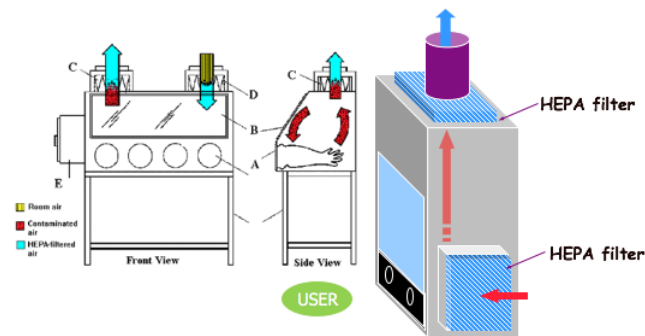




- **Genetic manipulation/modification organism (GMO)**
- Genetic makeup of microbes may change naturally (antibiotic resistance)
- May change intentionally in the lab – thus an upgrade in hazard group *may* be required
- Regulated by scientific advisory committee on genetic modification (SACGM), **HSE**, **ADCP**, DEFRA, and Scottish Executive Environment and Rural Affairs Department
- **Regulation within the laboratory**
- Regulated by **BSO**, **SACGM**
- Must comply with all regulations relating to non-GMO microbiology labs – subject to higher level of monitoring
- Higher level monitoring includes: health surveillance of employees to detect adverse reactions/ill health to prevent further exposure
- The lab should choose the less hazardous microbes to manipulate
- **Risk assessment of GMO**
- Considers impact on human and animal health, and the environment
- Should be reviewed regularly and updated in light of new knowledge
- Kept for 10 years after work has ended