

# Project Planning and Design Review Checklist

*Environmental Health and Safety*

This document should be used by Project Managers to help identify specific Environmental Health and Safety issues related to new construction, renovation, or demolition projects and needs to be reviewed during the design and planning phase. This checklist is a guide, and not an all-encompassing review of Environmental Health and Safety requirements. Please complete the checklist and review with the Environmental Health and Safety Department.

**Environmental Health and Safety should be involved in all phases of project-planning, starting with the initial design meeting, and should be included on the project's design team.**

Building:		Date:		
Project Name:		Project Number:		
Projected Start Date:		Projected Completion Date:		
Brief Description of Project:				
New Construction <input type="checkbox"/>		Renovation <input type="checkbox"/>		Demolition <input type="checkbox"/>
<b>Environmental</b>				
<b>Air Emissions Equipment</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will the project include the installation of an emergency or non-emergency generator (gas turbine and stationary internal combustion engines)?</li> </ul>				<p><b>If yes</b>, provide EH&amp;S with the documentation of the manufacturer's certification.</p> <p>A construction permit is required if the engine size is greater than or equal to 1,118 kW for emergency generators and 112 kW for non-emergency generators.</p>
<ul style="list-style-type: none"> <li>Will the project remove or modify any existing fuel-burning equipment, such as: boilers, generators, hot water heaters, internal fuel combustion engines, etc.</li> </ul>				<p><b>If yes</b>, provide EH&amp;S with identification of the unit(s) that are removed or modified along with information about the specific changes that are being proposed.</p> <p>Removal/modification of fuel-burning equipment may trigger reporting and updating of University's Air Operating Permit.</p>
<ul style="list-style-type: none"> <li>Will the project include the installation of new fuel-burning equipment such as those listed above?</li> </ul>				<p><b>If yes</b>, provide EH&amp;S with the following information: fuel source and the maximum BTU/hr or HP (for internal fuel combustion engines).</p> <p>New equipment may need to be added to the University's Air Operating Permit.</p>

<ul style="list-style-type: none"> <li>Will the project include the installation of equipment, other than fuel-burning equipment, that will release emissions to the air, such as non-steam sterilizers, furnaces or kilns, printing operations, chemical storage tanks, etc.?</li> </ul>				<p><b>If yes</b>, provide EH&amp;S with the following information: equipment and process diagrams, materials used, and anticipated usage rate.</p> <p>New equipment may need to be added to the University's Air Operating Permit.</p>
<b>Asbestos</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will the project involve disturbing asbestos-containing material (ACM) or material suspected to be ACM?</li> </ul>				<p><b>If yes</b>, complete the online <a href="#">Asbestos Request Form</a>.</p>
<b>Lead</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Does the scope of work involve impacting or removing interior or exterior materials covered from structures built before 1978?</li> </ul>				<p><b>If yes or unsure</b>, notify EH&amp;S prior to beginning work.</p> <p>A lead inspection may need to be conducted on paint and other surface coatings.</p>
<ul style="list-style-type: none"> <li>Will this project generate lead-containing paint debris (e.g. windows, window sashes, doors, jams, moldings, trim, etc.)?</li> </ul>				<p><b>If yes</b>, notify EH&amp;S prior to beginning work.</p> <p>A lead investigation may need to be conducted on paint and other surface coatings.</p>
<ul style="list-style-type: none"> <li>If yes for any of the questions above, will this project be performed on a school or residential building?</li> </ul>				<p><b>If yes</b>, notify EH&amp;S prior to beginning work.</p> <p>A lead investigation may need to be conducted on paint and other surface coatings.</p>
<ul style="list-style-type: none"> <li>Will this project generate any lead-paint-contaminated waste?</li> </ul>				<p><b>If yes</b>, notify EH&amp;S prior to beginning work.</p> <p>A lead investigation may need to be conducted on paint and other surface coatings.</p>
<b>Universal Waste</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will the project generate any waste batteries (e.g. lead acid, alkaline, Nickel-Cadmium, etc.)?</li> </ul>				<p><b>If yes</b>, batteries will need to be separated from all other waste streams. EH&amp;S can assist with implementing waste management procedures.</p>
<ul style="list-style-type: none"> <li>Will the project generate waste fluorescent bulbs?</li> </ul>				<p><b>If yes</b>, fluorescent light bulbs need to be separated from other wastes streams. EH&amp;S can assist with implementing waste management procedures.</p>
<ul style="list-style-type: none"> <li>Will the project generate waste mercury-containing devices (e.g. mercury switches, thermostats, etc.)?</li> </ul>				<p><b>If yes</b>, mercury-containing devices need to be separated from other waste streams. EH&amp;S can assist with implementing waste management procedures.</p>
<ul style="list-style-type: none"> <li>Will the project generate waste light ballasts that contain PCBs?</li> </ul>				<p><b>If yes</b>, the ballasts need to be separated from other waste streams. Notify EH&amp;S if unsure. EH&amp;S can assist with implementing waste management procedures.</p>

<b>Hazardous Waste Management</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will this project generate any waste streams other than normal construction debris and universal wastes (e.g. flammable or corrosive chemicals, cleaning solutions, etc.)?</li> </ul>				<p><b>If yes</b>, generate list of waste materials and provide to EH&amp;S.</p> <p>EH&amp;S will determine legal requirements for disposal of the material.</p>
<ul style="list-style-type: none"> <li>If this is a demolition project, are there any chemicals or other materials remaining in the structure that need to be removed prior to demolition?</li> </ul>				<p><b>If yes</b>, do not attempt to remove the materials, generate list of waste materials and provide to EH&amp;S.</p> <p>EH&amp;S will determine legal requirements for disposal of the material.</p>
<b>Oil-Containing Equipment</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will the project include the removal of an Underground Storage Tank (UST)?</li> </ul>				<p><b>If yes</b>, provide EH&amp;S with the location of the UST.</p> <p>Notifications may need to be submitted to the IEPA and OSFM. Installation may require a permit.</p>
<ul style="list-style-type: none"> <li>Will the project involve an installation of an UST?</li> </ul>				<p><b>If yes</b>, provide EH&amp;S with the size and contents of the UST.</p> <p>EH&amp;S will need to review the regulatory requirements for the installation before work can begin. Installation may require a permit.</p>
<ul style="list-style-type: none"> <li>Will the project include the installation or removal of an Above Ground Storage Tank (AST)?</li> </ul>				<p><b>If yes</b>, provide EH&amp;S with the location of the AST.</p> <p>EH&amp;S will need to review the regulatory requirements for installations before work can begin. Installation may require a permit.</p>
<ul style="list-style-type: none"> <li>Will the project involve the installation or removal of any equipment that contains 55 gallons or more of oil (e.g. elevators, transformers, switches, etc.)?</li> </ul>				<p><b>If yes</b>, provide EH&amp;S with a list of the equipment and drums along with the volumes of oil.</p> <p>SPCC plan may need to be updated to include new locations. Installation may require a permit.</p>
<b>Air Pollution Control for Project Activities</b>				
<ul style="list-style-type: none"> <li>Will the project involve demolition of existing structures?</li> </ul>				<p><b>If yes</b>, a “Notice of Intent to Demolish” must be submitted to and approved by the City of Chicago Department of Environment at least 10 working days prior to commencement of demolition.</p> <p>The general contractor for the project is responsible for submitting the notice.</p>

<ul style="list-style-type: none"> <li>Will the project involve sandblasting, grinding, or chemical cleaning of the outer surfaces of a building?</li> </ul>				<p><b>If yes</b>, an “Architectural Surface Cleaning Permit” must be obtained from the City of Chicago.</p> <p>The general contractor is responsible for obtaining this permit from the City of Chicago.</p>
<ul style="list-style-type: none"> <li>If yes to the previous question, will this work be performed on painted surfaces?</li> </ul>				<p><b>If yes</b>, the paint needs to be analyzed to determine if it is lead-based paint (greater than 0.5% lead by weight).</p> <p>Contact EH&amp;S to collect paint samples.</p>
<b>Soil</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will the project include the removal of any soil from University property?</li> </ul>				<p><b>If yes</b>, provide EH&amp;S with approximate volume of soil to be removed.</p> <p>EH&amp;S will need to ensure soil will be transferred to a site permitted to receive uncontaminated soil.</p>
<b>Storm Water</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will the project disturb more than 15,000 square feet of land, create an at-grade impervious surface of more than 7,500 square feet, or discharge stormwater into any body of water or separate sewer system?</li> </ul>				<p><b>If yes</b>, a stormwater management plan must be submitted to and approved by the City of Chicago Department of Environment.</p> <p>The general contractor for the construction site is responsible for developing and submitting the site stormwater management plan for approval.</p>
<ul style="list-style-type: none"> <li>Will the project disturb more than one acre of land? Measurements typically include all areas inside the construction site limit for the project.</li> </ul>				<p><b>If yes</b>, a Storm Water Pollution Prevention (SWPP) Plan and Permit may be required by the EPA.</p> <p>The general contractor of the construction site is responsible for reviewing permit requirements and applying for a permit when required.</p>
<ul style="list-style-type: none"> <li>For construction and renovations, will the new structure have any pollution sources exposed to storm water (uncovered dumpsters, uncovered outdoor material storage, outdoor equipment, etc.)?</li> </ul>				<p><b>If yes</b>, a SWPP Permit may be required; but this can be avoided.</p> <p>Work with EH&amp;S in the design phase of the project to ensure a SWPP plan is not necessary for the new structure.</p>
<b>Wastewater</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>For new constructions, has the Facility Classification Questionnaire been completed?</li> </ul>				<p><b>If no or unsure</b>, work with EH&amp;S to complete this form.</p>
<ul style="list-style-type: none"> <li>If the site has an existing wastewater discharge, will the project increase the rate of wastewater discharge?</li> </ul>				<p><b>If yes</b>, provide EH&amp;S with the increase in the daily rate of wastewater discharge.</p> <p>Notification may need to be submitted to the local POTW.</p>

<ul style="list-style-type: none"> <li>Will demolition, renovation, or construction activities result in wastewater discharges?</li> </ul>				<p><b>If yes</b>, review the discharges with EH&amp;S. EH&amp;S will conduct a regulatory review on the discharges.</p>
<ul style="list-style-type: none"> <li>Will this project involve the removal or modifications to existing wastewater discharges?</li> </ul>				<p><b>If yes</b>, Provide EH&amp;S with the locations and information about the modifications.</p> <p>The University's wastewater discharge permit may need to be updated.</p>
<ul style="list-style-type: none"> <li>Will this project introduce a new wastewater discharge?</li> </ul>				<p><b>If yes</b>, provide EH&amp;S with the wastewater contents, discharge rates, and discharge locations.</p> <p>A wastewater discharge permit may be required.</p>
<b>Radiation Safety</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will this project involve the performance of radiography for quality assurance of welds?</li> </ul>				<p><b>If yes</b>, contact the Radiation Safety Office for further instruction.</p>
<ul style="list-style-type: none"> <li>Will tritium-containing exit signs be removed or installed?</li> </ul>				<p><b>If yes or unsure</b>, contact the Radiation Safety Office to coordinate waste collection.</p>
<ul style="list-style-type: none"> <li>Will Americium-containing smoke detectors be removed or installed?</li> </ul>				<p><b>If yes or unsure</b>, contact the Radiation Safety Office to coordinate waste collection.</p>
<ul style="list-style-type: none"> <li>Will any radiation or Laser equipment be removed, modified, or installed?</li> </ul>				<p><b>If yes</b>, contact the Radiation Safety Office for further instruction.</p> <p>Notifications will need to be submitted to the Illinois Emergency Management Agency.</p>
<b>Health &amp; Safety</b>				
<b>Fire Safety</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will any activities be performed that require a Hot Work Permit (welding, grinding, soldering, etc.)?</li> </ul>				<p><b>If yes</b>, a Hot Work Permit is required. Contact EH&amp;S to obtain permit at least 24 hours before work is to begin.</p>
<ul style="list-style-type: none"> <li>Will any of the fire suppression system need to be shut-down at any time during the project?</li> </ul>				<p><b>If yes</b>, a Red Tag permit is required. Contact EH&amp;S to obtain permit at least 24 hours before work is to begin.</p>
<ul style="list-style-type: none"> <li>Will fire detection and alarm systems need to be disabled at any time during the project?</li> </ul>				<p><b>If yes</b>, a Red Tag permit is required. Contact EH&amp;S to obtain permit at least 24 hours before work is to begin.</p> <p>Notifications need to be submitted to the City of Chicago and the University Police.</p>
<ul style="list-style-type: none"> <li>Will any penetrations be made to a wall or floor?</li> </ul>				<p><b>If yes</b>, ensure that filling floor, wall, or ceiling penetrations with fire-rated materials is specifically included in the project scope.</p>
<ul style="list-style-type: none"> <li>During the project, have plans been made for temporary emergency egress and exits?</li> </ul>				<p><b>If no</b>, plan out emergency egress routes and exits prior to beginning work. Contact EH&amp;S for assistance.</p>

<b>Confined Spaces</b>	<b>YES</b>	<b>NO</b>		<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will a confined space need to be entered?</li> </ul>				<b>If yes</b> , contact EH&S to determine if Permit is necessary to enter the space at least 24 hours prior to entry.
<b>Fall Protection</b>	<b>YES</b>	<b>NO</b>		<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will work be performed on a surface that is elevated at 6 feet or above the next lower level, including: unprotected sides and edges, leading edges, through hoist areas, and holes in roofs and floors?</li> </ul>				<b>If yes</b> , means to protect workers from falls such as guardrails or fall protection equipment need to be implemented. If personal fall protection equipment is needed, contact EH&S to obtain a Fall Protection Permit.
<ul style="list-style-type: none"> <li>Will fixed ladders be installed?</li> </ul>				<b>If yes</b> , review requirements for fixed ladders with EH&S.
<ul style="list-style-type: none"> <li>Will the project include the use of scaffolding?</li> </ul>				<b>If yes</b> , scaffolds greater than 20 feet in height must be assembled by a contractor; scaffolds greater than 80 feet in height require a permit from the City of Chicago.
<ul style="list-style-type: none"> <li>Will the new construction or renovation include fall protection installations on roofs and other elevated surfaces?</li> </ul>				<b>If no</b> , work with EH&S to discuss options for providing means for fall protection on roofs and other elevated surfaces.
<b>Traffic Control/Public Safety</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will this project block sidewalks or walkways?</li> </ul>				<b>If yes</b> , alternative walkways and signage must be provided.
<ul style="list-style-type: none"> <li>Will the project area be accessible to emergency vehicles?</li> </ul>				<b>If no</b> , plan out accessible areas prior to beginning work. EH&S may need to work with the City of Chicago to plan for accessing site for emergencies.
<ul style="list-style-type: none"> <li>Will a crane or other hoisting equipment be required?</li> </ul>				<b>If yes</b> , notification to the University heliport may need to be submitted. Work with EH&S to submit notification prior to raising hoist.
<ul style="list-style-type: none"> <li>Will the project generate excessive noise levels to neighboring occupied areas?</li> </ul>				<b>If yes</b> , work with building occupants to plan noisy activities.
<ul style="list-style-type: none"> <li>Will the project generate excessive dust, chemical or other air emissions next to occupied areas or fresh air intakes?</li> </ul>				<b>If yes</b> , install barriers or enclosures around dusty activities. Contact EH&S for assistance.
<b>New Construction/Renovation Design</b>				
<b>Fire &amp; Life Safety</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will a Fire Department Information Cabinet (FDIC) be added to a construction or updated for a renovation?</li> </ul>				<b>If no</b> , contact EH&S for assistance with gathering or updating the information necessary for the FDIC.
<ul style="list-style-type: none"> <li>Will the project involve the installation of wall partitions, reduction of available exits, or blocking of corridors?</li> </ul>				<b>If yes</b> , submit floor layout plan to EH&S for approval.

<ul style="list-style-type: none"> <li>Will the project involve the addition, removal, or alteration of fire protection systems (alarms, detection, suppression, etc.)?</li> </ul>				<p><b>If yes</b>, submit plans to EH&amp;S for insurance review.</p>
<ul style="list-style-type: none"> <li>Will the new construction/renovation include adequate exits and routes of egress?</li> </ul>				<p><b>If no or unsure</b>, work with EH&amp;S to design a floor plan that allows adequate egress routes and exits.</p>
<ul style="list-style-type: none"> <li>Will new elevators be installed?</li> </ul>				<p><b>If yes</b>, notify EH&amp;S prior to beginning work.</p> <p>Notifications need to be submitted to the OSFM.</p>
<ul style="list-style-type: none"> <li>Will existing elevators be removed or modified?</li> </ul>				<p><b>If yes</b>, notify EH&amp;S prior to beginning work.</p> <p>Notifications need to be submitted to the OSFM.</p>
<ul style="list-style-type: none"> <li>If the project is a new construction, will the structure be greater than 80 feet above grade?</li> </ul>				<p><b>If yes</b>, the structure is considered a high rise according to Chicago Building Codes.</p> <p>Work with EH&amp;S to ensure compliance with the Chicago Building Codes.</p>
<ul style="list-style-type: none"> <li>Will the electrical system for the new construction or renovation have an arc flash and electrical safety analysis conducted per the requirements of the NFPA 70E-2009 Standard?</li> </ul>				<p><b>If no</b>, include the analysis in the scope of work for the electrical installations.</p>
<b>Chemical Storage Areas</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Required Actions</b>
<ul style="list-style-type: none"> <li>Will chemical storage be in areas with limited access to the public?</li> </ul>				<p><b>If no</b>, designate a new area for chemical storage that meets this requirement.</p>
<ul style="list-style-type: none"> <li>Will flammable liquids and/or gases be stored in the chemical storage area?</li> </ul>				<p><b>If yes</b>, provide EH&amp;S with an inventory including volumes of flammable materials.</p>
<ul style="list-style-type: none"> <li>Will compressed gas cylinders be stored in the chemical storage area?</li> </ul>				<p><b>If yes</b>, consult the University's <a href="#">Compressed Gas Cylinders</a> policy on the EH&amp;S website for storage requirements.</p> <p>Provide EH&amp;S with an inventory of compressed gases to be stored in the area.</p>
<ul style="list-style-type: none"> <li>Will corrosive chemicals, such as acids or bases, be stored in the chemical storage area?</li> </ul>				<p><b>If yes</b>, ensure that emergency eye washes and showers are located inside the storage area, and are accessible within 10 seconds of all points in the area.</p>

The following "Post Construction/Renovation Review" checklist is to be completed by the Project Manager and a representative from Environmental Health and Safety upon completion of the project.

<b>Post Construction/Renovation Review</b>			
<b>General</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
• Are corridors and stairwells free of debris?			
• Has all construction-related debris been removed?			
• For new wastewater discharges, has a water meter been installed?			
<b>Fire Safety</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
• Are fire extinguishers in place as required?			
• Have evacuation maps been updated and posted?			
• Has the Fire Department Information Cabinet (FDIC) for the building been updated or added?			
• Have the floor plans and emergency exit maps been updated?			
• Are exit signs and stairwell signs visible in the all sections of the corridor?			
• Have all wall, floor, and/or ceiling penetrations been sealed?			
• Has the Facility Classification Questionnaire been completed for new constructions or renovations?			
• Have occupancy placards been placed outside of large assembly areas?			
<b>Laboratories</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
• Emergency eye wash and showers installed.			
• Are spill kits sufficient and available?			
• Are gas cylinders stored upright and secured to a fixed structure?			
• Have new fume hoods been tested and certified for proper air flow?			
• Is laboratory equipment stored in the laboratory and not in the corridor?			
• Are compressed gas cylinders stored away from electrical connections?			