

Behrens and Associates, Inc.

Environmental Noise Control



March 4, 2016

Padre Associates, Inc.
369 Pacific Street
San Luis Obispo, California 93401

Attention: Crystahl Taylor, Senior Project Manager

Subject: Effects of the proposed East Cat Canyon Oil Field Redevelopment Project equipment layout change on the reported noise impact

Dear Ms. Taylor:

Per your request, we have reviewed the documents provided by Padre Associates, Inc. regarding the proposed equipment layout changes for the Aera Energy (LLC) East Cat Canyon Oil Field Redevelopment Project (Project). The following analysis reviews the proposed changes in an effort to determine if the proposed changes in the equipment layout are significant enough to necessitate a revision of the noise impact analysis reported in the *East Cat Canyon Oil Field Redevelopment Project Noise and Vibration Impact Analysis Report* (Behrens and Associates, Inc., February 5, 2015).

Proposed Equipment Layout Changes

The proposed layout changes include the relocation of equipment from the Central Processing Facility (CPF) to the Group Station and Steam Generator Site area (GS/SGS). The majority of the equipment being moved is non-noise emitting equipment (e.g., tanks, vessels) and low-noise emitting equipment (e.g., small pumps, small compressors). The significant noise emitting equipment being moved includes a 62.5 MMBTU/hr steam generator and an emergency flare from the CPF to the GS/SGS area.

In addition to the above equipment, the truck rack configuration at the CPF will change. Four loading racks will be shifted to the north end of the truck loading area. Also, two unloading racks will be merged with the loading rack skids.

It is noted that no new noise emitting equipment is being added to the Project as a result of the equipment layout changes. The layout change includes only the relocation of equipment that was previously assessed in the *East Cat Canyon Oil Field Redevelopment Project Noise and Vibration Impact Analysis Report*. Additionally, there are no proposed changes to the grading plan that was utilized in the noise impact analysis provided in report.

For convenience, Figure 1 below shows a section of the Project area that is relevant to the proposed changes. The CPF and GS/SGS areas are marked on the map. Also, the nearest noise sensitive receiver (NSR 1) utilized in the noise impact report is marked on the map. The Project property line is shown in blue.



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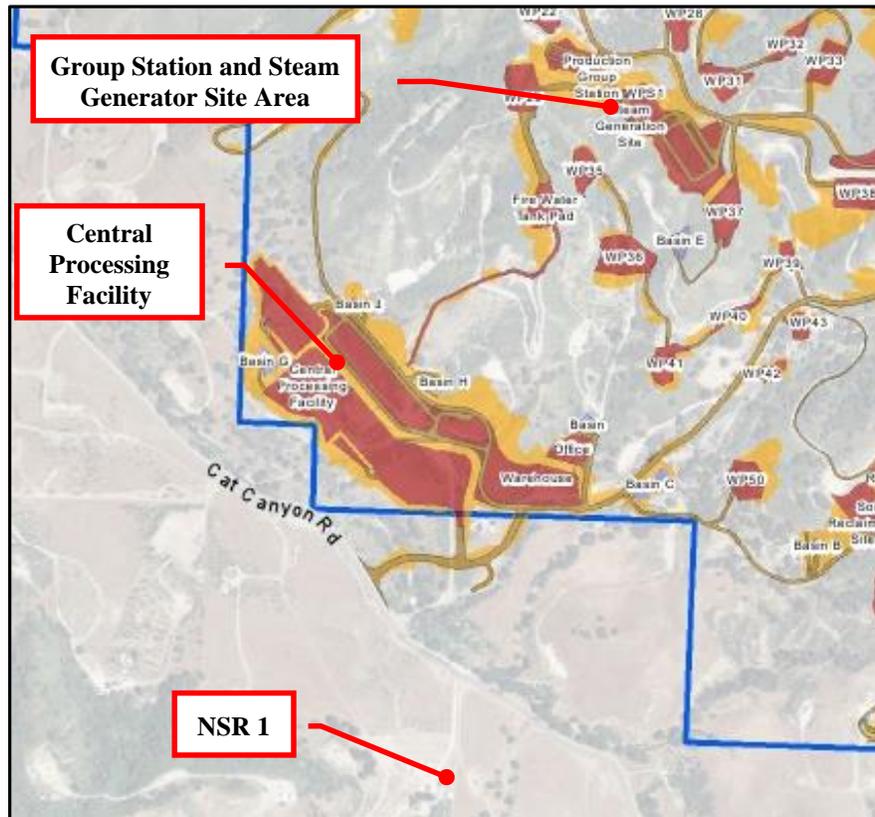


Figure 1 Project CPF and GS/SGS Areas

Source: Padre Associates, Inc., August 2014

Effects of Equipment Layout Changes on Project Noise Impact

To assess the production noise impact of the Project, predicted production noise levels were compared to measured ambient noise levels as reported in the *East Cat Canyon Oil Field Redevelopment Project Noise and Vibration Impact Analysis Report*. It was concluded that the predicted production noise levels would create a less than significant impact at the project property line and noise sensitive receivers.

As can be seen in Figure 1, relocating the equipment from the CPF to the GS/SGS area will increase the distance between the equipment in question and both the Project property line and NSR 1. Additionally, shifting the truck rack configurations to the north end of the truck loading area at the CPF will increase the distance between idling trucks and both the Project property line and NSR 1. As noise attenuation increases with distance, it follows that the noise impact of the equipment in question would decrease at the Project property line and at NSR 1.

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Considering the equipment that will remain at the CPF, the predicted production noise levels reported in the *East Cat Canyon Oil Field Redevelopment Project Noise and Vibration Impact Analysis Report* would either remain unchanged or slightly decrease due to the relocation of the equipment in question. As a result, the conclusion of a less than significant production noise impact at the property line and noise sensitive receivers will not be affected by the proposed equipment layout change.

Conclusions

The proposed equipment layout changes were reviewed and it was determined that the distance between the relocated equipment in question would increase in relation to both the Project property line and noise sensitive receivers resulting in a decrease in noise impact from the equipment. As a result, the conclusion reported in the *East Cat Canyon Oil Field Redevelopment Project Noise and Vibration Impact Analysis Report* of a less than significant production noise impact at the property line and noise sensitive receivers will not be affected by the proposed equipment layout change and further noise modeling and analysis of the Project production operations is not recommended.

Please contact me with any questions or comments.

Regards,

Jason Peetz

Senior Acoustic Consultant