

**Northrop Grumman Newport News
Environmental Technologies Panel
Norfolk, VA June 1, 2005**

Environmental Programs

**Jim Thornton
Director, EH&S**

Northrop Grumman Newport News

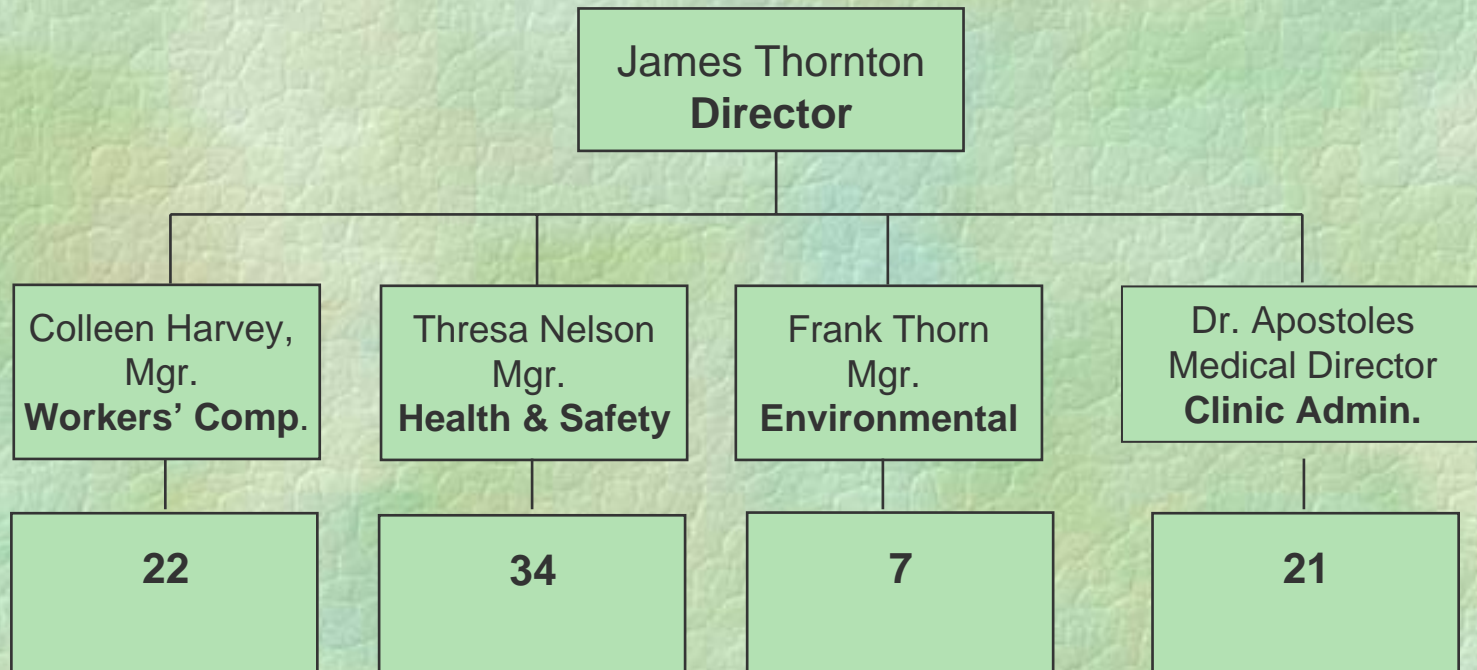
- 19,200 employees
- Delivered over 800 ships
- Largest private US shipyard
 - 28 aircraft carriers
 - 69 naval surface ships
 - 53 nuclear submarines
- 550 acres of manufacturing and construction facilities
 - 2 miles of waterfront property
 - 7 dry docks and 1 floating dock
 - 2 outfitting berths and 4 outfitting piers

Environmental Program Mission Statement

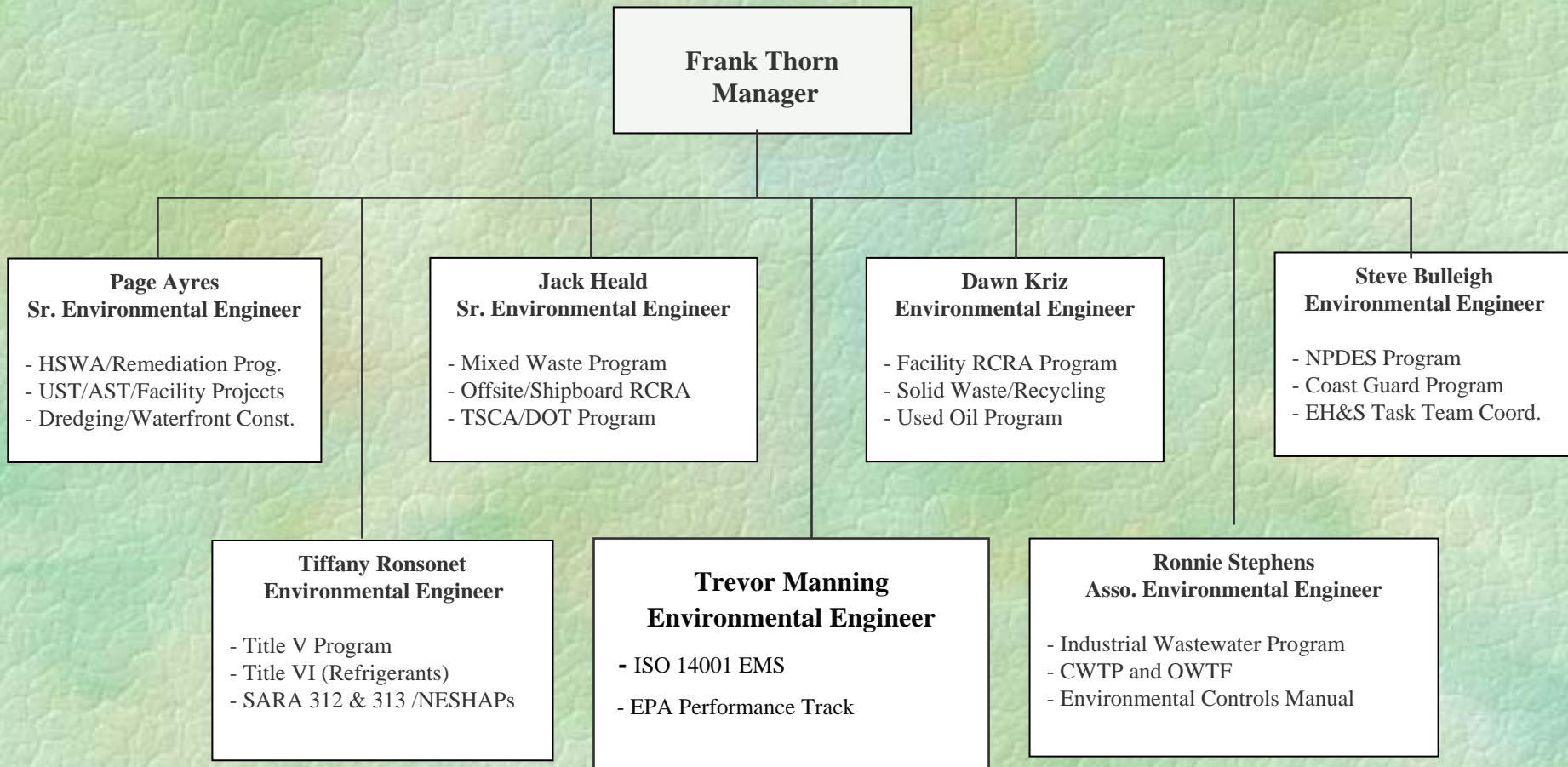
To implement Northrop Grumman Newport News commitment to environmental excellence through programs and expertise that protect the community and our natural resources, ensure regulatory compliance and advance NGNN strategic business objectives.



EH&S Division



Environmental Engineering



Clean Water Act

- Hampton Roads Sanitation District
- Discharges to the Local POTW
 - North Yard and Main Yard Permits
 - Approximately 180 wastestreams
 - Chemical Waste Treatment Plant
 - Oily Waste Treatment Facility
 - Used Oil Program
 - AWARDS

Chemical Waste Treatment Plant



Control Panel

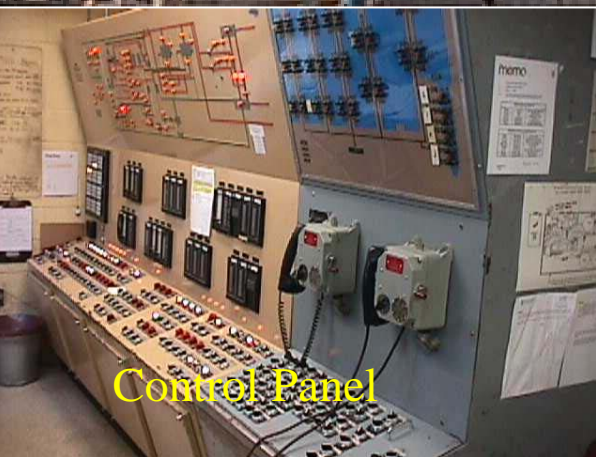


Chromium Reduction



Metal Removal Process

Oily Waste Treatment Facility



Control Panel



Oil/Water Separator



Dissolved Air Floatation

Clean Water Act

- Virginia Pollutant Discharge Elimination System - 183 Permitted Outfalls
- Discharges to the James River
 - Processes (57 Industrial Outfalls)
 - Dry Docks (Y-1075, Y-1004, BMPs, Dam & Baffle)
 - Storm Water (126 Outfalls, SWP³, Zn & Pb Cover, Vac.Truck)
 - Tributyltin/Copper Antifoulant Issues



Clean Air Act

- Title V Air Permit
 - 340 air emission sources
- Title VI (Refrigerant Program)
- Title III NESHAP – 40 CFR 63
 - Subpart II (Marine Coating)
 - Subpart N (Chrome Electroplating)
 - Subpart EEEEE (Iron & Steel Foundries)
 - Subpart DDDDD (Industrial, Commercial, and Institutional Boilers and Process Heaters)

Blast and Coat Facility



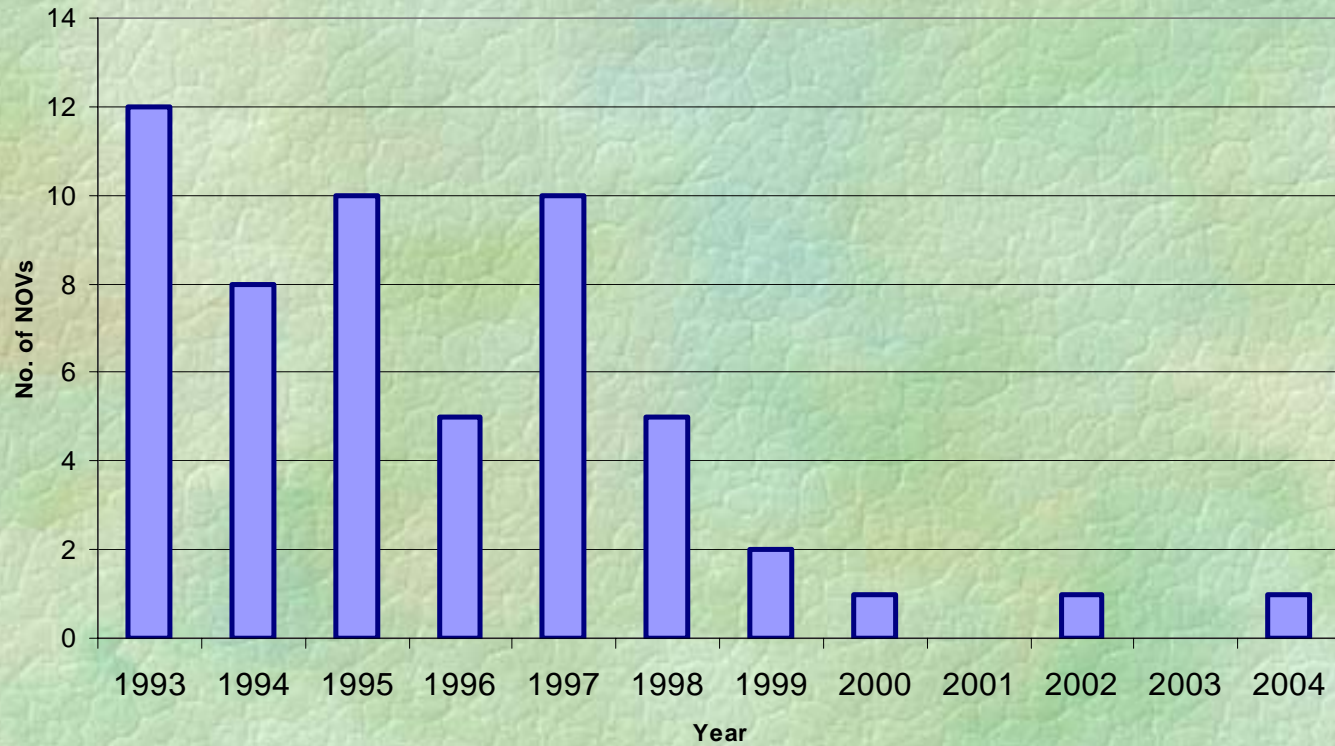
Resource Conservation & Recovery Act

- 60 Satellite Accumulation Areas
- 60 <90 Day Storage Areas
- Hazardous Waste Contractor
- North Yard Surface Impoundment Permit
- Hazardous and Solid Waste Amendments
- Mixed Waste Program

Other Environmental Programs

- Oil Pollution Act
 - Coast Guard
 - Vessel and Facility Response Plans
- USTs/ASTs
- Dredging and Waterfront Construction
- Superfund and Reauthorization Act
 - EPCRA - SARA 312 and 313
- Toxic Substance Control Act - PCBs
- Department of Transportation
- CVN78 EH&S IPT

Environmental NOVs



Success From: Changes in Environmental Culture

- Relationship with Regulators
- EH&S Task Teams
- Pollution Prevention Task Team (P2T2)
- Environmental Controls Manual
- Environmental Training
- Environmental Communications

Next:

- Enhance current and implement new training programs
- Maintain Activity Based Goals Program
- Maintain ISO 14001 Environmental Management System Certification
- Seek EPA Performance Track Certification

