



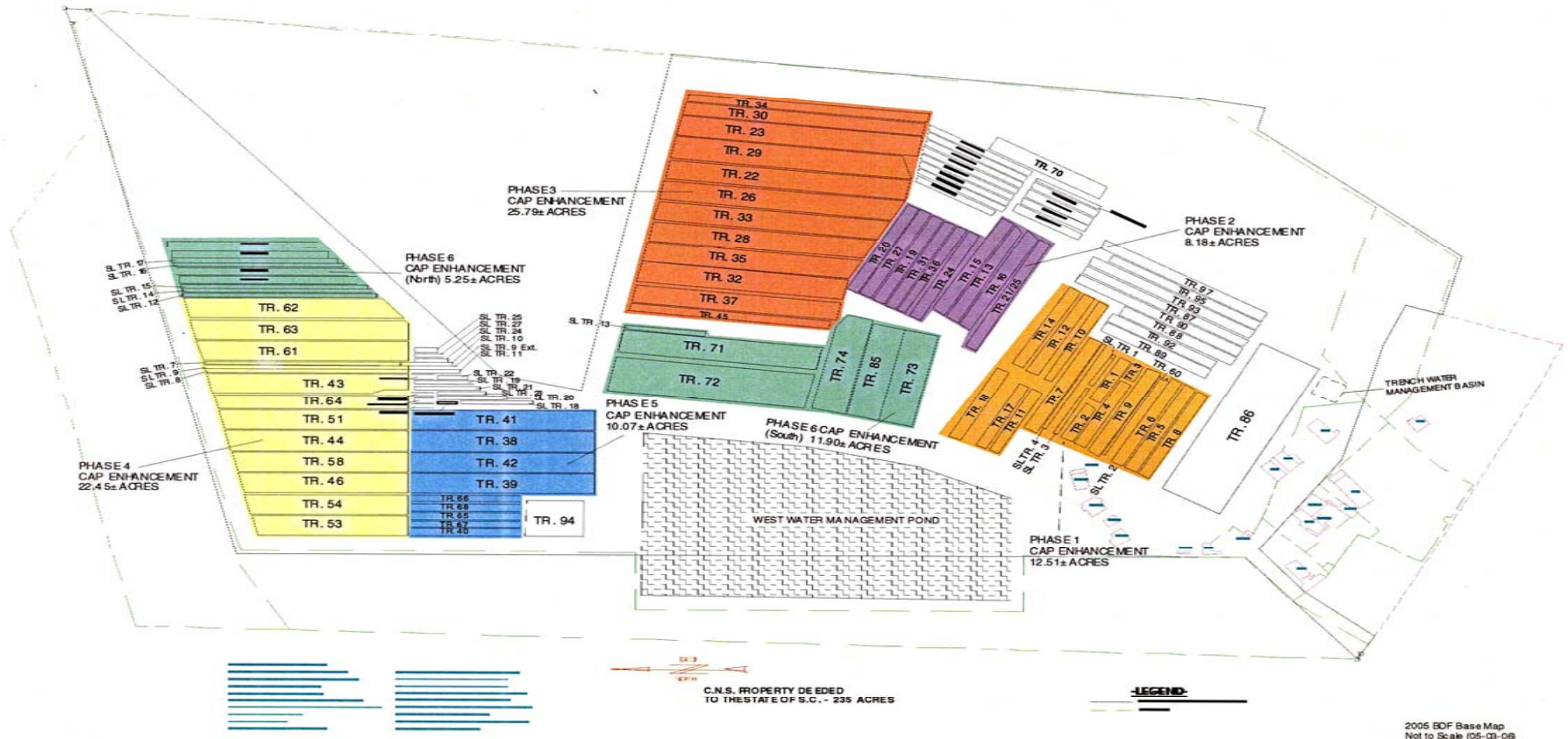
# **Barnwell Low-Level Radioactive Waste Disposal Facility Status and Plan Forward**

**WM '07 Panel Session 20  
Disposal Issues  
February 27, 2007  
by Bill House**

# Barnwell Disposal Site Presentation Overview

- **Current Disposal Operations**
- **Waste Volumes and Types**
- **Disposal Site Finances**
- **In-Region Operations Plans**

# Barnwell Site Configuration



# Current Disposal Operations

## ■ Three Trench Designs

- Large (Class A) Waste Trench
- Class B/C Trench
- Slit Trench

## ■ Concrete Disposal Vaults or equivalent

- Liners, drums, boxes in standard vaults (cylindrical, rectangular, and slit trench)
- Large components encapsulated in specifically designed vaults
- Large components assessed as the vault

# Disposal Trench in 2004



# Class B/C Trench



# Large Component Disposal



# Volumes under Atlantic Compact

	Volume Allowed	Actual Volume
<b>FY 2000-2001</b>	<b>160,000 cu ft</b>	<b>125,989 cu ft</b>
<b>FY 2001-2002</b>	<b>80,000 cu ft</b>	<b>57,763 cu ft</b>
<b>FY 2002-2003</b>	<b>70,000 cu ft</b>	<b>65,656 cu ft</b>
<b>FY 2003-2004</b>	<b>60,000 cu ft</b>	<b>59,516 cu ft</b>
<b>FY 2004-2005</b>	<b>50,000 cu ft</b>	<b>43,260 cu ft</b>
<b>FY 2005-2006</b>	<b>45,000 cu ft</b>	<b>44,988 cu ft</b>
<b>FY 2006-2007</b>	<b>40,000 cu ft</b>	<b>(7/06 – 12/06) 14,031 cu ft</b>
<b>FY 2007-2008</b>	<b>35,000 cu ft</b>	

•Members: SC, CT, NJ. No out of compact waste after FY 07/08.



# Barnwell Site Waste Types

Waste Types	CY 2004 Volume		CY 2005 Volume		CY 2006 Volume	
	CuFt	%	CuFt	%	CuFt	%
Resins/Filter Media/Filters	27,358	48	23,419	54	18,149	48
Dry Active Waste	12,358	22	8,861	21	10,867	28
Reformed Residue	4,225	7	6,685	16	5,534	15
Equipment & Components *	10,398	18	1,624	4	1,493	3
Irradiated Hardware	920	2	1,498	3	1,379	4
Solidified Liquids	519	1	493	1	285	1
Sealed Sources, Devices and Gages	985	2	433	1	422	1
<b>Totals</b>	<b>56,763</b>	<b>100</b>	<b>43,013</b>	<b>100</b>	<b>38,129</b>	<b>100</b>

\* CY 2004 volume includes **7,507** cu.ft. for the CY RPV large component

# Barnwell Site Class B/C Volumes

	FY 2001/2002	FY 2002/2003	FY 2003/2004	FY 2004/2005	FY 2005/2006
	(cu. ft.)	(cu. ft.)	(cu. ft.)	(cu. ft.)	(cu. ft.)
<b>Atlantic Compact</b>	<b>5,819</b>	<b>4,495</b>	<b>11,942<sup>2</sup></b>	<b>2,894</b>	<b>4,791</b>
<b>Texas Compact (2 states)</b>	<b>809</b>	<b>1,081</b>	<b>909</b>	<b>1,127</b>	<b>549</b>
<b>34 States w/o Access after 6/30/08</b>	<b>16,055</b>	<b>24,694<sup>1</sup></b>	<b>20,524<sup>3</sup></b>	<b>16,923</b>	<b>14,761</b>
<b>Totals</b>	<b>22,683</b>	<b>30,270</b>	<b>33,375</b>	<b>20,944</b>	<b>20,101</b>
<b>Totals w/o RPVs</b>	<b>22,683</b>	<b>20,734</b>	<b>23,038</b>	<b>20,944</b>	<b>20,101</b>

<sup>1</sup> Includes 9,536 cu.ft. for the ME Yankee RPV

<sup>2</sup> Includes 7,507 cu.ft. for the CY RPV

<sup>3</sup> Includes 2,830 cu.ft. for the Big Rock RPV

# Non- Atlantic Compact B/C Wastes (CY 2006)

<b>Generator Segment</b>	<b>Class B (cu. ft.)</b>	<b>Class C (cu. ft.)</b>	<b>Total (cu. ft.)</b>
<b>Utility</b>	<b>8,260</b>	<b>7,248</b>	<b>15,508</b>
<b>Non-Utility</b>	<b>149</b>	<b>484</b>	<b>633</b>
<b>Medical</b>	<b>1</b>	<b>15</b>	<b>16</b>
<b>Projected Total</b>	<b>8,410</b>	<b>7,747</b>	<b>16,157</b>

# Barnwell Site Financials - Actuals

<b>(\$ in millions)</b>	<b>FY 00/01</b>	<b>FY 01/02</b>	<b>FY 02/03</b>	<b>FY 03/04</b>	<b>FY 04/05</b>	<b>FY 05/06</b>
<b>Gross Revenue</b>	<b>\$69.3</b>	<b>\$33.2</b>	<b>\$37.8</b>	<b>\$39.2</b>	<b>\$29.7</b>	<b>\$29.2</b>
<b>Total cost of Operations</b>	<b>\$14.9</b>	<b>\$14.5</b>	<b>\$14.4</b>	<b>\$14.5</b>	<b>\$16.0</b>	<b>\$15.8</b>
<b>Payment to State of SC</b>	<b>\$46.3</b>	<b>\$22.2</b>	<b>\$30.0</b>	<b>\$24.8</b>	<b>\$14.0</b>	<b>\$12.3</b>

## **Full Access Until June 30, 2008**

- **Volume commitments for both years near allowed limits**
- **Still accepting irradiated hardware and sealed sources**
- **Budget and Control Board volume hold incentive program to Atlantic Compact generators had little success**

# In-Region Operations Assumptions

- **Operations for South Carolina, Connecticut, and New Jersey**
- **Annually 8,000 cu. ft. Class A,B,C wastes**
- **Two Trench Designs with progressive construction**
- **Accept existing packages including large components**

# Small Volume Site Objectives

- **Operate safely and compliantly**
- **Optimize trench size / open time**
  - Maintain operational doses ALARA
  - Minimize stormwater accumulation
- **Considering campaign style receipts for cost effectiveness**
- **Use remaining disposal area efficiently**

# Barnwell Site Financials - Projections

<b>(\$ in millions)</b>	<b>FY 06/07</b>	<b>FY 07/08</b>	<b>FY 08/09</b>	<b>FY 09/10</b>	<b>FY 10/11</b>	<b>FY 11/12</b>
<b>Gross Revenue</b>	<b>\$26.0</b>	<b>\$22.8</b>	<b>\$4.0</b>	<b>\$4.0</b>	<b>\$4.0</b>	<b>\$4.0</b>
<b>Total cost of Operations</b>	<b>\$14.8</b>	<b>\$14.4</b>	<b>\$7.6</b>	<b>\$7.6</b>	<b>\$7.6</b>	<b>\$7.6</b>
<b>Payment to State of SC</b>	<b>\$11.2</b>	<b>\$8.4</b>	<b>----</b>	<b>---</b>	<b>---</b>	<b>---</b>



# Potential Funding Alternatives

- **Increase Atlantic Compact Volume**
- **Change pricing structure to generate sufficient revenue (2nd year surcharges)**
- **Fund closed site maintenance and monitoring from the Extended Care Fund**
- **Obtain other funding or revenue sources**

# Legislative Action

- **House Bill H3545 introduced on 2/15/07**
- **Referred to Committee on Agriculture, Natural Resources and Environmental Affairs on 2/15/07**
- **Amendments Requested**
  - 40,000 cubic feet total annual volume limit
  - Including non-regional waste
  - FY 2008 through FY2023
  - Compact Commissioners to vote in favor
- **[www.truthaboutbarnwell.com](http://www.truthaboutbarnwell.com)**