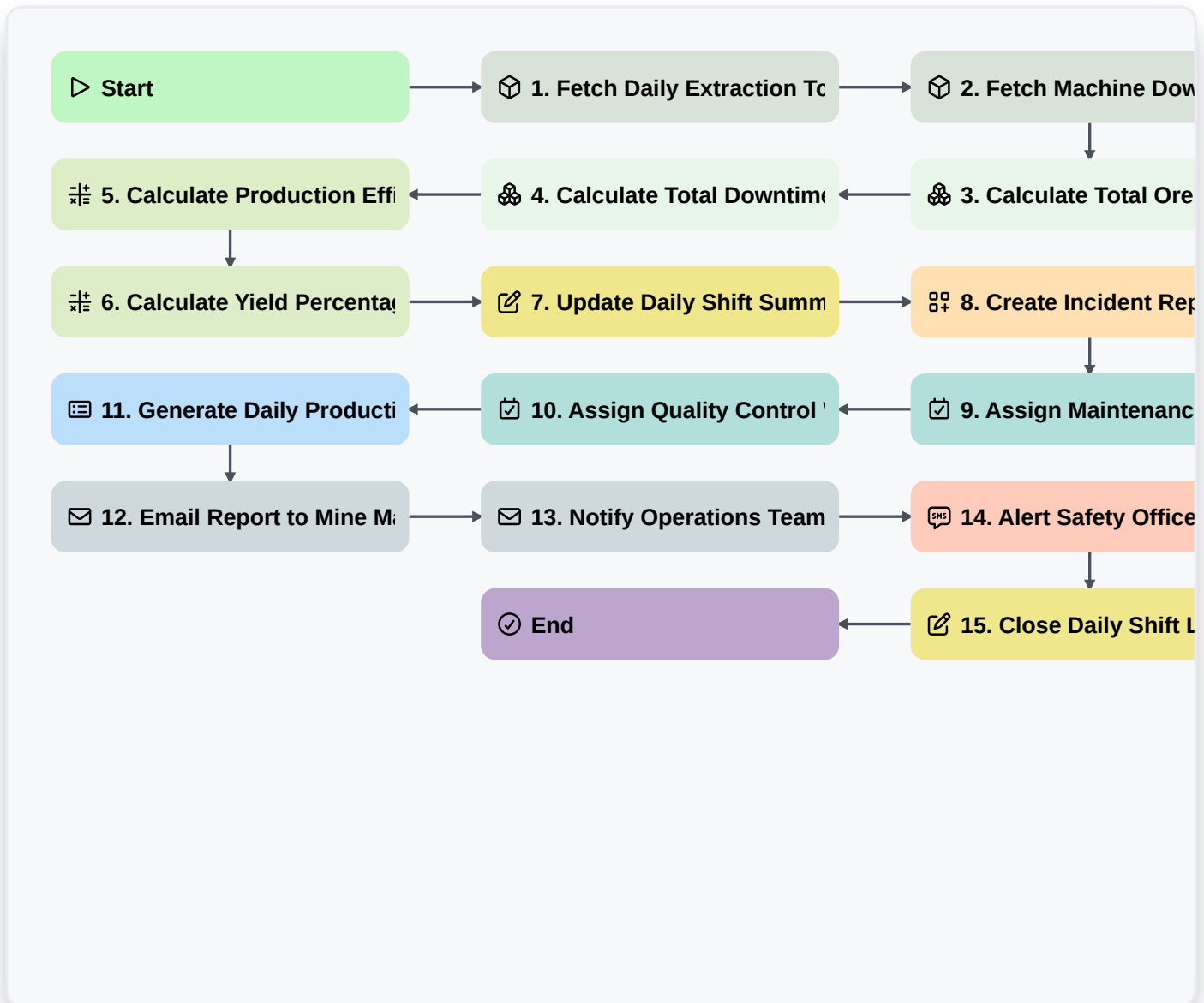


Mine Production Daily Reporting



▷ Start

Start of the Workflow/Process.

📦 1. Fetch Daily Extraction Totals

Retrieve all production entries recorded for the current shift/day from the Extraction Data Model.

📦 2. Fetch Machine Downtime Logs

Retrieve all maintenance and downtime entries logged by the machinery operators.

🔗 3. Calculate Total Ore Tonnage

Sum the 'Weight' property of all extracted ore entries to get the total daily tonnage.

🔗 4. Calculate Total Downtime Duration

Sum the 'Duration' property of all downtime entries to calculate total lost production time.

⚙️ 5. Calculate Production Efficiency (OEE)

Calculate the ratio of Actual Production vs. Planned Production target using a predefined formula.

⚙️ 6. Calculate Yield Percentage

Calculate the percentage of usable ore relative to the total extracted mass.



7. Update Daily Shift Summary

Update the 'Daily Production Master' entry with the new aggregated totals and efficiency metrics.

8. Create Incident Report Entry

If downtime exceeded a threshold, automatically create a new entry in the Incident Management Data Model.

9. Assign Maintenance Review Task

Create a task for the Maintenance Manager if downtime logs show critical machinery failure.

10. Assign Quality Control Verification

Create a task for the QC Lab to verify the ore grade from today's extraction.

11. Generate Daily Production PDF

Generate a formatted PDF report containing the day's metrics, charts, and downtime summaries.

12. Email Report to Mine Manager

Send the generated Daily Production PDF and a summary text to the Mine Manager's email address.

13. Notify Operations Team

Send an email alert to the Operations team with the calculated efficiency and yield stats.

14. Alert Safety Officer of Incidents

Send an SMS alert to the Safety Officer if the 'Incident Report' entry was triggered during the workflow.

15. Close Daily Shift Log

Update the status of the 'Daily Shift Log' entry to 'Finalized' to prevent further edits.

End

End of the Workflow/Process.