively equal footing in terms of funding and ability and training.

D0010-3 (cont.)

So I will look forward to completing the review of the Environmental Impact Statements, and will be providing written comments before the deadline. Thank you very much.

MR. ARMSTRONG: Thank you.

Final call. Anyone that has not signed up that wishes to speak at this time?

(No response)

If there's anyone who wishes to place their comments on the record, once I adjourn the formal public hearing process, you're invited to do so by coming up and visiting with the court reporter. If there is anyone who wishes to extend their comments for the record, you are also invited to come up and extend those comments one-on-one.

The public record will remain open and accept comments from the public through February the 2nd, 2004. Comments that I receive by this date will be included in the public record. Comments received after this time will be considered to the extent practical.

If you wish to have your comments on the official record after tonight, as Mr. Hartman has indicated, you may send those to him by mail, fax, or e-mail.

Ladies and gentlemen, the time is 20 minutes to the hour of 7:00. I want to thank each of you for coming. I'm always comforted when I know that there are people that are willing to give up time from their families to come out to a public meeting such as this. Your participation has made this meeting successful. We thank you for your attendance. Please be safe driving home. This public hearing is now officially adjourned.

(The hearing was concluded at 6:40 p.m.)

STATE OF KENTUCKY

COUNTY OF McCRACKEN

I, AMY S. CARONONGAN, RPR, CSR, and Notary Public in and for said State of Kentucky at Large, do hereby certify that the above and foregoing is a true, correct, and complete transcript of the public hearing taken at the time and place and for the purpose set out in the caption hereof; that said public hearing was taken down in stenotype by me and thereafter transcribed; that the appearances were as set out in the caption hereof.

I further certify that I am neither attorney for, nor counsel for, nor related to, nor employed by any of the parties to the action in which this public hearing is taken; and further, that I am not a relative or employee of any representative or entity employed by the parties hereto nor financially interested in the action.

My commission expires on June 9, 2007.

Given under my hand and seal of office on this the 17th day of January, 2003.

_____
Amy S. Caronongan, RPR, CSR
Notary Public
State of Kentucky at Large

Document D0011

PUBLIC MEETING

PRESENTATION BY MR. GARY HARTMAN

SPEAKERS:

MS. BARBARA WALTON

MR. NORMAN MULVENON

MS. SUSAN GAWARECKI

MR. CHARLES FORSBERG

FACILITATOR:

MR. DARRYL ARMSTRONG

JANUARY 15, 2004

JOAN S. ROBERTS

COURT REPORTER

P.O. BOX 5924

OAK RIDGE, TENNESSEE 37831

(865-457-4027)

forward. Seeing none, Barbara Walton will be the first speaker; who will be followed by Norman Mulvenon.

MS. WALTON: I'm Barbara Walton and I live here in Oak Ridge and I'm speaking as an individual. I appreciate this opportunity to comment. I think they did a good job of preparing these documents and I agree with the preferred alternatives. However, we have somewhat been overtaken by events and the decision has been made to build the centrifuge base enrichment plant at Portsmouth. And partly as a result of that, and partly for other reasons, the cumulative impacts section of the Portsmouth document, I feel, has some inadequacies, which I would like to see remedied in the final EIS. They refer to a 1977 document, a 1977 Analysis of Environmental Consequences for such an action that was done by U.S. Energy Research and Development Administration. This is on page 5-117 of the Portsmouth document. I would like to see that updated. I'm assuming that there will be an EIS done for the enrichment facility that will be built at Portsmouth. This document does

D0011-1

D0011-2

state that it will be located in area B that was considered here, so there is no conflict there. Also, there were, in the worker dose on page 5-115 there were two footnotes. Note I said that there was no worker dose given for the lead cascade and the information just was not available. And I hope that that can be remedied to where a better estimate than a 1977 document could be given for the final. In addition, there is a section on historical safety for Anhydrous Ammonia and Hydrogen Fluoride, which goes up through 2002, but the table of impacts on page 5-104 analyzes forty-nine percent and seventy percent Aqueous Hydrogen Fluoride. I suspect that was done because it is a bounding, but I would like a clear statement about that. I note that there was a recent derailment of fuming Sulfuric Acid in Knoxville and a lot of people were evacuated away from their homes for three or four days and that is a similar order of magnitude. And thirdly; in the Paducah Environmental Impact Statement on page 320 is figure 3.1-4 on the wetlands. This figure is titled Paducah, but it is the identical figure that is in the

D0011-2 (cont.)

D0011-3

D0011-4

D0011-5

D0011-6

Documents D0011 & D0012

Portsmouth document on page 3-19. In other words, they have shown the Portsmouth wetlands in the Paducah document. And I assume that could be corrected for the final. Also, they say in the document that use of an overpack is most likely to ship the noncompliant cylinders, but they also analyze the building of a facility in Oak Ridge. I would like a more definitive statement on that. They don't analyze it as an alternative or give a preference, it's just a general statement and I would like a definite statement that that is what they plan to do. It's fine that they analyze more than one thing, which is what you are supposed to do in an EIS. And I think that covers the major points that I had. Thank you. D0011-6 (cont.) D0011-7

FACILITATOR: Norman.

MR. MULVENON: I'm Norman Mulvenon. M-u-l-v-e-n-o-n. I'm a resident of the City of Oak Ridge. My main theme is to thank the Department of Energy finally for issuing these environmental impact statements. And the second thing is that I concur with everything that Ms. Walton said. Barbara is very meticulous in reading these documents and is D0012-1

one of our resources in making sure that the Department of Energy follows all the rules. Our main theme here in Oak Ridge is that we ship those cylinders out of here. We don't particularly care whether they go to Portsmouth or Paducah, but they are scheduled to go to Portsmouth. There are some empties that have been recently sent to the Nevada test site and there are some partially filled cylinders that are ready to go to Ohio right now. And then the bulk of them are the cylinders which are going to be shipped out. Our main theme is that they should leave the City of Oak Ridge. They present an issue with us about being able to use the K-25 or ETTP site as a reindustrialization site. If you were a person who wanted to lease or build a building out there and all you see is thousands of these cylinders stacked around it, I don't think it is very conducive to people wanting to actually use the site. Our main theme; ship them out of here. Thank you very much.

D0012-1 (cont.)

FACILITATOR: Thank you, sir. Anyone else registered, Fred?

FRED: No, sir.

Document D0013

FACILITATOR: Is there anyone who has not registered who would like to speak at this time? Please step forward and state your name for the record.

MS. GAWARECKI: Good evening, I'm pleased to be able to speak on the EISs. I am Susan Gawarecki, G-a-w-a-r-e-c-k-i, Executive Director of the local oversight committee and several of our stakeholder members are here tonight. We follow EISs like this quite closely and will issue some official comments on them. I wanted to say that I concur with Barbara Walton and Norman Mulvenon and especially emphasize that safe and rapid shipment of the cylinders out is a high priority in this community. We would hope that UDS would look at this for their part of the shipping very early on, involve the stakeholders. Do consider the option of rail transportation instead of by truck. And understand that you are going to have to be working with a number of states and emergency management organizations as well. And there are good organizations already built up and a lot of planning done already. And certainly,

D0013-1

Documents D0013 & D0014

we are eager to work with the company and make sure that they understand what the needs of the communities are. But again, we are very interested in seeing those cylinders shipped out in a timely and safe manner. Thank you. D0013-1 (cont.)

FACILITATOR: Thank you. Is there anybody else who is not registered that would like to speak at this time? Please step forward and state your name for the record.

MR. FORSBERG: Charles Forsberg, F-o-r-s-b-e-r-g. Short comment; the facilities should include expandable long-term storage facilities for the stable Depleted Uranium Dioxide waste product. The historical record of the United States and other Western countries is that disposal always takes longer than planned. Plan ahead. D0014-1

FACILITATOR: Thank you, sir. Is there anyone else who would like to speak who is not registered at this time? This is like church, you are going to get two more calls. Anyone else? Is there anyone who would like to extend their comments who has already spoken? If there is anyone who would like to give their comments one-on-one with the court reporter

privately at the close of this session, she will be available until the close of business on this hearing which is at nine o'clock. The DOE and the Argonne National Laboratory representatives are available following this meeting, if you would like to meet with them privately one-on-one or discuss any issues with them. The public record will remain open and accept comments from the public through February 2, 2004. Comments that are received by this date will be included in the public record. Comments received after this time will be considered to the extent practical. If you wish to have your comments on the official record after tonight, you may submit written comments by mail, by fax or by e-mail directly to Mr. Gary Hartman with U.S. Department of Energy. That information is on page five of his presentation. Fred, what time is it back there?

FRED: Quarter to seven.

FACILITATOR: Ladies and gentlemen, it is 6:45. I want to thank each of you for coming this evening. I am always comforted to know that people are willing to take time away

from their families to come to meetings like this and let their opinions be known on such projects. Participation has made this meeting successful and we thank you for your attendance. Please be safe driving home. This meeting is now officially adjourned.

CERTIFICATE

I, JOAN S. ROBERTS, NOTARY PUBLIC AT LARGE FOR THE STATE OF TENNESSEE AND COURT REPORTER DO HEREBY ACKNOWLEDGE THAT THE FOREGOING TWENTY-SIX PAGES ARE A TRUE AND CORRECT TRANSCRIPT OF THE PUBLIC MEETING TAKEN BY ME IN THIS CAUSE ON THE 15TH DAY OF JANUARY, 2004.

THIS THE 23RD DAY OF JANUARY, 2004.

_____

JOAN S. ROBERTS, COURT REPORTER

Document D0015

PACE Local 5-689

PAPER, ALLIED-INDUSTRIAL, CHEMICAL AND ENERGY INTERNATIONAL UNION, AFL-CIO

Dan Minter, President
Bill Dimit, V. Pres.

P. O. Box 467
Piketon, OH 45661

Delivery Add: 2288
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PH: (740) 289-2405
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paceport@zoomnet.net

Community And Workforce Questions For The Public Draft Environmental Impact Statement (ESI) Hearing January 7th, 2004 - Waverly, Ohio.

1) PL 107-206 -- Assurance that construction of both plants will be started on schedule on July 31, 2004. Further, both sites' construction must proceed expeditiously thereafter. (Section 502(c) of the Act) Meeting schedule is an environmental compliance issue. D0015-1

2) Has DOE provided sufficient funds for construction of both plants for FY 05? This speaks to the question of whether statutory intent will be honored fully, or whether it will be constrained by allocation of funds in the President's budget request. Failure to meet schedule is an environmental issue. D0015-2

3) PL 107-206 provides access to the $373 million by the Secretary without need for further appropriation, by virtue of removing the fence on the expenditures of funds. This money is in account number 95X4054 in the U.S. Treasury. The GAO's Letter Report January 19, 2000 to Chairman Billy Tauzin of the House Energy & Commerce Committee regarding the use of funds for the Portsmouth Cold Standby Plan (B-286661), states that the USEC Fund is available to meet the authorized purposes of the McConnell Act (P.L. 105-204). Please explain whether and how DOE is using these funds? If not, please explain why? D0015-3

4) Are there foreign ownership and control issues that are impairing the ability of the contractor and DOE to meet the statutory schedule? If so, what are the plans for resolving this potential delay? D0015-4

5) Socioeconomic Impact - Will DOE direct Bechtel Jacobs to admit UDS to the Multiple Employer Pension Plan? If not, please advise how DOE will assure that UDS will provide pension continuity? D0015-5

6) It appears from the supplied data that impacts no action would in fact pose greater risk to environment and public safety? This is based on decay of the containment vessels and surveillance painting potential impacts and other required up-keep activities. Is this what the EIS is stating based on a no action plan? D0015-6

7) How, given the risks of a no action option and the fact that time is not an element conducive to the current method of vessel storage, provisions of Public law 105-204 and 107 -206, clear Congressional intent and 1/3 billion in available funding; why is a no action option even a proposed option under consideration? D0015-7

Document D0016

1864 Shyville Road, Piketon, Ohio 45661

Southern Ohio Diversification Initiative

Phone: 740-289-3654 or 289-4861
Fax: 740-289-4591

January 7, 2004

Gary S Hartman
US Department of Energy – Oak Ridge Operations
PO Box 2001
Oak Ridge, TN 37831

Dear Mr. Hartman:

Thank you for the opportunity to comment on the US Department of Energy's Draft Environmental Impact Statement for the proposal to construct, operate, maintain and decontaminate and decommission a depleted uranium hexafluoride conversion facility at the US DOE Piketon Site. We believe that the best alternative to dealing with the DUF6 waste at the US DOE Piketon site is to build the DUF6 Conversion Plant, as directed by Public Laws 105-204 and 107-206, at Piketon, Ohio, to convert the material into a more stable form for use and/or disposal. We also agree that location A (former lithium hydroxide monohydrate storage area) is the best location for the facility. D0016-1

We oppose the no action alternative and long-term storage of the cylinders and conversion products at the US DOE Piketon site. As the designated community reuse organization, SODI expects to be involved in the sale of conversion products so that revenues will be used to benefit the community and local governments that are hosting and supporting the conversion plant operations. We also oppose the construction of one conversion plant for two sites. D0016-2

D0016-1 (cont.)

Because the DUF6 material is chemically toxic to humans if released into the atmosphere, it is imperative that safety and health issues are given top priority to protect the workers, the community, and the environment. We do not support the transport of "repaired" or "as is" non-compliant cylinders from ETTP to Piketon. We strongly urge US DOT not to grant exemptions, but to require DUF6 contents to be transferred from non-compliant cylinders to new or compliant cylinders prior to shipment to Piketon. Shipping and then storing non-compliant cylinders from ETTP at Piketon increases the risk of exposure to toxic chemicals to workers, the community, and the environment. We also believe that DUF6 cylinders from ETTP should be shipped only as the Piketon inventory of DUF6 material is safely converted and space becomes available. D0016-3 D0016-4

Please provide a written response to the SODI Board of Directors, 1864 Shyville Road, Piketon, Ohio, 45661. If you have any questions or need additional information, please contact me at (740) 289-3654.

Sincerely,

Jennifer Chandler for
Gregory L. Simonton
Executive Director

Document D0017

Draft Depleted Uranium Hexafluoride (DUF_6) Conversion Facility EISs Comments

This form is provided for you to submit your comments on either or both of the Draft Environmental Impact Statements for construction and operation of DUF_6 Conversion Facilities at the Paducah and Portsmouth sites. Please give this completed form to one of the meeting hosts or take it with you and mail it in. Make your comments, fold the form, tape it shut, place a stamp on the outside and drop it in the mail.

Gary Hartman
U.S. Department of Energy
Oak Ridge Operations
P.O. Box 2001
Oak Ridge, TN 37831

Comments must be received no later than February 2, 2004

FOLD HERE

Please provide this information:

Name Steve Meiners
Title/organization Regional Manager/SEC (Safety & Ecology Corp.)
Mailing address 5050 McCracken Blvd.
Paducah
State Kentucky Zip+four 42001 -

Please indicate if the comment is for ☐ Paducah DEIS ☐ Portsmouth DEIS ☑ Both DEISs

E-mail (I wish to receive DUF_6 Conversion Facility EISs information by e-mail at this address) smeiners@sec-tn.com

Please consider barge transport in a second draft EIS for public comment. Barge is more economical and safer than truck or rail transport. It is safer for the public because it involves no onboard fuel and does not place the cylinders in harms way in proximity to fuel trucks and other fuel-laden conveyances moving at high speed in opposing and cross-traversing traffic. D0017-1

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WITHHOLDING OF PERSONAL INFORMATION

It is DOE's practice to make comments, including names and addresses of commenters, available for public review. Individuals may request that their home address be withheld from the publicly available record, and DOE will honor such requests to the extent allowable by law. Circumstances may also arise in which DOE would withhold from the publicly available record a commenter's identity, as allowable by law.

If you wish DOE to withhold your name and or address, you must state this prominently at the beginning of your comment. However, DOE will not consider anonymous comments. DOE will make all submittals from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

Document D0018

Ohio Department of Natural Resources

BOB TAFT, GOVERNOR SAMUEL W. SPECK, DIRECTOR

Division of Real Estate and Land Management
Paul R. Baldridge, Chief
1952 Belcher Drive – Bldg. C-4
Columbus, OH 43224-1386
Phone: (614) 265-6384

January 12, 2004

Gary S. Hartman
U.S. Department of Energy-Oak Ridge Operations
P.O. Box 2001
Oak Ridge TN 37831

Dear Mr. Hartman:

The Ohio Department of Natural Resources (ODNR) has completed a review of the *Draft Environmental Impact Statement (DEIS) for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Portsmouth, Ohio, Site (DOE/EIS – 0360)*. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), chapters 1531 and 1533 of the Ohio Revised Code, the National Environmental Policy Act, and other applicable laws and regulations. These comments are the result of project reviews within multiple ODNR Divisions and collectively reflect ODNR's experience as a state resource management agency. These comments do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

ODNR has no concerns with this proposed project. No rare or endangered species, unique natural features, state nature preserves or scenic rivers were identified within or adjacent to the project site. Additionally, ODNR does not think the proposed project will negatively impact any rare or endangered species, ODNR properties, or rare geological features outside of the project area. D0018-1

ODNR appreciates the opportunity to provide these comments. If you have any questions, please call Randall E. Sanders, Environmental Administrator, at 614.265.6344.

Sincerely,

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Date R

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Paul R. Baldridge, Chief
Division of Real Estate and Land Management

PRB:ag
cc. Scott Zody, Deputy Director

DNR 0001

Document D0019

Submitted in writing at the Oak Ridge hearing on January 15, 2004.

The EIS does not describe the role of the U.S. Nuclear Regulatory ~~[illegible]~~ Commission (USNRC), especially in licensing the product for disposal. D0019-1
Clarifying the role of various licensing agencies would be beneficial to the reader.

M. Jonathan Haire
116 Greenbriar Ln.
Oak Ridge, TN 37830

The product of the conversion facilities is said to be U_3O_8. In fact it is a complex mixture of uranium oxides, urania. Most of the beneficial uses of depleted uranium use uranium dioxide, UO_2. I urge the Project to include provisions to fabricate UO_2. D0019-2

M. Jonathan Haire
116 Greenbriar Ln.
Oak Ridge, TN
37830

Document D0020

Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

January 15, 2004

Gary S. Hartman
DOE-Oak Ridge Operations
P.O. Box 2001
Oak Ridge, TN 37831

Dear Mr. Hartman:

Comments on the Draft Environmental Impact Statements for Depleted Uranium Hexafluoride (UF_6) Conversion Facilities

The Oak Ridge Site Specific Advisory Board (ORSSAB) has considered the Draft Environmental Impact Statements for Depleted UF_6 Conversion Facilities.[1,2] ORSSAB provided a recent recommendation to the U.S. Department of Energy–Oak Ridge Operations concerning the Depleted UF_6 Disposition Program at the Department of Energy's East Tennessee Technology Park.[3] At this time, ORSSAB would like to affirm that recommendation and submit it as comments on the proposed activities described in these documents. A copy of that recommendation is enclosed. ORSSAB would also like to take this opportunity to clarify that the overall intent of the recommendation is to accelerate the removal of all UF_6 cylinders in inventory at the East Tennessee Technology Park. D0020-1

Sincerely,

David N. Mosby, Chair

Enclosure

cc/enc: Dave Adler, DOE-ORO
Pat Halsey, DOE-ORO
Connie Jones, EPA Region 4
John Owsley, TDEC
Sandra Waisley, DOE-HQ

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[1] U.S. Department of Energy, *Draft Environmental Impact Statement for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Paducah, Kentucky, Site*, DOE/EIS-0359, December 2003.

[2] U.S. Department of Energy, *Draft Environmental Impact Statement for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Portsmouth, Ohio, Site*, DOE/EIS-0360, December 2003.

[3] Oak Ridge Site Specific Advisory Board, "Recommendation Concerning the Depleted Uranium Hexafluoride Disposition Program at the DOE East Tennessee Technology Park," Letter to Mr. Steve McCracken, July 10, 2003.

P.O. Box 2001, EM-91, Oak Ridge, TN 37831 • Phone 865-576-1590; 1-800-382-6938 • Fax 865-576-5333
Web: http://www.oakridge.doe.gov/em/ssab

Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

July 10, 2003

Mr. Steve McCracken
Assistant Manager for Environmental Management
DOE-Oak Ridge Operations
P.O. Box 2001, EM-90
Oak Ridge, TN 37831

Dear Mr. McCracken:

Recommendation Concerning the Depleted Uranium Hexafluoride Disposition Program at the DOE East Tennessee Technology Park, Oak Ridge, Tennessee

At our July 9, 2003, meeting, the Oak Ridge Site Specific Advisory Board approved the enclosed recommendation.

We appreciate your consideration of our recommendation and look forward to receiving your written response.

Sincerely,

David N. Mosby, Chair

Enclosure

cc/enc: Dave Adler, DOE-ORO
Pat Halsey, DOE-ORO
Dave Hutchins, DOE-ORO
Connie Jones, EPA Region 4
John Owsley, TDEC
Sandra Waisley, DOE-HQ

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Web: http://www.oakridge.doe.gov/em/ssab

Oak Ridge Site Specific Advisory Board Recommendation Concerning the Depleted Uranium Hexafluoride Disposition Program at the DOE East Tennessee Technology Park, Oak Ridge, Tennessee

BACKGROUND

A uranium enrichment process called gaseous diffusion was used at the Oak Ridge Gaseous Diffusion Plant, now called the East Tennessee Technology Park (ETTP), from 1945 until 1985. The process physically separated naturally occurring uranium, fed as a uranium hexafluoride (UF_6) gas that solidifies at ambient temperatures, into a product enriched in uranium-235 and a depleted stream that was withdrawn and stored in cylinders allowed to accumulate on site. Most cylinders contain either 10 or 14 tons of UF_6, but there are a number of cylinders of smaller sizes and ones that are empty or contain heels.

Overall, there are approximately 57,000 storage cylinders containing over 500,000 metric tons of UF_6 at the ETTP, Paducah, Kentucky, and Portsmouth, Ohio, gaseous diffusion plants. Since there are more cylinders at Paducah (about 38,000), transporting the 6,364 ETTP cylinders to Portsmouth would bring the inventories into balance and facilitate the design and operation of two similarly sized conversion plants. The Tennessee Department of Conservation (TDEC) and DOE signed a Commissioner's Order in 1999 requiring DOE to submit a plan to remove the depleted UF_6 (DUF_6) cylinders and their contents no later than December 31, 2009. The Oak Ridge Comprehensive Closure and Performance Management Plans accelerate this schedule to the end of fiscal year 2007 to accomplish closure of ETTP. In 2002, DOE awarded a conversion contract to Uranium Disposition Services for two plants and also decided that Bechtel Jacobs Corporation (BJC) and Uranium Disposition Services (UDS) will share responsibility for shipment of the ETTP cylinders to Portsmouth. Requirements for shipping UF_6 cylinders are contained in the U.S. Department of Transportation Hazardous Materials Regulations, 49 CFR Parts 100–185 and ANSI N14.1, *Uranium Hexafluoride – Packaging for Transport*. BJC will be responsible for shipping ANSI N14.1-compliant cylinders in 2003 through 2005, and UDS will be responsible for shipping ANSI N14.1-noncompliant cylinders in 2005 through 2007.

DISCUSSION

On May 14, 2003, Mr. David Hutchins, Manager of the DUF_6 Cylinder Program at ETTP, gave a review to the Oak Ridge Site Specific Advisory Board (ORSSAB) on plans for shipping cylinders at ETTP to Portsmouth. The presentation focused on the ANSI N14.1-compliant cylinders. DOE notes that these shipments do not involve "Highway Route-Controlled Quantities," and are not subject to any laws that require specific routing, notifications, or escorts, but they are taking some additional steps. The questions asked by members of the Board and the public related to emergency response and preparedness training, communications with local communities, shipping logistics, and hazards inherent to the material. The Board was told that some consideration was given to disguising the cylinders for security purposes but that ability to identify the material in any incident was decided to be more important. Shipment by barge and air were discounted. DOE prefers highway shipments by truck, claiming they're more cost

effective than rail. Truck shipments were said to have higher probability of accident occurrence than rail, but rail accidents would have higher consequences due to more cylinders potentially being involved. Truck shipments allow greater potential selection of routes. DOE has worked primarily through state authorities rather than directly with every local community along the way to develop the transportation plan and to train emergency response personnel. The Department of Transportation has set an initial evacuation distance for UF_6 from a large spill at 100 meters (1/16 mile) and then 300 meters (3/16 mile) in event of a major fire. By comparison, evacuation distances, in event of a fire, are 800 meters (1/2 mile) for gasoline and chlorine and 1,600 meters (1 mile) for propane.

Historical research indicates that DOE and its predecessor agencies have been involved in efforts to make the handling of uranium hexafluoride safer for a long time. In 1966, fire tests of bare, UF_6-filled cylinders were conducted at the Oak Ridge Gaseous Diffusion Plant Rifle Range to determine if cylinders would hydrostatically or explosively rupture and the time available for fire fighting before either incident occurred.[1] The tests confirmed that a UF_6 cylinder rupture of explosive force is possible and that it can occur within a time sufficiently short as to preclude fire fighting unless initiated very promptly. It was also concluded that a type of foam insulation provided a high degree of fire protection for shipments.

Safety issues related to the storage of DUF_6 have continued to be investigated up through preparation and maintenance of current safety basis documents for the cylinder storage yards.

On April 30, 2002, the Department of Transportation issued a notice of proposed rulemaking (NRPM) to bring about compatibility of its regulations with those of the International Atomic Energy Agency (IAEA). One area that has the greatest potential for substantially increased costs to shippers of radioactive materials concerns large stocks of DUF_6 stored in currently authorized packagings at three different locations. If this material should be moved off-site to one or more conversion facilities, then it is likely that the current packagings will not meet the standards proposed in this NPRM. In that case the existing packages likely will be required to be overpacked in order to meet the standard for a hypothetical fire test. The ramification of differences between U.S. and IAEA regulations is something that needs to be better understood.

RECOMMENDATION

ORSSAB fully supports the accelerated shipping schedule for DUF_6 cylinders from ETTP. D0020-1 (cont.)
Additionally, we recommend that DOE keep open and not preclude transportation options other than highway. D0020-2 Finally, we recommend that DOE manage the safety aspects of the program consistent with the entire knowledge base of the hazards associated with handling UF_6 and inform the public about any plans to seek exemptions from more stringent requirements that may be evolving. D0020-3

[1] Mallett, A.J., *ORGDP Container Test and Development Program – Fire Tests of UF_6-Filled Cylinders*, K-D-1894, Union Carbide Nuclear Division, ORGDP, January 12, 1966.

Document D0021

Comments on the UF6 Environmental Impact Statement

Paul D. Kalb, Division Head
Environmental Research & Technology Division
Brookhaven National Laboratory
Upton, NY 11973

As a researcher at Brookhaven National Laboratory (BNL) I have been involved with the issue of depleted uranium for a number of years. As you are probably aware, BNL developed, tested and patented a process for the encapsulation of various forms of DU in polyethylene. The secondary end-use product (sometimes referred to as DUPoly) is a dense solid that can be used for shielding or ballast applications. It provides the same benefits as DUCrete but has advantages in that it can be easily formed to complex shapes, re-worked at a later date, and has good ability to shield both high energy gamma and neutron radiation. We recently completed fabrication of a full-scale prototype DUPoly transport/disposal cask and then successfully used it to transport a highly radioactive RaBe source and dispose the material and cask at Hanford without additional handling and radiation exposures to workers. We have discussed the use of this material for dry-cask storage of spent nuclear fuel with NAS Corp. and its use as a shielding/construction material at the Yucca Mountain repository with Argonne National Laboratory.

I was disappointed to find that the EIS did not take the potential for re-use of the DU into account, but rather focused on issues of disposal. Turning our waste into useful, commercially viable products is a tremendous economic and sociological benefit. While the UF6 website does include several references to secondary end-use of DU, including its use in DUPoly, the EIS itself does not consider this alternative. In my view, the additional benefits associated with this alternative make the treatment of DUF6 a much more cost-effective and attractive solution. D0021-1

Document D0022

OhioEPA
State of Ohio Environmental Protection Agency
Southwest District

401 East Fifth Street
Dayton, Ohio 45402-2911

TELE: (937) 285-6357
FAX: (937) 285-6249

January 29, 2004

Mr. Gary S. Hartman
USDOE ORO
P.O. Box 2001
Oak Ridge, Tennessee 37831

Mr. Hartman:

Ohio EPA has reviewed the Draft Environmental Impact Statement for Construction and Operation of a Depleted Uranium Hexafluoride (DUF6) Conversion Facility and comments on this draft are listed below. As you are aware, Kentucky, Tennessee and Ohio have been working with DOE for many years to address the multiple challenges associated with management and conversion of DUF6. We expect that collaboration to continue throughout the construction, operation and cylinder management and transportation portions of this project. D0022-1

Ohio EPA concurs with the preferred alternative of constructing a DUF6 conversion facility at the Portsmouth site. We also concur with transporting DUF6 cylinders from the ETTP at Oak Ridge to the Portsmouth site for conversion. We are currently negotiating administrative orders with DOE to allow this to happen. Please contact me if you have any questions about these comments.

Sincerely,

Graham E. Mitchell
Chief, Office of Federal Facilities Oversight

Ohio EPA Comments on the Draft Environmental Impact Statement for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Portsmouth, Ohio Site.

General Comments

1) A closed RCRA unit (The X-616 Chromium sludge Lagoon) which is in post-closure care is located in the area of Alternative Location A. A deed notice was submitted to the Pike County Planning Commission on July 7, 1992. There are also monitoring wells associated with this unit which are used to evaluate the status of the groundwater contamination in that area. Please provide a description of how the restricted land and these wells will be avoided during the construction and operation of the facility. D0022-2

2) The EIS should be expanded to discuss the potential to accept the DUF_6 cylinders from USEC should the Centrifuge Facility be constructed and operated at Portsmouth. The EIS should discuss the impact of longer operation and the potential need to increase the size of the Portsmouth Facility to deal with the additional DUF_6 cylinders. D0022-3

3) The EIS should recognize that the current clean-up at the facility is governed by three Administrative Consent Orders; the 1989 Ohio Consent Decree, the 1997 Three Party Administrative Order on Consent and the 1999 Administrative Order for Integration. The document should also recognize that the DUF_6 is considered a hazardous waste by the State of Ohio and that there is an Administrative Order governing how the DUF_6 cylinders are to be managed at the site. D0022-4

4) Please provide a discussion of how the cylinders will be prioritized for conversion. Will the older cylinders be processed first? Will the cylinders from ETTP be processed first? What is the current strategy for determining which cylinders will be addressed first during the conversion process? D0022-5

5) Please provide a description of the type of inspections that will be conducted of the cylinders during the four month aging period to determine if the cylinder wall has been breached or damaged during the conversion process. D0022-6

6) You may wish to consider decommissioning and decontaminating the X-616 SWMU and the old fire training area to make additional room for cylinders to be stored and managed before and after conversion. D0022-7

7) The EIS fails to describe in Section 5.9 what is expected during decommissioning and decontamination (D& D) of the facility. The EIS should provide some detail regarding what will happen to the waste from the D&D facility and where the waste is likely to go. For instance, some of the material may be construction debris and is likely be interred in a facility that excepts construction debris waste, other waste would be considered mixed waste and shall be shipped off site to an appropriate facility. D0022-8

Specific Comments

1) Table S-2 page S-13: The table should also include a bulleted item under Proposed Action describing how the DUF_6 cylinders created by USEC during the centrifuge operation (should the facility be constructed in Portsmouth) would be maintained at the facility and converted at the UDS Facility. D0022-9

2) Page S-21, Section S.2.2.5: Will the noncompliant cylinders remain in the over packs? If not, how will these cylinders be moved around the facility once received at Portsmouth? D0022-10

1) Page S-39, S.5.5 Water and Soil: The text should indicate that best available practices (BAT) will be implemented at the site during construction to eliminate or reduce the risk of potential soil, surface water, and groundwater contamination from construction of the facility. The text indicates that good construction practices will be implemented during construction but does not provide any detail. It is common for a construction project as described in the text to implement a BAT policy during construction to minimize impact on the soils, surface water and ground water at the construction site. D0022-11

4) Page S-39, S.5.6 Socioeconomics: The text indicates that construction of the facility would create 310 jobs and the operation of the conversion facility would create 320 jobs. The information provided to Ohio EPA indicates that approximately 100-150 construction jobs would be created and approximately 140-150 jobs would be needed to operate the facility. Please provide the correct reference to the number of jobs created for construction and operation of the facility. D0022-12

5) Page S-41, section S.5.8: This section states that a stabilizer will be added to the heels in the emptied cylinders. What type of stabilizer will be used and will this stabilizer produce any gases which will need to be captured? D0022-13

6) Page S-41, section S.5.8: Will the U_3O_8 generated be considered a LLW or a LLMW? How will this be determined? D0022-14

1) Page S-47, S.5.18 Unavoidable Adverse Impacts: Please provide an explanation as to why it may be necessary to disturb up to 65 acres of land during construction. Please provide an area map showing the extent of the area which may be disturbed. D0022-15

2) Page S-47, S.5.18 Unavoidable Adverse Impacts: Please provide a detailed list of the possible loss of terrestrial and aquatic habitats from construction and disturbance of wildlife during operations. Include a description of the type of wildlife which may be impacted due to construction. Also, describe which areas may be irrevocably harmed due to the presence of the facility. D0022-16

3) Page S-54, S.7 Preferred Alternative, Table S-6: – Under Environmental Consequence, the Bounding radiological accident for the proposed action is given as an earthquake damaging the U_3O_8 storage building and releasing 145 lb. of depleted U_3O_8. For no action, a cylinder ruptures-fire is given as the bounding accident with 24,000 lb of UF_6 released. On Pg. S-12, the cylinder accident is stated D0022-17

to be one involving several cylinders in a fire. On Pg. S-68, under the earthquake scenario, 10% of the stored containers are assumed to be breached. More definitive data needs to be presented to support the quantities released. D0022-17 (cont.)

4) Page 2-23, Section 2.2.7: The EIS discusses the possibility of accepting cylinders from the Paducah facility. Currently, there is no mechanism in place that allows for the transfer of cylinders from the Paducah facility to Portsmouth. As you are aware the State of Ohio and US DOE are currently negotiating a Director's Administrative Order, including a management plan for the shipment and management for the cylinders from ETTP. Please provide a description of the regulatory requirements which would be required in order for the State of Ohio to accept the DUF_6 cylinders from Paducah. Furthermore, it is likely that Portsmouth may be required to accept cylinders from an enrichment facility in New Mexico or a new USEC centrifuge facility. It would make more sense to increase the size of the facilities being built so that a greater number of cylinders can be addressed in a shorter period of time. Both facilities should be sized to have the capability to address all the DUF6 cylinders currently on site as well as others which may be shipped from other facilities in the future. D0022-18

5) Page 2-25, Section 2.3.5 Other Transportation Modes: Due to the difficulties cited by the document with air and barge transportation, it appears that these modes of transportation are not being seriously considered. If this situation changes, the state would expect adequate NEPA review in order to assess risks associated with those methods. D0022-19

6) Page 2-27, Section 2.4.2: Please refer to General Comment #7 above in regard to D&D. D0022-20

7) Page 2-29, Section 2.4.2.2.2: Please make reference to the approved DUF6 management plan that is currently in place and agreed to by US DOE. The DUF6 management plan outlines the steps US DOE must take should a breach in the DUF6 cylinders occur. D0022-21

8) Section 5.2.2.3.1 Based on the information provided in this section. It appears that fugitive dust emissions (PM10, and PM2.5) concentrations (ug/m3) from construction activities may exceed the National Ambient Air Quality Standards NAAQS for PM10 and PM2.5 . Additional emission control methods, operational restrictions, or monitoring need to be implemented to assure that the NAAQS are not exceeded. D0022-22

Document D0023

Ernie Fletcher
Governor

LaJuana S. Wilcher
Secretary

Commonwealth of Kentucky
Environmental & Public Protection Cabinet
Department for Environmental Protection
Division of Waste Management
14 Reilly Road
Frankfort KY 40601-1190

February 2, 2004

Mr. William E. Murphie, Manager
U.S. Department of Energy
Portsmouth Paducah Project Office
1017 Majestic Place Drive
Suite 200
Lexington KY 40513

Mr. Glenn E. VanSickle, Paducah Manager of Projects
Bechtel Jacobs Company LLC
761 Veterans Avenue
Kevil, Kentucky 42053

RE: Draft Environmental Impact Statement for Construction and Operation of a Depleted Uranium Hexaflouride Conversion Facility at the Paducah, Kentucky, Site
DOE/EIS-0359

Dear Mr. Murphie and Mr. VanSickle:

The Division of Waste Management (Division) has completed its review of the DUF6 Environmental Impact Statement (EIS) received on November 24, 2003. Several concerns were identified during the review. The Division's comments are outlined in the attached pages. Also attached separately are comments from the Cabinet for Health Safety (CHS). Please edit the draft EIS consistent with the enclosed comments.

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Mr. Murphie,
Mr. VanSickle
Page 2
January 30, 2004

We look forward to the submittal of a revised EIS. Please contact Lori Veal at (502) 564-6716 if you have any questions or need additional information.

Sincerely,

Michael V. Welch, P.E., Manager
Hazardous Waste Branch

MVW/lmv

Attachment

c: Randy McDowell, OLS-Frankfort
Mike Welch, DWM-Frankfort
Lori Veal, DWM-Frankfort
Tuss Taylor, DWM-Frankfort
DWM Reading file # 1190
DOE Reading file

Draft Environmental Impact Statement for Construction and Operation of a Depleted Uranium Hexaflouride Conversion Facility at the Paducah, Kentucky Site, Paducah, Kentucky

Specific Comments:

1. **Summary, Section S.1.1.2, Page S-5 and S-6:** This section outlines the development of concern over DOE's DUF6 inventory beginning in 1995. The 3rd paragraph describes an agreement reached in 1998 between DOE and Ohio EPA (OEPA) that resulted in the implementation of a DUF6 management plan governing the storage of DUF6 cylinders at Portsmouth. The 4th paragraph discusses a consent order entered into in 1999 by DOE and the Tennessee Department of Environment and Conservation (TDEC) regarding the implementation of a UF6 management plan for cylinders stored at ETTP, as well as removal or conversion of DUF6 cylinders at ETTP. An addition must be included in this section to discuss the Agreed Order signed by DOE and Kentucky Department for Environmental Protection in October 2003 regarding the implementation of a DUF6 management plan for cylinders stored at PGDP, as well as other issues associated with the proposed DUF6 conversion facility at Paducah. D0023-1

2. **Section 1.1.2, Page 1-4 and 1-5:** See Specific Comment #1 above. D0023-2

3. **Summary, Section S.5.2.2, Page S-30:** Impacts from a certain type of accident were investigated by DOE but not included in the draft EIS due to security concerns. The document states that a classified appendix will be provided to proper state and local officials for review and comment. Please identify which "proper state and local officials" will review the classified appendix. D0023-3

4. **Summary, Section S.5.2.2, Page S-31:** Current UDS facility design includes the storage and use of anhydrous NH_3 for production of hydrogen for the conversion process. Conversion facility scenarios involving the accidental release of NH_3 were evaluated. However, the document states that the use of natural gas for hydrogen production is being investigated, which would eliminate the need for NH_3. DOE must define in the EIS the specific process and products that will be utilized in the conversion facility in order to complete a relevant evaluation of environmental impacts. D0023-4

5. **Summary, Section S.5.19, Page S-45:** Please clarify the statement that the land used to dispose of conversion products would be an "irreversible and irretrievable" commitment of resources. The Kentucky Division of Waste Management (KDWM) does not agree with the designation of this land as an "irreversible and irretrievable resource" or the limitations implied regarding any natural resources damages that could occur due to construction and operation of the conversion facility. D0023-5

6. **Section 1.1.1, Page 1-4:** The first paragraph describes the agreement between DOE and USEC signed in June 2002 to transfer ownership of up to 23,300 tons DUF6 from USEC to DOE between 2002 and 2006. A clear determination must be made with regards to who will be responsible for management of these cylinders. The EIS must be revised to indicate if DOE plans to manage these cylinders under the 2003 DUF6 Agreed Order between Kentucky and DOE. D0023-6

7. **Section 2.4.2.3, Page 2-30:** This section outlines safety considerations related to cylinder transportation. The highest risk is shown to be associated with accidents involving NH_3 or HF shipments. Please include consideration of risks associated with shipping UF_6 cylinders from ETTP to the selected conversion sites. D0023-7

8. **Section 3.1.5.1, Page 3-15:** The sixth paragraph states "In 2000, the maximum uranium concentration from DOE outfalls was 0.09 mg/L. This value is below the derived concentration guide of 600 pCi/L." Please state these values in common units in order to provide a clear comparison between the contamination level and the regulatory limit. D0023-8

9. **Section 5.1.1.1, Page 5-3:** Table 5.1-1 lists frequency of inspections, monitoring, and maintenance for cylinders for 2003-2007. This section must provide clarification that inspection and maintenance activity schedules will be consistent with requirements of the 2003 DUF6 Agreed Order between Kentucky and DOE. D0023-9

10. **Section 5.2.1.4, Page 5-28:** This section discusses wastewater that will be produced during construction, treated prior to release, and discharged to a KPDES permitted outfall or to an existing sewer. It is further stated that dilution will occur once the discharge reaches Bayou Creek and the Ohio River, and therefore contamination of surface water from the discharge will be negligible. This section must be edited to state that the discharge will meet KPDES limits **at the outfall**, regardless of how much dilution is expected to occur downstream. D0023-10

11. **Section 5.2.2.3.1, Page 59:** This section indicates that fugitive dust emission concentrations from conversion will approach the National Ambient Air Quality Standards NAAQS for PM2.5. Elaborate on emission control methods, operational restrictions, or monitoring that will be implemented to assure that the NAAQS are not exceeded. D0023-11

12. **Section 5.2.2.4.1, Page 5-65:** The EIS maintains there will be no process wastewater discharge from the facility during conversion and that all blowdown water would be circulated back into the process with no planned discharges. Thus impacts on surface water are assumed to be negligible. The EIS must address the possibility and impacts of an accidental or emergency discharge of process water or blowdown water that could affect surface water. Please specify the distance to potential receiving waters and possible contaminants of concern. D0023-12

13. **Section 5.2.2.4.1, Page 5-65:** The third paragraph describes an accident scenario in which an earthquake would cause the rupture of an aboveground pipeline carrying liquid HF from the conversion building to the storage building. The scenario assumes that "because response and cleanup would occur within a relatively short time after the release (i.e. days or weeks), the HF would have little time to migrate into the soil. Removal of the contaminated soil would prevent any problems of contamination of either surface or groundwater resources. Therefore, there would be no impacts to surface water or groundwater from this type of accident." If cleanup was impeded by adverse weather conditions, then stormwater runoff and/or infiltration could transport contaminants to surface water or groundwater within a short time. This section must be edited to consider the possibility that such an accident could endanger surface water and groundwater quality. D0023-13

14. **Section 5.2.2.4.1, Page 5-65:** Define the origin and expected constituents of the "sanitary wastewater" that is proposed to be treated in the wastewater treatment plant and discharged to Bayou Creek. D0023-14

15. **Section 5.2.4, Page 5-89:** This section discusses the impacts associated with the use and potential sale of conversion byproducts. However, the discussion fails to consider time periods for storage of the byproducts before disposal or reuse. Estimates of storage times must be given along with consideration of how storage of the conversion products may impact human health and the environment. D0023-15

16. **Section 5.2.4, Page 5-90:** This section does not provide an adequate description of cylinders that might be transported from ETTP to Paducah for conversion. DOE must provide more information regarding contents and contaminants of cylinders compared to the cylinders currently stored at PGDP along with assessment of potential environmental impacts. D0023-16

17. **Section 5.9, Page 5-118:** This section fails to adequately address impacts from future decommissioning and decontamination (D&D) of the facility. Further details must be provided regarding disposal of waste from D&D of the facility, since portions of the waste would likely be classified as hazardous or mixed waste. D0023-17

General Comments:

1. The EIS states that no hazardous wastes will be disposed of or treated on site at the conversion facility, nor will any hazardous wastes that are generated during conversion be stored on site for more than 90 days. Therefore, UDS assumes that no hazardous waste permit will be required. Since DOE does not treat DUF6 as a hazardous waste, the EIS does not evaluate the need to have a hazardous waste permit for converting/treating the DUF6. In addition, the no action alternative considers only LLW and LLMW that would be generated during construction from maintenance of cylinder yards and cylinder painting and scraping operations. It does not consider management of the DUF6 itself as a mixed waste. The Division disagrees with these assumptions, based on Condition 7 in the 2003 DUF6 Agreed Order which states: "The Cabinet (Natural Resources and Environmental Protection Cabinet) alleges that the DUF6 generated by DOE and USEC is a "Waste" as defined by KRS 224.010(31) and is subject to the waste determination requirement in KRS 224.46-510". D0023-18[2]

2. The EIS proposes that if the HF conversion by-product cannot be sold to the chemical industry, it will be converted to CaF_2 for sale or disposal. Generation of large volumes of CaF_2 would have significant impacts on transportation and waste management plans. DOE has not determined whether CaF_2 would need to be disposed of as a non-hazardous solid waste, or a LLW. Additionally, DOE has not determined whether CaF_2 would be considered DOE waste if the conversion was performed by a private commercial enterprise. DOE must edit the EIS to adequately address these issues. D0023-19

3. Comments previously issued by KDWM for the PEIS should be considered applicable to this EIS. KDWM requests that DOE respond to these comments as relevant to the EIS. D0023-20

4. The EIS should be expanded to discuss the potential to accept DUF_6 cylinders from USEC due to continued conversion operations at PGDP, and due to cylinder transport from ETTP. The EIS should discuss the impacts of longer operation and the potential need to increase the size of the Paducah Facility to deal with the additional DUF_6 cylinders. In addition, specify where additional cylinders would be stored in the event that cylinders are transported from ETTP to Paducah for conversion. D0023-21

[2]Comment withdrawn by the Kentucky Division of Waste Management on March 12, 2004 (Hatton 2004).

ERNIE FLETCHER
GOVERNOR

CABINET FOR HEALTH AND FAMILY SERVICES
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JAMES W. HOLSINGER, JR., M.D.
SECRETARY

MEMORANDUM

To: **Lori Veal,**
Kentucky Division of Waste Management

From: **Robert L. Johnson, Manager**
Radiation Health & Toxic Agents Branch

Date: **January 29, 2004**

Subject: **REVIEW PADUCAH DUF6 DRAFT ENVIRONEMNTAL IMPACT STATEMENT**

The Radiation Health and Toxic Agents Branch (RHTAB) has completed a preliminary review of the Paducah Draft DUF6 Environment Impact Statement for the HF and CaF2 separation process. The RHTAB's comments are attached and will be further clarified with comment from UK .

Cc: Eric Scott. REMS
Steve Hampson, UK
Tuss Taylor, NREPC

PADUCAH DEIS Comments
January 29, 2003
Page One

1. **Verification of Compliance with the DOE Public Dose Limit, page E-10, second paragraph.** Please provide a copy of the basis for presumption of compliance decision and how the DOE demonstrated compliance with the a public dose limit of 100 mrem TEDE in a year by limiting the maximally exposed member of the public to 25 mrem.. I have not had the opportunity to review any position determination related to this method of compliance verification and would be interested in reviewing the document before agreeing to the general process identified in the Draft environmental Impact Statement. D0023-22

2. **Characterization of HF and CaF2 Produced during conversion, Page E-5, third paragraph, and Page E.4.1, first paragraph.** Both references indicate Framatome Advanced Nuclear Power, Inc. (ANP) is licensed by the Nuclear Regulatory Commision (NRC). I question DOE's capability to commercially market HF and CaF2 developed during conversion without licensing due to the amount of Uranium present in bulk, even though depleted Uranium. Further research will be required. D0023-23

Document D0024

Central Midwest Interstate Low-Level Radioactive Waste Commission
1035 Outer Park Drive ❖ Springfield, IL 62704 ❖ 217/785-9982

January 29, 2004

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Log No. 142098
Date Received FEB 3 2004
File Code

Gary S. Hartman
Oak Ridge Operations
P.O. Box 2001
Oak Ridge, TN 37831

Re: The U.S. Department of Energy's Draft Environmental Impact Statements for the Construction and Operation of Depleted Uranium Hexafluoride Conversion Facilities at the Paducah, KY and Portsmouth, OH Sites

Dear Mr. Hartman:

The Central Midwest Interstate Low-Level Radioactive Waste Commission is concerned about the safe management of low-level radioactive waste within the borders of the two-state compact region of Illinois and Kentucky. While the Commission acknowledges that the DUF_6 addressed in these Draft Environmental Impact Statements (DEIS's) is federal waste not subject to the Commission's jurisdiction, it is concerned for its safe management nonetheless and offers these comments on the two DEIS's. Unless specifically noted, the comments contained in this letter apply to both DEIS's.

D0024-1

Section 2.2.4 of the DEIS's states "It is unknown how many DUF_6 cylinders do not meet DOT transportation requirements." This section should reference the LLNL report *Depleted Uranium Management Program; the Engineering Analysis Report for the Long-Term Management of Depleted Uranium Hexafluoride* which estimates that half to all of the DUF_6 cylinders at the ETTP do not meet Department of Transportation (DOT) requirements. Failure to do so might indicate that DOE is trying to understate the magnitude of the effort

Dr. Edward S. Ford, Chairman ❖ Gary N. Wright, Secretary-Treasurer ❖ Philip J. Rock, Commissioner ❖ Marcia S. Marr, Executive Director

Gary S. Hartman
Page 2
January 29, 2004

required to render the East Tennessee Technical Park (ETTP) cylinders roadworthy or the need to seek a variance from DOT. D0024-1 (cont.)

As part of the transportation analysis, the DEIS's do not address the impacts to local first-responders who would respond to any transportation accident. Both DEIS's indicate that there will be a significant number of DUF_6 and UF_6 shipments from the ETTP to either Portsmouth or Paducah, possible DUF_6 shipments from Paducah to Portsmouth, and possible DUF_6 shipments from a yet to be developed enrichment facility to one or both of the conversion facilities. D0024-2

The analysis presented exposure scenarios for both low and high consequence accident events. Various assumptions must have been made regarding the nature of these events and the amount of material released to the environment. However, the DEIS's are silent with regard to how these events are managed from a practical perspective. Police, emergency medical personnel and firefighters respond to traffic accidents. What were the assumptions of their ability in terms of training, experience and available resources to deal with these potential accidents? D0024-3

The DEIS's are silent with respect to the need for providing assistance to these first responders. DOE should commit to provide assistance in the form of training and equipment for local first responders along the transportation routes selected for DUF_6 and UF_6 shipments. Without this assistance, some of the low-consequence events could become high-consequence with significant impact to public health and the environment.

DOE has provided "training the trainer" assistance to the Commonwealth of Kentucky, which had the net effect of training over 500 first responders in Kentucky. However, these responders are not physically equipped to respond to a potential transportation accident. DOE needs to provide direct financial assistance to local governments so they may purchase the equipment necessary to respond in case of an accident. Since these shipments would be "campaigned", the specific transportation routes would be defined such that the appropriate governmental entities can be easily identified. In addition, DOE should consider providing this assistance to local governments and first responders located along designated routes for the shipment of hazardous conversion products. D0024-4

Gary S. Hartman
Page 3
January 29, 2004

The DOE should also schedule the DUF_6 and UF_6 shipments such that they would travel in convoys of approximately 10 trucks. This would allow Kentucky to more effectively manage its resources and escort these shipments through the state. D0024-5 With DOE acknowledging that half to all of the canisters at the ETTP do not meet DOT standards, it is incumbent on the state to ensure that these shipments are properly inspected prior to traveling on Kentucky roadways. D0024-6

The Commission thanks the DOE for the opportunity to provide comment on these DEIS's. Any question you may have pertaining to these comments may be directed to Michael Klebe, Illinois Emergency Management Agency, at 217-785-9986.

Sincerely,

Edward S. Ford
Chairman

Document D0025

JAN. 30. 2004 42AM ORDER SERVICE NO. 883 P. 2

MITCH McCONNELL
KENTUCKY

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United States Senate

MAJORITY WHIP

COMMITTEES:
AGRICULTURE
APPROPRIATIONS
SUBCOMMITTEE ON FOREIGN OPERATIONS
CHAIRMAN
RULES AND ADMINISTRATION

January 30, 2004

Mr. Gary Hartman
DOE-ORO Cultural Resources Management Coordinator
DOE Oak Ridge Operations
P.O. Box 2001
Oak Ridge, Tennessee 37831-2001

RE: DOE/EIS-0359
Draft Environmental Impact Statement for Construction of a Depleted Uranium Hexafluoride Conversion Facility in Paducah, Kentucky

Dear Mr. Hartman:

I understand that DOE is in the process of collecting comments on the Draft Environmental Impact Statement (DOE/EIS-0359) for the construction of the congressionally mandated depleted uranium hexaflouride (DUF_6) conversion facility in Paducah, Kentucky. This is an important step in the process of issuing a Record of Decision to finalize the EIS, which is critical to ensure that the construction of this important facility can begin on time. D0025-1

You may be aware that I sponsored Public Law 105-204 and provisions in Public Law 107-206 that require DOE to construct and operate DUF_6 conversion facilities in Paducah, Kentucky and Portsmouth, Ohio. More specifically, P.L. 107-206 expressly requires that construction of these facilities begin by July 31, 2004, and continue expeditiously thereafter. In recognition of the "two plant" mandate, DOE has completed Draft Environmental Impact Statements for both locations. The Draft EIS for Paducah assesses environmental risks associated with the construction and operation of the facility, related maintenance, and D&D, as well as materials and waste transportation issues.

Each of the sites under consideration for the Paducah conversion plant lie within the confines of the Paducah Gaseous Diffusion Plant reservation, where DOE currently maintains nearly 40,000 aging cylinders of DUF_6. Congress has directed DOE to process this DUF_6 into materials more suitable for long-term storage, use, or disposal. This will remove from Paducah the existing DUF_6 inventory, which currently poses significant inspection, maintenance, and security challenges. D0025-2

It is long past time to remove the environmental and public health threats this waste poses to our citizens. I respectfully urge the DOE to finalize the EIS and issue a Record of Decision so that construction can begin on the Paducah DUF_6 Conversion Facility by the deadline mandated by Congress. D0025-3

Sincerely,

MITCH McCONNELL
UNITED STATES SENATOR

MM/bdb

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FEB-02-2004 16:42 FROM:US EPA REGION 5 312 353 5374 TO:630 252 4611 P.2

Document D0026

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

FEB 0 2 2004

REPLY TO THE ATTENTION OF

B-19J

Mr. Gary Hartman
DOE-ORO Cultural Resources Management Coordinator
U.S. Department of Energy- Oak Ridge Operations
P.O. Box 2001
Oak Ridge, TN 37831

Subject: Comments on the Draft Environmental Impact Statement for the Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility.

Dear Mr. Hartman:

The U.S. Environmental Protection Agency Region 5 (U.S. EPA) has reviewed the Department of Energy Draft Environmental Impact Statement (DEIS) for the Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Portsmouth, Ohio site. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. The CEQ's number for this DEIS is 030540.

The proposed action is to convert the Department of Energy's Depleted Uranium Hexafluoride (DUF_6) inventory at the Portsmouth site to Triuranium Octaoxide (U_3O_8). The EIS assessed the potential environmental impacts from the following construction activities: 1) Construction, operation, maintenance, and decontamination and decommissioning (D&D) of the proposed conversion facility; 2) Transportation of uranium conversion products and waste materials to a disposal facility; 3) Transportation and sale of the hydrogen fluoride (HF) conversion co-product; and 4) Neutralization of HF and Calcium Fluoride (CaF_2) and its sale or disposal in the event that the HF co-product is not sold.

Potential environmental impacts were assessed by examining all of the activities required to implement each alternative. Potential long-term impacts from cylinder breaches occurring at Portsmouth and East Tennessee Technology Park (ETTP) were also estimated. For each alternative, potential impacts to workers, members of the general public, and the environment were estimated for both normal operations and potential accidents.

Because of the chemical and radioactive nature of the materials processed and produced and the fact that the conversion facility would be built on a previously disturbed industrialized site, the potential impact to the health of workers and the public is one of the areas of primary

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concern.

The No Action alternative is the storage of DUF_6 cylinders indefinitely in the yards at the Portsmouth and ETTP sites with the continued cylinder surveillance and maintenance activity. Impacts were evaluated through the year 2039 and potential long-term (beyond 2039) impacts were also evaluated.

Three action alternatives, besides the No Action Alternative, were evaluated. The only difference in alternatives was the location of the plant within the Portsmouth site.

Alternative A, the preferred alternative, has three existing structures that were formerly used to store chemicals. The site has already been environmentally disturbed; therefore no new impacts will be likely to occur.

Alternative location B was considered, but a gas centrifuge plant is now going to be constructed at the site, so that location is not a viable alternative anymore.

Alternative location C consists of a gently rolling grass field and would cause more environmental disturbances than the preferred alternative.

Our comments about the project as described in the DEIS include:

- The three Administrative Consent Orders governing environmental restoration at the Porthsmouth plants should be discussed in the FEIS;

- The cumulative impacts of constructing and operating the newly announced centrifuge facility for uranium enrichment should be discussed in the context of the DUF_6 facility;

- The FEIS should describe DOE's confidence that adequate off-site disposal capacity will exist to accept wastes from the DUF_6 process;

- Transportation of wastes should be more thoroughly discussed;

- The FEIS should be explicit that the Radionuclide National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for DOE facilities will apply to the DUF_6 facility;

- Calculations provided and models cited should use consistent units.

U.S. EPA rates "A," the preferred alternative, **EC-2, Environmental Concerns - Insufficient Information.** Please see the enclosure for a description of U.S. EPA's ratings. An EC-2 rating indicates that our review has identified potential environmental impacts of the proposal that should be avoided to fully protect the environment, and that more information should be provided to fully assess the impacts of the proposal. Our detailed comments are included in an additional enclosure. D0026-8

We appreciate the opportunity to review the DEIS. Please send only three copies of the final EIS to this office at the same time it is officially filed with our Washington, D.C. Office. If

you have any questions, please call Joana Bezerra at (312) 886-6004, or send email to bezerra.joana@epa.gov.

Sincerely,

Kenneth A. Westlake
Chief, Environmental Planning and Evaluation Branch
Office of Strategic Environmental Analysis

Enclosures (2): Summary of Rating Definitions and Followup Action
Detailed Comments

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION*

Environmental Impact of the Action

LO-Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS sate, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate
The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alterative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information
The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment

USEPA Comments on the Depleted Uranium Hexafluoride Conversion Facility DEIS in Portsmouth, Ohio. **February 2, , 2004**

The Final EIS should indicate that environmental restoration activities at the Portsmouth Gaseous Diffusion Plants (PORTs) are governed by three Administrative Consent Orders: 1) the 1989 Ohio EPA Consent Decree; 2) the 1997 Three Party Administrative Order on Consent (U.S. EPA, Ohio EPA and DOE); and 3) the 1999 Ohio EPA Administrative Order for Integration. A summary and overview of these and other legal orders relevant to PORTs should be provided. D0026-1

On January 12, 2004, USEC, Inc., announced that a new American Centrifuge uranium enrichment plant (ACEP) will be constructed and operated at Portsmouth. The summary section of the Final EIS should address the potential cumulative effects of that new plant will have on the overall environmental impacts of the DUF_6 facility. D0026-2

If the conversion facility will have a role beyond processing the current inventory of DUF_6 and non-DUF_6 cylinders, the Final EIS should address the conversion facility's potentially longer operation period and processing capacity. The EIS should also address the potential for facility upgrades that would accommodate increased processing capacity should the need arise. The concern is whether the EIS is comprehensive enough to accommodate future upgrades to the conversion facility, without having to revisit the NEPA process again. D0026-3

Disposal facilities each have unique waste acceptance criteria (WAC) that dictate what can be accepted for disposal. For what is currently known about the two representative disposal facilities (Envirocare and NTS - Nevada Test Site), and the anticipated profiles of the conversion products (depleted U_3O_8, CaF_2, emptied cylinders), the Final EIS should describe the level to which DOE is confident that the representative disposal facilities have both the WAC limits and the physical capacity to accept what will be an enormous quantity of conversion product waste. D0026-4

The Draft EIS suggested that 2,200 railcar shipments could be sent to NTS. Rail access to NTS and its existing disposal areas currently does not exist. The Final EIS should offer additional discussion of the transportation process and related impacts. D0026-5

When regulatory compliance assurances are provided throughout this document, the Radionuclide National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Radionuclide Emissions for United States Department of Energy (USDOE) Owned or Operated Facilities, found at 40 CFR 61, Subpart H, are not always adequately identified. This outside oversight and compliance demonstration helps to provide the public with the knowledge they are adequately protected under this regulation as long as compliance can be clearly demonstrated. D0026-6

Measurement of parameters in calculations and models cited must be in consistent units to avoid confusion and to better assess the conservatism and adequacy of the methodologies used for evaluating the relative risks for this project. D0026-7

FROM :USEC TO : 630 252 4611 2004,02-02 15:38 #391 P.02/05

Document D0027

USEC
A Global Energy Company

February 2, 2004

Gary S. Hartman
DOE-ORO Cultural Resources Management Coordinator
U.S. Department of Energy - Oak Ridge Operations
P.O. Box 2001
Oak Ridge, TN 37831

RE: DEIS for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Portsmouth, Ohio Site (DOE/EIS - 0360)

Dear Mr. Hartman:

Attached please find specific comments on the referenced DEIS.

As a general comment, United States Enrichment Corporation (USEC) and the DOE-PORTS office have worked together to address issues at the Portsmouth Gaseous Diffusion Plant (PORTS) for more than 10 years. They coordinate many of their activities to assure appropriate site reporting and response to the various environmental authorities. This close coordination has benefited both DOE and USEC and has assured compliance with applicable environmental requirements. We would be glad to arrange for a meeting at PORTS to discuss the impacts the UDS Conversion Facility may have upon other activities at PORTS and to include those facilities in our coordination of activities affecting the site. D0027-1

Thank you for the opportunity to make these comments.

Sincerely,

T. Michael Taimi
Director, Environmental Affairs

Attachment

USEC Inc.
6903 Rockledge Drive, Bethesda, MD 20817-1818
Telephone 301-564-3200 Fax 301-564-3201 http://www.usec.com

FROM :USEC TO : 630 252 4611 2004,02-02 15:39 #391 P.04/05

USEC
A Global Energy Company

February 2, 2004

Gary S. Hartman
DOE-ORO Cultural Resources Management Coordinator
U.S. Department of Energy - Oak Ridge Operations
P.O. Box 2001
Oak Ridge, TN 37831

RE: DEIS for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Paducah, Kentucky Site (DOE/EIS - 0359)

Dear Mr. Hartman:

Attached please find specific comments on the referenced DEIS.

As a general comment, United States Enrichment Corporation (USEC) and the DOE-GDP office have worked together to address issues at the Paducah Gaseous Diffusion Plant (PGDP) for more than 10 years. They coordinate many of their activities to assure appropriate site reporting and response to the various environmental authorities. This close coordination has benefited both DOE and USEC and has assured compliance with applicable environmental requirements. We would be glad to arrange for a meeting at PGDP to discuss the impacts the UDS Conversion Facility may have upon other activities at PGDP and to include those facilities in our coordination of activities affecting the site. D0027-1 (cont.)

Thank you for the opportunity to make these comments.

Sincerely,

T. Michael Taimi
Director, Environmental Affairs

Attachment

USEC Inc.
6903 Rockledge Drive, Bethesda, MD 20817-1818
Telephone 301-564-3200 Fax 301-564-3201 http://www.usec.com

Draft Environmental Impact Statement comments for *Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility* at the Portsmouth, Ohio, Site

1. Section 2.5 - USEC concurs with the DOE's preferred location (Location A) to construct and operate the proposed DUF6 conversion facility. D0027-2
2. General Comment - Reference to any USEC Advanced Technology siting decisions for the American Centrifuge need to reflect that the siting decision has been made and that PORTS has been selected. D0027-3
3. Section 3.1.3.2 - The Title V air permit for USEC operations has been issued and was effective August 21, 2003. D0027-4
4. Table 6.1 States: "The DUF6 conversion facility would not discharge industrial process wastewater. Therefore, an NPDES Permit for Process Water Discharge would not be required." It is possible that a facility with a wet scrubber, water-cooled heat exchangers, and water spray cooling may have a process wastewater stream. Sanitary water use from daily activity and shower rooms will require discharge through a NPDES permitted treatment process such as the onsite USEC operated process. It is likely that UDS will be required to obtain a NPDES permit that will require an internal monitored outfall before discharging into the USEC X-6619 permitted sewage treatment plant. D0027-5
5. Section 3.1.6.2 states "greater biological diversity exists upstream of the plant discharges than downstream." This is not consistent with the following Ohio EPA reports that state: "aquatic habitat quality in Little Beaver Creek declines upstream of PORTS discharges due to low and/or intermittent water flow." D0027-6
   - *Biological, Fish Tissue and Sediment Quality in Little Beaver Creek, Big Beaver Creek, Big Run Creek and West Ditch, Piketon Ohio.* May 24, 1993, OEPA Technical Report EAS/1993-5-2
   - *Biological and Water Quality Study of Little Beaver Creek and Big Beaver Creek – 1997*, June 4, 1998, OEPA Technical Report MAS/1998-5-1
6. General Comment: There is no specific reference as to how waste material with radionuclides other then uranium will be addressed. In particular, heels material is likely to contain TRU, and long-lived thorium isotopes (^{228}Th, ^{230}Th, ^{232}Th). The EIS needs to address containment and contamination control of this material. D0027-7
7. General Comment: There is no specific reference to how Radionuclide NESHAPs will be implemented. UDS needs to consider how they will quantify their radionuclide emissions and how they will coordinate their annual reporting with other site residents. Currently the Radionuclide NESHAPs dose limit applies to the site as a whole. If UDS pursues a "go it alone" approach, then USEC and DOE will be UDS's public and UDS will be USEC and DOE's public for whom dose needs to be determined. D0027-8
8. Table 6.1 States: "UDS will prepare and submit an Annual Hazardous Chemical Inventory Report each year, if hazardous chemicals have been stored at the DUF6 conversion facility site in amounts that exceed threshold quantities during the preceding year." Chemical threshold quantities are derived from the aggregate of all Reservation residents. Currently DOE provides USEC a monthly chemical inventory list of materials managed by various DOE Sub-Contractors resident on site. USEC compiles the lists monthly to determine if a threshold quantity has been exceeded. USEC then files the Annual Hazardous Chemical Inventory Report for the site. D0027-9

DOE/EIS 359 Comments

Section	Comment/Recommendation	
General Comments	HF production is discussed in several areas but emissions are not addressed. USEC's current air pollution permit contains limits on HF emissions that utilize the full allocation for the site. The EIS should address how HF emissions are to be treated or include a zero emission plant design.	D0027-10
	There is no specific reference as to how waste material that includes radionuclides and long-lived thorium isotopes other than uranium will by handled. USEC experience indicates transuranics and technetium may remain in the heel material after transfer of UF_6 from the cylinder, especially in cylinders that were previously used for handling of reactor returns. The EIS should address waste material containing transuranics and technetium.	D0027-11
	There is no specific reference to how radionuclide NESHAPs will be implemented. Currently radionuclide NESHAPs dose limit applies to the site as a whole. If UDS pursues a stand-alone approach, then USEC and DOE will be UDS's "public" and UDS will be USEC's and DOE's "public" when calculating and reporting dose to the public. The EIS should address the method of compliance with 40 CFR 61 regulations.	D0027-12
	Reference to any USEC Advanced Technology siting decisions for the American Centrifuge should reflect that the siting decision has been made and that the Portsmouth Gaseous Diffusion Plant site has been selected.	
S.5.4, Table 5.6, 3.1.3.3	The EIS indicates emissions of particulate matter from construction activities may exceed ambient air quality standards. Control measures will be applied to minimize the particulate emissions. The EIS should address any air or water quality impacts from applying the particulate matter control measures.	D0027-13
Fig. 2.2-2	Process descriptions indicate the addition of nitrogen and ammonia to the systems but do not mention whether NOx will be generated in significant quantities. The EIS should discuss the impact of introduction of nitrogen bearing compounds.	D0027-14
S.5.16	The cumulative radiological exposure as compared to the DOE limit is discussed but there is no mention of exposure compared to 40 CFR 61 and 40 CFR 190 limits. The EIS should discuss compliance with EPA limits on radiological exposure.	D0027-15
3.1.3.2	USEC does not have a Title V Permit. Sentence should be revised to so indicate.	D0027-16
3.1.9, 5.3.2	USEC does not manage the DOE DUF_6 cylinders and therefore does not handle waste generated from those processes. Delete these references.	D0027-17
5.2.1.4.1	The EIS indicates water is used during construction and that wastewater will be treated at the wastewater treatment plant. The wastewater treatment plant is not shown in process schematics. The EIS should be specific on where the wastewater will be treated and indicate on process drawings.	D0027-18
Table 5.2-15	This Table mentions 24 hour concentrations of HF associated with operations of the facility. The KDEP standard is base on a 12-hour concentration. The EIS should discuss compliance during normal operation and during accident conditions with the KDEP 12-hour limit.	D0027-19
Table 5.2-19 and Table 5.6-3	The amount of fuel and natural gas listed in these tables are not included in the general process discussions of air emissions and permitting. The EIS should discuss this issue.	D0027-20
Table 6-1	This Table indicates UDS will prepare an Annual Hazardous Chemical Inventory report each year. Chemical threshold quantities are derived from the aggregate of all residents on the DOE Reservation. Currently DOE provides USEC a monthly chemical inventory list of materials managed by various DOE sub-contractors on site. USEC then compiles the list to determine if a threshold quantity has been exceeded. The EIS method should address the current practices and how compliance will be demonstrated for the site.	D0027-21
	This Table indicates the DUF_6 conversion plant will not discharge process wastewater and therefore will not need a NPDES permit. USEC experience has been that a wet scrubber, water-cooled heat exchangers and water spray cooling will have a process waste stream. The EIS should address how these waste streams are to be treated or indicate a discharge permit will be required.	D0027-22

2/2/04 VJS

Document D0028

LOC INC
Oak Ridge Reservation
Local Oversight Committee

February 2, 2004

Gary Hartman
U.S. Department of Energy
Oak Ridge Operations Office
P.O. Box 2001
Oak Ridge, TN 37831

Subject: Draft Environmental Impact Statements (DEIS) for the construction and Operation of Depleted Uranium Hexafluoride (DUF6) Conversion Facilities at the Paducah, KY and Portsmouth, OH sites (DOE/EIS-0359 and -0360)

Dear Mr. Hartman:

The Citizens' Advisory Panel (CAP) of the Oak Ridge Reservation Local Oversight Committee, Inc. (LOC) concurs with the preferred alternatives presented for the two DEISs. D0028-1

The CAP's special concern is the removal of the DUF6 cylinders from East Tennessee Technology Park (ETTP). We are pleased that this action is to be completed by 2008 prior to the deadline imposed by the Tennessee Department of Conservation and Environment Commissioner's order and so that the accelerated cleanup of ETTP can be accomplished in a timely manner. D0028-2

The cumulative impact portion of the Portsmouth DEIS should be updated to reflect the decision to site the centrifuge plant at Site B. D0028-3

We are pleased to have the opportunity to comment on these documents. If you have any questions, feel free to contact the LOC office at 483-1333.

Sincerely,

Norman A. Mulvenon

Norman A. Mulvenon
Chair, LOC Citizens' Advisory Panel

cc: LOC Register
LOC Board
LOC CAP
Steve McCracken, Assistant Manager for EM, DOE ORO
William Murphie, Manager, Portsmouth Paducah Project Office
John Owsley, Director, TDEC DOE-O
Pat Halsey, FFA Coordinator, DOE ORO
Amy Fitzgerald, City of Oak Ridge
David Mosby, Chair, ORSSAB

Document D0029

From: Vina Colley [vcolley@earthlink.net]
Sent: Tuesday, February 03, 2004 4:50 PM
To: DUF6_Ports
Subject: Testimony for the record..

Thank you for the opportunity to testify about the DU conversion plant. *Facility Accidents Involving Radiation or Chemical Release* on page 2-29 (2.4.2.2.2) DOE/EIS-0360 Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility dated December 2003. D0029-1

Under the alternative, it is possible that human-error could cause an accidental release of more deadly radiation and toxic chemicals into the environment affecting both the workers and the general public. For the Piketon,OakRidge and any other plant to ship these cylinders off-site and continue moving these cylinders around, whether by train or by truck, not only provides the terrorists with a moving target as well as increases the threat of nuclear terrorism. We shouldn't ship these potential "dirty bombs" of poisonous hazards waste cylinders because there will be unnecessary risks of exposure to the workers and the public. . D0029-2

Many of these cylinders contain plutonium (PU) and Neptunium NEP in them any many other Transuranic elements. Past history has also revealed shoddy record keeping at the Piketon plant. We find the records on these cylinders often disappear or the government simply fails to follow necessary safety precautions, which can cause even more serious problems once these depleted uranium (DU) cylinders become heated up. D0029-3

Furthermore, where will we put all the toxic waste? How many more people will ultimately be contaminated with PU and NEP and many other daughter products? Who will want to store such nuclear waste? And how much more waste from these potential "dirty bombs" will be left over, which further increases the threat of nuclear terrorism? The scope of this work is to push forward into unknown territory. Performance at the Piketon plant over the past 50 years has been based solely on government secrecy and lies. Recent statements being made by government contractors vying to build two new plants at Piketon is also base on similar lies that we've all heard before.

Telling local schools teachers, media and all local business owners that these new jobs will be safe and better than before is simply another LIE! The truth is we the people of the United States are engaged in a war on terrorism. The government has even lied to us about why we were going to war against Iraq (there were no weapons of mass destruction in Iraq). We are Americans and we have the right to know the truth about health hazards and other potential threats that the promise of these new jobs will bring with them into Piketon, into each of our communities, even into our very own backyards! D0029-4

Many of you know what serious harm will come from the DU conversion plant or from the Centrifuge, but some of you don't. If the Piketon community will still be operating a nuclear waste storage facility then everyone in the Piketon community should be told the truth that the Portsmouth Gaseous Diffusion will be a conversion waste storage plant. In the end you can expect to find little work, but more toxic, hazardous chemicals coming through our area and contaminating our community. We might suggest that as a sign of good faith that the government buys up the homes leading into the plant if they still intend to build these two hazards plants. D0029-5

It is high time for the DOD/DOE to abandon their Nazi mentality and remember their crimes against humanity. Thousand of American workers that you lied too became made sick as if Piketon was a Nazi concentration camp and we were your holocaust victims. The ghosts of thousands of former plant workers and eventually the ghosts of those who are now dying after deadly exposures from the Portsmouth Gaseous Diffusion plant will certainly come back to haunt you in the end. Not only here, but at other DOE/DOD site across this country! If you don't believe in God and the Day of Judgment, the Devil and hell, you and your families will have an eternity to think about your crimes against humanity. D0029-6

Cancer and heart problems around the Portsmouth Gaseous Diffusion plant are extremely high. Thousands of community residents have not been given any compensation for their cancers or other radiation-induced illnesses, either. Like the Nazis, you shall stand before God Almighty with their blood on your hands too.

Additional threats that the Piketon plant poses include several earthquake tremors (at least 5-7 on the scale) that we have had. We live in a flood plain zone. Tornados have also been known to touch down within a couple miles from the Portsmouth Gaseous Diffusion plant, too. Any of these so-called "acts of God" can certainly cause the Piketon nuclear facility to explode like Chernobyl. D0029-7

Two aquifers beneath the Piketon nuclear plant supplies our groundwater. One is shallow and the other aquifer is D0029-8

deep. DOE reports the shallow aquifer is contaminated, with (TCE)***trichloroethylene*** being the main contaminant of concern. The other aquifer is not of sufficient volume to be a source of drinking water. DOE maintains that no groundwater has migrated offsite, which we know to be a bare face lie. Arguments similar to these were used at the Pantex plant in Texas, where a shallow"perched" aquifer was supposedly confined, but has since been found to be leaking into the much larger Ogallala aquifer, despite DOE's earlier false assurances to the American public that all is safe. (TCE) trichoroeyhylene is contaminating the Ogallala Aquifer, which was outlined in the Radioactive Waste Management Associate groundwater report February 2002 on groundwater movement of the Portsmouth Gaseous Diffusion Plant. D0029-8 (cont.)

Below is a few reason that the Portsmouth Gaseous diffusion should be investigated before we bring more nuclear jobs to Piketon, Ohio. DOE/DOD haven't even address the off site problems from the past 50 years of production yet. D0029-9

The report of Groundwater Movement at the Portsmouth Gaseous Diffusion Plant by Marilynn dela Merced, Beat Hintermann and Marvin Resnikoff for the Uranium Enrichment Project and PRESS February 2002 should be thoroughly investigated before anyone should begin pushing the idea of creating more dirty jobs for the area..We will need to have independent scientists looking at the problems here first in order to hold someone within the U.S. government, within the Piketon nuclear plant accountable before beginning construction of the Depleted Uranium Hexafluoride Conversion Facility at Piketon, Ohio. D0029-10
We will also need to look much closer at the on site and off site contamination problems from the past 50 years of productions at the Piketon plant, too.
POTENTIAL COMMUNITY HEALTH THREAT POSED BY RADIATION IN CREEK FLOWING FROM PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKETON, OH. Dr. Paschenko has collected over 100 samples of water and soil around the plant, which will be analyzed in SSGR's laboratory in the coming months. However, in the first stage of analysis, Paschenko discovered levels of beta activity in samples of foam that were at least 100 times higher than normal background radiation levels. This foam was collected in a creek that flows from the plant grounds along border of the community residents. We need more time to bring others into Piketon for additional independent studies in order to hold DOE and other government officials accountable. D0029-11

Members of (PRESS) Portsmouth/ Piketon Residents for Environmental Safety and Security have asked the Ohio Environmental Protection Agency (OEPA) and the company managing the Portsmouth Gaseous Diffusion plant many times to please post warning signs along the creeks that surround the Portsmouth Gaseous Diffusion plant located in Piketon, Ohio. Still to this day THERE ARE NO SIGNS! This alone is hard core evidence that clearly proves the OEPA blatant disregard for the value of human life and raises some serious concerns about their role as protectors of environmental safety. D0029-12

(PRESS) Portsmouth/Piketon Residents for Environmental Safety and Security have only used documents from the Portsmouth Gaseous Diffusion plants to publicly present every story about the problems at the Piketon, Ohio plant. Stories about the "Plutonium" which the company managing the Portsmouth Gaseous Diffusion plant consistently denies having on site, for example. Workers nationally at the DOE/DOD plants now have a compensation bill called EEOICPA. This bill is paying some cancer victims but not all cancer victims nor all illness. PRESS is asking for an audit and investigation of the Portsmouth Gaseous Diffusion Plant as well. If the recent findings of Sergie Paschenko, a well known Russia physicist, are validated community concern will quickly escalate. D0029-13
Once again this will provide additional hard-core evidence of the OEPA blatant disregard for the value of human life. Residents of the local community have not been informed that they have problems.
Furthermore, the site alert/alarms have not been sounded at the time of negative release of gases. On March 7, 1978 a 14 ton cylinder filled with liquid uranium hexafluoride was being hauled to a cooling site by straddle and lift cylinders. The cylinder lost over 21,00.00 lbs of uranium hexafluoride passing through a hole in the cylinder. The alarm should have sounded, but didn't! Again in August of 1980 the Cleveland Plain Dealer reported that: 2,500 pounds of uranium was lost down the west drainage ditch, which also collected "essentially all the uranium that precipitated from the plume". About 1,500 pounds of uranium escaped from the ditch into the nearby Scioto River.
The Cleveland Plain Dealer reported that at least 43 workers were known to have become contaminated. Goodyear officials speculated that most of the URANIUM HEX-A-FLUORIDE reacted with moisture in the air (FORMING HYDROGEN FLUORIDE - A POTENT ACID CAPABLE OF EATING THROUGH GLASS AND URANYL FLUORIDE) another uranium compound. In 1992 while moving and painting the Deplete Uranium cylinders a valve was D0029-14
broken. This cause more material to become airborne. Again there were NO ALARMS for community awareness.

Below are a few reports of the many off-site problems. The Portsmouth Gaseous Diffusion in Piketon, Ohio scored 54.6 for the NPL superfund. A minimum score of 28.5 score suggests it should have be placed on the Superfund. Portsmouth has never been placed on the NPL listing. D0029-15

Columbus Dispatch Feb 7, 1993
Michael B. Lafferty reported that the fish in streams surrounding the Portsmouth Gaseous Diffusion Plant in Piketon, Ohio have elevated levels of radiation according to an Ohio Environmental Protection Agency (EPA). The report was written in April of 1992 but was not released until the Dispatch asked for a copy for his story in 1993. The report stated the most comprehensive state evaluation of radiation and chemical pollution surround the nuclear fuels plant. Further example suggests the Plant's uranium hexafluoride is concentrated into a more radioactive form for use as fuel in reactors like those on submarines. Bomb grade uranium was process from 1954 until at least 1991or 92.

The dispatch further reported that tissue from fish around the plant have elevated levels of radiation. Stream sediments also displayed radiation levels FIVE TIMES above the acceptable levels. There were also increased levels of arsenic, cadmium, chromium and mercury.

At one measured site on Little Beaver Creek in Southern Ohio. The total uranium levels were twice the level at which normally corrective action are required.

In total, the test samples were collected at 18 sites in the Scioto River , Big Beaver and Little Beaver Creeks, Big Run and at the water course referred to in the report as Nursing home road. D0029-16

The EPA representative said in the 90's that there was a strong indication that radioactive and chemical pollutants would cause future problems. Biologists have been concerned about the uranium and heavy metals found in Little Beaver Creek. Most of the year, particularly during summer, wastewater from the plant supplies almost all flow into the streams.The EPA report also said they found radioactivity may be the results of the radioactive isotope potassium 40, which is considered an abnormally RADIOACTIVE substance that accumulates in bones like Strontium-90. Radiation could be the result of widespread technetium 99 contamination at the Portsmouth Plant, too. Bernie Counts speculated the heavy metals may be suppressing some insect populations as well.

Finally, the EPA report says heavy metals in the sediments were also at high concentration levels. The highly elevated concentrations of chromium, (about 72 parts per million) and also mercury (0.24 parts per million) were found where BiG Beaver Creek empties into the Scioto River and then into the OHIO RIVER, which is a primary source of drinking water for millions of unwitting Americans residing in cities further downstream, from Cincinnati all the way to New Orleans!

Vina Colley former worker and president of PRESS and National Advocate co-chair for National Nuclear Workers For Justice..

Document D0030

February 2, 2004

Gary Hartman
U.S. Department of Energy
Oak Ridge Operations
P.O. Box 2001
Oak Ridge, TN 37831

Public Comment in the matter of:
Draft Depleted Uranium Hexafluoride (DUF-6) Conversion Facility EISs

Comment Period Ends:
February 2, 2004

Please include the following questions and comments as part of the permanent file.

Charles Jurka
RT 3, Box 265A
Golconda, IL 62938

Vicki Jurka
RT 3,Box 265A
Golconda, IL 62938

Questions and Comments:

1. Pages 2-19 & 20: A proposed enrichment facility in New Mexico is attempting to broker a deal giving DOE responsibility for conversion of their DUF-6; for services similiar to those DOE provides USEC. This DEIS (Paducah) bases its assumptions on a 25 year operational period with a maximum 20,000 tons/yr (DUF-6) throughput. Should USEC and the New Mexico company divide future conversion needs between Paducah and Portsmouth, many of the already marginal assumptions, regarding human health and the environment, would become invalid either in terms of time, throughput, or both. Rumors persist that plans are already underway to increase the capacity of the Paducah conversion plant beyond the four parallel conversion lines. D0030-1

2. Page 4-11 (last para.): Many hypersensitive individuals were "created" due to an initiating dose that changed their normal immune response. D0030-2

3. Page 4-11 (last para.): A pregnant woman exposed during an "accidental" release may show no adverse response herself; inatead passing the toxic effect to the fetus. D0030-3

4. Page F9 (F.1.2): When addressing the chemical impacts of hydrogen fluoride, on human health, one important aspect, not considered in this DEIS (Paducah), is the propensity of inhaled HF to damage the heart and arteries once absorbed into the blood stream. For instance, the latent effects, for the general public, from the action of HF (fluoride) on the heart and vascular system could be considerable when calculating a dose of 0.02mg/kg-d (168 hours per week) over a 25 year period. Low doses of fluoride entering D0030-4

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the body, over a long period of time, might also produce arthritic conditions from the calcifying action on joints.

Also unclear is whether total regionally-emitted "fluoride" was considered when determining potential dose to the general public. One might expect that the coal buring plants, identified in Table 3.1-2 (page 3-7), would be additional regional-sources of fluoride emissions as well as PGDP and the Honeywell plant in Metropolis, Illinois. Further, in this instance, an important consideration should be the extent and duration of past fluoride exposure, for general public, living within 10 miles of PGDP. It is also unclear as to whether the HF dose-rate of 0.02mg/kg-d applies to all of the general public residing within the targeted 50 mile radius or to public in an unidentified radius. One would expect the impact to be greater the closer one lives to the plant. D0030-4 (cont.)

Low doses of fluoride entering the body over a long period of time might also produce generational effects.

5. Page 5-63: "Total maximum estimated concentrations for PM 2.5 would approach NAAQS and SAAQS..." What is the anticipated composition (metal, chemical, radiological) of that PM 2.5 (microns), expected to be released to air during normal plant operations? The character of the respirably sized particle is important when considering its potential to adversely impact human health. For instance, respirably sized particles of U_3O_8 could represent a significant pathway for radiation exposure if inhaled into the lungs or absorbed into the gastrointestional tract, through contaminated foodstuff. The health risk for PM 2.5 does not alone lie in the airborne levels but also in the duration that particle remains in the body and the effect it has on cell structure and activity. Also, due to the size of the particle and the anticipated high-release levels this DEIS (Paducah) should have assessed a terrain dispersion model that included cumulative levels of particulates and their re-entrainment. D0030-5

6. Page B-7 (B.5): "...potential impacts of any TRU and Tc contamination would be the greatest in cases involving accidents during...handling of the cylinders and during the management of wastes associated with the cleaning and disposition of empty cylinders." (B-9) "...doses...attributed to TRU and Tc-99 found in the heels...can be relative high compared to uranium doses." Page 2-36 (2.4.2.8) "Current USD plans are to leave the heels in the emptied cylinders...and either (1) crush the cylinders..." Page 2-14 (2.2.2.6) This section presents an option for compacting and sectioning emptied cylinders still containing heels.

The option to crush and section cylinders in the manner presented on page 2-36 provides no explanation as to whether protective measures were incorporated into that process ; that would protect workers from exposure to "free" TRU or grouted TRU. This DEIS (Paducah), in general, fails to consider worker health with respect to handling cylinders. D0030-6

Page B-6 (B.4) "...UDS is now planning to fill the emptied cylinders with the depleted U_3O_8 product..." We agree this would be the preferred option and suggest the heels be stabilized with grout prior to refilling. We do disagree however that the U_3O_8 is "product": it is waste. Also, if the crush and cut option is still valid, this DEIS needs to present a clearer

view as to how the TRU in the heels will be contained during processing. D0030-6 (cont.)

7. Page E-7 (E 3.1): Does the figure of 70% include all the aqueous hydrogen produced at both conversion plants? D0030-7

8. The nominal wall thickness for DUF-6 cylinders is 312 mils.. Ultrasonic measurements for the thickness of cylinders in storage at ETT and Paducah have shown that corrosive actions have reduced that thickness, in many instances,to less thanhalf. DOE guidance recommends that a minimum cylinder wall thickness of 250 mils is "required" for safe handling and transporting cylinders. Studies have determined 3mils per year would be a normal rate of corrosive reduction in cylinders. At that rate, cylinders over 25 years old would already have wall thicknesses below the"safe level" of 250 mils, thus presenting a hazard when handling and shipping. Further, previous inspections of cylinders stored on the ground have found that areas in contact with the ground experienced greater corrosion rates. Other cylinders have not been inspected to assess wall thickness due to the storage configuration. It is our opinion that this DEIS (Paducah) has not adequately considered the conditions of the cylinders and the associated risk(s). D0030-8

9. Page F-21 (F.3.1): In the past river transportation was explored as an economical option for transporting cylinders from ETT. This DEIS did not analyse the risks associated with that mode of transportation. D0030-9

10. Will the calcium fluoride produced at the conversion plant be a granular form or a fine powder? D0030-10

11. The Depleted UF-6 Final PEIS expresses Hydrogen Fluoride in terms of anhydrous while this DEIS (Paducah) expresses it as aqueous. Please explain the reason for this change. D0030-11

12. Perhaps we overlooked it, but we do not recall any information in this DEIS (Paducah) detailing annual use, storage, or transportation of anhydrous ammonia. It is apparent that anhydrous ammonia (page 2-12, 2.2.2.3) is an important component of the conversion process that will pose its own set of hazards.

    Page 5-117 (Table 5.6-2): 10,000 tons of nitrogen gas (N_2) will be consumed annually during the conversion facility operations" (Paducah). Page 2-12 (2.2.2.3): "Nitrogen...a purging gas and is released to the atmosphere...the clean off-gas stream." D0030-12

    Pages 5-59 through 61 (5.2.2.3.1): We are unsure as to whether all nitrogen referenced as an off-gas is a by-product of hydrogen generation from anhydrous ammonia. We are also unsure as to whether all 10,000 tons are expected to be released to air. Another uncertainity is whether this excess nitrogen, free for oxidation, was included in total NO_x emissions from conversion facility operations.

13. Page 5-65 (5.2.2.4.1): Water withdrawn from the Ohio River would approximate 57 million gallons per year. 4,000 gal/d would be released to surface water with the remainder of the withdrawn-water recirculated back D0030-13

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into the process. Assuming this were true, there would be an enormous net water gain somewhere in the system or a lot of potentially contaminated water would be vented as steam from the cooling towers and other plant processes. This DEIS (Paducah) needs to better account for water usage/ disposal. D0030-13 (cont.)

14. Page 5-69 (line 11): incorectly references Table 5.2-18 for Table 5.2-17 D0030-14

15. Page 3-15 (3.1.5.1): This sets the current water use at "approximately 15 million gal/d." However, a January 9, 2004 report entitled Paducah Water Balance Analysis (PGDP,CAB-Water Task Force) sets the total average water flow in at 11.9 million gal/d.

    Page 3-15 (3.1.5.1): This states that"during most of the year, most of the flow in both streams (Bayou & Little Bayou) is derived from plant effluents" and that the average discharge to the Ohio River...is about 4.1 million gal/d. However, the Paducah Water Balance Analysis puts the water flow out (accounted for) at 10.54 million gal/d. D0030-15

    In this draft DEIS (Paducah) the difference in the ratio of water in to water out is significant. Since the Water Balance-water flow in figure is reflective of the unaccounted for (DEIS) water out this DEIS needs to reconcile water in/water out with water use/ water disposal.

16. The ATSDR Public Health Assessment for Paducah Gaseous Diffusion Plant... May 2002 (pg. 52), identifies thallium as "the contaminant of concern" found in surface water at PGDP. While this DEIS (Paducah) discusses PCB and Uranium as surface water/sediment contaminants, it fails to consider thallium; a significant pollutant, injurious to human health. D0030-16

17. The combined effect of pollutants is frequently understated in documents such as this (DEIS). One of the reasons often provided is the lack of studies regarding additive, synergistic, or cummulative actions. However, the synergistic interaction of airborne hydrogen fluoride with sulfur dioxide has been well researched. This DEIS (Paducah) anticipates the release of HF to air from the DUF-6 conversion facility (page 5-61, Table 5.2-15) and describes fairly high sulfur dioxide emission levels from major sources around the Paducah site (page 3-7, Table 3.1-2).This DEIS has not considered the greater adverse-effects expected from the synergistic action of these two pollutants. D0030-17

18. Page 5-69 (re: on site disposal): The permitted life of the on-site C-746-U landfill is less that the expected 25 years of conversion operations. The Acclerated Clean-up Plan waste volumes for PGDP also exceed the permitted capacity of that landfill. The C-746-U landfill is owned by DOE. If Uranium Disposition Services, LLC is a private/stand alone company, ultimately responsible for products produced as well as waste generated, disposal in the C-746-U landfill should be fee based, identical to any similiar landfill. THE C-746-U LANDFILL IS A VERY CONTENUOUS COMMUNITY ISSUE. D0030-18

19. Past "self regulation" of PGDP, by DOE, has ultimately created an extreme example of a Superfund site that will remain a toxic legacy for generations to come. Uranium Disposition Services, LLC (Paducah) should be the owner/ operator of the conversion facility;responsible for all air, water,and land permits. D0030-19

Thank you

Document D0031

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-0435

BETSY L. CHILD
COMMISSIONER

PHIL BREDESEN
GOVERNOR

January 30, 2004

Gary S. Hartman
U.S. Department of Energy
Oak Ridge Operations
PO Box 2001
Oak Ridge, TN 37831

RE: Depleted Uranium Hexafluoride EIS

Dear Mr. Hartman:

Please find enclosed the comments on the Draft Environmental Impact Statements concerning the facilities at Paducah and Portsmouth. I am writing to emphasize two points. The Department of Energy is under a final Order regarding the depleted uranium hexaflouride (DUF6) cylinders at the East Tennessee Technology Park in Oak Ridge. That Order requires that all of the cylinders be removed by December 31, 2009. All actions of the Department of Energy, in regard to the cylinders, should be consistent with that deadline, including the statements in the Environmental Impact Statement. The other issue is that at this time we support the option of over-packing any cylinders that do not meet DOT transportation requirements. We do not view any other option as having been adequately studied or evaluated in a NEPA process.

D0031-1

D0031-2

Sincerely,

Karen H. Stachowski

Karen Stachowski
Deputy Commissioner

Encls.

Cc: John Owsley

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Document D0032

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DOE OVERSIGHT DIVISION
761 EMORY VALLEY ROAD
OAK RIDGE, TENNESSEE 37830-7072

January 23, 2004

Gary S. Hartman
U.S. Department of Energy
Oak Ridge Operations
PO Box 2001
Oak Ridge, TN 37831

Dear Mr. Hartman

Draft Environmental Impact Statement (DEIS) for a proposal to Construct, Operate, Maintain, and Decontaminate and Decommission a Depleted Uranium Hexafluoride (DUF6) Conversion Facility at Portsmouth, Ohio and another at Paducah, Kentucky, DOE/EIS 0359 and DOE/EIS 0360, respectively

The Tennessee Department of Environment and Conservation, DOE Oversight Division (TDEC/DOE-O), has reviewed the above subject documents in accordance with the requirements of the National Environmental Policy Act (NEPA) and associated regulations of 40 CFR 1500-1508 and 10CFR 1021 as implemented. The Tennessee Emergency Management Agency also concurs in these comments.

General Comments:

The state of Tennessee concurs with the proposed action for managing the ETTP cylinder inventory. We defer comments on siting and operational alternatives at DOE Paducah and DOE Portsmouth to the commonwealth of Kentucky and the state of Ohio respectively. D0032-1

We do not expect to compromise environmental quality in another state in order to benefit our own. We will continue to talk about UF_6 with Ohio and Kentucky like we have for the past several years. D0032-2

The DEIS documents were reviewed with the Tennessee Consent Order No.97-0378-H0023 Part IX of the Uranium Hexafluoride Management Plan in focus, which states *"By (July 31, 1999), DOE shall issue its record of decision (ROD) for the final Programmatic Environmental Impact Statement for Alternative Strategies for the long-term management and Use of Depleted Uranium Hexafluoride (PEIS). Unless DOE selects the no action alternative in the ROD, DOE* D0032-3

shall either remove all known DUF_6 cylinders and their contents from ETTP or complete the conversion of the contents of the cylinders by (December 31,2009). In this event, DOE may undertake additional National Environmental Policy Act reviews (EAs/EISs) in order to implement the alternative selected in the ROD. Within 60 days of completing any such further NEPA reviews as may be necessary to implement the selected long-term management strategy, DOE shall submit a plan containing schedules for activities that will ensure removal of all known DUF_6 cylinders and their contents from ETTP or conversion of the contents of such cylinders will be completed by December 31, 2009. The schedule contained in the plan shall be considered an enforceable provision of this Agreement." These documents should state that DOE shall submit this schedule within 60 days of completing this EIS. Any associated references (summaries, etc) should be changed accordingly. D0032-3 (cont.)

Specific Comments:

Section 1, Introduction, 2.1 No Action Alternative, 2.4.1 General: Both EIS's evaluate a no action alternative that assumes continued storage of cylinders at Portsmouth, Paducah, and ETTP. These documents should state that the Tennessee Consent Order requires conversion or removal of UF_6 cylinders from ETTP by the end of 2009 because DOE did not select the no action alternative in the PEIS ROD of April 1999. D0032-4

Section 1.2.1, Table 1.1-1 Inventory of DOE UF_6 Cylinders Considered in This [sic] EIS: The tables list the proposed action for shipment of all ETTP cylinders to Portsmouth. According to the table this includes 584 empty cylinders. Most of these empty cylinders have already been shipped to NTS. Some empty 48-inch cylinders remaining at ETTP will probably be shipped to Portsmouth. The table is footnoted to show that the numbers are as of April 30, 2003. Updated data should be used in the final Portsmouth and Paducah documents. D0032-5

Section 2.2.4 Preparation and Transportation of ETTP Cylinders, Pg. 2-18; Section 5.2.4 Cylinder Preparation Impacts at ETTP. The statement is made in 2.2.4 that "It is unknown exactly how many DUF_6 cylinders do not meet DOT transportation requirements." In 5.2.4, the evaluation referenced in the DUF_6 PEIS (DOE 1999a) indicates that 50% to 100% of the ETTP inventory would not meet DOT requirements. The current documents should be updated to show the number of DUF_6 cylinders that will be shipped initially without extra preparation such as overpacks or transfer of contents. D0032-6

Section 2.2.5, Preparation and Transportation of ETTP Cylinders to Portsmouth, Page S-21, Second Paragraph, Line 8: There are "no current plans" for a new cylinder transfer facility at ETTP. If such a facility was to be further considered, the state of Tennessee would expect to be notified through the NEPA process of such plans as soon as they reach the stage of serious consideration. Due to the nature of the operation (purging of deteriorating cylinders, and subsequent refilling of more substantial cylinders) the environmental risk posed by this type of facility to the environment of the state of Tennessee and the East Tennessee Technology Park has the potential to be substantial. The state of Tennessee requires that the cylinders be shipped in a DOT-compliant manner using over-pack containers, if necessary. This applies even if the cylinders are shipped by a different mode of transportation to Paducah. D0032-7

Section 2.3.5, Other Transportation Modes, Page 2-25: Due to the difficulties cited by the document with air and barge transportation, it appears that these modes of transportation are not being seriously considered. If this situation changes, the state would expect adequate NEPA review in order to assess risks associated with those methods. D0032-8

Section 2.4.2.3, Human Health and Safety – Transportation: – This section shows the two highest potential accidents to involve either NH_3 or HF shipments. It should be expanded to show that there is also transportation risk connected with shipping UF_6 cylinders from ETTP to the selected conversion sites. D0032-9

Section 3.2.7.1 Radiation Environment, Page 3-56, Line 3: states that *"radiation exposure of the general public MEI (Maximally Exposed Individual) is estimated to be 6.7 mrem/yr. This dose is about 7% of the maximum dose limit of 100 mrem/yr set for the general public (DOE 1990) and much smaller than the average dose from natural background radiation in the state of Tennessee. The actual radiation exposure of the general public would be much lower that the estimated maximum value."* The state would like to point out that these dose estimates to the general public provided by the document are very scenario-dependent. The state's UF6 Cylinder Yard Monitoring Project recorded a 2002 direct gamma dose of 9,539 mrem/yr at the fence line of the K-1066-L yard. While the state's dose measurement in this instance is the result of continuous monitoring (twenty four hours per day, 365 days) and reflects direct gamma dose only, the relative openness of the ETTP site to co-located workers from private companies, and the plans to further open the ETTP site to the public leave many previous assumptions about dose estimates in question. D0032-10

Section 5.2.3.1.1 Radiological Impacts, Page 5-61, Fourth Paragraph, Line 2 states that *"for the first 2 years, because of receiving, inspecting and putting the ETTP cylinders into storage position, the potential radiation exposures are expected to be greater than in following years."* This should be changed to reflect the fact that only ANSI-N14.1 compliant cylinders will be shipped during the first 2 years and the total shipping campaign will take approximately twice that long resulting in higher potential radiation exposures for a longer time period. D0032-11

If you have any questions concerning these comments, please contact me at (865) 481-0995.

Sincerely

John A. Owsley
Director

Jao742.99

Document D0033

Ruby English
6715 Metropolis Lake Road
West Paducah, KY 42086
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February 3, 2004

Gary S. Hartman
U. S. Department of Energy
Oak Ridge Operations
PO Box 2001
Oak Ridge, TN 37831

Public Comment in the Matter of: ***Draft Environmental Impact Statement***
Construction and Operation of a Depleted Uranium
Hexafluoride Conversion Facility

Comment Period was Extended to: February 4, 2004 by Department of Energy D0033-1

Please include the following comments as part of the permanent record.

Thank you for allowing me the opportunity to comment on such an important topic. The construction of a DUF6 Conversion Facility to be located at Paducah, KY. As you know, I am a neighbor of the Paducah Gaseous Diffusion Plant and have always tried to comment on topics you have let me know about and I always try to do it in a civilized manner. D0033-2

I understand about the conversion plant being built here and employing some of the workers that will be laid off when USEC closes. Since this is a rural community and the high paying jobs are not around here this plant would be good for the few people that will be successful in securing those positions. But, I also understand that when all or most of the current and former workers begin developing health problems then that will be another story. D0033-3

The continued storage of the current DUF6 cylinders indefinitely will eventually cause you more of a problem if these are not moved and disposed of due to continued exposure. There are more accidents at the Paducah Gaseous Diffusion Plant each year than is reported. One day this plant will cause and accident that will affect this whole area if these cylinders are not cleaned up. Then, I look at the health aspect for the neighborhood and wonder how much more The Department of Energy is going to put on us. D0033-4

So money wise this plant will be a good thing. Health-wise this plant addition will only cause more health problems for the neighborhood and the community. D0033-5

Transportation will be another problem, because, you will not only clean-up the cylinders at the Paducah site, but, you will be shipping in cylinders from other locations. These cylinders will be traveling on our roads and rails and possibly down our rivers. There could be accidents and then this would endanger the public. Hexaflouride is dangerous to our health. I also want to know about the disposal of the cylinders as to where they will go. My concern is in the landfill behind my house. Is that the plan? D0033-6

I also want to know about the waste from the DUF6 plant being built in New Mexico by Louisiana Energy Systems. Is the Department of Energy going to be responsible for waste that is produced from this plant. If so will they be shipped to Paducah? From everything that I am reading it seems the plan is for the EPA to lower the standards for the landfills and then DOE will dispose of material in these landfills that should never be put there. This has already happened at the Paducah Site and I am sure it could and will happen again. I don't really know what else to say, because, I think decisions and agreements have already been made and any thing else I could say would not make much difference. I hope that you will seriously consider and think about the decisions you make that at least take the thought of what is good for the neighborhood and the worker's. I know you have to make money, but please don't do it at the expense of human life. There has already been more than enough lives taken due to health problems caused by the misguided management that has been at this plant in the past. Please do something good for the community and build and operate a clean plant. The imaginary fences are not there and the contaminants don't stop at the fence either. The landfills are already leaking, so any additional dumping will only endanger us that much more. D0033-7 D0033-8 D0033-9

This Paducah Site will become a dumping ground for all waste good or bad that other locations will want to ship to Paducah if you let them. So, let me know what your decision will be and May God Bless. D0033-10

Sincerely,

Ruby English

Ruby English
PGDP Neighbor and
ACT Chairperson

Document D0034

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

February 2, 2004

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Mr. Gary S. Hartman
DOE-ORO Cultural Resources Management Coordinator
U.S. Department of Energy-Oak Ridge Operations
P.O. Box 2001
Oak Ridge, TN 37831

RE: EPA Review and Comments on
Draft Environmental Impact Statement (DEIS)
Construction and Operation of a Depleted Uranium Hexafluoride
Conversion Facility at the Paducah, KY site
CEQ No. 030541

Dear Mr. Hartman:

The U.S. Environmental Protection Agency (U.S. EPA) Region 4 reviewed the subject Draft Environmental Impact Statement (DEIS) pursuant to Section 309 of the Clean Air Act and Section 102 (2)(C) of the National Environmental Policy Act (NEPA). The purpose of this letter is to provide the Nuclear Regulatory Commission (NRC) with EPA's comments regarding potential impacts of the proposed construction and operation of a depleted uranium hexafluoride conversion facility at the Paducah, Kentucky site.

DOE's proposed action is to design, construct, and operate a conversion facility for converting depleted uranium hexafluoride (DUF_6) to a more stable chemical form (depleted triuranium octaoxide, U_3O_8) at the Paducah, KY site. The resulting conversion products would be suitable for beneficial use or for disposal.

The DEIS assesses the potential environmental impacts of the following activities: 1) construction, operation, maintenance, and decontamination and decommissioning (D&D) of the proposed conversion facility; 2) conversion to depleted U_3O_8 based on the proposed Uranium Disposition Services, LLC (UDS) technology; 3) transportation of uranium conversion products and waste to a disposal facility; 4) transportation and sale of the hydrogen fluoride (HF) conversion co-product and 5) neutralization of HF to CaF_2 and its sale or disposal in the event that the HF product is not sold.

Potential environmental impacts were assessed by examining all of the activities required to implement each alternative. For each alternative, potential impacts to workers, the public, and the environment were estimated for both normal operations and potential accidents. The No Action alternative is the storage of DUF_6 cylinders indefinitely, with continued cylinder surveillance and maintenance. The action alternatives included three potential locations for siting the proposed conversion facility. Location A was identified as the preferred location.

When regulatory compliance is discussed in this document, the radionuclide National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Radionuclide Emissions for United States Department of Energy (USDOE) Owned or Operated Facilities, in 40, CFR 61, Subpart H, is not always adequately referenced. Please include this information in the FEIS. D0034-1

The EIS should include information regarding the capability and capacity for the two disposal facilities mentioned in the DEIS, namely Envirocare and the Nevada Test Site (NTS), to accept the proposed waste products from the Paducah conversion facility. The disposal facilities must meet both the Waste Acceptance Criteria (WAC) limits, as well as have the physical capacity to accept the proposed quantity of conversion product waste. D0034-2

Based on the review of the DEIS, the project received a rating of "EC-1," meaning that some environmental concerns exist regarding aspects of the proposed project. Because of the chemical and radioactive nature of the materials processed and produced, safety measures and prevention of potential impacts to on-site workers and public health are areas of primary concern. Specifically, protecting the environment and human health involves the need for appropriate operation and safety measures, monitoring, short-term storage, packaging, and transportation and sale or disposal of conversion products.

Ongoing radiological monitoring will be required during operation of this facility. Also, appropriate short-term storage of radioactive wastes on-site is required in order to prevent impacts to workers, the public, and the environment. With regard to LLW disposal, the DEIS covers the impacts from the transporting of conversion products to both the Envirocare of Utah, Inc. facility, and Nevada Test Site (NTS) from the proposed conversion facility in Paducah. Construction of the facility could potentially result in minor impacts to wetlands. Overall, the impacts as defined in the DEIS appear to be within acceptable limits. D0034-3

Thank you for the opportunity to comment on this document. We look forward to reviewing the Final EIS. If we can be of further assistance, please contact Ramona McConney of my staff at (404) 562-9615.

Sincerely,

Heinz Mueller

Heinz J. Mueller, Chief
NEPA Program Office

Enclosure: Summary of Rating Definitions and Follow up Action

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION*

Environmental Impact of the Action

LO-Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS sate, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate
The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alterative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information
The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment