UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

April 5, 2018

OFFICE OF
AIR AND RADIATION

Ms. LeAnn Johnson Koch
Perkins Coie
700 13th Street, NW
Suite 600
Washington, D.C. 20005-3960

Re: Limetree Bay Terminals, St. Croix, U.S. Virgin Islands – Permitting Questions

Dear Ms. Johnson Koch:

This is in response to your February 1, 2018, letter to the U.S. Environmental Protection Agency's (EPA) Region 2 Office, in which you sought EPA's concurrence on three New Source Review (NSR) permitting questions pertaining to the Limetree Bay Terminals (LBT) facility in St. Croix, U.S. Virgin Islands (USVI). In your letter, you specifically asked whether EPA concurs with LBT that:

> (1) restarting some of the idled refinery units as part of the "MARPOL Project"[1] (to produce fuel compliant with the maritime sulfur regulations taking effect January 2020) will not result in the facility being viewed as a new stationary source under EPA's current so-called Reactivation Policy;
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> (2) the MARPOL Project and another LBT project to produce Renewable Diesel Fuel are independent and should not be considered a single project for purposes of applicability under the Prevention of Significant Deterioration (PSD) regulations; and
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> (3) the addition of a deeper water loading configuration (Single Point Mooring or SPM) should be considered a modification to an existing emissions unit (i.e., the dock system and associated loading terminal) and not a new emissions unit for the PSD applicability analysis.

In addition to the foregoing inquiries, you previously sought EPA guidance regarding when emission decreases from a project can be considered within the NSR applicability analysis.

[1] MARPOL is the International Convention for the Prevention of Pollution from Ships.

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Based on EPA's review of your submitted analyses and supporting documents, we concur that: (1) restarting of the refinery's idled units for the MARPOL Project should not be treated as a new stationary source under the current Reactivation Policy; (2) the MARPOL Project and the Renewable Diesel Fuel Project are independent of each other and therefore separate projects for PSD applicability; and (3) constructing the SPM would be considered a modification to an existing emissions unit rather than a new emissions unit. Discussion on each of these issues is provided below, along with information to address your previous question regarding accounting of emission decreases within the NSR applicability analysis.

Restarting Refinery Units and the Current Reactivation Policy

The current policy on the reactivation of sources provides that a major stationary source that has been idled for 2 or more years is presumed to be permanently shut down. *See In the Matter of Monroe Electric Generating Plant Entergy Louisiana, Inc.*, Proposed Operating Permit, Petition No. 6-99-2 (June 11, 1999). That policy states that if a source is permanently shut down, upon reactivation it is considered a "new" stationary source for purposes of PSD review. Accordingly, PSD applicability would be based on the reactivated source's potential to emit.

Importantly, however, this 2-year presumption is rebuttable. EPA will not consider the shutdown to have been permanent upon the owner or operator of the source making a demonstration that, at the time of the shutdown, and continuously throughout the shutdown period, they intended to restart the facility. Among the factors that EPA in the past has considered in evaluating the owner or operator's intent are:

- Length of time the facility has been shut down and concrete plans for restart;
- Statements by the owner or operator of intent;
- The cause of the shutdown;
- Status of permits, including but not limited to Clean Air Act operating permits, acid rain permits and other required permits, and emission inventory;
- Maintenance and inspections during shutdown; and
- Time and capital needed to restart.

In evaluating these factors, no single factor is likely to be conclusive in determining intent. Instead, EPA generally has considered the totality of all such factors and the relevant supporting documentation in evaluating whether there was a continuous intent to restart the facility.[2]

In the case of LBT's facility in St. Croix, our review of the information you have submitted leads us to conclude that both LBT and HOVENSA displayed a continuous intent to restart the refinery operations. Therefore, applying the criteria of the current Reactivation Policy, we have determined that LBT's St. Croix facility was not permanently shut down and should not be considered a "new source" for purposes of PSD applicability.

[2] As this description indicates, the current Reactivation Policy has been derived from a series of EPA site-specific determinations and guidance issued over the course of many years. Further, EPA has not cited any specific regulatory provisions of the NSR program to support its position on source "reactivation." We are applying the current Reactivation Policy to resolve the LBT issue, but we intend to reconsider the policy in the near future.

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LBT's facility in St. Croix was previously owned by HOVENSA until 2016, at which time LBT purchased the refinery and terminal operations. As LBT explains, an economic downturn caused HOVENSA to idle the refinery operations in 2012. Nevertheless, since that time, the terminal operations, wastewater treatment plant, and power generation have continued to operate at this location. Even before HOVENSA announced, on February 21, 2012, that it had completed the final idling of all refinery units, HOVENSA had informed the USVI government of its plans to retain its permits and implement maintenance procedures on their equipment so that it could restart the refinery. LBT represents that over the next several years, HOVENSA spent over $400 million to maintain the restart capability of the refinery operations, which included removing residual material from equipment, retaining control room operability, and conducting other process equipment mothballing activities.

LBT provided EPA with a timeline and supporting information that included evidence of this continuous intent by HOVENSA and LBT to restart the facility. The supporting information included company statements, press releases, and various correspondence from 2011 through 2017. LBT also confirmed that HOVENSA and LBT maintained all environmental permits in active status and submitted timely renewal applications. Further, LBT stated that these companies continued to comply with the Refinery MACT, NSPS Subpart J, and all of the applicable RCRA regulations while the refinery units were idled. LBT represents that the companies maintained critical refinery equipment, such as compressors, pumps, utilities, wastewater treatment units in working order and conducted multiple walkthrough inspections at the plant, activities that are necessary for a restart. In order to demonstrate that the maintenance activities were performed, LBT provided a list of critical equipment and the timeline of significant maintenance activities performed at the refinery. LBT also represents that neither it nor HOVENSA made any statements to any party or issued any press release indicating any intent *not* to restart the plant in the future.

Project Aggregation – Renewable Diesel Project and Refinery Restart (MARPOL Project)

The term "project aggregation" describes the process of grouping "nominally separate changes that are sufficiently related based on established criteria … into a single common project for the purpose of determining PSD applicability."[3] More specifically, the emissions of the nominally separate changes are combined for the purposes of determining whether a "significant emissions increase" – referred to as "Step 1" of the NSR applicability test – will occur from the project. EPA's project aggregation policy aims to ensure the proper permitting of modifications that involve multiple physical and/or operational changes. Where the projects at issue are more reasonably deemed to constitute a single project for purposes of NSR, a source will not be allowed to circumvent major NSR by seeking to permit the individual activities separately under minor source NSR.

[3] Letter from Stephen Page, Director, Office of Air Quality Planning and Standards, to David Isaacs, Vice President, Government Policy, Semiconductor Industry Association (August 26, 2011). (SIA Letter)

LBT plans to construct the Renewable Diesel Project and the MARPOL Project at the current plant site in late 2018. Given that these projects will begin close in time to one another, LBT has sought EPA's concurrence that these projects should not be aggregated (i.e., considered to be a single project) for the purposes of the PSD applicability analyses. LBT representatives have been clear in statements to EPA that, while they are pursuing the Renewable Diesel Project and the MARPOL projects concurrently, they are separate and distinct projects. Based upon EPA's review of all the information LBT provided, we concur that the two projects are independent of each other and, therefore, should not be aggregated for purposes of PSD applicability.

In analyzing whether the two LBT projects at issue here should be aggregated, we have followed our current policy on project aggregation, which takes into account indicia of relatedness among the individual actions at a source in order to determine whether the activities, in the aggregate, are one physical or operational change as those terms are used in the statute and regulations.[4] Our policy on aggregation outlines an approach relying upon case-specific factors (*e.g.*, timing, funding, and the company's own records) and the relationship between nominally separate changes.

As explained in your letter, the MARPOL Project involves restarting certain existing refinery units to process crude oil, heavy fuel oil, and petroleum intermediates into refined petroleum products. This project will involve restarting a crude unit, a reformer, two naphtha hydrotreating units, a coker unit, two distillate hydrotreating units, an isomerization unit, and two sulfur recovery plants. These units will be configured to produce low-sulfur fuels (i.e., gasoline, diesel, and fuel oil) and are scheduled to begin operation just before January 2020, when the relevant MARPOL amendments and EPA implementing regulations take effect. LBT represents that the economic viability of the MARPOL Project depends on the value generated from converting petroleum crude into refined petroleum products and market advantages that may exist due to an anticipated market shortfall of MARPOL-compliant marine fuel in 2020.

Your letter explains that the proposed Renewable Diesel project will convert vegetable, animal, and recycled cooking oils into renewable diesel fuel. This project involves building a feedstock pretreatment train and a new hydrogen unit to convert the oils into diesel compounds, and repurposing an existing hydrotreating unit (previously used for the hydrotreating of petroleum liquids) as the reactor for the conversion. LBT represents that the Renewable Diesel Project will produce fuel meeting the requirements of the Renewable Fuel Standard (RFS) and California's Low Carbon Fuel Standard (LCFS) programs, and that the fuel could be blended with transportation fuel sold in the United States to generate Renewable Identification Numbers (RINs) under the RFS as well as LCFS credits. Further, LBT suggests that the renewable diesel fuel may be eligible for a federal blender's tax credit. According to LBT, the economic viability of the Renewable Diesel Project depends heavily on the future value of converting vegetable, animal, and recycled cooking oils into renewable fuel, as well as the value of RINs, LCFS, and other tax credits. Significantly, none of these factors relate to the MARPOL project.

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[4] While EPA issued a revised policy on project aggregation in 2009, the policy has been stayed and is currently under reconsideration by the Agency. *See* 74 FR 2376 (January 15, 2009), 74 FR 7193 (Feb. 13, 2009), 75 FR 27643 (May 18, 2010). *See* 75 FR 19570-71 (April 15, 2010) for a collection of memoranda that provide examples of EPA's current approach to project aggregation.

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LBT has shown that each of these two projects is technically distinct and does not depend on the other in terms of decision-making and timing, interaction between units, the process technologies used, feedstocks involved, or products produced. LBT stated that the MARPOL Project will be fully self-contained as the selected units are inspected, reconditioned as needed, and restarted. More specifically, LBT maintains that the raw materials, piping, process equipment, and material transfer systems for each project will be completely unshared and independent of the other project. LBT represents that the construction of one project does not necessitate or otherwise influence the construction of the other project.

LBT has demonstrated to our satisfaction that the economic viability of each project stands on its own, such that the Renewable Diesel Project could proceed on its own financial merits, regardless of the future of the MARPOL Project, and vice versa. In particular, LBT noted the unique opportunity presented to timely and economically reconfigure the idled hydrotreating equipment and the current availability of renewable fuel and tax credits as proof of lack of economic dependency between the Renewable Diesel and MARPOL Projects. Each project's feasibility is based on its own set of incentives and market realities and does not depend on the other project going forward.

We note that the one thing that may be considered to be common to both projects is the potential for shared utilities. However, sharing utilities does not in and of itself mean that activities at a source are functionally or economically dependent on one another. Since both projects will produce fuel gas, the power and steam required to operate each project can be generated from fuel gas produced by either the renewable diesel unit or the MARPOL refining unit, and in some cases the projects may combust fuel oil, so neither project is dependent on the other project for steam or power generation. In addition, LBT stated that each project will rely on the existing wastewater treatment and water production facilities at the terminal. LBT maintains there is no appreciable cost benefit that the Renewable Diesel Project will receive by virtue of the MARPOL Project because the utilities are already in operation as part of the ongoing terminal operations.

Single Point Mooring – Modification to an Existing Emission Unit

LBT also seeks a determination that the addition of a single point mooring (SPM) project to its existing marine loading/unloading system should be considered a modification to an existing unit at the facility rather than a new unit pursuant to the PSD regulations. In your letter, you explain that the existing marine loading/unloading system consists of ten marine docks, each of which can load and unload multiple petroleum products. According to LBT, the proposed SPM addition would "extend from the jetty on the seabed for approximately 5,800 feet to a Pipeline End Manifold" that would be connected to a buoy via a flexible hose, and the buoy would load/unload crude oil onto ships via two floating hoses.

Based on the information provided by LBT, EPA believes that the addition of the SPM is reasonably considered to be an extension of the existing marine loading terminal. Therefore, EPA concludes that the SPM should be treated as a modification of the existing marine terminal emissions unit.

The definition of "emissions unit" in the PSD regulations does not speak to how broadly or narrowly to consider the scope of an emissions unit at a stationary source, nor does it address how to treat a new emissions point, such as the SPM, that is added to an existing stationary source with existing emission units. The definition at 40 CFR §52.21 (b)(7) states:

> *Emissions unit* means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in paragraph (b)(31) of this section. For purposes of this section, there are two types of emissions units as described in paragraphs (b)(7)(i) and (ii) of this section:
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> > (i) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.
> >
> > (ii) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (b)(7)(i) of this section. A replacement unit, as defined in paragraph (b)(33) of this section, is an existing emissions unit.

This regulatory language can be reasonably interpreted to provide that multiple pieces of related process equipment (or emission points) comprise a single emissions unit.

Prior EPA determinations interpreting the PSD regulations provide specific guidance on this question. Those determinations illustrate that ascertaining the proper scope of an "emissions unit" often requires very case- and fact-intensive analyses. For instance, in a letter to the Semiconductor Industry Association, EPA confirmed that it was appropriate to treat an entire semiconductor fabrication building, or "fab," as one emissions unit.[5] EPA based this decision on the "interconnected nature of the 'tools' in the fab" and the systems that deliver materials and manage discharges. The letter also pointed out that fab units could be located in adjoining buildings if they are "physically connected, integrated, and operated" in a continuous and consolidated manner, and that it may be more appropriate to treat physically separated operations as a separate emissions unit. In that letter, EPA also referenced other determinations by EPA Regions, in which the Regional office provided rationale for why grouping related processes and equipment into a single emissions unit made sense given the circumstances.[6]

In analyzing the SPM project, we note that the existing marine terminal currently loads and unloads crude oil in addition to other petroleum products. Based on the information provided in LBT's recent permit application to the Virgin Islands Department of Planning and Natural Resources, the SPM will load and unload only crude oil. Since LBT is currently loading and

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[5] SIA Letter.

[6] Letter from Judith M. Katz, Region III, U.S. EPA, to John M. Daniel, Director, Air Program Coordination, Commonwealth of Virginia, Department of Environmental Quality, (November 30, 2000); Letter from Douglas M Skie, Region VIII, U.S. EPA, to Brad Beckham, Director, Air Pollution Control Division, Colorado Department of Health (February 6, 1990).

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unloading crude oil at the existing marine terminal, the proposed SPM would not change the nature of the pollutant-emitting activity occurring at the terminal. Furthermore, the SPM will be physically connected to the existing marine loading terminal by way of an underwater piping system and will be completely integrated with the loading and storage operations at the existing terminal. Consequently, the SPM and current marine terminal appear to share the same interconnectedness that EPA previously found persuasive in its analysis of semiconductor fabs, which supports treating LBT's proposed SPM and the existing terminal as a single emissions unit.

We also note that state agency permit actions have also reflected the flexibility within the definition of emissions unit. There are several examples of state permitting agencies treating multiple marine loading berths/docks as a single emissions unit in the context of Title V permits.[7] Thus, the treatment of multiple loading docks or berths as a single emissions unit is not unusual.

Finally, in other correspondence LBT has informed EPA that it will be installing a vapor capture and collection system at the existing marine terminal, although LBT has indicated the system will not be used to reduce emissions that occur while loading ships at the SPM. Instead, LBT has indicated it intends to comply with the submerged loading requirements[8] when the ships are loaded at the SPM, and that the control of emissions from the existing docks will help offset the emission increases from the operation of the SPM. We note that, in the context of the PSD program, a BACT determination for a major modification is focused on each emissions unit. However, this approach does not foreclose a determination that different emission points within an emissions unit can have distinct BACT requirements due to technical or economic feasibility or other factors considered under a BACT review. Consequently, for LBT to install a vapor recovery system at the existing loading berths and apply a different control strategy for the SPM emission point does not necessitate that the SPM be treated as a separate emissions unit under the PSD program. EPA views the proposed SPM and the new vapor control system as being part of the overall integrated loading/unloading operation at the terminal, and views this operation as an integrated emissions unit for PSD purposes.

Consideration of Emission Decreases from the Project

While not specifically raised in your February 1, 2018 letter, LBT previously asked EPA whether, under the NSR applicability procedures (e.g., 40 CFR §52.21(a)(2)), emission decreases may be taken into account when a "significant emissions increase" calculation of projects which involve only existing units is undertaken at Step I of the NSR applicability analysis. As you should be aware, EPA has recently clarified that emission decreases from a project are to be considered at Step 1. This applies not only to existing emission units for but all categories of projects. *See* Project Emissions Accounting Under the New Source Review Preconstruction Permitting Program (March 13, 2018).

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[7] *See, e.g.*, Indiana Department of Environmental Management, Part 70 Operating Permit, BP Products North America, Inc. – Whiting Business Unit (December 14, 2006); Commonwealth of Virginia, Department of Environmental Quality, Federal Operating Permit, TransMontaigne Operating Company, L.P. – Norfolk Terminal (April 7, 2014). EPA is also aware of analogous non-marine loading activities, such as truck loading racks, being treated as a single emissions unit.

[8] 46 CFR 153.282.

Conclusion

EPA's responses contained within this letter are based on the information LBT has provided EPA through letters and emails pertaining to your permitting questions. Since EPA does not have emissions information and other specifics regarding your planned projects, EPA is not providing any final determination on the applicability of the PSD regulations to your projects. A final determination on PSD applicability will be made on the basis of the information provided in your application and supporting materials. Finally, nothing in this letter's discussion of PSD policies should be interpreted to reflect EPA's views on the applicability or requirements of any other programs, including the New Source Performance Standards and the National Emissions Standards for Hazardous Air Pollutants.

If you have any questions about this letter, please contact Anna Marie Wood in the Office of Air Quality Planning and Standards at (919) 541-3604 or wood.anna@epa.gov.

Sincerely,

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