IN THE MATTER OF COMPLIANCE WITH RCW 70A.15 AND THE GENERAL REGULATIONS FOR AIR POLUTION SOURCES OF THE SOUTHWEST CLEAN AIR AGENCY	SWCAA 24-3659 REGULATORY ORDER CONSENT ORDER
LANXESS Corporation RESPONDENT Kalama, WA	

BACKGROUND

1. LANXESS Corporation (LANXESS) operates a synthetic organic chemical manufacturing facility of specialty and fine chemicals located at 1296 NW Third Street in Kalama, Washington. This facility's operations are regulated by the provisions of SWCAA Air Discharge Permit 13-3041 and Title V Air Operating Permit SW99-10-R1A.
2. On August 14, 2024, LANXESS notified the Southwest Clean Air Agency (SWCAA) of their intention to conduct a planned plant-wide shutdown, which generally occurs annually, from September 9, 2024, through October 2, 2024.
3. Under normal circumstances, the headspaces of Tank T-70, Tank T-71, and Tank T-42, saturated with toluene vapor, are vented through the Vent Header System (VHS) to carbon beds and regenerative thermal oxidizers for final control of toluene and volatile organic compounds (VOCs). Tank T-70 and Tank T-71 are equipped with glycol chillers to reduce the toluene concentration on the vapor, prior to venting to the VHS. Vapor is sent to the VHS if the headspace pressure exceeds +0.8 inch of water volume (iwc) and the D-PAD valve opens. The tanks are also equipped with pressure/vacuum valves (PVVs) that open

if the headspace pressure exceeds +1.8 iwc and emergency safety valves that open if the headspace pressure exceeds +2.5 iwc. During the shutdown, LANXESS will be maintaining a minimum tank headspace pressure of +0.5 iwc by introducing nitrogen.

4. Due to the shutdown, the carbon beds and regenerative thermal oxidizers will not be in operation and therefore, there will be no flow through the VHS. Under these circumstances without an alternate means of control, it is expected that the PVVs will open periodically to relieve tank pressure due to temperature changes and vapor growth from nitrogen padding, leading to excess emissions.

5. LANXESS proposes to install and operate a temporary horizontal portable emission control system (PECS) for the purposes of controlling toluene vapors and avoiding violations due to excess emissions under the Air Discharge Permit and Title V Air Operating Permit during the shutdown.

6. The PECS is a John Zink Hamworthy portable, trailer-mounted unit rated at 41 million British Thermal Units (MMBtu) per hour heat capacity. It has an operating temperature of 500 to 1,800 °F and a retention time of greater than 1 second. It is expected to produce emissions of nitrogen oxides (NO_X) at 0.15 lb/MMBtu, carbon monoxide (CO) at 0.20 lb/MMBtu and have at least a 98% reduction in total hydrocarbon vapor emissions, including toluene and other VOCs.

7. The PECS will be connected upstream of the carbon beds and induce a flow using a variable speed process vapor blower, which will be used to pull a vacuum on the VHS. This flow would, in the case where the D-PAD valve is open, draw toluene saturated vapor to the PECS, where those vapors will be controlled through controlled combustion with pipeline natural gas.

8. During the shutdown, only the vapors from the headspaces of the toluene tanks will be controlled by the PECS, and all other potential source of emissions connected to the VHS will be valved off or otherwise isolated from the system.

APPLICABLE REGULATIONS

9. The purpose of this Regulatory Order - Consent Order is to set forth and establish operating parameters and monitoring, reporting, and recordkeeping requirements applicable to the PECS, a temporary air pollution source operated by LANXESS.

10. Pursuant to the United States Clean Air Act under 42 U.S.C. 7401 *et seq*. and the Washington Clean Air Act under Chapter 70A.15 Revised Code of Washington (RCW), SWCAA has adopted regulations for the control of air contaminant emissions.

11. In conformance with RCW 70A.15, the policy and purpose of SWCAA is to control and regulate the emission of air contaminants from sources within the jurisdiction of SWCAA, to prevent violations of federal, state, and local air pollution regulations, to provide uniform administration and enforcement of the aforementioned regulations, and to effectuate the requirements and purpose of RCW 70A.15.

12. RCW 70A.15.1070 prohibits any person from causing or permitting air pollution in violation of RCW 70A.15 or any ordinance. resolution, rule or regulation promulgated pursuant to RCW 70A.15.

13. RCW 70A.15.2040 provides SWCAA the authority to issue such orders as may be necessary to effectuate the purpose of RCW 70A.15 and enforce the same by all appropriate administrative and judicial proceedings.

14. SWCAA 400, General Regulations for Air Pollution Sources, which was promulgated pursuant to RCW 70A.15, provides for the control of air contaminants from all new,

modified, and existing emission units in Clark, Cowlitz, Lewis. Skamania and Wahkiakum Counties in the state of Washington.

15. SWCAA 400-230, Regulatory Actions, provides SWCAA the ability to take actions to enforce its regulations to meet the provisions of RCW 43.21B.300 including the penalty provisions of RCW 70A.15.3150 and RCW 70A.15.3160.

16. SWCAA 400-230(1)(e), Consent Order, provides SWCAA the ability to issue a Consent Order to establish a schedule for activities and necessary steps to achieve compliance with applicable regulations.

SPECIFIC REQUIREMENTS

NOW HAVING CONSIDERED THIS MATTER AND BEING DULY ADVISED, IT IS HEREBY ORDERED:

17. THAT, this Consent Order will take effect upon signature by an authorized representative of LANXESS and will be effective until **October 12, 2024**, after which it will expire and be of no further force or effect and authorization to operate the PECS will discontinue, unless altered by mutual agreement by SWCAA and LANXESS.

18. THAT, LANXESS must install the PECS, as proposed, and in accordance with manufacturer's specifications. The PECS must be installed at a location downstream of Tank T-70, Tank T-71, and Tank T-42 where the emissions from the tank headspaces combine and upstream of the carbon beds.

19. THAT, LANXESS must operate the PECS, as proposed, and in accordance with the manufacturer's specifications. In addition, LANXESS must:

    (a) Operate the PECS on natural gas and pad gas from the toluene tanks, only;

    (b) Maintain the operating temperature at a minimum of 1,400 °F, as a 1-hour average;

(c) Maintain a sufficient flow through the PECS when the D-PAD vent is open to provide adequate combustion and maintenance of the minimum operating temperature;

(d) If the D-PAD vent is closed and there is no flow from the VHS to the PECS, provide an alternate means to provide adequate combustion and maintenance of the minimum operating temperature;

(e) Operate the PECS with a flame present at all times; and

(f) Operate the PECS such that visible emissions do not exceed zero percent (0%) for more than three (3) minutes in any 1-hour period as determined in accordance with SWCAA Method 9:

20. THAT, LANXESS must notify SWCAA:

(a) When the PECS is installed and begins operation;

(b) Whenever the VHS is not being controlled by the PECS;

(c) Whenever the PVVs of Tank T-70, Tank T-71, or Tank T-42 open; and

(d) Whenever there is an upset or malfunction of the PECS or any system connected to it.

21. THAT, LANXESS must monitor and record the following:

(a) The headspace pressure for Tank T-70, Tank T-71, and Tank T-42, as a 5-minute average, at minimum.

(b) The glycol supply and return temperatures at X-70, each, continuously

(c) The status of the D-PAD valve, continuously

(d) The vapor flow rate, as a 1-hour average, continuously

(e) The PECS operating temperature, continuously

22. THAT, during each shift, while the PECS unit is operating normally, a brief qualitative observation must be performed to check for visible emissions. This observation should be made during daylight hours and only when the unit is in normal operation (i.e., not during startup, shutdown, or upset conditions).

(a) If no visible emissions are observed, then a record of the observations must be made, and no further action is necessary.

(b) If any visible emissions are observed, then LANXESS must:

(i) Take corrective action until no visible emissions are observed and verify compliance per 22(a)(iii);

(ii) Record all observations and corrective actions taken. If visible emissions cannot be reduced to zero or be verified to comply with the visible emissions limit within one (1) business day of discovery, then LANXESS must report the excess emissions, make a record, and take corrective actions until the unit can be demonstrated to comply with the limit and verify compliance per 22(a)(iii); and

(iii) When verifying compliance with the opacity limit after observation of visible emissions, LANXESS must take six (6) minutes of opacity readings, at minimum, in accordance with SWCAA Method 9.

23. THAT, if the PECS is taken offline while the D-PAD valve is open, for any reason, LANXESS must notify SWCAA and note the date and time that uncontrolled venting occurred. Under such circumstances, LANXESS must take all reasonable actions to minimize emissions until such time as the emissions can be controlled. SWCAA must be

notified after the PECS is brought back online and must note the date and time that the controls were reestablished.

24. THAT, LANXESS must submit to SWCAA with the October Title V deviation report, due November 30, 2024, and subsequently by no later than March 15, 2025, as part of the annual emissions inventory for the calendar year 2024, the sum of emissions for the PECS. This submission must include the total emissions of NO_X, CO, VOCs, particulate matter (10 microns or less), particulate matter (2.5 microns or less), sulfur dioxide, SWCAA toxic air pollutants, and federal hazardous air pollutants for the relevant operating period. The submission must also include all calculations, background data, and assumptions utilized in deriving the reported emissions.

GENERAL REQUIREMENTS

25. THAT, for the purpose of ensuring compliance with this Consent Order or any other applicable requirement, duly authorized representatives of SWCAA must be permitted access, pursuant to 42 U.S.C. 7414(a) and RCW 70A.15.2500, to the Facility's premises and all sources being constructed, owned, operated, and/or maintained thereon for the purpose of inspecting said facilities and to make or require such tests as may be deemed necessary for the purpose of determining the status of compliance with the terms of this Consent Order or any other applicable requirement.

26. THAT, the provisions, terms, and conditions of this Consent Order will be deemed binding upon, and inure to the benefit of, LANXESS, its officers, directors, agents, servants, employees, assigns, successive owners, and/or partners of the source, as well as all persons, firms, and corporations acting under or for the source.

27. THAT, this Consent Order does not supersede requirements of other agencies with jurisdiction and further, this Consent Order does not relieve LANXESS of any applicable requirements of any other governmental agency.

28. THAT, compliance with the terms of this Consent Order will not relieve LANXESS from the responsibility of compliance with the applicable provisions of:

(a) SWCAA 400;

(b) Any previously issued Regulatory Order (except as specifically amended or superseded by this Consent Order);

(c) RCW 70A.15;

(d) Title 173 Washington Administrative Code;

(e) Any other applicable emission control requirements; nor

(f) Any resulting liabilities and/or legal remedies for failure to comply.

29. THAT, if any provision of this Consent Order is held to be invalid, all unaffected provisions of this Consent Order will remain in effect and will be enforceable.

30. THAT, no change in this Consent Order will be made or be effective except as may be specifically set forth by written order of SWCAA upon written application by LANXESS for the relief sought.

31. THAT, the requirements of this Consent Order will survive any transfer of ownership of the Facility or any portion thereof.

32. THAT, SWCAA may, in accordance with RCW 70A.15 impose such conditions as are reasonably necessary to assure the maintenance of compliance with the terms of this Consent Order, RCW 70A.15, and the applicable rules and regulations adopted therein.

33. THAT, this Consent Order must be posted conspicuously at or near the PECS unit or be readily available upon request.

34. THAT, failure to comply with this Consent Order and applicable regulations may result in additional enforcement action and escalated civil penalties.

DATED on 8/29/2024

Authorized by: _____

Uri Papish, Executive Director

Southwest Clean Air Agency

LANXESS hereby accepts the foregoing Consent Order and agrees to abide by and be bound by the provisions, terms, and conditions contained therein.

DATED on Sept 3, 2024

Signed by: _____

Galen Hathcock, Site Director

LANXESS Corporation