

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

via email to tonya.klunder@Valero.com

July 18, 2023

Ms. Tonya Klunder, Health, Safety and Environmental Manager Valero Renewable Fuels - Welcome Plant 1444 120th St. Welcome, MN 56181

RE: Request for 40 CFR Part 60 Subpart NNN Applicability to Valero Renewable Fuels,

Welcome, Minnesota

Dear Ms. Klunder:

The U.S. Environmental Protection Agency has received and reviewed a letter, dated March 7, 2023, from Valero Renewable Fuels (Valero) – Welcome Plant located in Welcome, Minnesota (Facility). Your letter requests an applicability determination of 40 CFR part 60 subpart NNN (New Source Performance Standard for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations) for Valero's fuel ethanol plant in Welcome, Minnesota. For the reasons discussed below, EPA has determined that the subpart NNN rule does not apply to the current fuel production process at the Facility.

Background

The Standards of Performance for VOC Emissions From SOCMI Distillation Operations, 40 CFR part 60 subpart NNN, define applicability based on a distillation unit constructed, reconstructed, or modified after December 30, 1983, that "produces any of the chemical listed in Sec. 69.667 as a product, co-product, by-product, or intermediate...". 40 CFR Sec. 69.667 lists ethanol as one of the chemicals affected by subpart NNN.

Valero Renewable Fuel's Request

Valero's March 7, 2023, letter requests that EPA determine whether the fuel ethanol plant in Welcome, Minnesota is subject to NSPS subpart NNN. The letter states that since the ethanol plant ferments corn starch to produce fuel ethanol and that EPA background document 450/3-83-005a states that NSPS subpart NNN does not apply to chemicals totally produced by biological synthesis (which would include fermentation), that therefore NSPS NNN does not apply to the

Facility. Valero's request also provided several prior applicability determination response letters found in EPA's online Applicability Determination Index. All three of these past EPA determination letters state that NSPS subpart NNN does not apply to a facility that ferments corn to produce fuel grade ethanol.

Analysis

Valero's request concerns the applicability of 40 CFR part 60 subpart NNN to fuel ethanol production at the Facility. EPA is issuing this applicability determination in response to the request, relying on the information provided by Valero.

EPA document 450/3-83-005a, entitled "Distillation Operations in Synthetic Organic Chemical Manufacturing Industry – Background Information for Proposed Standards", published December 1983, discusses the scope of 40 CFR part 60 subpart NNN on page 8-23. "The scope of the distillation NSPS does not include polymers, coal tar distillation products, chemicals extracted from natural sources, or chemicals totally produced by biological synthesis". Ethanol is listed as a chemical affected by NSPS subpart NNN, however the EPA document 450/3-83-005a is background documentation created during the development of NSPS subpart NNN and indicates that the creation of ethanol by fermentation (biological synthesis) is excluded from the scope of NSPS subpart NNN. A search of EPA's online Applicability Determination Index found four previous EPA determination letters¹ which determined that ethanol facilities which use biological processes to ferment corn starch into fuel ethanol are exempt from NSPS subpart NNN.

Based on the information you have provided, the documentation summarized above, and consistent with the previous EPA determinations, we conclude and agree that NSPS subpart NNN does not apply to fuel ethanol production by fermentation at the Facility.

If you have any further questions, please contact Richard Angelbeck of my staff at (312) 886-6698.

Sincerely,

DOUGLAS ABURANO Digitally signed by DOUGLAS ABURANO Date: 2023.08.07 14:00:46 -05'00'

Douglas Aburano Manager Air Programs Branch

cc: Jared LaFave, P.E.

Supervisor, Air Quality Permits Section Minnesota Pollution Control Agency

¹ The four previous EPA applicability determination letters include: (1) 3/31/2004 letter from EPA Region 3 to Penn-Mar Ethanol, (2) 3/12/2004 letter from EPA Region 5 to Liquid Resources of Ohio, (3) 4/19/2001 EPA Region 5 letter to the Minnesota Pollution Control Agency regarding Al-Corn facility, (4) 12/6/2000 EPA Region 5 letter to the Minnesota Pollution Control Agency regarding several ethanol facilities.

Toni Volkmeier, P.E. Supervisor, Air Quality Permits Unit 3 Minnesota Pollution Control Agency

Meg Muramoto-Mathieu, P.E. Air Permit Engineer Minnesota Pollution Control Agency