DOCKETED	
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Project Title:	Pittsburg District Energy Facility - Commission Adoption Order (Order No. 99-0817-01)
TN #:	238268
Document Title:	LMEC Petition for Modification Mineralization and Carbon Capture Project—Responses to Data Requests Set 1
Description:	N/A
Filer:	Amanda Cooey
Organization:	Ellison Schneider Harris & Donlan LLP
Submitter Role:	Applicant Representative
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LOS MEDANOS ENERGY CENTER, LLC

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June 17, 2021

John Heiser
Compliance Project Manager
Siting, Transmission and
Environmental Protection (STEP Division)
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814
John.heiser@energy.ca.gov

RE: Los Medanos Energy Center (98-AFC-01C): Petition for Modification
Mineralization and Carbon Capture Project—Responses to Data Requests Set 1

Dear Mr. Heiser:

Los Medanos Energy Center, LLC ("Project Owner") submits the attached responses to California Energy Commission Staff's Data Requests Set 1.

If you have any questions regarding the proposed modification, please contact Barbara McBride at 925-570-0849 or Barbara.McBride@calpine.com.

Sincerely,

/S/
Barb McBride

LOS MEDANOS ENERGY CENTER (98-AFC-01C)
PETITION FOR MODIFICATION
MINERALIZATION AND CARBON CAPTURE PROJECT
RESPONSES TO CEC STAFF'S DATA REQUESTS SET 1

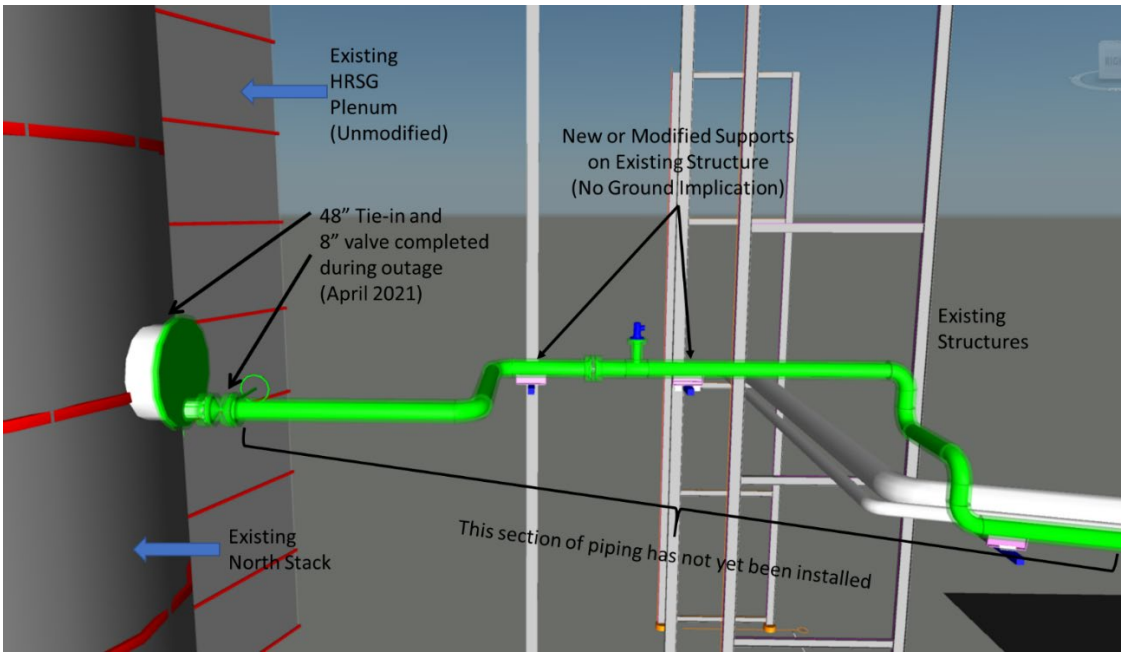
DATA REQUEST RESPONSES

A1. The petition states no ground disturbance will be required for the project.

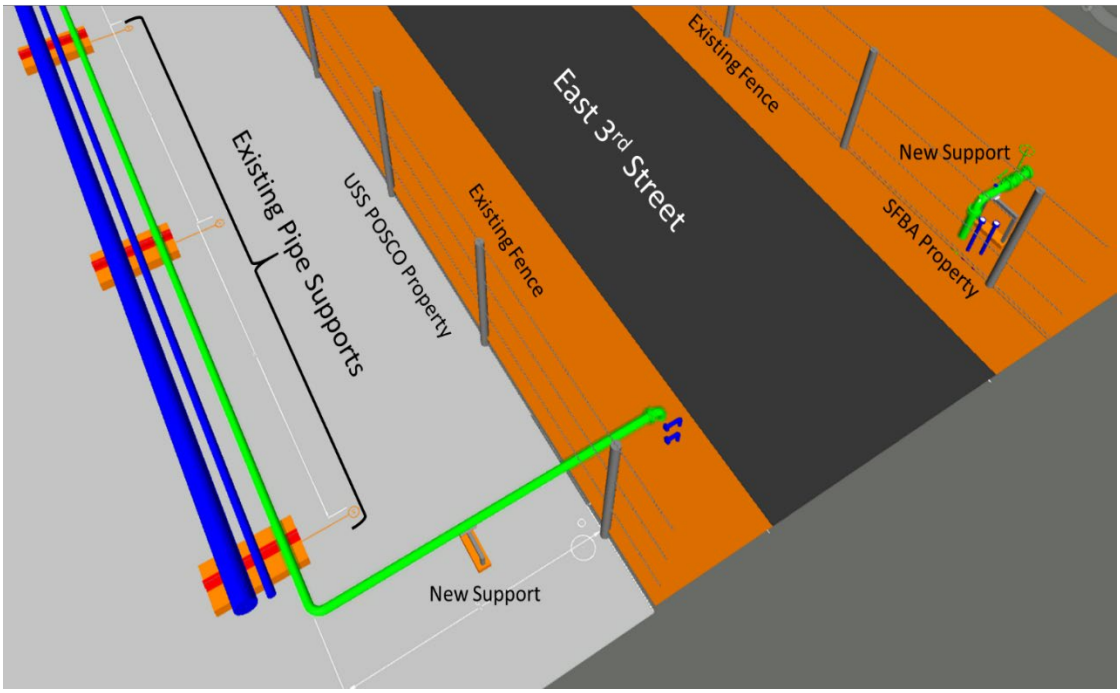
RESPONSE: Since the filing of the Petition, the pipeline crossing of East 3rd Street has been finalized. The final design routes the pipeline under East 3rd Street, which is a private road. San Francisco Bay Aggregates ("SFBA") has conducted ground penetrating radar and potholing studies along the road crossing and determined that placing the top of the 8-inch pipe at a depth of 24 inches below the surface of East 3rd Street will provide sufficient clearance over any existing lines. Additional ground disturbance at the USS POSCO property will also be required to install a new pipe support rack. The Project Owner is also proposing to install two additional, 2-inch stainless steel pipe segments to the portions of the work crossing East 3rd Street. These pipes will be capped as there are no current plans to utilize these pipes. However, it is possible that Los Medanos Energy Center ("LMEC") may provide steam or other process fluid in the future. Installing these pipe segments during the construction for this project will minimize traffic disruptions for any future projects.

a) *Please describe the new pipe racks/supports to which the 8-inch gas pipe will be attached.*

RESPONSE: The new pipe supports will be constructed on existing structures. Two supports for the new 8-inch pipeline will be located near the stack tie-in. These supports will be located on an existing portion of structure. The supports are positioned in a location that will support the run of 8-inch pipe from the stack to the existing pipe racks.



With the underground road crossing, two new support structures located in the immediate vicinity of the East 3rd Street crossing will be installed. These are shown below. One of those supports is located just inside the fence line on USS POSCO property. The second support structure is located on SFBA property on an existing concrete pad.



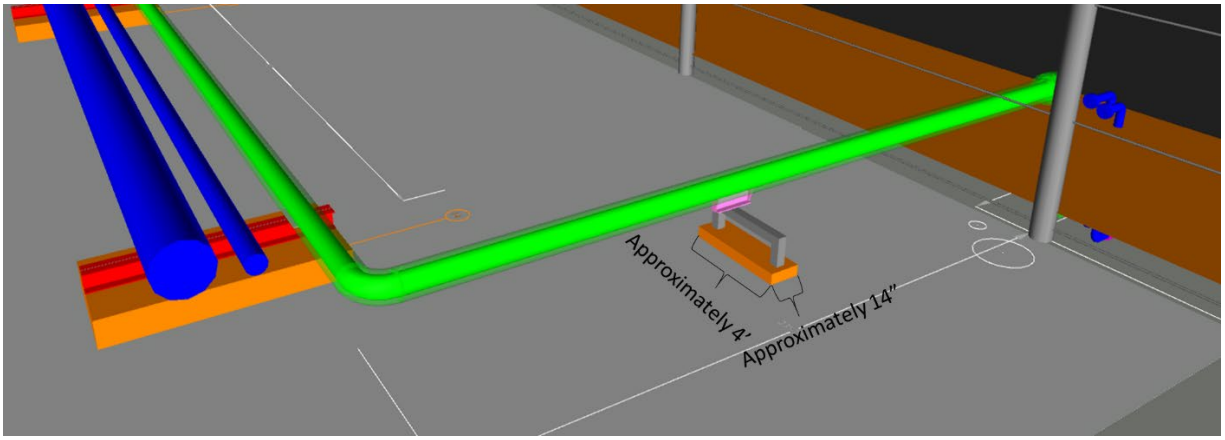
b) *Please describe the horizontal extent (length) of the new pipe and pipe racks/supports that are required for the project.*

RESPONSE: The new pipe will run approximately 880 feet. The main portion of this will run along the LMEC's existing pipe support racks (with the exception of the new supports described above) until it exits the LMEC site to cross under East 3rd Street where it will daylight on SFBA property. The length of pipe to the fence line where it will cross East 3rd Street is approximately 820 feet. The road crossing and daylighting on SFBA property adds an additional 60 feet. As discussed above, the only new pipe rack/supports that will be placed on the ground are the two needed to facilitate the East 3rd Street crossing shown in the figure above.

c) *Please describe how the new sections of pipe rack/supports would be installed and specifically, how that is accomplished without ground disturbance. If ground disturbance is required to install the new sections of pipe rack/supports, please identify the number and extent of horizontal and vertical excavations that would be required to install the pipe racks/supports, the ground surface to which they will be attached or mounted, and*

any below-grade elements that would be required for the installation of the pipe racks/supports.

RESPONSE: Within the LMEC fence line, new sections of pipe will be installed on existing structures using clips and brackets. No additional welding is anticipated for these new attachments. Once the pipe leaves the LMEC fenceline, it will run along LMEC's existing pipe support racks, with the exception of the two new supports described above. The pipe support on USS POSCO property will require ground disturbance of approximately 4 feet in length, 14 inches wide, and installed to the same ground surface as the existing pipe supports. As noted above, in addition to the 8-inch insulated pipe, two additional 2-inch pipes will be installed under East 3rd Street as well. These lines are for future, as-yet undetermined use, and are intended to minimize impacts to the traffic on East 3rd Street, which is a privately owned road.



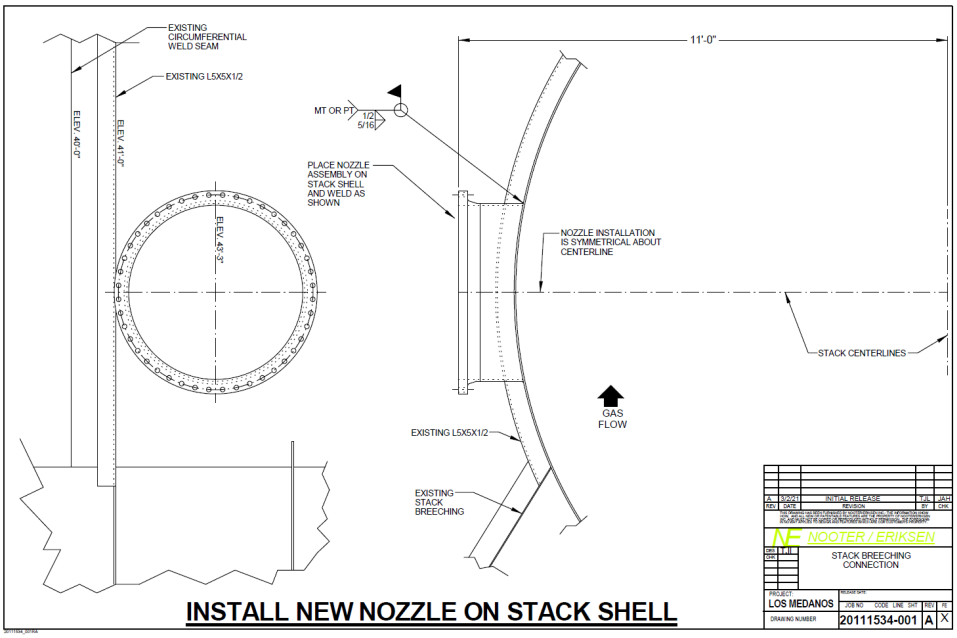
d) *Please describe the existing trench referred to on Sketch 3. The clouded area appears to be in an area where the pipe would be elevated above grade. Would ground disturbance be required to work within the existing trench? If so, please describe the specifics of the ground disturbance that would be required.*

RESPONSE: No ground disturbance is required to work within the existing trench.

A2. *Please provide a figure depicting the new 8-inch pipe where it would interconnect to the stacks and its relationship to the surface at grade or confirm the specifications on Sketch 1. Sketch 1 seems to indicate the connection to be at 34-feet 2-inches above grade and sloping generally at 1/8-inch per foot.*

RESPONSE: As shown below, the stack tie-in is a 48-inch nozzle with a centerline approximately 43 feet and 3 inches above grade. Regarding the 1/8-inch sloping per foot, this is a design feature to minimize condensate collection in the pipe. During normal operation, the flue gas temperature is well above the dewpoint and condensation will not be an issue. However, in the event some condensate collects during shutdown, the piping

from the stack to the damper valve (which is for isolation) is designed to be self-draining back to the stack where it will be vaporized by the exiting flue gas.



A3. Please provide a site plan on an aerial base that shows the new 8-inch pipe connection at the stack and the entirety of the pipe line to the connection at the adjacent property.

RESPONSE:

A4. Please describe the ground disturbance and pipeline connection on San Francisco Bay Aggregate's property required to accomplish the CO2 removal.

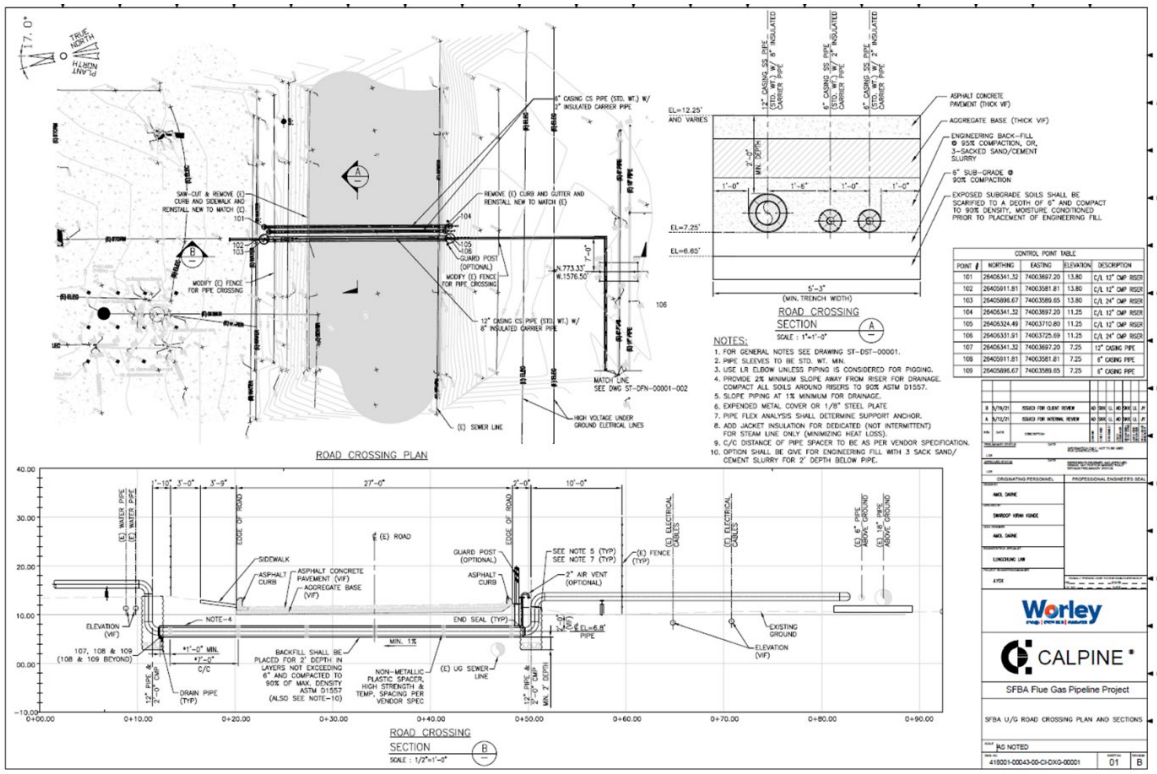
RESPONSE: There is no ground disturbance associated with the Carbon Capture and Mineralization Project. Equipment is skid mounted with no below grade construction of facilities or pipelines, construction of new foundations, or construction of new buildings. The pipeline support on the SFBA property will be located on an existing concrete pad.

A5. Please provide the Assessor's Parcel Number and address of the San Francisco Bay Aggregate property.

RESPONSE: The Assessor's Parcel Number (APN) is 073-020-019-3. The address is 895 East 3rd Street, Pittsburg, California 94565.

A6. The petition does not mention crossing 3rd Street as part of the project description, which is noted in Sketch 1. Please clarify the extent of the project as it relates to crossing 3rd Street.

RESPONSE: The project includes an underground crossing of 3rd Street to carry flue gas from LMEC to the SFBA facility. The crossing will be below the road surface. A detailed sketch of the road crossing is provided below.



A7. Would the pipe and racks/supports be installed by existing LMEC workers, or would workers need to be employed for this work? If workers would need to be employed, approximately how many workers would be required?

RESPONSE: Qualified outside contractors will be employed for the construction. Approximately ten workers will be required.

A8. How long would the installation of pipe and racks/supports take and when do you estimate the installation would occur?

RESPONSE: Construction will take approximately six weeks, ideally commencing at the end of June 2021.

A9. What is the lowest clearance of any new structure over 3rd Street?

RESPONSE: No new structures over 3rd Street are proposed.