

Ohio EPA

Division of Air Pollution Control

Engineering Guide # 65

**Question:**

For which types of emissions units should a monitoring, recordkeeping, and reporting program be established to ensure continued compliance with applicable emission limitations and control requirements? In the absence of specific requirements which have been approved by the USEPA as part of the Ohio SIP, what would constitute reasonable and adequate programs for such emissions units? These questions are particularly relevant to a Title V permit applicant who must propose, within the "Applicable Requirements" section of the application, reasonable and adequate monitoring, recordkeeping, and reporting requirements.

[These questions and answers were created by the Engineering Section of the DAPC to assist State permit (PTI and PTO) and Title V permit applicants, as well as District Office and local air agency staff who will be reviewing permit applications and drafting the necessary permits.]

**Answer:**

A well-designed monitoring, recordkeeping, and reporting program will allow the permittee to obtain and document information for an emissions unit which can be used to ensure continued compliance with the applicable emission limitations and control requirements and ensure the proper operation and maintenance of any control equipment. In many cases, a permittee will want to establish some type of program for almost all of the significant emissions units at a facility. Although the DAPC believes this approach would be the most beneficial approach for the permittee,

from a permitting and regulatory standpoint, the DAPC believes that it would be acceptable for the permittee to focus on emissions units which (a) are required by State or federal law to establish a specific type of program, (b) generate, either individually or collectively (for similar emissions units), substantial amounts of emissions on an uncontrolled basis, or (c) have actual emission rates that are close to the allowable emission rates. These situations are described in more detail in the remainder of this Guide.

Throughout this Guide, "monitoring" refers to a device, equipment, or system used to measure, detect, or analyze an emission or operating parameter for an emissions unit or for an air pollution control device. The monitoring may be continuous or periodic and may be automated or manual. A monitoring system may be equipped with an automated means for recording the emission or parameter being measured, detected, or analyzed. Also, the monitoring system may be equipped with an alarm or other mechanism to notify personnel that the emission or parameter being measured, detected, or analyzed is above or below an acceptable level.

"Recordkeeping" refers to the maintenance of records by the permittee of information or data from a monitoring system, equipment maintenance plan, inspection, emission test, emission unit activity, etc. Recordkeeping can also include documentation concerning estimated emissions, material usage, and hours of operation for an emissions unit on a periodic basis (e.g., annually, quarterly, monthly, daily, or hourly).

"Reporting" refers to the submission by the permittee of any information, notice, or report to the Ohio EPA or a designated local air agency. The reporting can be periodic (e.g., annually, quarterly, or monthly) or triggered by the occurrence of a specific event such as a failure to meet a specified monitoring level, an equipment malfunction, or a violation of an emission limitation. The reporting may be written or verbal or both, depending upon the legal requirements.

Some emissions units are required by the following State or federal regulations to employ continuous emission monitors and meet specific recordkeeping and reporting requirements:

- New Source Performance Standards (NSPS)
- National Emission Standards for Hazardous Air Pollutants (NESHAP)
- Appendix P of 40 CFR Part 51
- 40 CFR Part 266 (for cement kilns, boilers and industrial furnaces that burn hazardous wastes)
- 40 CFR Part 503 (for sewage sludge incinerators)
- Title IV of the Clean Air Act (for utility and industrial boilers subject to the acid rain provisions)
- OAC Chapter 3745-75 (for infectious waste incinerators)
- OAC Chapter 3745-57 (for hazardous waste incinerators)

The emissions unit categories subject to NSPS, NESHAP, and Appendix P requirements for continuous emission monitoring are summarized in Engineering Guide # 52, along with the pollutants required to be monitored for each category.

All of the above-mentioned regulations establish mandatory continuous emission monitoring, recordkeeping, and reporting requirements for the affected emissions units. Engineering Guide # 52 also describes several situations which may warrant the use of continuous emission monitors. The most important of those situations are described below.

1. The emissions unit has demonstrated marginal compliance with the allowable mass rate of emission. (The DAPC considers marginal compliance to be greater than 80% of

the allowable mass rate of emission.)

2. Method 9 readings are not feasible due to the nature of the operation of the emissions unit.
3. Very low visible emissions levels must be maintained for the emissions unit to ensure compliance with a very stringent allowable mass rate of emission.
4. The emissions unit has a history of periodic, possibly unexplained, violations of OAC rule 3745-17-07.
5. The use of a continuous emission monitoring system for a coating line or printing line, or a group of such lines, is more reasonable (both technically and economically) than detailed, daily, line-by-line recordkeeping and reporting for the coatings or printing inks employed. (This approach has been successfully used in situations where several emissions units are located within a permanent total enclosure and vented to a common control system.)

The decision to pursue continuous emission monitoring in these situations and the others described in Engineering Guide # 52 will normally be made by District Office or local air agency personnel, after appropriate discussions with Central Office personnel and company representatives.

The other types of emissions units for which a monitoring, recordkeeping, and reporting program should be established are described in the following tables by type of pollutant. For each type of emissions unit, the table identifies what elements (monitoring, recordkeeping, or reporting) should be included in the program (e.g., for some emissions units, recordkeeping only may be sufficient, and for others, recordkeeping and reporting may be sufficient), any rules that are applicable to each program element, and any recommended wording that is contained within the STARS library of permit terms and conditions (T&Cs) for each

program element.

SO<sub>2</sub>:

	EMISSIONS UNIT DESCRIPTION	PROGRAM ELEMENTS			STARS LIBRARY (T&Cs)
		MONITORING	RECORDKEEPING	REPORTING	
1.	coal-fired boiler, > 10 mmBtu/hr and ≤ 100 mmBtu/hr, without CEM for SO <sub>2</sub>		X	X	X (I.6)
2.	coal-fired boiler, > 100 mmBtu/hr and < 1,000 mmBtu/hr, without CEM for SO <sub>2</sub>	X	X	X	X (I.4 or I.5)
3.	coal-fired boiler, ≥ 1,000 mmBtu/hr, > 15,000 TPY, and without CEM for SO <sub>2</sub>	X	X	X	X (I.3)
4.	coal-fired boiler, ≥ 1,000 mmBtu/hr, < 15,000 TPY, and without CEM for SO <sub>2</sub>	X	X	X	X (I.4 or I.5)
5.	any coal-fired boiler operated by the State of Ohio	X	X	X	X (I.8)
6.	oil-fired boiler, > 10 mmBtu/hr and ≤ 100 mmBtu/hr, without CEM for SO <sub>2</sub>		X	X	X (I.7)

7.	any fuel burning equipment with operating rate restrictions	X	X	X	X (I.9)
8.	sulfur recovery plant (non-NSPS)	X (CEM)	X	X	none
9.	coke oven battery (H <sub>2</sub> S content of COG)	X	X	X	none
10.	FCC unit and CO boiler	X (CEM)	X	X	none

**PARTICULATES:**

	EMISSIONS UNIT DESCRIPTION	PROGRAM ELEMENTS			STARS LIBRARY (T&Cs)
		MONITORING	RECORDKEEPING	REPORTING	
1.	coal-fired boiler, > 1 mmBtu/hr and < 20 mmBtu/hr, and subject to 17-10(C)(7)		X (ash content)	X	X (R.1 - R.3)
2.	coal-fired boiler, uncontrolled or equipped solely with mechanical collectors		X (17-07 (A)(1)(d) and (f) for sootblowing and intermittent ash removal operations, respectively)		none
3.	fuel burning equipment which have been derated	X	X	X	X (S.3 & S.4)
4.	coke oven battery (lids, charging, doors, offtake piping, and combustion stack)	X	X	X	X (T.2 - T.4)

5.	BOF shop	X	X	X	X (Z.1, Z.2, Z.4 & Z.5)
6.	infectious waste incinerators, ≤ 1,000 lbs/hr	X	X	X	X (N.4.a & N.5)
7.	infectious waste incinerators, > 1,000 lbs/hr	X	X	X	X (N.4.b & N.5)
8.	roadways and parking areas		X	X	X (U.5, U.8, or U.9; U.11 & U.13 if applic- able)
9.	landfills used for the disposal of asbestos-containing materials		X	X	X (O.14 & O.15)
10.	controlled emissions units, with uncontrolled particulate emissions > 25 TPY	X (parametric monitoring of the control equipment)	X	X	X (J.32- J.47, as applic- able)
11.	asphaltic concrete batch plants	X	X	X	X (P.11 & P.12; or P.14 & P.15; if applic-able, P.19, P.20, P.21, & P.23)

**VOC:**

	EMISSIONS UNIT/CATEGORY DESCRIPTION	PROGRAM ELEMENTS			STARS LIBRARY (T&Cs)
		MONITORING	RECORDKEEPING	REPORTING	
1.	exempt metal furniture coating line, < 15 lbs/day for all such lines [21-09(I)]		X (B)(3)(b)	X (B)(3)(c)	X (B.1.a & B.1.b)
2.	exempt misc. metal parts coating line, < 15 lbs/day for all such lines [21-09(U)(2)(h)]		X (B)(3)(b)	X (B)(3)(c)	X (B.2.a & B.2.b)
3.	exempt misc. metal parts coating line, < 8 or 10 gpd/line [21-09(U)(2)(e)]		X (B)(3)(d)	X (B)(3)(e)	X (B.3.a & B.3.b; or B.3.c & B.3.d)
4.	coating line or printing line that employs only complying coatings		X (B)(3)(f)	X (B)(3)(g)	X (B.4.a & B.4.b; or B.4.c & B.4.d)
5.	coating line or printing line that complies by means of a daily volume-weighted average VOC content		X (B)(3)(h)	X (B)(3)(i)	X (B.5.a & B.5.b; or B.5.c & B.5.d)

6.	coating line that employs control equipment and is subject to a lbs VOC/gallon of solids limitation	X (B)(3)(j) & (n)	X (B)(3)(j)	X (B)(3)(k) & (m)	X (B.6.a & B.6.b; B.6.c & B.6.d; B.6.e & B.6.f; or B.6.g & B.6.h)
7.	coating line or printing line that employs control equipment and is subject to capture and control efficiency requirements or to an overall control efficiency requirement [21-09 (B)(6), (H), (Y), (NN), (PP), and (XX)]	X (B)(3)(l) & (n)	X (B)(3)(l)	X (B)(3)(m)	X (B.7.a & B.7.b; B.7.c & B.7.d; B.7.e & B.7.f; or B.7.g & B.7.h)
8.	an emissions unit, other than a coating line or printing line, that employs control equipment and is subject to 21-09 (O), (W), (X), (EE), (KK), (LL), (MM), (SS), (TT), (UU), (VV), (YY), (ZZ), (AAA), or (BBB)	X (B)(4)(b) & (d) (parametric monitoring of the control equipment)	X (B)(4)(b)	X (B)(4)(c)	X (J.32- J.47, as applic- able)
9.	guidecoat or surfacer coating line [21-09 (C)(1)(a)(v)]		X	X	none

10.	topcoat coating operation [21-09 (C)(1)(c)]		X	X	none
11.	can coating operation (alternative daily emission limitation) [21-09 (D)(3)]		X (D)(3)(d)	X	X (B.8.b & B.8.c; or B.8.d & B.8.e)
12.	fixed roof storage tank [21-09 (L)]		X (L)(3)	X (L)(4)	X (G.3 & G.4)
13.	process unit turnaround [21-09 (M)(3)]		X (M)(3)(b)		none
14.	use of cutback asphalts [21-09 (N)]		X (N)(4)		none
15.	cold cleaner [21-09 (O)(2)]		X (O)(5)		X (C.1.g)
16.	open top vapor degreaser [21-09 (O)(3)]	X (parametric monitoring of the control equipment)	X (O)(5)		X (C.2.g or C.2.h)
17.	conveyorized degreaser [21-09 (O)(4)]	X (parametric monitoring of the control equipment)	X (O)(5)		X (C.3.g or C.3.h)
18.	bulk gasoline plant [21-09(P)]	X (P)(4)	X (P)(6)	X (P)(7)	X (E.4; & E.5 & E.6, or E.8 & E.9)

19.	bulk gasoline terminal [21-09 (Q)]	X (Q)(3)			X (F.3; &, if applicable, F.4 & F.5)
20.	gasoline dispensing facility, Stage I [21-09 (R)]	X (R)(3)	X (R)(5) exempt facilities	X (R)(5) exempt facilities	X (Q.5 & Q.7; or Q.6 & Q.8)
21.	leaks from petroleum refinery equipment [21-09 (T)]	X (T)(1)(a)-(d)	X (T)(1)(e)-(h)	X (T)(1)(i)	none
22.	gasoline tank truck [21-09 (V)]	X (V)(1)(a)	X (V)(1)(a)-(f)		none
23.	external floating roof storage tank [21-09 (Z)]	X (Z)(2)(a)-(c)	X (Z)(2)(d)&(e); (Z)(4)	X (Z)(5)	X (H.3 & H.4; or H.5.b & H.5.c)
24.	perchloroethylene dry cleaning facility [21-09 (AA)]	X (AA)(3)	X (AA)(4)		X (D.2-D.4; or D.2, D.5 & D.6)
25.	petroleum dry cleaning facility [21-09 (BB)]		X (BB)(4)	X (BB)(5)	none
26.	leaks from process units that produce organic chemicals [21-09 (DD)]	X throughout (DD)	X throughout (DD)	X throughout (DD)	none
27.	steel door wipe cleaning operation [21-09 (FF)]		X	X	none
28.	loading rack [21-09 (GG)]	X (GG)(6)	X		none

29.	PVC film casting lines and associated solvent storage and mix tanks [21-09 (HH)]	X	X	X	none
30.	sheet-fed, offset, lithographic printing press [21-09 (II)]	X (II)(2)	X (II)(2) & (3)	X (II)(4)	none
31.	nitrile-butadiene rubber production operation [21-09 (JJ)]	X (JJ)(1)	X (JJ)(1)	X (JJ)(1)	none
32.	methyltin intermediates production process [21-09 (KK)]	X (KK)(1)	X (KK)(1)	X (KK)(1)	none
33.	reactor [21-09 (LL)]		X (LL)(3)(a) exempted unit	X (LL)(3) (a) exempted unit	none
34.	paint manufacturing operations and paint laboratory operations [21-09 (MM)]		X (MM)(8) & (9)		none
35.	mica coating or laminating line [21-09 (NN)]		X (NN)(2)	X (NN)(2)	none
36.	several emissions units at a petroleum refinery, controlled by means of a flare [21-09 (UU)]	X (DD)(10)(d) (parametric monitoring of the flare)			X (J.39.c & J.39.d)
37.	fluid catalytic cracking unit [21-09 (VV)]	X (VV)(1)(e)	X (VV)(1)(e)	X (VV)(1) (e)	none

38.	reactor [21-09 (ZZ)]	X (DD)(10)(d) (parametric monitoring of the flare)			X (J.39.c & J.39.d)
39.	gasoline dispensing facility (Stage II) [21-09 (DDD)]		X (DDD)(3)	X (DDD)(2)	X (Q.13 & Q.15; or Q.14 & Q.16)
40.	any controlled emissions unit, with uncontrolled VOC emissions > 25 TPY	X (parametric monitoring of the control equipment)	X	X	X (J.32- J.47, as applic- able)
41.	any controlled, <b>new</b> emissions unit that is not subject to 21-09, but has a PTI which specifies a VOC emission limitation and the uncontrolled emissions are > 25 TPY	X (parametric monitoring of the control equipment)	X	X	X (J.32- J.47, as applic- able)
42.	any uncontrolled, <b>new</b> emissions unit that is not subject to 21-09, but has a PTI which specifies a VOC emission limitation and the emissions are > 25 TPY		X	X	none

43.	multiple, uncontrolled, similar, <b>new</b> emissions units that are not subject to 21-09, but have a PTI which specifies a VOC emission limitation for each unit and the combined emissions are > 25 TPY		X	X	none
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**ORGANIC COMPOUNDS:**

	EMISSIONS UNIT DESCRIPTION	PROGRAM ELEMENTS			STARS LIBRARY (T&Cs)
		MONITORING	RECORDKEEPING	REPORTING	
1.	uncontrolled <b>coating operation</b> that is subject to 21-07 (G)(2), which has actual emissions > 80% of the allowable hourly or daily emission rates and is <u>not</u> followed by an oven which is subject to 21-07 (G)(1)		X	X	X (B.9.e & B.9.f; B.9.g & B.9.h; B.10.a & B.10.b; or B.10.c & B.10.d)

2.	uncontrolled <b>coating operation</b> that is subject to 21-07 (G)(2), which has actual emissions > 80% of the allowable hourly or daily emission rates and is followed by an oven which is subject to 21-07 (G)(1)		X	X	X (B.12.a & B.12.b; or B.12.c & B.12.d)
3.	uncontrolled <b>coating operation</b> that is required to employ only nonphotochemically reactive materials and is followed by an oven which is subject to 21-07 (G)(1)		X	X	X (B.14.a & B.14.b; or B.14.c & B.14.d)
4.	controlled <b>oven</b> that is subject to the 3 lbs/hr & 15 lbs/day limitations in 21-07 (G)(1), which has actual emissions > 80% of the allowable hourly or daily emission rates and/or uncontrolled emissions > 25 TPY	X (parametric monitoring of the control equipment)	X	X	X (B.13.e & B.13.f or B.13.g & B.13.h; & J.32-J.47, as applicable)

5.	controlled <b>oven</b> that is subject to the 85% overall & 90% destruction efficiency limitations in 21-07 (G)(1), which has actual emissions > 80% of the allowable hourly or daily emission rates and/or uncontrolled emissions > 25 TPY	X (parametric monitoring of the control equipment)	X	X	X (B.13.i & B.13.j; B.13.k & B.13.l; B.13.m & B.13.n; B.13.o & B.13.p; or B.13.q & B.13.r)
6.	controlled <b>coating operation</b> that is subject to the 8 lbs/hr & 40 lbs/day limitations in 21-07 (G)(2), which has actual emissions > 80% of the allowable hourly or daily emission rates and/or uncontrolled emissions > 25 TPY, and is <u>not</u> followed by an oven which is subject to 21-07 (G)(1)	X (parametric monitoring of the control equipment)	X	X	X (B.9.a & B.9.b or B.9.c & B.9.d; & J.32-J.47, as applicable)

7.	<p>controlled <b>coating operation</b> that is subject to the 85% overall &amp; 90% destruction efficiency limitations in 21-07 (G)(2), which has actual emissions &gt; 80% of the allowable hourly or daily emission rates and/or uncontrolled emissions &gt; 25 TPY, and is <u>not</u> followed by an oven which is subject to 21-07 (G)(1)</p>	<p>X (parametric monitoring of the control equipment)</p>	<p>X</p>	<p>X</p>	<p>X (B.9.i &amp; B.9.j; B.9.k &amp; B.9.l; B.9.m &amp; B.9.n; B.9.o &amp; B.9.p; or B.9.q &amp; B.9.r)</p>
8.	<p>controlled <b>coating operation</b> that is subject to the 8 lbs/hr &amp; 40 lbs/day limitations in 21-07 (G)(2), which has actual emissions &gt; 80% of the allowable hourly or daily emission rates and/or uncontrolled emissions &gt; 25 TPY, and is followed by an oven which is subject to 21-07 (G)(1)</p>	<p>X (parametric monitoring of the control equipment)</p>	<p>X</p>	<p>X</p>	<p>X (B.12.e &amp; B.12.f or B.12.g &amp; B.12.h; &amp; J.32-J.47, as applicable)</p>

9.	controlled <b>coating operation</b> that is subject to the 85% overall & 90% destruction efficiency limitations in 21-07 (G)(2), which has actual emissions > 80% of the allowable hourly or daily emission rates and/or uncontrolled emissions > 25 TPY, and is followed by an oven which is subject to 21-07 (G)(1)	X (parametric monitoring of the control equipment)	X	X	X (B.12.i & B.12.j; B.12.k & B.12.l; B.12.m & B.12.n; B.12.o & B.12.p; or B.12.q & B.12.r)
10.	controlled <b>emissions unit</b> that is subject to 21-07 (G)(1) or (G)(2), which has actual emissions > 80% of the allowable emission rates and/or uncontrolled emissions > 25 TPY	X (parametric monitoring of the control equipment)	X	X	X (J.32-J.47, as applicable)

11.	uncontrolled <b>oven</b> that is subject to 21-07 (G)(1), which has actual emissions > 80% of the allowable hourly or daily emission rates and/or uncontrolled emissions > 25 TPY, and is preceded by a coating operation which is either subject to 21-07 (G)(2) or required to employ only nonphotochemically reactive materials		X	X	X (B.13.a & B.13.b; or B.13.c B.13.d)
12.	multiple, similar, uncontrolled <b>ovens</b> that are subject to 21-07 (G)(1), which have actual emissions > 80% of the allowable hourly or daily emission rates and/or uncontrolled emissions > 25 TPY, and are preceded by a coating operation which is either subject to 21-07 (G)(2) or required to employ only nonphotochemically reactive materials		X	X	X (B.13.a & B.13.b; or B.13.c B.13.d)

13.	multiple, similar, uncontrolled <b>coating operations</b> that are subject to 21-07 (G)(2), which have combined emissions > 25 TPY and are <u>not</u> followed by ovens which are subject to 21-07 (G)(1)		X	X	X (B.9.e & B.9.f; B.9.g & B.9.h; B.10.a & B.10.b; or B.10.c & B.10.d)
14.	multiple, similar, uncontrolled <b>coating operations</b> that are subject to 21-07 (G)(2), which have combined emissions > 25 TPY and are followed by ovens which are subject to 21-07 (G)(1)		X	X	X (B.12.a & B.12.b; or B.12.c & B.12.d)
15.	multiple, similar, uncontrolled <b>coating operations</b> that are required to employ only nonphotochemically reactive materials and are followed by an oven which is subject to 21-07 (G)(1)		X	X	X (B.14.a & B.14.b; or B.14.c & B.14.d)

16.	any controlled, <b>new coating operation</b> that is not subject to 21-07 (G), but has a PTI which specifies allowable hourly and daily OC emission limitations, and either the actual emissions are > 80% of the allowable emission rates and/or the uncontrolled emissions are > 25 TPY	X (parametric monitoring of the control equipment)	X	X	X (B.15.e & B.15.f or B.15.g & B.15.h; & J.32-J.47, as applicable)
17.	any controlled, <b>new emissions unit</b> that is not subject to 21-07 (G), but has a PTI which specifies an OC emission limitation and the uncontrolled emissions are > 25 TPY	X (parametric monitoring of the control equipment)	X	X	X (J.32-J.47, as applicable)

18.	any uncontrolled, <b>new coating operation</b> that is not subject to 21-07 (G), but has a PTI which specifies allowable hourly and daily <b>OC</b> emission limitations, and either the actual emissions are > 80% of the allowable emission rates and/or the uncontrolled emissions are > 25 TPY		X	X	X (B.15.a & B.15.b; or B.15.c & B.15.d)
19.	multiple, uncontrolled, similar, <b>new coating operations</b> that are not subject to 21-07 (G), but have a PTI which specifies allowable hourly and daily <b>OC</b> emission limitations, and either the actual emissions are > 80% of the allowable emission rates and/or the uncontrolled emissions are > 25 TPY		X	X	X (B.15.a & B.15.b; or B.15.c & B.15.d)

Some new emissions units may be subject to special limitations that require a monitoring, recordkeeping, and reporting program.

The most commonly encountered situations are summarized in the following table:

	TYPE OF LIMITATION	PROGRAM ELEMENTS			STARS LIBRARY (T&Cs)
		MONITORING	RECORDKEEPING	REPORTING	
1.	daily production rate		X	X	X (V.2 & V.3)
2.	monthly production rate		X	X	X (V.2 & V.3)
3.	annual production rate		X	X	X (V.2 & V.3)
4.	annual production rate, based upon a rolling 12-month summation		X	X	X (V.5 & V.6; or V.8 & V.9)
5.	annual production rate, based upon a rolling 365-day summation		X	X	X (V.5 & V.6; or V.8 & V.9)
6.	daily coating usage		X	X	X (W.2 & W.3)
7.	monthly coating usage		X	X	X (W.2 & W.3)
8.	annual coating usage		X	X	X (W.2 & W.3)

9.	annual coating usage, based upon a rolling 12-month summation		X	X	X (W.5 & W.6; or W.8 & W.9)
10.	annual coating usage, based upon a rolling 365-day summation		X	X	X (W.5 & W.6; or W.8 & W.9)
11.	daily operating hours		X	X	X (X.2 & X.3)
12.	monthly operating hours		X	X	X (X.2 & X.3)
13.	annual operating hours		X	X	X (X.2 & X.3)
14.	annual operating hours, based upon a rolling 12-month summation		X	X	X (X.5 & X.6; or X.8 & X.9)
15.	annual operating hours, based upon a rolling 365-day summation		X	X	X (X.5 & X.6; or X.8 & X.9)
16.	annual emissions, based upon a rolling 12-month summation		X	X	X (Y.2)
17.	annual emissions, based upon a rolling 365-day summation		X	X	X (Y.2)

18.	annual emissions, based upon a rolling 12-month summation, and enforceable monthly limitations are required either during the first 12 months of operation or during the first 12 months of operation after issuance of the permit			X	X (Y.4)
19.	annual emissions, based upon a rolling 365-day summation, and enforceable monthly limitations are required either during the first 12 months of operation or during the first 12 months of operation after issuance of the permit			X	X (Y.4)

It is not possible to develop an exhaustive listing of all the emissions units for which a detailed monitoring, recordkeeping, and reporting program should be employed. The above tables should cover most emissions units; however, there undoubtedly will be types of emissions units that do not fit any of the listed descriptions. In such cases, if the emissions unit meets one or more of the following criteria, the District Office or local air agency personnel should evaluate the feasibility of and require, if determined to be reasonable and beneficial, a detailed monitoring, recordkeeping, and reporting program to ensure continued compliance with the applicable emission

limitations or control requirements:

1. The actual uncontrolled emissions from the emissions unit are significant, i.e., generally greater than 25 TPY.
2. The combined, actual uncontrolled emissions from the emissions unit and other similar emissions units at the facility are significant, i.e., generally greater than 25 TPY as a combined total.
3. The actual emissions from the emissions unit are greater than 80% of the allowable emission rate.
4. The emissions unit emits one or more air contaminants which, due to their toxic or hazardous nature, could pose a threat to public health if the control device is not operated and maintained properly.
5. The emissions unit has a history of compliance problems, or the ability of the emissions unit to remain in compliance over the long-term is questionable.

As mentioned earlier, the program designed for a particular emissions unit may not include all the elements of monitoring, recordkeeping, and reporting. For example, for some emissions units, recordkeeping only may be sufficient, and for others, recordkeeping and reporting may be sufficient.

For significant emissions units that are not included in the above tables and do not meet any of the above-mentioned criteria, a Title V applicant must specify in the electronic application the "proposed approach for determining compliance," the "proposed compliance monitoring method," the "proposed compliance recordkeeping method," and the "proposed compliance reporting method" for each applicable emissions limit or control requirement. For these emissions units, a detailed monitoring, recordkeeping, and reporting program will not be required. Any simplified, reasonable, and clearly defined program will be

acceptable to the DAPC. (In some cases, an applicant may decide to develop a more comprehensive program in order to have a greater assurance of ongoing compliance for each of these smaller emissions units. That approach obviously will also be acceptable to the DAPC.)

In general, to obtain a Title V permit, the applicant must be able to demonstrate that each emissions unit is in compliance with each applicable emissions limit or control requirement. For the smaller, significant emissions units, the approach used by the applicant to initially demonstrate compliance with each applicable emission limit or control requirement can also serve as the basis for the proposed monitoring, recordkeeping, and reporting program for each applicable emission limit or control requirement and also for the annual certification required by OAC rule 3745-77-07 (C)(5). The following examples illustrate how this approach would be used:

**Example # 1:**

- an emissions unit with a particulate emission limit of X lbs/hr
- no control equipment
- basis for the initial compliance demonstration:  
Calculations were performed using AP-42 emission factors and the maximum capacity of the emissions unit.

\*\*\*\*\*

The following statements would be included in the Title V, electronic application:

**Proposed Approach for Determining Compliance:**

Calculations using AP-42 emission factors and the maximum capacity of the emissions unit will be performed to demonstrate compliance.

Proposed Compliance Monitoring Method:

Not Applicable

Proposed Compliance Recordkeeping Method:

Any changes in the maximum capacity of the emissions unit shall be recorded and kept on file.

Proposed Compliance Reporting Method:

The compliance status of the emissions unit shall be reported pursuant to the annual certification required by OAC rule 3745-77-07(C)(5). Calculations, using AP-42 emission factors and the maximum capacity of the emissions unit, shall be performed to quantify the particulate emissions.

**Example # 2:**

- an emissions unit with a particulate emission limit of X lbs/hr
- control equipment employed
- basis for the initial compliance demonstration:  
A particulate emission test was conducted while the emissions unit was operating at or near its maximum capacity.

\*\*\*\*\*

The following statements would be included in the Title V, electronic application:

Proposed Approach for Determining Compliance:

A particulate emission test will be conducted periodically (at intervals consistent with the frequency required in past Ohio EPA permits), while the emissions unit is operating at or near maximum capacity, to demonstrate compliance.

Proposed Compliance Monitoring Method:

Monitoring of the control equipment shall be performed in accordance with an operation and maintenance plan that is consistent with the manufacturer's recommendations.

Proposed Compliance Recordkeeping Method:

Records of inspections and maintenance activities for the control equipment shall be maintained in accordance with the operation and maintenance plan for the equipment. Records shall also be maintained of any particulate emission tests performed for the emissions unit.

Proposed Compliance Reporting Method:

The compliance status of the emissions unit shall be reported pursuant to the annual certification required by OAC rule 3745-77-07(C)(5). A particulate emission test shall periodically be performed to determine the controlled particulate emission rate from the emissions unit, while operating at or near its maximum capacity.

**Example # 3:**

- coating operation with an OC emission limit of 8 lbs/hr
- no control equipment
- basis for the initial compliance demonstration:  
The applicant demonstrated through calculations that at "worst case" conditions, i.e., at the highest coatings usage rate and with the highest OC content coatings, the OC emissions were in compliance with the allowable emission rate.

\*\*\*\*\*

The following statements would be included in the Title V, electronic application:

Proposed Approach for Determining Compliance:

Calculations shall be performed which document the OC emission rate from the emissions unit under "worst case" conditions, i.e., the highest coatings usage rate and the highest OC content coatings.

Proposed Compliance Monitoring Method:

Not Applicable

Proposed Compliance Recordkeeping Method:

Any changes in the "worst case" conditions for the emissions unit shall be recorded and kept on file.

Proposed Compliance Reporting Method:

The compliance status of the emissions unit shall be reported pursuant to the annual certification required by OAC rule 3745-77-07(C)(5). Calculations shall be provided which document the OC emission rate from the emissions unit under "worst case" conditions, i.e., the highest coatings usage rate and the highest OC content coatings.

It would be nearly impossible to develop enough examples to cover all the smaller, significant emissions units. However, assuming the applicant does not want to develop a more detailed monitoring, recordkeeping, and reporting program, a simplified, reasonable program can be developed for any emissions unit by beginning with the approach used to demonstrate compliance with the applicable emission limit or control requirement.

JO

May 17, 1996