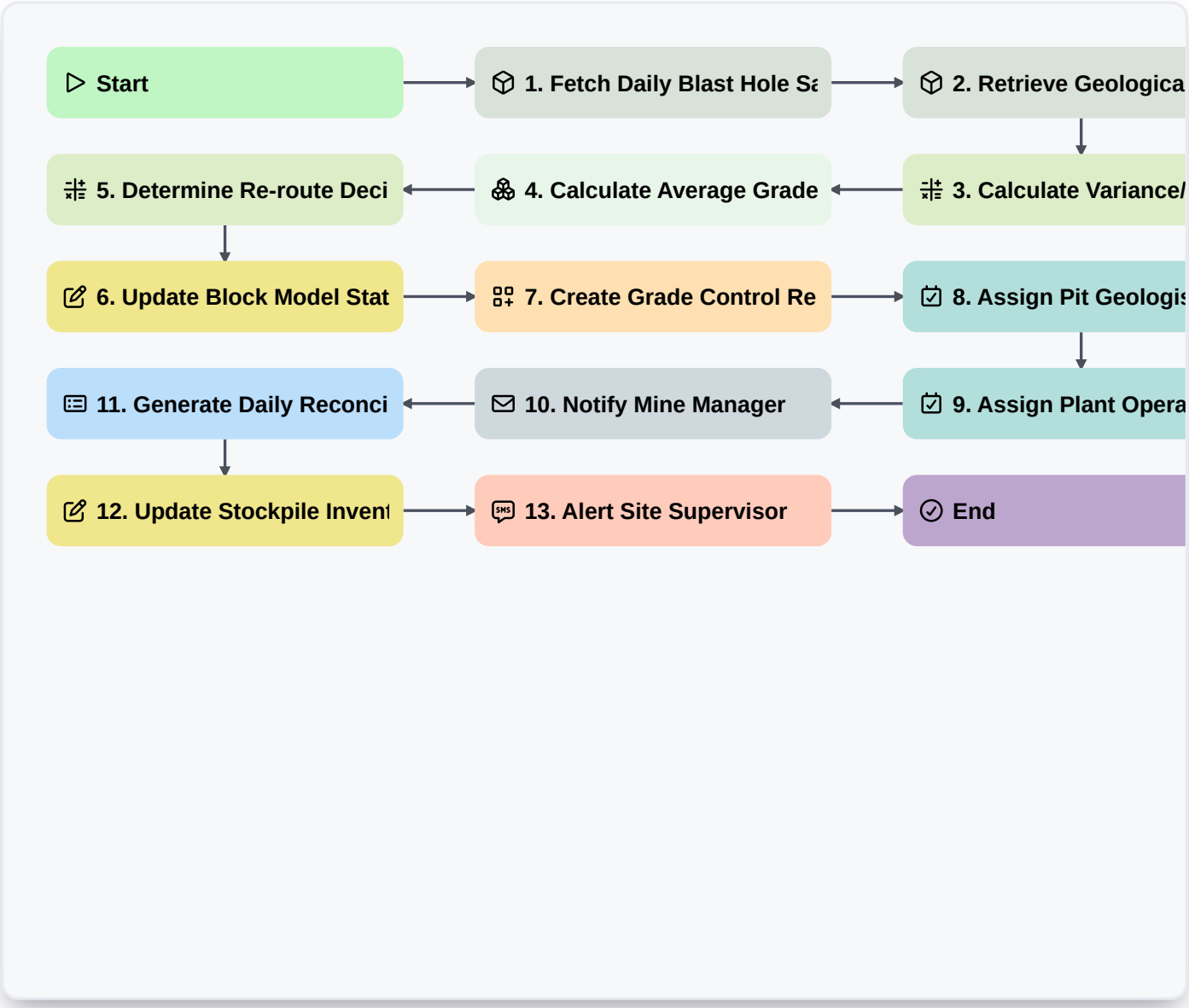
ChecklistGuro

# Automated Ore Grade Control Process




## Start
Start of the Workflow/Process.

## 1. Fetch Daily Blast Hole Samples
Retrieve all recent assay results from the Blast Hole Assay data model.

## 2. Retrieve Geological Block Model
Fetch the predicted grade data from the 3D Block Model data model for the current mining area.

## 3. Calculate Variance/Deviation
Calculate the difference between the sampled ore grade and the predicted block model grade.

## 4. Calculate Average Grade Per Zone
Aggregate the fetched assay results to determine the mean grade for each specific mining zone.

## 5. Determine Re-route Decision
Apply logic to determine if the ore should be diverted to the High-Grade stockpile, Low-Grade stockpile, or Waste dump based on calculated variance.

## 6. Update Block Model Status
Update the 'Validated' status in the Block Model data model based on the new assay results.

## 7. Create Grade Control Report Entry
Generate a new record in the Grade Control Logs data model containing the calculated results and variance.

## 8. Assign Pit Geologist Review
Create a task for the Pit Geologist to verify the deviation if the variance exceeds the predefined threshold.

## 9. Assign Plant Operator Instruction
Create a task for the Crusher Operator with specific instructions on which ore stream to process.

## 10. Notify Mine Manager
Send an email summary of the daily ore grade distribution and any significant deviations to the Mine Manager.

## 11. Generate Daily Reconciliation Report
Create a formal PDF report comparing predicted vs. actual grades for the daily production meeting.

## 12. Update Stockpile Inventory
Update the tonnage and grade estimates in the Stockpile Data Model based on the new ore routing.

## 13. Alert Site Supervisor
Send an SMS alert to the Site Supervisor if ore grade falls below the critical economic cut-off.

## End
End of the Workflow/Process.