then the owner or operator shall state such information in a startup, shutdown, and malfunction report, and describe the actions taken. Such description can take the form of a checklist; only one checklist is necessary if actions taken are the same for multiple events during the reporting period.

(4) If at any time an action taken by an owner or operator, during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) during which excess emissions occur, as defined in §65.3(a)(4), is not consistent with the procedures specified in the regulated source’s startup, shutdown, and malfunction plan, the owner or operator shall report the actions taken for that event as part of the periodic report. The report shall explain the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.


§ 65.7 Monitoring, recordkeeping, and reporting waivers and alternatives, and alternative work practice for equipment leaks.

(a) Waiver of recordkeeping or reporting requirements—(1) Waiver application. The owner or operator may apply for a waiver from recordkeeping or reporting requirements if the regulated source is achieving the relevant standard(s), or the source is operating under an extension of compliance under 40 CFR 63.6(1), or a waiver of compliance under 40 CFR 61.10(b), or the owner or operator has requested an extension or waiver of compliance and the Administrator is still considering that request. The waiver application shall be submitted in writing to the Administrator.

(2) Extension of compliance request. If an application for a waiver of recordkeeping or reporting is made, the application shall accompany the request for an extension of compliance under 40 CFR 63.6(1) or the request for a waiver of compliance under 40 CFR 61.10(b), any required compliance progress report or compliance status report required in the source’s Title V permit application or a permit modification application, or a periodic report required under this part, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of recordkeeping or reporting is warranted.

(3) Approval or denial of waiver. The Administrator will approve or deny a request for a waiver of recordkeeping or reporting requirements when performing one of the following actions:

(i) Approves or denies an extension of compliance under 40 CFR 63.6(1) or a waiver of compliance under 40 CFR 61.10(b); or

(ii) Makes a determination of compliance following the submission of a required compliance status report or periodic report; or

(iii) Makes a determination of suitable progress toward compliance following the submission of a compliance progress report, whichever is applicable.

(4) Waiver conditions. A waiver of any recordkeeping or reporting requirement granted under this paragraph (a) may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Administrator.

(5) Waiver cancellation. Approval of any waiver granted under this section shall not abrogate the Administrator’s authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the regulated source.

(b) Requests for approval of alternative monitoring or recordkeeping. An owner or operator may submit a written request for approval to use alternatives to the monitoring or recordkeeping provisions of this part. For process vents and transfer racks, except low-throughput transfer racks, the provisions in paragraph (c) of this section shall govern the review and approval of requests. In addition, the application shall include information justifying the owner or operator’s request for an alternative monitoring or recordkeeping method, such as the technical or economic infeasibility, or the impracticality, of the regulated source using the required method. For storage
vessels and low throughput transfer racks, owners and operators shall comply with the requirements of §65.145(b) for preparing and submitting a design evaluation. For equipment leaks, owners and operators shall comply with the recordkeeping requirements of §65.163(d). Owners and operators are also provided the option of complying with an alternative work practice for monitoring leaking equipment in §65.7 (e), (f), and (g) rather than monitoring equipment with a 40 CFR part 60, appendix A–7, Method 21 monitor.

(c) Approval or denial of request to use alternative monitoring or recordkeeping. The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring or recordkeeping method within 90 calendar days after receipt of the original request and within 30 calendar days after receipt of any supplementary information that is submitted. Before disapproving any request to use an alternative method, the Administrator will notify the applicant of the Administrator’s intention to disapprove the request together with the following:

(1) Notice of the information and findings on which the intended disapproval is based; and

(2) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of the intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.

(d) Use of an alternative monitoring or recordkeeping method. (1) The owner or operator of a regulated source is subject to the monitoring and recordkeeping requirements of the relevant standard unless permission to use an alternative monitoring or recordkeeping method requested under paragraph (b) of this section or §65.162(d) has been granted by the Administrator. Once an alternative is approved, the owner or operator shall use the alternative for the emission points or regulated sources cited in the approval and shall meet the monitoring and recordkeeping requirements of the relevant standard for all other emission points or regulated sources.

(2) If the Administrator approves the use of an alternative monitoring or recordkeeping method for a regulated source under paragraph (c) of this section, the owner or operator of such source shall continue to use the alternative monitoring or recordkeeping method unless he or she receives approval from the Administrator to use another method.

(e) Alternative work practice for monitoring equipment for leaks. This section contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative convenience and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A–7, Method 21 monitor. Paragraphs (e), (f), and (g) of this section apply to all equipment for which the applicable subpart requires monitoring with a 40 CFR part 60, appendix A–7, Method 21 monitor, except for closed vent systems, equipment designated as leakless, and equipment identified in the applicable subpart as having no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, appendix A–7, Method 21 monitor. Requirements in the existing subparts that are specific to the Method 21 instrument do not apply under this section. All other requirements in the applicable subpart that are not addressed in paragraphs (e), (f), and (g) of this section continue to apply. For example, equipment specification requirements, and non-Method 21 instrument
recordkeeping and reporting requirements in the applicable subpart continue to apply. The terms defined in paragraphs (e)(1) through (5) of this section have meanings that are specific to the alternative work practice standard in paragraphs (e), (f), and (g) of this section.

(1) Applicable subpart means the subpart in 40 CFR parts 60, 61, 63, and 65 that requires monitoring of each piece of equipment with a 40 CFR part 60, appendix A–7, Method 21 monitor.

(2) Equipment means pumps, valves, pressure relief valves, compressors, open-ended lines, flanges, connectors, and other equipment covered by the applicable subpart that require monitoring with a 40 CFR part 60, appendix A–7, Method 21 monitor.

(3) Imaging means making visible emissions that may otherwise be invisible to the naked eye.

(4) Optical gas imaging instrument means an instrument that makes visible emissions that may otherwise be invisible to the naked eye.

(5) Repair means that equipment is adjusted, or otherwise altered, in order to eliminate a leak.

(6) Leak means:

(i) Any emissions imaged by the optical gas instrument;

(ii) Indications of liquids dripping;

(iii) Indications by a sensor that a seal or barrier fluid system has failed; or

(iv) Screening results using a 40 CFR part 60, appendix A–7, Method 21 monitor that exceed the leak definition in the applicable subpart to which the equipment is subject.

(f) The alternative work practice standard for monitoring equipment for leaks is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A–7, Method 21 monitor.

(1) An owner or operator of an affected source subject to 40 CFR parts 60, 61, 63, or 65 can choose to comply with the alternative work practice requirements in paragraph (g) of this section instead of using the 40 CFR part 60, appendix A–7, Method 21 monitor to identify leaking equipment. The owner or operator must document the equipment, process units, and facilities for which the alternative work practice will be used to identify leaks.

(2) Any leak detected when following the leak survey procedure in paragraph (g)(3) of this section must be identified for repair as required in the applicable subpart.

(3) If the alternative work practice is used to identify leaks, re-screening after an attempted repair of leaking equipment must be conducted using either the alternative work practice or the 40 CFR part 60, appendix A–7, Method 21 monitor at the leak definition required in the applicable subparts to which the equipment is subject.

(4) The schedule for repair is as required in the applicable subpart.

(5) When this alternative work practice is used to detect leaking equipment, choose one of the monitoring frequencies listed in Table 3 to subpart A of this part, in lieu of the monitoring frequency specified for regulated equipment in the applicable subpart. Reduced monitoring frequencies for good performance are not applicable when using the alternative work practice.

(6) When this alternative work practice is used to detect leaking equipment, the following are not applicable for the equipment being monitored:

(i) Skip period leak detection and repair;

(ii) Quality improvement plans; or

(iii) Complying with standards for allowable percentage of valves and pumps to leak.

(7) When the alternative work practice is used to detect leaking equipment, the regulated equipment in paragraph (f)(1)(i) of this section must also be monitored annually using a 40 CFR part 60, appendix A–7, Method 21 monitor at the leak definition required in the applicable subpart. The owner or operator may choose the specific monitoring period (for example, first quarter) to conduct the annual monitoring. Subsequent monitoring must be conducted every 12 months from the initial period. Owners or operators must keep records of the annual Method 21 screening results, as specified in paragraph (i)(4)(vii) of this section.

(g) An owner or operator of an affected source who chooses to use the alternative work practice must comply
with the requirements of paragraphs (g)(1) through (g)(5) of this section.

(1) Instrument specifications. The optical gas imaging instrument must comply with the requirements specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this section.

(i) Provide the operator with an image of the potential leak points for each piece of equipment at both the detection sensitivity level and within the distance used in the daily instrument check described in paragraph (g)(2) of this section. The detection sensitivity level depends upon the frequency at which leak monitoring is to be performed.

(ii) Provide a date and time stamp for video records of every monitoring event.

(2) Daily instrument check. On a daily basis, and prior to beginning any leak monitoring work, test the optical gas imaging instrument at the mass flow rate determined in paragraph (g)(2)(i) of this section in accordance with the procedure specified in paragraphs (g)(2)(ii) through (g)(2)(iv) of this section for each camera configuration used during monitoring (for example, different lenses used), unless an alternative method to demonstrate daily instrument checks has been approved in accordance with paragraph (g)(2)(v) of this section.

(i) Calculate the mass flow rate to be used in the daily instrument check by following the procedures in paragraphs (g)(2)(i)(A) and (g)(2)(i)(B) of this section.

(A) For a specified population of equipment to be imaged by the instrument, determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, within the distance to be used in paragraph (g)(2)(iv)(B) of this section, at or below the standard detection sensitivity level.

(B) Multiply the standard detection sensitivity level, corresponding to the selected monitoring frequency in Table 3 of subpart A of this part, by the mass fraction of detectable chemicals from the stream identified in paragraph (g)(2)(i)(A) of this section to determine the mass flow rate to be used in the daily instrument check, using the following equation.

\[ E_{dc} = (E_{sd}) \sum_{i=1}^{k} x_i \]

Where:

- \( E_{dc} \) = Mass flow rate for the daily instrument check, grams per hour
- \( x_i \) = Mass fraction of detectable chemical(s) i seen by the optical gas imaging instrument, within the distance to be used in paragraph (g)(2)(iv)(B) of this section, at or below the standard detection sensitivity level, \( E_{sd} \).
- \( E_{sd} \) = Standard detection sensitivity level from Table 3 to subpart A, grams per hour
- \( k \) = Total number of detectable chemicals emitted from the leaking equipment and seen by the optical gas imaging instrument.

(ii) Start the optical gas imaging instrument according to the manufacturer’s instructions, ensuring that all appropriate settings conform to the manufacturer’s instructions.

(iii) Use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no less than 98 percent.

(iv) Establish a mass flow rate by using the following procedures:

(A) Provide a source of gas where it will be in the field of view of the optical gas imaging instrument.

(B) Set up the optical gas imaging instrument at a recorded distance from the outlet or leak orifice of the flow meter that will not be exceeded in the actual performance of the leak survey. Do not exceed the operating parameters of the flow meter.

(C) Open the valve on the flow meter to set a flow rate that will create a mass emission rate equal to the mass rate calculated in paragraph (g)(2)(i) of this section while observing the gas flow through the optical gas imaging instrument viewfinder. When an image of the gas emission is seen through the viewfinder at the required emission rate, make a record of the reading on the flow meter.

(v) Repeat the procedures specified in paragraphs (g)(2)(ii) through (g)(2)(iv) of this section for each configuration of the optical gas imaging instrument used during the leak survey.

(vi) To use an alternative method to demonstrate daily instrument checks, apply to the Administrator for approval of the alternative under §65.7(b).
(3) **Leak survey procedure.** Operate the optical gas imaging instrument to image every regulated piece of equipment selected for this work practice in accordance with the instrument manufacturer’s operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.

(4) **Recordkeeping.** Keep the records described in paragraphs (g)(4)(i) through (g)(4)(vii) of this section:

(i) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.

(ii) The detection sensitivity level selected from Table 3 to subpart A of this part for the optical gas imaging instrument.

(iii) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (g)(2)(i)(A) of this section.

(iv) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (g)(2)(i)(B) of this section.

(v) The daily instrument check. Record the distance, per paragraph (g)(2)(iv)(B) of this section, and the flow meter reading, per paragraph (g)(2)(iv)(C) of this section, at which the leak was imaged. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.

(vi) **Recordkeeping requirements in the applicable subpart.** A video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements of the applicable subparts if each piece of regulated equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.

(vii) The results of the annual Method 21 screening required in paragraph (f)(7) of this section. Records must be kept for all regulated equipment specified in paragraph (f)(1) of this section. Records must identify the equipment screened, the screening value measured by Method 21, the time and date of the screening, and calibration information required in the existing applicable subparts.

(5) **Reporting.** Submit the reports required in the applicable subpart. Submit the records of the annual Method 21 screening required in paragraph (f)(7) of this section to the Administrator via e-mail to CCG-AWP@EPA.GOV.