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April 1, 2022

Matthew Botill California Air Resources Board 1001 I St. Sacramento, CA 95814

Re: True North Renewable Energy Comments on 2022 Scoping Plan

Dear Mr. Botill:

True North Renewable Energy, LLC (TNRE) appreciates the opportunity to comment on the California Air Resources Board's (CARB) 2022 Scoping Plan Update.

TNRE develops, builds, and operates state-of-the-art organics-to-renewable energy facilities, including large scale, regional high-solids anaerobic digestion infrastructure. These facilities reuse and repurpose organic resources diverted from landfills to create beneficial, sustainable products, including biomethane and soil-amending compost. TNRE is focused on partnering with communities in California to meet local and state requirements for diverting organic waste from landfills and cutting short-lived climate pollutant (SLCP) emissions, while generating compost and renewable natural gas to help decarbonize other sectors of the economy and meet California's climate goals.

Reinforce State's Commitment to SB 1383 Targets and Requirements

As you know, SLCPs – often referred to as "super pollutants" for good reason – are responsible for nearly half of current global warming and millions of premature deaths globally each year. They have short atmospheric lifetimes, so efforts to reduce them now delivers significant near-term climate and health benefits. As California already grapples with the very real, devastating impacts of climate change, delaying near-term action to reduce these most potent climate pollutants, including landfill methane, is the exact opposite of what we need to do.

Diverting organics from landfill must be a priority and puts the state on the quickest path to reducing SLCPs in the near-term. We were encouraged to see CARB support and reinforce the states commitment to SB 1383 and CalRecycle's regulations by including minimum organics diversion requirements of 75 percent by 2025 across all Scoping Plan modeling scenarios. We thank CARB for updating scenario assumptions to include this existing law across all scenarios. Rather than questioning whether we can achieve 75 percent diversion rates, CARB and the State should take a proactive approach to ensure these goals are met.

Success Requires Developing Required Infrastructure

The fact is, the state's organics diversion requirements can be met, but jurisdictions, haulers, project developers and state agencies need to work quickly and diligently to develop dozens of new composting and anaerobic digestion facilities that CalRecycle and CARB have identified will be needed. This should be a state priority, and we hope that CARB will highlight it as such in the Scoping Plan. In addition to the important methane and other climate and energy benefits, CalRecycle estimates diverting 75 percent of organic waste from landfills by 2025 will deliver \$17 billion in economic benefits and create 11,700 permanent, green jobs.

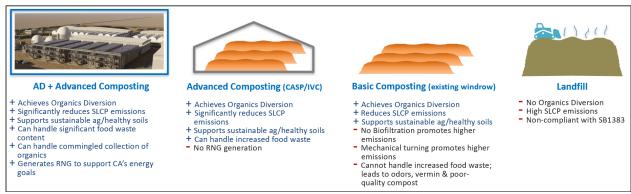
To the extent valid barriers or challenges may exist to deploying needed infrastructure, we encourage CARB to work with CalRecycle and other agencies to convene stakeholders to quickly work through challenges and identify solutions to ensure the rapid development of infrastructure needed to successfully implement CalRecycle's regulations.

We also encourage the agencies to work on education and outreach efforts to help support California's households and businesses as many of them begin sorting organic waste from other waste streams for the first time. In particular, while many households are already accustomed to separating yard waste, we believe a targeted effort to ensure households separate food waste as well – which has a higher energy content than other organic waste streams, such as yard waste, and therefore tends to generate more methane in landfills than other organic waste streams – will deliver important, low cost emissions benefits that will support compliance with CalRecycle's regulations and SB 1383. We hope CARB will highlight the need to ensure food waste is diverted from landfills as another key priority in the Scoping Plan.

Prioritize Anaerobic Digestion as the Highest Value Organics Diversion Strategy

As California considers organics waste management, there is a clear hierarchy of value, as illustrated in the figure below. Moving from right to left, landfilling, of course, offers the lowest value. It is a source of SLCP emissions and other nuisances, although well-controlled landfills may provide renewable natural gas to help decarbonize hard-to-abate sectors. Moving up the hierarchy is composting, which supports SB 1383 goals (to an extent) and provides compost for healthy soils. Composting is not well-suited to managing food waste, however, and only offers a partial solution for achieving the diversion requirements under SB 1383. Anaerobic digestion provides a more flexible approach – which can accommodate high levels of food waste and produce renewable natural gas to meet the State's Renewable Gas Standard under SB 1440 and help to decarbonize industry and other hard-to-abate sectors.

The highest value use of organics comes from anaerobic digestion with composting, like the systems TNRE develops. TNRE's project can accommodate any mix of organics – with variable and high or low levels of food waste – and offers a complete solution to SB 1383's organics diversion requirements, while also producing renewable natural gas and compost to decarbonize other sectors. TNRE also develops large, enclosed projects with state-of-the-art emissions and odor controls. This supports economies of scale and means that state could meet its SB 1383 goals with just about a dozen new facilities of the type TNRE develops, rather than the 50-100 identified in the SLCP Reduction Strategy.



Hierarchy of disposition and use of organic waste, from most preferred (left) to least preferred (right).

We want again thank CARB for including the 75 percent of organics diversion in all scenarios and we appreciate your consideration of comments to prioritize anaerobic digestion effort to reducing SLCPs moving forward. We are committed to working with you on the ongoing Scoping Plan process to meet the states climate goals. If you have any questions regarding TNRE, these recommendations, or the status of the market for organics diversion, please do not hesitate to reach out to us.

Thank you,

Gary Aguinaga President

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True North Renewable Energy, LLC