

ClinchRiverESPHFNPEm Resource

From: Dozier, Tamsen
Sent: Friday, April 28, 2017 3:35 PM
To: Schiele, Raymond Joseph
Cc: Vokoun, Patricia; Fetter, Allen; Sutton, Mallecia
Subject: Environmental audit planning
Attachments: Clinch environmental audit planning 28Apr2017.xlsx

Ray

Attached please find a copy of our latest detailed schedule for the environmental audit. I would like to schedule a discussion with TVA to go over this with you and address any recommended additions or revisions. This would involve our PNNL team lead, Bruce McDowell and Kim Leigh, our scheduler. Our best availability is 10AM on Tuesday, May 2. But we are also available on Thursday at 10AM. If these times do not work for you, please suggest some alternative times, preferably on Tuesday, May 2.

I have coordinated with Allen on this transmittal to you.

Thanks.
Tami

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From: Dozier, Tamsen

Created By: Tamsen.Dozier@nrc.gov

Recipients:

"Vokoun, Patricia" <Patricia.Vokoun@nrc.gov>
Tracking Status: None
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Tracking Status: None
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Tracking Status: None

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Options

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Time	What	Where	Who- NRC	Who- PNNL	Who- Other Agency
Clinch River Site Audit: May 14-May 19, 2017					
Sunday May 14, 2017					
8:00- 8:30 PM	Check-in mtg for Monday participants	Knoxville hotel lobby			NA
Monday May 15, 2017					
AM/PM	Cultural SHPO Mtg	Nashville	Davis	Kennedy	NA
9:00-12:00	Hydro: TDEC Remediation. DOE- OREM will attend.	Oak Ridge	Haque/ Barnhurst; Dozier; Giacinto(?)	Meyer	Dave Adler (OREM DOE), Dennis Mayton (OREM DOE), Eddie Worthington (TDEC), Randy Young (TDEC), Kristof Czartoryski (TDEC)
7:45 AM - 8:00 AM	Check in TVA building. Be sure to bring your drivers license.	TVA Knoxville			NA
8:00- 8:30 AM	Introductions, safety briefing	TVA Knoxville			NA
8:30 - 10:30 AM	Land Use Discussions	TVA Knoxville	Doub	D. Anderson	NA
8:30 - 10:30 AM	Cumulative Discussions (no specific info needs - this is recommended but is optional)	TVA Knoxville	Cushing	McDowell	
10:30 - 12:00 PM	Socio/EJ Discussion	TVA Knoxville	Mussatti	D. Anderson	NA
12:00- 1:00 PM	Lunch	TVA Knoxville	All	All	All
1:00 - 5:00 PM	DOE-OREM: Tour Melton Valley area with DOE-OREM and TDEC	Oak Ridge	Haque, Barnhurst	Meyer	Dave Adler (OREM DOE), Dennis Mayton (OREM DOE), Eddie Worthington (TDEC), Randy Young (TDEC), Kristof Czartoryski (TDEC)
1:00 - 5:00 PM	Aquatic Discussion	TVA Knoxville	Doub	Krieg	NA
1:00- 2:00 PM	Socio/EJ Discussion cont. if needed	TVA Knoxville	Mussatti	D. Anderson	NA
2:00- 4:00 PM	Non Radiological Health and Non Radiological Waste	TVA Knoxville	Mussatti	Aston via phone; Leigh	NA

4:00-5:00	NRC/PNNL download to NRC EPM.	TVA Knoxville	Dozier	McDowell, Leigh	NA
5:00 -6:00 PM	NRC EPM/PNNL TL/TVA Closeout	TVA Knoxville	Dozier	McDowell, Leigh	NA
8:30- 9:00 PM	Check-in Mtg:	Hotel Lobby	All available	All available	NA
Tuesday May 16, 2107					
AM/PM	Socio/EJ Offsites: 9:00 AM City of Oak Ridge Government Affairs and Information Service; 10:00 AM City of Oak Ridge Community Development; 11:00 AM Anderson County United Way; 1:00 PM Trinity Out Reach; 2:00 PM Oak Ridge Convention and Visitors Bureau; 3:30 TN Housing Development Agency	TN area	Mussatti	D. Anderson	NA
7:15 AM- 7:45 AM	Walk to TVA building. 400 West Summit Hill Drive, Knoxville.	TVA Knoxville	All	All	NA
7:45 AM - 8:00 AM	Check in TVA building. Be sure to bring your drivers license.	TVA Knoxville	All	All	NA
8:00 - 9:00 AM	Introductions, meeting logistics, safety overview, etc. NRC give an overview of what the weekly schedule and describe the goals for the week. TVA give overview of PPE, and any new information.	TVA Knoxville	All	All	NA
9:00 - 10:00 AM	Terrestrial/Aquatic Discussions with FWS, TWRA, ORNL (??? Tami to find out which agencies have confirmed)	TVA Knoxville	Doub	Becker, Krieg	
9:00 - 10:00 AM	Hydrology Discussions with TDEQ (Division of Water Resources): stormwater, dewatering, and operational discharges, Water withdrawals, Aquatic Resource Alteration permit (Section 401 Cert), water resources notification, water withdrawal registration.	TVA Knoxville	Haque, Barnhurst	Meyer	Bob Alexander (TDEC), Inspector Mark McIntosh (USACE) ???
10:00- 12:00 PM	Terrestrial Discussions with TVA	TVA Knoxville	Doub	Becker	NA

10:00- 12:00 PM	Hydrology Discussions with TVA	TVA Knoxville	Haque, Barnhurst	Meyer, Krieg	NA
9:00 - 12:00	Met/Air Quality (Safety and Environmental)	TVA Knoxville	Sutton, Quinlan, Quinn-Willingham	Flaherty via phone; McDowell	NA
9:00 - 12:00 PM	Historic and Cultural Discussions with TVA	TVA Knoxville	Davis	Kennedy	NA
9:00 - 12:00 PM	Alternative Site Discussions with TVA (to include STO-9 and STO-10)	TVA Knoxville	Kugler, (Dozier approximately 11:00 AM to talk STO-9 and STO-10)	Cort, (McDowell/Leigh approximately 11:00 AM to talk STO-9 and STO-10)	NA
9:00 - 12:00 PM	Radiological/Decommissioning Health Discussions with TVA	TVA Knoxville	Hickey	Smith, Mart	NA
9:00 - 12:00 PM	Site Description Discussions with TVA- Ch 3 (STO-1 through STO-8)	TVA Knoxville	Cushing	Kohn	NA
12:00 PM- 1:00 PM	Lunch	Downtown Knoxville	All	All	All
1:00 PM - 4:00 PM	Accidents Discussions with TVA	TVA Knoxville	Palmrose, Hickey	Mart, Smith	NA
1:00 PM - 4:00 PM	Historic and Cultural Discussions with TVA cont. if needed (1:30 Info Need CR-1 Kugler/Cort join)	TVA Knoxville	Davis (Kugler at 1:30 to discuss CR-1)	Kennedy (Cort at 1:30 to discuss CR-1)	
1:00 PM - 4:00 PM	Site and Technical Overview Discussions with TVA- Chapter 3 if still needed; Chapter 1, Chapter 10, Chapter introductions and Chapter summary sections) STO-11 thru STO-13	TVA Knoxville	Dozier, Cushing	McDowell, Leigh, Kohn	NA
1:00 PM - 4:00 PM	Met/Air Quality (Safety and Environmental) cont. if needed	TVA Knoxville	Sutton, Quinlan, Quinn-Willingham	NA, unless Flaherty still needs the time.	NA

1:00 PM - 4:00 PM	Alternative Sites cont. (Kugler until 2:00 only)	TVA Knoxville	Kugler	Cort	NA
1:00 PM - 4:00 PM	Terrestrial cont.	TVA Knoxville	Doub	Becker	NA
1:00 PM - 4:00 PM	Hydrology cont. (Meyer until 2:00 only)	TVA Knoxville	Haque, Barnhurst	Meyer	NA
2:00- 4:00	T Lines Discussion with TVA	TVA Knoxville	Doub	Becker, Krieg	NA
2:00- 4:00	Alternative Systems discussions with TVA	TVA Knoxville	Kugler	Meyer	NA
4:00- 5:00	NRC/PNNL SMEs download to NRC EPM/PNNL TL/USACE. Or as available throughout the day	TVA Knoxville	All	All	
5:00 - 6:00 PM	NRC EPM/PNNL TL/USACE/TVA Closeout	TVA Knoxville	Dozier, Vokoun	McDowell, Leigh	
PM	T-line driveby: Segment N of Knoxville for rebuild.	Knoxville	Doub	Anderson, Kohn, Becker	NA
Wednesday, May 17					
AM/PM	Socio/EJ Offsites: 9:00 AM Roane County	TN area	Mussatti	D. Anderson	NA
7:00 -7:05 AM	Meet in lobby to leave for CRN Site.	Hotel Lobby	All attending	All attending	NA
7:05-8:00 AM	Travel	????? Tami believes we are all traveling from Knoxville in TVA vans	All attending	All attending	

8:00 AM -12:00 PM	<p>CRN Site: Tour intake, discharge, barge unloading facility location, met tower location, power block excavation area and adjacent plant areas, holding pond location, potentially affected streams, ponds and wetlands, site of aquifer pump test, sinkhole near wetland, any known karst structures on site,</p> <p>(??Melton Hill Dam (for Jenny/Ellen, Becky/Peyton). See if TVA archeologist can accompany NRC on this tour.)</p>	Oak Ridge	Haque, Barnhurst, Palmrose, Quinlan, Quinn-Willingham, Vokoun, Kugler, Hickey, Davis, Doub, Cushing, Dozier, Sutton	Becker, Krieg, Smith, Mart, Cort, Kohn, Kennedy, Meyer, McDowell, Leigh	Larry Long (EPA Region 4), Mark McIntosh (USACE)
12:00 PM -1:00 PM	Lunch	Oak Ridge	All	All	
1:00 PM -5:00 PM	Geology driveby	Grainger County	Barnhurst	Meyer	NA
1:00 PM -3:00 PM	Radiological tour with TVA staff: maximally exposed individual locations for residence, garden, milk	Oak Ridge	Palmrose, Hickey	Smith, Mart	
1:00 PM -3:00 PM	<p>ORR Alt Site 2: power block excation areas, intake structure location, discharge structure location, potentially affected streams, ponds, wetlands, affected floodplain locations, any offsite area where ground disturbing activites or hydrologic alterations are expected (if applicable)</p>	Oak Ridge	?? Tami to discuss this with TVA		Mark McIntosh (USACE)

3:30 PM- 5:30 PM	ORR Alt Site 8: power block excation areas, intake structure location, discharge structure location, potentially affected streams, ponds, wetlands, affected floodplain locations, any offsite area where ground disturbing activites or hydrologic alterations are expected (if applicable)	Oak Ridge	?? Tami to discuss this with TVA		Mark McIntosh (USACE)
Afternoon	Project management- plan for closeout process implementation	TBD	Dozier	McDowell, Leigh	NA
8:30 - 9:00 PM	NRC/PNNL SME download mtg	Knoxville hotel lobby	All available	All available	NA
Thursday, May 18					
AM	Socio/EJ Offsites: 9:00 AM Anderson County Economic Development Association; 11:00 AM University of TN				
7:15 AM- 7:45 AM	Walk to TVA building. 400 West Summit Hill Drive, Knoxville.	Hotel Lobby	All scheduled to be in Knoxville - Palmrose, Hickey, Kugler, Cort, Dozier, Cushing	All scheduled to be in Knoxville Smith, Mart, Cort, McDowell, Leigh	
7:45 AM - 8:00 AM	Check in TVA building. Be sure to bring your drivers license.	TVA Knoxville	All scheduled to be in Knoxville	All scheduled to be in Knoxville	
7:00 -7:05 AM	Meet in lobby to leave for Clinch Site Proper	Hotel Lobby	All scheduled to be in Oak Ridge - Davis, Barnhurst, Haque, Doub	All scheduled to be in Oak Ridge - Kennedy, Kohn, Becker, Anderson)	
7:05-8:00 AM	Travel	Cars	All scheduled to be in Oak Ridge	All scheduled to be in Oak Ridge	
8:00 - 12:00 AM	Transportation Discussions with TVA	TVA Knoxville	Palmrose	Maheras via phone	

8:00 - 12:00 AM	Rad/Decom cont. if needed	TVA Knoxville	Hickey	Smith, Mart	
8:00 - 12:00 AM	Alternatives/Crossover with Ologies- (Potential) ??? If no ologists with alternative sites info needs are available in AM, Tami thinks this might be good time to pull Andy into STO discussions	TVA Knoxville	Kugler, Haque, Barnhurst,	Cort, Meyer, McDowell, Leigh,	
8:00 - 12:00 AM	Site and Technical Overview cont. if needed	TVA Knoxville	Dozier, Vokoun, Cushing	McDowell, Leigh	
8:00 - 12:00 AM	Cultural museum visits• Oak Ridge Heritage and Preservation Association <ul style="list-style-type: none"> • Oak Ridge Library. • Roane County Historical Commission • East Tennessee Historical Society, one of four history centers in Knoxville 	Knoxville and Oak Ridge	Davis	Kennedy	
8:00- 11:00 AM	T lines tour with TVA staff/ORNL staff: 5 mile extensions for the underground line.	Oak Ridge	Doub	Becker, Kohn, Meyer	Mark McIntosh (USACE)
12:00 - 1:00 PM	Lunch		All	All	
1:00- 4:00 PM	Cultural Museum visits continue	Knoxville and Oak Ridge	Davis	Kennedy	
1:00- 4:00 PM	Terrestrial/Aquatic cont. if needed	TVA Knoxville	Doub	Becker, Krieg	
1:00- 4:00 PM	Uranium Fuel/Rad Waste Discussions with TVA	TVA Knoxville	Hickey	Smith, Mart	
1:00- 4:00 PM	Alternatives/Crossover/Alternative Systems cont if needed (Potential timeline: Info Need HY-SW-16, then TE-21, TE-22, TE-23, AE-05, LU-4?)	TVA Knoxville	Kugler, Barnhurst, Haque, Doub	Cort, Meyer, Becker, Krieg	
1:00- 4:00 PM	Hydro cont. if needed	TVA Knoxville	Barnhurst, Haque	Meyer	
1:00- 4:00 PM	Site Description cont if needed	TVA Knoxville	Cushing	Kohn	
4:00- 5:00 PM*	NRC/PNNL SMEs download to NRC EPM/PNNL TL/USACE; Sooner if possible.	TVA Knoxville	All	All	Mark McIntosh (USACE)

5:00 - TBD PM*	NRC/PNNL/USACE/TVA informal closeout; Sooner if possible.	TVA Knoxville	Dozier, Vokoun	McDowell, Leigh	Mark McIntosh (USACE)
Friday, May 19					
8:30 AM- 10:00 AM	NRC/PNNL formal close out with TVA	TVA Knoxville	Frank A via phone, Dozier, Vokoun	McDowell, Leigh	

Who-TVA staff
NA
NA
NA
All

NA
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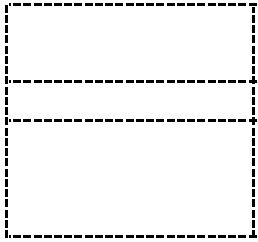
All

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[illegible]



ER Crosswalk: Long List

Group Name	Who - NRC	Who - PNNL	What - ER Sections
Accidents	Palmrose	Smith/Mart	7.1 Design Basis Accidents
Alternatives	Kugler	Cort, Meyer	2.5 Socioeconomics (Demography) 9.1 No Action Alternative 9.3 Alternative Sites 9.4 Alternative Systems
Aquatic Ecology	Doub	Krieg	2.4 Ecology (Aquatic) 4.3 Impacts to Ecosystems/Construction (Aquatic)
Cultural and Historic	Davis	Kennedy	2.5 Socioeconomics (Historic Properties) 4.1 Land Use/Construction (Historic Properties) 5.1 Land Use/Construction (Historic Properties)
Cumulative	Cushing	McDowell, Leigh, Kohn	2.9 Related Federal Projects and Other Activities 4.7 Cumulative Impacts/Construction 5.11 Cumulative Impacts/Operation SSAR 2.2 Nearby Facilities
Hydrology	Barnhurst, Haque	Meyer	2.3 Water 2.6 Geology 3.3 Plant Water Use 3.4 Plant Cooling Systems 4.2 Water Related Impacts/Construction 4.6 Measures and Controls/Construction 4.7 Cumulative 5.2 Water Related Impacts/Operations 5.3 Cooling System Impacts 5.10 Measures and Controls/Operation 6.1 Thermal Monitoring 6.3 Hydrological Monitoring 6.6 Chemical Monitoring 6.7 Summary of Monitoring Programs 9.3 Alternative Sites 9.4 Alternative Systems

Land Use	Doub	Anderson	2.1 Site Location 2.2 Land 2.9 Related Federal Projects 3.1 External Appearance and Plant Layout 3.7 Power Transmission System 4.1 Land Use Impacts 5.6 Transmission System Impacts 9.3 Alternative Sites
Met/Air Quality	Quinn-Willingham	Flaherty, McDowell	2.7 Meteorology 6.4 Meteorological Monitoring
Non-Rad Health/Waste	Mussatti	Aston/Leigh	2.2 Land 2.5 Socioeconomics (Community Characteristics) 2.8 Noise
Rad/Decom/	Hickey	Smith/Mart	3.1 External Appearance and Plant Layout 3.2 Reactor Power Conversion System
Socio/EJ	Mussatti	Anderson	2.5 Socioeconomics 3.10 Workforce Characterization 4.4 Socioeconomic Impacts/Construction 5.4 Radiological Impacts/Operation 5.8 Socioeconomic Impacts/Operation
Site and Technical Overview	Dozier, Cushing	McDowell, Leigh, Kohn	Chapter 1 Introduction -all sections 2.1 Site Location Chapter 3 Plant Description -all sections
Terrestrial Ecology	Doub	Becker	2.2 Land 2.4 Ecology (Terrestrial)

Transportation	Palmrose	Maheras	3.8 Transportation of Radioactive Materials 4.7 Cumulative/Construction 5.11 Cumulative Impacts/Operations 7.4 Transportation Accidents 9.3 Alternative Sites 10.2 Irretrievable Environmental Commitments SSAR 15 Accident Analysis

ER Crosswalk: Paragraph Listing

Group Name	Who - NRC	Who - PNNL	What - ER Sections
Accidents	Palmrose	Smith/Mart	7.1 Design Basis Accidents 7.2 Severe Accidents
Alternatives	Kugler	Cort, Meyer	2.5 Socioeconomics (Demography) 9.1 No Action Alternative 9.3 Alternative Sites 9.4 Alternative Systems
Aquatic Ecology	Doub	Krieg	2.4 Ecology (Aquatic) 4.3 Impacts to Ecosystems/Construction (Aquatic) 4.6 Measures and Controls/Construction 5.3 Cooling System Impacts 5.10 Measures and Controls/Operations 6.5 Ecological Monitoring 9.3 Alternative Sites
Cultural and Historic	Davis	Kennedy	2.5 Socioeconomics (Historic Properties) 4.1 Land Use/Construction (Historic Properties) 5.1 Land Use/Construction (Historic Properties) 9.3 Alternative Sites
Cumulative	Cushing	McDowell, Leigh, Kohn	2.9 Related Federal Projects and Other Activities 4.7 Cumulative Impacts/Construction 5.11 Cumulative Impacts/Operation SSAR 2.2 Nearby Facilities

Hydrology	Barnhurst, Haque	Meyer	2.3 Water 2.6 Geology 3.3 Plant Water Use 3.4 Plant Cooling Systems 4.2 Water Related Impacts/Construction 4.6 Measures and Controls/Construction 4.7 Cumulative 5.2 Water Related Impacts/Operations 5.3 Cooling System Impacts 5.10 Measures and Controls/Operation 6.1 Thermal Monitoring 6.3 Hydrological Monitoring 6.6 Chemical Monitoring 6.7 Summary of Monitoring Programs 9.3 Alternative Sites 9.4 Alternative Systems
Land Use	Doub	Anderson	2.1 Site Location 2.2 Land 2.9 Related Federal Projects 3.1 External Appearance and Plant Layout 3.7 Power Transmission System 4.1 Land Use Impacts 5.6 Transmission System Impacts 9.3 Alternative Sites
Met/Air Quality	Quinn- Willingham	Flaherty, McDowell	2.7 Meteorology 6.4 Meteorological Monitoring
Non-Rad Health/W aste	Mussatti	Aston/Leigh	2.2 Land 2.5 Socioeconomics (Community Characteristics) 2.8 Noise 3.6 Nonradioactive Waste System 4.6 Measures and Controls/Construction 5.9 Decommissioning Impacts 5.10 Measures and Controls/Operations 5.11 Cumulative Impacts/Operation 6.4 Meteorological Monitoring 6.6 Chemical Monitoring 6.7 Summary of Monitoring Programs 9.3 Alternative Sites

Rad/Decom/ Uranium Fuel	Hickey	Smith/Mart	3.1 External Appearance and Plant Layout 3.2 Reactor Power Conversion System 3.5 Radioactive Waste Management 4.5 Radiation Exposure/Construction 4.7 Cumulative Impacts/Construction 5.4 Radiological Impacts/Operation 5.5 Environmental Impacts of Waste 5.7 Uranium Fuel Cycle/Transport Impacts 5.9 Decommissioning 6.2 Radiological Monitoring 7.2 Severe Accidents 9.3 Alternative Sites SSAR 2.0 Site Characteristics and Site Parameters SSAR 11.2.3 Liquid Radioactive Releases
Socio/EJ	Mussatti	Anderson	2.5 Socioeconomics 3.10 Workforce Characterization 4.4 Socioeconomic Impacts/Construction 5.4 Radiological Impacts/Operation 5.8 Socioeconomic Impacts/Operation
Site and Technical Overview /Project Description	Dozier, Cushing	McDowell, Leigh, Kohn	Chapter 1 Introduction -all sections 2.1 Site Location Chapter 3 Plant Description -all sections 4.6 Measure and Controls/Construction 5.10 Measure and Controls/Operation 9.3 Alternative Sites Chapter 10 Environmental Consequences - all sections SSAR 2.0 Site Characteristics and Parameters (for comparison)
Terrestrial Ecology	Doub	Becker	2.2 Land 2.4 Ecology (Terrestrial) 3.6 Non-Radioactive Waste 3.7 Power Transmission 4.3 Ecological Impacts/Construction (Terrestrial) 5.3 Ecological Impacts/Operation (Terrestrial) 6.5 Ecological Monitoring 9.3 Alternative Sites

Transportation	Palmrose	Maheras	3.8 Transportation of Radioactive Materials 4.7 Cumulative/Construction 5.11 Cumulative Impacts/Operations 7.4 Transportation Accidents 9.3 Alternative Sites 10.2 Irretrievable Environmental Commitments SSAR 15 Accident Analysis
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