PRESENTATION AND ATTACHMENTS FOR 16 JANUARY 1997 RESTORATION ADVISORY BOARD MEETING NSY PORTSMOUTH ME
2/24/1997
PORTSMOUTH NAVAL SHIPYARD

DEPARTMENT OF THE NAVY
PORTSMOUTH NAVAL SHIPYARD
PORTSMOUTH, N. H. 03804-5000

IN REPLY REFER TO:

February 24, 1997

MEMORANDUM

FOR THE MEMBERS OF THE RESTORATION ADVISORY BOARD CERCLA REMEDIAL ACTION PROGRAM, PORTSMOUTH NAVAL SHIPYARD, KITTERY, MAINE

Enclosed please find the draft minutes from the January 16, 1997, Restoration Advisory Board meeting for your review and comment. Comments are requested by March 14, 1997. You may provide your comments to me at 207-438-3830.

Sincerely,

Ken

Ken Plaisted
Navy Co-Chairman
Restoration Advisory Board

Distribution:
Juanita Bell
Doug Bogen
Jeff Clifford
Michele Dionne
Eileen Foley
Carolyn Lepage
Mary Marshall
Phil McCarthy
Jack McKenna
Guy Petty
Onil Roy
Peter Vandermark
EPA New England Region (M. Cassidy)
NOAA (K. Finkelstein)
MEDMR (D. Card)
USFWS (K. Munney)
NHF&G (J. Nelson)
MEDEP (I. McLeod)
NORTHDIV (F.Evans)
COMSUBGRU TWO (R. Jones)
Brown & Root Environmental (B. Horne, L. Klink)
PNS (Codes ~~106.3~~, 106.3R, 100PAO, 105, 105.5, NRRO)

RESTORATION ADVISORY BOARD AGENDA

Date Jan. 16, 1997
Place Comfort Inn, Portsmouth, NH
Time 7 p.m.- 9 p.m.

Introduction

Status of work

Results of soccer field risk evaluation

Review of the Feasibility Study process

Discussion on general landfill cap construction

JILF SOCCER FIELD
RISK EVALUATION

Portsmouth Naval Shipyard
RESTORATION ADVISORY BOARD

January 16, 1997

Portsmouth Naval Shipyard
RESTORATION ADVISORY BOARD

- Scenario of youth soccer at JILF soccer field
- Specific evaluation performed by Navy
  - in coordination with MEDEP and EPA

Portsmouth Naval Shipyard
RESTORATION ADVISORY BOARD

- Evaluation conducted using criteria more specific to youth soccer (provided by MEDEP)
- CONCLUSION:
  - Using existing data, specific methodology and the professional judgment of the risk assessors the evaluation shows that use of the field for youth soccer does not present a problem

LANDFILL COVERS

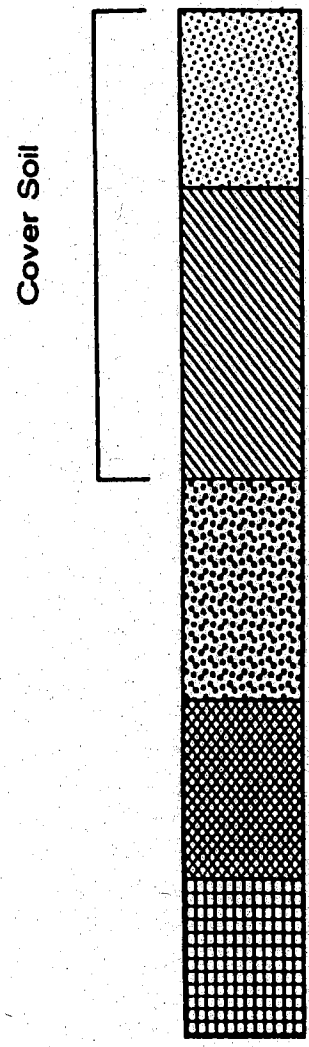
Portsmouth Naval Shipyard
RESTORATION ADVISORY BOARD

January 16, 1996

PURPOSE OF LANDFILL COVERS

- Separate the waste form the plants, animals, and humans
- Limit infiltration of precipitation into waste
  - Maximize the amount of runoff of precipitation
  - Promote evapotranspiration of remaining precipitation
- Control release of gas from site
- Prevent migration of perched leachate out of waste on side slopes

LANDFILL COVER COMPONENTS



Profile	*Layer*	Primary function(s)	Usual materials	General considerations
	1. Surface layer	Promote vegetative growth (most layers); promote evapotranspiration; prevent erosion	Topsoil; geosynthetic erosion control systems	Surface layer for control of water and/or wind erosion is always required
	2. Protection layer	Store water; protect underlying layers from intrusion by plants, animals, and humans; protect barrier layer from dessication and freeze/ thaw; maintain stability	Mixed soils; cobbles	Some form of protective layer is always required; surface layer and protective layer may be combined into a single 'cover soil' layer
	3. Drainage layer	Drain away infiltrating water to minimize barrier layer contact and to dissipate seepage forces	Sands; gravels; geotextiles; geonets; geocomposites	Drainage layer is optional; necessary only where excessive water passes through protection layer or seepage forces are excessive
	4. Barrier layer	Minimize infiltration of water into waste and control escape of gas out of waste	Compacted clay liners; geomembranes; geosynthetic clay liners	Barrier layer is usually required
	5. Gas collection layer	Transmit gas to collection points for removal and/or cogeneration	Sand; geotextiles; geonets	Required if waste produces excessive quantities of gas

DESIGN CONSIDERATIONS

- Site Specific Factors
  - Climate
  - Construction materials
  - Freeze-thaw phenomena
  - Waste characteristics
  - Potential subsidence
  - Surface water, tidal influences
  - Ability to support vegetation
  - Other environmental factors
- Legal Requirements

OTHER CONSIDERATIONS

- Extensive Quality Assurance/Quality Control required during construction
- Requires periodic inspection for settlement, standing water, erosion, and/or deep rooted plants following construction
- Maintenance required based on inspections
- Groundwater monitoring is usually performed to monitor migration
- Land use restrictions