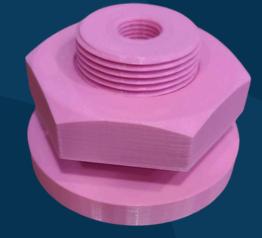
RADON MITIGATION

PRESENT, AND UNCERTAIN FUTURE





Gas bulkhead



Docdb 5754

Recap of last update

We were planning to use nylon 6 to create bags to cover the jars during assembly, up until the IV is fully installed in the PV.

Constant nitrogen flushing even during transport to remove radon.

WHAT IS NEW?



Now using multilayered Polyethylene Bags

Waiting time between IV assembly to IV insertion could take several months

HOW ARE WE GONNA DO THAT? (ROUGHLY)

- 1. First, after OJ is assembled with the bellows, we will put a bag over the jar and seal the bellows. Constant nitrogen will flow in the bag region and in the active region.
- 2. Once the IJ is cleaned, we remove the bellows seal and insert it. We insert the heating plates, put a bag and then the coiling coil.
- *3. We move to the Cube Hall to wait several months.
- 4.1V insertion: we remove the bellows bag and possibly the jar bag.
- 5.PV is flushed with nitrogen.

BAG MATERIAL CHOICE

Polyethylene was chosen because it's transparent, poor triboelectric effect and thicker.

If we don't use a bag for IV insertion, we don't remove the requirement to be transparent.

WHAT ARE WE TO DO BEFORE IV INSERTION ...?

Preliminary discussions suggested to have a sealed enclosure to reduce the nitrogen use and improve radon mitigation

However, it was too early to talk about design for that



Radon (222)