

# Engineering Ethics Update

By John E. Feddock, P. E.

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# Indemnification

This presentation is to identify and discuss sections of Kentucky Statutes and Regulations regarding the practice of Engineering and Land Surveying in Kentucky, and to discuss and review the influence of the National Council of Examiners for Engineering and Land Surveying (NCEES) upon the practice of Engineering and Land Surveying. The material presented has been compressed and summarized for presentation during the time period allotted. The full wording and intent published in the KRS and KAR and NCEES should be read and investigated prior to reaching any interpretation and/or conclusion regarding any individual or corporate issue.

# Engineering Ethics Update

My goals for today are to update everyone on the

- Status of Disciplinary Actions issued by the KY Board of Engineering and Land Surveying or (Boels) during 2022.
- The National Council of Examiners for Engineering and Surveying (NCEES) and its Enforcement Exchange.
- Identify Issues regarding Licensure and Permit Renewals, and an Advisory Opinion on Mapping.

# Is there a need to Improve Ethical Judgement?

Boards continue to find persistent violators of:

- 201 KAR 18:142 Code of Professional Practice and Conduct
- KRS322:020 - Practice of Engineering or Land Surveying without License Prohibited
- KRS322:180 - Grounds for Denial of License and for Disciplinary Action

Historical and Annual Violations reinforce the need for continuing enforcement.

State Boards and NCEES are enhancing collaboration to improve ethical compliance by exchange information on violators in other jurisdictions to identify failures to disclose violations.

# KYBOELS Investigations Increased 30% in 2022

<b>Cases / Investigation Files</b>	<b>2022</b>	<b>2021</b>
<b>Open Investigative Files as of January 1,</b>	<b>61</b>	<b>56</b>
Investigative Files Opened during Year		
Engineering	71	49
Surveying	35	20
Both	1	4
<b>Total New Investigations</b>	<b>107</b>	<b>73</b>
<b>Total Open and Ongoing Investigations</b>	<b>168</b>	<b>129</b>

# KYBLPS Enforcement Statistics - 2022

<b>Cases / Investigation Files</b>	<b>2022</b>	<b>2021</b>
<b>Total number of Case</b>	<b>168</b>	<b>129</b>
Closed with NO Action	6	22
Written Admonishments (Warnings, No Disciplinary Action)	65	31
Inactive License Retired due to CPD Issue	1	3
Educational Letters (Unlicensed Practice)	1	2
<b>Cases with NO Disciplinary Action</b>	<b>73</b>	<b>58</b>
Injunction/ Suspension of License or Permit	1	1
Agreed Injunctions/Prohibited from Offering / Practicing	3	2
Reprimands, Fines, Probation, Other Conditions	9	7
<b>Disciplinary Actions</b>	<b>13</b>	<b>10</b>
<b>Open Investigative Files as of Year End</b>	<b>82</b>	<b>61</b>

# KYBLPS Disciplinary Statistics - 2022

Primary Violation of Ethical Standards	Cases	Injunction	Consent Decree	Letter of Reprimand	2 Year Probation	Other	Fine
Companies Offer/Practice without a Permit	4	1	3	2			2
Individuals Offer / Practice without a License	4	3	1	1			2
Dishonorable, Unethical & Unprofessional Conduct	2		2	2	2	1	2
Providing Misinformation to the Board (Fraud)	3		3	3	1	6	3
<b>TOTAL 2022</b>	<b>13</b>	<b>4</b>	<b>9</b>	<b>8</b>	<b>3</b>	<b>7</b>	<b>9</b>
<b>Total 2021</b>	<b>10</b>	<b>1</b>	<b>9</b>	<b>7</b>	<b>4</b>	<b>7</b>	<b>7</b>

## KRS 322.180

# Grounds for Denial of Licensure and for Disciplinary Action

1. **Engaged in any practice of fraud or deceit in obtaining a license**
2. **Engaged in gross negligence, incompetence, or misconduct in the practice of engineering or land surveying;**
3. Violated any provision of this chapter, [including] the administrative regulations promulgated by the board, or the code of professional practice and conduct in the administrative regulations;
4. Employed, procured, or induced a person not licensed to practice engineering or land surveying in this state;
5. Aided or abetted a person not licensed to practice engineering or land surveying in this state;
6. **Been granted a license upon a mistake of material fact;**
7. Been convicted by a court of law of a felony, if in accordance with KRS Chapter 335B;
8. Become a chronic or persistent alcoholic or has become drug-addicted so that continued practice is dangerous to clients or to the public safety;
9. Developed a physical or mental disability or other condition so that continued practice is dangerous to clients or to the public safety;
10. Violated any order of suspension or the terms or conditions of any order of probation issued by the Board;



## KRS 322.180

# Grounds for Denial of Licensure and for Disciplinary Action (Continued)

- 11. Had a license or registration certificate to practice as an engineer or land surveyor denied, limited, suspended, probated, or revoked in another jurisdiction...;**
12. Engaged in conduct likely to deceive or defraud the public;
13. Presented or attempted to use... the license, seal, or stamp of another (engineer);
14. Falsely impersonated any other licensee;
15. Attempted to use an expired, suspended, or revoked license;
- 16. Provided certification for any plan, specification, plat, report, or physical description not prepared by him or her or under his or her direct supervision; or\**
17. Applied the certification (seal, stamp, signature, or title block) of another professional engineer to any work that was not prepared by that individual.

# NCEES and Enforcement

## National Council of Examiners for Engineering and Surveying

- NCEES formed to develop a uniform procedure for licensees to practice between those states.
- Today NCEES:
  - Coordinates professional mobility of registrants between member licensing boards,
  - Establish model laws and rules for quality professional practice .
  - Develops credential records and evaluates programs in member boards.
  - Administer and score exams in Fundamentals of Engineering and for licensure in engineering disciplines and lands surveying.
  - Provides study guides to assist licensure.
  - Assists educational institutions to develop quality curriculums following professional standards.
  - Gathers and serves as a repository of statistics on professional practice and board administration.

# Highlights in the History of NCEES

- 1920** CO, FL, IA, IL, LA, MI, SD State Boards met to form an organization to develop uniform registration.
- 1925** 22 Member Boards, Articles of Agreement. Define an Engineering School and Accreditation.
- 1933** FE and Part II Exams in Civil, Mechanical, Industrial, Electrical, Chemical and Mining offered, and establish Board of Directors representing sections of U.S.
- 1938** Kentucky establishes State Board by an Act of the Kentucky General Assembly.
- 1945** WW II ends and some states still disagree with registration of Engineers.
- 1959** Adoption of Model Law by Member Boards, EIT Class established, acceptance of NCEE and first national report.`

# Highlights in the History of NCEES (Continued)

- 1965** First national EIT exam offered.
- 1974** Rules of Professional Conduct adopted.
- 1980** ABET formed.
- 1995** Emphasis on Professional Ethics, Records Program started, and International Engineering comity.
- 2004** Records program enhanced and emphasis on examinations for PE and LS licensure and their domestic mobility.
- 2020** Transition to computer-based testing:

# Status of NCEES Computer Based Testing

Currently, all applications to obtain a PE or PS License require a complete and up to date NCEES Record.

The Fundamentals of Engineering Exam is computer based and is given year-round.

The Principles and Practice Exam in

- Chemical, Civil, Environmental, and Mechanical Engineering are given year-round
- Mining and Mineral Processing, Petroleum, and other Engineering disciplines are given in October,

# The NCEES Records Program and Enforcement Exchange

- The Records Program maintains individual credential records and gathers and serves as a repository of statistics on professional practice and board administration.
- The Enforcement Exchange is a nationwide web-based database that allows NCEES Member Boards to enter disciplinary actions taken against violators and to review disciplinary actions posted by other jurisdictions.

# The NCEES Enforcement Exchange

The “**Enforcement Exchange**” information includes:

- Names of Licensees or Company Permits,
- Profession (Engineer or Surveyor) and State License Number,
- State Case Number and Date of Enforcement Action,
- Description of the violation and violated State regulation or statute,
- Explanation of the Investigation,
- Disciplinary Action and Penalty, and
- Whether it is an original or reciprocal violation.

# Cause to Check the Enforcement Exchange

## Each New and Renewal application asks:

1. Are you responsible for **Child Support** and you are in violation of such requirements?
2. Have you had a **Felony Conviction** in a court in any jurisdiction in accordance with KRS Chapter 335B?
3. Have you been subject to an investigation, disciplinary action, or proceeding by any local, state, national regulatory board?

A “No” Response will be checked upon Audit requires

A “YES” Response requires:

- A written explanation of event(s),
- A description of investigation and disciplinary proceedings,
- The type of sanctions imposed and current status.



# Comparing Disciplinary Actions - 2022

<b>Primary Violation of Ethical Standards</b>	<b>KYBOELS 2022</b>	<b>WVPEBD 2022</b>
Companies Practicing Engineering without a Permit (COA)	<b>4</b>	<b>5</b>
Individuals Offering and Practicing Engineering without a License	<b>4</b>	<b>0</b>
Engaged in Dishonorable, Unethical and Unprofessional Conduct	<b>2</b>	<b>2</b>
Providing Misinformation to the Board	<b>3</b>	<b>22</b>
<b>TOTAL 2022</b>	<b>13</b>	<b>29</b>

# Things to Remember about License or Permit Renewal

**License Renewal is two (2) years on or before June 30th.**

**Last names begins with Letters A – K / Renew in odd years, i.e. 2023**

**Last names begins with Letters L – Z / Renew in even years, i.e. 2024**

## **RESPONSIBILITY is on Licensee**

**Courtesy Notice** sent to address on file **one (1) month** prior to expiration.

(Address Change should be filed with BOELS within 30 days of change)

## **Failure to renew by the expiration date:**

- Within 2 months - Fee is increased by 10% for each month or part of a month.
- 2 and 12 months - Fee is increased by 10% for each month or part of a month.  
Automatically audited for completion of continuing education hours.
- After 1 year - Fee is increased by 10% for each month or part of a month.  
Evidence of qualifications of continued practice, and  
Evidence of completion of continuing education hours as required.

# Audits of Continuing Professional Development (CPD)

5% of renewals each year are audited for Continuing Professional Development compliance.

If you receive a **Notice of Audit** :

- **You must respond within 30 days** from the date of the Notice.
- **You must submit a log with documents** verifying your attendance and/or completion of claimed hours.
- Failure to respond may extend the audit to prior years and result in **Disciplinary Action**.

If some of your **pdh hours are disallowed**:

- **You may be granted up to 180 days** to either substantiate your original claim or earn other PDH hours. (This applies only to PDH hours submitted but disallowed.)

# Advisory Opinion on Mapping Science

## Exclusions to the Practice of Surveying

- **Generalized Location** - A description of the position of a feature, object or boundary using general mapping accuracy standards that do not meet or exceed surveying accuracy standards per 201 KAR 18:150 Sections 7 and 8.
- **Land surveying does not encompass** work products which represent only a generalized location of a feature, object, or boundary upon which the public would not reasonably rely as the precise location of that feature, object, or boundary.

201 KAR 18:150  
 Sections 7 (5)  
 Measurement  
 Specifications

**(5) Table of Specifications by Class: Classification of Surveys.**

	Urban	Rural	Remarks
Unadjusted Closure (Minimum)	1:10,000	1:5,000	Loop or Between Control Monuments
Angular Closure (Maximum)	15" N	30" N	N = Number of Angles in Traverse
Accuracy of Distances	+/- 0.05'+100 PPM	+/- 0.10'+200 PPM	100PPM=1:10,000
Relative Positional Accuracy	+/- 0.05'+100 PPM	+/- 0.10'+200 PPM	

**Thank You**