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October 27, 2016

VIA EMAIL

John W. Fricks
Ogden & Fricks LLP
656 Santa Rosa Street, Suite 2B
San Luis Obispo, CA 93401

Re: Hitachi Zosen Inova

Dear John:

This letter is written in response to your letter of October 20, 2016 and will attempt to provide you with answers to those questions you asked that are relevant to an environmental determination of the proposed project. As you know, financial considerations are not part of the CEQA process and are therefore of no relevance. We will not be responding to questions directed to those areas.

In answering these questions I have gathered information from the Hitachi team. I am not a scientist and don't pretend to understand the technical information beyond concepts. Therefore, while I am answering these questions to the best of my ability, it may be that you will require further elaboration or explanation. Please let me know if you require anything further and I will do my best to get it to you as soon as possible. Please also copy Linda Somers Smith with any request, however, as I am dealing with a family issue that may require my being out of the office without much warning. I want to make sure we meet any reasonable request in a timely fashion.

My responses will naturally refer to numbers used to designate the questions in your letter.

1) There is no "identical" plant to that proposed because each location is unique and designed to minimize impacts. The proposed plant is based on technology that is currently being successfully employed throughout Europe for many years. However, the proposed plant is in fact "state of the art" and is designed and will be built to eliminate any significant environmental impacts. Some of the enhanced design features were discussed in some detail last night at the informational meeting. Your clients were there and were advised of those features. In a nutshell, the proposed operation will be entirely enclosed within a building subject to negative pressure that will eliminate any offsite odors. There will be no outdoor sorting or storage of any type. Doors to the interior will be open for only minutes (we estimate between 15-20 a day cumulative.) The doors will open to allow the trucks to enter and then close immediately to keep any potential odors indoors. During the brief periods when the doors are open, air will flow

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through the door, instead of the louver, due to the negative pressure design, to further ensure that no odors escape the property. That said, plants operating under similar technology are set out in the attached matrix. Because Hitachi Zosen Inova does not operate these plants (they are operated by third parties using the Kompogas technology) we do not have the information regarding government officials or inspectors for the projects. We also do not have any records or details of any possible complaints regarding the projects (all of which have outside components unlike the proposed projects.) We can tell you that anecdotally, while these projects have not been problem-free, we are aware of no complaints relating to any portion of properly operated enclosed components of any of the projects. Our understanding is that any complaints have been confined to outdoor components and/or operator error and such complaints were quickly addressed and rectified.¹ As was provided at the October 18 hearing, a strict and detailed Odor Impact Minimization Plan, which is a condition of an approval for the project, has been provided that will significantly reduce any potential for operator error and require immediate identification and resolution of any issues that might arise.

No facility using Kompogas ADPs has required a noise barrier despite their proximity to commercial and residential uses.

2) The acoustical analysis and the air quality analysis were informed by existing/operating Kompogas ADPs in Europe. From a broader perspective, technical data for other CEQA issues are similar to other development projects. The proposed project was also informed by the CalRecycle (*Statewide Anaerobic Digester Facilities for the Treatment of Municipal Organic Solid Waste*, Final Program EIR, SCH No. 2010043100, June 2011).

3) During the first three months of project operation, the digester and ADP will be ramped up as necessary to commission the facility at the capacity of 33,000 tons per year.

The maximum physical technical capacity of the system is 36,500 tons/year. The expected capacity, based on current usage plus a 20-year projected grow, is 33,000 tons/year based upon the 100 tons per day permit limitation. The project for which approval is requested is 33,000 tons/year.

4) H₂S is removed upstream of the Combine Heat & Power (CHP) unit to below 20 ppm. This is achieved through a desulfurization unit that has a 95%+ removal efficiency. SO₂ creation is therefore very low. Moreover, the project will be required to obtain operational permits from the Air Pollution Control District that will require emissions to be well below levels of significance.

¹ It is our belief that the majority of any issues with any of the listed systems has been related to prolonged storage of materials due to severe winter weather. We have no severe weather issues and further will have no right or ability to store materials out of doors.

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The flare operates between 1,400 and 1,800 degrees Fahrenheit. Minimum retention time at 1,800 degrees equal 0.7 seconds. The flare operates only during CHP is stopped or under maintenance, which is expected to be below 300 hours per year. The biogas will be flared in an initial startup period of 90-days (although expected to be shorter).

5) The content of ammonia correlates with the content of nitrogen within the feedstock. That content should be low due to the expected ratio between green waste and food waste. Ammonia is soluble in water and, therefore, most of the ammonia will remain within the liquid digestate.

A catalyst will be installed for NO_x, CO and VOC reduction. Ammonia will also be reduced in the catalyst and will be within the standards established by the Air Pollution Control District.

6) Because all operations will be indoors, there will be no increase in birds at the site.

7) Overall destruction efficiency of the flare is 98 to 99% (depending on the flare temperature.) In response to your question regarding the percentage of biogas that will not be burned, please see our response to No. 4 above. A biochemical desulfurization system specifically designed for biogas application will be installed. The biogas filter module removes the hydrogen sulfide from the biogas which is passing through the module. Removal is by the sorption processes taking place in the filtering material. In a parallel process, the material is regenerated appropriately by oxygen input into the filter module. During the regeneration process in the filtering material, sulfur compounds contained in the filtering materials are chemobiologically degraded. This process allows for a continuously high desulfurization capacity of the filtering material.

8) As noted above, 95%+ reduction in H₂S (below 20 ppm) is achieved through the desulfurization unit leaving the SO₂ extremely low. The filter on the unit will be replaced on an as needed basis, but likely once to twice a year.

9) There is a significant demand for both the compost and the liquid digestate that will be produced. Local growers have expressed an interest in obtaining the materials as soil amendments. The most likely manner is the material will be sold to a third party broker who will then resell the materials to agricultural users. It is anticipated that the demand will far exceed the supply. (In the event it does not, the plant operator will have to dispose of the compost and digestate in the manner required by law. It will not be stockpiled onsite.

10) The reference to a "grant" was not correct. As Carol said last night, she is not privy to the internal workings of the company and was not quite clear as to the nature of the time

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deadlines. The financial time constraints are not driven by a grant but by an investment tax credit for 30% of the investment costs of the project. In order to qualify for this investment tax credit, construction must be significantly underway by the end of the year. (The investment tax credit expires on December 31, 2016.) Given the significant cost of the project (approximately \$20-21 million), if the investment tax credit is not realized, the project will not proceed at this time.

11) As noted above, financial considerations are not relevant to environmental review and would require the disclosure of proprietary information. We will not be responding to these unwarranted inquiries.

12) It is estimated that the doors will be open for a cumulative total of 15-20 minutes a day under negative pressure. Here is the anticipated timeframe for the process:

- Door Up- 6 seconds
- Trucks backs in-10/15 seconds
- Door down- 8 seconds
- Door up (after load is tipped)- 6 seconds
- Truck pulls out- 10 seconds
- Door closes-8 seconds

The 41 dB number is the Leq measured 100 feet from a similar ADP located in Ottenbach, Switzerland.

13) Please see the chart attached to this letter.

Very truly yours,

ADAMSKI MOROSKI MADDEN
CUMBERLAND & GREEN LLP



THOMAS D. GREEN

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Attachments

cc: San Luis Obispo County
Board of Supervisors

KOMPOGAS FACILITIES

Technology	Technology Reference	Comment
Reception and pre-treatment – same equipment Comparable equipment	Fulda (DE) 35,300 tons/year Higher food waste content Backnang (DE) 39,700 tons/year Higher food waste content Vetroz (CH) 22,000 tons/year Similar feedstock mix Winterthur (CH) 27,600 tons/year Similar feedstock mix Zurich (CH) 27,600 tons/year Similar feedstock mix	
Digester Same type (1500 m3 instead of 1800 m3) Same digester (4 x 1800 m3)	Winterthur/ Zurich/ Chavornay (CH) Bologna (IT), approved	
Digestate treatment (dewatering including decanter, no settling basin)	Vetroz (CH) Zwolle (NL) 49,600 tons/year Similar feedstock Novi (IT) 18,400 tons/year High food waste content	Overall less odors compared to other technologies
Solid digestate treatment/aerobisation	Vetroz (CH) Zurich (CH) Fulda /Backnang (DE)	
Liquid digestate storage (enclosed with biogas holder)	Vetroz (CH) Fulda (DE)	Overall less odors compared to other technologies
Maturation (enclosed in building)	No identical reference is constructed. Existing facilities are roof-only, outdoor, or no	

	maturation component.	
Combined Heat & Power (CHP)	Backnang (DE) Oensingen (CH) 19,900 tons/year Similar feedstock	
Waste air treatment	Vetroz (CH) Winterthur (CH) Oensingen (CH)	

CALIFORNIA SITES

Location/ Project	Address	Owner	Environmental Document	Processing Type	Status
Monterey/ Marina MRWMD Waste to Energy	14201 Del Monte Boulevard Marina, CA 93933 8,000 feet to residential neighborhood	Zero Waste Energy (ZWE) partnered with Monterey Regional Waste Management District (MRWMD)	MND for existing recycling operations (renewal of use permit) with addition of anaerobic plant (pilot program)	DRY. 5,000 tons organic material/ year First US based anaerobic digestion SMARTFERM plant.	Operating (since 2013)
San Jose Zero Waste Energy Development	685 Los Esteros Rd, San Jose, CA 95134 4,000 feet to residential neighborhood and church.	Zero Waste Energy Development Company (GreenWaste Recovery, Zero Waste Energy, and Zanker Road Resource Management)	MND for 270,000 ton per year dry fermentation AD facility. (3) 60,000 SF buildings, incidental office space, biofilters, outdoor space for aerated curing piles, screening and stockpiling finished materials, 6 power and 3 emergency generators on an approximately 41 gross acre site.	DRY. One of the largest dry AD plants in the world.	Operating (since 2013)
S. San Francisco Blue Line Zero Waste Energy (South San Francisco Scavenger Company)	500 E Jamie Ct, South San Francisco, CA 94080 Directly adjacent to Genentech corporate campus	1. Blue Line Transfer Inc. and South San Francisco Scavenger Co., Zero Waste Energy	MND for 10,000 tons per year (tpy) of food waste and green waste into biogas (gaseous product generated by the degradation of organic matter under anaerobic conditions) that would be cleaned and converted into biogenic compressed natural gas (CNG); 56,000 diesel equivalent gallons (dge) per year of CNG.	DRY. 11,200 tons organic material/ year SMARTFERM plant.	Operating (Since 2015)
American Canyon City of Napa Material Recovery Facility	802 Levitin Way, American Canyon, Napa, CA Directly adjacent to Airport and Southern Pacific Railroad tracks	Napa Recycling and Waste Services	MND for renewal of use permit of recycling and waste services and introduction of new technologies and equipment (Anaerobic Digestion, Biomass Gasification Unit, and Solar Panels)	DRY. Use approved, details of components not available.	Entitlement only, approved 2014.

Perris CR&R Material Recovery and Transfer Station (Green Energy)	1706 Goetz Road, Perris, CA 92570 Residential neighborhoods ±700 feet from AD facility.	CR&R Incorporated	MND for major modification to use permit 83,600 tons/year initial phase to 335,000 ton/year at capacity anaerobic digester and supporting equipment including biofilter and a Renewable Natural Gas (RNG) fueling facility,	DRY. Up to 150 tons per day of organic municipal waste into biogas and compostable material. Eisenmann Corporation system.	Construction nearing completion
San Luis Obispo Anaerobic Digestion Plant	4388 Old Santa Fe Road, CA 93401 ±1500 feet to residence; adjacent to airport.	HZI Kompogas®	MND for Anaerobic Digestion Plant and supporting equipment. 33,000 tons/ year	DRY. HZI Kompogas® system	Pending Board of Supervisors Decision