Q&A

- How many personnel (of different grade) are usually present in ONE single clean room?
 - The less the better.

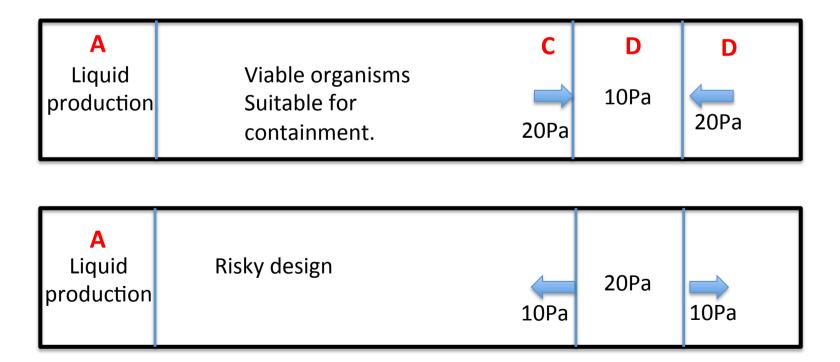
HVAC system:

- How often should HEPA filters be changed?
 - 5 years in general.
- How to identify items and frequency of environment monitoring for HVAC system PQ?
- Do we need to develop a list of qualified manufacturers of HEPA filters? And manage the manufacturers like we do with raw materials? What are the rules?
 - Yes. Difficult to manage as raw materials. No actual rules, make sure you do testing on HEPA filters yourselves.

- What should be the length of Probe tube for particle counter?
 - Tube should be around 2m minimum, exceeding
 4-5m, not OK.

- How often should grade A and grade B area be cleaned?
 - After every use. 1 hour everyday after use, it is the job of the operator, people from outside are not allowed to do clean grade A and B area.
 - Daily: clean surfaces
 - Weekly: wall (peroxide and alcohol).
 - Monthly: all (including ceiling)

 Function and design specification provided by WHO? Manufacturer or contractor? How do we decide whether to use trap door/ wall or pressure door/wall?



- "First air" concept design in HVAC input and output (inlets and returns)?
 - Input should be directly above working area.
 - Return far away from work area.

 For personnel working in Grade C and Grade D areas, should "medium trial" be carried out on gowning?

- About products of sterile filtration. During a mock medium filling, should the medium undergo sterile filtration step?
 - If the basic process requires the medium to go through sterile filtration, then yes.

- If for some reason the RABS was shut down, do we always need to redo the medium fill validation?
 - Yes. Because different methodology, so need to revalidate and do medium refill.

- In case of remodeling of some rooms, do we need to redo process validation even if the process stays unchanged?
 - The likelihood that the remodeling would affect the process is high, restart with risk assessment, to see whether the remodeling affects the process.

- Should the laminar hood be on at all times in Grade C area (C background)?
 - No, not in Grade C, only 15-20 minutes before working to clean the air in the hood. But yes in Grade A.

- Do we need to do the "in operation" monitoring when the process is done in laminar hood (Grade A) in Grade C area (C background)?
 - Yes, we need to make sure the aseptic transfer does not cause contamination.

- Our Grade C clean room is closed during the summer (water and HVAC). Is there a guideline we can refer to for qualification of clean room and water system before restarting production?
 - Never turn off water system (can be slowed down to 1.5m/second, but never off). HVAC should also be on at all times to prevent contamination, if off, you need to requalify.

- We know the monitoring points "at rest" should be evaluated before validation and monitoring. What about "in operation"?
 - Simulate in operation in Grade B (5 people maximum), run the machines and the process, but not the product.
 - You can also run it in actual operation.

 Does every exposure process need to be handled under HEPA?

– Yes.

- How can we define "Airlock Grade"? And shower room?
 - Transition room C/D.
 - A clean room is better than air shower.

- How can we evaluate risk level?
 - See handout on Aseptic RA Qualitative Report A3 from workshop.
 - Use documented process.

- How do we assure aseptic operators?
 - Clean hands, come to work after shower, sensitize hands before gowns, garment, under garment, test contact hotspots for bugs.
 - Operators need to be trained and monitored constantly.
 - Check garments for bugs when out of the room.

- If colony is found in Grade A, does it mean the product is "non aseptic"?
 - If found at filling point and stopper point, discard batch.
 - if found somewhere else, you need to find the source of the bug.

 During ONE MFT run, how many times should regulatory or non-regulatory intervention activity be run?

- Do we need to monitor airflow velocity at a regular basis? If so, how often?
 - Every 6 months in Grade A.
 - Every 2 months in Grade B.

- Do we need to monitor air input and output (inlets and exhaust) in each room? If so, how often?
 - Air input velocity in Grade A and B.
 - Air input integrity in Grade C and D.
 - Air output does not have to be monitored.