

# 1. Screening procedures for Introducing new chemicals OCAD U

## **Purpose for this Procedure:**

1. To define chemical products that are restricted and cannot be introduced to the facility without explicit permission of the Office of Safety and Risk Management.
2. To the extent practicable, avoid introducing to the facility any new products or chemicals that are:
  - a) highly hazardous to health, safety, the environment, or the property, or
  - b) require significant effort to maintain regulatory compliance.
3. To ensure that we comply with all applicable regulatory requirements and good safety practices in relation to any newly introduced products or chemicals.
4. Describe the information gathering activities and compliance actions that must be taken prior to or in connection with introducing and procuring chemicals and products.

## **Restricted Substances List:**

1. No "new product" containing any substance on the OCAD U Restricted Substance List shall be purchased or brought onto OCAD U property unless prior written approval is obtained from the Office of Safety and Risk Management. A "new product" is one that was not listed on the OCAD U Master Chemical Inventory, as of December 2011.
2. "OCAD U Restricted Substances" are substances that are subject to significant health, safety or environmental regulatory compliance obligations, and / or may present significant hazards to health, safety or the environment. Approval to purchase or bring onto the property an OCAD U Restricted Substance shall only be granted if the compliance requirements identified in the list are complied with.
3. It is the responsibility of the "new product user" (i.e. the person wishing to obtain the new product, or his / her supervisor or manager) to ensure compliance with the requirements shown on the list.
4. For assistance and guidance in complying with any OCAD U Restricted Substances requirements, contact the Office of Safety and Risk Management.

## List of OCAD U Restricted Substances

Restricted Substance	Reason for Restriction	Not Permitted on OCAD U Property	Designated Substance Assessment	Emergency Response Plan	Substance-Specific Safety Plan	Specific Regulatory Training	City of Toronto Pollution Prevention Plan
1,1,2,2-tetrachloroethane	City of Toronto Appendix 1 substance						√
1,2-dichlorobenzene	City of Toronto Appendix 1 substance						√
1,4-dichlorobenzene	City of Toronto Appendix 1 substance						√
3,3'-dichlorobenzidine	City of Toronto Appendix 1 substance						√
acrylonitrile (monomer)	Designated substance		√		√		
aldrin/dieldrin	City of Toronto Appendix 1 substance						√
alkylphenol ethoxylates	City of Toronto Appendix 1 substance						√
alkylphenols	City of Toronto Appendix 1 substance						√
ammonia (as a compressed gas)	Inherent hazard			√	√		
an ozone depleting substance (see Prohibited Substances list)	Federal and provincial environmental law prohibitions	√					
any radioisotope (unless contained within a consumer product)	Inherent hazard and regulatory control requirements	√					
arsenic as a salt or in solution	OHSA designated substance, and City of Toronto Appendix 1 substance		√		√		√
asbestos	OHSA designated substance		√				
benzene	OHSA designated substance, and City of Toronto Appendix 1 substance		√		√		√
bis (2-ethylhexyl) phthalate	City of Toronto Appendix 1 substance						√
carbon tetrachloride	Inherent hazard				√		
chlordane	City of Toronto Appendix 1 substance						√
chlorine (as a compressed gas)	Inherent hazard			√	√		
chloroform	City of Toronto Appendix 1 substance						√
chromium (in a metal, salt or in solution)	City of Toronto Appendix 1 substance				√		√
cis-1,2-dichloroethylene	City of Toronto Appendix 1 substance						√
cobalt	City of Toronto Appendix 1 substance						√
copper	City of Toronto Appendix 1 substance						√
DDT	City of Toronto Appendix 1 substance						√
di-n-butyl phthalate	City of Toronto Appendix 1 substance						√
ethyl benzene	City of Toronto Appendix 1 substance						√
ethylene oxide	OHSA designated substance		√		√		
hexachlorobenzene	City of Toronto Appendix 1 substance						√
hexachlorocyclohexane	City of Toronto Appendix 1 substance						√
hydrofluoric acid	Inherent hazard				√		
hydrogen (as a compressed gas)	Inherent hazard, Ontario Fire Code requirements				√	√	
isocyanates (any type of monomer)	OHSA designated substance		√		√		
lead	OHSA designated substance, and City of Toronto Appendix 1 substance		√		√		√

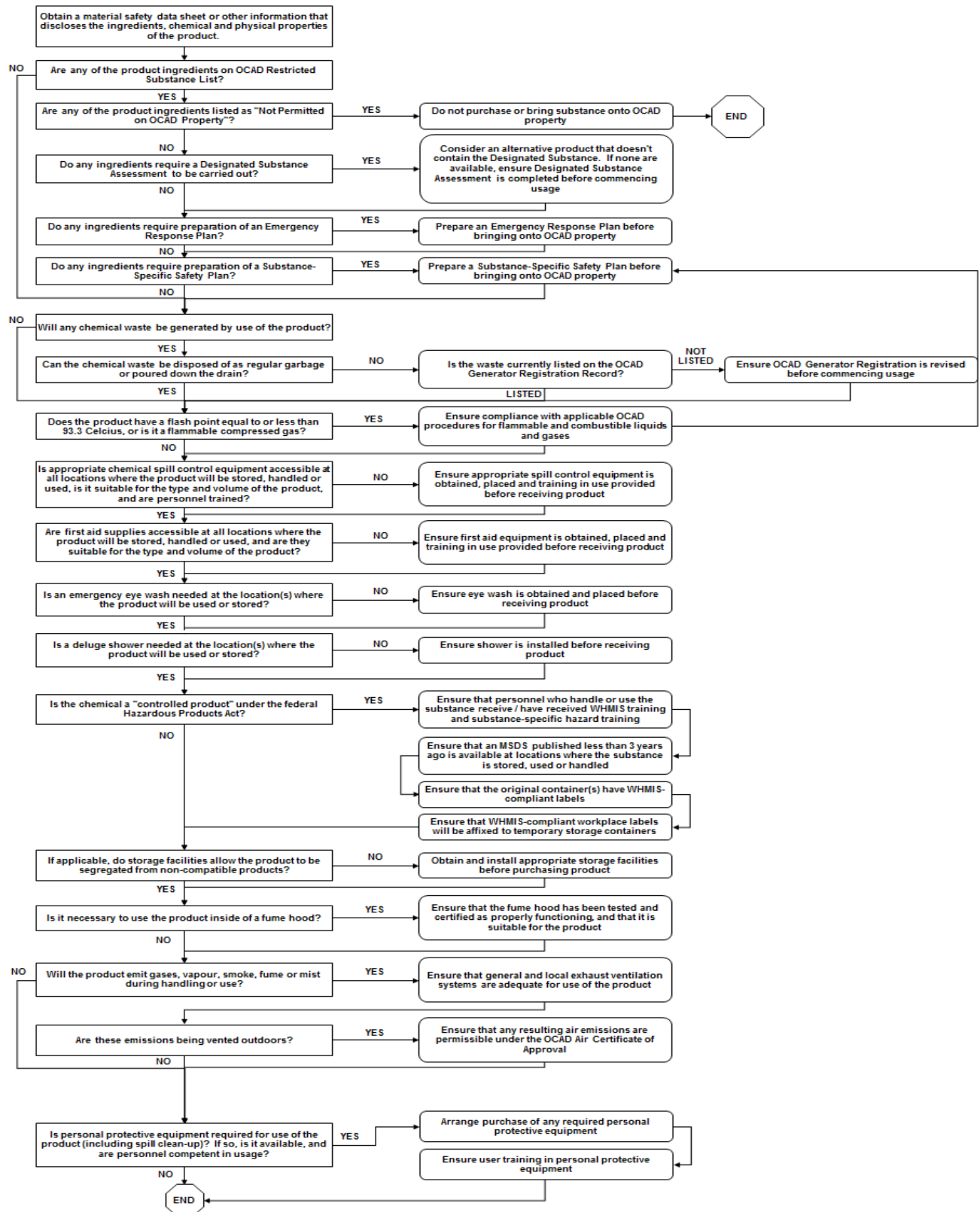
Restricted Substance	Reason for Restriction	Not Permitted on OCAD U Property	Designated Substance Assessment	Emergency Response Plan	Substance-Specific Safety Plan	Specific Regulatory Training	City of Toronto Pollution Prevention Plan
manganese (as a salt or in solution)	Toxicity				√		
mercury	OHSA designated substance, and City of Toronto Appendix 1 substance		√		√		√
methylene chloride	City of Toronto Appendix 1 substance						√
mirex	City of Toronto Appendix 1 substance						√
molybdenum	City of Toronto Appendix 1 substance						√
nickel (as a salt or in solution)	City of Toronto Appendix 1 substance				√		√
polychlorinated biphenyl	City of Toronto Appendix 1 substance, provincial and federal environmental law prohibitions	√					√
pentachlorophenol	City of Toronto Appendix 1 substance						√
picric acid	Inherent hazard	√					
propane	Inherent hazard, Ontario Fire Code requirements				√	√	√
selenium	City of Toronto Appendix 1 substance						√
silica (any crystalline form)	OHSA designated substance		√		√		
styrene (monomer)	Inherent hazard				√		
tetrachloroethylene	City of Toronto Appendix 1 substance						√
toluene	City of Toronto Appendix 1 substance						√
xylene	City of Toronto Appendix 1 substance						√
trans-1,3-dichloropropylene	City of Toronto Appendix 1 substance						√
trinitrotoluene ("TNT")	Inherent hazard	√					
vermiculite	Potential asbestos content, resultant OHSA regulatory controls	√					
vinyl chloride (monomer)	OHSA designated substance		√		√		
zinc	City of Toronto Appendix 1 substance						√

## List of OCAD U Prohibited Substances

Environmental Protection Act Ozone Depleting Substances	
EPA, 718/94 and 717/94 Class 1 ODS	CFC-11, also known as fluorotrichloromethane
EPA, 718/94 and 717/94 Class 1 ODS	CFC-12, also known as dichlorodifluoromethane
718/94 and 717/94 Class 1 ODS	CFC-13, also known as chlorotrifluoromethane
718/94 and 717/94 Class 1 ODS	CFC-111, also known as pentachlorofluoroethane
718/94 and 717/94 Class 1 ODS	CFC-112, also known as tetrachlorodifluoroethane
EPA, 718/94 and 717/94 Class 1 ODS	CFC-113, also known as trichlorotrifluoroethane
EPA, 718/94 and 717/94 Class 1 ODS	CFC-114, also known as dichlorotetrafluoroethane
EPA, 718/94 and 717/94 Class 1 ODS	CFC-115, also known as monochloropentafluoroethane
718/94 and 717/94 Class 1 ODS	CFC-211, also known as fluoroheptachloropropane
718/94 and 717/94 Class 1 ODS	CFC-212, also known as difluorohexachloropropane
718/94 and 717/94 Class 1 ODS	CFC-213, also known as trifluoropentachloropropane
718/94 and 717/94 Class 1 ODS	CFC-214, also known as tetrafluorotetrachloropropane
718/94 and 717/94 Class 1 ODS	CFC-215, also known as pentafluorotrichloropropane
718/94 and 717/94 Class 1 ODS	CFC-216, also known as hexafluorodichloropropane
718/94 and 717/94 Class 1 ODS	CFC-217, also known as heptafluorochloropropane
EPA, 718/94 and 717/94 Class 1 ODS	Halon-1211, also known as bromochlorodifluoromethane
EPA, 718/94 and 717/94 Class 1 ODS	Halon-1301, also known as bromotrifluoromethane
EPA, 718/94 and 717/94 Class 1 ODS	Halon-2402, also known as dibromotetrafluoroethane
718/94 and 717/94 Class 1 ODS	carbon tetrachloride
718/94 and 717/94 Class 1 ODS	methyl chloroform, also known as 1,1,1 trichloroethane
718/94 and 717/94 Class 1 ODS	any hydrobromofluorocarbon
718/94 and 717/94 Class 1 ODS	any isomer of any 718/94 or 717/93 Class 1 ODS
718/94 Class 1 ODS	any hydrochlorofluorocarbon
717/94 Class 2 ODS	HCFC-21, also known as dichlorofluoromethane
717/94 Class 2 ODS	HCFC-22, also known as chlorodifluoromethane
717/94 Class 2 ODS	HCFC-31, also known as chlorofluoromethane
717/94 Class 2 ODS	HCFC-121, also known as tetrachlorofluoroethane
717/94 Class 2 ODS	HCFC-122, also known as trichlorodifluoroethane
717/94 Class 2 ODS	HCFC-123, also known as dichlorotrifluoroethane
717/94 Class 2 ODS	HCFC-124, also known as chlorotetrafluoroethane
717/94 Class 2 ODS	HCFC-131, also known as trichlorofluoroethane
717/94 Class 2 ODS	HCFC-132, also known as dichlorodifluoroethane
717/94 Class 2 ODS	HCFC-133, also known as chlorotrifluoroethane
717/94 Class 2 ODS	HCFC-141, also known as dichlorofluoroethane
717/94 Class 2 ODS	HCFC-142, also known as chlorodifluoroethane
717/94 Class 2 ODS	HCFC-151, also known as chlorofluoroethane
717/94 Class 2 ODS	HCFC-221, also known as hexachlorofluoropropane
717/94 Class 2 ODS	HCFC-222, also known as pentachlorodifluoropropane
717/94 Class 2 ODS	HCFC-223, also known as tetrachlorotrifluoropropane
717/94 Class 2 ODS	HCFC-224, also known as trichlorotetrafluoropropane
717/94 Class 2 ODS	HCFC-226, also known as chlorohexafluoropropane
717/94 Class 2 ODS	HCFC-231, also known as pentachlorofluoropropane
717/94 Class 2 ODS	HCFC-232, also known as tetrachlorodifluoropropane
717/94 Class 2 ODS	HCFC-233, also known as trichlorotrifluoropropane
717/94 Class 2 ODS	HCFC-234, also known as dichlorotetrafluoropropane
717/94 Class 2 ODS	HCFC-235, also known as chloropentafluoropropane

Environmental Protection Act Ozone Depleting Substances	
717/94 Class 2 ODS	HCFC-241, also known as tetrachlorofluoropropane
717/94 Class 2 ODS	HCFC-242, also known as trichlorodifluoropropane
717/94 Class 2 ODS	HCFC-243, also known as dichlorotrifluoropropane
717/94 Class 2 ODS	HCFC-244, also known as chlorotetrafluoropropane
717/94 Class 2 ODS	HCFC-251, also known as trichlorofluoropropane
717/94 Class 2 ODS	HCFC-252, also known as dichlorodifluoropropane
717/94 Class 2 ODS	HCFC-253, also known as chlorotrifluoropropane
717/94 Class 2 ODS	HCFC-261, also known as dichlorofluoropropane
717/94 Class 2 ODS	HCFC-262, also known as chlorodifluoropropane
717/94 Class 2 ODS	HCFC-271, also known as chlorofluoropropane
717/94 Class 2 ODS	all other hydrochlorofluorocarbons not specifically named as 717/94 Class 2 ODS, other than HCFC-225, also known as dichloropentafluoropropane
717/94 Class 2 ODS	all mixtures containing any 717/94 Class 2 ODS
717/94 Class 3 ODS	HCFC-225, also known as dichloropentafluoropropane

# Pre-Introduction Screening and Compliance Procedure Flow Diagram:



### User Record Keeping Checklist

A checklist must be filled in to serve as a record of having completed all of the activities required by the screening and compliance process. The completed checklist must be provided to the responsible manager for verification and signature. The verified and signed checklist must be provided to the Office of Safety and Risk Management for final review and record keeping purposes.

User Record Keeping Checklist			
OCAD U Department / User:			
New Product / Substance:			
Proposed Use:			
Estimated Quantity to be Kept on Hand:			
Estimated Quantity Used per Month:			
Name of verifying Manager:			
Signature of verifying Manager:			Date:
Step	Action	Completed On	Initials
1	Obtain a material safety data sheet or other information that discloses the ingredients, chemical and physical properties of the substance.		
2	Are any of the product ingredients on OCAD Restricted Substance List?		
3	Are any of the product ingredients listed as "Not Permitted on OCAD Property"?		
4	Are there any "designated substances" listed as ingredients in the product? If so, designated substance assessment must be carried out in conjunction with purchase.		
5	Do any ingredients require preparation of an Emergency Response Plan?		
6	Do any ingredients require preparation of a Substance-Specific Safety Plan?		
7	Will use of the product result in any chemical waste being generated?		
8	Can wastes be disposed of via the drain or in regular garbage, or are the wastes considered to be hazardous waste?		
9	If the waste is a hazardous waste, is that waste currently on the OCAD Generator Registration Record? If not, the Generator Registration Record must be updated.		
10	Is the chemical a liquid with a flash point under 93.3 Celsius, or a flammable compressed gas?		
11	Have provisions been made to ensure compliance with applicable OCAD procedures relating to the use of flammable and combustible liquids (as applicable)?		
12	Have provisions been made to ensure compliance with applicable OCAD procedures relating to flammable compressed gases?		
13	Is existing available spill response equipment at the site of storage and use adequate for the chemical type and volume?		
14	Are existing first aid supplies at the site of storage and use adequate for the chemical type and volume?		

Step	Action	Completed On	Initials
15	Do the locations of chemical storage and use require emergency eye wash and deluge shower? If so, are they present?		
16	Is the chemical a "controlled product" under the federal Hazardous Products Act?		
17	If the product is a "controlled product", have users received WHMIS training in the chemical?		
18	If the product is a "controlled product", ensure that a material safety data sheet published less than 3 years ago will be available at locations where the substance is stored, used or handled.		
19	If the product is a "controlled product", ensure that the original container(s) have WHMIS-compliant labels.		
20	If the product is a "controlled product", ensure that WHMIS-compliant workplace labels will be available if necessary to affix to temporary storage containers		
21	Where on-site will the chemical be stored by the user? Will it be stored beside other chemicals? Are the chemicals with which it will be stored compatible with the new chemical?		
22	Is the chemical one that can only be used inside a fume hood? Is one present? Has it been tested / certified to be functioning properly?		
24	If the chemical will emit gases, vapour, smoke, fume or mist during handling or use, how are these emissions being contained and vented outdoors?		
25	If any emitted gases, vapour, smoke, fume or mist is being released to the indoor atmosphere, is the current general ventilation system a suitable and adequate control measure?		
26	If the chemical will emit gases, vapour, smoke, fume or mist, does the existing OCAD Air Certificate of Approval cover these emissions?		
27	What personal protective equipment is required to be worn by users? Is it available and have users been trained in proper use?		
28	Who will be designated as having ultimate responsibility for compliance with safety requirements relating to the chemical?		



**Screening Guidance Notes (corresponds with the table on the proceeding page)**

The following table provides guidance on how to perform the various pre-introduction screening activities.

Screening Guidance Notes		
Step	Action	Guidance
1	Obtain a material safety data sheet or other information that discloses the ingredients, chemical and physical properties of the substance.	A material safety data sheet can be obtained from the proposed supplier / vendor. Many suppliers and vendors also make material safety data sheets available via their web sites.
2	Are any of the product ingredients on OCAD U Restricted Substance List?	Compare the ingredients listed on the material safety data sheet with the list of substances in Restricted Substances list.
3	Are any of the product ingredients listed as "Not Permitted on OCAD U Property"?	If "yes", then the product cannot be purchased.
4	Are there any "designated substances" listed as ingredients in the product? If so, designated substance assessment must be carried out in conjunction with purchase.	Restricted Substances list identifies the 11 "designated substances". It is necessary to perform a "designated substance assessment" if any of these substances are to be used.
5	Do any ingredients require preparation of an Emergency Response Plan?	Restricted Substances list identifies substances for which an Emergency Response Plan is required. Plans are required because of the potential for severe harm associated with spills or releases of these substances. Consult the procedure entitled "Preparation of Emergency Response Plans".
6	Do any ingredients require preparation of a Substance-Specific Safety Plan?	Restricted Substances list identifies substances for which a Substance-Specific Safety Plan is required. Plans are required because of the potential for severe harm associated with spills or releases of these substances.
7	Will use of the product result in any chemical waste being generated?	The product user is responsible for determining whether the use of the product will generate waste materials.
8	Can wastes be disposed of via the drain or in regular garbage, or are the wastes considered to be hazardous waste?	Consult the procedure entitled "Chemical Waste Disposal Procedures" to determine if the waste must be treated as hazardous waste, or whether it can be disposed via the drain or in regular garbage.
9	If the waste is a hazardous waste, is that waste currently on the OCAD U Generator Registration Record? If not, the Generator Registration Record must be updated.	Consult with Safety & Risk Management to determine whether the current Generator Registration Record permits OCAD to dispose of these substances. If not, the Generator Registration Record must be updated as a result of the introduction of the product.

Screening Guidance Notes		
Step	Action	Guidance
10	Is the chemical a liquid with a flash point under 93.3 Celcius, or a flammable compressed gas?	This information can be obtained from the material safety data sheet. If the chemical is a liquid and has a flash point between 37.8 C and 93.3 C, it is classed as a "combustible liquid" under the Ontario Fire Code. If the chemical is a liquid with a flash point less than 37.8 C, it is classed as a "flammable liquid" under the Ontario Fire Code. Substance-specific safety plans must be prepared for flammable or combustible liquids, and for flammable compressed gases, and these classes of substances are also subject to additional OCAD procedures that are intended to ensure compliance with Ontario Fire Code and Ontario Electrical Safety Code requirements.
11	Have provisions been made to ensure compliance with applicable OCAD procedures relating to the use of flammable and combustible liquids (as applicable)?	Determine occupancy classification for the proposed storage and usage locations, and ensure the occupancy complies with requirements of the Ontario Fire Code
12	Have provisions been made to ensure compliance with applicable OCAD procedures relating to flammable compressed gases?	Determine occupancy classification for the proposed storage and usage locations, and ensure the occupancy complies with requirements of the Ontario Fire Code
13	Is existing available spill response equipment at the site of storage and use adequate for the chemical type and volume?	Consult the procedure entitled "Chemical Emergency Response", and compare the requirements listed in Restricted Substances list of that procedure with the equipment that is present and available at or in the vicinity of the sites of planned storage and use.
14	Are existing first aid supplies at the site of storage and use adequate for the chemical type and volume?	Consult the procedure entitled " Chemical Emergency Response ", and compare the requirements listed in Restricted Substances list of that procedure with the equipment that is present and available at or in the vicinity of the sites of planned storage and use.
15	Do the locations of chemical storage and use require emergency eye wash and deluge shower? If so, are they present?	Consult the procedure entitled "Requirements for Chemical Emergency Response", and compare the requirements listed in Restricted Substances list of that procedure with the equipment that is present and available at or in the vicinity of the sites of planned storage and use.

Screening Guidance Notes		
Step	Action	Guidance
16	Is the chemical a "controlled product" under the federal Hazardous Products Act?	"Controlled product" is the term used for pure substances and products that possess chemical, physical, toxic, biohazardous or radioactive characteristics defined by the Controlled Products Regulations under the federal Hazardous Products Act. "Controlled products" are also often referred to as "WHMIS products", since those substances and products are subject to the Ontario Workplace Hazardous Materials Information System Regulation. If the material is a "controlled product", the material safety data sheet may specify the "WHMIS Class" or "Controlled Product Class" for the substance, which will be a number or number+letter combination, but it is not mandatory for this information to be on the material safety data sheet. It is also the case that many products that are not "controlled products" have material safety data sheets, despite the absence of a regulatory requirement for one. A sure way of determining if a substance is a "controlled product" is to examine the label. If it is a "controlled product", then the label will have one or more of the symbols shown in "Screening Procedures Prior to the Introduction of New Chemicals or Products to OCAD University" procedure.
17	If the product is a "controlled product", have users received WHMIS training in the chemical?	See the procedure entitled "Training of Personnel in Chemical Safety" for information on arranging this training.
18	If the product is a "controlled product", ensure that a material safety data sheet published less than 3 years ago will be available at locations where the substance is stored, used or handled.	The most practical way of doing so is to copy the material safety data sheet and place the copy into MSDS binders at the appropriate locations.
19	If the product is a "controlled product", ensure that the original container(s) have WHMIS-compliant labels.	It is a responsibility of the manufacturer and supplier to ensure compliant labelling.
20	If the product is a "controlled product", ensure that WHMIS-compliant workplace labels will be available if necessary to affix to temporary storage containers	See the procedure entitled "Requirements for Material Safety Data Sheet and Labels" for guidance on how to when workplace WHMIS labels are required for temporary containers, and how to prepare same.
21	Where on-site will the chemical be stored by the user? Will it be stored beside other chemicals? Are the chemicals with which it will be stored compatible with the new chemical?	Consult the procedure entitled "Chemical Storage Procedures" for advice on safe storage practices.

Screening Guidance Notes		
Step	Action	Guidance
22	Is the chemical one that can only be used inside a fume hood? Is one present? Has it been tested / certified to be functioning properly?	The determination of whether a chemical must be used in a fume hood is based on factors such as: (1) the potential for release of harmful airborne emissions; (2) potential for harmful spills; (3) potential for runaway reactions; (4) potential for explosions. If you are uncertain as to whether usage should be restricted to a fume hood, contact Studio Management or Studio Technician for assistance. If a fumehood is required and is available, it is necessary to verify that it has been tested and certified as functioning properly. If it has been certified, there will be a sticker affixed to the fume hood at a visible place indicating who performed the testing, when the certification occurred, and when it expires.
24	If the chemical will emit gases, vapour, smoke, fume or mist during handling or use, how are these emissions being contained and vented outdoors?	If the chemical is not being used in a fume hood or with other local exhaust ventilation, then any air emissions will be diluted in the general atmosphere inside the building, and will be partially exhausted and partially recirculated by the general ventilation system.
25	If any emitted gases, vapour, smoke, fume or mist is being released to the indoor atmosphere, is the current general ventilation system a suitable and adequate control measure?	Substances that can be emitted into the general atmosphere of the building without perceptible impacts include carbon dioxide, nitrogen, argon, helium, small quantities of low toxicity organic solvents, and residues from the evaporation of cleaning products. If you are uncertain as to the acceptability of emissions to the general atmosphere inside the building, or the adequacy of the general ventilation in the area where the emissions would occur, contact Facilities Planning & Management for assistance.
26	If the chemical will emit gases, vapour, smoke, fume or mist, does the existing OCAD Air Certificate of Approval cover these emissions?	The Office of Safety and Risk Management will make arrangements to add product on the CoA if required.
27	What personal protective equipment is required to be worn by users? Is it available and have users been trained in proper use?	The material safety data sheet for the product will specify the types of personal protective equipment recommended for use by the manufacturer. If you are concerned that additional or lesser protective measures are appropriate, contact Studio Management for assistance. Verify that proposed users have or will have the necessary protective equipment, and that they have been or will be trained in proper use. For guidance on training, see the procedure entitled "Training of Personnel in Chemical Safety" for information on arranging this training.
28	Who will be designated as having ultimate responsibility for compliance with safety requirements relating to the chemical?	This needs to be determined, and should be documented on the screening form. The person assigned should be competent to exercise the necessary responsibilities.

**Verification of Implementation Compliance:**

Following receipt of a "new product", the verifying manager shall examine the manner of product storage, handling, use and disposal, to verify the correctness of these practices.