# Incident Reporting and Management

1. **User-Friendly Incident Reporting**
	1. Simple, accessible interface for employees to report:
		1. Incidents
		2. Near-misses
		3. Hazards
2. **Automated Notifications**
	1. System must send alerts to relevant personnel based on:
		1. Type of incident
		2. Severity level
		3. Location
3. **Incident Classification**
	1. Ability to classify incidents by:
		1. Severity
		2. Type (e.g., injury, property damage, environmental)
		3. Department
4. **Full Investigation Workflow**
	1. Step-by-step processes including:
		1. Initial report logging
		2. Assignment to investigators
		3. Root cause analysis
		4. Corrective/preventive action tracking
		5. Review and closure
5. **Corrective Action Tracking**
	1. Monitor implementation of:
		1. Risk mitigation measures
		2. Process changes
		3. Training updates
6. **Root Cause Analysis Tools**
	1. Support for methods like:
		1. 5 Whys
		2. Fishbone (Ishikawa) diagram
		3. Fault tree analysis
7. **Audit Trail and Compliance**
	1. Maintain a log of:
		1. Who entered and edited incident records
		2. Timelines and actions taken
		3. Status history
8. **Reporting and Analytics**
	1. Generate reports on:
		1. Incident trends over time
		2. Department-specific statistics
		3. Root cause recurrence
		4. Leading and lagging safety indicators
9. **Mobile Access and Offline Support**
	1. Incident reporting should be supported:
		1. On mobile devices (via browser or app)
		2. With offline submission capability for remote areas

# Compliance Management

 **1.Compliance Management Requirements**

* 1. Track compliance with:
		1. Health and Safety at Work Act (HASAWA 1996)
		2. ISO 45001 and other applicable standards
	2. Ability to upload, store, and categorize legal and regulatory documents.
1. **Automated Alerts and Reminders**
	1. Alerts for:
		1. Upcoming audits
		2. Document expiries
		3. Scheduled reviews or inspections
	2. Reminder emails/notifications for regulatory deadlines.
2. **Risk Assessment Templates**
	1. Include ready-made templates aligned with standards, or allow for:
		1. Customizable risk assessment forms
		2. Department-specific or activity-specific templates
3. **Document Management**
	1. Version control and access logs for:
		1. Compliance checklists
		2. Safety audit forms
		3. Inspection records
4. **Audit Readiness Support**
	1. Maintain a centralized repository for all compliance evidence, including:
		1. Historical audit results
		2. Certification records
		3. Training and qualification documents
5. **Monitoring and Status Dashboard**
	1. Visual overview of:
		1. Compliance gaps
		2. Pending vs completed compliance activities
		3. Real-time status tracking
6. **Integration Support**
	1. Link compliance data with:
		1. Risk assessments
		2. Incident reports
		3. Training records
7. **Mobile Accessibility**
	1. Mobile-friendly access for compliance tasks in the field
	2. Support for uploading documentation or marking items as reviewed/completed on the go
8. **Secure Access and Permissions**
	1. Only authorized users should be able to:
		1. View/edit sensitive compliance documents
		2. Approve risk assessments or compliance checklists

# Audit and Inspection Tools

1. **Inspection Scheduling**
	1. Calendar-based interface for:
		1. Setting up routine and ad-hoc inspections
		2. Assigning inspectors by department, location, or risk category
	2. Recurrence options (e.g., weekly, monthly, quarterly)
2. **Customizable Inspection Checklists**
	1. Pre-loaded or configurable checklists for:
		1. Workplace safety inspections
		2. Equipment checks
		3. Compliance audits
	2. Ability to create inspection templates per site or department
3. **Mobile Inspection Support**
	1. Fully functional on smartphones and tablets
	2. Features include:
		1. Checklist completion
		2. Photo uploads (e.g., of hazards or non-compliance)
		3. Voice notes or annotations
	3. Offline mode for remote or low-connectivity areas
4. **Real-Time Issue Reporting**
	1. Instant flagging of:
		1. Safety hazards
		2. Non-conformance
		3. Corrective actions required
	2. Trigger workflows for immediate notifications and task assignments
5. **Automated Alerts and Notifications**
	1. For:
		1. Upcoming or overdue inspections
		2. Unresolved issues identified in previous inspections
		3. Escalation of critical findings
6. **Inspection History and Audit Trail**
	1. Log and retrieve:
		1. Past inspection reports
		2. Actions taken and dates
		3. Inspector details
	2. Support for audit preparedness
7. **Corrective and Preventive Action (CAPA) Integration**
	1. Link inspection findings to:
		1. Risk assessments
		2. Incident reports
		3. Assigned corrective actions with due dates and tracking
8. **Report Generation**
	1. Generate standardized or custom reports in:
		1. PDF, Excel, or CSV formats
	2. Summary dashboards for:
		1. Compliance scores
		2. Most common issues
		3. Departmental performance
9. **User Roles and Permissions**
	1. Assign inspection rights to designated roles
	2. Limit access to specific sites, departments, or tools
10. **Analytics and Insights**
* Visual dashboards to:
	+ Track inspection frequencies
	+ Identify trends or recurring issues
	+ Monitor corrective action turnaround time

# Employee Health and Safety Training

1. **Centralized Training Module**
	1. Single platform to manage all safety training activities
	2. Includes onboarding, refresher, and role-specific training
2. **Training Material Repository**
	1. Upload and store:
		1. Videos
		2. PDFs and slide decks
		3. SCORM-compliant content
		4. Standard operating procedures (SOPs)
3. **Training Calendar and Scheduling**
	1. Plan sessions by:
		1. Date
		2. Location
		3. Department or role
	2. View past and upcoming trainings
4. **Employee Certification Tracking**
	1. Maintain records of:
		1. Completed training sessions
		2. Certification issue and expiry dates
		3. Trainer details and course version
5. **Automated Reminders and Alerts**
	1. Notify employees and managers about:
		1. Upcoming training sessions
		2. Expiring or expired certifications
		3. Missed mandatory trainings
6. **Self-Service Portal**
	1. Employees can:
		1. Register for courses
		2. Download certificates
		3. View their training history
7. **Assessment and Quizzes**
	1. Post-training evaluations:
		1. Multiple-choice quizzes
		2. Pass/fail thresholds
		3. Randomized questions from a pool
8. **Compliance Reporting**
	1. Generate reports by:
		1. Employee
		2. Department
		3. Course
		4. Certification status
9. **Integration with HR Systems**
	1. Sync employee data from HRM
	2. Auto-assign required trainings based on:
		1. Job title
		2. Department
		3. Risk exposure level
10. **Mobile Accessibility**
* Access training content via mobile app or browser
* Support for media playback and quiz completion on phones/tablets
1. **Audit Trail**
* Log of:
	+ Training content changes
	+ User completions and certifications
	+ Administrator actions

# Risk Assessment and Mitigation

1. **Systematic Risk Identification**
	1. Interface to log and categorize:
		1. Workplace hazards
		2. Operational risks
		3. Environmental and health-related risks
	2. Link risks to:
		1. Locations/sites
		2. Equipment
		3. Departments
2. **Customizable Risk Assessment Templates**
	1. Built-in and user-defined templates supporting:
		1. Likelihood vs severity matrices
		2. Risk prioritization
		3. Job Safety Analysis (JSA)
	2. Department or task-specific templates with reusable formats
3. **Preventive Workflow Integration**
	1. Link risks directly to:
		1. Corrective/preventive actions (CAPA)
		2. Training requirements
		3. Policy or SOP updates
4. **Dynamic Risk Scoring and Classification**
	1. Automatically calculate:
		1. Initial risk level
		2. Residual risk post-mitigation
		3. Escalation triggers for high-risk findings
5. **Approval and Review Process**
	1. Multi-level review with:
		1. Risk owner assignments
		2. Supervisor or safety officer approval
		3. Scheduled review dates and signoffs
6. **Tracking of Risk Controls and Mitigations**
	1. Log and monitor:
		1. Control measures implemented
		2. Effectiveness evaluation
		3. Due dates and assigned persons
7. **Historical Risk Data and Versioning**
	1. Maintain history of:
		1. Previous assessments
		2. Revisions made
		3. Outcomes and lessons learned
8. **Visual Risk Maps and Dashboards**
	1. Display risk heatmaps by:
		1. Location
		2. Category
		3. Department
	2. Interactive dashboards for tracking:
		1. Open risks
		2. Mitigation progress
		3. High-risk areas
9. **Mobile Access and Field Reporting**
	1. Conduct risk assessments onsite using:
		1. Mobile app or web interface
		2. Offline mode support for remote sites
		3. Photo and file attachment support
10. **Compliance Integration**
* Align assessments with:
	+ ISO 45001 standards
	+ HASAWA 1996 requirements
* Automatically flag compliance-related risks
1. **Automated Alerts and Notifications**
* Reminders for:
	+ Risk reassessments
	+ Overdue mitigations
	+ Review cycles and escalations

# Data Analytics and Reporting

1. **Interactive Dashboards**
	1. Real-time visualizations of:
		1. Safety KPIs (e.g., LTIFR, TRIR, incident frequency)
		2. Open vs resolved incidents
		3. Inspection and training completion rates
	2. Customizable widgets for role-based dashboards (e.g., safety officer vs executive view)
2. **Incident Trends and Root Cause Analysis**
	1. Automated trend tracking by:
		1. Time period (daily, monthly, quarterly)
		2. Department, location, or risk category
	2. Root cause pattern detection to identify recurring issues or systemic gaps
3. **Report Builder**
	1. User-friendly tools to generate:
		1. Ad-hoc reports
		2. Scheduled reports
		3. Compliance reports
	2. Filter by time, location, type, severity, or department
4. **Exportable Report Formats**
	1. Generate and export data in:
		1. PDF
		2. Excel (XLS/XLSX)
		3. CSV
		4. Optional print-friendly versions
5. **Scheduled and Automated Reporting**
	1. Set up recurring reports for:
		1. Executive summaries
		2. Daily/weekly safety dashboards
		3. Monthly compliance snapshots
	2. Automated email delivery or download links
6. **Custom Metrics and Calculations**
	1. Define and calculate:
		1. Risk scores
		2. Downtime due to incidents
		3. Corrective action completion rates
	2. Support formulas and logic tailored to WAF needs
7. **Comparative Analytics**
	1. Compare performance over:
		1. Multiple locations
		2. Historical periods
		3. Departments or teams
8. **Drill-Down and Filtering**
	1. Click-through from high-level summaries to:
		1. Individual incidents
		2. Risk assessments
		3. Employee-level training compliance
9. **Data Visualization Tools**
	1. Include charts such as:
		1. Bar, line, pie, and heatmaps
		2. Risk heatmaps
		3. Geographic or site-based safety maps
10. **Role-Based Access to Reports**
* Restrict report types and data views by:
	+ User role
	+ Department or clearance level
1. **Audit Logs for Reports**
* Track:
	+ Who generated which report
	+ When it was created and shared
	+ Modifications or data exports

# Document Management System

1. **Centralized Document Repository**
	1. Secure, searchable storage for all OHS-related documents including:
		1. Policies and procedures (SOPs)
		2. Training materials
		3. Risk assessments
		4. Audit reports
		5. Incident records
2. **Version Control**
	1. Maintain version history for each document:
		1. Track changes and revision notes
		2. Restore previous versions
		3. Identify current “approved” or “in use” versions
3. **Access Control and Permissions**
	1. Restrict document access based on:
		1. User roles
		2. Departmental assignments
		3. Sensitivity levels (e.g., confidential reports)
	2. Support for view-only, edit, upload, and approve rights
4. **Document Approval Workflow**
	1. Routing of new/updated documents through:
		1. Review and approval steps
		2. Notifications for pending approvals
		3. Audit trail of approvals and comments
5. **External and Separate Storage Environment**
	1. Store documents separately from core application data to enhance:
		1. Security and backup
		2. Scalability
		3. Legal compliance
6. **Metadata Tagging and Search**
	1. Tag documents with:
		1. Category, date, author, department, tags
		2. Expiry date or review date
	2. Enable full-text search and filtered queries
7. **Automated Alerts and Expiry Tracking**
	1. Set expiration or review dates on:
		1. Safety policies
		2. Certifications
		3. Compliance documents
	2. System alerts for:
		1. Upcoming reviews
		2. Expired or outdated documents
8. **Mobile Accessibility**
	1. Access and retrieve documents via:
		1. Mobile web interface
		2. Mobile app (online/offline support for field operations)
9. **Audit Logging and Traceability**
	1. Record:
		1. Who accessed/downloaded each document
		2. When it was uploaded/modified/deleted
		3. Purpose of change (with optional comments)
10. **Integration with Other Modules**
* Documents should be accessible or linked from:
	+ Incident records
	+ Risk assessments
	+ Training modules
	+ Inspection reports
1. **Data Backup and Recovery**
* Regular, automated backups of the document repository
* Restore options for both individual files and bulk recovery in case of data loss

# Mobile Accessibility

1. **Mobile-Friendly Interface**
	1. The system must be accessible via:
		1. Mobile web browsers (responsive design)
		2. Dedicated mobile app (Android/iOS preferred)
	2. Optimized for various screen sizes and devices (phones, tablets)
2. **Core Functional Access**
	1. Mobile interface must support key OHS functions including:
		1. Incident reporting
		2. Risk assessments
		3. Inspections and audits
		4. Training access
		5. Document viewing and uploading
3. **Offline Mode Support**
	1. Ability to:
		1. Capture and save data without internet access
		2. Sync data automatically once reconnected
	2. Ideal for field use or remote locations with limited connectivity
4. **Photo and Media Capture**
	1. Direct access to device camera for:
		1. Attaching images/videos to incidents, inspections, risk assessments
		2. Annotating visual evidence when necessary
5. **Push Notifications**
	1. Support for:
		1. Incident alerts
		2. Upcoming inspections or training
		3. Assigned tasks or escalations
6. **Secure Access and Authentication**
	1. Enforce mobile login with:
		1. MFA (Multi-Factor Authentication)
		2. SSO or JWT integration with WAF IAM systems
		3. Role-based access even from mobile
7. **Real-Time Data Synchronization**
	1. Ensure any data entered via mobile reflects:
		1. Instantly in the centralized dashboard (when online)
		2. With queuing and retry mechanisms for unstable connections
8. **User Experience and Speed Optimization**
	1. Light UI design for faster loading
	2. Touch-friendly buttons and simplified workflows
	3. Reduced bandwidth usage for cost-effective mobile access
9. **Mobile Dashboard and Quick Actions**
	1. Condensed overview of:
		1. Recent incidents
		2. Pending actions
		3. Assigned tasks
	2. Shortcut buttons to report, inspect, assess, or upload
10. **Security Compliance**
* Protect mobile data with:
	+ Encrypted local storage
	+ Secure API communication (HTTPS, TLS)
	+ Remote wipe or session termination if device is lost

# User Roles and Permissions

1. **Role-Based Access Control (RBAC)**
	1. Define user roles such as:
		1. System Administrator
		2. OHS Manager
		3. Inspector
		4. Department Supervisor
		5. General Employee
	2. Assign granular access rights per role:
		1. View, edit, create, approve, delete permissions by module
2. **Department/Designation Mapping**
	1. Map users to:
		1. Specific departments
		2. Job designations
		3. Work locations
	2. Filter access and visibility of data based on user's organizational context
3. **Custom Role Creation**
	1. Allow administrators to:
		1. Create custom roles
		2. Define specific permissions outside standard roles
		3. Clone or modify existing role templates
4. **Integration with WAF IAM Systems**
	1. Support integration with:
		1. JWT (JSON Web Tokens)
		2. SSO (Single Sign-On)
		3. LDAP/Active Directory for centralized authentication and user provisioning
5. **Permission-Based UI Rendering**
	1. Show/hide:
		1. Pages, modules, actions, or buttons based on user’s role and permissions
	2. Prevent unauthorized actions even via direct URL access
6. **Approval Workflows Based on Role**
	1. Assign approver rights only to authorized roles for:
		1. Incident approvals
		2. Risk assessments
		3. Training and compliance validations
7. **Audit Trail for Role Changes**
	1. Log all:
		1. Role assignments
		2. Permission changes
		3. Login attempts and security actions
8. **Multi-Level Access Structure**
	1. Support for:
		1. Hierarchical permission models
		2. Delegation of authority (e.g., temporary access for leave cover)
9. **User Group Management**
	1. Group users by:
		1. Region, unit, or operational role
		2. Apply group-level permissions and reports
10. **Mobile Access Controls**
* Ensure mobile users follow the same role restrictions:
	+ Data access and task execution based on user profile
	+ Secure token-based authentication for mobile sessions

# System Integration

1. **Integration with Existing HR Systems**
	1. Seamless data exchange with WAF’s HR platform for:
		1. Employee records
		2. Departmental structure
		3. Role assignments and job designations
	2. Auto-sync for new hires, terminations, and transfers
2. **Integration with ICT Systems**
	1. Link with ICT systems for:
		1. Authentication (e.g., LDAP, SSO, JWT)
		2. User provisioning and permissions
		3. Infrastructure monitoring/logging where needed
3. **Secure RESTful API Support**
	1. Provide robust APIs for:
		1. Data import/export
		2. Real-time data exchange with third-party systems
		3. Custom application integration (e.g., reporting tools, dashboards)
4. **Bulk Data Import and Export**
	1. Tools to handle:
		1. Initial data migration (CSV, Excel, XML formats)
		2. Ongoing bulk updates (e.g., audit history, risk logs)
	2. Support for data exports for backup, analytics, or compliance
5. **Webhook and Event-Based Integration**
	1. Trigger external actions when specific events occur, such as:
		1. New incident logged
		2. Training completion
		3. Risk reassessment required
6. **Modular Integration Options**
	1. Enable selective integration of:
		1. Incident data into BI tools
		2. Compliance logs with regulatory platforms
		3. Training completion into learning management systems (LMS)
7. **Data Mapping and Transformation**
	1. Handle:
		1. Field-level mapping across systems
		2. Data normalization between external formats and internal models
	2. Error handling and reconciliation for failed syncs
8. **Authentication Federation**
	1. Use existing WAF authentication methods for:
		1. Single sign-on (SSO)
		2. Identity federation via LDAP/Active Directory or other IAM systems
9. **Audit and Logging for Integration Activity**
	1. Maintain logs of:
		1. API calls and sync attempts
		2. Data exchanged between systems
		3. Any integration failures or retries
10. **Compliance with Data Standards**
* Ensure integrations follow:
	+ Data privacy laws (e.g., GDPR, HIPAA)
	+ Secure transport protocols (HTTPS, TLS)
	+ Encrypted token-based access for APIs