Overview of EHS Assistant:
EHSA was established in 1999 and upgraded in 2017. It is the safety management system supported and operated collaboratively by the Office of Research Safety (ORS) and Environmental Health and Safety (EHS).

THE UNIVERSITY OF CHICAGO

#	EHSA Module	Description
1	Dashboards	Visual representation of the data in modules 2 - 14 in this list. Inspection progress, permit status, training compliance, equipment audits, chemical waste generated, accident and incident investigations and corrective actions.
2	Locations	Building and room level data is fed into EHSA via integration with the University's space management system (Archibus). The data is used to in building inspections, lab inspections, chemical inventories. This module also has the ability to create interactive floor maps to more effectively communicate hazards. Linked to modules 1, 3 - 13
3	Equipment	Testing, calibration and regulatory compliance audits for various equipment types (e.g., fume hoods, biosafety cabinets, radiation meters, lead aprons, underground/aboveground storage tanks, AEDs, ORS spill kits, EHS spill kits). Linked to modules 1 - 2, 5, 7 - 14
4	Fire	Fire drill history (location, time to evacuate, issues with egress paths) Linked to modules 1 - 2, 13
5	Inspections	Research Safety Inspections (Chem/Bio/Laser), Radiation Safety Inspections, and General EHS Building Inspections (Fire/Building codes, OSHA, EPA). Deficiencies are assigned to the responsible party (e.g., PI, Lab Safety Contact, Facilities Services, and/or Facility Manager). The responsible party can respond to the deficiency in the "viewer" dashboard to provide status updates/ feedback. Linked to all modules.
6	Inventory	Chemical and radioactive inventories for labs, shops, warehouses, and facility maintenance. Uses data from the "license" module and the "locations" module to links inventory to each user and their storage location/work area. As new lab buildings are constructed, this module will be invaluable to ensure compliance with new building codes and storage limits by hazard class. Ability to summarize hazards, emergency response protocols, and special handling procedures for each inventory item. EHS has uploaded and linked each non-lab chemical to their Safety Data Sheet (required by OSHA regulations) to ensure proper hazard communication to affected users. Linked to all modules.
7	License	Chemical, Biological, Laser, Radiological, and General permits are attached to each PI and/or shop manager. The licenses allow us to link the workers to the PI/manager and their locations. It can also track permit amendments, PPE profiles specific to a lab and a permit. ORS builds training profiles which are specific to the hazards in the lab and/or outlined in the IBC protocols whose information is received via an integration with AURA IBC. The training profile is attached to each affected PI and lab worker. Linked to all modules.
8	Procure	Purchase requests for radioactive isotopes are tracked from receipt to disposal. We unsuccessfully tried to use this module to track chemical purchases, but we found that Buysite does not have a consistent unique identifier to flag chemical purchasers. We also found the Buysite does not collect the needed data points at the time of purchase (CAS #, Chemical name, Vendor name, catalog #, units, quantity per unit) to push the data to the chemical inventory module.
9	Radiation Compliance	Radiation surveys and contamination histories. Linked to modules 1 - 3, 5 - 8, 10, 12 - 14
10	Training	A learning management system specifically for safety courses. It allows us to build, manage, deploy and track training. More than 130 courses are hosted by ORS, EHS, ARC, Pritzker Nano-Fab Lab, the Chemistry Department, and Facilities Services. It delivers web-based training courses and has a scheduler for lecture-based courses. It is accessible to every University member with a valid CNET ID. An integration with UCM's LMS updates BSD training histories to avoid making them take the same course twice. An automation is in place to send our training reminders and expirations notices to each user. Linked to modules 1, 5, 7, 9, 11 - 14
11	Accident Incident	Receives UC Accident and Incident Report notifications (e.g., injuries, fires, spills, property damage and near-misses) that we use to populate an in-depth investigation from that allows us to publish lessons learned documents, identify trends and root causes, and assign/track corrective-actions to eliminate/reduce future events. Linked to modules 1 - 3, 7, 10, 12 - 14

Overview of EHS Assistant continued

#	EHSA Module	Description	Page 2 of 2
12	Waste	Management of chemical and radioactive wastes. The end-user submits waste pick-ups via this module and the vendor completes the pick-ups once per week. The end-user can also request empty containers (i.e., bottles, buckets, carboys) which are dropped off at their lab. This module also allows users to create waste profile templates for reoccurring waste pick-ups. Linked to modules 1 - 2, 6 - 10, 13 - 14	
13	Workers	Integration with Workday and MCDB runs on M, W, and F to add new workers to the system and if pre-determined conditions are met, update existing records. We bring over the username, ID, cnet, organizational code (division down to sub-sub dept), job code, title worker status, supervisor. The integration allows labs to easily add new members to their groups. The worker profile is also a document repository for OSHA required training documents (e.g., respirator fit tests and voluntary use and Hepatitis B vaccine declination form.) EHS has created an automation which converts the Workday job code to worker type. Each worker type is associated with the basic training profile for their role/hazards to ensure we are compliant with federal and state regulations.	
14	Other	The control panel for EHSA Administrators (Heather Sims, Sa-Lin, and several EHS and ORS members). We assign security groups to determine which modules and data each user can access in EHSA based on their roles in their units.	
15	Safety Data Sheets	Storage location for Safety Data Sheets which are linked to chemical inventory items. This is required to ensure compliance with the OSHA Hazard Communication standard.	
16	Worker Registration	PIs and Lab Safety Contacts can submit requests to add/remove workers from their various permits. It also alerts EHS and ORS if a worker takes training in EHSA but is not yet present in EHSA.	
17	Reports	A large selection of report templates which summarize data in the various EHSA modules.	
18	SOP Documents	Area where PIs and Lab Safety Contacts can upload their Standard Operating Procedures for high hazard tasks. Guides them through a risk assessment to identify hazards and mitigation strategies such as administrative controls, engineering controls, and define personal protective equipment.	
19	Placards	PI and Lab Safety Contact can use this module to update the information on the placard which is posted outside each wet lab. The placard communicates hazards present in the lab, required PPE, and name/numbers for emergency contacts.	
20	PI Overview	Customizable view for PI's where they can track permit status, training profiles linked to permits for each of their workers, Lab/Room Maps, Inspection Results, and Upcoming Events.	
21	Safety Portal (Hazard Assessment)	Onsite recently provided a demonstration of this newest safety portal module. It's an intuitive, user-friendly tool that allows safety officers with no programming experience to create custom web-based forms and/or applications. The fields within these forms are linked to existing EHSA tables to create standardized dropdown lists (i.e., more accurate data) to facilitate form completion. It eliminates the need to manage form response in emails and the subsequent manual entry of data into EHSA by the safety officers. It then ties the form to a workflow which can be constructed in EHSA (notifications, reviews, approvals, escalations, next steps)	

EHS Assistant Integrations

THE UNIVERSITY OF
CHICAGO

WorkDay

Absorb

AURA IBC

Data Warehouse

Archibus/SIMS

ARC Injury Report

MCDB

INBOUND FEEDS

Maximo *(Future)*

EHSA

WorkDay *(Future)*

OUTBOUND FEEDS

Maximo *(Future)*

eShipGlobal

AURA IBC

AIMS

Fac Services KPIs