December 19, 2023

Trevor Martin, AICP
Community & Economic Development Director, City of Sunnyside
Community and Economic Development Department
818 E. Edison Ave.
Sunnyside, WA 98944

Dear Mr. Martin:

Please accept these additional comments from the Friends of Toppenish Creek regarding amendments to the City of Sunnyside mitigated determination of non-significance (MDNS) for the proposed Sunnyside Renewable Natural Gas (SS RNG) digester project - SEPA 2022-0200 or SEPA 2023.0200. We submit these comments to further support our position that the SS RNG project needs an Environmental Impact Statement (EIS).

FOTC believes that the Environmental Checklist submitted to the City of Sunnyside in December 2022 is outdated, incomplete, and insufficient to justify an MDNS for the following reasons:

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The proposed project is located on 50 acres of land just South of the City of Sunnyside within the Port of Sunnyside Midvale Industrial Park, and adjacent to the Sunnyside Mabton Hwy# 241.

Comment: To our understanding the Port of Sunnyside is within the Sunnyside City limits. Thus, the proposed manure methane plant would be located within the Sunnyside City limits.

Digestate and other residues produced at the plant will be carefully managed

Comment: This statement is not sufficiently specific to allow any kind of analysis.

The subject properties are identified as Parcel# 220901-41404, # 220901- 14007 and the eastern half of# 220901-13001.

Comment: The June 22, 2023 MDNS listed the Parcel Numbers as Parcel Number(s): 220901-13001, -44401, & -41404 which are not exactly the same. The City of Sunnyside has since revised the parcel numbers on the MDNS to read 22090-141405 & 220901-41406.

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Digestate NH3 emissions are modeled under the daily limit, and are additionally exempt from regulation pursuant to RCW 70A.15.4540.

RCW 70A.15.4540 reads:

The department shall not regulate ammonia emissions resulting from the storage, distribution, transport, or application of ammonia for use as an agricultural or silviculture fertilizer.

Comment: SS RNG states that some of the digestate will be used as animal bedding and compost. Thus RCW 70A.15.4540 does not apply.

Comment: Proposed modeling under a daily limit has not been provided in this Environmental Checklist.

Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. ***Background concentrations will be accounted for in the Air Permit.***

Comment: Pacific Ag failed to document emissions from Windmill Mushrooms, Nutrien Solutions, and the City of Sunnyside Waste Water Treatment Plant, all of which would contribute to cumulative air pollution in the area. Are emissions from these sources considered background?

b. Ground Water:

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals . .. ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. ***No waste will be discharged to the ground.***

c. Water runoff (including stormwater): 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Stormwater runoff will be retained on site and infiltrated into the ground at various locations including a potential stormwater pond. This water will not flow into other waters.

Comment: If stormwater is infiltrated into the ground, then any waste in the stormwater that is *infiltrated into the ground* will reach the aquifer. Any spilled manure on site would contaminate stormwater. Flow from groundwater to surface waters, such as the already contaminated Sulphur Creek Wasteway is well documented. Pacific Ag has not described lining for ponds and lagoons at the site.

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Describe special emergency services that might be required. Standard emergency and fire services, as well as potentially confined space rescue. ***Other special health and safety planning is underway and will be confirmed with emergency services and County Health Department. Standard emergency services equipment includes self-contained breathing apparatus (SCBA) appropriate for potential exposure.***

Comment: FOTC submitted a public records request to Yakima Emergency Management Services in November 2023, asking for information about conversations between Pacific Ag and SS RNG regarding preparations for potential explosions and fires. Yakima EMS replied that there have not been any such conversations.

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1) *Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:* ***No, the proposal is consistent with uses in the surrounding area.***

Comment: FOTC disagrees.

In September 2022 Pacific Ag told the Port of Sunnyside that SS RNG would: *Produce an organic digestate that can be used as fertilizer, livestock bedding and compost*.

And: *Recycles manure and kills odors and pathogens while producing a renewable fuel and soil products.*

1. FOTC maintains that mesophilic and even thermophilic process are insufficient to kill pathogens in the digestate. Pacific Ag has not described any other mechanism for killing pathogens.

2. Digestate would presumably be applied to cropland in South Yakima County. This digestate would likely contain pesticides, herbicides, and veterinary pharmaceuticals from manure and crop residues. Research from John Hopkins University[1] tells us that anaerobic digesters do not always degrade these chemicals.

The John Hopkins team studied 20 chemicals after anaerobic digestions, namely:

Fungicides: boscalid, carbendazim, difenoconazole, pyraclostrobin, & tebuconazole

Insecticides: carbaryl, chlorpyrifos, diflubenzuron, & malathion

[1] Brueck, Christopher L., et al. "Assessing the fate of antibiotics and agrochemicals during anaerobic digestion of animal manure." *Science of the Total Environment* 856 (2023): 159156. https://www.sciencedirect.com/science/article/am/pii/S0048969722062556

Herbicides: dicamba, imazapyr, & triclopyr

Antibiotics: ceftiofur, erythromycin, lincomycin, monensin[2], sulfamethazine, sulfamethoxazole, trimethoprim

Feed Additive: ractopamine.

Nine of the twenty - boscalid, carbendazim, difenoconazole, imazapyr, lincomycin, monensin,[2] ractopamine, sulfamethazine, and tebuconazole - did not degrade during digestion.

The study did not evaluate toxicity of the transformation products. The study suggested the possibility of development of pesticide and antibiotic resistance during anaerobic digestion.[3,4]

While this work fills previous knowledge gaps, it also emphasizes that additional work is needed to evaluate the fate of AD-derived TPs (transformation products) as they pass through manure management systems and after field application where they are exposed to alternate microbial and redox environments. It is unclear whether these TPs will retain the antibiotic or pesticidal properties from their parent compounds, potentially contributing to the development of pesticide and antibiotic resistances.

3. Studies describe negative impacts on earthworm populations when anaerobic digestate is applied as fertilizer.[5,6] At a minimum, farmers who might accept and use digestate, farming neighbors, the public, and potential compost customers should be informed of this potentiality.

The issues are complicated. With no disrespect, FOTC states that the Sunnyside Department of Commerce and Economic Development lacks the expertise to evaluate the many potential impacts from one of the largest manure methane plants in the nation on the small City of Sunnyside and the surrounding area. An Environmental Impact Statement is necessary.

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[2] The 2013 EPA Study Relation Between Nitrate in Water Wells and Potential Sources in the Lower Yakima Valley found monensin in water wells downgradient from LYV dairies. https://www.epa.gov/sites/default/files/2017-12/documents/lower-yakima-valley-groundwater-report-2013.pdf

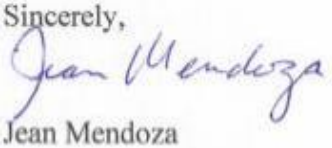
[3] Center for Disease Control. Where Resistance Spreads: Water, Soil, & the Environment. https://www.cdc.gov/drugresistance/environment.html

[4] U.S. Environmental Protection Agency. 2023. Feedback Requested on Structure and Scope for Proposed Framework to Strengthen Assessment of Antimicrobial-resistance Risks Associated with Pesticide Use. https://www.epa.gov/pesticides/feedback-requested-structure-and-scope-proposed-framework-strengthen-assessment

[5] Rollett, Alison J., et al. "The effect of field application of food-based anaerobic digestate on earthworm populations." *Soil Use and Management* 37.3 (2021): 648-657. https://bsssjournals.onlinelibrary.wiley.com/doi/abs/10.1111/sum.12615

[6] van Midden, Christina, et al. "The impact of anaerobic digestate on soil life: a review." *Applied Soil Ecology* 191 (2023): 105066. https://centaur.reading.ac.uk/112674/1/van%20Midden%20et%20al%20ASE%202023.pdf

Sincerely,



Jean Mendoza

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