CAR Correlation Table - Equipment Leaks
(40 CFR Part 60, Subpart VV - 60.480 through 60.489)

Citations Part 60, Subpart VV (SOCMI Equipment Leaks)	**Citations, Part 65[a,b]**	**Description**	**Type of Change[c]**	**Comments**
60.480	**[Referencing Subpart]**	Applicability and designation of affected facility	R	These paragraphs pertain to applicability. The CAR does not contain any provisions on applicability of the referencing subparts.
60.481	65.2 and **[Referencing Subpart]**	Definitions	R,S	All CAR definitions are in the CAR general provisions. Terms not used in the CAR and terms used only for applicability provisions are not defined in the CAR. See definitions correlation table.
60.482-1(a)	**[Referencing Subpart]**	General standards: compliance timing	R	The CAR does not contain provisions regarding compliance schedules.
60.482-1(b)	65.3(b)	General standards: compliance determination	S	The CAR features one consolidated set of general compliance determination procedures. The subpart VV general standards are incorporated into the CAR general provisions along with all other general compliance provisions.
60.482-1(c)(1) and (c)(2)	65.102(b)	General standards: alternative means of emission limitation	C	The CAR language clarifies that if an owner or operator has obtained permission to use an alternative means of emission limitation, he or she may still choose to comply with the regulation as written.
60.482-1(d)	65.100(b)	General standards: exemption for equipment in vacuum service	BR	The CAR does not require an identification record for equipment in vacuum service. The equipment in vacuum service provision appears in the applicability section of the CAR rather than the general standards section where it appears in subpart VV.
60.482-2(a)(1)	65.107(b) and (b)(1)	Standards: pumps: leak detection: instrument monitoring	N	
60.482-2(a)(2)	65.107(b)(4)	Standards: pumps: leak detection: visual inspection (check)	C	For clarity and completeness, the CAR specifies in this paragraph the corresponding documentation provisions (document that the inspection was conducted and the date of the inspection).
60.482-2(b)(1)	65.107(b)(2)(i) through (b)(2)(iii)	Standards: pumps : leak detection: leak definition, instrument	BI	CAR has pump leak definitions of 5000, 2000, or 1000 ppm, all of which are lower than the 10,000 ppm definition specified in subpart VV. For leak definitions of 1000 ppm, however, repair is not required unless the instrument reading is greater than 2000 ppm. See 65.107(b)(3).

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60.482-2(b)(2)	65.107(b)(4), (b)(4)(i), and (b)(4)(ii)	Standards: pumps: leak detection: leak definition, visual	BR	Under subpart VV, visual indications of liquids dripping from the pump seal are considered leaks. Under the CAR, if such indications are found, the owner or operator can either monitor the pump to confirm a leak or fix ("eliminate the visual indications") the pump.
60.482-2(c)(1) and (c)(2)	65.107(d) and 65.105(a)	Leak repair schedule	C	The CAR contains the same leak repair schedule, but it enumerates several examples of activities that are considered "first attempts at repair" for pumps and valves. This addition applies to several paragraphs of subpart VV but is only mentioned here.
60.482-2(d)	65.107(e)(1)	Standards: pumps: special provisions: dual mechanical seal pumps (DMSP)	N	
60.482-2(d)(1)	65.107(e)(1)(ii)	DMSP requirements	N	
60.482-2(d)(1)(i)	65.107(e)(1)(ii)(A)	DMSP requirements: barrier fluid pressure	C	The CAR clarifies that this requirement does not apply during startup, shutdown, or malfunction periods.
60.482-2(d)(1)(ii)	65.107(e)(1)(ii)(B)	DMSP requirements: barrier fluid degassing reservoir	BR	The CAR allows the reservoir to be routed to a process or fuel gas system as an alternative to routing to a control device.
60.482-2(d)(1)(iii)	65.107(e)(1)(ii)(C)	DMSP: barrier fluid purge system	S	The CAR does not contain the subpart VV language requiring "zero VOC emissions."
60.482-2(d)(2)	65.107(e)(1)(iii)	DMSP: heavy liquid service only	N	
60.482-2(d)(3)	65.107(e)(1)(iv)	DMSP: sensor	N	
60.482-2(d)(4)	65.107(e)(1)(v), (e)(1)(v)(A), and (e)(1)(v)(B)	DMSP: visual inspection (check)	BR	Under subpart V, indications of liquid dripping is automatically considered a leak. Under the CAR, you may establish design criteria to the presence and frequency of drips, or you can instrument monitor to confirm the presence or absence of a leak.
60.482-2(d)(5)(i)	65.107(e)(1)(vii)	DMSP: sensor daily checks	BR	The CAR allows an exemption from this requirement for unmanned plant sites.
60.482-2(d)(5)(ii)	65.107(e)(1)(i)	DMSP: failure criteria	N	

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60.482-2(d)(6)(i)	65.107(e)(1)(vi)	DMSP: leak definition	BR	Some pumps routinely appear to drip because of condensation or other factors besides leaks. The CAR allows owners and operators to establish criteria, and a drip is a leak only if the drip exceeds the criteria.
60.482-2(d)(6)(ii) and (d)(6)(iii)	65.107(e)(1)(viii) and 65.105(a)	DMSP: leak repair	N	
60.482-2(e)	**[Not Consolidated]**	Standards: pumps: special provisions: no detectable emissions (allowance)	NC	CAR equipment leaks contains a performance standard option (operating less than 500 ppm above background) only for compressors.
60.482-2(e)(1)	65.107(e)(2)	Standards: pumps: special provisions: no external shaft	N	
60.482-2(e)(2) and (e)(3)	**[Not Consolidated]**	Standards: pumps: special provisions: no detectable emissions (compliance demonstrations)	NC	
60.482-2(f)	65.107(e)(3)	Standards: pumps: special provisions: closed vent systems and control devices	BR	CAR allows routing to a process or fuel gas system as an alternative to routing to a control device.
60.482-3(a) and (b)	65.112(b)	Standards: compressors: seal system standard	N	Subpart VV references to preventing leakage of "VOC" where the CAR generalizes to preventing leakage of "process fluid."
60.482-3(b)(1)	65.112(b)(1)	Standards: compressors: seal system design and operation: barrier fluid pressure	C	CAR clarifies that this requirement does not apply during periods of startup, shutdown, or malfunction
60.482-3(b)(2)	65.112(b)(2)	Standards: compressors: seal system design and operation: control device	BR	CAR allows routing to a fuel gas system or process as an alternative to routing to a control device.
60.482-3(b)(3)	65.112(b)(3)	Standards: compressors: seal system design and operation: purge system	C	Clarified language from the HON used to characterize the closed loop system. The CAR does not contain the subpart VV language requiring "zero VOC emissions to the atmosphere."

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60.482-3(c)	65.112(c)	Standards: compressors: barrier fluid sensor	C	Subpart VV specifies that the barrier fluid is in heavy liquid service and is not in VOC service. As a clarifying edit, the CAR specifies that the barrier is not in light liquid service.
60.482-3(d)	65.112(c)	Standards: compressors: barrier fluid sensor	N	
60.482-3(e)(1)	65.112(c)	Standards: compressors: daily check or alarm	BR	The CAR does not require alarms at unmanned facilities.
60.482-3(e)(2)	65.112(d)(1)	Standards: compressors: failure criterion	N	
60.482-3(f)	65.112(d)(1)	Standards: compressors: leak detection	N	
60.482-3(g)(1) and (g)(2)	65.105(a)	Standards: compressors: leak repair	N	
60.482-3(h)	65.112(e)	Standards: compressors: control device	BR	CAR allows routing to a process or fuel gas system as an alternative to routing to a control device.
60.482-3(i), (i)(1), and (i)(2)	65.112(f)(1)	Standards: compressors: alternative compressor standard	C	CAR explicitly states that a reading over 500 ppm above background constitutes a failure.
60.482-3(j)	**[Not Consolidated]**	Exemption for existing reciprocating compressors	BI	The CAR does not contain an exemption for existing reciprocating compressors.
60.482-4(a)	65.111(b)	Standards: pressure relief devices (PRD)	C	CAR explicitly refers to an instrument reading of 500 ppm versus the subpart VV "no detectable emissions" language.
60.482-4(b)(1)	65.111(c)(1)	PRD: return to less than 500 ppm	N	
60.482-4(b)(2)	65.111(c)(2)	PRD: monitor	C	After a pressure release, the CAR requires monitoring 5 days after the release (but after the equipment is returned to service). Subpart VV requires monitoring five days after the pressure release.

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60.482-4(c)	65.111(d)	PRD: control device	BR	CAR allows routing to a process or fuel gas system as an alternative to routing to a control device.
60.482-5(a)	65.113(b)	Standards: sampling connection systems (SCS)	C	CAR clarifies that gases displaced during filling of the sample container are not required to be controlled.
60.482-5(b), (b)(1), (b)(2), and (b)(3)	65.113(c), (c)(1), (c)(2), and (c)(3)	SCS: design and operation	BR	CAR allows routing to a fuel gas system as an alternative to routing to a process or to a control device.
60.482-5(c)	65.113(d)	SCS: in-situ sampling systems	N	

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60.482-6(a)(1) and (a)(2)	65.114(b)(1)	Standards: open-ended valves or lines: equipment requirements	N	
60.482-6(b)	65.114(b)(2)	Standards: open-ended valves or lines: second valves	N	
60.482-6(c)	65.114(b)(3)	Standards: open-ended valves or lines: double block and bleed systems	N	
60.482-7(a)	65.106(b)	Standards: valves: leak detection: monthly monitoring	BR	Subpart VV features two alternative monitoring programs for valves ("allowable percentage" and "skip period"). Neither of these options are included in the CAR. Instead, the CAR features a subgrouping monitoring program with the potential to provide greater burden reduction and equivalent environmental protection.
	65.106(b)(1)	Standards: valves: leak detection: monitoring method	N	
60.482-7(b)	65.106(b)(2)	Standards: valves: leak detection: instrument reading	BI	CAR consolidates on a 500 ppm leak definition (versus 10,000 ppm under subpart VV).
60.482-7(c)(1) and (c)(2)	65.106(b)(3)	Standards: valves: leak detection: monitoring frequency	BR	65.106(b)(3) outlines the monitoring frequencies for the CAR's subgroup monitoring program for valves. For well-performing groups of valves, the monitoring period can extend to 2 years.
60.482-7(d)	65.106(d)(1) and 65.105(a)	Standards: valves: leak repair	N	
60.482-7(e), (e)(1), (e)(2), (e)(3), and (e)(4)	65.105(a)	First attempt at repair: valves	N	
60.482-7(f)	**[Not Consolidated]**	Standards: valves: special provisions: no detectable emissions	BI	CAR equipment leaks contains a performance standard option (operating less than 500 ppm above background) only for compressors. While this somewhat limits the control options for equipment under the CAR, the "no detectable emissions" option is a burdensome, seldom-used alternative. The CAR contains other, less burdensome compliance alternatives.

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60.482-7(g)	65.106(e)(1)	Standards: valves: special provisions: unsafe-to- monitor	N	
60.482-7(g)(1)	65.103(c)(1)	Criteria for unsafe-to-monitor valves	N	
60.482-7(g)(2)	65.103(c)(4)(i)	Written plan for difficult-to-monitor	C	The CAR contains a clarifying edit specifying that the requirement to monitor whenever it is safe to monitor does not mean that a valve must be monitored on a more frequent schedule than it would otherwise be subject to.
60.482-7(h)	65.106(e)(2)	Standards: valves: special provisions: difficult-to-monitor	C	The CAR explicitly states that the valve must be monitored according to the written plan.
60.482-7(h)(1)	65.103(c)(2)(i)(A)	Criteria for difficult-to-monitor valves	BR	CAR allows a valve to qualify if "it is not accessible in a safe manner when it is in ...service"
60.482-7(h)(2)	65.103(c)(2)(i)(B) and(c)(2)(i)(C)	Criteria for difficult-to-monitor valves	N	
60.482-7(h)(3)	65.103(c)(4)(ii)	Written plan for difficult-to-monitor	N	
60.482-8(a)	65.110(b)(1)	Standards: pumps and valves in heavy liquid service: leak detection	BR	HON wording used, which includes a provision that if a potential leak is repaired, then monitoring under 65.105 is not required.
60.482-8(b)	65.110(b)(2)	Standards: pumps and valves in heavy liquid service: leak definition	BI	The instrument reading that defines a leak in the CAR varies by equipment type, versus the subpart VV leak definition of 10,000 ppm.
60.482-8(c)(1), (c)(2), and (d)	65.110(c) and 65.105(a)	Standards: pumps and valves in heavy liquid service leak repair provisions	N	
60.482-9(a)	65.105(d)(1)	Delay of repair: technically infeasible	C	CAR removes a disincentive to repair by clarifying that "delay of repair" is allowed if repair within 15 days after a leak is detected is technically infeasible.
60.482-9(b)	65.105(d)(2)	Delay of repair: isolated equipment	N	

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60.482-9(c), (c)(1), and (c)(2)	65.105(d)(3), (d)(3)(i), and (d)(3)(ii)	Delay of repair: valves	N	
60.482-9(d)	65.105(d)(4)	Delay of repair: pumps	N	
60.482-9(d)(1)	65.105(d)(4)(i)	Delay of repair: pumps: upgrading the seal design	BR	Subpart VV references "a dual mechanical seal system." The CAR allows a more general delay of repair for a "new system... [that] will provide better performance." As alternatives, the CAR also specifically references dual mechanical seal system pumps, pumps with no external shaft, and pumps with emissions routed to a fuel gas system or process. See 65.105(d)(4)(i)(A) through (d)(4)(i)(C).
60.482-9(d)(2)	65.105(d)(4)(ii)	Delay of repair: pumps: 6 month limit	N	
60.482-9(e)	65.105(d)(5)	Delay of repair: valve assembly replacement	N	
60.482-10(a)	**[Not Consolidated]**	Standards: CVS/CD: introductory paragraph	NC	This introductory paragraph is not needed in the CAR structure.
60.482-10(b)	65.115(b)(1)	Standards: CVS/CD: vapor recovery systems (i.e., condensers)	BR	As an alternative to the required 95 percent efficiency for vapor recovery systems (non-combustion, non-flare, control devices), the CAR allows the device an exit concentrations of less than 20 ppmv. This adds flexibility and makes the requirement more feasible for low concentration vent streams.
60.482-10(c)	65.115(b)(1)	Standards: CVS/CD: enclosed combustion devices	BR	The CAR provides an option for enclosed combustion devices to meet an outlet concentration of less than 20 ppmv in addition to control efficiency and design specification options. Note that the CAR presents consolidated design specifications (0.5 second at minimum 760°C) versus those contained in subpart VV (0.75 seconds at minimum of 816° C).
60.482-10(d)	65.115(b)(2)	Standards: CVS/CD: flares	N	

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60.482-10(e)	65.146(c)	Standards: CVS/CD: control devices must be monitored to ensure operation and maintenance in conformance with their design.	N	
60.482-10(f)	65.143(b)(1)	Standards: CVS/CD: inspection procedures	N	
60.482-10(f)(1) and (f)(2)	65.143(b)(1)(i) and (b)(1)(ii)	Standards: CVS/CD: hardpiping and ductwork inspection procedures	N	
60.482-10(g), (g)(1), and (g)(2)	65.143(d)(1) and (d)(2)	Standards: CVS/CD: leak repair	BR	The CAR distinguishes between sensory indications of a leak and instrument confirmation of a leak. Repair is not necessarily required upon sensory indications of a leak.
60.482-10(h)	65.143(d)(3)	Standards: CVS/CD: delay of repair	C	CAR removes a disincentive to repair by clarifying that "delay of repair" is allowed if repair within 15 days after a leak is detected is technically infeasible.
60.482-10(i)	65.143(b)(1)	Standards: CVS/CD: negative pressure exemption	N	
60.482-10(j), (j)(1), and (j)(2)	65.143(b)(2), (b)(2)(i), and (b)(2)(ii)	Standards: CVS/CD: unsafe-to-inspect exemption	C	CAR clarifies that the written plan does not imply a greater monitoring frequency than otherwise applicable (i.e., annual).
60.482-10(k), (k)(1), and (k)(3)	65.143(b)(3), (b)(3)(i), and (b)(3)(ii)	Standards: CVS/CD: difficult-to-inspect exemption	N	
60.482-10(k)(2)	**[Not Consolidated]**	Standards: CVS/CD: applicability of the difficult-to-monitor exemption	BR	The CAR does not require the process unit to be new or reconstructed, or the CVS to have less than 3% difficult-to-inspect as conditions for difficult-to- inspection designation.
60.482-10(l)	65.163(a)	Standards; CVS/CD: records	N	
60.482-10(l)(1) and (l)(2)	65.163(a)(2)	Standards: CVS/CD: difficult- and unsafe-to-inspect records	N	

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60.482-10(l)(3)	65.163(a)(3)	Standards: CVS/CD: inspection that finds a leak	N	
60.481-10(l)(4) and (l)(5)	65.163(a)(4)	Standards: CVS/CD: inspection that does not find a leak	N	
60.482-10(m)	65.143(a)(2) and 65.146(a)(2)	Standards: CVS/CD: period of operation	C, BR	The CAR does not require the CVS/CD to be operating at all times when emissions "may" be vented to them.
60.483-1	**[Not Consolidated]**	Alternative valve standards: allowable percent leakers	BR	Subpart VV features two alternative monitoring programs for valves ("allowable percentage" and "skip period"). Neither of these options are included in the CAR. Instead, the CAR features a subgrouping monitoring program with the potential to provide greater burden reduction and equivalent environmental protection. See 65.106(b)(3) and (b)(4).
60.483-2	**[Not Consolidated]**	Alternative valve standards: skip period	BR	Subpart VV features two alternative monitoring programs for valves ("allowable percentage" and "skip period"). Neither of these options are included in the CAR. Instead, the CAR features a subgrouping monitoring program with the potential to provide greater burden reduction and equivalent environmental protection. See 65.106(b)(3) and (b)(4).
60.484(a)	65.102(b)	Alternative means of emission limitation	N	
60.484(b), (b)(1), (b)(2), and (b)(3)	65.102(d)(1), (d)(1)(i), (d)(12)(ii), and (d)(1)(iii)	Alternative means of emission limitation: equipment, design, or operational requirements	N	
60.484(c) and (c)(1) through (c)(6)	65.102(d)(2) and (d)(2)(i) through (d)(2)(vi)	Alternative means of emission limitation: work practice standards	BI	The CAR specifies in 65.102(d)(2)(ii) that in order to request an alternative to a work practice standard, the "emission reduction achieved by the required work practices shall be demonstrated for a minimum of period of 12 months."
60.484(d)	65.102(d)(3)	Alternative means of emission limitation: unique approach	N	
60.484(e)(1) and (e)(2)	65.8(a) and 65.102(d)(4)	Alternative means of emission limitation: public notice	N	

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60.484(e)(3)	**[Not Consolidated]**	Alternative means of emission limitation: any equivalent means of emission limitation shall constitute a required work practice, equipment standard, etc. in relation to the CAA section 111(h)(1).	NC	The CAR does specify at 65.102(b) that the owner or operator must comply with either the standards or the approved alternative.
60.484(f)(1) and (f)(2)	65.102(c)(1) and (c)(2)	Alternative means of emission limitation: requests by manufacturers	N	
60.485(a)	**[Not Consolidated]**	Performance test procedures	NC	This reference is not necessary in the CAR structure.
60.485(b), (b)(1), (b)(1)(i), and (b)(1)(ii)	65.104(b), (b)(1), (b)(2), (b)(3), and (b)(4)	Instrument monitoring procedures	BR, C	The CAR allows more flexibility in calibration gas selection in instances where the instrument does not respond to methane. Subpart VV only allows n-hexane as an alternative. The CAR also clarifies how to apply Method 21 and how to calculate the response factor. It also clarifies what to do if no instrument at the site can meet the performance criteria. See also the analogous procedures at 65.143(c).
60.485(c), (c)(1), and (c)(2)	65.104(c) and (c)(1) through (c)(4)	Compliance monitoring requirements	BR	The CAR extends to the owner or operator the option to adjust or not to adjust the instrument readings for background.
60.485(d)	**[Referencing Subpart]**	Provisions regarding applicability and exemptions in relation to VOC content, etc.	R	The CAR does not contain applicability provisions.
60.485(e), (e)(1), (e)(2), and (e)(3)	65.2 and **[Referencing Subpart]**	Determine if equipment is in light liquid service	N	These provisions are necessary for applicability determinations under subpart VV. The concept of what is meant by "in light liquid service" is identical under the CAR, but the details are incorporated into the definitions section.
60.485(f)	**[Referencing Subpart]**	Samples used in applicability determination	R	The CAR does not contain applicability provisions.
60.485(g)	65.147(a)	Flares: introduction	N	

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60.485(g)(1)	65.147(b)(3)(i)	Flares: Method 22 for visible emissions	C	In the CAR, the observation period is explicitly specified to be 2 hours.
60.485(g)(2)	65.147(c)	Flares: monitor the presence of pilot flame	BR	CAR is more general and flexible, requiring the detection of at least one pilot flame other than "a" pilot flame.
60.485(g)(3)	65.147(a)(7)	Flares: maximum permitted velocity	N	
60.485(g)(4) through (g)(6)	65.147(b)(3)(ii)	Flares: net heating value	N	
60.485(g)(7)	65.147(b)(3)(iii)	Flares: actual exit velocity	N	
60.486(a)(1) and (a)(2)	65.119(a)	Recordkeeping system	N	
60.486(b)	**[Not Consolidated]**	Leak repair records: introduction	NC	This introductory paragraph is not necessary in CAR structure.
60.486(b)(1)	65.104(e)(1)	Leak repair records: weatherproof marker	BR	The CAR does not require equipment identification numbers.
60.486(b)(2)	65.105(c)(1)	Leak repair records: leak identification removal (valves)	BR	The CAR specifies that a valve leak identification marking can only be removed after monitoring which is performed within 3 months of repairing a leak. Subpart VV requires the valve to be monitored for 2 successive months with no leaks before the tag can be taken off.
60.486(b)(3)	65.105(c)(2)	Leak repair records: leak identification removal (general)	N	
60.486(c)	65.105(f)	Leak repair records: records upon finding a leak	C, BR	CAR does not require that the information be kept in a "log," but CAR references the general provisions data retention requirement. This specifies 5 year (versus 2 year) data retention for title V sources.
60.486(c)(1)	**[Not Consolidated]**	Leak repair records: instrument and operator identification numbers	BR	The CAR does not require identification numbers for equipment, operators, or monitoring instruments.

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60.486(c)(2)	65.105(f)(1) and (f)(2)	Leak repair records: dates	BR	Subpart VV requires a record of the date the leak was detected plus the dates of each repair attempt. The CAR only requires the date of first attempt to repair and the date of successful repair.
60.486(c)(3)	**[Not Consolidated]**	Leak repair records: methods applied to repair	NC	The CAR does not require this record.
60.486(c)(4)	65.105(f)(3)	Leak repair records: maximum reading following repair	C	The CAR requires the maximum reading following repair, while subpart VV language only requires "above 10,000 ppm" if the maximum reading is above 10,000 ppm.
60.486(c)(5)	65.105(f)(4), (f)(4)(i), and (f)(4)(ii)	Leak repair records: delay of repair	C, S	The CAR allows written justification to be maintained in the startup, shutdown, and malfunction plan. Reasons for delay of repair can then be documented by citing the relevant section. The CAR also clarifies the recordkeeping associated with depletion of stocked parts.
60.486(c)(6)	**[Not Consolidated]**	Leak repair records: signature required for designating a leak as unrepairable without a process shutdown	NC	The CAR does not require this record.
60.486(c)(7)	**[Not Consolidated]**	Leak repair records: expected date of repair when repair is delayed	NC	The CAR does not require this record.
60.486(c)(8)	65.105(f)(5)	Leak repair records: dates of shutdowns of process units with unrepaired equipment	N	
60.486(c)(9)	65.105(f)(2)	Leak repair records: date of successful repair	N	
60.486(d) and (d)(1) through (d)(5)	65.163(d), (d)(1), and (d)(2)	Records for CVS/CD in relation to equipment leaks	N	

CAR Correlation Table - Equipment Leaks
(40 CFR Part 60, Subpart VV - 60.480 through 60.489)

Citations Part 60, Subpart VV (SOCMI Equipment Leaks)	**Citations, Part 65[a,b]**	**Description**	**Type of Change[c]**	**Comments**
60.486(e) and (e)(1)	65.103(a)	Equipment identification: general	BR	The CAR does not require identification numbers and a list, allowing the form of identification to be decided by the owner or operator.
60.486(e)(2)(i)	65.103(e)	Equipment identification: less than 500 ppm	N	
60.486(e)(2)(ii)	**[Not Consolidated]**	Equipment identification: signature required for designating equipment as "no detectable emissions"	BR	The CAR does not require a signature.
60.486(e)(3)	**[Not Consolidated]**	Equipment identification: PRD operating at less than 500 ppm	BR	The CAR does not require this record
60.486(e)(4)	65.112(f)(2)	Standards: compressors: alternative compliance standard	N	These provisions reformatted for clarity, with the record required under each applicable equipment type.
60.486(e)(5)	**[Not Consolidated]**	Equipment identification: list of equipment in vacuum service	BR	The CAR does not require identification numbers and a list, allowing the form of identification to be decided by the owner or operator.
60.486(f), (f)(1), and (f)(2)	65.103(c)(3)	Equipment identification: unsafe-or difficult-to-monitor and unsafe-to-repair	BR	The CAR removed the need for identification numbers and a list, allowing the form of identification to be decided by the owner or operator.
60.486(g), (g)(1), and (g)(2)	65.106(b)(4)(iv)	Standards: valves: recordkeeping	BR	Valve recordkeeping is reformatted in the CAR to be consistent with the CAR's subgrouping approach to valve monitoring. The identity of the valves, which valves are leaking, and the required monitoring frequency are all still required to be recorded under the CAR.
60.486(h), (h)(1), and (h)(2)	65.107(e)(1)(i)	Standards: pumps: special provisions: dual mechanical seal pumps: requirement to record design criteria	BR	Records are not specifically required to be kept in a log book.

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Citations Part 60, Subpart VV (SOCMI Equipment Leaks)	**Citations, Part 65[a,b]**	**Description**	**Type of Change[c]**	**Comments**
60.486(h), (h)(1), and (h)(2)	65.112(d)(2)	Standards: compressors: failure criterion and leak detection: requirement to record design criteria	BR	Records are not specifically required to be kept in a log book.
60.486(i) and (j)	**[Referencing Subpart]**	Design capacity and other records associated with applicability	R	The CAR does not contain applicability provisions.
60.486(k)	**[Not Consolidated]**	Override of part 60 general provisions	NC	The CAR does not consolidate any general provisions that are not applicable, so it does not need to specify which general provisions do not apply. All CAR general provisions apply.
60.487(a)	65.120(b) and 65.5(e)	Reporting: semi-annual reports (requirement)	N	This paragraph in the CAR now contains a pointer to the general provisions periodic reporting section [65.5(e)] and a pointer to the periodic report contents beyond the minimums established under the general provisions [65.120(b)(1) through (b)(9)].
60.487(b) and (b)(1) through (b)(4)	65.120(a), (a)(1), and (a)(1)(i) through (a)(1)(iii)	Reporting: initial semi-annual report contents	BI	The CAR requires a report of the number of all equipment types as well as a list of the method of compliance to be used.
60.487(c) and (c)(1) through (c)(4)	65.120(b) and (b)(1) through (b)(9)	Reporting: semi-annual report contents	BR	The CAR requires a record only of the explanation for a delay of repair; the report must contain the number of instances of delay of repair. See 65.105(d) and 65.120(b)(2).
60.487(d)	**[Not Consolidated]**	Reporting: notification prior to beginning alternative percentage or skip leak programs	BR	Subpart VV features two alternative monitoring programs for valves ("allowable percentage" and "skip period"). Neither of these options are included in the CAR. Instead, the CAR features a subgrouping monitoring program with the potential to provide greater burden reduction and equivalent environmental protection.
60.487(e)	65.164(a)	Reporting: report results of performance tests	C	The CAR consolidates the general provisions reporting requirements and the similar requirements from other rules into this section, but the concepts of 60.487(e) are maintained.
60.487(f)	**[Referencing Subpart]**	Reporting: State delegation	R	
60.488	**[Referencing Subpart]**	Reconstruction	R	

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Citations Part 60, Subpart VV (SOCMI Equipment Leaks)	**Citations, Part 65[a,b]**	**Description**	**Type of Change[c]**	**Comments**
60.489	**[Referencing Subpart]**	List of chemicals produced by affected facilities	R	
New	65.102(a)	Alternative means of emission limitation is not applicable to performance standards	C	The CAR clarifies that alternative means of emission limitation are inapplicable to performance standards.
New	65.103(b)(1) through (b)(6)	Additional equipment identification	S	The CAR provides for a simpler identification scheme for subject equipment. Identification numbers are not required. Some types of equipment, however, must be specifically identified. This is similar to the referencing subpart but avoids relying on identification numbers.
New	65.103(d), (d)(1), and (d)(2)	Connectors: unsafe-to-repair designation	BI	The CAR introduces periodic connector monitoring. This provision is associated with the periodic connector monitoring program.
New	65.104(a), (a)(1), and (a)(2)	Outline of instrument and sensory monitoring	C	This paragraph provides a roadmap to the standards by referencing each citation where either instrument or sensory monitoring occur.
New	65.104(b)(5)	Monitoring performance	C	The CAR clarifies that monitoring may be performed when the equipment is either in regulated material service or in use with any other detectable material.
New	65.104(b)(6)	Monitoring data	BR	The CAR allows historical data to be used to initially qualify for reduced valve (or connector) monitoring.
New	65.104(d)	Sensory monitoring methods	C	The CAR clarifies that sensory (non-instrument) monitoring includes visual, audible, olfactory, or any similar detection method. The CAR makes distinctions, in terms of requirements, between sensory an instrument monitoring.
New	65.106(c)	Percent leaking valves calculation	BR	To implement the burden reducing valve subgrouping program, the CAR provides a percent leaking calculation procedure for valves. Included in this procedure is a correction for "nonrepairable" valves.
New	65.106(d)(2)	Monitoring to confirm repair	C, BR	The CAR clarifies what monitoring is required to ensure that a valve has been repaired. The CAR also provides a procedure through which the default, periodic monitoring can be used to satisfy the requirement.
New	65.106(e)(3)	Exemption if less than 250 valves	BR	The CAR introduces a monitoring exemption for plant sites with fewer than 250 valves in regulated material service.

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Citations Part 60, Subpart VV (SOCMI Equipment Leaks)	**Citations, Part 65[a,b]**	**Description**	**Type of Change[c]**	**Comments**
New	65.107(c)	Percent leaking pumps calculation	C	The CAR explicitly provides a procedure for calculating the percent leaking pumps.
New	65.107(e)(4)	Unmanned plant site	BR	The CAR introduces an exemption for weekly visual inspections at unmanned plant sites.
New	65.107(e)(5)	Ninety percent exemption	BR	The CAR exempts process units from pump requirements if 90 percent of the pumps comply with the dual mechanical seal pump standards or standards for pumps with no external shaft.
New	65.107(e)(6)	Unsafe-to-monitor pumps	BR	The CAR provides for pumps where it is unsafe to follow the monitoring requirements.
New	65.103(d), (d)(1), and (d)(2), 65.104(e)(2), 65.105(e) and 65.108	Connectors	BI	The CAR introduces periodic connector monitoring. Under the referencing subpart, connector monitoring was only required if evidence of a potential leak was found.
New	65.111(e)	Rupture disk exemption for pressure relief devices	BR	The CAR introduces an exemption for pressure relief devices configured with an upstream rupture disk.
New	65.113(c)(4)	Purged process fluid disposal options	BR	The CAR adds flexibility by allowing material purged from sampling collection systems to be collected, stored, and transported to certain waste management units.
New	65.113(c)(5)	Closed-purge system containers must be kept closed.	BI	The CAR adopts the common sense provision that when not in use, containers that are part of a closed-purge system must be covered or closed.
New	65.114(c) and (d)	Exemptions for open-ended valves and lines	BR	The CAR exempts certain open-ended valves and lines from the requirements.
New	65.115(b)(3), 65.144, and 65.165(a)	Routing emissions to a process or fuel gas system	BR	The CAR adds flexibility by providing for this additional compliance option.
New	65.116	Duality improvement program for pumps	BI	The CAR introduces a QIP for pumps at plant sites where more than 10 percent (or more than 3) pumps leak.
New	65.117, 65.118, 65.120(a)(2). and (a)(3)	Alternative means of emission limitation	BR	The CAR adds flexibility by adopting alternative compliance methods for certain processes, including batch process and enclosed and vented process units.

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Citations Part 60, Subpart VV (SOCMI Equipment Leaks)	**Citations, Part 65[a,b]**	**Description**	**Type of Change[c]**	**Comments**
New	65.119(b) and (c)	Recordkeeping provisions, general and specific	C, S	The CAR is structured to be of use to different readers. For the operators of the equipment, all applicable requirements (including recordkeeping) are included in the standards sections. Section 65.119 is a compiled list of all the previously appearing recordkeeping requirements. This list is to avoid the personnel responsible for recordkeeping.
New	65.146(b)	Performance test not required	C	The CAR explicitly states that a performance test is not required for a control device that is only controlling emissions from equipment leaks.
New	65.143(a)(1)	CVS must collect emissions and route to a control device	C	The CAR clarifies that the CVS must be designed and operated to collect the regulated material emissions and route it to a control device.
New	65.143(a)(3), 65.163(a)(1), 65.166(b), (b)(1), (b)(2), and (b)(3)	CVS bypass monitoring, recordkeeping, and reporting	BI	The CAR introduces bypass monitoring for lines which could divert a vent stream away from the control device to the atmosphere.
New	65.147(b)(2)	Procedures when control devices are replaced with flares	C	The CAR outlines the procedures to follow when one control device is replaced with a flare.
New	65.147(b)(3)(iv)	Flame monitors to be operated during flare compliance determinations	C	The CAR clarifies that the pilot flame or flare flame monitor must be in operation during the flare compliance determinations.
New	65.163(c) and 65.167(b)	Startup, shutdown, and malfunction plan and associated requirements	BR	- The CAR incorporates the startup, shutdown, and malfunction (SSM) plan from the part 63 general provisions. These paragraphs are a necessary part of the SSM plan scheme. - The SSM plan acts to reduce burden because less reporting is required when there is a startup, shutdown, or malfunction. See the part 60 general provisions correlation table for more discussion on the SSM requirements and the differences with the corresponding General Provisions of part 60.
New	65.157(b)(1)	Prior flare compliance determinations acceptable	BR	The CAR allows prior flare compliance determinations under certain situations.

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Citations Part 60, Subpart VV (SOCMI Equipment Leaks)	**Citations, Part 65[a,b]**	**Description**	**Type of Change[c]**	**Comments**
New	65.159(a)	Have available records to determine the conditions of flare compliance determinations	C	The CAR requires that records be available to determine the conditions of the flare compliance determinations. This clarifies the requirement that these data must be available although records are required to be kept for 2 or 5 years depending on Title V source status regardless. Also, records of flare compliance determinations are probably kept indefinitely anyway because of their importance to the facility.
New	65.164(a)	Flare compliance determination reports	C	These provisions in the CAR clarify the contents of performance tests and compliance determinations. They also clarify what to submit when multiple emission points of the same kind are tested using the same methods.
New	65.164(b)(2)	Submission of subsequent flare compliance determinations	C	The CAR clarifies when performance test reports must be submitted when they are not submitted as part of the Initial Compliance Status Report.

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[a] **[Not Consolidated]** - Provisions that are not consolidated in the CAR because they are not relevant to SOCMI sources or needed in the CAR.
[b] **[Referencing Subpart]** - Provisions that are not consolidated in the CAR but remain in the Referencing Subpart and remain applicable to sources complying with the CAR.
[c] Letters in this column indicate the following:

C - clarification
S - simplification
BR - burden reduction
BI - burden increase
N - no significant change
NC - not consolidated
R - provisions retained in referencing subpart.