

## DOCKETED

<b>Docket Number:</b>	81-AFC-03C
<b>Project Title:</b>	NCPA Geothermal Project No. 3 - Compliance
<b>TN #:</b>	212148
<b>Document Title:</b>	NCPA Plant 2 (formerly NCPA 3) Petition to Amend - Replacement of Sulfur Processing Building
<b>Description:</b>	N/A
<b>Filer:</b>	Camile Remy-Obad
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	7/7/2016 9:29:41 AM
<b>Docketed Date:</b>	7/7/2016

## REQUEST FOR APPROVAL ON EQUIPMENT CHANGE

AT

### Northern California Power Agency Geothermal Power Plant #2

**Construction of new sulfur processing building to replace existing structure using existing process equipment** - Northern California Power Agency Geothermal Power Plant 2 sulfur processing building, as part of the Stretford H<sub>2</sub>S abatement system, is over 30 years old and in need of replacement. Additionally the design of the current structure is such that all operations are elevated. This additional height, the existing structure is over 32 feet high, is not necessary for the function of the building. This added elevation also makes employees climb exterior stairs unnecessarily. During inclement weather this is a safety concern. The function of the building and the abatement equipment will remain the same, as the existing equipment will be transferred to the new structure. This proposed new structure, is 20 feet in height, and is within the footprint of the Plant site, albeit a bit larger than the existing building. NCPA proposes to build this new structure, transfer the existing equipment, and leave the old structure until time and budget permit its removal. The new structure will be painted with a non-reflective paint to match the existing power plant.

**Description of Modification:** This modification proposes to build new sulfur processing building, transfer existing equipment, updated electrical wiring and protection, while maintaining the sulfur processing intact. A professional engineering company has been engaged to engineer and produce drawings for this building

The building will be constructed by a qualified contractor under a public works contract. The amount of labor and number of construction workers will not be known until the contract is awarded, and they will not be housed on site. Some lay down area will be necessary as the new construction materials arrive on-site, but will be within the perimeter of the Plant. Some excavation for building footings and a modification to a drain will be necessary however the existing containment will not require any modification. These excavations will be within the existing yard and are expected to be 2 to 3 feet deep for the footings and the drain is expected to be 2 feet wide and 2 feet deep and run approximately 20 feet in length. There are no new liquid tanks involved with this process.

**Necessity for the Modification:** The installation of this new building will allow for more efficient operation of the sulfur processing by lower the structure to 20 feet in height, from 32 feet, eliminating exterior stairs, and placing the processed sulfur bin at ground level, while making it safer for employees.

**Modification was not known at the time of Certification:** The need for this modification became apparent during the last several years of operation and was not considered at the time of Certification.

**If the modification is based on new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision, an explanation of why the change should be permitted:** The modification does not change or undermine in any way the assumptions, rationale, findings, or other basis of the CEC Final Decision (81-AFC-03C).

**Analysis of the impacts the modification may have on the environment:** The construction of the new building will have no significant adverse impacts on the environment. Existing

processing equipment will be transferred to the new building from the old structure upon the completion of construction.

**Analysis on the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards:** The proposed modification does not impact the facility's ability to comply with all applicable laws, ordinances, regulations, and standards. The proposed building will be constructed per applicable LORS. Traffic routing for construction materials shall be on public highways, will not require any special permitting. The amount of traffic associated with this project will be negligible.

**A discussion of how the proposed modification affects the public:** This modification will have no adverse effect on the public. The change will not likely be noticeable to the general public due to the remote location of the facility.

**Property owners potentially affected by the modification:** No property owners will be affected by the proposed modification. The site is located on a long term BLM lease in a very remote area.

**Construction Schedule:** The construction project is expected to take approximately 6 weeks to complete from the time the bid is awarded. A small crane and a man lift will be utilized during the construction phase and it is anticipated that there will be a maximum of 18 workers on the job at any one time.

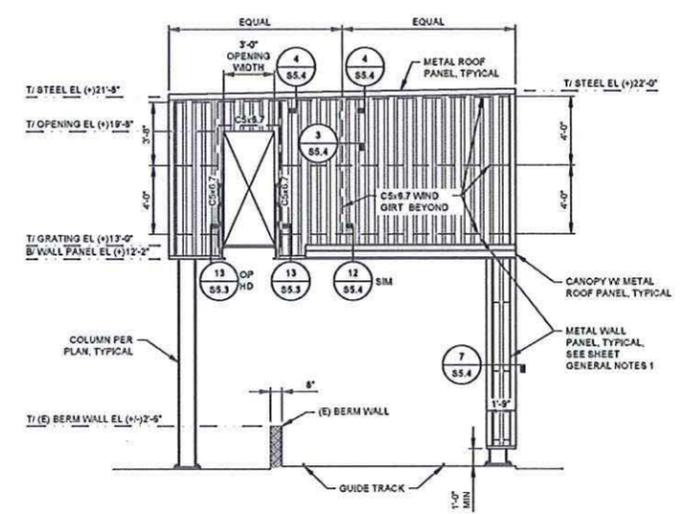
Attachments:

- A) Exterior elevations of sulfur processing building
- B) Photos of existing building

Attachment A – Engineering drawing of Exterior Elevations

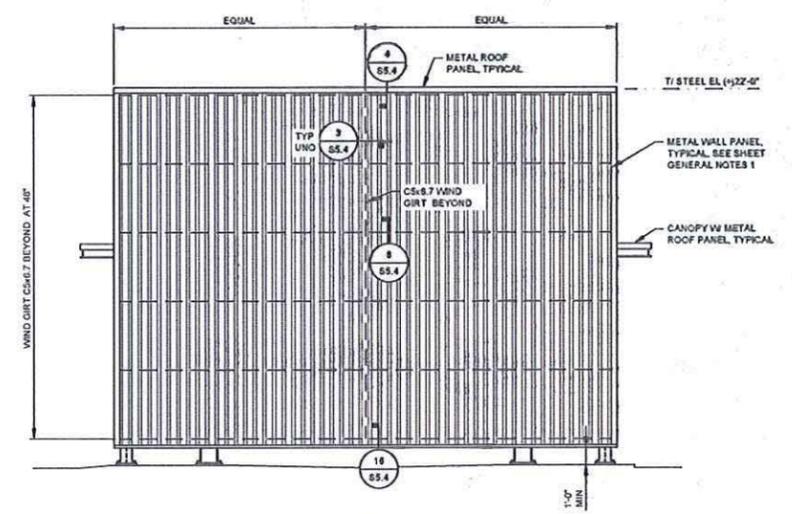
**SHEET GENERAL NOTES**

1. METAL SIDING: MBC1 TYPE 7.2 PANEL, 28 GAUGE, GALVALUME PLUS FINISH, FASTEN TO SUPPORTS USING TEK S FASTENER AT EACH FLUTE AT EACH GIRT, FASTEN SIDE LAPS AT 8" USING MBC1 TYPE 4A FASTENERS W PLATED FINISH, PAINT SIDING IN ACCORDANCE W SPECIFICATIONS, COLOR TO BE DETERMINED BY OWNER



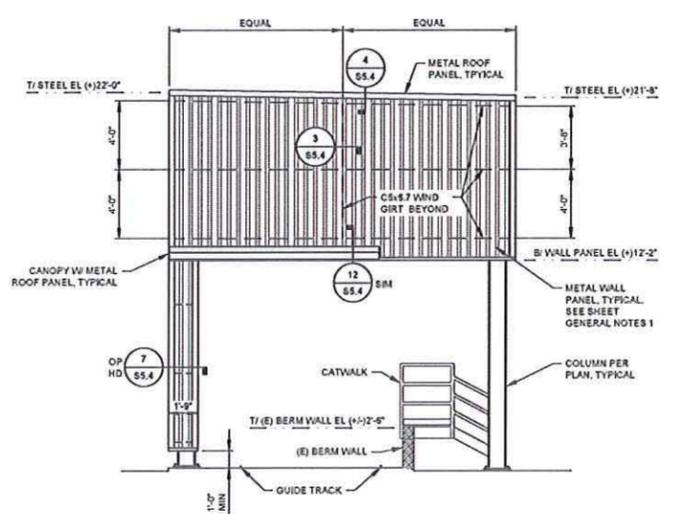
**WEST EXTERIOR ELEVATION**

0 2 4 8



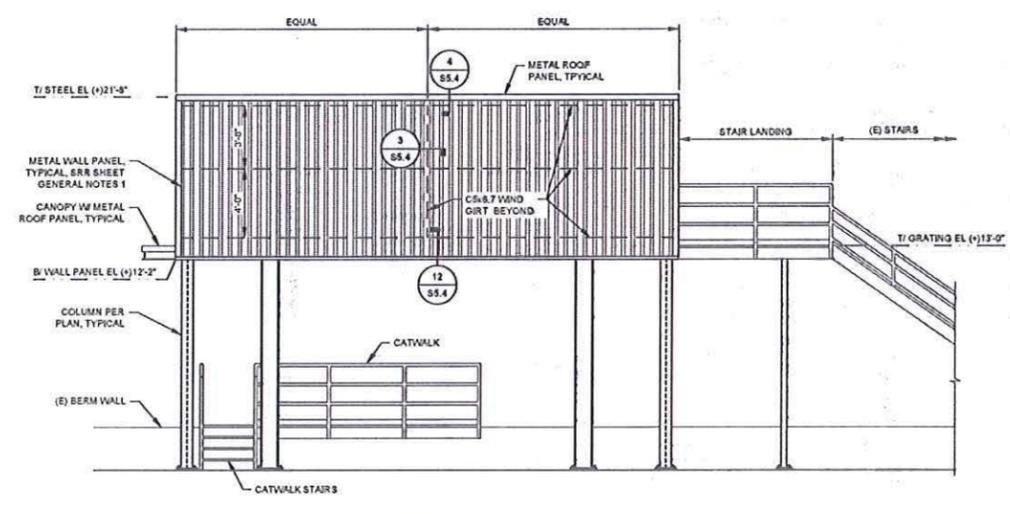
**SOUTH EXTERIOR ELEVATION**

0 2 4 8



**EAST EXTERIOR ELEVATION**

0 2 4 8



**NORTH EXTERIOR ELEVATION**

NOTE: EXISTING SHRINE BUILDING NOT SHOWN FOR CLARITY

0 2 4 8

No	Revision	Note	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR BID		SB	SB		5/25/18

Plot Date: 28 May 2018 - 2:23 PM Printed by: Paul Kemp Cad File No: G:\1111111006\NCPA Geothermal Plant 2 Sulfur Platform\06-CAD\Drawings\11110605-S2.1.dwg

**Reuse of Documents**  
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD Inc. and shall not be reused in whole or in part for any other project without GHD Inc.'s written authorization. © GHD Inc. 2012



**GHD Inc.**  
15575 SW Sequoia Parkway, Suite 140 Portland Oregon 97224 USA  
T 1 503 226 3921 F 1 503 226 3926  
W www.ghd.com

Drawn: S BRADY  
Drafting Check: [ ]  
Approved (Project Director): [ ]  
Date: 05/19/18  
Scale: AS NOTED

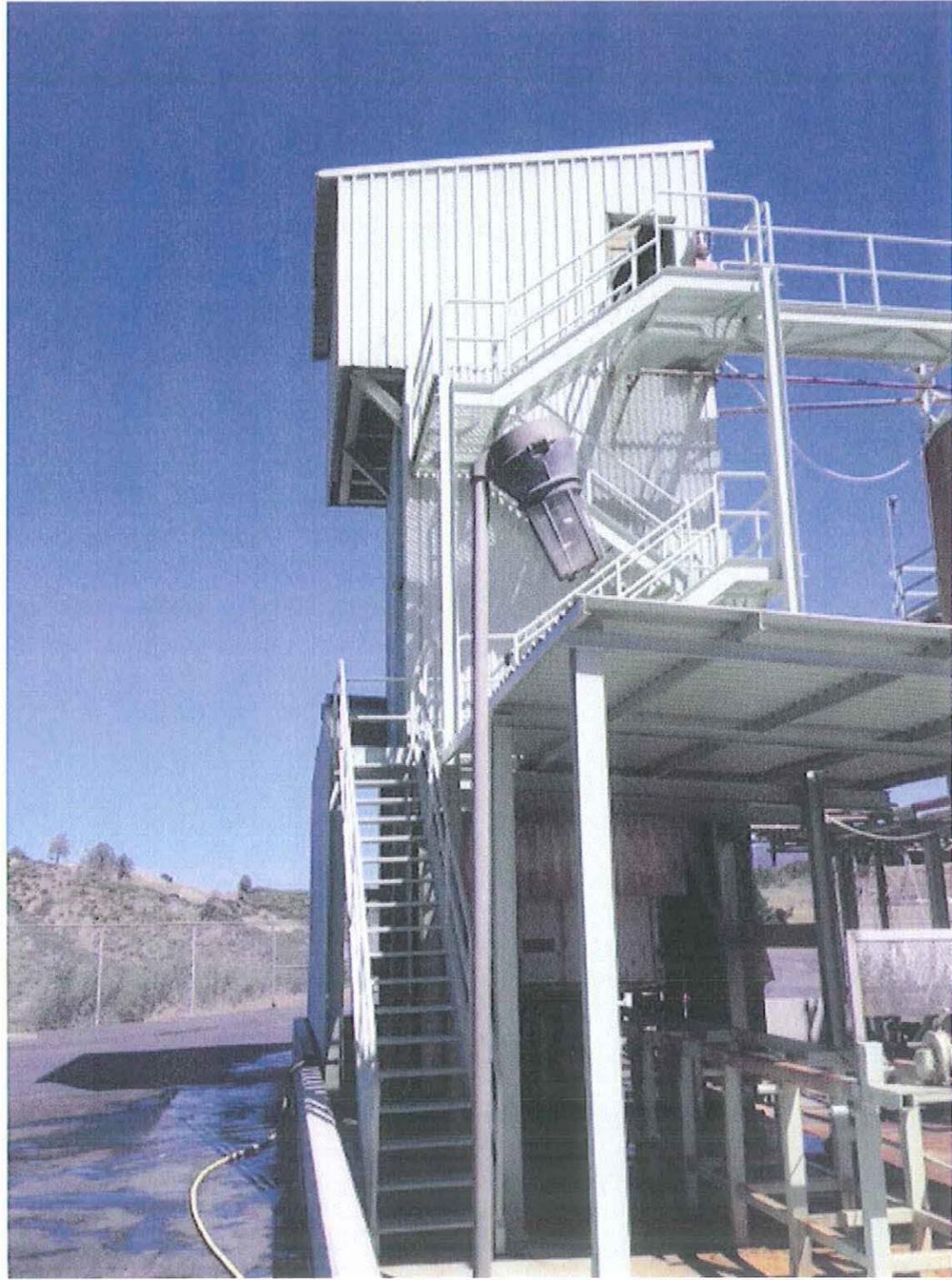
Designer: S BURNS  
Design Check: [ ]  
Client: NCPA GEOTHERMAL, MIDDLETOWN, CA  
Project: SULFUR PLATFORM  
Title: VACUUM FILTER EXTERIOR ELEVATIONS  
Contract No.: 11110605  
Original Size: [ ]  
Arch: [ ] Drawing No: 86050-401-S2.1  
Rev: 0

**ISSUED FOR BID**

Attachment B - Photo of Existing Sulfur Processing Building at Plant 2



Attachment B - Photo of Existing Sulfur Processing Building at Plant 2



Attachment B – Photo of Existing Sulfur Processing Building at Plant 2

