

---

# Feasibility Study II Editors Meeting

January 29-31, 2001

Satoshi Ozaki

Brookhaven National Laboratory

Brookhaven Science Associates  
U.S. Department of Energy



# RHIC Facility Configuration

---



Brookhaven Science Associates  
U.S. Department of Energy

# Environmental Concerns

---

## Long Island sole source aquifer issues

- Build the facility including the storage ring above the water table
- Install appropriate water sampling wells to monitor water quality
  - This is done at all accelerator site at BNL
- Intensive outreach to gain confidence of the public the the facility is safe

# Radiation Safety

---

Radiation safety issues at BNL is basically not different from that at Fermilab

- Considerations for Study I mostly applicable without change
- Thick enough concrete wall to stop radiation leaking into the soil or water that surround the accelerator systems, including the storage ring.
  - Talk on shielding calculation for 20 GeV storage ring by Mokhov this afternoon
- Must keep the level of Tritium, produced by neutrino beam in ground water, well below the regulatory level.
  - Need to calculate if this is an issue

# Geo-technical Issues

---

Ground at the part of Long Island where BNL is very stable

- Sand is easy for cut and fill construction technique
- No significant earthquake has been experienced in the area
- Good load holding capability
- Need to understand the stability of the hill for the upper part of the storage ring