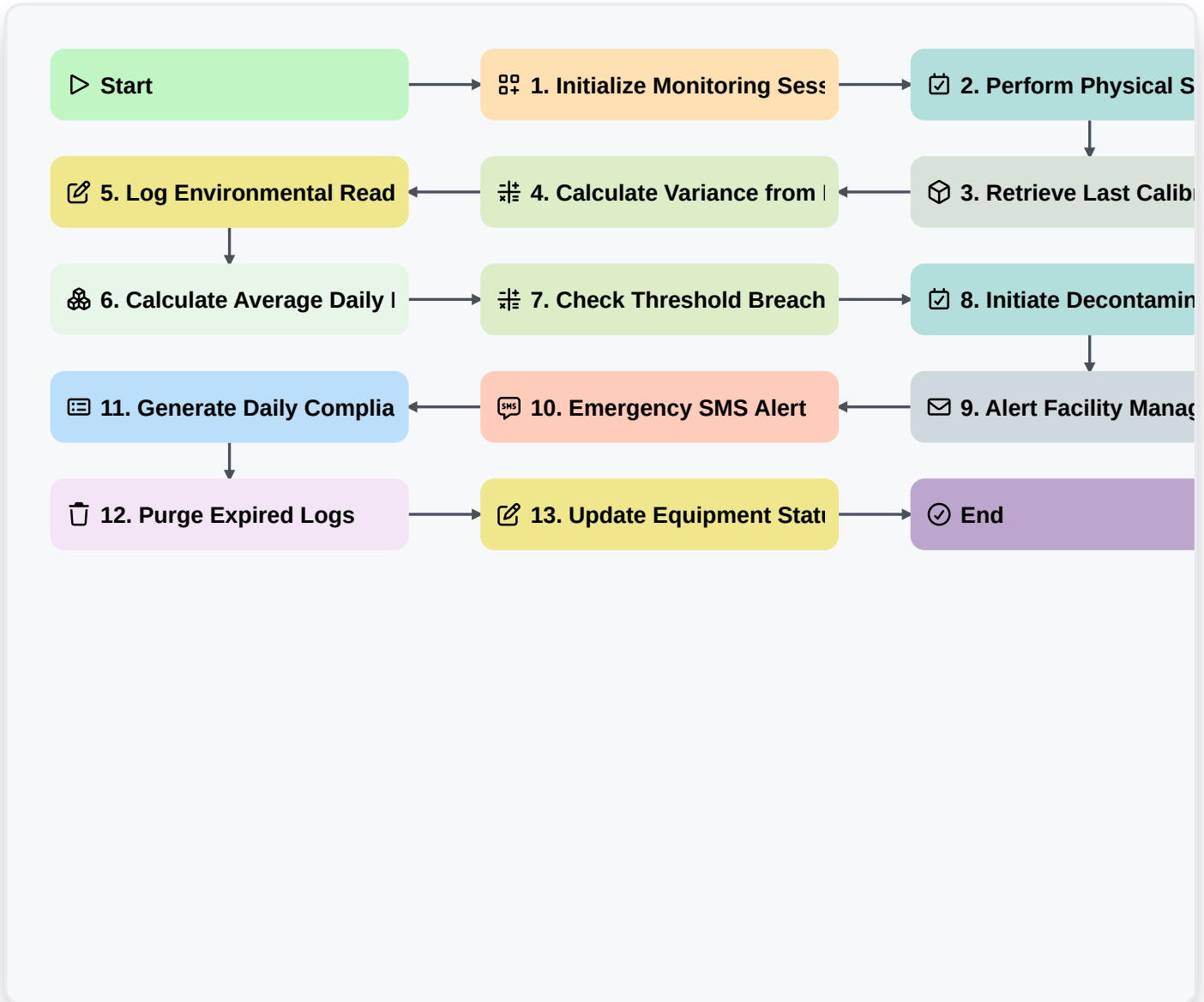


Environmental Monitoring And Cleanroom Control



▷ **Start**

Start of the Workflow/Process.

 **1. Initialize Monitoring Session**

Create a new entry in the 'Monitoring Session' data model to track the start of a cleanroom audit.

 **2. Perform Physical Sensor Check**

Assign a task to the Technician to manually verify that all particle counters and humidity sensors are operational.

 **3. Retrieve Last Calibration Date**

Get the most recent calibration date from the 'Equipment' data model to ensure sensors are within valid range.

 **4. Calculate Variance from Baseline**

Calculate the difference between the current reading and the established cleanroom baseline for particle count.

 **5. Log Environmental Readings**

Update the active Monitoring Session entry with the newly captured temperature, pressure, and humidity values.



6. Calculate Average Daily Particle Count

Aggregate all entries from the last 24 hours to find the average particle concentration.

7. Check Threshold Breach

Compare the current aggregated particle count against the maximum allowed limit defined in the safety protocol.

8. Initiate Decontamination Protocol

Trigger a high-priority task for the Cleaning Crew if a threshold breach is detected.

9. Alert Facility Manager

Send an automated email to the Facility Manager if environmental parameters fall outside of regulated limits.

10. Emergency SMS Alert

Send an urgent SMS to the On-call Supervisor if a critical pressure loss is detected in the cleanroom.

11. Generate Daily Compliance Report

Create a formatted PDF report summarizing all environmental readings and any deviations recorded during the session.

12. Purge Expired Logs

Delete temporary sensor data entries that have exceeded the data retention policy period.

13. Update Equipment Status

Update the 'Equipment' data model to mark a sensor as 'Out of Service' if it fails the physical check.

End

End of the Workflow/Process.