A BILL FOR AN ACT

101   **CONCERNING PAPER BALLOT FRAUD COUNTERMEASURES.**

Bill Summary

(Note: This summary applies to this bill as introduced and does not reflect any amendments that may be subsequently adopted. If this bill passes third reading in the house of introduction, a bill summary that applies to the reengrossed version of this bill will be available at http://leg.colorado.gov.)

The bill requires that paper used for paper ballots have certain fraud countermeasures and that paper ballot records be provided by vendors that have one or more specified accreditations in any primary, general, coordinated statewide, or statewide recall election.

The bill also requires the general assembly to annually appropriate money from the general fund to the department of state as necessary for the department of state to pay county clerk and recorders for the costs related to complying with the requirements of the bill.

1 *Be it enacted by the General Assembly of the State of Colorado:*

2 **SECTION 1.** In Colorado Revised Statutes, **add** 1-5-414 as

3 follows:

4 **1-5-414. Paper ballot fraud countermeasures - vendors -**

5 **general fund appropriation.** (1) COMMENCING WITH THE GENERAL

6 ELECTION HELD IN NOVEMBER 2022, PAPER BALLOTS USED IN ANY

7 PRIMARY, GENERAL, COORDINATED STATEWIDE, OR STATEWIDE RECALL

8 ELECTION MUST INCLUDE THE FOLLOWING BALLOT FRAUD

9 COUNTERMEASURES:

10 (a) UNIQUE CONTROLLED-SUPPLY WATERMARKED CLEARING BANK

11 SPECIFICATION ONE SECURITY PAPER;

12 (b) SECURE HOLOGRAPHIC FOIL WITH A TOTAL SURFACE AREA OF

13 BETWEEN TEN SQUARE MILLIMETERS AND TWENTY SQUARE MILLIMETERS

14 AND WITH A PROPRIETARY ORIGINAL IMAGE IN VISIBLE AND

15 MULTICOLORED INVISIBLE ULTRAVIOLET INKS. THE VISIBLE OVERPRINT

16 MUST BE TRANSLUCENT SO THAT THE HOLOGRAM IMAGE STRIKES

17 THROUGH THE PRINTED IMAGE WHEN VIEWED AT DIFFERENT ANGLES AND

18 MUST BE CURED IN SUCH A WAY THAT ANY TAMPERING OF THE IMAGE

19 CAUSES VISIBLE DAMAGE TO THE HOLOGRAM. THE HOLOGRAPHIC FOIL

20 DESIGN AND ORIGINATION ARTWORK MUST BE EXCLUSIVELY OWNED AND

21 CONTROLLED BY THE SECURITY PRINTER.

22 (c) BRANDED OVERPRINT OF ANY HOLOGRAM THAT PERSONALIZES

23 THE HOLOGRAM WITH A CUSTOMER LOGO;

24 (d) CUSTOM COMPLEX SECURITY BACKGROUND DESIGNS WITH

25 BANKNOTE-LEVEL SECURITY;

26 (e) SECURE VARIABLE DIGITAL INFILL;

1 (f) THERMOCHROMIC, TRI-THERMOCHROMIC, PHOTOCHROMIC, OR

2 OPTICALLY VARIABLE INKS;

3 (g) STEALTH NUMBERING IN ULTRAVIOLET, INFRARED, OR

4 TAGGANT INKS;

5 (h) TWO-COLOR RAINBOW PRINT INVISIBLE ULTRAVIOLET

6 NUMISMATIC DESIGNS WITH A FINE LINE SECURITY RELIEF DESIGN THAT

7 FOLLOWS THE PRIMARY IMAGE'S DESIGN EXACTLY AND WITH A MINIMUM

8 LINE WEIGHT OF FOUR HUNDRED AND TWENTY-FOUR TEN THOUSANDTHS

9 OF A MILLIMETER;

10 (i) UNIQUE FORENSIC FRAUD DETECTION TECHNOLOGY THAT IS

11 BUILT INTO SECURITY INKS;

12 (j) INVISIBLE ULTRAVIOLET MICROTEXT WITH AN ULTRAVIOLET

13 IMAGE MINIMUM HEIGHT OF THREE TENTHS OF A MILLIMETER AND

14 MAXIMUM HEIGHT OF ONE-HALF OF A MILLIMETER;

15 (k) RASTER IMAGING PRINTED ON SEVENTY-FIVE PERCENT OF THE

16 DOCUMENT FACE IN A MINIMUM TWO-COLOR INVISIBLE ULTRAVIOLET INK

17 WITH A MINIMUM LINE WEIGHT OF TWO HUNDRED AND FORTY-TWO TEN

18 THOUSANDTHS OF A MILLIMETER AND A MAXIMUM LINE WEIGHT OF

19 EIGHTY-FOUR THOUSANDTHS OF A MILLIMETER;

20 (l) THREE-COLOR INVISIBLE ULTRAVIOLET GUILLOCHE WITH AN

21 ANTI-COPY FEATURE THAT IS A CUSTOM GEOMETRIC DESIGN SPECIFIC TO

22 THE DOCUMENT AND WITH A HIGH LEVEL OF SECURE FINE LINE DETAIL

23 CONSISTING OF MULTIPLE LINE WEIGHTS WITH A MINIMUM LINE WEIGHT OF

24 TWO HUNDRED AND FORTY-TWO THOUSANDTHS OF A MILLIMETER;

25 (m) VISIBLE COLORED OVERT INK WITH AN EMBEDDED COVERT,

26 NEAR-INFRARED, MACHINE-READABLE TAGGANT THAT IS CAPABLE OF

27 DETECTION THROUGH PROPRIETARY INFRARED WAVELENGTH LIGHT

1 SOURCE EXCITATION AND RELATED INFRARED WAVELENGTH EMISSION

2 CHARACTERISTICS THAT CONFIRM AUTHENTICITY THROUGH A COMPLEX

3 TEMPORAL MEASUREMENT WHEN READ BY A HAND-HELD, RECHARGEABLE

4 BATTERY-OPERATED PROPRIETARY DETECTOR;

5 (n) A MOLECULAR LEVEL, FORENSIC-COVERT SECURITY FEATURE

6 INCLUDED IN THE INFRARED TAGGED INK PRESCRIBED IN SUBSECTION

7 (1)(m) OF THIS SECTION. THIS PROPRIETARY MOLECULAR MARKER MUST

8 BE AUTHENTICATED BY LABORATORY ANALYSIS USING GAS

9 CHROMATOGRAPHY MASS SPECTROMETRY AND THE CONCENTRATION IN

10 THE RELATED INK CANNOT BE MORE THAN ONE PART PER MILLION.

11 (o) MICROPRINTING, A SECURITY RELIEF DESIGN TECHNIQUE THAT

12 REQUIRES A BANKNOTE GRAPHICS SOFTWARE. THE DESIGN MUST PROTECT

13 INFILL AREAS FROM FRAUDULENT ALTERATIONS.

14 (p) MULTICOLORED INVISIBLE PRIMARY FLUORESCENT ELEMENTS

15 THAT ARE PRINTED IN REGISTER TO CREATE A RAINBOW EFFECT

16 BACKGROUND. THE IMAGE MUST INCORPORATE MULTIPLE SECURITY

17 GRAPHIC TECHNIQUES AND MUST BE GENERATED USING

18 ANTI-COUNTERFEIT DESIGN SOFTWARE THAT IS COMMERCIALLY

19 AVAILABLE ONLY FOR APPROVED AND ACCREDITED PRINTERS.

20 (q) SERIALIZED BLACK QUICK RESPONSE CODE, OTHERWISE KNOWN

21 AS A "QR CODE", PRINTED ON THE TOP LEFT CORNER AND BOTTOM RIGHT

22 CORNER THAT CAN BE READ BY NATIVE QUICK RESPONSE FUNCTIONS OF

23 IOS AND ANDROID SMARTPHONES, REDIRECTS THE VOTER TO A

24 WEB-BASED VOTER INFORMATION PAGE, AND TRACKS THE VOTER'S BALLOT

25 AS IT IS PROCESSED;

26 (r) PAPER THAT IS EIGHT AND ONE-HALF INCHES WIDE BY NINETEEN

27 TO TWENTY-TWO INCHES LONG AND THAT WEIGHS EIGHTY GRAMS PER

1 SQUARE METER; AND

2   (s) A PAPER RECEIPT FOR THE VOTER THAT IS A PERFORATED

3 PORTION OF THE BALLOT SUITABLE FOR THE VOTER TO REMOVE FROM THE

4 BALLOT AFTER COMPLETING THE BALLOT AND INCLUDES THE LOT NUMBER

5 AND SEQUENCE NUMBER OF THE SHEET OF PAPER ON WHICH THE BALLOT

6 IS PRINTED AND A SERIALIZED BLACK QUICK RESPONSE CODE THAT CAN BE

7 READ BY NATIVE QUICK RESPONSE FUNCTIONS OF IOS AND ANDROID

8 SMARTPHONES, REDIRECTS THE VOTER TO A WEB-BASED VOTER

9 INFORMATION PAGE, AND TRACKS THE VOTER'S BALLOT AS IT IS

10 PROCESSED.

11   (2) COMMENCING WITH THE GENERAL ELECTION HELD IN

12 NOVEMBER 2022, PAPER BALLOTS USED IN ANY GENERAL OR RECALL

13 ELECTION MUST BE PROVIDED BY VENDORS WHO ARE ACCREDITED

14 PURSUANT TO ISO/IEC 27001, ISO/IEC 17025, ISO/IEC 45001, ISO/IEC

15 14001, ISO/IEC 14298, OR ISO/IEC 9001:2015 OF THE JOINT TECHNICAL

16 COMMITTEE OF THE INTERNATIONAL ORGANIZATION FOR

17 STANDARDIZATION AND THE INTERNATIONAL ELECTROTECHNICAL

18 COMMISSION.

19   (3) THE GENERAL ASSEMBLY SHALL ANNUALLY APPROPRIATE

20 MONEY FROM THE GENERAL FUND TO THE DEPARTMENT OF STATE AS

21 NECESSARY FOR THE DEPARTMENT OF STATE TO PAY COUNTY CLERK AND

22 RECORDERS FOR THE COSTS RELATED TO COMPLYING WITH THE

23 REQUIREMENTS OF THIS SECTION.

24   **SECTION 2. Safety clause.** The general assembly hereby finds,

25 determines, and declares that this act is necessary for the immediate

26 preservation of the public peace, health, or safety.