RCRA HAZARDOUS WASTE REGULATION SUMMARY: Large Quantity Generators (LQG) UNIVERSITY OF WISCONSIN SYSTEM

RCRA REQUIREMENT	RCRA Hazardous Waste Generator Rule Requirements	RCRA Hazardous Waste Generator Improvement Rule Changes (2017)	SUBPART K: Alternate RCRA Regulations for Academic Labs (OPTIONAL)	Federal Code Reference (EPA)	State Code Reference (WI DNR)
EPA ID number	Required		Applies to academic labs only ; all labs at an institution must opt-in; must notify the EPA using EPA ID no. form if electing to follow Subpart K.	40 CFR 262.18; Subpart K, 40 CFR 262.203-204 and 40 CFR 262.16	NR 662.012, NR 665.0011; NR 662.200- 216 (Subchapter K)
Waste determinations	Required; waste determination record retention required.	Haz waste determinations must be accurate and made at the point of generation. Containers and tank labels must indicate hazards of the container contents (e.g., DOT hazard communication, OSHA hazard pictogram, NFPA hazard label or RCRA characteristic). LQGs required to identify and mark RCRA waste codes on containers prior to sending haz waste off site.	A trained professional must make the haz waste determinations for unwanted materials in labs prior to removal or within 4 days of arrival at CAA (LQGs, SQGs). In-lab haz waste determinations	40 CFR 262.11; Subpart K, 40 CFR 262.209-211	NR 661.10-35, NR 662.011, NR 665.0013; NR 662.200-216 (Subchapter K)
Monthly generation limits	Greater than: 1000 kg (2200 lbs), 1 kg (2.2 lbs) acute haz waste, or 100 kg (220 lbs) acute spill residue or soil for entire facility.			40 CFR 260.10	NR 660.10(70m)
On-site accumulation quantity	None/no limit			N/A	N/A
Central accumulation area (CAA) time limits	90 days			40 CFR 262.17	NR 662.034(1)
Satellite accumulation area (SAA) quantity limits	55 gallons of non-acute haz waste or 1 quart or 1 kg (2.2 lbs) acute haz waste; removed within 3 days to CAA if limits reach/exceeded.		55 gallons of non-acute haz waste or 1 quart or 1 kg (2.2 lbs) reactive acutely haz waste; removed within 10 days if limits reach/exceeded.	40 CFR 262.15; Subpart K, 40 CFR 262.208	NR 662.034(3); NR 662.200-216 (Subchapter K)
Satellite accumulation area (SAA) time limits	None		1 year , either on a regular interval of 12 months for all containers or 12 months from the container accumulation start date.	40 CFR 262.15; Subpart K, 40 CFR 262.208	NR 662.034(3); NR 662.200-216 (Subchapter K)
Accumulation requirements	Full compliance for management of containers, tanks, drip pads or containment buildings	of the container contents (e.g., DOT hazard communication, OSHA hazard pictogram, NFPA hazard label or RCRA characteristic); applies to both SAAs and CAAs. LQGs may request local waiver from fire code requirement to store ignitable/reactive waste 50 feet from property	meet specific labeling requirements, including but	40 CFR 262.15(a)(5)(ii), 40 CFR 262.17(a)(1)-(5); Subpart K, 40 CFR 262.206	NR 662.034, NR 662.200- 216 (Subchapter K)
Episodic generation	N/A		Lab clean-outs allowed once per 12-month period for each lab. All unwanted material removed from lab within 30-days of clean-out start. Haz waste generated during a lab clean-out that is unused commercial chemical product does not have to be	Subpart K, 40 CFR 262.213	NR 662.200-216

			All lab workers and students must received training commensurate with their duties and sufficient to understand Subpart K requirements. LQGs must maintain training documentation. All lab workers who transfer unwanted material and haz waste outside labs must be trained professionals and make the haz waste	40 CFR 262.17(a)(7); Subpart K, 40 CFR	NR 665.0016; NR 662.200-216
Personnel training	Required for facility personnel		determinations for unwanted material.	262.207	(Subchapter K)
Contingency plan and emergency procedures	Full plan required	Generators must document they have attempted to make arrangements with local emergency responders and keep documentation in facility's operating record. Quick Reference Guide must be included in contingency plan.	Academic institution must develop and maintain a Laboratory Management Plan (LMP) per the requirements of 40 CFR 262.214.	40 CFR 262.17(a)(6), 40 CFR 262.256, 40 CFR 262.262(b); Subpart K, 40 CFR 262.214	NR 665.0050-0056 (Subchapter D); NR 662.200-216 (Subchapter K)
		SAAs must meet LQG regulations for preparedness, prevention and emergency procedures. Location of SAAs must be		40 CFR 262.15(a)(8), 40 CFR 262.17(a)(6), 40 CFR	NR 665.0030-0037
Preparedness and prevention	Required	documented.		262.250-265 (Subpart M)	(Subchapter C)
Air emission standards	Required			40 CFR 262.17(a)(1) and (2)	NR 665.0178, NR 665.0202, NR 665.1030- 1090
Land disposal restrictions	Required			40 CFR 262.17(a)(9)	NR 668
Manifest	Required			40 CFR 262 Subpart B	NR 662.020-023
Waste minimization	Program required in place			40 CFR 262.27	NR 662.027
Pre-transport requirements	Required			40 CFR 262.30-262.33	NR 662.030-033, NR 665.0013
Biennial report	Required; annual WDNR report required.			40 CFR 262.41	NR 662.041
Exception and additional reporting	Required			40 CFR 262.42 and 262.43	NR 662.042-043
Recordkeeping	Required			40 CFR 262.11(f) and 262.40	NR 662.040
Facility type	RCRA permitted/interim status facility			40 CFR 264/265, 266/267 and 270	NR 664/665 and 670
Closure	Required	LQGs accumulating haz waste in containers must meet closure notification and performance standard requirements prior to closing a unit at the facility.		40 CFR 262.17(a)(8)	NR 662.194(6)

DEFINITIONS:

40 CFR 262.200 (Subpart K)

Reactive acutely hazardous unwanted material means an unwanted material that is one of the acutely hazardous commercial chemical products listed in §261.33(e) for reactivity.

Trained professional means a person who has completed the applicable RCRA training requirements of §262.17 for large quantity generators, or is knowledgeable about normal operations and emergencies in accordance with §262.16 for small quantity generators and very small quantity generators. A trained professional may be an employee of the eligible academic entity or may be a contractor or vendor who meets the requisite training requirements.

Unwanted material means any chemical, mixtures of chemicals, products of experiments or other material from a laboratory that is no longer needed, wanted or usable in the laboratory and that is destined for hazardous waste determination by a trained professional. Unwanted materials include reactive acutely hazardous unwanted materials and materials that may eventually be determined not to be solid waste pursuant to §261.2, or a hazardous waste pursuant to §261.3. If an eligible academic entity elects to use another equally effective term in lieu of "unwanted material," as allowed by §262.206(a)(1)(i), the equally effective term has the same meaning and is subject to the same requirements as "unwanted material"

Working container means a small container (i.e., two gallons or less) that is in use at a laboratory bench, hood, or other work station, to collect unwanted material from a laboratory experiment or procedure.

RCRA HAZARDOUS WASTE REGULATION SUMMARY: Small Quantity Generators (SQG) UNIVERSITY OF WISCONSIN SYSTEM

RCRA REQUIREMENT	RCRA Hazardous Waste Generator Rule Requirements	RCRA Hazardous Waste Generator Improvement Rule Changes (2017)	SUBPART K: Alternate RCRA Regulations for Academic Labs (OPTIONAL)	Federal Code Reference (EPA)	State Code Reference (WI DNR)
Note the Quite the terms of the	Requirements	maio emanges (2027)	7100001110 <u>2</u> 020 (C. 110101 <u>2</u>)	(2177)	(111 5111.)
		SQGs must re-notify the EPA every 4 years, unless		40 CFR 262.18; Subpart	NR 662.012, NR
EPA ID number	Required	subject to more stringent state re-notification requirement.	institution must opt-in; must notify the EPA using EPA ID no. form if electing to follow Subpart K.	K, 40 CFR 262.203-204 and 40 CFR 262.16	665.0011; NR 662.200- 216 (Subchapter K)
		·	-		
		Haz waste determinations must be accurate and made at the point of generation. Containers and			
		tank labels must indicate hazards of the container	A trained professional must make the haz waste		
		contents (e.g., DOT hazard communication, OSHA hazard pictogram, NFPA hazard label or RCRA			NR 661.10-35, NR
		characteristic). SQGs required to identify and			662.011, NR 665.0013;
Wasta data waisa di au	Required; waste determination record retention	mark RCRA waste codes on containers prior to	-	40 CFR 262.11; Subpart	NR 662.200-216
Waste determinations	required. Between: 100 kg (220 lbs) and 1000 kg (2200	sending haz waste off site.	transfer requirements, per 40 CFR 262.210.	K, 40 CFR 262.209-211	(Subchapter K) NR 660.10(107), NR
Monthly generation limits	lbs)/month.			40 CFR 260.10	662.190
On-site accumulation quantity	Less than: 6000 kg (13228 lbs).			40 CFR 262.16(b)(1)	NR 660.10(107), NR 662.192
	180 days (or 270 days for transport greater than			40 CED 363 46(L) (I)	ND 552 402
Central accumulation area (CAA) time limits	200 miles).			40 CFR 262.16(b)-(d)	NR 662.192
	55 gallons of non-acute haz waste or 1 quart or 1		55 gallons of non-acute haz waste or 1 quart or 1		NR 662.192(4); NR
Catallita casumulation area (CAA) avantitu limita	kg (2.2 lbs) acute haz waste; removed within 3		kg (2.2 lbs) reactive acutely haz waste; removed	40 CFR 262.15; Subpart	662.200-216
Satellite accumulation area (SAA) quantity limits	days to CAA if limits reach/exceeded.		within 10 days if limits reach/exceeded. 1 year , either on a regular interval of 12 months	K, 40 CFR 262.208	(Subchapter K) NR 662.192(4); NR
			for all containers or 12 months from the container	40 CFR 262.15; Subpart	662.200-216
Satellite accumulation area (SAA) time limits	None		accumulation start date.	K, 40 CFR 262.208	(Subchapter K)
			Alternate labeling and management standards for		
			unwanted chemicals in labs only. Containers may		
			be transferred between labs. Containers must meet specific labeling requirements, including but		
		Containers and tank labels must indicate hazards			
	Basic requirements with technical standards for		chemical name, chemical type/class, accumulation start date and sufficient information for making a	40 CFR 262.15(a)(5)(ii),	NR 662.192, NR 662.194;
	containers, tanks, drip pads or containment	hazard label or RCRA characteristic). Applies to		Subpart K, 40 CFR	
Accumulation requirements	buildings	both SAAs and CAAs.	professional.	262.206	(Subchapter K)
			Lab clean-outs allowed once per 12-month period		
			for each lab; all unwanted material removed from		
		One episodic event per year without changing generator status and able to petition for a second		40 CFR 262.16(f), 40 CFR 262.230-233 (Subpart L);	
		event; must have an EPA ID no., notify the EPA	commercial chemical product does not have to be	Subpart K, 40 CFR	
Episodic generation	May require generator status change	and meet conditions in 40 CFR 262 Subpart L.	counted toward generator status.	262.213	(Subchapter K)

			All lab workers and students must received training commensurate with their duties and sufficient to understand Subpart K requirements.		
			All lab workers who transfer unwanted material and haz waste outside labs must be trained	40 CFR 262.16(b)(9)(iii);	NR 662.192(e); NR
			professionals and make the haz waste	Subpart K, 40 CFR	662.200-216
Personnel training	Basic training required for facility personnel		determinations for unwanted material.	262.207	(Subchapter K)
			Academic institution must develop and maintain a	40 CFR 262.16(b)(8)(vi)	NR 662.192(e); NR
Contingency plan and emergency procedures	Basic planning required	responders and keep documentation in facility's operating record.	Laboratory Management Plan (LMP) per the requirements of 40 CFR 262.214.	and (9); Subpart K, 40 CFR 262.214	662.200-216 (Subchapter K)
contingency plan and emergency procedures	Busic planning required	SAAs must meet SQG regulations for preparedness, prevention and emergency procedures. Location of SAAs should be	requirements of 40 cm 202.214.	40 CFR 262.15(a)(7), 40	(Subchapter K)
Preparedness and prevention	Required	documented.		CFR 262.16(b)(8),(9)	NR 662.192(d)
Air emission standards	Not required			N/A	N/A
Land disposal restrictions	Required			40 CFR 262.16(b)(7)	
Manifest	Required			40 CFR 262 (Subpart B)	NR 662.020-023, NR 662.191
Waste minimization	Good faith effort required			40 CFR 262.27	NR 662.027
Pre-transport requirements	Required			40 CFR 262.30-262.33 (Subpart C)	NR 662.030-033, NR 665.0013
	Not required by EPA; annual WDNR report			40 CFR 262.40-262.44	
Biennial report	required.			(Subpart D)	NR 662.041
Exception and additional reporting	Required			40 CFR 262.42(b), 262.43	NR 662.042-043
Recordkeeping	Required				NR 662.040, NR 662.193
Facility type	RCRA permitted/interim status facility			40 CFR 264/265, 266/267 and 270	NR 664/665 and 670
Closure	Required for tanks, drip pads and containment building			40 CFR 262.16(b)(3)(vi)	NR 662.194(6)

DEFINITIONS:

40 CFR 262.200 (Subpart K)

Reactive acutely hazardous unwanted material means an unwanted material that is one of the acutely hazardous commercial chemical products listed in §261.33(e) for reactivity.

Trained professional means a person who has completed the applicable RCRA training requirements of §262.17 for large quantity generators, or is knowledgeable about normal operations and emergencies in accordance with §262.16 for small quantity generators and very small quantity generators. A trained professional may be an employee of the eligible academic entity or may be a contractor or vendor who meets the requisite training requirements.

Unwanted material means any chemical, mixtures of chemicals, products of experiments or other material from a laboratory that is no longer needed, wanted or usable in the laboratory and that is destined for hazardous waste determination by a trained professional. Unwanted materials include reactive acutely hazardous unwanted materials and materials that may eventually be determined not to be solid waste pursuant to §261.2, or a hazardous waste pursuant to §261.3. If an eligible academic entity elects to use another equally effective term in lieu of "unwanted material," as allowed by §262.206(a)(1)(i), the equally effective term has the same meaning and is subject to the same requirements as "unwanted material" under this subpart.

Working container means a small container (i.e., two gallons or less) that is in use at a laboratory bench, hood, or other work station, to collect unwanted material from a laboratory experiment or procedure.

RCRA HAZARDOUS WASTE REGULATION SUMMARY: Very Small Quantity Generators (VSQG) UNIVERSITY OF WISCONSIN SYSTEM

RCRA REQUIREMENT	RCRA Hazardous Waste Generator Rule Requirements	RCRA Hazardous Waste Generator Improvement Rule Changes (2017)	SUBPART K: Alternate RCRA Regulations for Academic Labs (OPTIONAL)	Federal Code Reference (EPA)	State Code Reference (WI DNR)
EPA ID number	Not required, unless VSQG chooses to use uniform haz waste manifest		Applies to academic labs only ; all labs at an institution must opt-in; must the notify EPA using EPA ID no. form if electing to follow Subpart K.	40 CFR 262.16; Subpart K, 40 CFR 262.203-204	NR 662.012; NR 662.200- 216 (Subchapter K)
Waste determinations	Required; waste determination record retention recommended.	Haz waste determinations must be accurate and made at the point of generation. Containers and tank labels must indicate hazards of the container contents (e.g., DOT hazard communication, OSHA hazard pictogram, NFPA hazard label or RCRA characteristic).	A trained professional must make the hazardous waste determinations for unwanted materials in labs prior to removal. In-lab haz waste	40 CFR 262.11; Subpart K, 40 CFR 262.209-211	NR 661.10-35; NR 662.200-216 (Subchapter K)
Monthly generation limits	Less than: 100 kg (220 lbs), 1 kg (2.2 lbs) acute, or 100 kg (220 lbs) acute spill residue or soil.			40 CFR 260.10	NR 660.10(139), NR 662.220
On-site accumulation quantity	Less than: 1000 kg (2200 lbs), 1 kg (2.2 lbs) acute haz waste, or 100 kg (220 lbs) acute spill residue or soil.			40 CFR 262.14(a)(3) and (4)	NR 660.10(139), NR 662.220
Central accumulation area (CAA) time limits	None			N/A	N/A
Satellite accumulation area (SAA) quantity limits Satellite accumulation area (SAA) time limits	Not permitted Not permitted		55 gallons of non-acute haz waste or 1 quart or 1 kg (2.2 lbs) reactive acutely haz waste; removed within 10 days if limits reach/exceeded. 1 year , either on a regular interval of 12 months for all containers or 12 months from the container accumulation start date.	Subpart K, 40 CFR 262.208 Subpart K, 40 CFR 262.208	(Subchapter K)
Accumulation requirements	None; WNDR storage requirements for hazardous waste.	VSQGs may send haz waste to an LQG under the control of the same person as the VSQG, provided conditions are met in 40 CFR 262.14(a)(5)(viii). Containers and tank labels must indicate hazards of the container contents (e.g., DOT hazard	Alternate labeling and management standards for unwanted chemicals in labs only. Containers may be transferred between labs. Containers must meet specific labeling requirements, including but not limited to the words "unwanted material," chemical name, chemical type/class, accumulation start date and sufficient information for making a	40 CFR 262.14(a)(5)(viii);	NR 662.220; NR 662.200- 216 (Subchapter K)
Episodic generation	May require generator status change	·	•	40 CFR 262.230-233 (Subpart L); Subpart K, 40 CFR 262.213	NR 662.200-216

Personnel training	Not required	All lab workers and students must received training commensurate with their duties and sufficient to understand Subpart K requirements. All lab workers who transfer unwanted material and haz waste outside labs must be trained professionals and make the haz waste determinations for unwanted material. Trained personnel at a VSQG must train to SQG standards.	Subpart K, 40 CFR 262.207	NR 662.200-216 (Subchapter K)
Contingency plan and emergency procedures	Not required	Academic institution must develop and maintain a Laboratory Management Plan (LMP) per the requirements of 40 CFR 262.214.	Subpart K, 40 CFR 262.214	NR 662.200-216 (Subchapter K)
Preparedness and prevention	Not required		N/A	N/A
Air emission standards	Not required		N/A	N/A
Land disposal restrictions	Not required		N/A	N/A
Manifest	Not required		N/A	NR 662.220
Waste minimization	Not required		N/A	N/A
Pre-transport requirements	Only if required by DOT or the state		N/A	N/A
Biennial report	Not required		N/A	N/A
Exception and additional reporting	Not required		N/A	N/A
Recordkeeping	Not required		N/A	N/A
	Permitted or licensed facilities (as noted in 40 CFR 262.14(a)(5))		40 CFR 262.14(a)(5)	
Closure	Not required		N/A	N/A

DEFINITIONS:

40 CFR 262.14(a)(5)(viii)

40 CFR 262.200 (Subpart K)

Trained professional means a person who has completed the applicable RCRA training requirements of §262.17 for large quantity generators, or is knowledgeable about normal operations and emergencies in accordance with §262.16 for small quantity generators and very small quantity generators. A trained professional may be an employee of the eligible academic entity or may be a contractor or vendor who meets the requisite training requirements.

Unwanted material means any chemical, mixtures of chemicals, products of experiments or other material from a laboratory that is no longer needed, wanted or usable in the laboratory and that is destined for hazardous waste determination by a trained professional. Unwanted materials include reactive acutely hazardous unwanted materials and materials that may eventually be determined not to be solid waste pursuant to §261.3. If an eligible academic entity elects to use another equally effective term in lieu of "unwanted material," as allowed by §262.206(a)(1)(i), the equally effective term has the same meaning and is subject to the same requirements as "unwanted material" under this subpart.

Working container means a small container (i.e., two gallons or less) that is in use at a laboratory bench, hood, or other work station, to collect unwanted material from a laboratory experiment or procedure.

[&]quot;Control of the same person" means the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate generator facilities on behalf of a different person as defined in 40 CFR 260.10 shall not be deemed to "control" such generators.