
Feasibility Study II Editors Meeting Summary (Site Specific Section)

ES&H Concerns
Site Layout with Near Detector Pit
Proton Driver
Detector Concept

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RHIC Facility Configuration



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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, except that Off-site limit as follows

DOE Limit:	100 mrem/year
Fermilab:	10 mrem/year
BNL	5 mrem/year

- Considerations for Study I for conventional radiation safety applicable mostly without change
- Neutrino induced radiation issues is less stringent for 20 GeV than for 50 GeV in Study I .

Nikolai Mokhav's Report

- For Conventional Radiation: concrete wall thick enough to stop radiation leaking into the soil or water that surround the accelerator systems.
 - Arc section: 6-7 m outward 2-3 m inward
 - Straight Section: 2-3 m both sides
- BNL off-site limit of 5 mrem/year:
 - 700 m from the end of the straight section to the site boundary
- Radionuclide production by neutrino beams:
 - Concentration limit (CL): 20 pCi/ml for Tritium
0.4 pCi/ml for ^{22}Na
 - Near the Near-Detector close to the arc: $<1/2500 \times \text{CL}$
 - Near Site boundary several order of magnitude $< \text{CL}$