

## **XII. VOLATILE ORGANIC COMPOUND EMISSIONS FROM OIL AND GAS OPERATIONS**

### **XII.A. APPLICABILITY**

XII.A.1. Except as provided in SECTIONS XII.D.1.A., XII.D.2.A., XII.D.2.B.(i) AND XII.A.2. THROUGH 4., this SECTION XII. applies to oil and gas exploration and production operations, natural gas compressor stations and natural gas drip stations:

XII.A.1.a. That collect, store, or handle condensate in AN OZONE NON-ATTAINMENT AREA,

XII.A.1.b. That are located upstream of a natural gas plant, and

XII.A.1.c. For which UNCONTROLLED ACTUAL VOC EMISSIONS FROM THE ATMOSPHERIC CONDENSATE STORAGE TANKS ARE EQUAL TO OR GREATER THAN **TWO TONS PER YEAR.**

XII.A.2. OIL REFINERIES ARE NOT SUBJECT TO THIS SECTION OF THE RULE.

XII.A.3. GAS-PROCESSING PLANTS LOCATED IN AN OZONE NON-ATTAINMENT AREA ARE SUBJECT TO SECTIONS XII.B., XII.G., XII.H., AND XVI.

XII.A.4. GLYCOL NATURAL GAS DEHYDRATORS LOCATED AT AN OIL AND GAS EXPLORATION AND PRODUCTION OPERATION, NATURAL GAS COMPRESSOR STATION, DRIP STATION OR GAS-PROCESSING PLANT IN AN OZONE NON-ATTAINMENT AREA ARE SUBJECT TO SECTION XII.B. AND XII.H.

### **XII.B. DEFINITIONS SPECIFIC TO SECTION XII.**

XII.B.1. AFFECTED OPERATIONS MEANS OIL AND GAS EXPLORATION AND PRODUCTION OPERATIONS, NATURAL GAS COMPRESSOR STATIONS AND NATURAL GAS DRIP STATIONS TO WHICH THIS SECTION XII APPLIES PURSUANT TO SECTION XII.A.1.

XII.B.2. AIR POLLUTION CONTROL EQUIPMENT, AS USED IN THIS SECTION XII, MEANS A COMBUSTION DEVICE OR VAPOR RECOVERY UNIT. AIR POLLUTION CONTROL EQUIPMENT ALSO MEANS ALTERNATIVE EMISSIONS CONTROL EQUIPMENT AND POLLUTION PREVENTION DEVICES AND PROCESSES THAT COMPLY WITH THE REQUIREMENTS OF SECTION XII.D.2.A.(ii).

**XII.B.3. ATMOSPHERIC STORAGE TANKS OR ATMOSPHERIC CONDENSATE STORAGE TANKS MEANS A TYPE OF CONDENSATE STORAGE TANK THAT VENTS, OR IS DESIGNED TO VENT, TO THE ATMOSPHERE.**

XII.B.4. AUTO-IGNITER MEANS A DEVICE WHICH WILL AUTOMATICALLY ATTEMPT TO RELIGHT THE PILOT FLAME IN THE COMBUSTION CHAMBER OF A CONTROL DEVICE IN ORDER TO COMBUST VOC EMISSIONS.

XII.B.5. CONDENSATE TANK SHALL MEAN ANY TANK OR SERIES OF TANKS THAT STORE CONDENSATE AND ARE EITHER MANIFOLDED TOGETHER OR ARE LOCATED AT THE SAME WELL PAD.

XII.B.6. DOWNTIME SHALL MEAN THE PERIOD OF TIME WHEN A WELL IS PRODUCING AND THE AIR POLLUTION CONTROL EQUIPMENT IS NOT IN OPERATION.

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- XII.B.7. ELECTRONIC SURVEILLANCE SYSTEM MEANS A MONITORING SYSTEM WHICH CONTINUOUSLY MONITORS PILOT FLAME PRESENCE IN A COMBUSTION DEVICE. THE MONITORING SYSTEM SHALL RECORD TIMES AND DURATIONS OF ALL PERIODS WHERE A PILOT FLAME IS NOT DETECTED.
- XII.B.8. EXISTING SHALL MEAN ANY CONDENSATE TANK THAT BEGAN OPERATION BEFORE FEBRUARY 1, 2009, AND HAS NOT SINCE BEEN MODIFIED.
- XII.B.9. GLYCOL NATURAL GAS DEHYDRATOR MEANS ANY DEVICE IN WHICH A LIQUID GLYCOL (INCLUDING, ETHYLENE GLYCOL, DIETHYLENE GLYCOL, OR TRIETHYLENE GLYCOL) ABSORBENT DIRECTLY CONTACTS A NATURAL GAS STREAM AND ABSORBS WATER.
- XII.B.10. NEW SHALL MEAN ANY CONDENSATE TANK THAT BEGAN OPERATION ON OR AFTER FEBRUARY 1, 2009.
- XII.B.11. MODIFIED OR MODIFICATION SHALL MEAN ANY PHYSICAL CHANGE OR CHANGE IN OPERATION THAT RESULTS IN AN INCREASE IN ACTUAL UNCONTROLLED VOC EMISSIONS FROM THE PREVIOUS CALENDAR YEAR. FOR CONDENSATE TANKS, A PHYSICAL CHANGE OR CHANGE IN OPERATION INCLUDES DRILLING NEW WELLS AND RE-COMPLETING, RE-FRACTURING OR OTHERWISE STIMULATING EXISTING WELLS.
- XII.B.12. STABILIZED, WHEN USED TO REFER TO STORED CONDENSATE, MEANS THAT THE CONDENSATE HAS REACHED SUBSTANTIAL EQUILIBRIUM WITH THE ATMOSPHERE AND THAT ANY EMISSIONS THAT OCCUR ARE THOSE COMMONLY REFERRED TO WITHIN THE INDUSTRY AS "WORKING AND BREATHING LOSSES."
- XII.B.13. SYSTEM-WIDE WHEN USED TO REFER TO EMISSIONS AND EMISSION REDUCTIONS IN THIS SECTION XII.D.2.A., SHALL MEAN EMISSIONS AND EMISSION REDUCTIONS FROM ALL ATMOSPHERIC CONDENSATE STORAGE TANKS AT AFFECTED OPERATIONS WITHIN AN OZONE NON-ATTAINMENT AREA FOR WHICH UNCONTROLLED ACTUAL VOC EMISSIONS FROM THE ATMOSPHERIC CONDENSATE STORAGE TANKS ARE EQUAL TO OR GREATER THAN **TWO TONS PER YEAR**.

### XII.C. GENERAL PROVISIONS TO SECTION XII.

- XII.C.1. GENERAL REQUIREMENTS FOR AIR POLLUTION CONTROL EQUIPMENT - PREVENTION OF LEAKAGE
- XII.C.1.A. ALL AIR POLLUTION CONTROL EQUIPMENT REQUIRED BY THIS SECTION XII SHALL BE OPERATED AND MAINTAINED CONSISTENT WITH MANUFACTURER SPECIFICATIONS AND GOOD ENGINEERING AND MAINTENANCE PRACTICES. THE OWNER OR OPERATOR SHALL KEEP MANUFACTURER SPECIFICATIONS ON FILE. IN ADDITION, ALL SUCH AIR POLLUTION CONTROL EQUIPMENT SHALL BE ADEQUATELY DESIGNED AND SIZED TO ACHIEVE THE CONTROL EFFICIENCY RATES REQUIRED BY THIS SECTION XII AND TO HANDLE REASONABLY FORESEEABLE FLUCTUATIONS IN EMISSIONS OF VOLATILE ORGANIC COMPOUNDS. FLUCTUATIONS IN EMISSIONS THAT OCCUR WHEN THE SEPARATOR DUMPS INTO THE TANK ARE REASONABLY FORESEEABLE.
- XII.C.1.B. ALL CONDENSATE COLLECTION, STORAGE, PROCESSING AND HANDLING OPERATIONS, REGARDLESS OF SIZE, SHALL BE DESIGNED, OPERATED AND MAINTAINED SO AS TO MINIMIZE LEAKAGE OF VOLATILE ORGANIC COMPOUNDS TO THE ATMOSPHERE TO THE MAXIMUM EXTENT PRACTICABLE.

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- XII.C.1.c. IF A COMBUSTION DEVICE IS USED TO CONTROL EMISSIONS OF VOLATILE ORGANIC COMPOUNDS TO COMPLY WITH SECTION XII,D. IT SHALL BE ENCLOSED, HAVE NO VISIBLE EMISSIONS, AND BE DESIGNED SO THAT AN OBSERVER CAN, BY MEANS OF VISUAL OBSERVATION FROM THE OUTSIDE OF THE ENCLOSED COMBUSTION DEVICE, OR BY OTHER CONVENIENT MEANS, SUCH AS A CONTINUOUS MONITORING DEVICE (WHICH INCLUDES AUTO-IGNITORS AND CONTINUOUS ELECTRONIC SURVEILLANCE SYSTEMS), APPROVED BY THE DIVISION, DETERMINE WHETHER IT IS OPERATING PROPERLY.
- XII.C.2. THE EMISSION ESTIMATES AND EMISSION REDUCTIONS REQUIRED BY THIS SECTION XII.D. SHALL BE DEMONSTRATED USING ONE OF THE FOLLOWING EMISSION FACTORS:
- XII.C.2.A. FOR ATMOSPHERIC STORAGE TANKS AT OIL AND GAS EXPLORATION AND PRODUCTION OPERATIONS, A DEFAULT UNCONTROLLED EMISSION FACTOR OF 13.7 POUNDS OF VOLATILE ORGANIC COMPOUNDS PER BARREL OF CONDENSATE SHALL BE USED UNLESS A MORE SPECIFIC EMISSION FACTOR HAS BEEN ESTABLISHED PURSUANT TO SECTION XII.C.2.B.II. THE DIVISION MAY REQUIRE A MORE SPECIFIC EMISSION FACTOR THAT COMPLIES WITH SECTION XII.C.2.B.II.
- XII.C.2.B. FOR ATMOSPHERIC CONDENSATE STORAGE TANKS AT NATURAL GAS COMPRESSOR STATIONS AND NATURAL GAS DRIP STATIONS, AND GAS-CONDENSATE-GLYCOL SEPARATORS, A SPECIFIC EMISSION FACTOR ESTABLISHED PURSUANT TO THIS SECTION XII.C.2.B. SHALL BE USED. A SPECIFIC EMISSION FACTOR DEVELOPED PURSUANT TO SECTION XII.C.2.B.(II) MAY ALSO BE USED FOR ATMOSPHERIC STORAGE TANKS AT OIL AND GAS EXPLORATION AND PRODUCTION OPERATIONS AND, ONCE ESTABLISHED, OR REQUIRED BY THE DIVISION, SHALL BE USED FOR SUCH OPERATIONS.
- XII.C.2.B.(I) FOR ATMOSPHERIC STORAGE TANKS AT NATURAL GAS COMPRESSOR STATIONS AND NATURAL GAS DRIP STATIONS, AND GAS-CONDENSATE-GLYCOL SEPARATORS A SOURCE MAY USE A SPECIFIC EMISSIONS FACTOR THAT WAS USED FOR REPORTING EMISSIONS FROM THE SOURCE ON APENs FILED ON OR BEFORE FEBRUARY 28, 2003. THE DIVISION MAY, HOWEVER, REQUIRE THE SOURCE TO DEVELOP AND USE A MORE RECENT SPECIFIC EMISSION FACTOR PURSUANT TO SECTION XII.C.2.B.(II), IF SUCH A MORE RECENT EMISSION FACTOR WOULD BE MORE RELIABLE OR ACCURATE.
- XII.C.2.B.(II) EXCEPT AS OTHERWISE PROVIDED IN XII.C.2.B.(I) A SPECIFIC EMISSIONS FACTOR SHALL BE ONE FOR WHICH THE DIVISION HAS NO OBJECTION, AND WHICH IS BASED ON COLLECTION AND ANALYSIS OF A REPRESENTATIVE SAMPLE OF CONDENSATE PURSUANT TO A TEST METHOD APPROVED BY THE DIVISION AND EPA. THE DIVISION SHALL CONSULT WITH AND PROVIDE EPA 30 DAYS IN WHICH TO COMMENT ON THE TEST METHOD. EPA SHALL BE DEEMED TO HAVE APPROVED THE TEST METHOD FOR PURPOSES OF THIS SECTION XII.C.2.B. IF IT DOES NOT OBJECT DURING SUCH 30-DAY PERIOD.

## XII.D. EMISSION CONTROLS

The owners and operators of affected operations shall employ air pollution control equipment to reduce emissions of volatile organic compounds from ATMOSPHERIC CONDENSATE STORAGE TANKS associated with affected operations by the dates and amounts listed below. Emission reductions shall be required for each NEW, MODIFIED AND EXISTING ATMOSPHERIC CONDENSATE STORAGE TANKS as follows:

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### XII.D.1. NEW AND MODIFIED CONDENSATE TANKS

XII.D.1.A. BEGINNING, FEBRUARY 1, 2009, OWNERS OR OPERATORS OF ANY ATMOSPHERIC CONDENSATE STORAGE TANK AT EXPLORATION AND PRODUCTION SITES SERVING WELLS THAT ARE DRILLED, RE-COMPLETED, RE-FRACTURED OR OTHERWISE STIMULATED AFTER FEBRUARY 1, 2009, SHALL COLLECT AND ROUTE EMISSIONS TO, AND OPERATE, AIR POLLUTION CONTROL EQUIPMENT, EQUIPPED WITH AN AUTO-IGNITER, THAT HAS A CONTROL EFFICIENCY OF AT LEAST 98% ON SUCH TANKS DURING THE FIRST 90 DAYS AFTER THE DATE OF FIRST PRODUCTION OF THE NEWLY DRILLED, RE-COMPLETED, RE-FRACTURED OR OTHERWISE STIMULATED WELL. AFTER THIS 90-DAY PERIOD, THE AIR POLLUTION CONTROL EQUIPMENT MAY BE REMOVED IF UNCONTROLLED ACTUAL EMISSIONS PROJECTED FOR THE FIRST TWELVE MONTHS BASED ON DATA FROM THE FIRST 90 DAYS OF OPERATION FROM THE CONDENSATE STORAGE TANK WILL BE LESS THAN TWO TONS PER YEAR OF VOCs. IF THE OWNER OR OPERATOR DETERMINES THAT EMISSIONS OF VOCs WILL BE LESS THAN TWO TONS PER YEAR OF VOCs, THE OWNER OR OPERATOR SHALL NOTIFY THE DIVISION OF THIS DETERMINATION IN WRITING AND INCLUDE AN EXPLANATION OF THE METHODOLOGY USED TO MAKE THIS DETERMINATION.

XII.D.1.B. BEGINNING, FEBRUARY 1, 2009, ALL NEW AND MODIFIED ATMOSPHERIC CONDENSATE STORAGE TANKS HAVING PROJECTED, OR ACTUAL UNCONTROLLED ANNUAL EMISSIONS EQUAL TO OR GREATER THAN TWO TONS PER YEAR OF VOCs MUST CONTROL 98% OF UNCONTROLLED ACTUAL EMISSIONS UPON START-UP. THIS 98% CONTROL REQUIREMENT ALLOWS FOR 100 HOURS OF DOWNTIME.

### XII.D.2. EXISTING CONDENSATE TANKS

XII.D.2.A. SYSTEM-WIDE CONTROL STRATEGY (TO BE PHASED OUT AS OF MAY 1, 2010)

XII.D.2.A.(i) THE REQUIREMENTS OF SECTION XII.D.2.A. SHALL NOT APPLY TO ANY OWNER OR OPERATOR IN ANY CALENDAR YEAR IN WHICH THE APENS FOR ALL OF THE ATMOSPHERIC CONDENSATE STORAGE TANKS ASSOCIATED WITH THE AFFECTED OPERATIONS OWNED OR OPERATED BY SUCH PERSON REFLECT A TOTAL OF LESS THAN 30 TONS-PER-YEAR OF ACTUAL UNCONTROLLED EMISSIONS OF VOCs IN AN OZONE NON-ATTAINMENT AREA. SUCH REQUIREMENTS SHALL, HOWEVER, APPLY TO SUCH OWNER OR OPERATOR IN ANY SUBSEQUENT CALENDAR YEAR IN WHICH THE APENS FOR ATMOSPHERIC CONDENSATE STORAGE TANKS ASSOCIATED WITH SUCH AFFECTED OPERATIONS REFLECT A TOTAL OF 30 TONS-PER-YEAR OR MORE OF ACTUAL UNCONTROLLED EMISSIONS OF VOCs IN AN OZONE NON-ATTAINMENT AREA.

XII.D.2.A.(ii) The owners and operators of affected operations shall employ air pollution control equipment to reduce emissions of volatile organic compounds from ATMOSPHERIC CONDENSATE STORAGE TANKS by the dates and amounts listed below. Emission reductions shall not be required for each and every unit, but instead shall be based on overall reductions in uncontrolled actual emissions from all the ATMOSPHERIC CONDENSATE STORAGE TANKS associated with the affected operations for which UNCONTROLLED ACTUAL VOC EMISSIONS ARE EQUAL TO OR GREATER THAN TWO TONS PER YEAR. The dates and requisite reductions are as follows:

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XII.D.2.A.(i)(A) For the period of May 1 through September 30 of 2008, such emissions shall be reduced by 75% from uncontrolled actual emissions on a weekly basis.

XII.D.2.A.(i)(B) BEGINNING JANUARY 1, 2008 THROUGH MAY 1, 2010, emission reductions achieved between January 1 and April 30 shall be averaged with emission reductions achieved between October 1 and December 31. Emissions shall be reduced by 70% from uncontrolled actual emissions, calculated as an average of the emission reduction achieved during the seven months covered by the two periods.

XII.D.2.a.(i)(c) For the period of May 1 through September 30, 2009, such emissions shall be reduced by 80% from uncontrolled actual emissions on a weekly basis.

XII.D.2.A.(ii) ALTERNATIVE EMISSIONS CONTROL EQUIPMENT AND POLLUTION PREVENTION DEVICES AND PROCESSES INSTALLED AND IMPLEMENTED AFTER JUNE 1, 2004 AND BEFORE FEBRUARY 1, 2009, SHALL QUALIFY AS AIR POLLUTION CONTROL EQUIPMENT, AND MAY BE USED IN LIEU OF, OR IN COMBINATION WITH, COMBUSTION DEVICES AND VAPOR RECOVERY UNITS TO ACHIEVE THE EMISSION REDUCTIONS REQUIRED BY THIS SECTION XII.D.2.A., IF THE FOLLOWING CONDITIONS ARE MET:

XII.D.2.A.(ii)(A) THE OWNER OR OPERATOR OBTAINS A CONSTRUCTION PERMIT AUTHORIZING SUCH USE OF THE ALTERNATIVE EMISSIONS CONTROL EQUIPMENT OR POLLUTION PREVENTION DEVICE OR PROCESS. THE PROPOSAL FOR SUCH EQUIPMENT, DEVICE OR PROCESS SHALL COMPLY WITH ALL REGULATORY PROVISIONS FOR CONSTRUCTION PERMIT APPLICATIONS AND SHALL INCLUDE THE FOLLOWING:

XII.D.2.a.(ii)(a)(i) A description of the equipment, device or process;

XII.D.2.a.(ii)(a)(ii) A description of where, when and how the equipment, device or process will be used;

XII.D.2.a.(ii)(a)(ii) The claimed control efficiency and supporting documentation adequate to demonstrate such control efficiency;

XII.D.2.a.(ii)(a)(iii) An adequate method for measuring actual control efficiency; and

XII.D.2.a.(ii)(a)(iv) Description of the records and reports that will be generated to adequately track emission reductions and implementation and operation of the equipment, device or process, and a description of how such matters will be reflected in the spreadsheet and annual report required by Sections XII.F.4 and XII.F.5.

XII.D.2.A.(ii)(B) PUBLIC NOTICE OF THE APPLICATION IS PROVIDED PURSUANT TO REGULATION No. 3, PART B, SECTION III.C.4.

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XII.D.2.A.(ii)(c) EPA APPROVES THE PROPOSAL. THE DIVISION SHALL TRANSMIT A COPY OF THE PERMIT APPLICATION AND ANY OTHER MATERIALS PROVIDED BY THE APPLICANT, ALL PUBLIC COMMENTS, ALL DIVISION RESPONSES AND THE DIVISION'S PERMIT TO EPA REGION 8. IF EPA FAILS TO APPROVE OR DISAPPROVE THE PROPOSAL WITHIN 45 DAYS OF RECEIPT OF THESE MATERIALS, EPA SHALL BE DEEMED TO HAVE APPROVED THE PROPOSAL.

### XII.D.2.B. EMISSION THRESHOLD CONTROL STRATEGY (PHASED IN BEGINNING MAY 1, 2010)

XII.D.2.B.(i) FOR EXISTING CONTROLLED TANKS EQUIPPED WITH CONTROLS IN ORDER TO COMPLY WITH THE SYSTEM-WIDE CONTROL REQUIREMENTS OF SECTION XII.D.2.A. AS OF APRIL 30, 2010, SHALL CONTINUE TO OPERATE SUCH CONTROLS AND BECOME SUBJECT TO THIS EMISSION THRESHOLD CONTROL STRATEGY, SUBJECT TO 98% CONTROL REQUIREMENTS PER TANK BASED ON A ROLLING TWELVE-MONTH TOTAL BASIS, AND ASSOCIATED MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS OF SECTIONS XII.E. AND F.

XII.D.2.B.(ii) For EXISTING UNCONTROLLED TANKS HAVING ACTUAL EMISSIONS EQUAL TO OR GREATER THAN 10 TONS PER YEAR ON A ROLLING TWELVE-MONTH TOTAL BASIS, SUCH EMISSIONS SHALL BE REDUCED BY 98% FROM UNCONTROLLED ACTUAL EMISSIONS BY May 1, 2010.

XII.D.2.B.(iii) For EXISTING UNCONTROLLED TANKS HAVING ACTUAL EMISSIONS EQUAL TO OR GREATER THAN 5 TONS PER YEAR ON A ROLLING TWELVE-MONTH TOTAL BASIS, SUCH EMISSIONS SHALL BE REDUCED BY 98% FROM UNCONTROLLED ACTUAL EMISSIONS BY MAY 1, 2011.

XII.D.2.B.(iv) For EXISTING UNCONTROLLED TANKS HAVING ACTUAL EMISSIONS EQUAL TO OR GREATER THAN 2 TONS PER YEAR ON A ROLLING TWELVE-MONTH TOTAL BASIS, SUCH EMISSIONS SHALL BE REDUCED BY 98% FROM UNCONTROLLED ACTUAL EMISSIONS BY MAY 1, 2012.

XII.D.3. EACH COMBUSTION DEVICE AND VAPOR RECOVERY UNIT USED TO COMPLY WITH SECTION XII.D. SHALL HAVE A CONTROL EFFICIENCY OF AT LEAST 98% FOR VOCs. THIS 98% CONTROL REQUIREMENTN ALLOWS FOR 100 HOURS OF DOWNTIME.

### XII.E. Monitoring

The owner or operator of any condensate storage tank that is being controlled pursuant to Section XII.D. shall inspect or monitor the air pollution control equipment at least weekly to ensure that it is operating PROPERLY. The inspection shall include the following:

XII.E.1. NEW AND MODIFIED TANKS SUBJECT TO SECTION XII.D.1.A. SHALL INSTALL AND OPERATE AN AUTO-IGNITOR UPON START-UP AND CHECK THAT THE AUTO-IGNITER IS PROPERLY FUNCTIONING BY EITHER VISIBLE OBSERVATION OR OTHER MEANS APPROVED BY THE DIVISION.

XII.E.2. TANKS SUBJECT TO THE SYSTEM-WIDE CONTROL STRATEGY UNDER SECTION XII.D.2.A. THAT HAVE INSTALLED combustion devices SHALL check that the pilot light is lit by either visible observation or other means approved by the DIVISION AND CHECK THAT THE VALVES FOR PIPING OF GAS TO THE PILOT LIGHT ARE OPEN. For devices equipped with an auto-igniter that do not have a pilot light, check that the auto-igniter is properly functioning;

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XII.E.3. TANKS SUBJECT TO THE EMISSION THRESHOLD CONTROL STRATEGY UNDER SECTION XII.E.3.A. THAT HAVE INSTALLED COMBUSTION DEVICES, SHALL:

XII.E.3.B. INSTALL AND OPERATE AN AUTO-IGNITOR AND ELECTRONIC SURVEILLANCE SYSTEM BY THE APPLICABLE EMISSIONS CONTROL COMPLIANCE DATE IDENTIFIED IN SECTION XII.D.2.B.; AND

XII.E.3.C. CHECK THAT THE AUTO-IGNITER AND THE ELECTRONIC SURVEILLANCE SYSTEM ARE PROPERLY FUNCTIONING BY EITHER VISIBLE OBSERVATION OR OTHER MEANS APPROVED BY THE DIVISION.

XII.E.4. ALL TANKS SUBJECT TO SECTION XII.D. SHALL COMPLY WITH THE FOLLOWING:

XII.E.4.A. For combustion devices, visually check for **AND DOCUMENT** the presence or absence of smoke;

XII.E.4.B. For vapor recovery units, check that the unit is operating and that vapors from the condensate tank are being routed to the unit;

XII.E.4.C. For all control devices, check that the valves for the piping from the condensate tank to the air pollution control equipment are open;

XII.E.4.D. For all condensate tanks, check that the thief hatch is closed and latched.

## XII.F. Recordkeeping AND REPORTING

THE OWNER OR OPERATOR OF ANY CONDENSATE STORAGE TANK THAT IS BEING CONTROLLED PURSUANT TO SECTION XII.D. SHALL MAINTAIN RECORDS AND SUBMIT REPORTS TO THE DIVISION, AS FOLLOWS:

XII.F.1. THE AIRS NUMBER ASSIGNED BY THE DIVISION SHALL BE MARKED ON ALL CONDENSATE STORAGE TANKS REQUIRED TO FILE AN APEN.

XII.F.2. IF AIR POLLUTION CONTROL EQUIPMENT IS REQUIRED TO COMPLY WITH SECTION XII.D. VISIBLE SIGNAGE SHALL BE LOCATED WITH THE CONTROL EQUIPMENT IDENTIFYING THE AIRS NUMBER FOR EACH CONDENSATE STORAGE TANK THAT IS BEING CONTROLLED BY THAT EQUIPMENT.

XII.F.3. TANKS SUBJECT TO THE 90-DAY CONTROL REQUIREMENT OF SECTION XII.D.1. SHALL TRACK THE REDUCTIONS IN EMISSIONS ON A WEEKLY BASIS AND MAINTAIN INSPECTION RECORDS REQUIRED PURSUANT TO SECTION XII.E. AND E.1.

XII.F.4. RECORDKEEPING FOR TANKS SUBJECT TO THE SYSTEM-WIDE CONTROL STRATEGY UNDER SECTION XII.D.2

BETWEEN May 1 and September 30 of each year, the owner or operator shall, at all times, TRACK THE REDUCTIONS IN EMISSIONS OF VOCs ON A WEEKLY BASIS, BY MAINTAINING A SPREADSHEET describing the affected operations, the air pollution control equipment being used, and the emission reductions achieved, as follows:

XII.F.4.A. THE SPREADSHEET SHALL LIST ALL CONDENSATE STORAGE TANKS SUBJECT TO THIS SECTION XII BY NAME AND AIRS NUMBER, AND SHALL LIST THE PRODUCTION VOLUMES FOR EACH TANK. THE SPREADSHEET SHALL LIST THE MOST RECENT MEASUREMENT OF SUCH PRODUCTION AT EACH TANK, AND THE TIME PERIOD COVERED BY SUCH MEASUREMENT OF PRODUCTION.

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- XII.F.4.B. THE SPREADSHEET SHALL LIST THE EMISSION FACTOR USED FOR EACH TANK. THE EMISSION FACTORS SHALL COMPLY WITH SECTION XII.C.3.
- XII.F.4.C. THE SPREADSHEET SHALL LIST THE LOCATION AND CONTROL EFFICIENCY VALUE FOR EACH UNIT OF AIR POLLUTION CONTROL EQUIPMENT, AND SHALL IDENTIFY THE TANKS BEING CONTROLLED BY EACH BY NAME AND AIRS NUMBER.
- XII.F.4.D. The spreadsheet shall list the production volume for each tank, expressed as a weekly average based on the most recent measurement available. The weekly average shall be calculated by averaging the most recent measurement of such production, which may be the amount shown on the receipt from the refinery purchaser for delivery of condensate from such tank, over the time such delivered condensate was collected. The weekly average from the most recent measurement will be used to estimate weekly volumes of controlled and uncontrolled actual emissions for all weeks following the measurement until the next measurement is taken.
- XII.F.4.E. The spreadsheet shall show the weekly uncontrolled actual emissions and the weekly controlled actual emissions for each tank.
- XII.F.4.F. The spreadsheet shall show the total weekly uncontrolled actual emissions and the total daily controlled actual emissions PER INDIVIDUAL SUBJECT TANK.
- XII.F.4.G. The spreadsheet shall show the total daily percentage reduction of emissions.
- XII.F.4.H. The spreadsheet shall note any shutdown of air pollution control equipment, and shall account for such shutdown in the weekly emission reduction totals. The notations shall include the date, time and duration of any scheduled shutdown. For any unscheduled shutdown, the spreadsheet shall record the date and time the shutdown was discovered and the date and time the air pollution control equipment was last observed to be operating.
- XII.F.4.I. The spreadsheet shall be maintained in a manner approved by the DIVISION and shall include any other information requested by the DIVISION that is reasonably necessary to determine compliance with this SECTION XII of the regulation.
- XII.F.4.J. An up-to-date spreadsheet shall be promptly provided by e-mail or fax to the Division upon its request. The U.S. mail may also be used if acceptable to the DIVISION.
- XII.F.4.K. Failure to properly install, operate, and maintain air pollution control equipment at the locations indicated in the spreadsheet shall be a violation of this regulation.
- XII.F.4.L. A copy of each weekly spreadsheet shall be retained for three years. A spreadsheet may apply to more than one week if there are no changes in any of the required data and the spreadsheet clearly identifies the weeks it covers. The spreadsheet may be retained electronically, however, any



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loss of data may be treated by the DIVISION as if the data were not collected.

XII.F.4.M. In addition to the spreadsheet, each owner or operator shall maintain records of the inspections required pursuant to Section XII.E. These records shall include the time and date of the inspection, the person conducting the inspection, a notation that each of the checks required under Section XII.E. were completed, a description of any problems observed during the inspection, AND DESCRIPTION AND DATE OF ANY CORRECTIVE ACTIONS TAKEN.

### XII.F.5. RECORDKEEPING FOR TANKS SUBJECT TO THE THRESHOLD CONTROL STRATEGY UNDER SECTION XII.D.2.B.

XII.F.5.A. BEGINNING FEBRUARY 1, 2009, EACH OWNER OR OPERATOR SHALL, AT ALL TIMES, TRACK ACTUAL UNCONTROLLED AND CONTROLLED EMISSIONS OF VOCs ON A ROLLING 12-MONTH TOTAL BASIS. IN ADDITION, RECORDS SHALL BE MAINTAINED OF ANY SHUTDOWN OR MALFUNCTION OF AIR POLLUTION CONTROL EQUIPMENT, AND THE EMISSIONS ESTIMATES SHALL ACCOUNT FOR SUCH SHUTDOWN OR MALFUNCTION IF THE WELL WAS PRODUCING. THE NOTATIONS SHALL INCLUDE THE DATE, TIME AND DURATION OF ANY SCHEDULED SHUTDOWN. FOR ANY UNSCHEDULED SHUTDOWN OR MALFUNCTION, RECORDS SHALL BE MAINTAINED OF THE DATE AND TIME THE SHUTDOWN OR MALFUNCTION WAS DISCOVERED, THE DATE AND TIME THE AIR POLLUTION CONTROL EQUIPMENT WAS LAST OBSERVED TO BE OPERATING, AND WHETHER OR NOT THE WELL WAS PRODUCING FOR THE DURATION OF THE SHUTDOWN OR MALFUNCTION.

XII.F.5.B. FAILURE TO PROPERLY INSTALL, OPERATE, AND MAINTAIN AIR POLLUTION CONTROL EQUIPMENT AT THE LOCATIONS INDICATED IN THE SPREADSHEET SHALL BE A VIOLATION OF THIS REGULATION.

XII.F.5.C. IN ADDITION, EACH OWNER OR OPERATOR SHALL MAINTAIN RECORDS OF THE:

XII.F.5.C.(i) MONITORING RELATED INSPECTIONS REQUIRED PURSUANT TO SECTION XII.E. SHALL INCLUDE THE TIME AND DATE OF THE INSPECTION, THE PERSON CONDUCTING THE INSPECTION, A NOTATION THAT EACH OF THE CHECKS REQUIRED UNDER SECTION XII.E. WERE COMPLETED, A DESCRIPTION OF ANY PROBLEMS OBSERVED DURING THE INSPECTION, DESCRIPTION AND DATE OF ANY CORRECTIVE ACTIONS TAKEN;

XII.F.5.C.(ii) DATE AND DURATION OF ANY WELL DRILLING, RECOMPLETION, REFRACTURING OR STIMULATION;

XII.F.5.C.(iii) DETERMINATIONS REGARDING CONTROL EQUIPMENT APPLICABILITY; AND

XII.F.5.C.(iv) DATE, TIME, AND DURATION OF ANY SHUTDOWN OF AIR POLLUTION CONTROL EQUIPMENT.

XII.F.5.D. A COPY OF THESE RECORDS SHALL BE RETAINED FOR THREE YEARS. THE RECORDS MAY BE RETAINED ELECTRONICALLY, HOWEVER, ANY LOSS OF DATA MAY BE TREATED BY THE DIVISION AS IF THE DATA WERE NOT COLLECTED.

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### XII.F.6. REPORTING FOR TANKS SUBJECT TO THE SYSTEM-WIDE CONTROL STRATEGY UNDER SECTION XII.D.2.A.

XII.F.6.A. On or before April 30, 2006, and semi-annually by April 30 and November 30 of each year thereafter, each owner or operator shall submit a report describing the air pollution control equipment used during the preceding calendar year (for the April 30 report) and during the preceding ozone season (for the November 30 report) and how it complied with the emission reductions required by SECTION XII.D. during those periods. Such reports shall be submitted to the DIVISION on a form provided by the DIVISION for that purpose.

XII.F.6.A.(i) The report shall list all condensate storage tanks subject to this SECTION XII and the production volumes for each tank, which amounts may be the amounts shown on the receipt from the refinery purchasers for delivery of condensate from such tanks.

XII.F.6.A.(ii) The report shall list the emission factor used for each tank. The emission factors shall comply with SECTION XII.C.3.

XII.F.6.A.(iii) The report shall list the location and control efficiency value for each unit of air pollution control equipment, and shall identify the tanks being controlled by each.

XII.F.6.A.(iv) The April 30 report shall show the uncontrolled actual emissions and the controlled actual emissions for each tank for January 1 through April 30, May 1 through September 30 and October 1 through December 31 of the previous year. The November 30 report shall show such information for the May 1 through September 30 period only.

XII.F.6.A.(v) The April 30 report shall show the total percentage reduction of emissions PER INDIVIDUAL SUBJECT TANK for May 1 through September 30 of the previous year, and for the combined periods of January 1 through April 30 and October 1 through December 31 of the previous year. The November 30 report shall show such information for the May 1 through September 30 period only.

XII.F.6.A.(vi) The report shall note any shutdown of air pollution control equipment and shall account for such shutdown in the emission reduction totals. The notations shall include the date, time and duration of any scheduled shutdown. For any unscheduled shutdown, the date and time the shutdown was discovered, the last date the air pollution control equipment was observed to be operating and the date the source believes the shutdown occurred, including the basis for such belief, shall be recorded in the report.

XII.F.6.A.(vii) The report shall state whether the required emission reductions were achieved during the preceding year or preceding ozone season for the November 30 report, and whether the required emission reductions were achieved on a weekly basis during the preceding ozone season (May 1 through September 30). If the required emission reductions were not achieved, the

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report shall state why not, and shall identify steps being taken to ensure subsequent compliance.

XII.F.6.A.(viii) The report shall include any other information requested by the DIVISION that is reasonably necessary to determine compliance with this SECTION of the regulation.

XII.F.6.A.(ix) A copy of each semi-annual report shall be retained for three years.

XII.F.6.A.(x) In addition to submitting the semi-annual reports, on or before the 30<sup>th</sup> of each month commencing in June 2007, the owner or operator of any condensate storage tank that is required to control volatile organic compound emissions pursuant to SECTION XII.D. shall notify the DIVISION of any instances where the air pollution control equipment was not properly functioning during the previous month. The report shall include the time and date that the equipment was not properly operating, the time and date that the equipment was last observed operating properly, and the date and time that the problem was corrected. The report shall also include the specific nature of the problem, the specific steps taken to correct the problem, the AIRS number of each of the condensate tanks being controlled by the equipment and the estimated production from those tanks during the period of non-operation.

XII.F.6.A.(xi) Commencing in 2007, on or before April 30 of each year, the owner or operator shall submit a list identifying by name and AIRS number each condensate storage tank that is being controlled to meet the requirements set forth in this SECTION XII.D. On the 30<sup>th</sup> of each month during ozone season (May through September) and on November 30 and February 28, the owner or operator shall submit a list identifying any condensate storage tank whose control status has changed since submission of the previous list.

### XII.F.7. REPORTING FOR TANKS SUBJECT TO THE EMISSION-THRESHOLD CONTROL STRATEGY UNDER SECTION XII.D.2.B.,

BEGINNING FEBRUARY 1, 2009, EACH OWNER OR OPERATOR SHALL SUBMIT A REPORT ANNUALLY INCLUDING THE INFORMATION AS FOLLOWS:

XII.F.7.A. DATE AND DURATION OF WELL DRILLING, RECOMPLETION, REFRACTURING OR STIMULATION;

XII.F.7.B. DETERMINATIONS REGARDING CONTROL REQUIREMENT APPLICABILITY; AND

XII.F.7.c. Date, time, and duration of any shutdown of air pollution control equipment. XII.F.9. The record-keeping and reporting required in Section XII.F. shall not apply to the owner or operator of any natural gas compressor station or natural gas drip station that is authorized to operate pursuant to a construction permit or Title V operating permit issued by the Division if the following criteria are met:

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XII.F.7.c.(i) Such permits are obtained by the owner or operator on or after the effective date of this provision and contain the provisions necessary to ensure the emissions reductions required by Section XII.D.;

XII.F.7.c.(ii) Owners and operators of such natural gas compressor stations or natural gas drip stations do not own or operate any exploration and production operation(s); and

XII.F.7.c.(iii) Total emissions from atmospheric condensate storage tanks associated with such natural gas compressor stations or drip stations **HAVING UNCONTROLLED ACTUAL EMISSIONS OF GREATER THAN OR EQUAL TO TWO TONS PER YEAR**, owned or operated by the same person do not exceed 30 tons per year in an ozone non-attainment area.

XII.G. Gas-processing plants located in an ozone non-attainment area shall comply with requirements of this SECTION XII.G , as well as the requirements of SECTIONS XII.H. and XVI.

XII.G.1 For fugitive VOC emissions from leaking equipment, the leak detection and repair (LDAR) program as provided at 40 C.F.R. Part 60, Subpart KKK (SEE Regulation No. 6, Part A, Subpart KKK) shall apply, regardless of the date of construction of the affected facility.

XII.G.2. Air pollution control equipment shall be installed and properly operated to reduce emissions of volatile organic compounds from any atmospheric condensate storage tank (or tank battery) used to store condensate that has not been stabilized and **THAT HAS UNCONTROLLED ACTUAL EMISSIONS OF GREATER THAN OR EQUAL TO TWO TONS PER YEAR**. Such air pollution control equipment shall have a control efficiency of at least 95%.

XII.G.3. Existing natural gas processing plants within AN OZONE NON-ATTAINMENT AREA shall comply with the requirements of this SECTION XII.G. by May 1, 2005.

XII.G.4. The provisions of this SECTION XII.G., and SECTIONS XII.H., and XVI, shall apply upon the commencement of operations to any natural gas processing plant that commences operation in AN OZONE NON-ATTAINMENT AREA after the effective date of this SECTION.

XII.H. On or after May 1, 2005, any still vent and vent from any gas-condensate-glycol (GCG) separator (flash separator or flash tank), if present, on a glycol natural gas dehydrator located at an oil and gas exploration and production operation, natural gas compressor station, drip station or gas-processing plant in AN OZONE NON-ATTAINMENT AREA shall reduce uncontrolled actual emissions of volatile organic compounds by at least 90 percent through the use of a condenser or air pollution control equipment. This SECTION XII.H. shall not apply to any single natural gas dehydrator, or grouping of dehydrators at an oil and gas exploration and production operation, natural gas compressor station, drip station or gas-processing plant, with uncontrolled actual emissions of volatile organic compounds of less than 15 tons per year. The control requirement in this SECTION XII.H. shall not apply to a natural gas dehydrator with **ACTUAL UNCONTROLLED emissions below TWO TONS PER YEAR**, that is part of a grouping of dehydrators, but the emissions from such dehydrator shall be included in the calculation used to determine whether the grouping of dehydrators exceeds the 15 tons per year threshold.

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