Former Kerr-McGee Chemical Corporation Superfund Site Navassa, NC

Public Meeting March 14, 2017

U.S. Environmental Protection Agency
North Carolina Department of Environmental Quality
Greenfield Environmental Multistate Trust LLC,
Trustee of Multistate Environmental Response Trust







Public Meeting Agenda

- Introductions
- ✓ Update on EPA Information Repository
- ✓ NCEERC Update
- ✓ NC DEQ Update on Navassa Trustees Council and on Other Sites in the Area
- ✓ Overview and roles of EPA, NC DEQ, Multistate Trust and Stakeholders
- ✓ Status of the Site Investigations
 - Summary of Activities Completed in December 2016 and January 2017
 - Field Work Planned for 2017
 - Timeline for Remainder of Cleanup
- ✓ Kerr-McGee Navassa Redevelopment Planning Initiative
- Questions and Discussion







Introductions

Tonya Spencer, EPA







Introductions – Tonya Spencer, EPA

- ✓ Navassa Superfund Site Cleanup Team
 - U.S. Environmental Protection Agency (EPA)
 - North Carolina Department of Environmental Quality (NC DEQ)
 - Multistate Environmental Response Trust (Multistate Trust)
- ✓ Navassa Community Economic & Environmental Re-Development Corporation (NCEERC) — Community group
 - Technical Assistance Grant (TAG) update
- ✓ Navassa Trustees Council
- ✓ Partners in other efforts
 - National Oceanic and Atmospheric Administration (NOAA)
 - Natural resource restoration
 - North Carolina Division of Public Health (NCDPH)
 - Health education and outreach
 - University of North Carolina Wilmington (UNCW)







Update on EPA Information Repository

Public Meetings Every Quarter Next Meeting in June 2017







Information Repository









NCEERC Update

Chris Graham, NCEERC







NC Department of Environmental Quality Jim Bateson

NC DEQ Activities

and

Update on Navassa Trustees Council

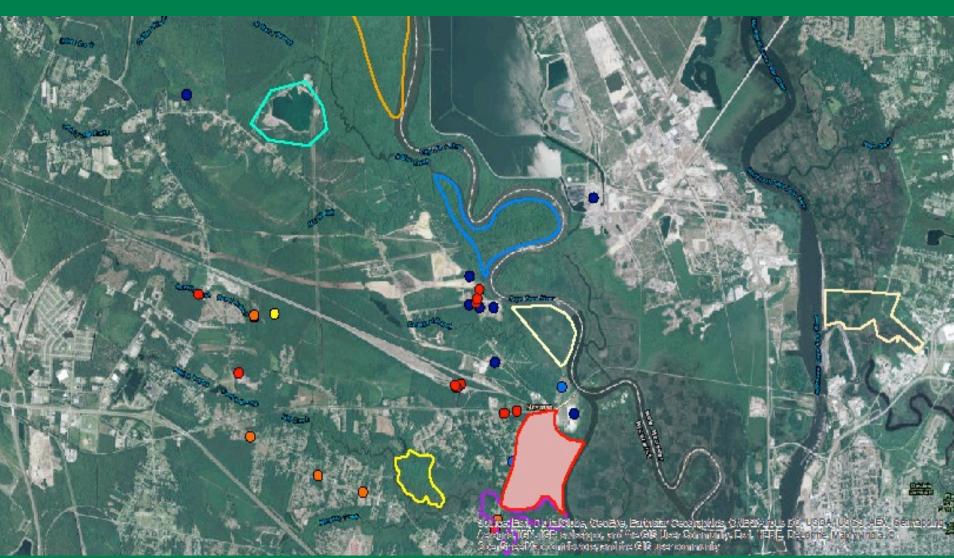
Jim Bateson, NC DEQ







NC DEQ Activities









Overview of Cleanup

Erik Spalvins, EPA







Cleanup Overview

- EPA, NCDEQ, Multistate Trust will:
 - Cleanup the site to enable reuse as supported by and beneficial to the community
 - Inform the public of the nature of the environmental issues and of the progress being made
 - Involve the public in the decision-making processes that will affect them and in the cleanup decisions under consideration
 - Conduct the cleanup so it can have a broad, positive community impact
- The role of the community Provide Vision
 - Pick up where the Superfund cleanup stops







Roles and Responsibilities



Joint activities

- Discuss and Plan Scope of Actions
- Coordinate with stakeholders and residents





- Ultimate responsibility for cleanup
- Review and Approve Work Plans
- Provide Oversight of Cleanup Work
- NC DEQ is responsible for long term care, if needed

Multistate Trust Activities

- Conduct "Environmental Actions" per Bankruptcy Agreement
 - Investigation
 - Cleanup
 - Long term care, etc.
- Coordination and integration of reuse and remedial efforts and initiatives







TVA Kingston / EPA Reuse Collaboration





Figure 1. Aerial view of the coal ash spill in 2008 (left). Capped landfill and recreation area at the Site in 2015 (right).



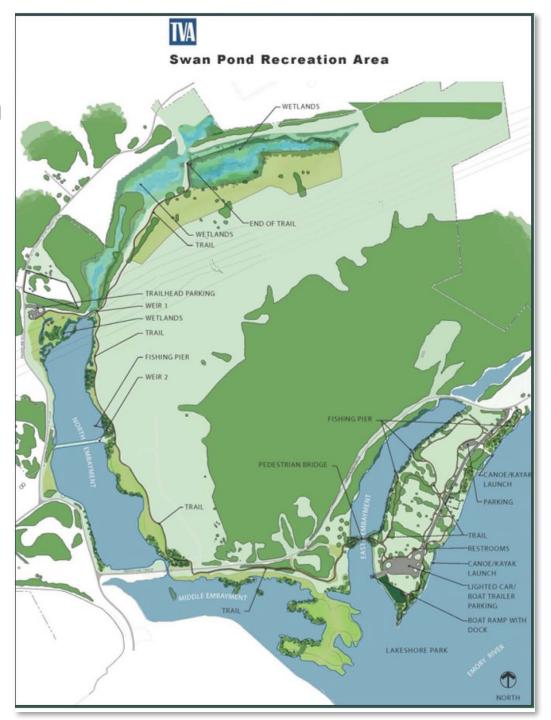


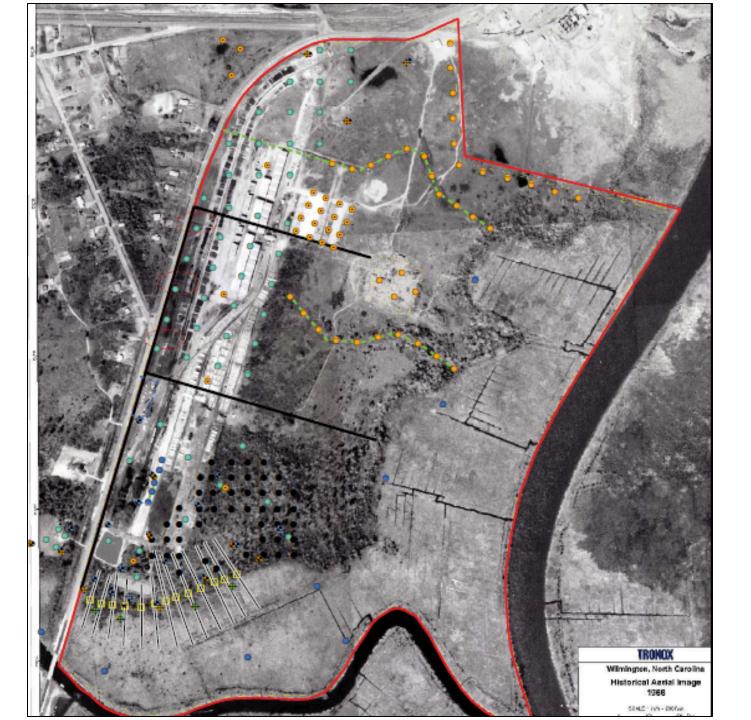


TVA Swan Pond Recreation Area Plan

Lessons Learned:

- 1. Integrate cleanup and reuse.
- 2. Rely on diverse expertise for complex cleanups.
- 3. Make sure all community voices are heard.
- Consider potential community impacts of cleanup activities and adjust plans accordingly.





Site Work Update

Richard Elliott, Multistate Trust







Supplemental Remedial Investigations (SRI) Richard Elliott, Multistate Trust

Purpose of Supplemental Remedial Investigations (SRI): Characterize Nature and Extent of Contaminants of Concern

- Determine lateral and vertical distribution of contaminants
- Investigate all media: soil, sediment, groundwater and surface water
- Use SRI results to determine risk posed by contamination to human health and the environment







J5 Safety Meeting Prior to Clearing Activities November 2016









December 2016 NAPL Measurements Wells MW-27S and MW-06D











December 2016 NAPL Measurements Wells MW-27S and MW-06D











March 2017 Core From Site









Groundwater Sampling Event December 2016

- ✓ Collected water level measurements from 49 existing monitoring wells
- ✓ Measured each well for the presence of DNAPL
 - Measurable amounts found in 7 wells at thicknesses ranging from 0.07 feet to 3.44 feet
- ✓ Collected groundwater samples from 44 monitoring wells
 - Analyzed for VOCs, SVOCs, and select inorganic constituents
- ✓ Groundwater analytical results are consistent with historical concentrations







Surface Water and Sediment Sampling Event December 2016

- ✓ Collected sediment samples from 3 background locations in the Marsh
 - Analyzed for SVOCs and chromium
- ✓ Collected surface water from 3 locations in the Marsh
 - Analyzed for select inorganic constituents
- ✓ Analytical results are being evaluated







Ecological Sampling Event December 2016

- ✓ Collected bulk sediment samples from 10 locations in the Marsh
 - Analyzed for PAHs and TOC
- ✓ Pore water extracted from the 10 sediment samples
 - Analyzed for PAHs
- ✓ Toxicity testing conducted using an amphipod species (crustacean)
 as the test organism
- ✓ Benthic community assessment samples collected from 10 locations
- ✓ Ecological samples results are being evaluated







Background Soil Sampling Event January 2017

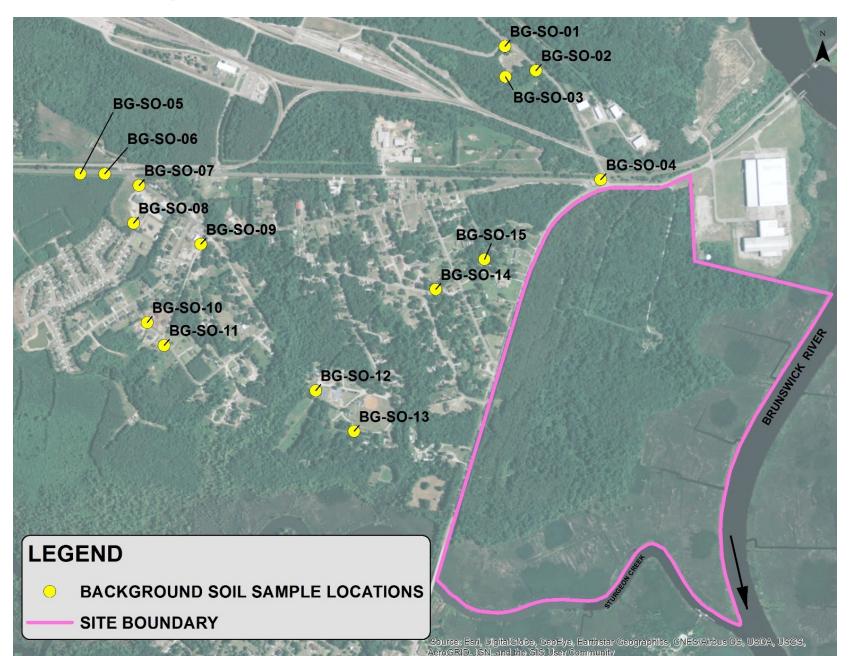
- ✓ Collected surface soil samples (0 to 0.5 feet deep) from
 15 locations on Town of Navassa property
 - Analyzed for metals and PAHs
- ✓ Analytical results indicated detected concentrations are below EPA Residential Regional Removal Management Level (RML)







Background Soil Sample Locations



2017 SRI Data Collection Activities

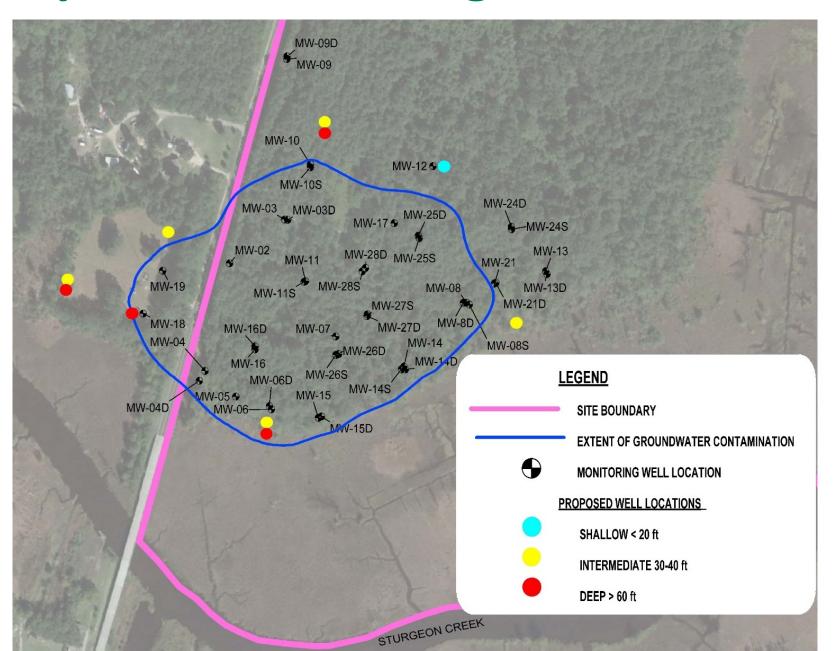
- √ First Quarter 2017
 - Geotechnical samples for vapor intrusion analysis
 - Additional on-site and off-site monitoring wells
 - Additional soil samples from northern areas of Site
 - Additional soil borings for DNAPL investigations
- ✓ Quarterly groundwater sampling in March, June, September and December
- √ Work began March 6, 2017







Proposed Monitoring Well Locations



First Quarter 2017 Field Schedule

- ✓ Field activities will be conducted in three 10-day shifts
- ✓ Shift 1 March 6 to March 15
 - Installation of 4 wells at off-site locations
 - Soil sampling from 31 locations in wood storage areas
 - Vapor intrusion soil sampling from 6 locations
- ✓ Shift 2 March 20 to March 29
 - DNAPL assessment 10 deep and 3 shallow soil borings
 - Installation of 6 wells at on-site locations
- ✓ Shift 3 April 3 to April 12
 - Groundwater sampling







2017 Risk Assessments and Feasibility Studies

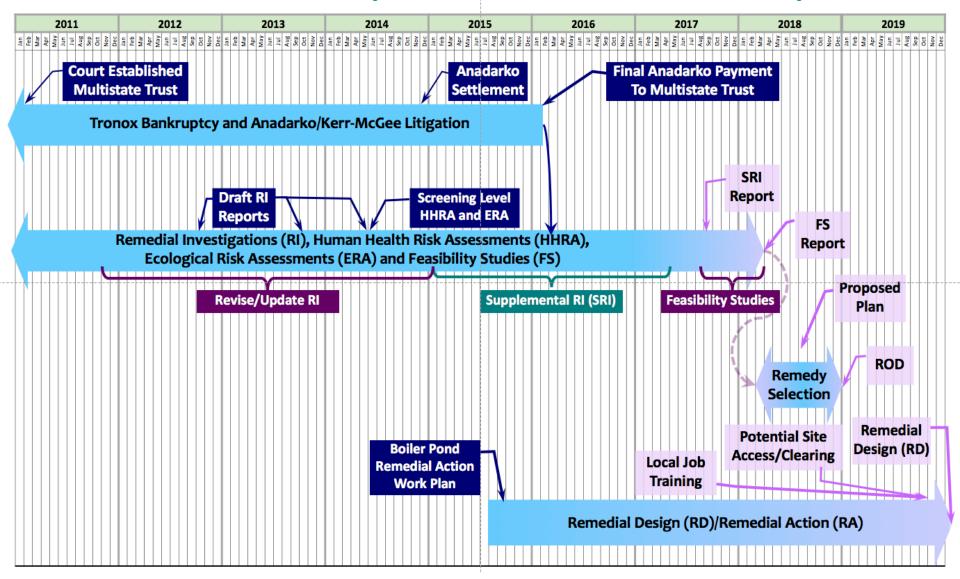
- ✓ Risk Assessments
 - Human Health and Ecological Risk Assessments
 - Scheduled to be complete June 2017
- ✓ Remedial Investigation (RI) Report scheduled to be issued September 2017
- ✓ Initiate Feasibility Study (FS) October 2017







Kerr-McGee Navassa Superfund Site Overview of Cleanup Plans



Kerr-McGee Navassa Redevelopment Planning Initiative (RPI)

Cindy Brooks, Multistate Trust







KMCC RPI Community Involvement

Redevelopment Working Group

- Residents of Navassa
 - Town of Navassa
 - NCEERC
 - Business Interest

Coordinator

- Multistate Trust—Cindy Brooks and Richard Elliott
- Land Use Planner—Jason Epley (Benchmark Planners)

Advisors

- Navassa Trustees Council—Anjie Ackerman
 - US EPA—Erik Spalvins and Tonya Spencer
 - NCDEQ—Anjie Ackerman







Kerr-McGee Navassa Redevelopment Planning Initiative (RPI)

What Should Redevelopment Plan Do?

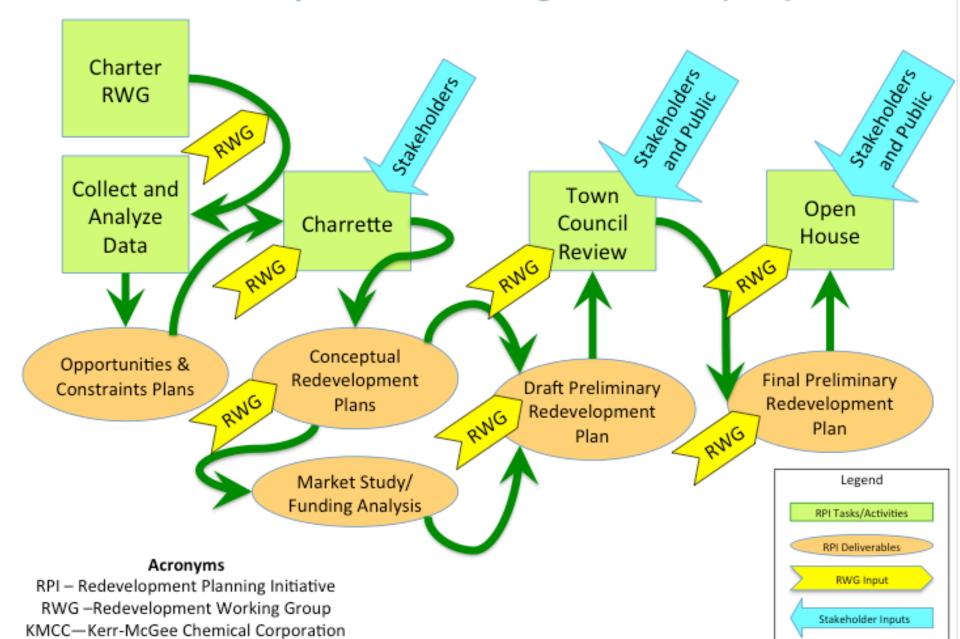
- ✓ Protective of Human Health and the Environment
- ✓ Endorsed by Community Stakeholders
- ✓ Technically Feasible
- ✓ Economically Viable/Sustainable
- ✓ Consistent with Superfund Laws, Zoning, etc.







KMCC Redevelopment Planning Initiative (RPI) Process



Public Meeting Agenda

| Redevelopment Working Group (RWG) Meetings/Events and Target Schedule | |
|--|-----------------|
| Meetings or RPI Events | Target Schedule |
| RWG Chartering Meeting | April 2017 |
| RWG Charrette Planning Meeting | July 2017 |
| Charrette | September 2017 |
| RWG Comments on Draft Conceptual Redevelopment Plans | October 2017 |
| RWG Review of Draft Preliminary Redevelopment Plans | November 2017 |
| Presentation of Draft Preliminary Redevelopment Plans to Town Council | November 2017 |
| Open House—Final Preliminary Redevelopment Plans Presented to General Public | December 2017 |







Contact Information

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- Cindy Brooks, Multistate Trust Managing Principal
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- Richard Elliott, Multistate Trust Project Manager
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Questions and Discussion







