

Roane County Environmental Review Board
 Meeting Minutes: May 5, 2016

Attendance, Board Members (and prospective members)

Present	Absent	
X		*Tom Brown, General Member
	X	*Carolyn Granger, County Commission Representative
X		*Scott Gregory, Vice-Chairperson
X		*Mary Anne Koltowich, Recorder
X		*David Martin; Chairperson
X		*David Reichle, General Member
	X	Colton Rue, Prospective Student Member
X		Scott Stout, County Executive's Office Representative
	X	*Allen Townsend, General Member
X		David Wasilko, Student Member
	X	*Dennis Wilson, General Member

*Voting Member

Quorum Present: Yes (5/8)

Other Attendees

Sue Cange, Manager, DOE OR Office of Environmental Management (Program Speaker)
 Martha A Deaderick, ORSSAB Member, prospective RCERB Member
 Janice Moody, Watts Bar Lake Association (WBLA), prospective RCERB Member

Meeting Location

Roane County Courthouse, Qualls Commission Room

Proceedings

Call to Order. Chairperson Martin called the meeting to order at 6:02PM. Introductions were made all around.

Approval of Agenda: A motion was made to approve the May 5, 2016 agenda by MAKoltowich and 2nd by TBrown. Vote to approve unanimous.

Approval of Meeting Minutes: A motion was made to approve the April 7, 2016 meeting minutes as submitted and reviewed via email by by DReichle and 2nd by SGregory. Vote to approve unanimous.

Public Comment Period:

Janice Moody, WBLA, spoke about the growing problem of aquatics weeds in the Clinch River and Watts Bar Lake. Meetings are planned with county officials from Rhea and Meigs Counties and with state government officials Kent Calfee and Ken Yager to promote more awareness of the problem and to encourage the development of a stakeholder's group. It was noted this is TVA's last year (of a 3-year program) to treat Guntersville Lake in Alabama. (More extensive notes on this issue are attached to the April 6, 2016 RCERB Meeting Minutes).

Board Business.

- A. Scheduled Program: Sue Cange, Manager, DOE OR Office of Environmental Management (OREM). Ms. Cange's program centered on the environmental cleanup of the Oak Ridge Reservation (ORR). A handout of the presentation is enclosed with these minutes. A summary of discussion points are given below:
- The EM cleanup program is the largest cleanup program in the world. The Oak Ridge cleanup program has a FY2016 budget of \$476 million to remediate buildings and land resulting from the Manhattan Project and Cold War efforts. It is possible that the FY17 budget could be as high as \$498 million.
 - ORR is one of 16 DOE sites in 11 states remaining to be remediated and includes 34,000 acres comprised of the K-25 (ETTP), ORNL, Y-12, and TRU-waste treatment areas.
 - The Mission is to 1) protect the region's health and environment; 2) make clean land available for future uses; 3) ensure DOE's ongoing vital missions. The Vision for the ORR is to be remediated, modernized, and reindustrialized.
 - With a variety of cleanup challenges, the main question is how to balance risks and costs. Y-12 presents the largest environmental risk with nearly 20 million lbs of mercury used with an estimated 700,000 lbs released into the environment. ORNL presents the largest nuclear/radiological risk with over 26 million curies stored there. ETTP presents the largest lifecycle cost risk with nearly \$60 million spent on base operations with the cost of cleanup increasing as facilities continue to degrade.
 - There are three "Visions": Vision 2016 is the completion of gaseous diffusion plant (GDP) demolition at ETTP (on target); Vision 2020 is to have the remaining portion of ETTP cleaned up and reindustrialized (includes centrifuge, central neutralization facility (CNF) and TSCA Incinerator); Vision 2024 is to expand cleanup work to Y-12 to address mercury contamination. Vision 2024 includes the preparation of facilities for future demolition (excess contaminated facilities; e.g., Alpha 5 with \$19 million to NNSA and \$28 million to EM this year for characterization, stabilization, and abatement of some hazards/risks); the design and

construction of the mercury treatment facility, and planning for waste disposition (e.g., future EMWMF).

- Status of ETTP Reindustrialization: over 700 acres of land transferred (to CROET); 14 buildings transferred; 20 private companies operating; and site infrastructure, roads and services transferred to the City of Oak Ridge. Historic preservation underway as part of the Manhattan Project National Park.
- 2018 is the planned beginning of construction of the Y-12 mercury treatment facility. The facility will help to reduce the mercury concentration in the water leaving the site (There is a 51 ppt (trillion) limit of mercury in water regulation) and it will be an important control measure for future cleanup at Y-12.
- Efforts at the current EMWMF (Bear Creek area adjacent to Y12) include the redesign of the landfill cap to get more storage and to update the original design that was completed 20 years ago. It is currently about 70% full and is expected to be nearly full when ETTP cleanup is complete. Approximately 90% of the ETTP materials were transported to the EMWMF with 10% ETTP materials shipped for offsite disposal due to higher level radwaste. The future EMWMF is needed for storage of waste demolition materials from the cleanup of Y-12 and ORNL.
- Status of future new on-site disposal facility (e.g., known as the EMDF): 16 sites were evaluated with 12 eliminated as unsuitable using defined screening criteria. There are 6 disposal options: four (4) sites in Bear Creek valley (East Bear Creek brownfield site, a dual-site, West Bear Creek valley greenfield site, and hybrid small onsite (using one of the dual sites combined with offsite disposal); 1 option of “no-action;” and 100% off-site disposal. Version 4 of the Draft Feasibility Study is currently in regulator review with TDEC and EPA (submitted in March 2016). If the Feasibility Study is not approved it is expected that the Parties will be in the “Informal Dispute” stage. This draft differs from previous drafts to address concerns such as TDEC wanting other sites explored and to not use sites that would impact groundwater streams requiring extra engineering and methods of re-directing water (e.g., current East Bear Creek brownfield site). DOE will seek community input in public workshops planned for this summer, along with formal public comment sought with the issuance of the proposed plan targeted for the fall of 2016.
- Decisions regarding the allocation of funds are made based on priorities for the EM Program. DOE facilities at Savannah River and Hartford have higher priority due to high-level radwaste resulting from Plutonium production. WIPP re-opening is another priority (targeted to begin at the end of 2016), with 2017 seeing the receiving of waste DOE has good support in Congress with Lamar Alexander chairing the Senate Appropriations Committee and Chuck Fleishman chairing the House Appropriations Committee.

- The Groundwater Strategy Plan is in implementation. This came about as a result of EPA and TDEC being frustrated with the lack of data and information on DOE groundwater that could be modeled and used for future decision-making. This became a DOE/TDEC/EPA strategy that focuses on addressing groundwater contamination on and around ORR.
 - The first project was to evaluate the potential for offsite migration of contamination west of the Clinch River. Three rounds of water sampling were conducted at over 40 locations in Roane and Anderson counties. Results indicated no exceedances of Federal Drinking Water Standards (after some repeated tests). This project carried a cost of about \$3.5 million. The final report will be issued in 2017. Some gross alpha and Radium 226 have been detected, which could be naturally occurring elements.
 - DOE, EPA and TDEC will decide what the next project should be under the groundwater strategy. There is a prioritized list including actions such as onsite studies of Melton and Bethel Valleys groundwater migration pathways will be performed to reduce uncertainties associated with former waste disposal areas
- The last major subject covered was DOE's Stewardship Program. This program is in place to ensure completed cleanup actions remain effective and protective. This includes the upkeep of earthen caps on closed burial grounds, site postings, environmental monitoring, maintenance of land use restrictions, etc. This encompasses over 45 sites with engineering/institutional controls that require more than 200 inspections annually. OREM uses a web-based tool to implement, track, maintain, and verify controls and other stewardship information. Implementation of stewardship activities is coordinated with environmental regulators and the public via annual formal reviews. T. Brown reiterated the need for DOE to communicate inspection results to the public.
- There will be a DOE workshop for the public on May 19, 2016 at the AMSE museum in Oak Ridge from 3-5 pm. This workshop includes a panel discussion with DOE's three prime contractors – UT Battelle (ORNL), CNS (Y-12), and UCOR (ETTP).
- Regarding the potential small modular reactor (SMR) project on the old Clinch River Breeder site, T. Brown asked if TVA and NRC is sharing groundwater sampling results from site investigations with the DOE. Susan replied she believes this is happening.

B. Roundtable Discussions:

- Martha Deaderick, report on recent National Environmental Justice Conference: deferred until the June RCERB meeting.
- Horsehead Facility Public Comment April 14, 2016: attended by DMartin and MAKoltowich. It was recommended the RCERB submit a letter to TDEC regarding the short notice given between the public meeting and

the due date to submit comments. (Notes from the April 14, 2016 meeting are attached to these minutes). This is an issue that requires further purview from the RCERB.

- Ferguson Report on new DOE EM landfill facility – wait on DOE’s response. The RCERB needs version 4 of the Feasibility Study that DOE submitted to TDEC and EPA to review.
- Roane County Lighting Ordinance: Glen Cofer of Roane County Zoning is preparing a draft. It is planned for the RCERB to review this draft before proposing this new ordinance to the Industrial Board.
- DOE Advisory Board Meeting: DMartin submitted the RCERB questions agreed upon in previous meetings. He emphasized that all of ETPP and most of ORNL are located in Roane County; therefore, public meetings are important to be conducted in Roane County.
- Tiger Haven status: waiting on TDEC to perform sampling this summer (planned for June). RCERB will follow up with TDEC to get results.
- Prospective RCERB Members: Martha Deaderick is being nominated by Ron Woody for appointment by the Roane County Commission in May’s meeting. Janice Moody, WBLA, is interested in becoming a member and will submit a bio for RCERB review

C. New Business: None

Next RCERB Meeting: Thursday, June 2, 2016, 6:00 pm, Roane County Courthouse. DMartin is working on the program

Meeting Adjourned: 8:05 pm.

Attachments and Enclosures:

- 1) RCERB May 5, 2016 Meeting Agenda
- 2) Meeting Notes April 14, 2016 – Horsehead Corporation and TDEC Public Meeting for Air Compliance Permit Revisions
- 3) Presentation: Cleanup of the Oak Ridge Reservation, Sue Cange, Manager, DOE OREM

Agenda for Thursday, May 5, 2016
Roane County Environmental Review Board
Roane County Court House
Qualls Commissioners Meeting Room

6:00 PM - Call to Order, Introductions and Chair's Comments

Our May presenter is Sue Cange. Ms. Cange is Manager, Department of Energy's Oak Ridge Office of Environmental Management.

The next meeting will be on June 2, 2016 at the Roane County Court House.
Presenter TBA.

6:03 PM - Changes to and approval of agenda

6:05 PM - Approve/changes April Minutes

6:07 PM - Presentation

7:00 PM Public Comment

7:05 PM – Board Business

- Martha Deaderick report on recent National Environmental Justice Conference. MD
- Update on public meeting on issuing a consolidated operating permit for Horsehead Corp zinc recovery facility in Rockwood. MAK, DM
- Update on putting forth a request to the RCC for a lighting ordinance. DM
- Ferguson Group Report on the sighting and possible community impact of a proposed low level waste disposal site that the DOE wants to build on the DOE OR Reservation. Concurrent with this the Board also received a copy of the statement and inquiry sent to OR DOE-EM by the City of Oak Ridge regarding the proposed disposal sites. Does the Board wish to wait till the DOE formally replies to the report to consider commenting? MK
- Comments on invasive aquatic weeds in Watts Bar Reservoir. All
- Report on presentation of questions submitted at the DOE Advisory Board Spring meeting in Oak Ridge. DM
- Report on the Oak Ridge Reservation Communities Alliance meeting 2/29/2015. DCM/MAK
- Comments on path forward with Tiger Haven. All
- Suggestions for new member. All

7:30 PM Adjourn

Incoming Documents:

Recap of RCERB Meetings

April 7, 2016 Quorum (4/7) Gene Robinson, NRCS
March 3, 2016 Quorum (7/8) Ron Woody, Update
February 18, 2016 Quorum (8/8) Glen Cofer, Proposed Lighting Ordinance
December 3, 2015 Quorum (5/8) Issues before the Board
November 2015 Quorum (8/8) L. Wilkerson update on ORDOE-EM

October 2015 Quorum (5/8) Officer election, FY2016 Planning
September 2015 Quorum, (6/8) Public comments
August 2015 Quorum, (8/8) (RSI) Solar Energy Projects, Gil Hough
July 2015 No meeting by agreement
June 4, 2015 Quorum TVA exit meeting on ash spill at Kingston Plant
May 7, 2015 Quorum (6/8) Soil remediation, Zone 1 ETTP

ROANE COUNTY ENVIRONMENTAL REVIEW BOARD

Meeting Notes: Horsehead Corporation; Major Source Title V Permit 562547
Public Hearing, April 14, 2016; 5 PM Informational Session; 6 PM Public Hearing
RCERB Attendees: David Martin, Mary Anne Koltowich

Attendees:

TDEC – Tara Wohlgemuth, Regional Director of External Affairs
Sunanda Shajikumar, Permit Writer
Malcolm Buther, Public Hearing Officer
Other Reps (Nashville) Steven Simpson, Marty, Jerry; all from Air Pollution Control
Horsehead – Tom Johnston, Allen, Don Norton, 1 other

5 PM Informational Session:

- Sunanda Shajikumar, Permit Writer, went through a Power Point presentation summarizing the numbers and types of air pollution control permits held by Horsehead. There are about 16 permits (73-0107-01 thru 16) that are being combined into one Title V Permit. The new Title V permit application was received at TDEC in 2012.
Major changes in this permit include new semiannual reporting of emissions and annual compliance certification. EPA has to approve the final permit.
- One of the Horsehead representatives gave a synopsis of what Horsehead does. It produces zinc from recycled waste products, primarily from electric arc furnace dust created from producing steel. Arc furnace dust is about 20% zinc. Horsehead uses coke to produce CO that releases the zinc via a kiln heating process.
- Several people from the community in proximity to Horsehead proceeded to discuss issues from living near the facility.
 - A woman noted there are two schools very close (about 2200 feet away). She wants TDEC to put in its own air monitors, as she believes Horsehead owning its own monitors and reporting its own emissions is a conflict of interest. It should be noted that Horsehead responded it monitor the air emissions for a 24-hour period every 6 days.
 - One man, Nicholas Barrett, expressed much concern for health and noise problems. He has extensive videos, showed several over the past week, and asked what were the emissions noted (a lot of smoky plumes from numerous points in the facility). Horsehead responded that a couple were steam, but was not forthcoming about the other “smoke” plumes, other than saying upset conditions (e.g., power outage) sometimes causes smoke to be emitted. He discussed an EPA criminal investigation during the 2009-2010 timeframe that was abruptly stopped. Mr. Barrett has high quality cameras mounted on his house that records the Horsehead facility 24/7.
 - Another lady asked what are the black specs that cover her white car. Horsehead did not respond.

6 PM Public Hearing: Moderated by Malcolm Butler

- (Noted that 17 people from the community attended)
- Noted that April 21, 2016 is the end of the written comment period for people to submit formal comments.

- Kimberly Howe (lives in immediate vicinity of Horsehead): discusses her research on the health effects of cadmium (one of Horsehead's air emissions substances). She has severe lung issues and anemia and had to go on disability due to being unable to work.
- Roberta Dennis (lives in immediate vicinity of Horsehead): called the police when "clouds" occurred during a middle school football game. The smoke cloud covered the football field. The responding policeman works part-time for Horsehead; nothing was done. Ms. Dennis sees a lot of "smoke" coming from the facility. She wants the names of the facility owners (past and present) sent to her from EPA to understand who is accountable. She stated that legislators change too often to be consistent people to work with on the Horsehead problem
- Carolyn Park (lives in Ozone and works in Rockwood): She owns a small business in Rockwood. While driving off the mountain, she often sees smoke hovering over the area of Horsehead.
- Adam Trout (lives in Rockwood): He wants to have permanent continuous stack emission monitors to show compliance daily. He wants Horsehead to be accountable for its air quality.
- Melissa Trout (lives in Rockwood): She is a runner who runs very early in the morning (before daylight), smells a lot chemicals. She stated there is always a smell and wants more monitoring and accountability.
- John Dennis (lives in immediate vicinity of Horsehead): He used to enjoy evening walks with his wife (Roberta). He stated that often, they cannot walk due to the smell and smoke. He had to put an air purifier in his home as he has developed respiratory problems. He asked if Horsehead needs to move to a more remote location or update its facility. He asked if the community needs to be notified when Horsehead is experiencing upset conditions.
- Nicholas Barrett (has lived in immediate vicinity of Horsehead for last 14 years): In 2007, he purchased a home for around \$200,000 located 2200 feet from Horsehead (he calls it "ground zero"). It was quiet until 2008, when construction activity started at Horsehead. The noise since is endless and is 24/7, not allowing Mr. Barrett to sleep well. He spent another \$200,000 upgrading his home with double pane windows and other improvements. He allowed the EPA to mount cameras on his house as part of an EPA investigation into "criminal" emissions and improper operations at Horsehead. He stated that after a full year of investigations (including extension video and interviews), the EPA investigator was told to "back off." He believes the investigation was halted due to influence from politicians. During a public meeting in 2012, he heard from one Horsehead employee that (allegedly) "we polluted the hell out of this place in 2008." Mr. Barrett reported that during 2009-2010, EPA met with TDEC and provided video evidence. In 2010, the criminal investigation was closed. Mr. Barrett was notified by EPA in a letter that the hard drive with the video and picture evidence was "inadvertently destroyed." He requested further hearing to provide additional evidence and wants TDEC to extend the public comment period.
- Teresa (lives in immediate vicinity of Horsehead): She discussed severe health issues that require 4 breathing treatments/day. She is worried about her 28-year old daughter who has grown up breathing the air. She stated she does not have the money to move.
- Nicholas Barret (allowed more time after everyone else had commented that wanted to): He stated he is a lifetime engineer. He thinks Horsehead is a botched job and that it should be torn down and re-built to modern standards. He stated that many facility orifices continue to emit in violation of standards. The EPA investigation came to nothing, some politically connected stopped the investigation. He does not expect anything to come from this public hearing or

from the Title V permitting process as nothing has been done before. He thinks the city council should all go out of office as they have not listened or done anything either (nice people, but incompetent to deal with the technical issues of Horsehead).