Former NAS Moffett Field

Hangar 1 Removal Action Update

Mike Schulz, PMP

AMEC Earth & Environmental, Inc.

July 8, 2010

RAB Meeting

Presentation Overview

- Project Objective and Approach
- Progress to Date
  - ✓ Community Outreach
  - ✓ Biological Survey
  - ✓ Asbestos Survey
  - ✓ Mobilization
  - ✓ Work Plans
  - ✓ Coating Condition Survey
  - ✓ Pre-construction Sampling
- Future Activities
- Schedule
- Questions

Project Objective

- Control release of PCBs from Hangar 1 in accordance with EE/CA (July 2008) and Action Memorandum (December 2008)
  - Demolition of interior structures
  - Removal of contaminated siding
  - Application of weather-resistant coating to steel frame

Project Approach

- Use of interior scaffold system to promote safety and contaminant control
- Use of the hangar shell as containment during interior demolition and coating
- Epoxy coating system with proven performance
- Rigorous air monitoring program

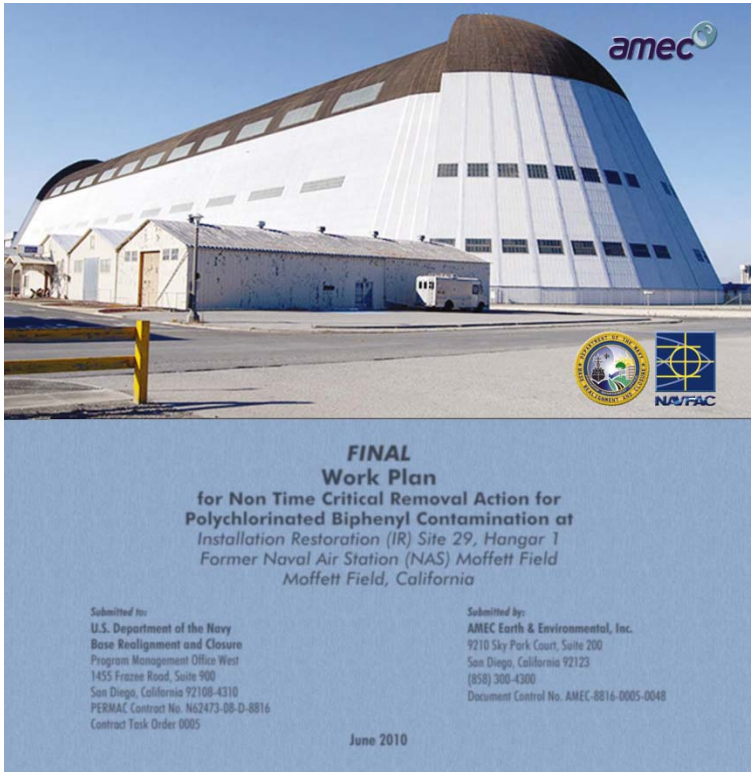
Community Outreach Update

- RAB presentation November 2009
- Fact Sheet January 2010
- NASA briefing January 2010
- Video documentation
- RAB tour July 2010

RAB Tour of Cork Room

Work Plan Status

- Accident Prevention Plan (February 2010)
- Final Sampling and Analysis Plan (April 2010)
- Final Work Plan (June 2010)
- Biological Hazard Abatement Plan



Biological Survey

- Biological surveys conducted January – April 2010
- Final Biological Survey Report submitted May 2010
- Species observed:
  - White-throated Swift
  - Common Raven
  - Barn Owl
  - Cliff Swallow
  - House Finch
  - Burrowing Owl
  - Coyote, Gray Fox, Red Fox
  - Black-tailed Jack Rabbit
  - California Ground Squirrel

Inactive Cliff Swallow nest

Biological Survey Recommendations

- Recommendations approved by California Department of Fish & Game and US Fish & Wildlife Service
  - Remove inactive nests
  - Protect active Raven nest
  - Periodic nesting surveys
  - Monitor and protect Burrowing Owls

Inspection of clamshell doors for Swift nests

Burrowing Owl Locations

Construction fence approximately 175 Feet north of active burrow

Coating Condition Survey

- Evaluated condition of existing coating on steel frame in accordance with Society of Protective Coatings TU-3:
  - Rust
  - Corrosion
  - Peeling/Blistering
  - Cracking/Checking
  - Chalking
  - Film Thickness
  - Adhesion
- Evaluated performance of new coating system adhesion
  - Patch tests

Patch test on new coating

Coating Condition Survey Results

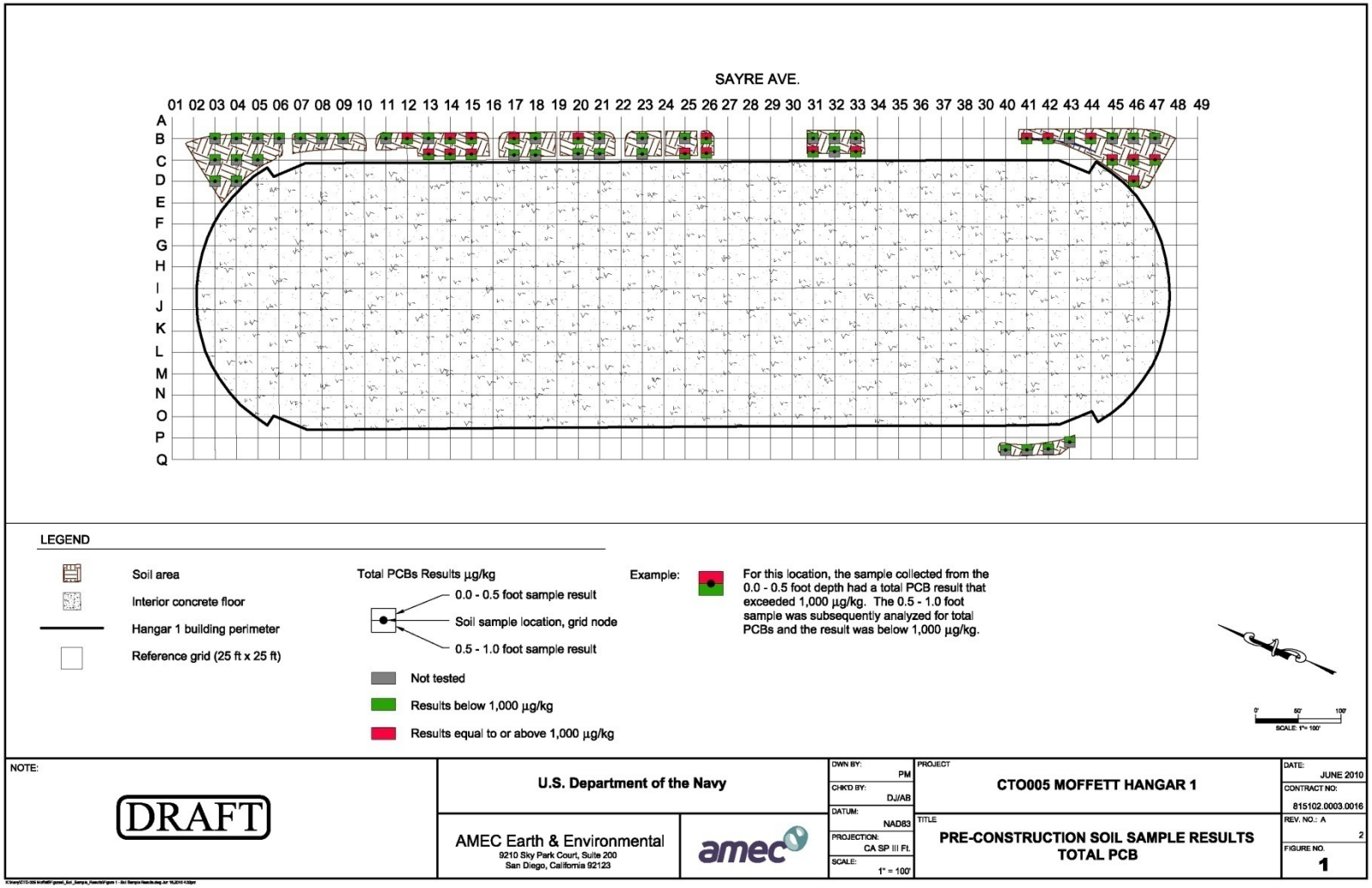
- Adhesion of existing coating very good at all locations tested
  - Average adhesion strength of 603 psi
  - 200 psi is acceptable
- Recommended coating system:
  - Carbomastic 15 (CM15) aluminum epoxy mastic
  - Surface preparation by low-pressure water cleaning and localized abrasive blasting or power tool cleaning
  - Application by spray, brush, or roller at 3 – 10 mils
- Excellent adhesion of CM15 coating system demonstrated in all tests (550 psi – 675 psi)

Pre-Construction Sampling

- Soil Areas
  - 110 samples collected from soil areas
  - 20 samples >1,000 µg/kg PCB action limit
  - PCB contamination restricted to upper 6 inches
  - Contaminated soil will be excavated and disposed off site

- Storm Drain Trench Sediment
  - 4 samples collected from the storm drain
  - All samples exceed PCB action limit
  - Sediment will be removed by vacuum methods and disposed off site

Baseline Sampling Results



Asbestos Survey

- Inspection of all building materials completed in May 2010
- Over 300 samples collected
- Asbestos-Containing Materials include:
  - Floor tile
  - Pipe insulation
  - Drywall and plaster on walls
  - Roofing on interior buildings
  - Mastics under flooring
  - Fire doors, file cabinets and safes
  - Window sealants and caulk
  - Gaskets on electrical fixtures
  - Sealant between siding and steel frame

Examples of Asbestos Materials

Drywall

Mastic under flooring

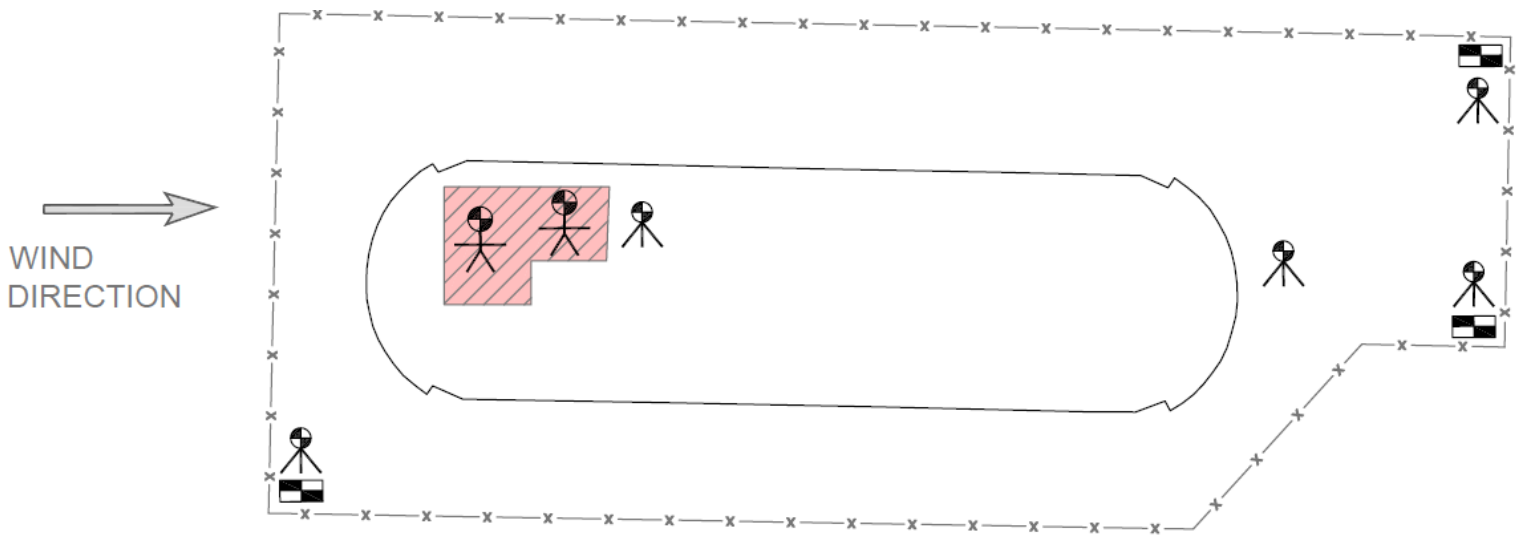
Duct tape and wrap

Light fixture gaskets

Asbestos Abatement Controls

- Compliance with OHSA and Cal. Code of Regulations (CCR Title 8)
- Install containment barriers and negative air pressure
- Air monitoring supervised by Certified Industrial Hygienist
- Post abatement inspection and clearance sampling
- All work under direction of California Asbestos Consultant

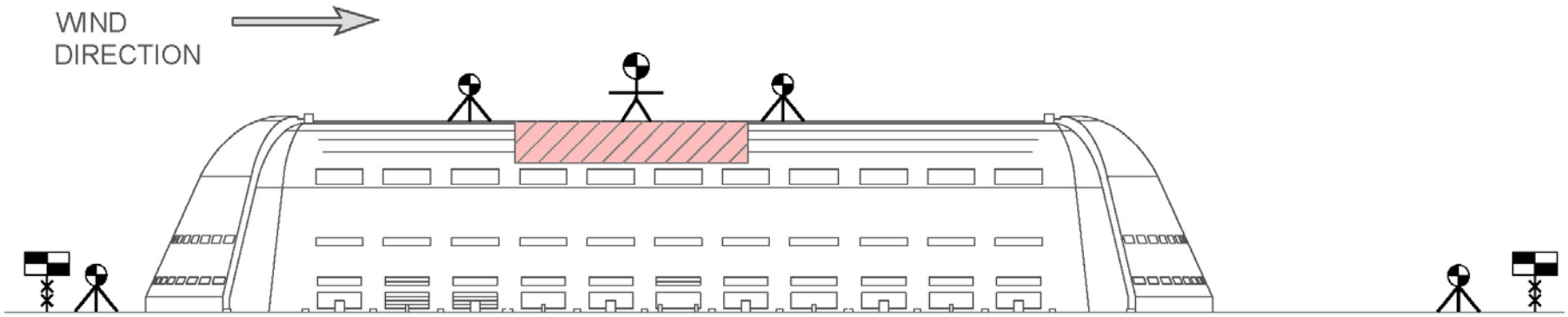
Air Monitoring Plan - Interior



LEGEND

- REGULATED WORK AREA
- WORK AREA PERIMETER MONITORING - "CHEMICAL SPECIFIC"
- FENCE LINE
- "PERSONNEL" WORKER AIR MONITORING
- SITE PERIMETER DUST MONITORING

Air Monitoring Plan - Exterior



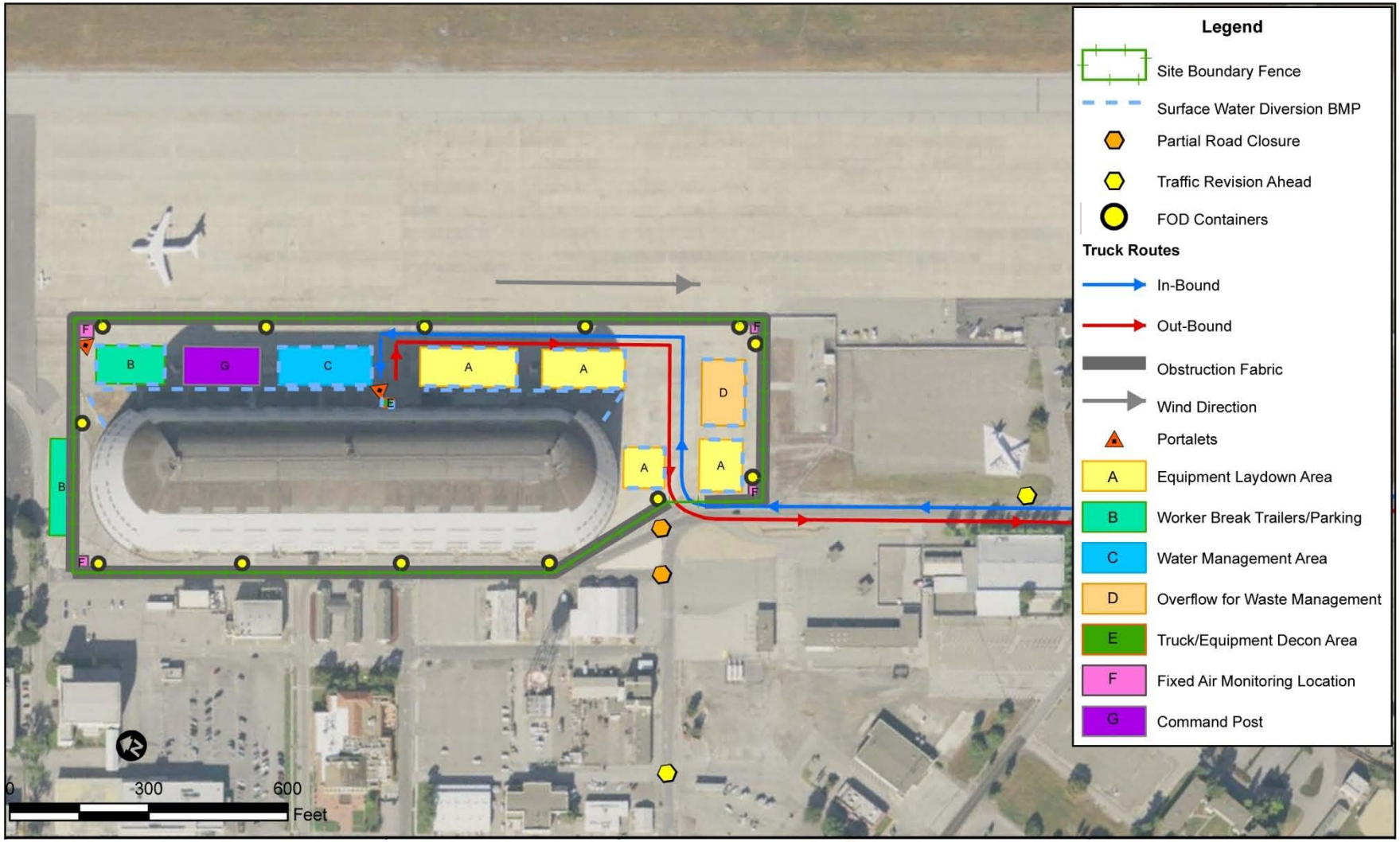
LEGEND

- REGULATED WORK AREA ACTIVE ROOF ABATEMENT
- WORK AREA PERIMETER MONITORING - "CHEMICAL SPECIFIC"
- FENCE LINE
- "PERSONNEL" WORKER AIR MONITORING
- SITE PERIMETER DUST MONITORING

Mobilization

- Temporary construction fence
- Owl buffer zone
- Utility termination
- Decontamination areas
- Lay down areas
- Storm water controls
- Air monitoring stations
- Command post
- Worker orientation
- Ellis Gate open

Site Plan

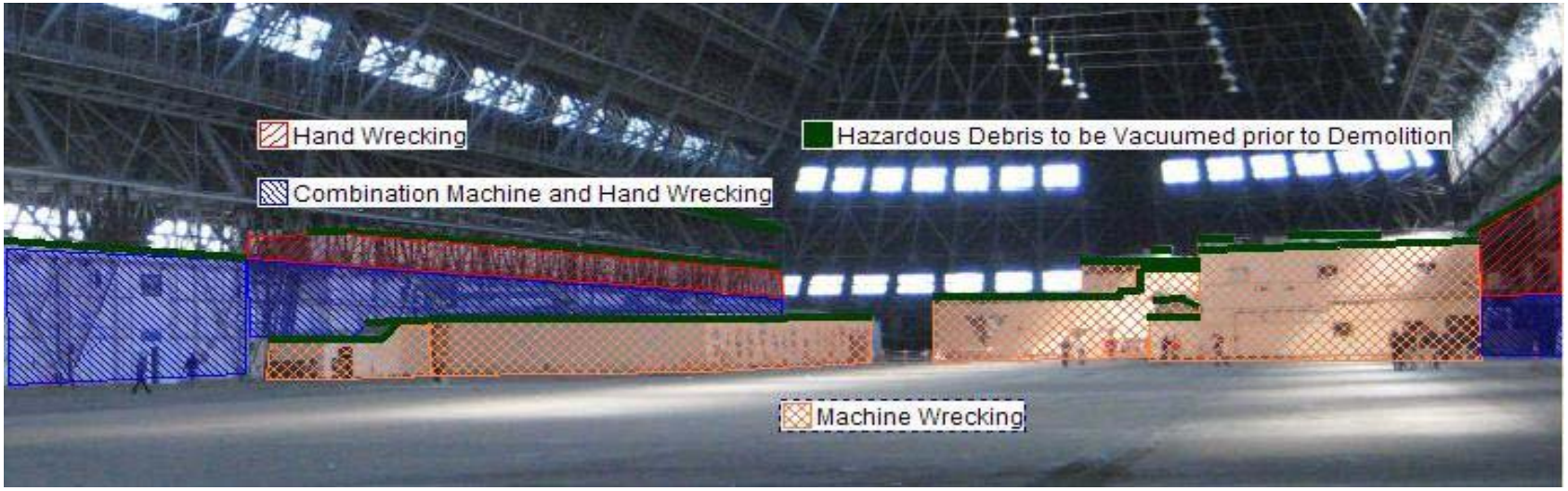

Legend
Site Boundary Fence
Surface Water Diversion BMP
Partial Road Closure
Traffic Revision Ahead
FOD Containers
Truck Routes
In-Bound
Out-Bound
Obstruction Fabric
Wind Direction
Portalets
A Equipment Laydown Area
B Worker Break Trailers/Parking
C Water Management Area
D Overflow for Waste Management
E Truck/Equipment Decon Area
F Fixed Air Monitoring Location
G Command Post
0
300
600
Feet

Preservation of Historic Artifacts

Future Activities

- Continue biological monitoring
- Complete decontamination of salvaged items
- Asbestos abatement
- Demolition of interior structures
- Repair of secondary structural steel members
- Scaffold installation
- Siding removal and coating
- Community outreach meetings
- Fact sheets

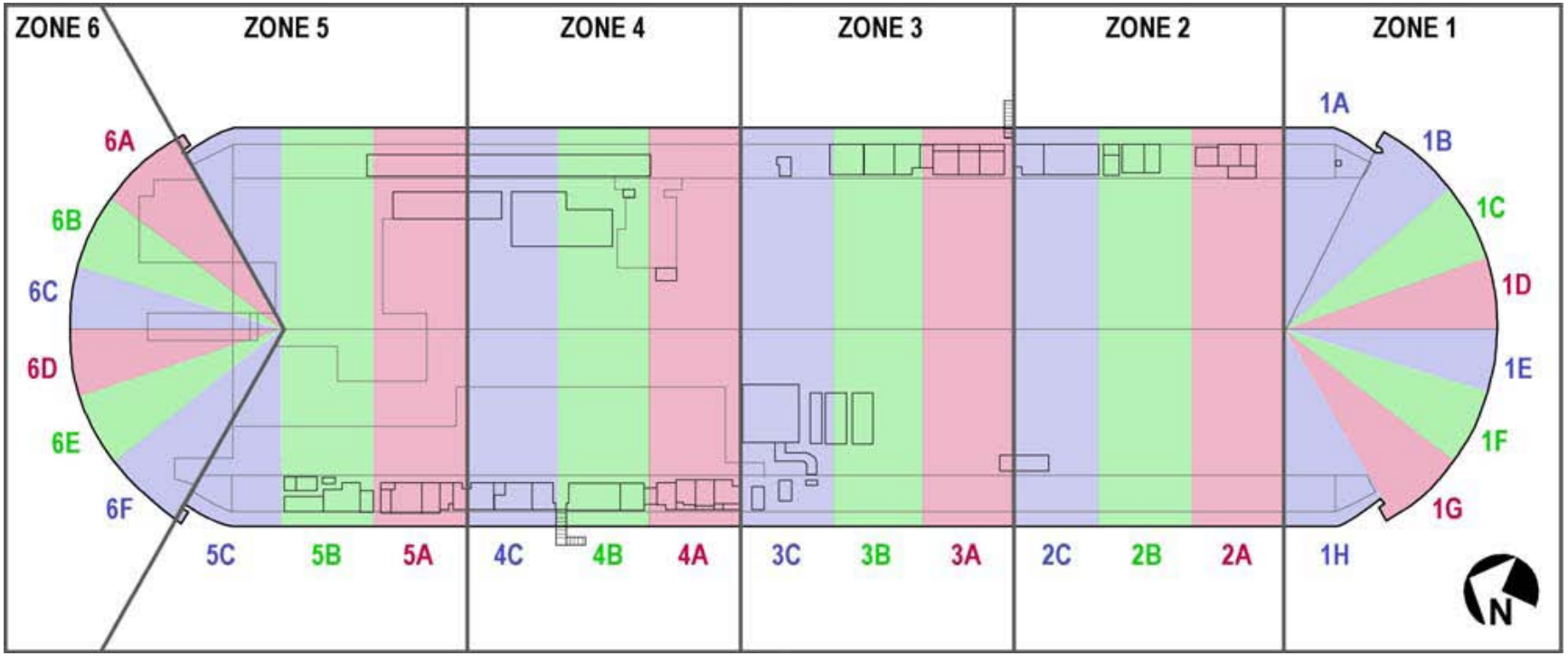
Interior Demolition



- Combination of manual and machine demolition methods
- Designed to protect structural integrity of the hangar

Siding Removal Plan

- Phase work in 6 Zones
- Start on the south end
- Work from roof to ground
- Coordinated with coating



Schedule

- Start asbestos abatement anticipated
  July 2010
- Start interior demolition anticipated
  October 2010
- Start siding removal
  Spring 2011
- Complete siding removal and coating
  Winter 2011
- Submit final report
  Spring 2012

Questions

Point of Contact

Kathryn Stewart, P.E.
BRAC Environmental Coordinator
(619) 532-0796
Kathryn.Stewart@navy.mil