

Corrective Action Program Review Waynesboro Invista Plant

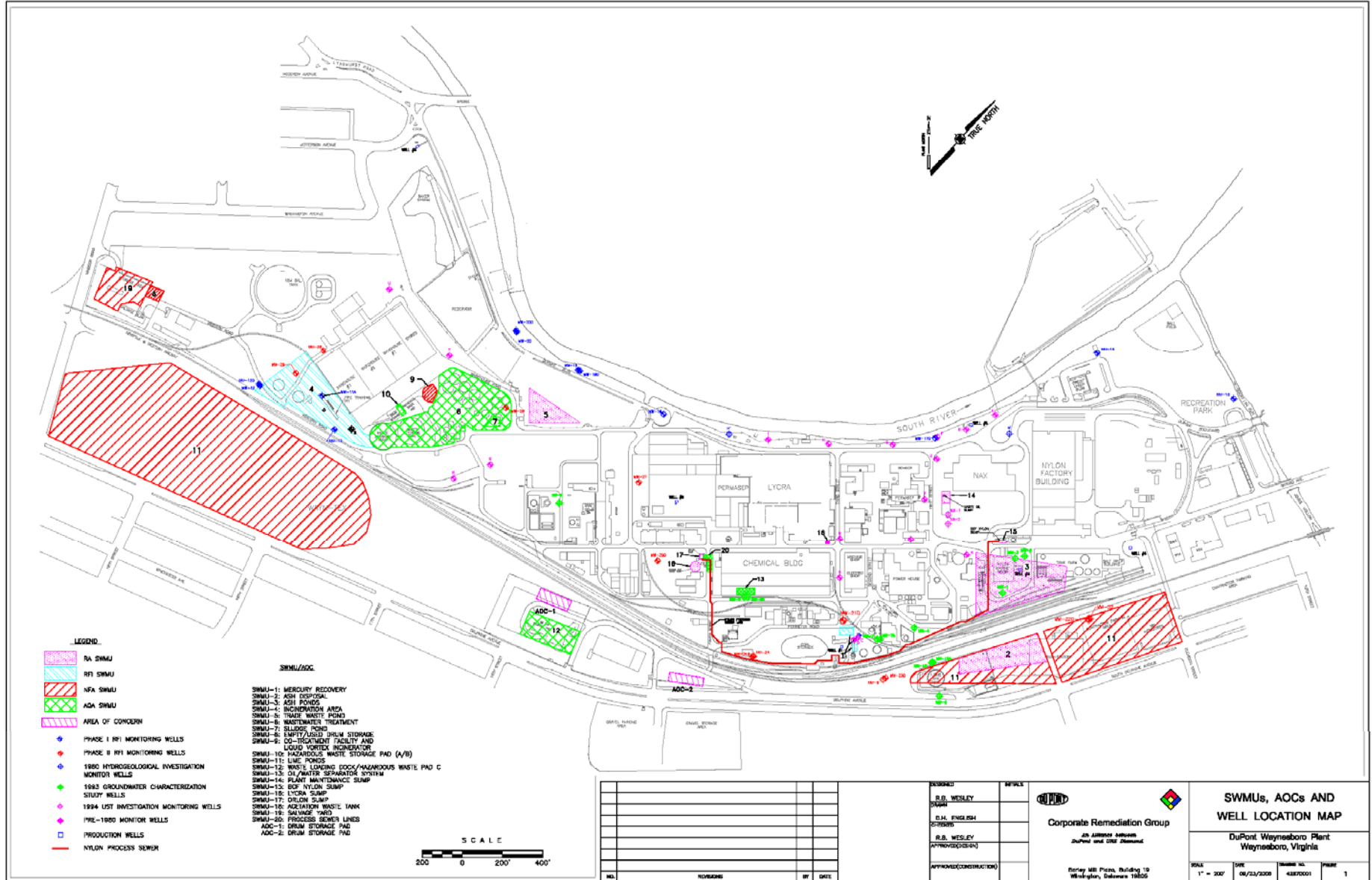


January 22, 2008

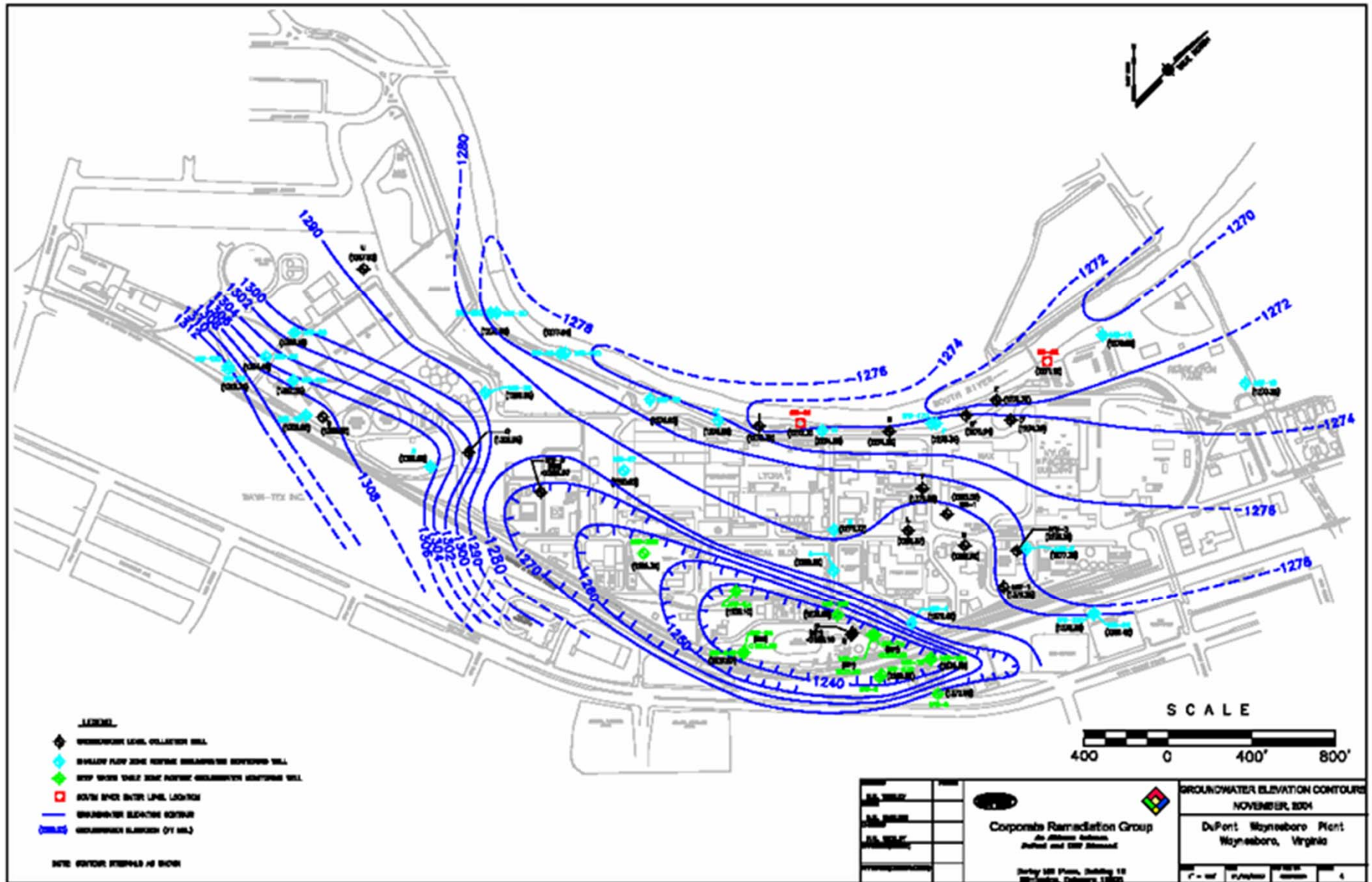
RCRA Corrective Action Programs

- Plant RCRA Facility Investigation (RFI)
- Semiannual Groundwater Monitoring Program
- Outfall Monitoring
- Sewer Investigation
- Hg Inspection and Abatement Program

SWMU Locations



Groundwater Elevation Map



Plant RFI

- Phase III (2007)
 - SWMU -1 (Mercury Recovery Area)
 - Soil sampling for correlation of soil gas Hg concentrations
 - Sampled former process ditches in Chemical Bldg area for Hg
 - SWMU – 4 (Incineration Area)
 - Additional delineation of Hg in soil
 - SWMU 6/7 (WWTP / Sludge Pond)
 - Geoprobe soil sampling to determine source of constituents at well MW-29
 - Drilled 2 wells to determine if constituents are migrating from this SWMU

Plant RFI (cont.)

- Phase III (cont'd.)
 - Northeast Area Investigation
 - Located and restored Well #1 and Flowing Well surface completions
 - Geophysical logging performed
 - Plant well sampling
 - Water level study to evaluate effect of plant well pumping on overburden wells – on going
 - Results do not indicate that the well serves as a conduit for the migration of shallow water to the bedrock aquifer

Plant RFI (cont.)

- Phase III A (planned for 2008)
 - Investigation of Hg in Chemical Building area and SWMU 1
 - To be accelerated
 - Interviews, test pits, soil and soil gas sampling
 - Northeast Area Investigation
 - Sample Well #1, additional water level study
 - SWMU 4
 - Additional delineation of Hg, sampling of seeps
 - SWMU 6/7
 - Investigate groundwater downgradient of SWMU

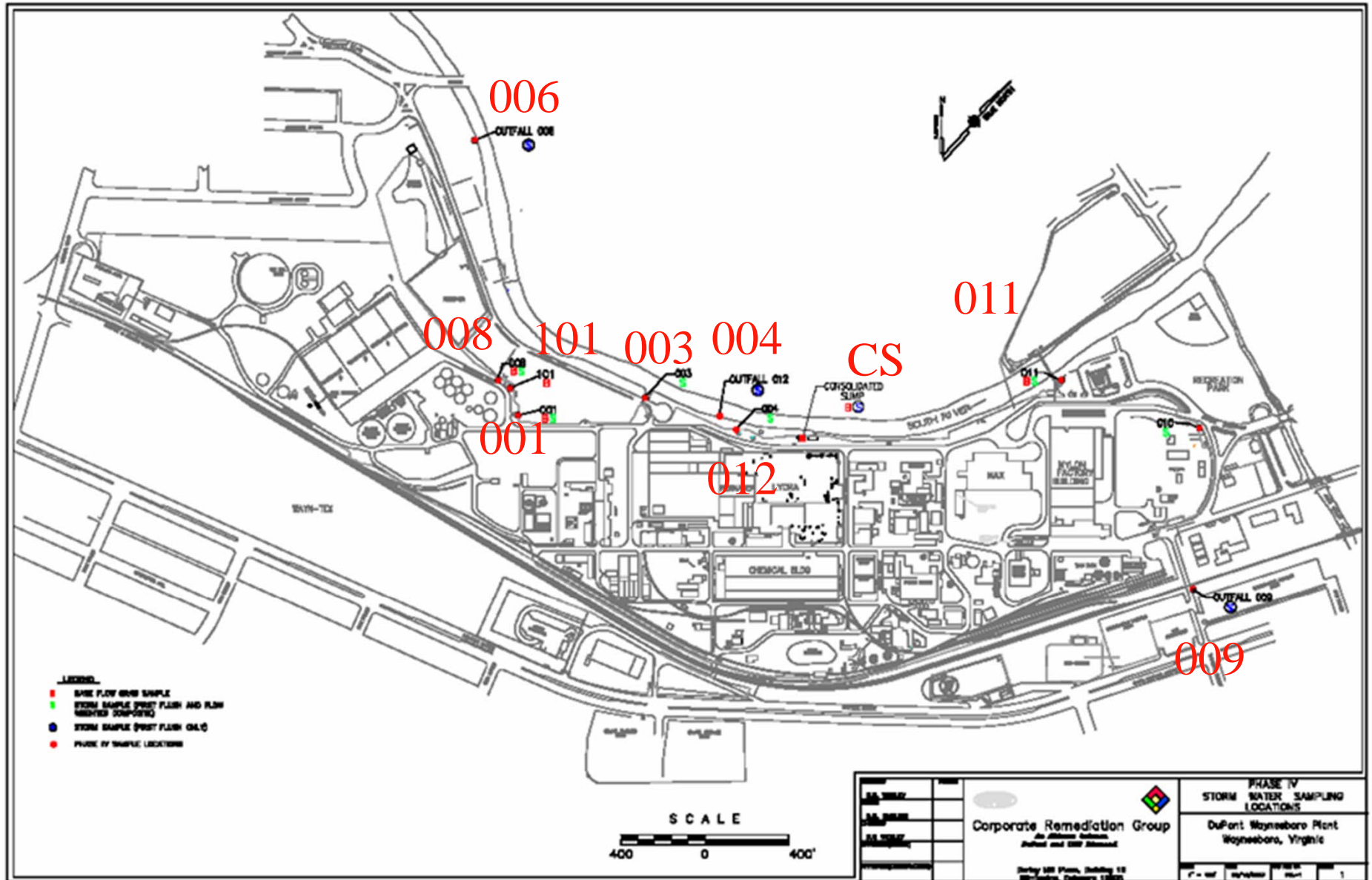
Groundwater Monitoring Program

- Semiannual monitoring program recommended after the Phase I RFI
- Monitoring Plan submitted in 2004 (38 wells, 55 water levels)
- Four years (8 events) of sampling completed to date
- Findings
 - Hg concentrations localized at SWMU-1, SWMU-4 and SWMU 6/7
 - Deep Water Table Zone water levels (Northeast Area) fluctuate significantly
 - Downgradient perimeter wells are below VGS criteria

Outfall Monitoring

- Phases I – III (2003-2007)
 - Sampled 19 baseflow and 8 storm events
- Phase IV (Started June 2007)
 - Continue to Sample 9 outfall locations + Consolidated Sump
 - Monthly baseflow samples at 4 outfalls and Consolidated Sump
 - Storm Samples to be collected twice per year at 9 outfalls and the Consolidated Sump.
 - 011 to be sampled for concentration only, no flow readings
 - EDDs to be submitted quarterly

Outfall Monitoring



Sewer Investigation

- Phase I (Completed in January 2007)
- Phase II (Proposed for 2008)
 - Closed circuit television (CCTV) inspection in the vicinity of the Old Chemical Building and upstream portions of 011 sewer system
 - Upstream sediment and water sampling and soil vapor sampling of pipe backfill .
 - Update basemap and GIS database with structures and piping sections
- Hg Inspection and Abatement
 - Cleanup of observed Hg in Chem Bldg area immediately
 - Weekly inspection and abatement program implemented

Hg Inspection and Abatement

- Mercury beads observed at drainage feature near Chemical Building
- Beads removed and disposed with Hg Vacuum
- Bi-weekly inspection and abatement program implemented

Minuteman MRS 2
Hg Vacuum



Looking Ahead

- Phase IV Outfall Sampling (Began in Jun 07)
- Hg Inspection and Abatement program ongoing
- Phase II Sewer Investigation (2008)
- Groundwater Monitoring (April and October 2008)
- Reporting of Phase III RFI (Jan 08)
- Corrective Measures Study (2008/2009)