





Meeting of the Board for Professional Engineers, Land Surveyors, and Geologists



Thursday, November 21, 2019 beginning at 9:00 a.m. and continuing on Friday, November 22, 2019 beginning at 9:00 a.m., if necessary

Elihu M. Harris Building 1515 Clay Street, Conference Room 2 Oakland, CA 94612

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MEETING OF THE BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

BOARD MEETING

NOVEMBER 21-22, 2019

Elihu M. Harris Building 1515 Clay Street, Conference Room 2 Oakland, CA 94612

BOARD MEMBERS

Fel Amistad, President; Steve Wilson, Vice President; Natalie Alavi; Alireza Asgari; Duane Friel; Andrew Hamilton; Kathy Jones Irish; Eric Johnson; Coby King; Asha Lang; Betsy Mathieson; Mohammad Qureshi; Frank Ruffino; and Robert Stockton

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	needed:	
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I. Roll Call to Establish a Quorum

II. Pledge of Allegiance

III. Public Comment for Items Not on the Agenda

NOTE: The Board cannot take action on items not on the agenda. The Board will also allow for Public Comment during the discussion of each item on the agenda. Please see the last page of this Official Notice and Agenda for additional information regarding Public Comment.

Administration

- A. Fiscal Year 2017/18 Budget StatusB. Fiscal Year 2018/19 Budget StatusC. Fiscal Year 2019/20 Budget Report

0770- Professional Engineers, Land Surveyors and Geologist Financial Statement

Financial Statement						
	FY 2019-20	FY 2019-20	FY 2019-20			
	10/16	FM 1	Updated	%		
	Activity Log	Projections	Projections	Change		
Revenue						
Applications/Licensing Fees	460,493	1,646,000	1,646,000	0%		
¹ Renewal fees	3,567,571	6,891,000	6,891,000	0%		
² Delinquent fees	16,560	88,000	88,000	0%		
Other & Reimbursements	49,387	140,000	140,000	0%		
3 Interest	0	163,000	163,000	0%		
Total Revenue:	4,094,011	8,928,000	8,928,000	0%		
Expense	1,00 1,011	0,020,000	0,020,000	5 70		
Damanal Camiaaa						
Personnel Services:	744.000	0.004.405	0.005.404	40/		
4 Salary & Wages (Staff)	741,366	2,924,425	2,965,464	1%		
Temp Help	26,932	123,785	107,728	-13%		
Statutory Exempt (EO)	33,396	135,526	133,584	-1%		
Board Member Per Diem	2,400	10,000	9,600	-4%		
Overtime/Flex Elect/Lump Sum	112	0	448	100%		
Staff Benefits	441,778	1,713,980	1,767,112	3%		
Total Personnel Services	1,245,984	4,907,716	4,983,936	2%		
Operating Expense and Equipment						
General Expense	20,830	67,000	67,000	0%		
5 Printing	25,056	8,000	31,978	300%		
Communication	4,611	44,000	44,000	0%		
Postage	0	50,000	50,000	0%		
Insurance	0	16,000	16,000	0%		
Travel In State	6,526	60,000	65,000	8%		
Travel, Out-of-State	0	800	800	0%		
Training	0	150	500	233%		
Facilities Operations	97,442	416,004	416,004	0%		
6 C & P Services - Interdept.	136,855	457,090	457,090	0%		
7 C & P Services - External	555,301	1,243,885	1,243,885	0%		
8 DCA Pro Rata	0	1,579,000	1,579,000	0%		
DOI - Investigations	0	0	0	0%		
Interagency Services	273	27,000	27,000	0%		
Consolidated Data Center	34	22,000	22,000	0%		
9 Information Technology	14,211	1,143,000	857,250	-25%		
Equipment	794	0	16,000	0%		
Other Items of Expense	0	0	100,000	0%		
Total OE&E	861,933	5,133,929	4,993,507	-3%		
Total Expense:	2,107,917	10,041,645	9,977,443	-1%		
Total Revenue:	4,094,011	8,928,000	8,928,000			
Total Expense:	2,107,917	10,041,645	9,977,443			
Difference:	1,986,094	(1,113,645)	(1,049,443)			

Financial Statement Notes

- **Renewal fees** Renewal fees are not collected equally throughout the year. On average, the Board collects 75% of its renewal fees revenue in the first half of the fiscal year.
- **2 Delinquent fees -** Approximately 90% of delinquent fee revenue is collected in the second half of the fiscal year.
- 3 Interest Includes income from surplus money investments earned on money in the Board's fund. The state treasury manages this money and the Board earns income based on the current interest rate. Line item projection was provided by the DCA Budgets office.
- **4 Salary & Wages (Staff)** The projected expenditure increase for salaries and wages is due to the Board almost being fully staffed, merit salary adjustments, and new bargaining unit agreements. The Board is trying to fill the following remaining positions: AGPA/SSA and OT.
- **5 Printing -** \$25,000 in contract encumbrances in Fi\$Cal reports. Board staff is working with DCA Budgets to identify contracts.
- **6 C&P Services Interdepartmental -** Includes all contract services with other state agencies for examination services (Dept. of Conservation and Water Resources). This line item also now includes enforcement expenses for the Attorney General and the Office of Administrative Hearings.
- 7 **C&P Services External** Includes all external contracts (examination development, exam site rental, expert consultant agreements, and credit card processing).
- **8 DCA Pro Rata** Includes distributed costs of programmatic and administrative services from DCA.
- **9 Information Technology -** California Department of Technology (CDT) oversight for review and approval of the Project Approval Lifecycle (PAL) project.

Prepared 11.12.2019

Budget

0770 - Professional Engineer's, Land Surveyor's and Geologist's Fund Analysis of Fund Condition

(Dollars in Thousands)

2019-2020 Budget Act	2	PY 2017-18	2	PY 2018-19		Act CY 019-20	2	BY 020-21	_	3Y + 1 021-22
BEGINNING BALANCE	\$	10,042	\$	7,955	\$	6,399	\$	5,471	\$	2,413
Prior Year Adjustment	<u>\$</u> \$	10.042	<u>\$</u> \$	7.055	<u>\$</u>		- <u>\$</u> \$	- - -	- <u>\$</u> \$	2,413
Adjusted Beginning Balance REVENUES AND TRANSFERS	Ъ	10,042	\$	7,955	\$	6,399	Þ	5,471	Ф	2,413
Revenues:										
4121200 Delinquent fees	\$	88	\$	75	\$	88	\$	88	\$	89
4127400 Renewal fees	\$	6,851	\$	6,260	\$	6,891	\$	6,323	\$	6,960
4129200 Other regulatory fees	\$	124	\$	252	\$	140	\$	140	\$	140
4129400 Other regulatory licenses and permits	\$ \$	1,643	\$	1,842	\$	1,646	\$	1,646	\$	1,646
4163000 Income from surplus money investments	\$	97	\$	145	\$	163	\$	36	\$	-
4171400 Escheat of unclaimed checks and warrants	\$	13	\$	13	\$	13	\$	13	\$	13
4172500 Miscellaneous revenues	\$	10	_\$	1_	_\$	<u>1</u>		1	\$	1_
Totals, Revenues	\$	8,826	\$	8,588	\$	8,942	\$	8,247	\$	8,849
Transfers from Other Funds										
Revenue Transfer from Geology/General Fund	\$	-			\$	1,134				
FO0001 Proposed GF Loan Repayment per item 1110-011-0770, Budget Act of 2011	\$	-	\$	800	\$	-	\$	-	\$	-
Totals, Revenues and Transfers	\$	8,826	\$	9,388	\$	10,076	\$	8,247	\$	8,849
Totals, Resources	\$	18,868	\$	17,343	\$	16,475	\$	13,717	\$	11,262
EXPENDITURES Disbursements:										
1111 Department of Consumer Affairs (State Operations)	\$	10,214	\$	10,092	\$	9,977	\$	10,277	\$	10,585
8880 Financial Information System for CA (State Operations)	\$	15	\$	1	\$	-1	\$	-1	\$	-1
9892 Supplemental Pension Payments (State Operations)	\$	-	\$	98	\$	209	\$	209	\$	209
9900 Statewide Admin. (State Operations)	\$	684	\$	753	\$	819	\$	819	\$	819
Total Disbursements	\$	10,913	\$	10,944	\$	11,004	\$	11,304	\$	11,612
FUND BALANCE										
Reserve for economic uncertainties	\$	7,955	\$	6,399	\$	5,471	\$	2,413	\$	-350
Months in Reserve		8.7		7.0		5.8		2.5		-0.4

NOTES:

A. ASSUMES WORKLOAD AND REVENUE PROJECTIONS ARE REALIZED IN BY+1 AND ON-GOING.

B. ASSUMES APPROPRIATION GROWTH OF 3% PER YEAR BEGINNING IN BY+1

C. ASSUMES INTEREST RATE AT 0.3%.

D. REVENUE AND EXPENDITURES PROJECTED THROUGH FM 12.

V. Legislation
A. 2020 Legislative Calendar

2020 TENTATIVE LEGISLATIVE CALENDAR

COMPILED BY THE OFFICES OF THE SECRETARY OF THE SENATE AND THE OFFICE OF THE CHIEF CLERK October 18, 2019 (Final)

JANUARY								
S	M	T	W	TH	F	S		
			1	2	3	4		
5	<u>6</u>	7	8	9	<u>10</u>	11		
12	13	14	15	16	<u>17</u>	18		
19	<u>20</u>	21	22	23	<u>24</u>	25		
26	27	28	29	30	<u>31</u>			

	FEBRUARY								
S	M	T	W	TH	F	S			
						1			
2	3	4	5	6	7	8			
9	10	11	12	13	14	15			
16	<u>17</u>	18	19	20	<u>21</u>	22			
23	24	25	26	27	28	29			

	MARCH									
S	M	T	W	TH	F	S				
1	2	3	4	5	6	7				
8	9	10	11	12	13	14				
15	16	17	18	19	20	21				
22	23	24	25	26	<u>27</u>	28				
29	30	31								

APRIL								
S	M	Т	W	TH	F	S		
			1	<u>2</u>	3	4		
5	6	7	8	9	10	11		
12	<u>13</u>	14	15	16	17	18		
19	20	21	22	23	<u>24</u>	25		
26	27	28	29	30				

	MAY								
S	M	Т	W	TH	F	S			
					1	2			
3	4	5	6	7	8	9			
10	11	12	13	14	<u>15</u>	16			
17	18	19	20	21	22	23			
24	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	30			
31									

^{*}Holiday schedule subject to Senate Rules committee approval.

DEADLINES

- Jan. 1 Statutes take effect (Art. IV, Sec. 8(c)).
- Jan. 6 Legislature Reconvenes (J.R. 51(a)(4)).
- Jan. 10 Budget must be submitted by Governor (Art. IV, Sec. 12(a)).
- <u>Jan. 17</u> Last day for **policy committees** to hear and report to **fiscal committees** fiscal bills introduced in their house in the **odd-numbered year** (J.R. 61(b)(1)).
- Jan. 20 Martin Luther King, Jr. Day.
- Jan. 24 Last day for any committee to hear and report to the floor bills introduced in that house in the odd-numbered year (J.R. 61(b)(2)). Last day to submit bill requests to the Office of Legislative Counsel.
- <u>Jan. 31</u> Last day for each house to **pass bills introduced** in that house in the odd-numbered year (Art. IV, Sec. 10(c)), (J.R. 61(b)(3)).
- Feb. 17 Presidents' Day.
- **Feb. 21** Last day for bills to be **introduced** (J.R. 61(b)(4)), (J.R. 54(a)).
- Mar. 27 Cesar Chavez Day observed

- Apr. 2 Spring Recess begins upon adjournment of this day's session (J.R. 51(b)(1)).
- **Apr. 13** Legislature reconvenes from **Spring Recess** (J.R. 51(b)(1)).
- Apr. 24 Last day for **policy committees** to hear and report to **fiscal committees** fiscal bills introduced in their house (J.R. 61(b)(5)).
- <u>May 1</u> Last day for **policy committees** to hear and report to the floor **nonfiscal** bills introduced in their house (J.R. 61(b)(6)).
- May 8 Last day for policy committees to meet prior to June 1 (J.R. 61(b)(7)).
- May 15 Last day for **fiscal committees** to hear and report to the floor bills introduced in their house (J.R. 61(b)(8)). Last day for **fiscal committees** to meet prior to June 1 (J.R. 61 (b)(9)).
- May 25 Memorial Day
- May 26 29 Floor Session Only. No committees, other than conference or Rules Committees, may meet for any purpose (J.R. 61(b)(10)).
- May 29 Last day for each house to pass bills introduced in that house (J.R. 61(b)(11)).

2020 TENTATIVE LEGISLATIVE CALENDAR

COMPILED BY THE OFFICES OF THE SECRETARY OF THE SENATE AND THE OFFICE OF THE CHIEF CLERK October 18, 2019 (Final)

	JUNE								
S	M	T	W	TH	F	S			
	1	2	3	4	5	6			
7	8	9	10	11	12	13			
14	<u>15</u>	16	17	18	19	20			
21	22	23	24	<u>25</u>	<u>26</u>	27			
28	29	30							

JUNE									
S	M	T	W	TH	F	S			
	1	2	3	4	5	6			
7	8	9	10	11	12	13			
14	<u>15</u>	16	17	18	19	20			
21	22	23	24	<u>25</u>	<u>26</u>	27			
28	29	30							

	JULY						
S	M	T	W	TH	F	S	
			1	<u>2</u>	<u>3</u>	4	
5	6	7	8	9	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	
26	27	28	29	30	31		

	AUGUST						
S	M	T	W	TH	F	S	
						1	
2	<u>3</u>	4	5	6	7	8	
9	10	11	12	13	<u>14</u>	15	
16	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	22	
23	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	29	
30	<u>31</u>						

June 1	Committee meetings n	may resume (J.R.	61(b)(12)).
ounc 1	Committee meetings in	may resume (J.1 C.	01(0)(12)).

June 15 Budget Bill must be passed by midnight (Art. IV, Sec. 12(c)(3)).

June 25 Last day for a legislative measure to qualify for the November 3 General Election ballot (Election code Sec. 9040).

June 26 Last day for policy committees to hear and report fiscal bills to fiscal committees (J.R. 61(b)(13)).

July 2 Last day for policy committees to meet and report bills (J.R. 61(b)(14)). Summer Recess begins upon adjournment provided Budget Bill has been passed (J.R. 51(b)(2)).

July 3 Independence Day observed.

Aug. 14 Last day for fiscal committees to meet and report bills (J.R. 61(b)(15)).

Aug. 17 - 31 Floor Session only. No committees, other than conference and Rules committees, may meet for any purpose (J.R. 61(b)(16)).

Aug. 21 Last day to amend bills on the Floor (J.R. 61(b)(17)).

Last day for each house to pass bills (Art. IV, Sec. 10(c), (J.R. 61(b)(18)). Aug. 31 Final recess begins upon adjournment (J.R. 51(b)(3)).

IMPORTANT DATES OCCURRING DURING FINAL RECESS

<u> 2020</u>	
Sept.	<u>30</u>

Last day for Governor to sign or veto bills passed by the Legislature before Sept. 1 and in the Governor's possession on or after Sept. 1 (Art. IV, Sec. 10(b)(2)).

General Election **Nov. 3**

Nov. 30 Adjournment <u>Sine Die</u> at midnight (Art. IV, Sec. 3(a)).

Dec. 7 12 m. convening of 2021-22 Regular Session (Art. IV, Sec. 3(a)).

2021

Statutes take effect (Art. IV, Sec. 8(c)). Jan. 1

Page 2 of 2

Legislature reconvenes from **Summer Recess** (J.R. 51(b)(2)).

^{*}Holiday schedule subject to Senate Rules committee approval.

VI. **Enforcement**

- A. Enforcement Statistical Reports
 1. Fiscal Year 2019/20 Update

Number of Complaint Investigations Opened & Completed by Month 12-Month Cycle

Month	Complaint Investigations	Complaint Investigations					
WIGHT	Opened	Completed					
November 2018	51	18					
December 2018	12	17					
January 2019	39	28					
February 2019	12	21					
March 2019	29	42					
April 2019	32	43					
May 2019	32	11					
June 2019	21	30					
July 2019	37	30					
August 2019	40	37					
September 2019	33	32					
October 2019	21	21					

Complaint Investigations Opened and Completed Total by Fiscal Year

Fiscal Year	Complaint Investigations Opened	Complaint Investigations Completed
2016/17	353	323
2017/18	362	349
2018/19	328	334
2019/20	131	120

Current Fiscal Year through October 31, 2019

Number of Open (Pending) Complaint Investigations (at end of FY or month for current FY)

(at one of the month for eartone the					
Fiscal Year	Number of Open (Pending) Complaint Investigations				
2016/17	237				
2017/18	254				
2018/19	247				
2019/20	258				

Current Fiscal Year through October 31, 2019

Average Days from Opening of Complaint Investigation to Completion of Investigation (at end of FY or month for current FY)

Fiscal Year	Average Days
2016/17	243
2017/18	238
2018/19	236
2019/20	311

Current Fiscal Year through October 31, 2019

Outcome of Completed Investigations

Fiscal Year	# Closed	% Closed	# Cite	% Cite	# FDA	% FDA
2016/17	205	63%	97	30%	21	7%
2017/18	219	63%	93	27%	37	10%
2018/19	225	67%	83	25%	27	8%
2019/20	79	66%	37	31%	4	3%

Current Fiscal Year through October 31, 2019

Closed = Closed with No Action Taken, includes the categories listed on the next page.

Cite = Referred for Issuance of Citation

FDA = Referred for Formal Disciplinary Action

Aging of Open (Pending) Complaint Investigation Cases 12-Month Cycle

Month	0-30 Days	31-60 Days	61-90 Days	91-12 Days	121- 180 Days	181- 270 Days	271- 365 Days	1-2 Years	2-3 Years	3-4 Years
November 2018	47	16	24	12	57	65	15	26	1	0
December 2018	12	41	19	23	32	81	19	30	1	0
January 2019	32	11	34	20	32	78	31	30	1	0
February 2019	11	29	11	39	37	60	46	26	1	0
March 2019	27	12	28	11	50	48	53	17	1	0
April 2019	31	25	11	27	41	36	50	14	1	0
May 2019	32	29	25	11	35	57	43	22	2	0
June 2019	17	31	26	21	33	42	39	37	1	0
July 2019	37	17	30	24	26	46	32	41	0	1
August 2019	40	37	16	27	40	27	41	27	1	1
September 2019	33	40	36	16	43	37	28	24	0	1
October 2019	20	32	39	36	36	37	33	23	1	1

Citations (Informal Enforcement Actions)

Number of Complaint Investigations Referred and Number of Citations Issued

Fiscal Year	Complaint Investigations Referred for Issuance of Citation	Citations Issued
2016/17	97	100
2017/18	93	83
2018/19	83	75
2019/20	37	38

Current Fiscal Year through October 31, 2019

Number of Citations Issued and Final

Fiscal Year	Issued	Final
2016/17	100	101
2017/18	83	91
2018/19	75	76
2019/20	38	28

Current Fiscal Year through October 31, 2019

Average Days Between Date of Issuance of Citation and Date Citation Becomes Final

Fiscal Year	Number of Days
2016/17	259
2017/18	164
2018/19	236
2019/20	167

Current Fiscal Year through October 31, 2019

Average Days from Opening of Complaint Investigation to Date Citation Becomes Final

Fiscal Year	Number of Days
2016/17	639
2017/18	495
2018/19	587
2019/20	532

Current Fiscal Year through October 31, 2019

Formal Disciplinary Actions Against Licensees

Number of Licensees Referred for Formal Disciplinary Action and Number of Final Disciplinary Decisions

Fiscal Year	Number of Licensees Referred for Formal Disciplinary Action	Number of Final Disciplinary Decisions
2016/17	36	41
2017/18	28	19
2018/19	34	30
2019/20	6	18

Current Fiscal Year through October 31, 2019

Average Days from Referral for Formal Disciplinary Action to Effective Date of Final Decision

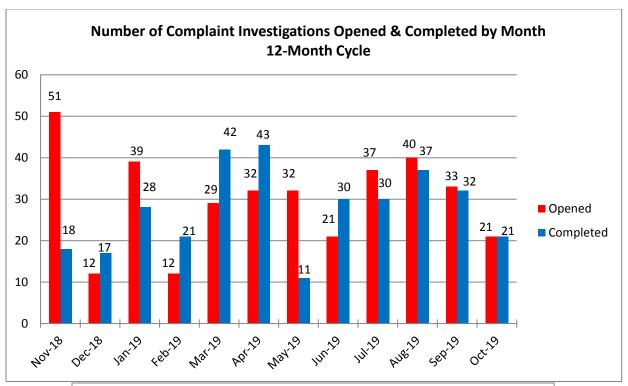
Fiscal Year	Number of Days
2016/17	703
2017/18	585
2018/19	550
2019/20	590

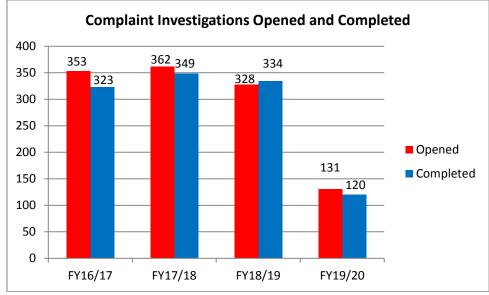
Current Fiscal Year through October 31, 2019

Average Days from Opening of Complaint Investigation to Effective Date of Final Decision

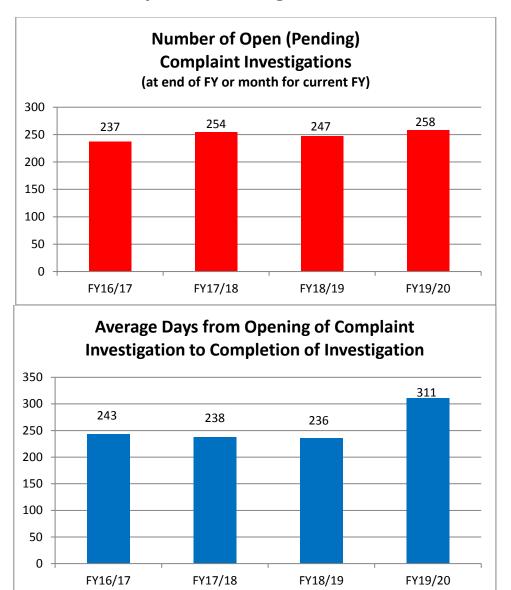
Fiscal Year	Number of Days
2016/17	1106
2017/18	825
2018/19	923
2019/20	651

Current Fiscal Year through October 31, 2019



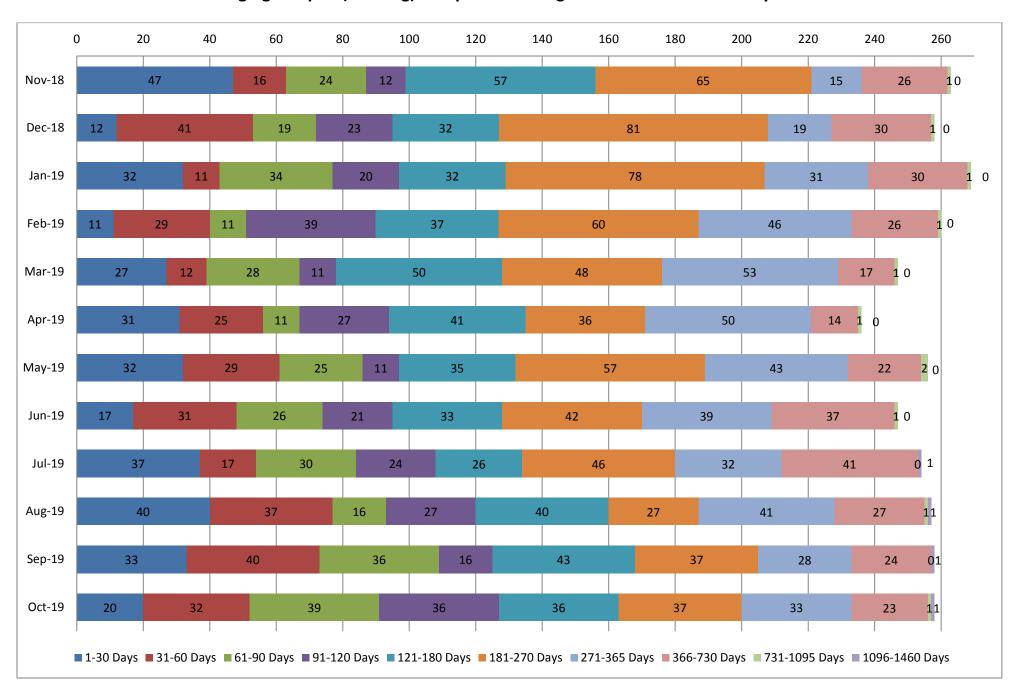


NOTE: FY19/20 statistics are through October 31, 2019

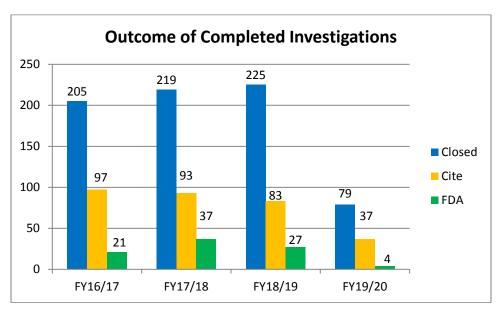


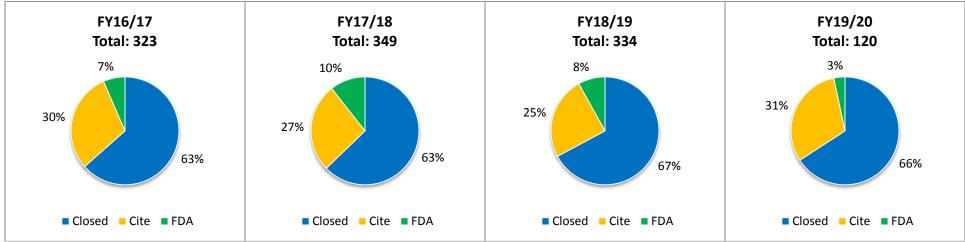
NOTE: FY19/20 statistics are through October 31, 2019

Aging of Open (Pending) Complaint Investigation Cases – 12-Month Cycle



Outcome of Completed Investigations





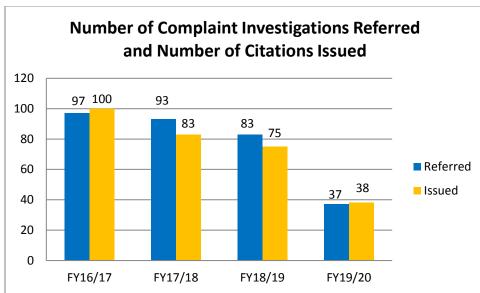
NOTE: FY19/20 statistics are through October 31, 2019

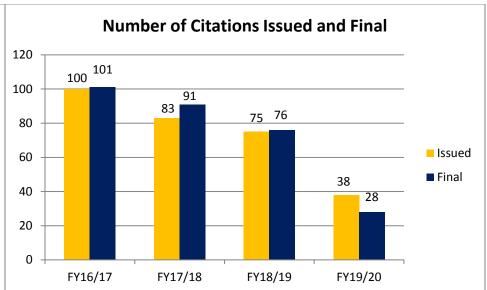
Closed with No Action Taken, includes the No Violation/Insufficient Evidence; Compliance Obtained; Warning Letter; Other Reason for Closing Without Action (e.g., subject deceased); Resolved After Initial Notification; Referred to District Attorney with Request to File Criminal Charges; and Mediated.

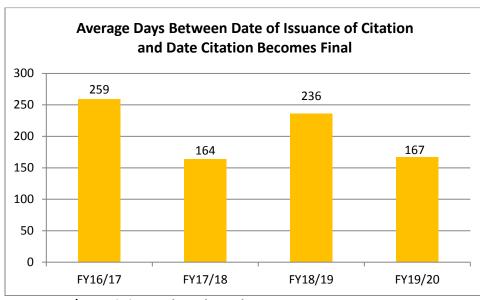
Cite = Referred for Issuance of Citation

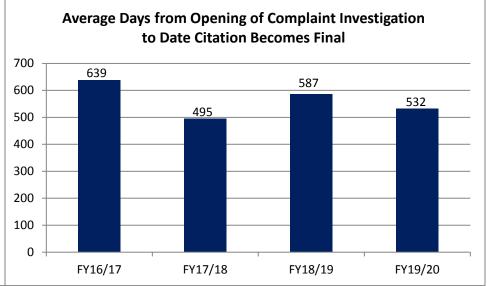
FDA = Referred for Formal Disciplinary Action

Citations (Informal Enforcement Actions)



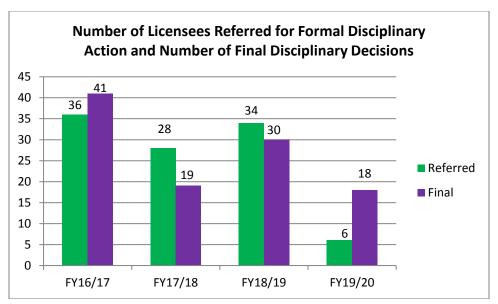


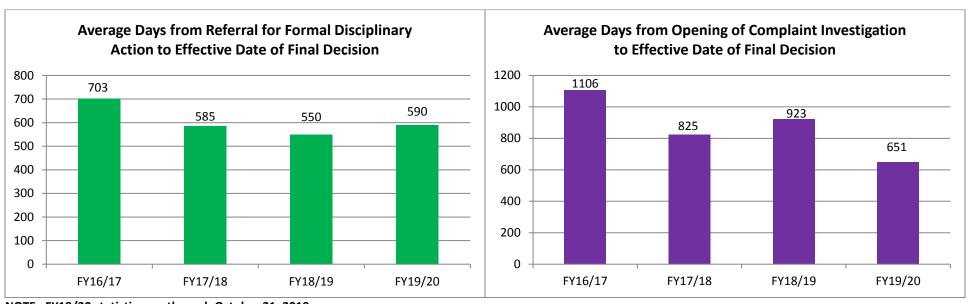




NOTE: FY19/20 statistics are through October 31, 2019

Formal Disciplinary Actions Against Licensees





Exams/Licensing VII.

- A. Update on 2019 Examinations
- B. Third Quarter Examination Results
- C. Update on Alternate Item Types for California Examinations
- D. Adoption of Test Plan Specifications
 - Professional Geologist Certified Engineering Geologist (CEG) (Possible Action)
 Professional Geologist Certified Hydrogeologist (CHG) (Possible Action)

California State Specific Civil Engineer Examination Results Third Quarter 2019

Civil Engineer - Seismic Principles

	Total Number of Candidates	Number Passed	Pass %
July	136	78	57%
August	218	115	53%
September	361	148	41%
Total	715	341	48%

Civil Engineer - Engineering Surveying

	Total Number of Candidates	Number Passed	Pass %
July	127	71	56%
August	213	98	46%
September	355	135	38%
Total	695	304	44%

2. 110 do: 1110 fill fill fill fill fill fill fill fil	BPELSG Certified Engineering Geologist-2019	
	Percentage of	
	Questions on	
	the Exam	
Professional Activities: 1. Review regional and site-specific geologic conditions that could impact a project based on available published and unpublished geologic and remote sensing (e.g. aerial imagery, LiDAR, InSAR) data		
 Review provided project documents to identify potential impacts from geologic hazards Review on- and off-site conditions, history, and usage to identify the potential presence of on-site concerns (e.g., environmental, ecological, cultural, community history, geotechnical, health and safety) Prepare preliminary geologic models of existing and proposed conditions Define scope of engineering geologic investigations based on preliminary review of available data and coordination with other project professionals Perform site reconnaissance to assess topography, access, and hazards Identify California regulatory requirements for field exploration, monitoring, testing and reporting 	15%	
Test questions on these professional activities may include one or more of the following:		
Test questions on these professional activities may include one or more of the following: A. California regulations pertaining to exploration and sampling of contaminated soil and groundwater		
A. California regulations pertaining to exploration and sampling of contaminated soil and		
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A. California regulations pertaining to exploration and sampling of contaminated soil and groundwater B. California guidelines for siting, design, construction, and monitoring landfills and disposal sites C. California guidelines, laws, and regulations for investigating sites for schools, hospitals,		
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Professional Activities: C. Collect remote sensing (e.g. aerial imagery, LiDAR, InSAR) data, maps, plans, and sections from published sources, references, field sources, and public networks Map geomorphology, lithology, geologic structures, geologic and hydrogeologic features Log subsurface explorations (e.g., trenches, borings) Log stratigraphy, geologic and engineering properties of earth materials Characterize hydrogeologic conditions Collect representative samples of various geologic media (e.g., soil, rock, groundwater, rapor) for physical and laboratory testing Measure geophysical properties of earth materials Select laboratory tests for measuring physical, engineering, and chemical properties of earth materials Identify site specific input parameters for seismic ground motion analyses		
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O. Field and laboratory tests to evaluate hydrogeologic properties of earth materials	
P. Laboratory tests to evaluate physical and chemical properties of earth materials	
Q. Tests to assess performance and durability of rock and aggregate materials	
Professional Activities: 1. Prepare and interpret geologic models (e.g., cross-sections, structure contours, isopach) from available data 2. Analyze the results of laboratory testing 3. Assess effects of erosional processes 4. Assess static and dynamic slope stability 5. Assess potential ground movement related to construction and natural processes 6. Analyze remote sensing data (e.g. aerial imagery, LiDAR, InSAR) to identify geologic conditions 7. Analyze hydrogeologic data 10. Identify potential volcanic hazards 9. Identify potential flood and debris flow hazards 8. Identify earth materials (e.g., asbestos, chert, radon, clay, pyrite) that may be detrimental to projects and/or human health 11. Identify hazards associated with coastal processes 14. Perform seismic ground motion analyses 13. Assess fault surface rupture hazards 12. Assess seismic hazards 15. Identify earthwork concepts and considerations (e.g., rippability, volume change, dewatering, drainage) 16. Recommend installation of geotechnical instrumentation and analysis of associated data	40%
Test questions on these professional activities may include one or more of the following: A. Geometric relationship between slope orientation and apparent dip of geologic	
structures	
B. Interpretation of geologic conditions on cross-sections	
C. Geometry, distribution, and strength characteristics of rock mass discontinuities	
D. Geomorphology pertaining to geologic hazards	
E. Geophysical methods, capabilities, and interpretation	
F. Standardized engineering soil and rock classification systems	
G. Application of rock and soil mechanics	
H. Effects of corrosive earth materials on engineered structures	
I. Physical and chemical weathering processes of rock and soil J. Evaluation and methods of mitigation of erosional and depositional processes	
K. Evaluation and methods of mitigation of slope instability	

L. Applicability of various slope stability analytical methods	
M. Stereonet uses	
N. Evaluation and mitigation of rockfall hazards	
O. Landslide types and characteristics	
P. Seismically-induced landslide displacement analysis	
Q. Identification of potential static and dynamic settlement	
R. Identification of potential land subsidence or rebound	
S. Geographic Information Systems (GIS) for engineering geologic purposes	
T. Remote sensing (e.g. aerial imagery, LiDAR, InSAR) data interpretation	
U. California guidelines, laws, and regulations for engineering geology reports for school,	
hospital, and essential services building sites	
V. California guidelines for engineering geology reports for surface water impoundments	
and control structures	
W. Evaluation and methods of mitigation of expansive soils and rock	
X. Application and analysis of flood hazard maps	
Y. Engineering properties of earth materials used in construction	
Z. Identification and significance of earth materials that may be detrimental to human	
health	
AA. Potential for mineral alteration or chemical properties of earth materials to adversely	
affect engineered projects	
BB. Evaluation and methods of mitigation of bluff instability and erosion along rivers and	
coastlines	
CC. Deterministic and probabilistic seismic hazard analyses	
DD. Earthquake ground motion analyses	
EE. Identification and analysis of potentially liquefiable soils	
FF. Methods of relative age dating of geologic materials	
GG. Geomorphic and field evidence of fault rupture	
HH. Field evidence of seismic shaking	
II. Methods to assess regional seismicity	
JJ. Seismic hazards and related zones	
KK. Methods for determining relative age of geomorphic features	
II. Crading and executation techniques and equipment carehilities and limitations	
LL. Grading and excavation techniques and equipment capabilities and limitations	
MM. The effects of soil and rock properties on excavation methods	
NN. Potential adverse effects of construction to off-site properties	
OO. Geologic factors that affect fill compaction and performance	
PP. Dewatering methods	
QQ. Hydrogeologic properties of earth materials	
RR. Construction and interpretation of geologic structure and groundwater contour maps	
SS. California guidelines for siting, designing, constructing, and monitoring landfills and	
disposal sites	
TT. Site suitability for on-site storm water and waste water disposal	
UU. Engineering geology aspects of foundation and retaining structure design and	
construction	

IV. Construction	
Des Construction and Australian	
Professional Activities: 1. Povious grading and development plans for conformance with goologic	
Review grading and development plans for conformance with geologic recommendations	20%
2. Observe and document conditions during construction for consistency with the geologic	20/0
report	
3. Identify and report unanticipated field conditions and recommend mitigations	
4. Determine the need for monitoring instrumentation	
Test questions on these professional activities may include one or more of the following:	
A. Methods to analyze temporary slope stability	
B. Recognition and methods of mitigation of landslides encountered during construction.	
C. Geologic site conditions that relate to California regulations safeguarding personnel	
engaged in excavations, trenches, and earthwork	
D. Cut and fill slope construction	
E. Earthwork construction practices and equipment	
F. Methods for ground improvement (e.g., use of geosynthetics, grouting, dynamic	
compaction, soil cement)	
G. Geologic aspects of foundation and retaining structure construction	
H. Methods to control groundwater (e.g., dewatering, wells, drains, hydraulic barrier)	
I. Recognition and mitigation of soil contamination	
J. California regulations pertaining to grading requirements	
K. Techniques to mitigate bluff instability and erosion along rivers and coastlines	
L. Influence of groundwater on slope stability	
M. Methods to analyze and mitigate rockfall hazards	
N. Methods of rock slope stabilization	
O. Methods to mitigate unstable slopes	
P. Mitigation methods for liquefaction and lateral spreading	
Q. Application of monitoring instrumentation and data evaluation	
R. Methods to mitigate unforeseen adverse soil and rock conditions	
S. California guidelines for constructing and monitoring landfills and disposal sites	
T. Geologic factors that affect various foundation types	
U. Methods and materials to mitigate erosion	
V. Methods to mitigate construction-related ground movement (e.g., differential	
settlement, subsidence, rebound)	
W. Methods and interpretation of field density tests	

BPELSG Certified Hydrogeologist-2019	
	Percentage of
	Questions on
	the Exam
 Project Planning Professional Activities: Develop an investigation approach to achieve project objectives Determine type, collection methods, quantity and quality of data, and method of data analysis needed to achieve project objectives based on anticipated geology 	
 Identify technical requirements for hydrogeologic investigations Determine regulatory requirements for hydrogeologic investigations Examine potential off-site/on-site contaminant sources Develop and refine a conceptual hydrogeologic model Identify water quality criteria for the intended use Determine the potential for saline water intrusion Evaluate potential sources of water supply 	20%
10. Identify the potential need to control groundwater flow direction or head	
11. Develop preliminary well design based on existing site data	
12. Assess hydrogeologic factors in water management decisions	
A. Applicable laws, regulations, permitting and policies pertaining to groundwater sampling, testing and reporting	
B. Regulatory agencies that have jurisdictional authority over water (e.g., supply, quality, rights, use, sustainability)	
C. Regional and local hydrogeologic conditions that may affect investigation approaches (e.g., basin boundaries, buried stream channels, proximity to pumping wells, utility trenches)	
D. Different site investigation methods (e.g., aquifer testing, geophysical techniques, soil and groundwater sampling)	
E. Laboratory methods to determine physical properties and chemical concentrations of soil, rock, water, gas, and waste samples	
F. Various drilling methods for different geologic settings	
G. The characteristics of different types of wells (e.g., siting, design, construction, development, testing, sampling)	
H. Methods for measuring groundwater levels, free product thickness, and field water quality parameters from wells	
I. Field testing and sampling methods for soil gas	
J. Groundwater monitoring program elements (e.g., frequency, data distribution)	
K. Aquifer testing methods and procedures, including their uses and limitations	
L. The elements of preparing a conceptual site model	

M. Quality assurance and quality control methods for hydrogeologic and water quality data	
N. Characteristics of groundwater basins and geologic environments	
O. The types and sources of netential groundwater conteminants associated with various	
O. The types and sources of potential groundwater contaminants associated with various	
categories of land uses, industrial processes, and geologic conditions P. The sources and quality of climate data related to hydrogeologic analysis	
Q. Aquifer characteristics and the principles of groundwater flow	
Q. Aquiler characteristics and the principles of groundwater flow	
R. Potential groundwater effects from long-term land use and water management plans	
S. Dynamic relationship between fresh water and saline water in aquifers	
T. Tidal and barometric pressure effects on groundwater levels	
U. Elements of water budgets	
V. Elements of sustainable groundwater management	
W. Hydrogeologic factors related to on-site wastewater disposal (e.g., septic systems,	
land application, ponds, injection wells)	
X. Hydrogeologic factors related to surface water and storm water management	
II. Data Collection	
Professional Activities:	
1. Collect hydrogeologic data from public and private sources (e.g., land use information,	
aerial photographs, remote sensing, historical records, online databases)	
2. Assess surficial conditions and site features in the field	
3. Map hydrogeologic features (e.g. springs, wetlands, wells, geologic structures)	22%
4. Collect samples and field data (e.g., lithology, stratigraphy, structure, moisture, water	
,	22/0
levels, flow, chemistry, geophysics, other properties)	22/0
	2270
levels, flow, chemistry, geophysics, other properties) 5. Apply quality control standards to the collection of data 6. Assess the physical condition, construction, and performance of existing wells	22/0
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 5. Apply quality control standards to the collection of data 6. Assess the physical condition, construction, and performance of existing wells 7. Conduct hydraulic testing (e.g., pumping and slug tests, stream gaging, other multi-well 	22/0
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H. Borehole geophysical investigation techniques	
I. Methods to determine hydraulic properties of saturated and unsaturated earth	
materials	
J. Principles of well hydraulics and aquifer properties	
K. Techniques to measure well discharge and efficiency	
L. The principles of groundwater flow pertaining to confined and unconfined aquifers	
under pumping and steady state conditions	
M. Quality control standards	
III. Evaluation and Analysis	
Professional Activities:	
1. Evaluate hydrogeologic data from public and private sources (e.g., land use information,	
aerial photographs, remote sensing, historical records, online databases)	
2. Interpret aquifer test and other data to characterize hydrogeologic properties,	
boundaries, heterogeneity, and anisotropy in aquifers	
3. Prepare hydrogeologic inventory and water budget	
4. Assess surface water/groundwater interactions	
5. Characterize nature and extent of contamination	
6. Prepare illustrations and interpret trends from water level and/or quality data	
7. Evaluate fate and transport of contaminants	38%
8. Evaluate hydrogeologic effects of pumping wells, fluid injection, containment walls,	
8. Evaluate hydrogeologic effects of pumping wells, fluid injection, containment walls, reactive barriers, and subsurface structures on groundwater flow and quality 9. Evaluate the hydrogeologic aspects of remedial technologies	
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H. Methods to determine groundwater flow directions and horizontal and vertical	
hydraulic gradients	
I. Data selection for groundwater potentiometric surface maps	
J. Water chemistry evaluation (e.g., stable isotope studies, radiometric dating, major ion	
distribution, contaminants)	
K. Techniques to analyze aquifer test data	
L. Unsaturated zone and soil vapor migration principles	
M. Causes and effects of land subsidence	
N. Procedures for calculating recharge rates	
O. Techniques and procedures used for water budget evaluations	
P. The interaction between groundwater and surface water	
Q. Land use effects on water resources	
R. Methods to calculate groundwater flow rates, mass flux, and volume	
S. The effects of boundary conditions on water levels during pumping	
T. Methods for evaluating changes in groundwater storage	
U. Principles and methods to estimate natural attenuation	
V. The chemical and biochemical transformation of organic and inorganic compounds	
W. Groundwater flow and solute transport modeling principles including their	
assumptions and limitations	
X. Numerical models, including calibration, sensitivity analysis, and uncertainty analysis	
Y. The similarities and differences in fractured and porous groundwater flow systems	
Z. Wellhead protection areas	
AA. Comparative evaluation of hydrogeologic aspects of remedial alternatives	
BB. Data evaluation from pilot tests for water supply, dewatering, and remediation	
CC. Evaluation of available water supply and sustainable groundwater management	
IV. Application	
Professional Activities:	
1. Prepare design recommendations for groundwater production, extraction and injection	
wells	
2. Design, install and develop wells and piezometers	
3. Develop subsurface monitoring programs	20%
4. Prepare design recommendations for dewatering or collection systems	
5. Design and implement well rehabilitation programs	
6. Prepare design recommendations for hydrogeologic related projects (e.g., groundwater	
remediation, groundwater management, aquifer storage, and groundwater replenishment	
programs)	
7. Develop plans for the destruction of wells and boreholes	
Test questions on these professional activities may include one or more of the following:	

A. Borehole drilling and well construction techniques to prevent cross-contamination	
B. Drilling techniques and construction practices for different types of wells	
C. Well design (e.g., screen size, filter pack selection, casing type)	
D. Well development and testing	
E. Procedures for well maintenance and rehabilitation	
F. Techniques and regulations for well destruction	
G. Hydrogeologic factors and analytical techniques to design a well field for groundwater	
extraction or injection	
H. Soil, soil vapor and groundwater remediation methods, performance and optimization	
I. Methods for estimating natural and artificial groundwater recharge	
J. Hydrogeologic factors for evaluating the effectiveness of groundwater management	
actions and groundwater sustainability projects	
K. Hydrogeologic requirements pertaining to the investigation, location, and operation of	
waste disposal and treatment facilities	

VIII. Executive Officer's Report

- A. Rulemaking Status Report
- B. Update on Board's Business Modernization/PAL Process
- C. Personnel
- D. ABET
- E. Association of State Boards of Geology (ASBOG)
 - 1. Report on the 2019 Annual Meeting
- F. National Council of Examiners for Engineering and Surveying (NCEES)
 - 1. Member Board Administrator Committee Draft Resolution of Cooperation (Possible Action)
 - 2. Nomination of Associate Members (Possible Action)
 - 3. Nomination for Western Zone Assistant Vice President (Possible Action)
 - 4. Out-of-State Travel Request for April 2020 Combined Interim Zone Meeting (Possible Action)
- G. Update on Outreach Efforts
- H. Unlicensed Activity Research Enforcement Statistics

Rulemaking Overview

1. Fees and Certificates (404, 410, 3005, and 3010)

- Initial review with Control Agencies (i.e. DCA and Agency) for approval of rulemaking package on May 30, 2019.
 - o Board directed staff to pursue initial rulemaking on November 1, 2018.

2. Repeal Professional Engineer and Land Surveyor Appeals (443 and 444)

- Initial rulemaking package submitted to DCA Legal for review on September 5, 2019.
 - o Board directed staff to pursue initial rulemaking on March 1, 2013.

3. Assembly Bill 2138 Conformance (416, 418, 3060, and 3061)

- Initial review with DCA Legal for approval of rulemaking package on June 11, 2019.
 - o Board directed staff to pursue initial rulemaking on February 21, 2019.

4. Definition of Traffic Engineering (404)

- Developing initial rulemaking package to submit to DCA, Legal, and Budget Office.
 - o Board directed staff to pursue initial rulemaking on March 8, 2018.

5. Definitions of Negligence and Incompetence (3003 and 3003.1)

- Developing initial rulemaking package to submit to DCA, Legal, and Budget Office.
 - o Board directed staff to pursue initial rulemaking on September 6, 2018.

Note: Documents related to any rulemaking file listed as "noticed" can be obtained from the Board's website at http://www.bpelsg.ca.gov/about_us/rulemaking.shtml.

BPELSG Licensing System Project Timeline

2019

- Project Approval Lifecycle (PAL) Stage 4 (S4) Project Readiness and Approval (PRAA) kickoff meeting with the California Department of Technology (CDT) -October
- Stage 3 (S3) Solution Development (SD) approved by CDT August
- S3SD submitted to CDT August
- S3SD approved by Business, Consumer Services and Housing Agency (Agency)

 – August
- S3SD submitted to Agency August
- Senate and Assembly Budget Subcommittees approved Spring Finance Letter (SFL) for project funding – May
- S3SD kickoff meeting with CDT April
- CDT approved Stage 2 Alternatives Analysis (S2AA) March
- Finalized SFL for project funding and inclusion in Governor's May [Budget]
 Revise January

2018

- Submitted S2AA to CDT December
- Agency approved S2AA December
- Submitted S2AA to Agency November.
- Submitted S2AA to DCA Office of Information Services (OIS) October
- System demonstrations from various vendors July through September
- Completed contract with Business Advantage Consulting (BAC) July
- S2AA Kickoff meeting with DCA, OIS, and CDT June
- Completed mid-level solution requirements draft with BAC vendor April
- Nationwide market research with other regulatory programs March
- BreEZe system demonstration provided by DCA and OIS March
- Stage 1 Business Analysis (S1BA) approved by CDT February
- Executed contract with BAC January

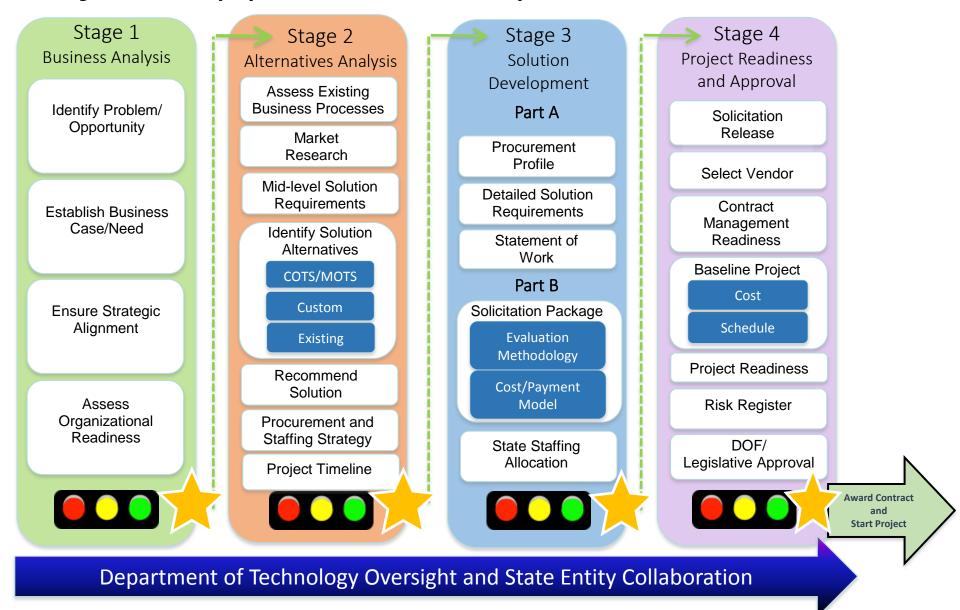
2017

- Contract awarded to BAC November
- S1BA approved by Agency November
- DCA OIS submitted Business Modernization Plan (BMP) to Legislature November
- BMP submitted to Board members November
- DCA OIS developing BMP September
- Submitted S1BA to DCA, OIS, Agency, and CDT September
- System demonstrations from various vendors January through May

2016

- Completed contract with Visionary Integration Professionals (VIP) December
- Completed stakeholder requirements gathering November
- Completed To-Be workshops October
- Completed As-Is business process workshops August
- Identified business processes directly associated with licensing, regulation, and enforcement June
- Executed contract with VIP to conduct a business process improvement study -June

Project Approval Lifecycle Framework



NCEES - Member Board Administrator's Committee Draft Resolution of Cooperation

The Member Board Administrator's Committee (MBA) distributed a draft Resolution of Cooperation (ROC) to all member boards, soliciting comments/feedback. The MBA intends to compile feedback and provide a final resolution to member boards at the April Combined Zone Interim meeting for signature by all participating boards.

BPELSG Mission Statement:

We protect the public's safety and property by promoting standards for competence and integrity through licensing and regulating the Board's professions.

BPELSG Vision Statement:

A California that leads the nation in protecting the public and environment with competent and ethical professional services by the Board's licensees

NCEES Mission Statement:

The mission of NCEES is to advance licensure for engineers and surveyors in order to safeguard the health, safety, and welfare of the public.

This mission is supported through its member boards, board of directors, staff, board administrators, and volunteers by:

- Providing outstanding nationally normed examinations for engineers and surveyors
- Providing uniform model laws and model rules for adoption by the member boards
- Promoting professional ethics among all engineers and surveyors
- Coordinating with domestic and international organizations to advance licensure of all engineers and surveyors

NCEES Vision Statement:

The vision of NCEES is to provide leadership in professional licensure of engineers and surveyors through excellence in uniform laws, licensing standards, and professional ethics in order to safeguard the health, safety, and welfare of the public and to shape the future of professional licensure.

Staff Comments:

The determination of whether the California Board should agree to sign this ROC is a Board policy decision. Staff has concerns with the current draft of the ROC related to the public's perception of the authority of this document and how the ROC will be used, portrayed, or distributed by NCEES or any of the other member boards.

While there remains a question as to whether the ROC would be legally binding upon signatories, Staff suggests the Board consider:

- What perception this document could have on the public's understanding of the Board's
 policies, laws, and regulations (e.g., Would people think any statements in this ROC
 would override the Board's official and properly vetted policies, laws, and regulations if
 any statements were in conflict with those laws or policies?)
- Could this ROC conflict with the Board's mission, vision, or laws and policies?
- Could this ROC subject the Board to scrutiny pertaining to conflicts with the Board's proper legislative/regulatory processes?

Staff recommends that the Board at minimum provide direction to Staff in the form of feedback/concerns/questions/revisions that can be provided to the MBA Committee at NCEES for consideration. It is anticipated that a final draft will be distributed prior to the April NCEES Combined Interim Zone meeting and available for the Board to further discuss before making a determination on whether the California Board should agree to sign the ROC.

NCEES – Nominations for Associate Members

The Board currently has 6 Associate Members approved by NCEES (Ric, Nancy, Tiffany, Larry, Mike, and Dallas)

Seeking the Board to formally recommend Natalie King, Senior Registrar Civil Engineer, and Candace Cummins, Licensing Unit Manager, as Associate Members of the California Board to NCEES.

In her role at the Board, Natalie is very involved in the development of the state civil engineering examinations and outreach related to licensure. It is hoped that submitting a request to the NCEES Board of Directors to approve Natalie as an Associate Member of our Board, she can be selected for committee assignments and serve on exam development efforts for the national civil engineering examinations.

And in her role as Manager overseeing the Board's licensing processes, it is vital for Candace to continually be made aware of NCEES's role in our licensing process.

Associate Member status also allows selection as a funded delegate to NCEES's meetings which should benefit the Board in maintaining an understanding for how the national engineering and surveying exams meet California's criteria for licensing.

BOARD OUTREACH REPORT

3rd Quarter: July–September 2019

SOCIAL MEDIA AND WEB PAGE VIEWS

TOP 5 TWEETS	DATE	VIEWS
Geology and Geophysics Video Available	September 11	1,340
Public Outreach Video Available	September 10	1,147
Notice and Agenda (October)	September 30	1,207
Meeting Materials (September)	August 30	489
Board Notice and Agenda (February)	August 16	224

TOP 5 FACEBOOK POSTS	DATE	VIEWS
Geology and Geophysics Video Available	September 11	4,700
Public Outreach Video Available	September 10	3,328
Meeting Materials (September)	August 30	875
Notice and Agenda (September)	August 16	776
Notice and Agenda (October)	September 30	665

TOP 5 WEBPAGE HITS	VIEWS
License Lookup—Board of Professional Engineers, Land Surveyors, and Geologists	308,443
Board of Professional Engineers, Land Surveyors, and Geologists	183,135
Application Information—Board of Professional Engineers, Land Surveyors, and Geologists	129,284
Professional Engineer Application—Board of Professional Engineers, Land Surveyors, and Geologists	106,253
Licensee Information—Board of Professional Engineers, Land Surveyors, and Geologists	94,853



OUTREACH EVENTS

University Outreach

APRIL

April 3–4: Cal Poly, San Luis Obispo Several presentations on the path to professional licensure by Mike Donelson, P.E., and Brooke Phayer.









April 11–12: San Diego State University
Several presentations on the path to professional licensure by
Mike Donelson (below), P.E., and Brooke Phayer.



April 12: California State University, Sacramento Laurie Racca, P.G., teamed with a representative of the California Geological Survey for a presentation to geology students and faculty regarding professional licensing requirements. The presentation encouraged students to begin taking control of their future careers by understanding licensing requirements, explained how having a professional license affects their career options, and encouraged attendees to keep up-to-date both with the standards of the profession and with activities at the Board.



University Outreach

APRIL

April 17–19: San Jose State University

Outreach coordinator Brooke Phayer attended the annual Mid-Pacific Conference for civil engineering programs, which included the University of California, Berkeley; Chico State; San Francisco State; San Jose State; Santa Clara University; University of California, Davis; Sacramento State; University of the Pacific; and Fresno State.





April 18: *California State University, San Bernardino* Student/faculty presentation to provide information regarding professional licensing requirements by Laurie Racca, P.G.

April 23: *University of California, Riverside*Presentations on the path to professional licensure: two student presentations and one faculty presentation by Natalie King, P.E., and Mike Donelson, P.E.



April 23: *University of California, Los Angeles* ASCE student chapter presentation on the path to professional licensure by Mike Donelson, P.E., and Natalie King, P.E.



April 25: *Cal Poly, Pomona*ASCE student chapter presentation on the path to professional licensure by Natalie King, P.E.

April 25: *California State University, Fullerton*ASCE student chapter presentation on the path to professional licensure by Natalie King, P.E.



University Outreach

APRIL

April 30: *University of California, Davis*ASCE student chapter presentation on the path to professional licensure by Natalie King, P.E.



MAY

May 1: California State University, Northridge Presentation on the path to professional licensure by Mike Donelson, P.E.

May 6: California State University, Sacramento Presentation on the path to professional licensure by Natalie King, P.E., and Mike Donelson, P.E.

May 7: *California State University, Sacramento* Additional presentation by Natalie King, P.E.

May 17: University of California, Riverside
Laurie Racca, P.G., encouraged students to obtain their
Geologist-in-Training certificate by taking the national
Fundamentals of Geology examination as soon as they
are qualified.

JUNE

June 6: *University of California, Davis*Senior Project Day attended by Mike Donelson, P.E., and Brooke Phayer with video interviews by the Department of Consumer Affairs' Office of Public Affairs.



Professional Outreach

APRIL

April 17: San Diego

Record of Survey Workshop given by Dallas Sweeney, PLS, and Ric Moore, PLS.

April 26: Turlock

Record of Survey Workshop given by Dallas Sweeney, PLS, and Ric Moore, PLS.

April 26: Redding

ASCE Shasta Branch presentation on the process of obtaining a license in California by Dr. M. Qureshi, P.E., who visited with the Shasta Branch of ASCE as it attempts to re-launch its branch. There were 17 audience members who were mostly recent graduates interested in licensure as civil or electrical engineers.

MAY

May 15: Webinar

The Board's Geology and Geophysics Program participated in a California-specific licensure webinar hosted by the American Geosciences Institute Geoscience Online Learning Initiative. This webinar was a follow up to the joint BPELSG/National Association of State Boards of Geology, February 2019 webinar providing an overview of geology licensing. This webinar was divided into two parts and covered the following:

- California Professional Geologist License Qualification Requirements
 - Types of licenses (P.G., PGp, CEG, CHG)
 - Qualification requirements
 - Overview of the application process
- Understanding Key Concepts in California Geology License Laws and Regulations
 - Brief history of licensure in California
 - Common myths and misconceptions
 - Important concepts

The webinar was recorded and is available online for free viewing here: www.americangeosciences.org/webinars/professional-geologist-licensure-requirements-california-2019.

Laurie Racca, P.G., participated in the organization and presentation of this webinar.

JUNE

June 18–19: Bakersfield and Long Beach

The California Department of Conservation (DOC), Division of Oil, Gas and Geothermal Resources (DOGGR), requested that the Board provide presentations on licensure requirements to staff in each of their offices. Enforcement Manager Tiffany Criswell, Senior Registrar Mike Donelson P.E., and Senior Registrar Laurie Racca P.G., provided information to staff in these DOGGR regional offices. Additional presentations are planned for other DOGGR offices throughout the summer.

June 20: Camp Pendleton Military Base

Information on the path to professional licensure for current and retired military personnel given by Mike Donelson, P.E., at the annual military educational event.







Professional Outreach

JUNE

June 26: Ventura

Monument Preservation Seminar given by Dallas Sweeney, PLS.

June 26: Santa Barbara

Monument Preservation Seminar given by Dallas Sweeney, PLS.

June 26: Altec Engineering

Presentation on the path to professional licensure given by Mike Donelson. P.E.

June 27: Santa Maria

Monument Preservation Seminar given by Dallas Sweeney, PLS.

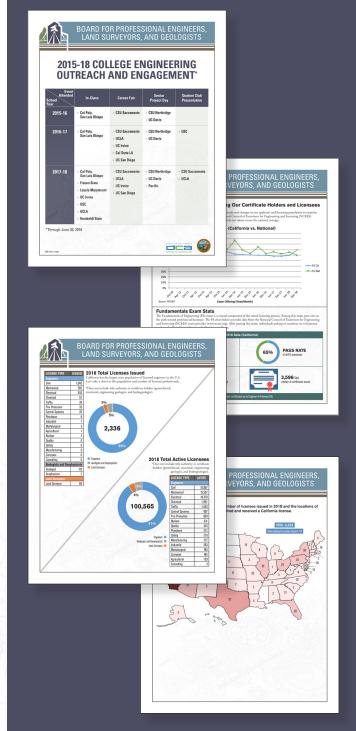
Fall 2019 Bulletin:

www.bpelsg.ca.gov/pubs/bulletin.latest.pdf



Printed Promotional Pieces

ABET Program promotional piece for annual college mailing



Breakdown of Complaint Investigations

		1 5	
Fiscal	Total Number of	Number Involving	Number Involving
Year	Complaint Investigations	Unlicensed Activity	Unlicensed Activity Filed
	Cases Opened	Allegations	by Licensees
15/16	368	101	29
16/17	353	126	28
17/18	362	90	28
18/19	328	105	34

Number of Complaints Opened Involving Unlicensed Activity Based on Act(s) Involved

Fiscal Year	PE Act	G&G Act	PLS Act
15/16	61	1	46
16/17	68	25	47
17/18	48	14	39
18/19	58	14	43

May add up to more than the number opened since cases may involve allegations of violations of more than one act (e.g., unlicensed person offering both engineering and land surveying would be counted as one case for number opened but under both PE Act and PLS Act for violations).

Number of Complaints Opened Involving Unlicensed Activity Filed by Licensees Based on Act(s) Involved

Fiscal Year	PE Act	G&G Act	PLS Act
15/16	14	0	15
16/17	12	4	16
17/18	15	7	10
18/19	13	2	19

May add up to more than the number filed by licensees since cases may involve allegations of violations of more than one act (e.g., unlicensed person offering both engineering and land surveying would be counted as one case for number filed but under both PE Act and PLS Act for violations).

Breakdown of Citations Issued

Fiscal Year	Total Number of Citations	Citations Issued for Unlicensed
	Issued (Licensed and	Activity
	Unlicensed)	
15/16	78	26
16/17	100	42
17/18	83	34
18/19	75	18

Number of Citations Issued for Unlicensed Activity Based on Act(s) Involved

Fiscal Year	PE Act	G&G Act	PLS Act
15/16	11	6	12
16/17	14	6	18
17/18	19	3	17
18/19	6	8	8

Citations may involve violations of multiple acts (e.g., unlicensed person offering both engineering and land surveying) and so would be counted under multiple acts (e.g., both PE Act and PLS Act for violations).

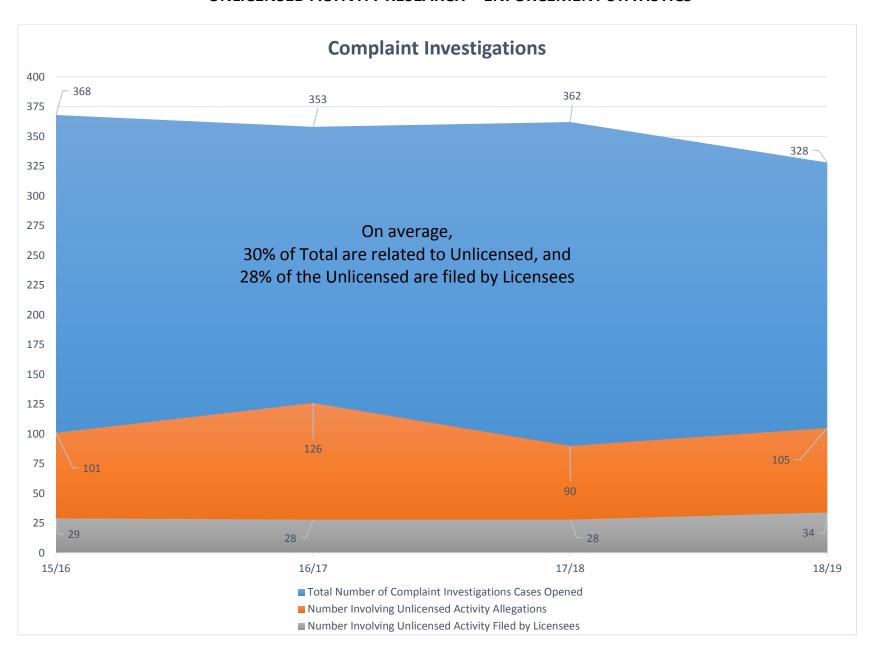
Number of Citations Issued for Unlicensed Activity Dismissed Following Appeal (Informal Conference or Formal Appeal Hearing)

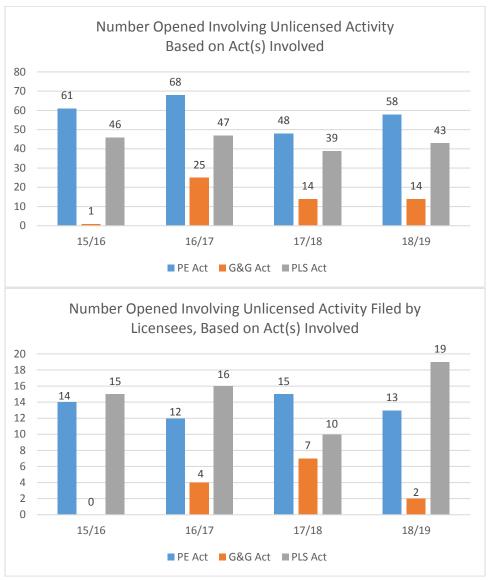
Based on Act(s) Involved

Fiscal Year	PE Act	G&G Act	PLS Act
15/16	1	1	3
16/17	2	1	6
17/18	0	0	2
	(2 not yet final)		
18/19	0	3	0
	(2 not yet final)	(3 not yet final)	

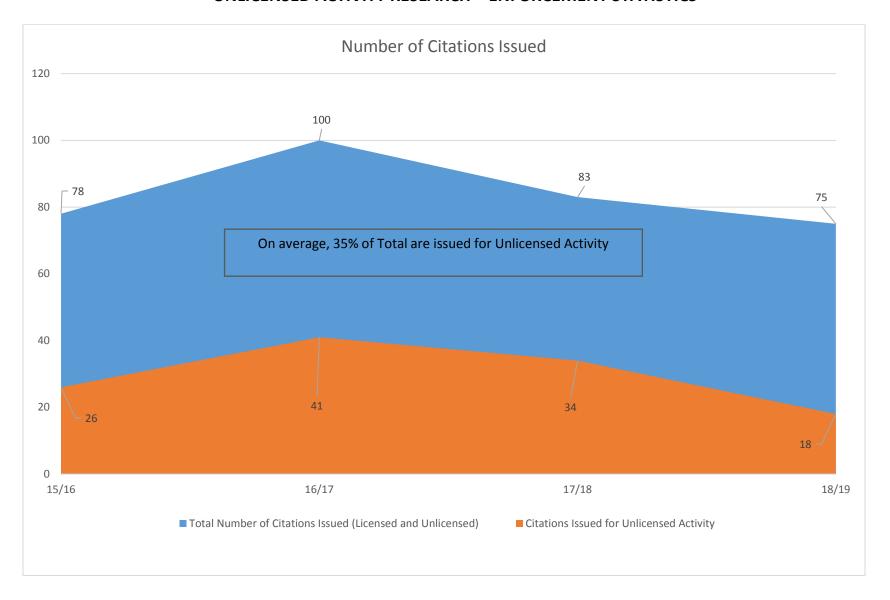
[&]quot;Not yet final" indicates the citation is still under appeal.

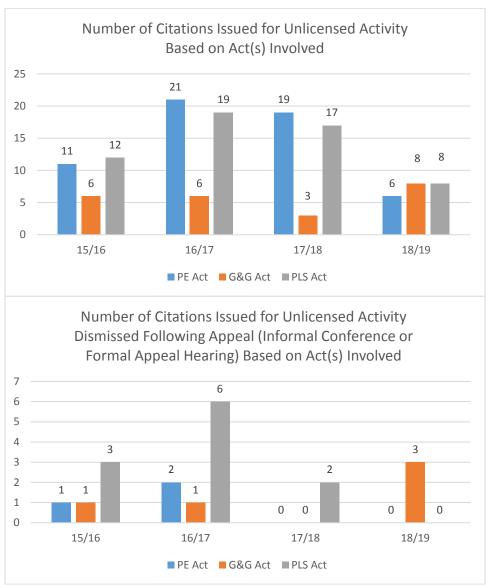
Citations may involve violations of multiple acts (e.g., unlicensed person offering both engineering and land surveying) and so would be counted under multiple acts (e.g., both PE Act and PLS Act for violations).





May add up to more than the number opened since cases may involve allegations of violations of more than one act (e.g., unlicensed person offering both engineering and land surveying would be counted as one case for number opened but under both PE Act and PLS Act for violations).





Citations may involve violations of multiple acts (e.g., unlicensed person offering both engineering and land surveying) and so would be counted under multiple acts (e.g., both PE Act and PLS Act for violations).

IX. National Transportation Safety Board (NTSB) Letter to Governor Related to Professional Engineer Exemption and Gas Pipelines

Request for Input from Business, Consumer Services and Housing Agency (Possible Action)

NTSB Letter to Governor Related to Professional Engineer Exemption and Gas Pipelines

The Board was included in correspondence between the National Transportation Safety Board (NTSB) and the Governor's Office related to NTSB's September 24, 2019 report on Overpressurization of Natural Gas Distribution System, Explosions, and Fires in Merrimack Valley, Massachusetts, September 13, 2018, NTSB/PAR-19/02.

NTSB identified California as being one of 31 states that allow exemptions to professional engineer approval and stamping for natural gas infrastructure projects and has asked California to:

• Remove the exemption so that all future natural gas infrastructure projects require licensed professional engineer approval and stamping. (P-19-16) (See section 3.4.)

NTSB has requested a response from the Governor's Office within 90 days and Business, Consumer Services, & Housing Agency (Agency) asked for the Board's recommendation(s) related to the above referenced NTSB request that can be passed on to the Governor for consideration.

NTSB's letter is attached along with the link to the entire report hosted on-line by NTSB. References related to the request in NTSB's report are primarily found in, but may not be limited to:

- Section 1.9 (Pages 29-31) Professional Engineer Review and Approval
- Section 2.1 (Page 33) Commonwealth of Massachusetts subsequent legislative action
- Section 3.4 (Pages 43-44) Professional Engineer Review and Approval
- Section 4.1 (Pages 48-49) Conclusions and Findings
- Section 4.2 (Page 49) Probable Cause
- Section 5.1 (Page 50) New Recommendations

Staff Recommendation:

Section 6747 in the Board's Professional Engineers Act is the primary section related to this request, (Sections 6739-6747 are related to professional engineer licensure exemptions) and is provided below for reference:

6747.

- (a) This chapter, except for those provisions that apply to civil engineers and civil engineering, shall not apply to the performance of engineering work by a manufacturing, mining, public utility, research and development, or other industrial corporation, or by employees of that corporation, provided that work is in connection with, or incidental to, the products, systems, or services of that corporation or its affiliates.
- (b) For purposes of this section, "employees" also includes consultants, temporary employees, contract employees, and those persons hired pursuant to third-party contracts.

Staff Recommendation (cont.):

It is important for the Board to remember in their discussion and subsequent guidance to the Governor's Office that many of the other state engineering licensing boards across the country issue engineering licenses as a general 'Professional Engineer' or 'P.E.' license expecting the individuals to self-regulate their practice within their own chosen area of expertise, while California is one of an approximate dozen boards that issue licenses by branch of engineering discipline (i.e., civil, mechanical, electrical, etc.).

The aforementioned Section 6747 specifically excepts 'civil engineering and licensed civil engineers' from the current language, but it is likely that engineering aspects associated with NTSB's concerns related to this matter involve electrical and mechanical engineering as well.

Staff recommends that the Board consider all aspects of this matter as it relates to the Board's Mission and Vision statements and provide key thoughts and considerations such that Staff can include in a letter to the Governor, signed by the Board President.

National

National Transportation Safety Board

October 24, 2019

Washington, DC 20594

The Honorable Gavin Newsom Governor of California 1303 10th St. Suite 1173 Sacramento, CA 95814-4910

Dear Governor Newsom:

Office of the Chairman

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation—railroad, highway, marine, and pipeline. We determine the probable cause of the accidents and issue safety recommendations aimed at preventing future accidents. In addition, we carry out special studies concerning transportation safety and coordinate the resources of the federal government and other organizations to assist victims and their family members affected by major transportation disasters.

We are providing the following information to urge the State of California to act on the safety recommendation in this letter because we believe your organization can help reduce the risk of future accidents. For more information about the NTSB and our recommendation process, please see the attached one-page summary.

This letter provides information about our September 24, 2019, report *Overpressurization* of Natural Gas Distribution System, Explosions, and Fires in Merrimack Valley, Massachusetts, September 13, 2018, NTSB/PAR-19/02. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

As a result of this investigation, we identified the following safety issues:

- Adequacy of natural gas regulations
- Project documentation
- Constructability review
- Project management
- Risk assessment
- Safety management systems

- Licensed professional engineer approval of natural gas projects
- Emergency response

Accordingly, the NTSB makes the following safety recommendation to the 31 states that allow exemptions to professional engineer approval and stamping for natural gas infrastructure projects, including the State of California. Additional information regarding this recommendation can be found in the noted section of the report.

• Remove the exemption so that all future natural gas infrastructure projects require licensed professional engineer approval and stamping. (P-19-16) (See section 3.4.)

The NTSB is vitally interested in this recommendation because it is designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement this recommendation. When replying, please refer to the safety recommendation by number (for example, P-19-16). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. If your reply, including attachments, exceeds 20 megabytes, please e-mail us at the same address for instructions on how to send larger documents. Please do not submit both an electronic copy and a hard copy of the same response.

Sincerely,

Robert L. Sumwalt, III

Robert R. Sumaltin

Chairman

X. Review of Professional Land Surveyors' Act and Board Rules related to the Preparation and Submittal of Record of Survey and Corner Record Requirements

Staff Report and Recommendations (Possible Action)

At the September 6, 2018 Board meeting, staff was authorized to commence a review of the Professional Land Surveyors' Act (PLS Act) and Board Rules related to the requirements for the preparation and submittal of Records of Survey and Corner Records. We proceeded to facilitate six workshops throughout the state intending to cover a good cross-section of public and private land surveyors, at the following locations:

Riverside 12/12/2018 ~40 attended Sacramento 2/22/2019 ~70 attended

Burbank 4/12/2019 ~60 attended San Diego 4/17/2019 ~60 attended

Turlock 4/26/2019 ~35 attended Santa Rosa 8/9/2019 ~60 attended

In preparation of each workshop, we asked California Land Surveyors Association (CLSA), County Engineers Association of California (CEAC) and County Surveyors to share a link via e-mail for an online survey we had prepared. The link for the online survey was also on our web page with the announcement for the workshops. For each workshop we created a different link for the online survey so we could track each workshops responses separately. The questions are included below:

Question 1:

Within the PLS Act, section 8764 defines the technical requirements for the preparation of and submittal of a Record of Survey. What subsections do you feel cause the most issues for you when preparing/submitting a Record of Survey and should be the priority for the Board to clarify?

<u>Priority</u>	<u>(a)</u>	<u>(b)</u>	<u>(c)</u>	<u>(d)</u>	<u>(e)</u>	<u>(f)</u>	<u>(g)</u>
High	86	54	34	102	23	32	95
Medium	24	40	48	44	52	42	58
Low	31	44	43	25	49	39	24
No change	80	79	90	60	87	96	51

Each respondent was allowed to answer once for each column. The letters reference each subsection under 8764.

Question 2:

PLS Act section 8764(d) states: The relationship to those portions of adjacent tracts, streets, or senior conveyances which have common lines with the survey.

How do you normally satisfy this requirement? Choose the answer that best describes your response.

Answer Choices	<u>Responses</u>	
Provide deeds of the adjacent properties	14.34%	35
Show found monuments of adjacent parcels	9.84%	24
Show record bearings and distances of adjacent parcels	6.15%	15
Depict adjacent ownership information (deed reference, ownership, etc.) on	24.18%	59
map		
Measured survey ties to adjacent / nearby surveys	11.89%	29
All the above	33.61%	82

Question 3:

PLS Act section 8764 (g) states: Any other data necessary for the intelligent interpretation of the various items and locations of the points, lines, and areas shown, or convenient for the identification of the survey or surveyor, as may be determined by the civil engineer or land surveyor preparing the record of survey.

How do you normally satisfy this requirement? Choose the answer that best describes your response.

Answer Choices	Responses	
Narrative of the Survey	30.74%	75
Show all found monuments	25.82%	63
Title block & vicinity map	2.87%	7
Detailed monument / corner establishment description	40.57%	99

Question 4:

PLS Act section 8766 states: (a) Within 20 working days after receiving the record of survey, or within the additional time as may be mutually agreed upon by the land surveyor or civil engineer and the county surveyor, the county surveyor shall examine it with respect to all of the following:(1) Its accuracy of mathematical data and substantial compliance with the information required by Section 8764.

How do you normally satisfy this requirement? Choose the answer that best describes your response

Answer Choices	Responses	
Bearings and distances referenced from record information	8.20%	20
Closure calculations for surveyed parcels	57.38%	140
Measured bearings and distances of the lines surveyed	34.43%	84

Question 5:

PLS Act section 8771 (a) states: Monuments set shall be sufficient in number and durability and efficiently placed so as not to be readily disturbed, to ensure, together with monuments already existing, the perpetuation or facile reestablishment of any point or line of the survey.

How would you define "Sufficient" as used in section 8771 (a) of the PLS Act?

Choose the answer that best describes your response.

Answer Choices	Responses	
Set / recover enough monuments to determine each line, or end of each line of the survey.	56.15%	137
Enough to meet the needs of a situation or a proposed end.	39.34%	96
Set / recover nearest centerline monuments to calculate the survey.	3.69%	9
Recover block corners, do not set lot corners.	0.82%	2

The purpose of the online survey was to assist in guiding the discussion at the workshops. We used the following format at the workshop: read the question from the survey, listen to input from attendees, then read the results of the survey. At each workshop we would take notes of the attendees' comments.

Going forward, we will continue to review and analyze the information received to see if statutory or regulatory changes are needed. Additionally, we identified two key opportunities where the Board can regularly provide much-needed outreach to the practicing community:

- 1. Facilitate multiple annual workshops throughout the state, focused on the Record of Survey requirements and responsibilities for the submitting surveyors.
- 2. Facilitate multiple annual workshops throughout the state focused on the statutory responsibilities of the County Surveyor within the PLS Act for receiving, reviewing, and filing of the Record of Survey.

Technical Advisory Committees (TACs) XI.

- A. Assignment of Items to TACs (Possible Action)
 B. Appointment of TAC Members (Possible Action)
- C. Reports from the TACs (Possible Action)

XIII. Approval of Meeting Minutes (Possible Action)

A. Approval of the Minutes of the September 26, 2019, Board Meeting

DRAFT

MINUTES OF THE BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

CalTrans District 11 4050 Taylor Street, Gallegos Room #134 San Diego, CA 92110

September 26, 2019

Board Members	Fel Amistad, President; Steve Wilson, Vice President; Natalie						
Present:	Alavi; Alireza Asgari; Duane Friel; Andrew Hamilton; Eric						
	Johnson; Asha Lang; Betsy Mathieson; Mohammad Qureshi;						
	Frank Ruffino; and Robert Stockton						
Board Members	Kathy Jones Irish and Coby King						
Absent:							
Board Staff Present:	Ric Moore (Executive Officer); Nancy Eissler (Assistant						
	Executive Officer); Tiffany Criswell (Enforcement Manager);						
	Jeff Alameida (Administration Manager); Celina Calderone						
	(Board Liaison); Mike Donelson (Senior Registrar); Natalie						
	King (Senior Registrar); and Reza Pejuhesh (Legal Counsel)						

I. Roll Call to Establish a Quorum

President Amistad called the meeting to order at 9:00 a.m., and a quorum was established.

II. Pledge of Allegiance

Ms. Lang led everyone in the recitation of the Pledge of Allegiance.

III. Public Comment for Items Not on the Agenda

Libi Uremovic, accounting auditor, expressed her frustration with engineers taking government positions, forging documents, and embezzling public funds in the City of Beaumont. The engineer along with the city attorney, finance director, and public works director were indicted. Ms. Uremovic claims she submitted a complaint with the Board and is disappointed in the Board's refusal to do anything about it. She will turn in all the documents in again.

A Professional Land Surveyor reported that he discovered that in 2009-2012, several people had received citations for not filing a record of survey when the local county surveyor was satisfied with the corner record document that was submitted and did not see anything that would require a record of survey. Because of this, a complaint was filed, and they received a citation. During the hearings they asked if the county surveyor was contacted and the answer was no. He questioned whether there was a rule in place or guideline to address what should be done when a local county surveyor feels there is no need for a record of survey, and

then a citation is issued because one was not filed. President Amistad advised the speaker to put his questions in writing to Mr. Moore.

IV. Request from Professional Engineers in California Government (PECG) that the Board Remove its Opposition to the Creation of Title Act Licenses

Ted Toppin, representing PECG, asked the Board to remove its opposition to the creation of new Title Act licenses and support the creation of a new Title Act license for environmental engineers. There are approximately nine universities in the state of California that provide environmental engineering degrees. The discipline is to apply environmental engineering principles to remediating and removing toxins from the air, water, and soil. Environmental engineering is key to addressing intense weather events and is vital to solving these problems. Regulating it would provide an important component to achieving the Board's mission. PECG's position is that a Title Act license is better than no regulation at all. A Title Act license would allow the Board to assess educational backgrounds, work done in the environmental engineering field, and provide an exam. By taking those steps, consumers would have a good baseline of understanding of the skills for people planning on becoming environmental engineers. There is currently no benchmark for establishing environmental engineering credentials. He further reported that a Title Act license would protect consumers and give students a path to environmental engineering. He is asking the Board to reconsider and give consumers of environmental engineering more protection.

Ms. Alavi noted that many aspects of environmental engineering fall under other disciplines.

Mr. Ruffino inquired as to why the Board would not want to regulate the practice and provide some oversight. He suggested establishing standards. The Board has other Title Act disciplines already. He questioned whether the Board was saying they do not mean anything. Consumers are aware that Title Act engineers have demonstrated a certain level of education and competency. He believes the Board should explore the concept further.

Mr. Stockton stated that, in the state of California, environmental engineering is a subset of other disciplines, and he does not see a need to create a separate Title Act license for environmental engineering as it is covered extensively by the Practice Act disciplines. The Board has the ability to regulate that aspect of the profession.

Mr. Toppin noted that all Title Act disciplines have some crossover with Practice Act disciplines.

Ryan Michael Atencio works for the California Air Resources Board. He holds a degree in environmental engineering and provided his personal testimony. He

requested that the Board consider a pathway for licensure for environmental engineers and remove the opposition.

Dr. Asgari inquired about how restricting the use of the title would change the way people currently practice since an environmental engineering license is not currently needed to do so.

Mr. Atencio indicated that college graduates do not know that there is not a pathway to obtain licensure.

Mr. Toppin added that if there was an environment engineer Title Act license, consumers could verify if a licensee had an environmental engineering degree, experience in the field, and if they passed the NCEES environmental engineering examination. It would protect the consumer.

Dr. Qureshi asked why licensure is so important if the field in which one practices does not require licensure. Mr. Atencio explained that people are coming into the profession and they are going to other states for work. Dr. Qureshi clarified and asked why licensure is important to Mr. Atencio.

Mr. Atencio indicated that up and coming engineers may be the problem solvers. There are many mechanical and chemical engineers at the Air Resources Board. When the recruits come up with their mechanical and chemical degrees, they are still able to choose their pathway, and he cannot provide them with a good answer as to why they should pursue an environmental pathway.

Mr. Stockton inquired if there is a difference in pay scale once an individual is licensed. Mr. Toppin explained that, in state service, it is subject to collective bargaining. There is a provision that provides additional compensation for licensed engineers in state service. If and when there was a license for environmental engineers, it would be subject to negotiation. He clarified that this is not about pay scale but fulfilling a need.

Mr. Ruffino believes that the time has arrived to engage in conversation rather than remain opposed. He recommended that the staff should do more research about the issue of licensure for environmental engineers.

Mr. Moore reported that there are multiple engineering examinations developed and administered by NCEES. There is a PE environmental examination that began in 1993. At one time, under the PE Civil exam, there existed a water resources module and a separate environmental module. In 2008, NCEES combined the water resources and environmental modules and continues to offer it as one of the modules that candidates may choose under the PE Civil exam. The Board reviewed the test plan specifications and determined that there is a very narrow area on the PE environmental examination that was not covered in the Board's

definitions of the professional practices of civil and mechanical engineering and geology.

Ms. Eissler explained that PECG sponsored legislation to create a Title Act license for environmental engineers several years ago and the Board reviewed it and took a position at that time to oppose the legislation. In voting to oppose that legislation, the Board had confirmed its opposition to the creation of new disciplines of licensure that only regulated the use of the title without regulating the associated practice. The legislation did not pass out of both houses. Currently, there is no pending legislation on which the Board could take a position. While the Board and its staff does not usually work with other organizations until legislation is pending, in this instance PECG has asked the Board to change its general policy position of opposing the creation of new Title Act licenses. With this request, it was deemed necessary to bring it to the Board to see if the Board wanted to change the position.

She explained that the reason the Board still issues Title Act licenses even though the position of the Board is that they do not protect the public is because the law dictates that the Board must still issue licenses in those disciplines. In the past, when the Board has tried to change the law to make some of the Title Act disciplines into Practice Acts, to eliminate some, or to change to a more generic form of licensure, the Board's legislation has been opposed by many professional groups including PECG. Over the years, the Board has tried to do something about the Title Acts as it has been the Board's position that they do not provide sufficient public protection.

Sutipa Bergquist is a PECG member and employed by the State Water Resource Control Board, Division of Drinking Water. She is part of CalEPA that engages in the field of infrastructure engineering including environmental. She is in support of the creation of a Title Act license.

PECG member Alan Escarda, Civil Engineer, acquired an environmental degree 30 years ago but ended up not using it due to the change in politics. He encourages the Board to support the environmental engineering Title Act license and is looking forward to building a relationship with the Board. He suggested that the Board could hold off on taking a vote on this issue and work with PECG. He felt devalued after graduation because there was not an environmental engineering path.

Mr. Johnson asked if there is a plan to introduce legislation. Mr. Toppin indicated that the PECG Board of Directors has not directed that be done at this time .

Roy Flores is a Civil Engineer who works for Caltrans and is a former president of PECG. When the concept of environmental engineering licensure was first proposed, there was strong opposition because they felt that environmental engineers would take work away from civil engineers. He believes it is time to include them and not oppose the creation of a Title Act license for environmental engineers as it will be beneficial for the public and state.

Carl Josephson reported that the last comprehensive study that was made of the title acts was completed in 2002/2003 by the Institute of Social Research. They came to the conclusion that Title Act licenses were not protecting the public and they made the recommendation to do away with Title Act licenses. Due to political reasons, it could not be done. Quality, safety, and corrosion were the only Title Act licenses that were done away with because they were specific to California. This issue has been a thorn in the side of the Board for many years and is a bigger problem that needs to be resolved.

Dr. Qureshi indicated that nothing said today has changed why he is opposed. He understands that while he holds a Title Act license, he is aware of what value it does not have and he did not hear a convincing argument from PECG. He acquired his Traffic Engineer license first but was unable to do all the job duties because many of them were civil engineering. While he could say he was a Professional Engineer and Traffic Engineer prior to obtaining his license as a Civil Engineer, there is not much value in his Traffic Engineer license. What he has discovered since he has been on the Board and with how the two fields overlap, much of what he did he could not do as a traffic engineer because it overlapped with civil engineering. As far as public protection, people can still do the work even if the Board revokes the Title Act license for incompetence. He would ask from PECG that if they are coming before the Board expressing the need for licensure, they need to tell the Board why. The arguments he has heard do not explain why a Title Act license for environmental engineers is needed. He understands licensure is a requirement for certain positions and it affects a person's career path. If that is the motivating factor, PECG should be honest about it. The argument for licensure needs to be more convincing as to why it is needed. If the issue is how the performance of the work is regulated, then it should be a Practice Act license. Since the practice would not be regulated, he does not see value in it. He doubts a homeowner would be hiring an environmental engineer; it would most likely be agencies and firms. The presentation of the argument as to why licensure is needed should be stronger.

Mr. Stockton does not think it is an appropriate time to have staff study and research given the workload.

Ms. Alavi noted that she only hears that it is better than nothing. There is no discussion on regulation or public protection, so she questions the motivation.

Ms. Lang would like to know if PECG has considered proposing a Practice Act license, rather than a Title Act license.

Mr. Ruffino respectfully disagrees with Dr. Qureshi. While not hearing compelling and convincing arguments, he has heard enough that he believes that having something is better than nothing. It would be worthwhile for the Board to entertain the idea and seek input from the profession to better justify why.

Mr. Toppin thanked the Board for engaging in the conversation as it is worthy. Remediating toxins in the air, soil, and water with engineering principles is a distinct field. PECG is not being disingenuous in the letter. The reference in the letter is to the people at the Water Board, Air Resources Board, and the Department of Water Resources who are engaging in and remediating toxins in air, land, and soil for the purposes of protecting the public. They are not practicing engineering but are using engineering principles. He is asking for consideration in providing them a path for licensure. Their work experience does not qualify them to take the civil, mechanical, or electrical engineering examinations, and they do not want to be pigeonholed into one of the Practice Act disciplines.

Dr. Asgari asked Mr. Pejuhesh if it would be considered a conflict for him to vote on any motions since he works for the State of California in an engineering position that is covered by the PECG bargaining unit agreement. Mr. Pejuhesh advised that there would likely not be a conflict if the request from PECG would not affect Dr. Asgari personally. Dr. Asgari indicated that it would not.

MOTION:	Mr. Stockton and Ms. Mathieson moved to reconfirm the Board's opposition to the creation of new license categories in which only the use of the title is restricted and the associated practice is not regulated.
VOTE:	7-3-2, Motion Carried

Member Name	Yes	No	Abstain	Absent	Recusal
Fel Amistad			Х		
Steve Wilson	Χ				
Natalie Alavi	Χ				
Alireza Asgari		Χ			
Duane Friel		Χ			
Andrew Hamilton	X				
Kathy Jones Irish				X	
Eric Johnson	Χ				
Coby King				X	
Asha Lang	Χ				
Betsy Mathieson	Χ				
Mohammad Qureshi			X		
Frank Ruffino		Χ			
Robert Stockton	Χ				

V. Administration

- A. Fiscal Year 2017/18 Budget Status
- B. Fiscal Year 2018/19 Budget Report
- C. Fiscal Year 2019/20 Budget Report

Mr. Alameida, Administrative Services Manager, reported on the above topics. He received additional information from DCA for 2017/18 and 2018/19 and updated

projections for 2018/19 as a result from the updated information. DCA continues to deal with constraints with the FI\$Cal system. Mr. Moore, Ms. Eissler, and Mr. Alameida met with the Budget office to capture any updated information to provide to the Board and also an update in terms of where the Board is going to close out 2017/18 and 2018/19 and then current statements for 2019/20. The Budget office has indicated that they are attempting with FI\$Cal to close out 2017/18 by October or November. They would like to close out 2018/19 in December and would like to be current for 2019/20 financial reports by February of 2020.

Mr. Alameida reviewed the Financial Statement. He noted that the table he presented in the meeting materials is broken out by specific line items and based on the budget allocation for Fiscal Month 1 Projections going forward to the end of the year. He is moving towards a simpler display that would still provide all the information that the Board has come to expect in terms of where the impact levels are within the budget and their associated line items.

VI. Legislation

A. 2019 Legislative Calendar

Ms. Eissler reported that the legislative session ended September 13, and the Governor has until October 13 to act on bills.

B. Discussion of Legislation for 2019

AB 1522 Board for Professional Engineers, Land Surveyors, and Geologists This bill passed unanimously through both the Senate and the Assembly. It was presented to the Governor on September 25, and a letter of support from the Board has been sent to the Governor's office.

SB 53 Open meetings

This bill would have amended the Bagley-Keene Open Meeting Act regarding what constitutes a state body. The Board, along with other DCA boards and DCA itself, opposed it because they felt the wording was confusing and it would create additional costs for the boards. The estimate from DCA and its constituent boards was that there would be an \$850,000 annual cost. The bill was held in the Assembly Appropriations Committee by the deadline. Because this was the first year in a two-year legislative session, the bill could be brought up again in January.

II. Enforcement

- A. Enforcement Statistical Reports
 - Fiscal Year 2018/19 Update
 David Hausfeld, the Board's Liaison Deputy Attorney General, announced
 his retirement from state service. Ms. Criswell introduced Amie Flynn who
 will be his replacement.

Ms. Criswell reviewed the Enforcement stats. Mr. Stockton noted a jump in aging of completed cases through 2019/20. Ms. Criswell explained that it is early in the fiscal year and she expects that it will change as there are only two months reflected in the statistics.

III. Exams/Licensing

No report given.

IV. Caltrans Director Presentation – update on Caltrans projects

Mario Orso, Corridor Director of District 11, provided a presentation on the Otay Mesa East Port of Entry (POE) project.

V. Executive Officer's Report

A. Rulemaking Status Report

Mr. Alameida reported that the Office of Administrative Law (OAL) approved the Geology Education rulemaking file on July 11, 2019, and the regulatory action will become effective October 1, 2019.

The Fees and Certificates rulemaking package is now at Agency as of September 19, 2019, and is still in the pre-notice review process prior to the Board being able to notice it for the 45-day comment period.

B. Update on Board's Business Modernization/PAL Process

Mr. Moore reported that the solicitations are out, and DCA is hopeful they will have proposals from various vendors. He suspects most of October will spent reviewing the proposals and negotiating by November.

C. Personnel

Mr. Moore reported that Jen Mueller, Enforcement Analyst, has left employment with the Board; Kara Williams, Budget Analyst, accepted a position at another DCA entity; and Nina Natha was hired as the new Board's receptionist.

D. ABET

Natalie King, Senior Civil Engineer Registrar with the Board, reported that she attended an ABET visit for the first time. She discovered it was much more than curriculum and courses, but more about the institution and the support of the different programs and what the students do with the information once they leave. She found it very interesting and looks forward to doing it again.

E. Association of State Boards of Geology (ASBOG)

1. Fall 2019 Meeting

Mr. Moore announced the ASBOG Annual Meeting will take place November 5-9, 2019, in Minneapolis, MN. He is planning on attending the Board Administrators meeting on November 5. Ms. Mathieson and Laurie Racca, the Board's Senior Geologist Registrar, will also be in attendance for the Annual Meeting. There will be discussion on computer based testing (CBT). David Cox, NCEES CEO ,will be doing a presentation on CBT. Mr. Moore will provide a report at the November meeting.

- F. National Council of Examiners for Engineering and Surveying (NCEES)
 - Report on the 2019 Annual Meeting
 Mr. Moore reported that at the August Annual Meeting, Christopher Knotts,
 who was the Southern Zone Vice President, was elected as 2019-2020
 NCEES President-Elect.

Mr. Moore reported that the Advisory Committee on Council Activities (ACCA) Motion 2 which would have prohibited proxy voting, passed. The Board was in support of this motion.

Mr. Moore also reported on Education Committee Motion 1 related to requiring an additional layer of evaluation in addition to ABET accreditation for engineering technology degrees. The Board's position was for its to vote consistently with California laws which did not require any additional evaluation above and beyond ABET accreditation. There was much discussion on the issue, with various alternative and amended motions proposed. Ultimately, the motion failed because it was a 50/50 vote.

Mr. Moore advised that Surveying Module Task Force Motion 1 related to restructuring of the Professional Surveying examination passed. The Board had supported this motion.

Mr. Moore advised that the Alabama Board presented a floor motion that proposed changes to various examination fees. Following the discussion, they withdrew the motion because NCEES already has a plan in place to review and revise the fees once all of the examinations have converted to CBT.

Mr. Moore indicated that that South Carolina Board presented a floor motion proposing changes to the bylaws related to NCEES education standards that would require any changes to that standard to be approved by a vote of the Council at the Annual Meeting. The motion to refer the matter to the Bylaws Committee passed.

Dr. Asgari announced he was appointed to serve as a member of the NCEES Outreach Task Force. Mr. Stockton indicated he is on the NCEES Finance Committee. Dr. Qureshi advised he is on the Examinations for Professional Engineers (EPE) Committee.

Mr. Moore stated that he is a consultant to the Examinations for Professional Surveyors (EPS) Committee.

- G. Update on Outreach Efforts
 Mr. Moore reported that the Board's outreach coordinator is researching how
 the Board can join LinkedIn.
- H. Request from Staff for Direction from the Board Regarding Unlicensed Activity Enforcement Discussion Item

Mr. Moore provided background information regarding this item. During discussion at the June 2019 meeting, the Board tasked staff to begin research on certificate or registration requirements for businesses related to all the Board regulated professions, including how similar boards in other states are handling the issue of certifying businesses and unlicensed activities. Ms. Eissler recommended that an item be placed on a future meeting agenda so the Board would be able to fully discuss what information the Board would like staff to research. At the August Board meeting, the Board expressed its concerns related to business certification being a remedy to unlicensed activity.

Mr. Moore indicated that staff needs clear guidance from the Board on what exactly the Board would like staff to research.

Mr. Stockton indicated that he would like information on whether or not other states require Certificates of Authorization and if it is effective in terms of dealing with unlicensed activity.

Ms. Mathieson reported that a surveyor who spoke during public comment at the last meeting indicated that he was aware of rampant unlicensed practice among contractors, and, although he did not want to disclose any names at the time, he would provide a summary letter and database regarding his own research. She asked if the information had been received. Mr. Moore advised that no information had been received yet.

Mr. Wilson is interested to know if the Board cites someone for unlicensed activity and they are licensed by another board, it there a method to compel the other board to hold that person's renewal until the fine is paid or to take other action. He believes there should be a method in place for the boards to work together in this manner but acknowledged that legislation may be needed to accomplish it.

Mr. Johnson agrees with Mr. Wilson and would like to discuss the possibility of working with other boards.

Mr. Wilson questioned if the laws regarding Organization Records should be strengthened. Mr. Moore reported that the Enforcement Unit receives Organization Records inquiries daily. If there is an Organization Record available, it is sent to them. If not, the company is then contacted and asked to provide one or provide an explanation as to why they believe they do not need to file one. If they do not respond or comply, then a complaint investigation case

is opened. Ms. Criswell indicated that many unlicensed activity citations start this way.

Mr. Stockton asked if it would be possible to provide statistical data regarding citations issued for unlicensed activity. Ms. Eissler advised that some data is tracked relating to unlicensed activity cases and citations. Statistical information will be provided at the next meeting.

VI. Technical Advisory Committees (TACs)

- A. Assignment of Items to TACs No report given.
- B. Appointment of TAC Members No report given.
- C. Reports from the TACs No report given.

VII. President's Report/Board Member Activities

President Amistad reported that he attended the meeting DCA held regarding the Executive Officer compensation study. He also attended the NCEES Annual Meeting in Washington DC. For those who have not been to an NCEES meeting, he strongly encourages everyone to attend a meeting. He will also be attending an ABET visit and a few college outreach events as well.

Ms. Mathieson is planning on participating in a discussion with the UC Davis American Institute of American Geologists. They have a series of discussions by professionals, to discuss their careers and current projects.

VIII. Approval of Meeting Minutes

A. Approval of the Minutes of the August 8, 2019, Board Meeting

MOTION:	Mr. Wilson and Mr. Johnson moved to approve the minutes as amended.
VOTE:	10-0-4, Motion Carried

Member Name	Yes	No	Abstain	Absent	Recusal
Fel Amistad	Х				
Steve Wilson	Χ				
Natalie Alavi			Χ		
Alireza Asgari	Х				
Duane Friel	Х				
Andrew Hamilton			Χ		
Kathy Jones Irish	Х				
Eric Johnson	Х				
Coby King	Χ				
Asha Lang			Χ		

Betsy Mathieson	Χ		
Mohammad Qureshi	Χ		
Frank Ruffino	Χ		
Robert Stockton		Χ	

IX. Discussion Regarding Proposed Agenda Items for Next Board Meeting

A. November 21-22, 2019, Board Meeting will be held in Oakland, CA at the Elihu M. Harris Building, 1515 Clay Street, Oakland, CA.

X. Closed Session – The Board will meet in Closed Session to discuss, as needed:

- A. Personnel Matters [Pursuant to Government Code sections 11126(a) and (b)]
 - 1. Executive Officer Performance Evaluation
- B. Examination Procedures and Results [Pursuant to Government Code section 11126(c)(1)]
- C. Administrative Adjudication [Pursuant to Government Code section 11126(c)(3)]
- D. Pending Litigation [Pursuant to Government Code section 11126(e)]

XI. Open Session to Announce the Results of Closed Session

During Closed Session the Board took action on two stipulations and discussed personnel matters as noticed.

XII. Adjourn

The meeting adjourned at 4:18 p.m.

PUBLIC PRESENT

Libi Uremovic, Beaumontgate.org
Ted Toppin, PECG
Ryan Atencio
Sutipa Bergquist, PECG
Alan Escarda, PECG
Robert Lumahan, PECG

2020 Board for Professional Engineers, Land Surveyors, and Geologists

Board Meetings

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	Holidays
1/1	New Year's
1/20	M. L. King, Jr. Day
2/17	President's Day
3/31	Cesar Chavez Day
5/25	Memorial Day
7/3	Independence Day
9/7	Labor Day
11/11	Veteran's Day
11/26-11/27	Thanksgiving Break
12/25	Christmas
Board M	esting Dates

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Board Meeting Dates
January 16-17
March 12-13
May 7-8
June 25-26
August 20-21
October 15-16
December 10-11

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	Key
BOARD MEEETINGS	HOLIDAYS
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4/23-4/25 NCEES Joint All-Zone Interim Meeting, Houston, TX

4/8-4/11ASBOG Spring Council of Examiners Workshop, Cheyenne, WY

8/26-8/29 NCEES 100th Annual Meeting, Chicago, IL

11/2-11/7 ASBOG Combined Executive Committee Meeting, Madison, WI

2020

XV. Discussion Regarding Proposed Agenda Items for Next Board Meeting

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 - I. Executive Officer Performance Evaluation
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