EAST BAY MUNICIPAL UTILITY DISTRICT

Request for Proposal (RFP) - Supplemental Document A

Regulatory Compliance – Environmental and Workplace Health & Safety System (EHS)

Functional Requirements for the Environmental Compliance Section (ECS) include:

Hazardous Waste Management

1. **Manifest Collection**
    a. System shall provide a one-way synchronization (download) with RCRAInfo and the DTSC Hazardous Waste Manifest Tracker, utilizing their data dictionaries to ensure consistency with federal and state manifest data fields.
    b. System shall be able to track common industry data fields, for example US DOT Hazardous Material Indicator, transporter EPA ID, etc.
2. **Manifest Management**
    a. System shall provide document management and meta data tagging with search functionality for PDF and TIFF files.
    b. System shall support customizable metadata fields aligned with DTSC/EPA data dictionaries.
    c. System shall allow tagging by generator site, transporter, disposal facility, waste stream, and reporting year.
    d. System shall automatically populate metadata from e-Manifest data when available.
    e. System shall provide user-defined fields for internal tracking (e.g. project number, contractor name, and/or invoice reference).
    f. System shall support logical groupings by facility, year, and manifest status.
    g. System shall provide version control and audit trails for uploads, edits, and deletions.
    h. System shall meet records retention requirements under Title 22 and EPA (minimum 3 years, or longer if required).
    i. Hazardous Waste Manifest workflow is below.
3. **Search and Retrieval**
    a. System shall provide full-text and metadata-based search functionality
    b. System shall allow filtering by EPA ID number, EPA ID number category (i.e. temporary generator), facility name, transporter, date range, and generator category (i.e. small quantity, larger quantity)
    c. System shall support Boolean and Wildcard searches
    d. System shall retrieve manifests and associated attachments (e.g. LDR forms, analytical results, waste profile forms) as linked records
4. **Reporting and Analytics**
    a. System shall generate reports consistent with DTSC/EPA data dictionary formats.
    b. System shall generate all regulatory-required reports, including DTSC, EPA, and hazardous waste tax filings (e.g., CDTFA, Waste Generator Fee, Biennial Report).
    c. System shall allow users to create, save, and reuse standardized queries for recurring analyses and internal reporting.

d. System shall perform data calculations and mass or unit conversions needed for regulatory and internal reporting.
e. System shall provide ad hoc reporting and querying capabilities for custom data analysis.
f. System shall generate manifest summaries by facility, waste type, or reporting period.
g. System shall calculate total waste quantities by category (e.g., solids, liquids, recyclables).
h. System shall export data in multiple formats (CSV, Excel, XML) for external analysis or agency submission.

5. **Related Waste Documents**
   a. System shall support tracking of non-manifest shipping documents, including Bills of Lading (BOLs) for Universal Waste and Treated Wood Waste, in addition to Uniform Hazardous Waste Manifests (UHWM).
   b. System shall provide upload functionality for both manifests and BOLs, with metadata fields automatically parsed where available or entered by the user, including generator, transporter, waste type, quantity, destination facility, and shipment date.
   c. System shall store all document types in the central repository and index records within the database using a defined document-type attribute (e.g., manifest type) to distinguish regulated manifests from non-manifest shipments.
   d. System shall allow authorized users to query, retrieve, and view manifests and BOLs through a unified interface, with filter options for document type, facility, waste stream, and reporting period.
   e. System shall incorporate manifests and BOLs in all data aggregation, reporting, and audit functions to ensure complete waste tracking and regulatory documentation coverage.

6. **Workflow Automation**
   a. System shall retrieve and prepopulate data dictionary fields from public databases (e.g., RCRAInfo, DTSC Manifest Tracker) to reduce manual data entry. Prepopulated fields shall be stored in a pending or review state until verified and finalized by the authorized user
   b. System shall provide portal for District staff to upload Hazardous Waste manifests.
   c. System shall provide a secure, role-based web interface for external users to upload Uniform Hazardous Waste Manifests and associated documentation. Uploaded files shall be stored in the document repository and indexed within the manifest database using the user's organization ID, facility metadata, and manifest tracking number.
   d. System shall allow authenticated external users to retrieve and view historical manifest records associated with their assigned organization or facility. Access shall be limited to read-only queries through predefined database views or API endpoints.
   e. System shall present aggregated data summaries (e.g., total hazardous waste generated by period, waste stream, or facility) via dynamic dashboards or parameterized queries, consistent with user role permissions.
   f. System shall provide functionality for uploading Hazardous Waste Storage Inspection records, with client-side validation, metadata mapping, and referential linkage to the corresponding facility and inspection date within the database schema.

g. System shall provide notification to Environmental Compliance (EC) team when manifests have been uploaded.
h. System shall provide timestamps at distinct points of the manifest workflow.
i. System shall detect missing manifest returns (e.g. no facility or generator copy received) and generate an automatic notification to the Environmental Compliance (EC) team or third party at configurable deadlines (default thresholds: 30 days, 45 days).
j. System shall maintain deadline tracking logic for manifest submission intervals (e.g. 30 days, 45 days), associated timer states, and escalation rules. System shall allow for the creation of custom input forms, similar to our inspection forms.

Compliance Tracker / Calendar

1. System shall integrate Hazardous Waste Management data with a compliance calendar/tracker.
2. Permit Management
    a. System shall provide an online portal for facilities to access copies of their CUPA permit.

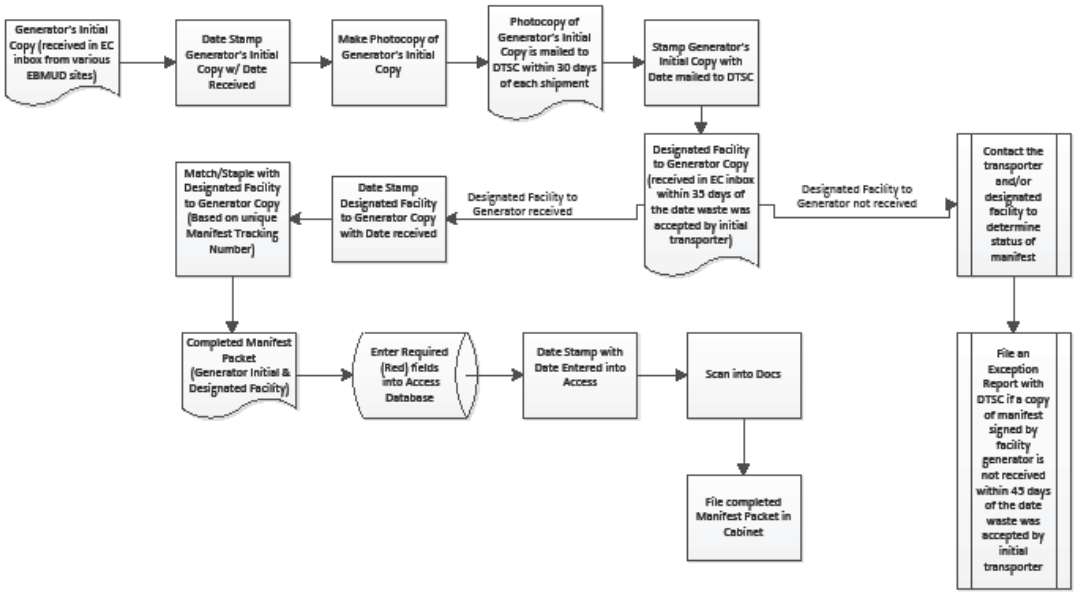
Reporting

1. System shall provide ad hoc reporting and querying capabilities.
2. System shall provide critical reports below:
    a. California Department of Tax and Fee Administration Report (annual).
    b. Waste Generator Fee Reports (annual).
    c. Generate biennial reports.

Configuration

1. System shall be user configurable to adapt to new requirements and/or workflows as they arise including forms, fields, layouts, UI configuration, user defined functional logic, etc.

Hazardous Waste Manifest Document Flow Chart



April 2020

EAST BAY MUNICIPAL UTILITY DISTRICT

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Regulatory Compliance – Environmental and Workplace Health & Safety System (EHS)

The Safety Sections seeks an intuitive user friendly EHS platform to integrate all health and safety information into one system, replacing manual spreadsheets and Access databases. The tool should seamlessly use existing data to create dashboards, automatically update key metrics, and make information easy to retrieve and share. For EHS, the critical requirement at implementation is associated with Industrial Hygiene and a flexible reporting tool that allows for real-time data integration and synchronization. It should support comprehensive Industrial Hygiene (IH) and exposure monitoring data management. It must allow for storage and organization of air, noise, and bulk material sampling data; import of laboratory results; and automated generation of reports such as IH survey summaries and Cal/OSHA-compliant exposure notifications. The system should enable association of sampling data with locations, employees, tasks, and Similar Exposure Groups (SEGs), and perform calculations such as time-weighted averages (TWAs).

The platform should also assist in managing respirator fit testing data, including respirator type, size, fit factor, and testing schedules, and automatically generate reminders and summary reports. It must support attachment of photos and supplemental documentation to sampling records and include functionality for tracking industrial hygiene equipment, calibration schedules, and supply inventories.

Functional Requirements for the Workplace Health & Safety Section (WHS) include:

Industrial Hygiene Data and Program Management

1. System shall receive, store, and organize exposure monitoring (air, noise, etc.) and bulk sampling data, including but not limited to materials samples, air monitoring samples and noise dosimetry.
2. System shall allow import of sampling data from laboratory analytical data files (Electronic Data Deliverables)
3. System shall allow import of laboratory sampling and survey reports
4. System shall automatically generate sampling and survey reports.
5. System shall create and manage Similar Exposure Groups
6. System shall allow for Calculations of Time Weighted Averages (TWAs) and Unit Conversions
7. System shall organize and store data within the system allowing the use of multiple tags and identifiers to allow for robust data analytics and reporting, including detailed location data, GPS coordinates, analytes, task(s), Department, work unit, Similar Exposure Groups (SEGs), employee name and ID, to enable robust data analysis, eliminating reliance on network drives.
8. System shall be capable of importing photos and other supplemental information and associate it with sampling data.
9. System shall provide integrated tracking and dashboard functionality.
10. System shall automatically generate and distribute Cal-OSHA compliant exposure memos to affected employees within configurable timeframes.
11. System shall allow rapid querying and referencing historical exposure data to inform future work planning.
12. System shall track industrial hygiene equipment, inventory, and calibration schedules.
13. System shall track respiratory fit testing results, respiratory type and size, and fit testing due dates and scheduling. We should be able to generate fit testing result reports for both individual employees and organization-wide for posting and reference.

14. System shall enable fast search and reference of historical bulk and exposure monitoring sample data for maintenance and construction planning.

Incident Reporting and Investigations / Injury Recordkeeping

1. System shall provide a robust incident investigation tool for reporting injuries and incidents (including near misses, safety hazards, and safety concerns), supervisors investigations, and corrective action tracking and assignments.
    a. Set timelines and provide automatic reminders and updates for incident status changes
    b. Assign and track supervisor injury investigations, track and assign corrective actions.
    c. Provide robust data management and analytics to identify trends and areas of focus.
2. System shall generate OSHA 300 and 300A Injury and Illness Log Reports automatically.
    a. Track all reported injuries and enable classification as OSHA reportable for inclusion on OSHA 300/300A Logs.
    b. Ensure injury investigations and information are linked to each injury entry.
3. The system shall allow employees and supervisors to report injuries and allow designated staff to track and tag information for each injury case related to injury category and severity, location, organizational unit, days of loss time and restricted duty and other common safety related metrics.
4. System shall integrate with existing dashboards or internal reporting systems.
5. System shall provide automated report generation and email distribution.

Auditing & Inspections

1. System shall support audits and inspections with customizable audits and inspection templates to reflect various programmatic inspection responsibilities.
2. System shall provide automated report generation and assignments for responsible parties and corrective action timelines.
3. System shall track audit schedules, due dates, and corrective action assignments and automatically send reminders and notices on user defined timelines.
4. System shall generate customizable queries, tables, forms, and reports to support audit workflows and trend analysis.
5. System shall allow audit/inspection completion through smartphone and allow offline access.
6. The system should track due dates, corrective actions, and send automated reminders.

Data Analytics and Dashboard Reporting

1. System shall provide robust data analytics with a dashboard reporting for all data managed by the system and allow for the custom development of reports and generation of dashboards viewable to users based on data integrated with other features and modules of the system.
2. System shall generate dashboards that provide a summary of leading and lagging indicators set by the user for each organizational unit and goals based on established key performance indicators (KPI) to track and encourage safety performance.
3. Dashboard functionality shall integrate with the system to pull data and allow reporting for:
4. Injury Statistics: Loss time injury rate, recordable injury rate, work hours lost to injuries, and days until next milestones (i.e. 1 year without a loss time injury).
5. Supervisor Injury Investigation Tracking: Completed investigations versus not completed within established timeframes.
6. Supervisor Jobsite Visit Tracking: Completed visits compared to a set goal.
7. Local Safety Committee Meetings Tracking: Completed meetings compared to a set goal.
8. Open Audit Findings Tracking: Audit findings that have been open, including those over a set time period that have not been completed.

9. Should allow for manual import of data as needed to supplement data not normally tracked within the system.

Reservoir Fall Protection

1. System shall digitally captured inspection data using a custom form equivalent to the existing 79-question Access form.
2. System shall integrate with external systems such as Design Division reports and AIM.
3. System shall generate multiple custom inspection reports automatically.
4. System shall link to spreadsheets on network drives such that the data updates dynamically.

Occupational Health & Medical Surveillance

1. System shall store and organize employee medical data related to pre-hire, baseline, and periodic medical exams, DOT physicals, respiratory medicals, and OSHA required medical exams such as asbestos and lead exams, audiograms, and employee exposure assessments.
2. System shall be able to import audiometric data and track employee hearing loss through career, identify threshold shifts, and automatically generate reports and notices.
3. It should track user defined medical exam schedules and generate report for who may be due for exams and provide an outlook for upcoming due dates.
4. System shall securely store data and be HIPAA compliant.

SSEAP / EAP Reporting

1. System shall integrate with business continuity tracking systems and Excel-based data.
2. System shall reproduce custom counters and due date tracking for program compliance.

DIRT Reporting

1. System shall digitally capture and store DIRT reports following regulatory standards.
2. System shall generate annual and individual DIRT reports automatically.
3. System shall replace current custom Access forms and reporting workflows.

AED Locations Tracking

1. System shall track AED inventory and locations digitally, including tracking maintenance schedules.
2. System shall generate and update reports on AED status and maintenance automatically.

Training & Gap Analysis

1. System shall be able to interface with common LMS systems, such as Cornerstone, to assist with safety training management, including tracking completions of required training and gap-analysis.

EAST BAY MUNICIPAL UTILITY DISTRICT

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Regulatory Compliance - Environmental and Workplace Health & Safety System (EHS)

Technical Requirements include:

1. **Software as a Service (SaaS)**: System shall be provided using a SaaS hosting model. Other than software licenses for System, Proposer shall not require District to purchase, install, or host any hardware or software components of System.
2. **Single sign-on**: System shall support SSO using OAuth 2.0 framework and District's Entra ID IdP; the use of SAML with District's Entra ID IdP would also be acceptable if System supports SAML Federation via XML Metadata URLs. System shall use District's SSO only to authenticate users and not to authorize users. System shall provide separate functionality for user authorization.
3. **User management**: System shall utilize best practices in user management including least privilege, role-based access, login timeouts, etc. System shall provide District with functionality to add, delete, and modify security roles and associated security permissions. System shall provide District with functionality to assign security roles to users. Expected user community numbers and roles:
    a. Users – all 2,000+ district employees; potentially cover contractors for incident reporting as well
    b. Power Users - ~25 RCO staff
    c. Administrators – ~8 key project management staff
4. **Audit trail and logging**: System shall provide logging functionality consistent with industry best practices to allow District to establish audit trails of System activities.
5. **Test environment:** Proposer shall provide a test environment for District's use in testing System functionality, integrations, configurations, patches, newer releases, etc. Activities performed in this test environment shall not in any way affect System's production environment.
6. **Data encryption**: System shall encrypt data in transit and at rest using industry standard protocols and ciphers such as TLS 1.3 and AES-256. System will not be handling personally identifiable information. Majority of system data is publicly available. System shall be HIPAA compliant.
7. **Data backup**: System shall implement a comprehensive data backup strategy including incremental and full backups, encryption, offsite storage, automation to the fullest extent, etc. System shall provide an RTO of 12 hours or less and an RPO of 5 minutes or less.
8. **System uptime**: System shall maintain a minimum of 99.99% uptime per month during District's business hours from 8am to 5pm Pacific Time. System maintenance shall occur outside of District's business hours.
9. **System change management:** Proposer shall notify District at least 10 business days in advance of minor System changes including software patches. Proposer shall notify District at least 30 business days in advance of major System changes including software releases. Proposer shall perform thorough testing prior to deploying any change and shall not deploy any change that would break functionality used by District. A business day is defined as a calendar day that is not a Saturday, Sunday, or District holiday.
10. **Data migration:** Proposer shall perform migration of District's data from MS Access database and various spreadsheets, need to be able to import/export all data from MS Excel.

11. **Integration with 3rd party applications**: System shall support integration with 3rd party applications, for example, HR and risk management solutions. Other desirable integrations are GIS, work management, training systems, etc.
12. **Integration with Microsoft 365 tools**, specifically the tools below:
    a. SharePoint Online to allow linking, storing, and accessing documents directly,
    b. Microsoft Outlook (including Outlook Calendar) for notifications and task assignments, to streamline communication and task follow-up.