Midcoast ECO
Midcoast ECO.Org

Sensible planning and protection for the San Mateo County Midcoast

April 26, 2021

To: San Mateo County Board of Supervisors

Subject: San Mateo County Coastal Development Permit (CDP) Review of Proposed Cypress Point Project, Moss Beach, PLN2018-00264

Dear Supervisors Pine, Groom, Horsley, Slocum and Canepa,

I write on behalf of Midcoast ECO, and as a scientist and resident of Moss Beach, regarding the County's environmental review in consideration of a CDP for the proposed Cypress Point development in Moss Beach. Midcoast ECO is a community-focused, educational and advocacy non-profit organization promoting sensible planning and protection of the San Mateo County Midcoast.

Midcoast ECO has received numerous comments from Moss Beach residents who are particularly concerned about the proposed project's safety and health impacts to their own families and also to future Cypress Point project residents. These concerns arise due to the presence of **hazardous materials** at the project site and the limited and flawed evaluation of these impacts to date, as well as an awareness of recent history regarding underestimated toxicity at Treasure Island, Bayview Hunters Point, San Francisco Green Street Garage, etc.

Midcoast ECO recognizes the need for affordable housing and supports efforts to find sustainable solutions to the housing crisis. However, the **pressure to build affordable housing does <u>not</u> justify putting public safety at risk**.

In the interest of social justice and public safety, **we ask the Board of Supervisors to require an in-depth review of environmental hazards, in collaboration with the appropriate state agencies (California Department of Toxic Substances Control-DTSC, San Francisco Regional Water Quality Control Board-SFRWQCB), culminating in a full and transparent Environmental Impact Report (EIR), before any project is allowed to proceed at Cypress Point**.

<u>Background Information</u>

A recent report on the History and Environment of Farallon Heights[1] (the historical name of the project site), indicates that it was part of the U.S. Navy's Point Montara Anti-aircraft Training Center from 1943-46. This training center housed over 1,500 men and trained over 320,000 men on the then-latest technology in anti-aircraft warfare during WWII. The military facilities on the Farallon Heights portion of the site included a boiler room with underground fuel tank, an incinerator, a gas pump and vehicle service area, a garage, several barracks, a TDD (drone) hanger, a subsistence building and a drill field. These facilities are indicated on the annotated map below from 1943.

[1] History and Environment of Farallon Heights.

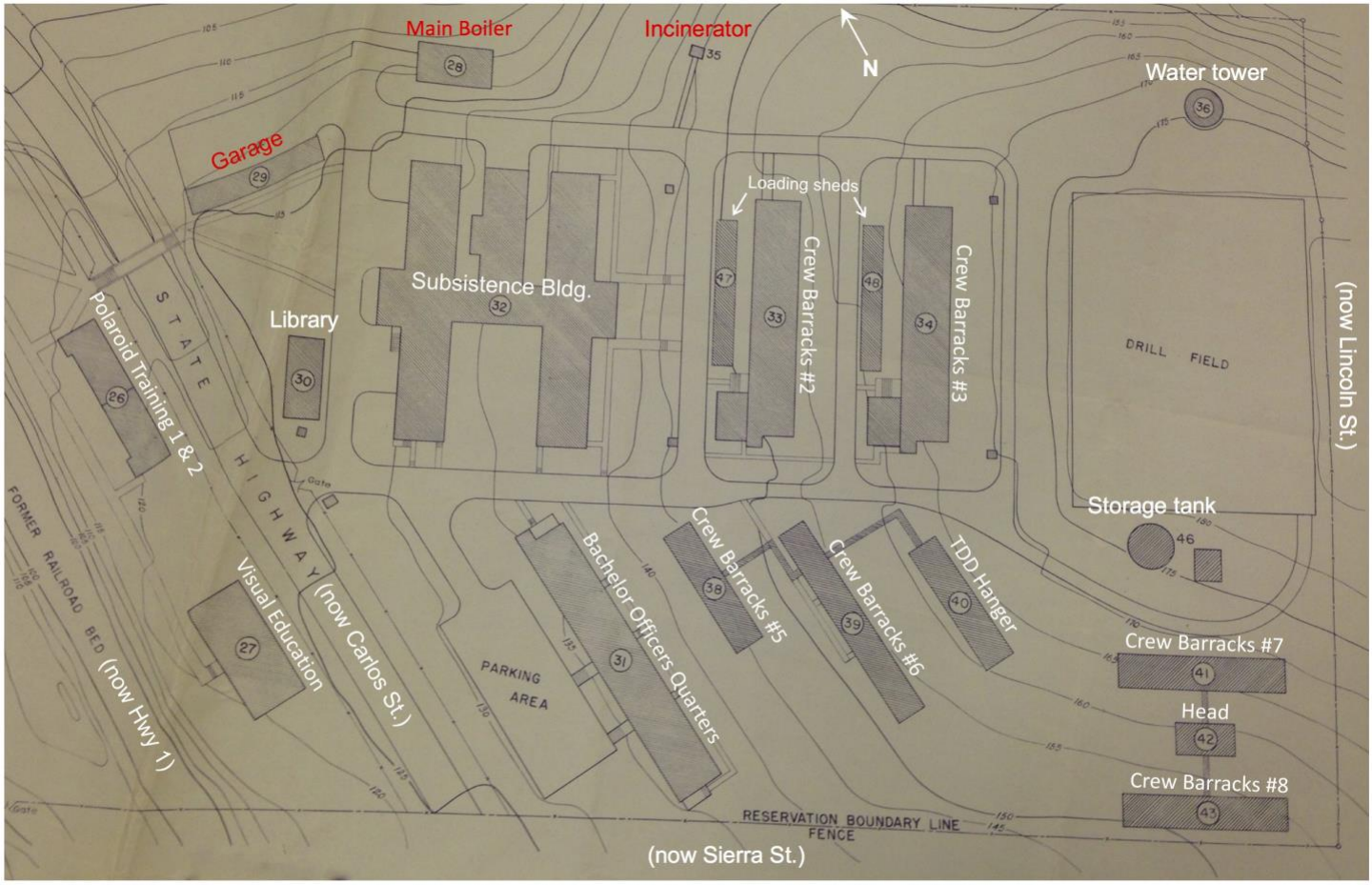

Fig 6. Map of the Farallon Heights Portion of the U.S. Navy Point Montara Anti-aircraft Training Center.

After the military's departure, the property and all of the buildings were sold as is in 1948. Most of the buildings were salvaged, but at the time there was no assessment for or cleanup of hazardous materials. An elementary school was built on the foundation of the Subsistence Building around 1950. This school also used the Navy incinerator and remained in operation until 1962, after which the entire site was essentially abandoned. The remaining buildings burned down a few years later, leaving the foundations and noncombustible building materials.

In 1985, Farallon Vista Associates prepared an EIR in anticipation of building a multi-unit housing complex there. However, **the 1985 EIR did <u>not</u> include an assessment for the presence of hazardous materials**. The developers installed two wells on the property, but their plans for further development were abandoned shortly thereafter.

A Limited Phase II Subsurface Investigation, performed by AEI Consultants under contract by MidPen Housing in 2016[2], was the first assessment for hazardous materials at this site. An even more limited follow-up investigation was performed by AEI in 2018[3]. Reports of both

[2] Limited Phase II Subsurface Investigation-AEI Consultants.
[3] Additional Subsurface Investigation & Water Well Evaluation.

investigations were provided in MidPen Housing's April, 2019 application. The stated purpose of these investigations was "to assess whether or not subsurface conditions (i.e., soil) beneath the property have been impacted by the historical onsite operations". However, as detailed below, these limited investigations were wholly inadequate in assessing the presence and extent of hazardous materials at the project site. An overlay map of boring sites and a results summary table taken from AEI's Phase II investigation report are shown below.

Legend

0 100 200 APPROXIMATE SCALE: 1" = 200'

Estimated Groundwater Flow Direction
Approximate Property Boundary
Approximate Water Tank Parcel
Water Well Location
Boring Location
Approximate Drill Field Boundary
Approximate Building Boundary
Approximate Incinerator Location

N

Figure 3: BORING LOCATION MAP
Carlos Street at Sierra Street, Moss Beach, California, 94038
Project Number: 350428

AEI Consultants

County Review Draft

TABLE 1: SOIL SAMPLE DATA SUMMARY
Carlos Street at Sierra Street, Moss Beach, CA

Location ID	Date	Depth (feet bgs)	Lead (mg/kg)	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	VOCs (mg/kg)	PCBs (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Molybdenu (mg/kg)	Nickel (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)	Remaining Metals (mg/kg)	Total Hexafurans (mg/kg)	Other Dioxins/Furans (mg/kg)
B-1-1.5	12/22/2015	1.5	4.5	--	--	--	--	<MRL	**2.3**	44	15	3.9	2.2	1.0	13	36	29	<MRL	2.78 x 10^{-5}	--
B-3-2.0	12/23/2015	2	--	--	1.3	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3-5.0	12/23/2015	5	--	--	<1.0	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4-0.0	12/23/2015	0	29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5-0.0	12/23/2015	0	54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6-0.0	12/23/2015	0	8.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-7-0.0	12/23/2015	0	**230**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-7-1.5	12/23/2015	1.5	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-8-0.0	12/23/2015	0	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-9-0.0	12/22/2015	0	6.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-10-0.0	12/22/2015	0	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-11-0.0	12/22/2015	0	6.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-12-5.0	12/23/2015	5	--	<1.0	--	--	<MRL	--	--	--	--	--	--	--	--	--	--	--	--	--
B-13-6.0	12/23/2015	6	--	<1.0	--	--	<MRL	--	--	--	--	--	--	--	--	--	--	--	--	--
B-14-2.0	12/23/2015	2	--	<1.0	--	--	<MRL	--	--	--	--	--	--	--	--	--	--	--	--	--
B-15-0.0	12/22/2015	0	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-15-7.0	12/23/2015	7	--	<1.0	--	--	<MRL	--	--	--	--	--	--	--	--	--	--	--	--	--
B-16-0.0	12/22/2015	0	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-17-4.0	12/22/2015	4	--	<1.0	--	--	<MRL	--	--	--	--	--	--	--	--	--	--	--	--	--
B-18-0.0	12/22/2015	0	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-19-0.0	12/22/2015	0	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-20-0.0	12/22/2015	0	41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-20-1.5	12/22/2015	1.5	8.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-21-0.0	12/22/2015	0	**88**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-21-1.5	12/22/2015	1.5	8.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-22-0.0	12/22/2015	0	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-23-0.0	12/22/2015	0	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-24-0.0	12/22/2015	0	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-25-0.0	12/22/2015	0	8.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-26-0.0	12/22/2015	0	7.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-27-0.0	12/22/2015	0	6.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-28-0.0	12/22/2015	0	9.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-29-0.0	12/22/2015	0	8.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-30-0.0	12/22/2015	0	9.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-31-0.0	12/22/2015	0	7.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-32-0.0	12/22/2015	0	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-33-0.0	12/22/2015	0	39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-34-0.0	12/22/2015	0	34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Regulatory Screening Levels																				
RWQCB $ESL_{residential}$			**80**	100	100	100	varies	varies	**0.39**	750	750	23	230	40	150	200	600	N/A	N/A	N/A
USEPA $RSL_{residential}$			400	82 - 520	96 - 110	2500 - 230000	varies	varies	**0.68**	15,000	120,000	23	3,100	390	NE	390	23,000	N/A	N/A	N/A

Notes:

mg/kg	milligrams per kilogram
<MRL	less than the method reporting limit
bgs	below ground surface
TPH-g	Total Petroleum Hydrocarbons as Gasoline
TPH-d	Total Petroleum hydrocarbons as Diesel
VOCs	Volatile Organic Compounds
PCBs	Polychlorinated biphenyls
Bold	Result exceeds applicable Comparison Value
--	Not analyzed
N/A	Not applicable
NE	Not established

Regulatory Screening Levels:
RWQCB $ESL_{residential}$: California Regional Water Quality Control Board Environmental Screening Level for residential land use for shallow soils (<3 meters bgs) assuming groundwater is a current or potential drinking water resource RWQCB, 2013, Table A-1).
USEPA $RSL_{residential}$: United States Environmental Protection Agency (USEPA) Regional Screening Level for resident soil (USEPA, June 2015 revised)

Page 1 of 1

Review of the Testing Plan and Results from AEI's Phase II Limited Subsurface Investigation

1. No soil tests were conducted in or around the military Garage area. This is a major oversight, as exemplified in a recent article in the SF Chronicle – "How SF sidestepped state law on developing toxic sites", which outlines the problem of building housing on sites previously contaminated by gas stations, vehicle repair shops and parking garages[4].
2. No soil tests were conducted in or around the military Loading Sheds.
3. Only one boring (B-1) was done near the military Incinerator. It was taken at a depth of only 1.5 feet and was taken uphill from the Incinerator. Results from this one sample indicated an arsenic level of 2.3 mg/kg, exceeding SFRWQCB's Environmental Screening Level (ESL) of 0.39 mg/kg.

[4] SF Chronicle: How SF sidestepped state law on developing toxic sites.

4. Only two borings were done near the military Main Boiler (B-3) at depths of only 2 and 5 feet. Although indicated on the above map, there was no sample taken at location B-2.
5. There is significant untested space between the Garage, Main Boiler and the Incinerator, as well as between building foundations.
6. For the vast majority of indicated test sites, only surface soil samples were taken and very few tests for contaminants other than lead were reported (see Table 1 above).
7. Only one of two water wells on the site was located and destroyed[5], although the top of the second (lower) well is clearly visible on the northwest side of the site near 16th Street.
8. Two locations (B-7 and B-21) indicated surface lead concentrations of 230 and 88 mg/kg, exceeding SFRWQCB's ESL limit of 32 mg/kg for terrestrial habitat exposure.
9. Despite the limitations of the Phase II investigation regarding all potential hazardous materials that may be expected at the project site, the Phase II report recommended further testing for lead only and only around locations B-7 and B-21. This was done in a small follow-up study (see footnote 3). Results of this study indicated the presence of **lead** near location B-7 that was 290 mg/kg, **9-times the SFRWCQB's ESL limit**. According to expert testimony from SWAPE Consulting[6], as well as that provided by an environmental chemist with extensive experience in assessing building sites in California for hazardous materials (shown below), the testing plan for lead used by AEI was not sufficient and indeed indicates that the presence of lead may be more widespread on the project site.
10. According to the 'Report Limitations and Reliance' sections in both AEI subsurface investigation reports regarding the number and location of samples, AEI states that "it cannot be assumed that they are representative of areas not sampled. This report should not be regarded as a guarantee that no further contamination beyond that which could have been detected within the scope of this investigation is present beneath the subject property".
11. **AEI Consultants did not test the site for asbestos** or even consider its potential presence. It is common knowledge that asbestos was extensively used during the WWII era by the military, as well as around 1950, when the elementary school was built on the military Subsistence Building foundation. Asbestos abatement was conducted on site near the Water tank in 1989 and the contractor noted the presence of asbestos on other areas of the premises not abated[7].

Additional Review Comments from a California Environmental Chemist

"No Sampling Plan was submitted for Agency or Public Review. The sampling, as it occurred, would never have passed review by any agency (DoD, EPA, CA EPA, DTSC) without significant comments and requirement to modify the plan. The following are the types of comments you would expect to receive from these agencies and should have been included in the sampling plan:

[5] Water Well Sampling and Well Destruction.
[6] SWAPE Comments on the MidPen Cypress Point Project Regarding Hazards, Hazardous Materials, Hydrology and Water Quality.
[7] Triad Environmental Systems, Inc.: 1989 Letter to Citizens Utilities.

Adequate maps showing ALL potential release points, groundwater flow, and projected sampling points including analytical methods, analytes, sampling locations including depths, etc. should be included. Discussion should be included for whether the sampling plan would be for statistical analysis (EPA DQOs, see below) or for "judgmental sampling".

Characterization of potential hazardous waste sites must include adequate numbers of samples for contaminants of potential concern (COPCs) in a random statistical sampling plan with enough samples and locations to be able to perform statistical analyses according to EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, EPA QA/G-4. The sampling as it occurred does not meet the requirements to conclude that the site is free of contaminants of concern.

Because the EPA DQO process requires so many samples and analyses to be able to statistically analyze the results and locations in a meaningful way, "judgmental sampling" may be used instead. This requires that ALL potential release points be disclosed, and adequate sampling be based on locations and possible migration of contaminants, taking into account potential migration pathways including leaching through the soil column, transport by air, and groundwater flow.

It appears the sampling occurred without review or comment, and without justifications for where and how sampling would occur. The sampling, as it occurred was flawed and did not meet any requirements for explaining why specific samples were collected and analyzed for specific methods. The following specific items should have been included in a "judgmental sampling" plan:

Lead, total petroleum hydrocarbons (TPH) as gasoline (TPH-g), diesel (TPH-d), and motor oil (TPH-mo) should have been analyzed at the surface (top 0.5 ft), 2 ft, and every 3-5 feet to groundwater from potential release points, and samples should follow the path of water runoff flow for at least several yards per decade of potential migration. This would apply to each potential fuel or oil storage or use area. This would be similar to any underground storage tank (UST) removal or spill investigation, but has not been adequately done to meet even minimal UST requirements. 27 Lead samples were collected only at the surface, but should also have been collected at depths of 2 feet and every 3-5 feet to groundwater. TPH sampling was wholly inadequate to characterize the site. Inadequate numbers of samples were collected without an established grid, nor with any indication that surface water flow and potential migration of contaminants has been characterized.

Any location from the 1940s with potential motor oil release should also be analyzed for polychlorinated biphenyls (PCBs). PCB analyses should have been performed at the surface (0-0.5 ft) as PCBs do not migrate through the soil easily, and should have occurred in a random grid around areas such as repair areas and motor oil storage tanks. One sample was collected and analyzed for PCBs for the whole 11-acre site. Inadequate numbers of samples were collected without an established grid, nor with any indication that potential migration of

these contaminants likely to have been released from potential release points has been characterized.

Dioxin furans samples should have been collected in a grid around the incinerator every 3-5 feet per decade from the incinerator following the path of water runoff at the surface and at depths of 1 ft and 3 ft and at similar depths up to 20 meters from the incinerator due to wind dispersal, with the majority of samples in the prevalent downwind direction. Surface water runoff would be downhill (to the west) and the predominant winds are from the NW, so samples should have been collected in the patterns discussed above to the west and SE of the incinerator. The single sample collected was uphill to the east of the incinerator, and cannot be judged to adequately characterize the area around the incinerator.

5 samples were collected for volatile organic compounds (VOCs) for the whole 11-acre site. 5 samples cannot adequately characterize more than one borehole, much less a whole 11-acre site.

No samples were collected or analyzed for asbestos, even though asbestos would have been routinely used during World War II throughout the site.

For an 11-acre site with known high density and high utilization during World War II, a total of 31 samples were analyzed for lead, 5 samples were analyzed for VOCs, 5 samples were analyzed for TPH-g, 2 samples were analyzed for TPH-d and TPH-mo, 1 sample was analyzed for PCBs, 1 sample was analyzed for dioxins/furans and 1 sample was analyzed for CAM 17 metals. Under no circumstances would this sampling event be deemed to adequately characterize even a 0.5-acre site by any agency (DoD, EPA, CA EPA DTSC or SFRWQCB). This would not even meet the requirements for brownfield redevelopment or property transfer for insurance purposes. Even if none of the sample results exceeded regulatory criteria, regardless of the results of the samples collected, this site has not been characterized adequately for a former World War II installation for housing development to proceed.

There is no way that the samples collected can be considered to adequately show that contaminants are not present at this site. If this were a parcel of land still owned by a DoD agency, there is no way that this sampling investigation could be judged to adequately characterize this former World War II installation site as transferable to the public, especially for public housing development.

Additional questions regarding this sampling event: Have these soils been adequately characterized for disposal as either hazardous waste or non-hazardous waste? If the former, state law requires that the landfill be apprised of the sampling plan. The site must also be free of contamination to meet insurance requirements.

This site should not be used for housing development, whether high density or very low density, until a proper, adequate, sampling and analysis characterization that would meet the requirements of any related agency has been completed."

The above comments are very concerning, especially considering that MidPen Housing stated in their application that site grading will require removal of 875 truckloads of material from the project site[8]. Since there are no major roads with direct access to the project site, these **875 truckloads of material, including contaminated soil, will be hauled through our small residential neighborhoods**, raising additional health and safety concerns for our community's children and vulnerable adults. Furthermore, mixing soils on site as an alternative to reducing hazardous waste concentrations, as proposed by AEI in their "Additional Subsurface Investigation & Water Well Evaluation" report (see footnote 3), is also clearly unacceptable. Additionally, runoff from the site as a result of grading, grubbing and excavating the highly-sloped property, which is in close proximity to Montara Creek (50-250 feet) and the Federally Protected Fitzgerald Marine Reserve, will be unavoidable.

In Summary

Midcoast ECO understands the need for affordable housing and supports efforts to find sustainable solutions to the housing crisis. However, the **pressure to build affordable housing does not justify putting public safety at risk**.

To protect the health and safety of current and future residents, we ask the Board of Supervisors to require an in-depth review of environmental hazards, in collaboration with the appropriate state agencies (DTSC, SFRWQCB), culminating in a full and transparent Environmental Impact Report (EIR), before any project is allowed to proceed at Cypress Point.

Sincerely,

JQ Oeswein, Ph.D.

Midcoast ECO Board of Directors

CC:
Midcoast Community Council
California Coastal Commission
Erik Martinez, CA Coastal Commission Program Analyst
Mike Schaller, San Mateo County Senior Planner
Steve Monowitz, San Mateo County Community Development Director
San Mateo County Planning Commission
Julie Pettijohn, DTSC Region 2 Branch Chief
California Water Board
Montara Water and Sanitary District
Andrew Bielak, MidPen Housing Associate Director of Housing Development

[8] Cypress Point Affordable Housing Project Air Quality and Greenhouse Gas Emissions Assessment