2020 MIT CHP Template Updates

2020 template and this document can be found here

https://ehs.mit.edu/chemical-safety-program/chemical-hygiene/

Throughout the document

New Wording

Update EHS website URLs https://ehs.mit.edu/XXX. See Appendix for more details.

Old Wording

Old EHS website URLs https://ehs.mit.edu/site/XXX

P. 1 and 2 Part I

Table of Contents

New Wording

New page numbers; new section 4.3 Guidance and resources for COVID-19 response

Old Wording

Old page numbers

P. 8 Part I

2.8. VISITORS, TOURS and PETS

New Wording

2.8. VISITORS, TOURS and PETS (Note: Section title is changed.)

To ensure the health and safety of visitors and tours to laboratories where potential hazards may exist, guidelines should be followed, which can be found in an EHS SOPs entitled "Visitors and Tours Guideline," # EHS-0036, located at https://ehs.mit.edu/sops/ (certificate login is required).

The Institute promotes a healthy learning and research environment by controlling potential health hazards and nuisances, including **prohibiting pets** from laboratories and other registered spaces with hazards. **This is for the safety and protection of the researchers, their work and the pet itself.** The definition of a pet is a domestic animal kept for personal enjoyment or companionship and is not trained to perform any disability-related tasks or work. The exception is for police dogs and animals used in research and teaching. For questions or further guidance related to pets, contact the EHS Office at environment@mit.edu.

Old Wording

2.8. VISITORS, MINORS, TOURS and PETS

To ensure the health and safety of visitors, minors and tours to laboratories where potential hazards may exist guidelines should be followed which can be found in an EHS SOPs titled Visitors and Tours Guideline # EHS-0036 and Minors and Pets in Laboratories, and other areas using or storing hazardous materials # EHS-0069 both located at http://ehs.mit.edu/site/sops

The Institute promotes a healthy learning and research environment by controlling potential health hazards and nuisances including prohibiting pets from laboratories and other registered spaces. The exception is for service dogs, police dogs and animals used in research and teaching. Additional guidance can be found in EHS SOP # EHS-0069 mentioned above.

P. 12 Part 1

New addition for COVID-19 response

4.3 Guidance and resources for COVID-19 response

The Institute is actively monitoring the COVID-19 situation and working with MIT researchers to ensure the safety of the MIT community while minimizing the impact on MIT's vibrant research enterprise. In response to COVID-19, the Institute has developed policies, guidance and resources, with the safety and security of our personnel being the most important guiding principle. The policies, guidance and resources may be developed, updated, or revoked as COVID-19 situation evolves. Find the latest Institute information can be found at:

- A. Faculty and Researchers https://now.mit.edu/faculty-teaching-staff/
- B. MIT Medical https://medical.mit.edu/covid-19-updates
- C. Environment Health and Safety office https://ehs.mit.edu/about/ehs-covid-19-fag/
- D. MIT's COVID-19 information center https://covid19.mit.edu/ MIT Now https://covid19.mit.edu/

P. 24 Part II

3.2.4. Discourage children in laboratories. (Note: Section title is changed.)

New Wording

Prudent safety practices discourage allowing children in laboratories where hazardous substances are stored or are in use. It is therefore urged that children not be permitted in laboratories. However, if children are allowed, they must be under the direct supervision of their parent or other qualified adult, and should be allowed to visit only for a brief period of time.

^{*}COVID-19 information center is replaced with MIT Now in the new academic year

Old Wording

3.2.4 Discourage children and pets in laboratories.

Prudent safety practices discourage allowing children and pets in laboratories where hazardous substances are stored or are in use. In fact, regulations prohibit pets from certain biosafety-rated laboratories. It is therefore urged that children and pets not be permitted in laboratories. However, if children are allowed, they must be under the direct supervision of their parent or other qualified adult, and should be allowed to visit only for a brief period of time.

P. 24 Part II

3.2.5 Establish and follow safe chemical storage procedures for your laboratory. New Wording

Researchers should consult the Environment, Health and Safety (EHS) Office website for chemical storage information at: https://ehs.mit.edu/chemical-safety-program/chemicals/ and the standard operating procedure (SOP) on Chemical Storage at https://ehs.mit.edu/sops/ (certificate login is required) for a discussion of procedures for storing chemicals in laboratories.

Old Wording

Researchers should consult the Environment, Health and Safety (EHS) Office website for chemical storage information at: http://ehs.mit.edu/site/chem_storage and the standard operating procedure (SOP) on Chemical Storage at http://ehs.mit.edu/site/sops for a discussion of procedures for storing chemicals in laboratories.

P. 25 Part II

3.2.5. Establish and follow safe chemical storage procedures for your laboratory. (7th bullet point)

New Wording

Temperature-sensitive, flammable chemicals with a flashpoint of 140 °F or less (GHS flame pictogram) must be stored in a refrigerator/freezer that has a spark free interior and that is UL, FM or other NRTL approved for flammable storage. The sparks from the components in a household-type refrigerator/freezer could ignite flammable vapors and cause a fire or explosion. For more details, refer to https://ehs.mit.edu/chemical-safety-program/chemicals/.

Old Wording

Temperature-sensitive, Flammable chemicals with a flashpoint of 140 °F or less (GHS flame pictogram) must be stored in a refrigerator/freezer that has a spark free interior and that is UL or FM approved for flammable storage. The sparks from the components in a household-type refrigerator/freezer could ignite flammable vapors and cause a fire

or explosion. For more details, refer to https://ehs.mit.edu/site/refrigerators-safe-flammable-storage

P. 33 Part II

4.1

New Wording

EHS website https://ehs.mit.edu/workplace-safety-program/personal-protective-equipment/ provides additional ...

Old Wording

The Guidance Document "Laboratory Coat Selection, Use, and Care" at http://ehs.mit.edu/site/content/clothing-such-lab-coats-smocks-and-coveralls-personal-protection provides additional ...

P. 33 Part II

4.2 Eye Protection

New Wording

All members of the lab are provided safety glasses. Guidance for assessing the level of additional eye protection required and procedure for obtaining prescription glasses are available at: https://ehs.mit.edu/workplace-safety-program/personal-protective-equipment/.

Note: There are several changes in this section within the main text, example A and example B. Refer to the CHP template to locate the changes.

Old Wording

Guidance for assessing the level of additional eye protection required is available at: http://ehs.mit.edu/site/content/eye-and-face-protection.

All members of the lab are provided safety glasses. The procedure for obtaining prescription glasses is described at: http://ehs.mit.edu/site/content/prescription-safety-glasses.

P. 36 Part II

5.2.2. Safety Showers and Eyewash Stations

New Wording

If an eyewash or safety shower needs to be repaired create and submit a service request to the Dept. of Facilities in Atlas https://atlas.mit.edu/. All showers are tested twice a year by Facilities if one or more shower inspections are out of date use the above link submit a service request include the bldg.-room number(s).

Old Wording

If an eyewash or safety shower needs to be tested or repaired, call the Department of Facilities and give the operator the location of the defective equipment and (for safety showers) the number on the blue preventive maintenance tag.

Appendix

No.	Page & Part No.	Section No. & Title	New Wording	Old Wording
1	P. 7 Part I	2.6. The ENVIRONMENT, HEALTH and SAFETY (EHS) OFFICE	https://ehs.mit.edu/chemical-safety-program/chemical-	https://ehs.mit.edu/site/chemical-safety/chemical-
			<u>hygiene/</u>	<u>hygiene-program</u>
2	P. 9 Part I	3. TRAINING	https://ehs.mit.edu/training/	http://ehs.mit.edu/site/training
3	P. 9 Part I	3.1. Training Requirements	https://ehs.mit.edu/training/	http://ehs.mit.edu/site/training
4	P. 10 Part I	4.2. Chemical Safety Information	https://ehs.mit.edu/workplac	http://ehs.mit.edu/site/conte
		Sources	e-safety-program/hazard-	nt/SDS-and-chemical-
		Note: There are two changes on this	communication/	safety-information
		page		
5	P. 11 Part I	4.2. Chemical Safety Information	https://ehs.mit.edu/workplac	https://ehs.mit.edu/site/che
		Sources	e-safety-program/hazard-	mical-safety/common-
			communication/	chemicals-non-labs-mit-
				shops-and-studios
6	P. 13 Part II	1. INTRODUCTION	https://ehs.mit.edu/lab-	https://ehs.mit.edu/site/labor
			research-program/field-	atory-safety/field-safety
			research-safety/	
7	P. 16 Part II	2.7. Particularly Hazardous	https://ehs.mit.edu/chemical	http://ehs.mit.edu/site/conte
		Substances/Select Carcinogens	-safety-program/dangerous-	nt/particularly-hazardous-
			highly-toxic-chemicals/	substance-review-160-mit-
				<u>chemicals</u>
8	P. 19 Part II	3.1. Preliminary Steps and	https://ehs.mit.edu/chemical	http://ehs.mit.edu/site/conte
		Procedures	-safety-program/dangerous-	nt/particularly-hazardous-
			highly-toxic-chemicals/	substance-review-160-mit-
				<u>chemicals</u>

No.	Page & Part No.	Section No. & Title	New Wording	Old Wording
9	P. 20 Part II	3.1. Preliminary Steps and Procedures Step 1	Consider substituting less toxic chemicals Note: Remove the old URL	Consider substituting less toxic chemicals by using MIT's Green Chemical Alternative Wizard at https://ehs.mit.edu/site/environmental-stewardship/green-chemistry
10	P. 21 Part II	3.1. Preliminary Steps and Procedures Step 3	https://ehs.mit.edu/workplac e-safety-program/personal- protective-equipment/	http://ehs.mit.edu/site/content/respiratory-protection
11	P. 22 Part II	3.1. Preliminary Steps and Procedures Step 3	https://ehs.mit.edu/workplac e-safety-program/personal- protective-equipment/	http://ehs.mit.edu/site/content/respiratory-protection
12	P. 22 Part II	3.1. Preliminary Steps and Procedures Step 4	https://ehs.mit.edu/workplac e-safety-program/fire-safety/	https://ehs.mit.edu/site/work place-safety/fire-safety-0
13	P. 22 Part II	3.1. Preliminary Steps and Procedures Step 4	https://ehs.mit.edu/about/e mergency-management/	http://ehs.mit.edu/site/emerg ency management
14	P. 24 Part II	3.2.3. Working Alone	https://ehs.mit.edu/about/policies/working-alone-policy/	http://ehs.mit.edu/site/content/mit-working-alone-policy
15	P. 27 Part II	3.2.9. Take additional precautions for handling highly reactive or peroxide forming substances.	https://ehs.mit.edu/sops/ (certificate login is required).	http://ehs.mit.edu/site/sops
16	P. 28 Part II	3.2.9. Take additional precautions for handling highly reactive or peroxide forming substances.	https://ehs.mit.edu/sops/ (certificate login is required).	http://ehs.mit.edu/site/sops

No.	Page & Part No.	Section No. & Title	New Wording	Old Wording
17	P. 30 Part II	3.4 Additional Requirements for	https://ehs.mit.edu/biologica	https://ehs.mit.edu/site/bios
		Work with Select Toxins	I-program/select-agent-	afety/select-agent-toxins
			toxins/	
18	P. 31 Part II	3.5 Special Precautions for Work	https://ehs.mit.edu/training/	http://ehs.mit.edu/site/trainin
		with Hydrofluoric Acid		g
19	P. 32 Part II	3.7 Special Precautions for Work	https://ehs.mit.edu/chemical	http://ehs.mit.edu/site/chem
		with Nanomaterials	-safety-program/chemicals/	<u>storage</u>
20	P. 32 Part II	3.8 Special Precautions for Work	https://ehs.mit.edu/chemical	https://ehs.mit.edu/site/sites/
		with Cyanide Salts and Compounds	-safety-program/chemicals/	default/files/images/sog 01
				49%20cynanide%20salts.pd
				<u>f</u>
21	P. 32 Part II	3.9 Special Precautions for Work	https://ehs.mit.edu/chemical	https://ehs.mit.edu/site/labor
		with Pyrophoric and Water-Reactive	-safety-program/chemicals/	atory-safety/pyrophoric-and-
		Materials		water-reactive-chemical-
				<u>safety</u>
22	P. 33 Part II	4. PERSONAL PROTECTIVE	https://ehs.mit.edu/workplac	http://ehs.mit.edu/site/conte
		EQUIPMENT	e-safety-program/personal-	nt/personal-protective-
			protective-equipment/	equipment-ppe
23	P. 36 Part II	5.1 Laboratory Fume Hoods /	https://ehs.mit.edu/lab-	http://ehs.mit.edu/site/conte
		Ventilation	research-program/fume-	nt/fume-hoodslaboratory-
			hoods-laboratory-	ventilation
			ventilation/	
24	P. 36 Part II	5.2.1 Fire Extinguishers	https://ehs.mit.edu/sops/	http://ehs.mit.edu/site/sops
			(certificate login is required)	
25	P. 37 Part II	5.3. Safe Use of Warm and Cold	https://ehs.mit.edu/lab-	https://ehs.mit.edu/site/labor
		Environmental Rooms	research-program/warm-	atory-safety/warm-and-cold-
			and-cold-rooms/	environmental-rooms-safe-
				<u>use</u>

No.	Page & Part No.	Section No. & Title	New Wording	Old Wording
26	P. 38 Part II	7. COMPRESSED GAS	https://ehs.mit.edu/chemical	https://ehs.mit.edu/site/labor
		CYLINDERS	-safety-	atory-safety/compressed-
			program/compressed-gas-	gas-cylinder-safety
			cylinder-safety/	
27	P. 40 Part II	8.3.4 SPECIAL PROCEDURES	https://ehs.mit.edu/sops/	https://ehs.mit.edu/site/lab-
		REQUIRED for Lab Waste Stream	(certificate login is required).	waste-stream-fact-sheet
28	P. 42 Part II	9. SHIPPING HAZARDOUS AND	https://ehs.mit.edu/lab-	http://ehs.mit.edu/site/conte
		DANGEROUS MATERIALS	research-	nt/hazardous-materials-
		(Note: There are two changes in this	program/hazardous-	shipping-mit
		section)	materials-shipping/	
29	P. 42 Part II	9. SHIPPING HAZARDOUS AND	https://ehs.mit.edu/training/	http://ehs.mit.edu/site/trainin
		DANGEROUS MATERIALS		g
30	P. 42 Part II	10.3.1 Particularly Hazardous	https://ehs.mit.edu/chemical	https://ehs.mit.edu/site/che
		Substance Evaluation of Common	-safety-program/dangerous-	mical-safety/dangerous-
		Laboratory Chemicals Used at MIT	highly-toxic-chemicals/	<u>chemicals</u>
31	P. 47 Part III	2.5 Personal Protective Equipment	https://ehs.mit.edu/workplac	http://ehs.mit.edu/site/conte
		(PPE)	e-safety-program/personal-	nt/personal-protective-
			protective-equipment/	equipment-ppe
32	P. 48 Part III	4.1 Appendix III-A -Lab Specific	https://ehs.mit.edu/chemical	https://ehs.mit.edu/site/sites/
		SOP Template	-safety-program/chemical-	default/files/LabSpecificSOP
			<u>hygiene/</u>	Template.doc
33	P. 51 Part IV	1. INTEGRATION WITH MIT EHS	https://ehs.mit.edu/about/eh	https://ehs.mit.edu/site/abou
		MANAGEMENT SYSTEM	s-management-system/	t-ehs/ehs-management-
				<u>system</u>
34	P. 51 Part IV	2.1 Laboratory and Chemical	https://ehs.mit.edu/chemical	https://ehs.mit.edu/site/che
		Security	-safety-program/chemical-	mical-safety/chemical-
			inventory/	<u>inventory</u>

No.	Page & Part No.	Section No. & Title	New Wording	Old Wording
35	P. 52 Part IV	2.2. Department, Laboratory, or Center-Based Prior Approvals	https://ehs.mit.edu/chemical -safety-program/chemical- hygiene/	http://ehs.mit.edu/site/sites/ default/files/CHP_Preparers Guide.pdf
36	P. 53 Part IV	2.4. Purchase of Large Chemical Quantities (Note: There are two places on this page)	https://ehs.mit.edu/sops/ (certificate login is required).	http://ehs.mit.edu/site/sops
37	P. 53 Part IV	2.6. Purchase of Select Toxins	https://ehs.mit.edu/biologica l-program/select-agent- toxins/	https://ehs.mit.edu/site/bios afety/select-agent-toxins
38	P. 54 Part IV	3.1 Medical Evaluation	https://ehs.mit.edu/workplac e-safety- program/occupational- injury-or-illness-reporting/	https://ehs.mit.edu/site/work place-safety/occupational- injury-or-illness-follow
39	P. 54 Part IV	3.1 Medical Evaluation	https://ehs.mit.edu/sops/ (certificate login is required).	http://ehs.mit.edu/site/sops
40	P. 55 Part IV	3.4 First Aid Kits	https://ehs.mit.edu/sops/ (certificate login is required).	https://ehs.mit.edu/site/first- aid-kits
41	P. 57 Part IV	6.1 Inspections and Audits (Note: There are two changes on this page)	https://ehs.mit.edu/about/ehs-management-system/	https://ehs.mit.edu/site/abou t-ehs/ehs-management- system