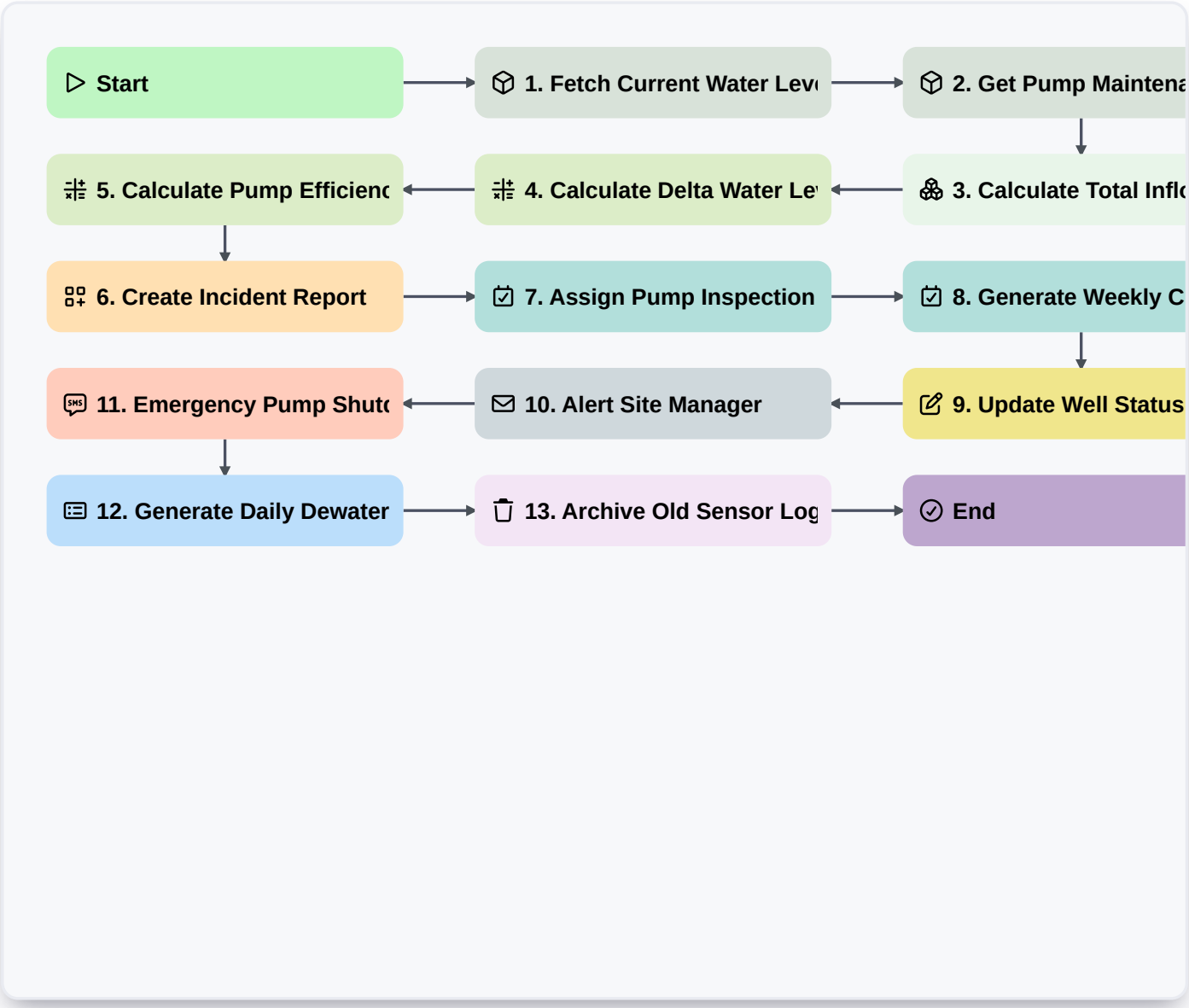
ChecklistGuro

Mine Water Management & Dewatering



Start
Start of the Workflow/Process.

1. Fetch Current Water Levels
Retrieve the latest sensor readings from the Piezometer and Borehole data models.

2. Get Pump Maintenance Logs
Retrieve the last service date and status for all active dewatering pumps.

3. Calculate Total Inflow Volume
Sum the total volume of water pumped across all active boreholes in the last 24 hours.

4. Calculate Delta Water Level
Compare current water level against the safety threshold to determine the rate of rise/fall.

5. Calculate Pump Efficiency
Calculate ratio of energy consumption to volume of water moved to identify degrading pumps.

6. Create Incident Report
Generate a new entry in the 'Water Management Incidents' data model if levels exceed thresholds.

7. Assign Pump Inspection
Create a task for the Maintenance Engineer to inspect a pump showing high vibration or low efficiency.

8. Generate Weekly Compliance Task
Create a recurring task for the Environmental Officer to review water quality data.

9. Update Well Status
Update the 'Operational Status' field in the Borehole data model to 'Inactive' if a pump fails.

10. Alert Site Manager
Send an urgent email notification to the Mine Manager regarding critical water level breaches.

11. Emergency Pump Shutdown Alert
Send an SMS to the On-Call Technician if a critical failure is detected in the dewatering circuit.

12. Generate Daily Dewatering Summary
Generate a PDF report summarizing daily volumes, energy usage, and any operational incidents.

13. Archive Old Sensor Logs
Delete or move historical sensor data entries older than the retention period to clean up the data model.

End
End of the Workflow/Process.