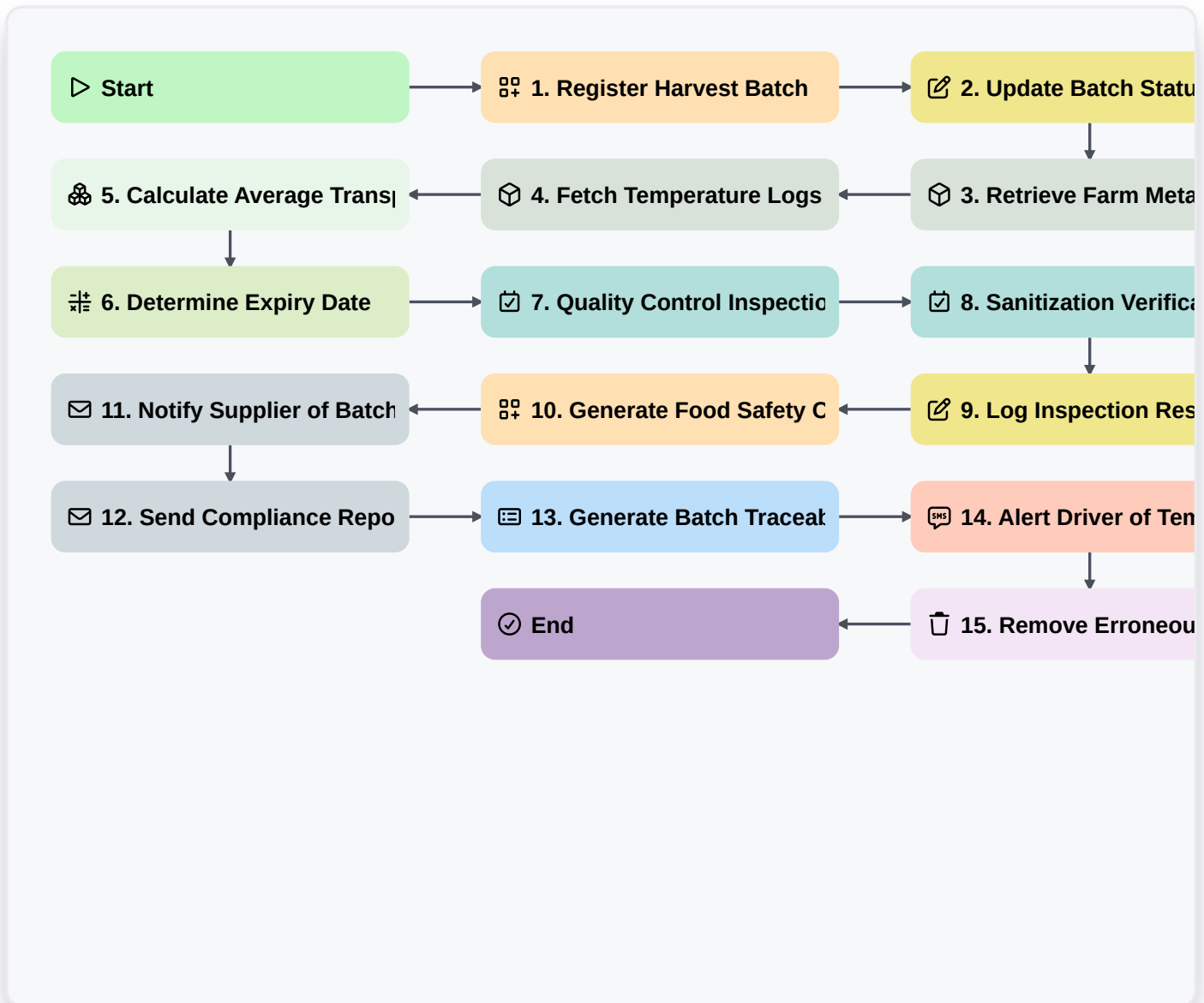


# Farm Traceability And Food Safety Workflow



## ▷ Start

Start of the Workflow/Process.

## 🛠️ 1. Register Harvest Batch

Create a new entry in the Harvest Batches data model to initiate the traceability chain.

## ✍️ 2. Update Batch Status to 'In Transit'

Update the status of the specific harvest batch entry to reflect movement from farm to facility.

## 📦 3. Retrieve Farm Metadata

Get origin details (soil quality, pesticide logs, farm location) from the Farm Registry data model.

## 📦 4. Fetch Temperature Logs

Retrieve historical temperature sensor data entries for the specific transit period.

## 🔗 5. Calculate Average Transport Temperature

Aggregate temperature data entries to find the average temperature during the transit duration.

## 🔗 6. Determine Expiry Date

Execute formula:  $\text{Harvest\_Date} + \text{Shelf\_Life\_Days} = \text{Expiry\_Date}$ .



### **7. Quality Control Inspection**

Create a task for the Lab Technician to perform a pathogen swab and visual inspection.

### **8. Sanitization Verification**

Create a task for the Facility Manager to verify equipment cleaning logs.

### **9. Log Inspection Results**

Update the Harvest Batch entry with the results (Pass/Fail) from the Quality Control inspection.

### **10. Generate Food Safety Certificate**

Create a new entry in the Certificates data model once all safety checks are passed.

### **11. Notify Supplier of Batch Rejection**

Send an email to the farm owner if the batch fails safety standards.

### **12. Send Compliance Report to Regulator**

Send an automated email containing the batch summary to the food safety regulatory body.

### **13. Generate Batch Traceability Report**

Create a comprehensive report linking farm origin, transport logs, and lab results for auditing.

### **14. Alert Driver of Temperature Deviation**

Send an SMS to the logistics driver if a temperature sensor exceeds the safety threshold.

### **15. Remove Erroneous Entry**

Delete a duplicate or incorrectly entered batch record to maintain data integrity.

### **End**

End of the Workflow/Process.