

**CHAPTER 8220**  
**SECRETARY OF STATE**  
**VOTING SYSTEM TESTING**

<b>SCOPE AND STANDARDS</b>			
8220.0050	CONDUCT OF ELECTIONS.	8220.0950	EDIT LISTINGS.
8220.0150	MINIMUM STANDARDS.	8220.1050	PREPARATION OF TEST DECK.
8220.0250	DEFINITIONS.	8220.1150	TEST BALLOTS.
		8220.1350	PRELIMINARY TESTING OF COMPUTER PROGRAMS.
<b>EXAMINATION AND CERTIFICATION</b>		8220.1450	DUTIES UPON COMPLETION.
8220.0325	TIMING.	8220.1550	PUBLIC ACCURACY TEST.
8220.0350	APPLICATION.	8220.1650	ADDITIONAL TEST DECKS.
8220.0450	ACCEPTANCE DEMONSTRATION.	8220.1750	CERTIFICATE OF PUBLIC ACCURACY TEST.
8220.0550	TESTING AND EXAMINATION.	8220.1850	SECURING COMPUTER PROGRAMS.
8220.0650	APPROVAL OF SYSTEMS.		
8220.0700	PERIODIC REEXAMINATION OF SOFTWARE.	<b>SECURITY OF VOTING SYSTEMS AND PROGRAMS</b>	
<b>PREPARATION AND TESTING OF ELECTION PROGRAMS</b>		8220.2050	ISOLATION OF CENTRAL COUNT VOTING SYSTEM AND PRECINCT COUNT VOTING SYSTEM.
8220.0750	PREPARATION OF COMPUTER PROGRAMS.	8220.2250	SUPPORT SOFTWARE.
8220.0800	PROGRAM PREPARATION BONDS.	8220.2850	CONTROL OF COMPUTER PROGRAM CHANGES.
8220.0825	CANDIDATE ROTATION ALGORITHM.		
8220.0850	SCHEDULE FOR COMPLETING PROGRAMS.		

**SCOPE AND STANDARDS**

**8220.0050 CONDUCT OF ELECTIONS.**

Except as provided in chapters 8220 and 8230 or in Minnesota Statutes, elections shall be conducted in the manner prescribed for precincts using paper ballots in the Minnesota election law.

**Statutory Authority:** *MS s 204D.11; 206.57; 206.81*

**History:** *10 SR 1690; 20 SR 2787; 23 SR 459; 25 SR 616*

**8220.0100** [Repealed, 10 SR 1690]

**8220.0150 MINIMUM STANDARDS.**

Chapters 8220 and 8230 set minimum standards for procedures in the use of electronic voting systems. An election jurisdiction may by resolution require additional procedures.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *10 SR 1690; 20 SR 2787; 23 SR 459; 25 SR 616*

**8220.0200** [Repealed, 10 SR 1690]

**8220.0250 DEFINITIONS.**

Subpart 1. **Scope.** As used in chapters 8220 and 8230, terms defined in Minnesota Statutes, section 206.56, have the meanings given them in that section, and the following terms defined in this part have the meanings given them.

Subp. 1a. **Audit trail.** "Audit trail" means any documentation of changes made to voting system programming, the incident report, and the report generated by an electronic voting system on election day.

Subp. 2. [Repealed, 25 SR 616]

Subp. 2a. [Repealed, 25 SR 616]

Subp. 3. [Repealed, 23 SR 459]

Subp. 3a. **Ballot counter.** "Ballot counter" means an automatic tabulator that is capable of counting votes on ballots as they are deposited into the tabulator.

Subp. 3b. **Ballot secrecy cover.** "Ballot secrecy cover" means a cover to be used by the voter to conceal the votes marked on the ballot.

Subp. 4. [Repealed, 23 SR 459]

Subp. 4a. **Ballot style.** “Ballot style” means a unique ballot format prepared for use in one or more precincts in which all ballot information is identical.

Subp. 5. [Repealed, 23 SR 459]

Subp. 5a. **Central count voting system.** “Central count voting system” means an electronic voting system designed for and certified by the secretary of state for use in a central counting center.

Subp. 5b. **Central counting center.** “Central counting center” means a place selected by the governing body of an election jurisdiction where an electronic voting system is used to count ballots from more than one precinct after voting hours have ended.

Subp. 6. [Repealed, 23 SR 459]

Subp. 7. [Repealed, 25 SR 616]

Subp. 8. [Repealed, 23 SR 459]

Subp. 9. [Repealed, 23 SR 459]

Subp. 10. [Repealed, 25 SR 616]

Subp. 11. **Demonstration ballot.** “Demonstration ballot” means a ballot of a distinctive color used to instruct voters in the use of the voting system.

Subp. 12. [Repealed, 23 SR 459]

Subp. 13. [Repealed, 23 SR 459]

Subp. 14. **Duplicate ballot.** “Duplicate ballot” means a ballot on which the word “DUPLICATE” is printed, stamped, or written to which election judges transfer a voter’s selections from the original ballot when necessary.

Subp. 15. **Edit listing.** “Edit listing” means a computer-generated listing showing, in the order that they appear in the computer program for each precinct, the offices and questions to be voted on and the candidates’ names.

Subp. 16. **Election jurisdiction.** “Election jurisdiction” means any municipality, school district, county, or special election district having responsibility for operating electronic voting systems to be used at an election.

Subp. 17. [Repealed, 25 SR 616]

Subp. 18. **Header card.** “Header card” means a special ballot used to initiate voting, end voting, or enable tabulation of absentee ballots.

Subp. 18a. **Incident report.** “Incident report” means a record made by election judges in the polling place on election day of unusual events that occurred in that polling place on election day.

Subp. 19. [Repealed, 23 SR 459]

Subp. 20. [Repealed, 25 SR 616]

Subp. 21. **Overvote.** “Overvote” means a condition of a voted ballot in which more votes have been cast for an issue or office than the number of votes that the voter is lawfully entitled to cast.

Subp. 22. [Repealed, 23 SR 459]

Subp. 22a. **Precinct counting center.** “Precinct counting center” means a precinct where a precinct count voting system is used to count votes on ballots at the precinct polling place as voters deposit the ballots into the ballot box.

Subp. 22b. **Precinct count voting system.** “Precinct count voting system” means an electronic voting system designed to store ballot configurations and vote totals on a removable memory unit and to tabulate ballots at the precinct polling place as voters deposit the ballots into the ballot box.

Subp. 23. [Repealed, 25 SR 616]

Subp. 24. **Public accuracy test.** “Public accuracy test” means a public test conducted prior to election day for the purpose of demonstrating the accuracy of the computer program and voting system which will be used to count the ballots and to demonstrate and explain the testing procedures being used to determine the accuracy.

Subp. 25. [Repealed, 23 SR 459]

Subp. 25a. [Repealed, 25 SR 616]

Subp. 26. **Self-contained voting station.** “Self-contained voting station” means a unit that when assembled creates a private space enclosed beneath and on three sides and with adequate lighting in which a voter may mark a ballot.

Subp. 27. [Repealed, 25 SR 616]

Subp. 28. [Repealed, 23 SR 459]

Subp. 28a. **Summary statement.** “Summary statement” means the certification supplied by the election jurisdiction to each precinct on which to record the information required by Minnesota Statutes, section 204C.24, subdivision 1, and any other information requested by the election jurisdiction or the secretary of state.

Subp. 29. [Repealed, 23 SR 459]

Subp. 30. **Test deck.** “Test deck” means a set of preaudited mock voted ballots used to determine that the voting system and software to be used in the election accurately count and process the votes.

Subp. 31. [Repealed, 25 SR 616]

Subp. 32. [Repealed, 25 SR 616]

Subp. 33. **Undervote.** “Undervote” means a condition of a voted ballot in which fewer votes have been cast for an issue or office than permitted by law.

Subp. 34. [Repealed, 25 SR 616]

Subp. 35. **Vendor.** “Vendor” means an individual or organization other than an election jurisdiction supplying any element of an electronic voting system, including but not limited to hardware, software, and programming services.

Subp. 36. [Repealed, 25 SR 616]

Subp. 37. [Repealed, 23 SR 459]

Subp. 38. [Repealed, 25 SR 616]

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *10 SR 1690; 20 SR 2787; 23 SR 459; 25 SR 616*

**8220.0300** [Repealed, 10 SR 1690]

## EXAMINATION AND CERTIFICATION

### 8220.0325 TIMING.

All applications for examination and certification of electronic voting systems and for recertification of electronic voting system software must be submitted to the secretary of state between December 1 of an even-numbered year and September 1 of the following odd-numbered year.

**Statutory Authority:** *MS s 206.57; 206.81*

**History:** *23 SR 459*

### 8220.0350 APPLICATION.

An application by a vendor pursuant to Minnesota Statutes, section 206.57, for examination of an electronic voting system must be accompanied by the following:

A. a signed agreement that the vendor will pay all costs incurred by the secretary of state, the vendor, and any designees of the secretary of state in accomplishing the examination;

- B. complete specifications of all hardware, firmware, and software;
- C. all technical manuals and documentation related to the system;
- D. complete instructional materials necessary for the operation of the equipment by election jurisdictions and a description of any training available to users and purchasers;
- E. a list of all state election authorities that have tested and approved the system for use;
- F. a list of all election jurisdictions where the system has been used for elections;
- G. a description of any support services offered by the vendor and of all peripheral equipment that can be used in conjunction with the system;
- H. recommended procedures for use of the system at Minnesota elections including procedures necessary to protect the integrity of the election;
- I. specifications for materials and supplies required to be used with the system;
- J. specifications for stickers for write-in votes that can be used with the system;
- K. explanation of the level of technical expertise required to program or prepare the system for use at an election; and
- L. certification by an independent testing authority approved by the secretary of state of conformance to standards for voting equipment issued by the Federal Election Commission.

The vendor may submit additional material including test reports and evaluations by other states, election jurisdictions, and independent testing agencies. The secretary of state shall make a preliminary review of the application. If the secretary of state determines from the preliminary review that the system obviously does not meet provisions of Minnesota election laws, the vendor may withdraw the application.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *10 SR 1690; 23 SR 459; 25 SR 616*

#### 8220.0400 [Repealed, 10 SR 1690]

#### 8220.0450 ACCEPTANCE DEMONSTRATION.

The vendor shall train a designee of the secretary of state in the preparation and operation of the system. The training must be at least as extensive as the training required for an election jurisdiction to be able to prepare and use the system at Minnesota elections.

The acceptance demonstration must be provided by the vendor and attended by designees of the secretary of state. The vendor is responsible for demonstrating that the system can meet all requirements of chapters 8220 and 8230 and Minnesota election law. In the acceptance demonstration, the vendor of the system must demonstrate the following concerning the system:

- A. its storage requirements;
- B. its speed of operation under conditions that simulate the scope and length of actual election ballots;
- C. full audit capability, with an audit trail, which includes a printout of overvotes and undervotes for each office and issue, and with the undervotes recorded directly from the ballots and not determined by subtraction of totals from ballots that were not overvoted;
- D. all features that can be programmed;
- E. all design specifications;
- F. maximum numbers of precincts, offices and issues, and candidates per office which can be handled;

G. the production of reports which include vote totals and all statistics and other information required by the secretary of state;

H. simulation of vote counting involving a configuration of the largest number of voters, precincts, offices, and candidates with which the system is expected to be used, which vote counting includes ballots showing overvotes, undervotes, and invalid votes as well as those with no overvotes or stray marks, in many different combinations, and demonstrates rotation sequences and the ability to count votes cast on the partisan, nonpartisan, and proposal sections of the ballot independently;

I. accuracy of vote counting and procedures or process for testing accuracy;

J. provisions for maintaining the security and integrity of elections; and

K. provisions for write-in votes.

The vendor shall identify all hardware configurations with which software is intended to operate and shall provide an acceptance demonstration for every hardware and software configuration for which certification for use in Minnesota is requested. The secretary of state may provide additional ballots or test decks for the acceptance demonstration.

The acceptance demonstration and training of the secretary of state's designee may be accomplished either at the vendor's site or at the office of the secretary of state.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *10 SR 1690; 23 SR 459; 25 SR 616*

**8220.0500** [Repealed, 10 SR 1690]

**8220.0550 TESTING AND EXAMINATION.**

The secretary of state shall investigate and evaluate the experience of other states and election jurisdictions using the system. The secretary of state shall review the results of the acceptance demonstration and perform additional tests as the secretary deems necessary. The additional tests may include field testing at simulated or actual elections, technical evaluation of the hardware and software by a designee of the secretary of state, and experimental use as provided in Minnesota Statutes, section 206.81. In determining the need for and extent of additional examination, the secretary of state shall consider the record of use in other states and the extent and experience of use in Minnesota of similar systems.

**Statutory Authority:** *MS s 206.57; 206.81*

**History:** *10 SR 1690; 23 SR 459*

**8220.0650 APPROVAL OF SYSTEMS.**

Subpart 1. **Certification.** If, from the reports of the demonstration and testing, the secretary of state determines that the system complies with chapters 8220 and 8230 and Minnesota Statutes and can be used safely at elections, the secretary of state shall issue to the vendor a certification of the system for use in Minnesota. The certification must be limited to specific hardware and software configurations and may not extend to models or configurations not examined. The certification may include stipulations or special procedures for use of the system. No certification may be issued until the vendor has:

A. paid all costs of the examination required under the agreement submitted with the application;

B. certified that the vendor and any agent acting on behalf of the vendor will offer the system for use or sale only according to chapters 8220 and 8230 and Minnesota Statutes and any stipulations of the certification;

C. certified that the vendor will immediately notify the secretary of state of any modifications to the system and will not offer for sale or provide for use in Minnesota any modified system if the secretary of state advises the vendor that, in the opinion of the secretary, the modifications constitute a significant change requiring that the system be reexamined;

D. deposited with an escrow agent a copy of all programs, documentation, and source codes; and

E. deposited with the secretary of state a bond in the amount specified in Minnesota Statutes, section 206.57, subdivision 4, conditioned on the vendor offering the system for sale in the manner required by chapters 8220 and 8230 and any conditions under which the system is certified for use in Minnesota. The form and execution of the bond must be acceptable to the secretary of state. Bonds must be issued by corporations authorized to contract as a surety in Minnesota. This bond is not in lieu of any right of action by the purchaser or the state of Minnesota against the vendor or the surety. The bond is required until the adoption, use, or purchase of the system or program is discontinued in Minnesota.

**Subp. 2. Decertification.** If a voting system no longer meets the standards of chapters 8220 and 8230 or Minnesota Statutes, the secretary of state may withdraw certification of the voting system. The vendor must be given written notification of intent to withdraw certification and may within ten days of receipt of the notification submit a written request to the secretary of state for a contested case hearing under Minnesota Statutes, sections 14.57 to 14.62.

**Subp. 3. Forfeiture of bond.** If the secretary of state determines that a vendor has offered for sale or use at an election a voting system in a manner other than that required by chapters 8220 and 8230 or any conditions under which the system was certified, the bond required by subpart 1, item E, must be forfeited. The secretary of state shall notify the vendor of the intent to forfeit the bond in writing and provide the vendor an opportunity to furnish a written explanation to the secretary of state prior to forfeiture. No system may be subsequently offered for sale or use at an election by the vendor who has received a notice of intent to forfeit the bond or whose bond has been forfeited, until the vendor has submitted an additional bond in the amount of \$50,000. The secretary of state shall notify each official on the user list of a receipt, forfeiture, or restoration of these bonds.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *10 SR 1690; 12 SR 1712; 12 SR 2426; 23 SR 459; 25 SR 616*

### **8220.0700 PERIODIC REEXAMINATION OF SOFTWARE.**

After an electronic voting system has been certified by the secretary of state, the software necessary to operate the voting system, tabulate votes, and prepare ballot styles must be reexamined and recertified under part 8220.0650, subpart 1, by the secretary of state or an independent testing authority approved by the secretary of state at least once every four years and at any time that, in the opinion of the secretary of state, the voting system no longer complies with Minnesota election law. The certification or approval of a significant change to a voting system's software satisfies the requirements of this part. The secretary of state may waive the reexamination and reapproval requirement in this part if no changes have been made to a voting system's software or if the software continues to operate in conformance with Minnesota election law.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *23 SR 459; 25 SR 616*

## **PREPARATION AND TESTING OF ELECTION PROGRAMS**

### **8220.0750 PREPARATION OF COMPUTER PROGRAMS.**

Computer programs must be prepared so as to tabulate accurately each voter's choices for all candidates, offices, and measures for which the voter is lawfully entitled to vote in conformity with chapters 8220 and 8230 and the laws of Minnesota.

Computer programs must require an electronically readable precinct identifier or ballot style indicator on all ballots.

The vote tabulation portion of the computer program must be prepared as follows:

A. The computer program must reflect the rotation sequence of the candidates' names as they appear on the ballots in the various precincts.

B. The computer program must reflect the offices and questions to be voted on in the order that they appear on the ballots in the various precincts.

C. The computer program must count valid votes cast by a voter for candidates for an office.

D. The computer program must count valid votes cast by a voter for or against any question.

E. The computer program must not count the votes cast by a voter for an office or question if the number of votes cast exceeds the number which the voter is entitled to vote for on that office or question, but it must record that there is an overvote condition as referred to in part 8220.0450, item C.

F. The computer program must ignore stray marks on a ballot; these marks must have no effect on any portion of the ballot.

G. For the purpose of programming, the partisan, nonpartisan, and proposal sections of the ballot are independent ballots; no action of a voter on one section of the ballot may affect the voter's action on another section of the ballot.

H. In partisan primary elections, the computer program must count the votes recorded by a voter for candidates in one political party only and reject all of the partisan section of the ballot if votes are cast for candidates of more than one political party, but count valid votes in the nonpartisan section of the ballot.

I. In partisan primary elections the computer program must check for the situation of a voter casting votes for candidates of more than one political party prior to checking for overvote conditions.

J. If the counting equipment can examine and return a ballot to the voter before counting it, the computer program must check for and reject without counting any ballot with an overvote or, at a partisan primary, with votes cast for candidates of more than one party. When the ballot is returned to a voter, an error message must indicate the type of defect and may indicate the specific office or question where the defective condition was found. The error message must print on a paper tape or display electronically.

K. A mark indicating a write-in is a vote for the purpose of determining if an overvote condition exists. Except where an overvote condition for the office exists, the computer program must record that a write-in has been indicated. The program must count and record valid votes on the ballot for all other offices and questions before a ballot with a write-in recorded is separated from ballots with no write-ins recorded. The program must report, by office, the total number of write-ins recorded.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *10 SR 1690; 11 SR 454; 23 SR 459; 25 SR 616*

#### **8220.0800 PROGRAM PREPARATION BONDS.**

Subpart 1. **Amount of bonds.** Each vendor preparing programs for use with an electronic voting system shall deposit a bond with the secretary of state in the amount of \$5,000. The form of the bond must be acceptable to the secretary of state. Bonds must be issued by corporations authorized to contract as a surety in Minnesota. This bond is not in lieu of any right of action by the purchaser or the state of Minnesota against the vendor or the surety. The bond is required until the adoption, use, or purchase of the system or program is discontinued in Minnesota.

Subp. 2. **Forfeiture of bonds.** If the secretary of state determines that a program used with an electronic voting system was not prepared in the manner required by chapters 8220 and 8230 and the written instructions of the official responsible for preparation of the ballots, the bond must be forfeited to the extent necessary to cover actual expenses resulting from the failure of the program. The secretary of state shall determine within 45 days after receiving notification of the failure of a program and a request for reimbursement of expenses resulting from the failure of the program from

the appropriate election officials, what actual costs were incurred as a result of the program failure. The secretary of state shall notify the vendor of the intent to forfeit the bond in writing and provide the vendor an opportunity to furnish a written explanation to the secretary of state prior to forfeiture. If required to meet actual expenses in excess of the amount of the bond posted under subpart 1, the secretary of state shall use, to the extent necessary, any bond posted by the vendor under part 8220.0650 as compensation to the election jurisdiction. The secretary of state shall notify each official on the user list of any receipt, forfeiture, or restoration of these bonds.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *12 SR 2426; 23 SR 459; 25 SR 616*

### 8220.0825 CANDIDATE ROTATION ALGORITHM.

Subpart 1. **Base rotation.** The secretary of state shall determine the base rotation of candidates' names for partisan offices voted on at the state primary election. The county auditor shall determine the base rotation of candidates' names for all other offices for which rotation is required. The county auditor may delegate the authority to determine the base rotation of candidates' names for municipal and school district offices to the municipal and school district clerks, respectively. The base rotation must be determined by assigning the initial order of the candidates' names by lot.

Subp. 2. **Base number of registered voters.** For purposes of the rotation algorithm, the county auditor shall determine the number of registered voters in each precinct as of 8:00 a.m. on June 1 of the election year.

Subp. 3. **Algorithm.** The algorithm in items A to F must be used to determine the rotation sequence for each race for which rotation is required.

A. Determine the base rotation.

B. Determine which precincts belong to the race being rotated.

C. Arrange the precincts in order of the number of registered voters, from largest number to smallest.

D. Calculate the number of rotations needed by determining the number of candidates for the office.

E. Starting with the largest precinct, assign a precinct to each rotation. If there are more candidates than precincts, stop after the last precinct has been assigned and go on to item F. If there are more precincts than candidates, keep a running subtotal of the total registered voters assigned to each rotation. After each rotation has been assigned one precinct, assign the next largest precinct to the rotation with the lowest subtotal. Continue assigning the next largest precinct to the rotation with the lowest subtotal until all precincts for that race have been assigned.

F. Print a report by race showing rotation subtotals.

**Statutory Authority:** *MS s 206.57; 206.81*

**History:** *23 SR 459*

### 8220.0850 SCHEDULE FOR COMPLETING PROGRAMS.

No later than five days after candidates' names are certified by the secretary of state, the election jurisdiction responsible for requesting the computer program must supply any information such as candidates' names and base rotation and the order of offices and questions to be voted on to the individuals designated to prepare the computer program. The official conducting the election also shall supply the programmers with the rotation algorithm in part 8220.0825 or other instructions regarding the proper rotation sequence for the ballots.

The computer program for any election and an exact duplicate of the program for use as backup must be completed and delivered to the election jurisdiction or the



county auditor in charge of a common central counting center at least 21 days prior to the election.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *10 SR 1690; 20 SR 2787; 23 SR 459*

#### **8220.0950 EDIT LISTINGS.**

The person preparing the computer program shall prepare at least two edit listings from the computer program showing, in the order that they appear on the ballots for each precinct, the offices and questions to be voted on and the candidates' names. The edit listings must be delivered to the appropriate election jurisdiction at least 21 days prior to the election.

**Statutory Authority:** *MS s 206.57; 206.81*

**History:** *10 SR 1690; 23 SR 459*

#### **8220.1000** [Repealed, 10 SR 1690]

#### **8220.1050 PREPARATION OF TEST DECK.**

The election jurisdiction requesting the computer program must prepare a test deck of ballots to be used to determine that the voting system and the computer program will correctly count the votes cast for all offices and all proposals in compliance with the Minnesota election law.

The test deck must conform to part 8220.1150. A test deck must be prepared specifically for each election.

The test deck prepared must consist of a preaudited configuration of ballots to record a predetermined number of valid votes for each candidate and issue.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *10 SR 1690; 23 SR 459; 25 SR 616*

#### **8220.1100** [Repealed, 10 SR 1690]

#### **8220.1150 TEST BALLOTS.**

All test ballots must be marked "TEST."

Ballots must be prepared having votes in excess of the number allowed by law for each office and proposal appearing on the ballot.

For district offices in which the number of candidates appearing on the ballot for that office varies by district, test ballots must be prepared with the number of votes allowed by law for that office in that district.

In partisan primary elections test ballots must be prepared to check the program for splitting tickets. Test ballots must be prepared with votes appearing in the same ballot for candidates of opposite political parties, nonpartisan candidates, and proposals. At least one ballot must be prepared with votes for one party and including votes for a nonpartisan office in excess of the number permitted by law.

In preparing the test deck, a number of the ballots must be voted to include valid votes in the partisan, nonpartisan, and proposal sections of the ballot. The test deck must include ballots involving no overvotes or marks in unassigned locations, valid votes for each candidate and ballot question, overvotes, undervotes, and invalid votes in many different combinations.

At least one test ballot must be prepared in which marks appear in the precinct identifier or ballot style indicator.

Blank ballots in which no positions have been voted must be included in the test deck.

**Statutory Authority:** *MS s 206.57; 206.81*

**History:** *10 SR 1690; 17 SR 8; 23 SR 459*

8220.1200 [Repealed, 10 SR 1690]

8220.1250 [Repealed, 23 SR 459]

8220.1300 [Repealed, 10 SR 1690]

**8220.1350 PRELIMINARY TESTING OF COMPUTER PROGRAMS.**

Prior to the public accuracy test, the election jurisdiction providing the computer programs shall test the voting systems and programs to ascertain that they will correctly count the votes for all offices and measures. The computer programs must be tested on all precincts.

The election jurisdiction shall compare the zero tape with the ballots of all precincts to ascertain that the appropriate ballots are in each precinct and that the offices and questions to be voted on and the candidates' names are in the order that they appear on the ballots for each precinct. Each election jurisdiction shall make a certificate as to the above matters and file it with the county auditor.

The test must be conducted using the test deck prepared under the direction of the election jurisdiction, and the results must be compared against the predetermined results of the test deck.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *10 SR 1690; 11 SR 454; 23 SR 459; 25 SR 616*

8220.1400 [Repealed, 10 SR 1690]

**8220.1450 DUTIES UPON COMPLETION.**

After an errorless count has been made on all precincts, the election jurisdiction providing the computer program must:

A. secure all computer programs, all support software used except the operating system, test decks, test results, and predetermined results of the test decks in a sealed container stored in a secured area;

B. secure all memory units containing the election program;

C. secure a duplicate copy of all computer programs, including support software and application programs, in a location separate from the working copy; and

D. prepare a certificate that all precincts have been tested using the test deck prepared under the direction of the election jurisdiction and that the results agree with the predetermined results of the test deck. The certificate must contain the numbers of any seals used to seal the container or memory units and may be combined with the certificate required in part 8220.1750.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *10 SR 1690; 20 SR 2787; 23 SR 459; 25 SR 616*

**8220.1550 PUBLIC ACCURACY TEST.**

The election jurisdiction must hold a public accuracy test within 14 days prior to the election for the purpose of demonstrating the accuracy of the computer programs and voting systems to be used at the election. The public accuracy test must be conducted according to Minnesota Statutes, section 206.83.

The time and place of the public accuracy test must be designated by the election jurisdiction providing the computer program, which must give at least 48 hours' public notice of the time and place of the test by publication in official newspapers and by posting a notice in the office of the county auditor and each local election official conducting the test.

The test must be open to the public. At least two election judges of different political parties must witness the test. The chief election official of the election jurisdiction shall explain the methods and test procedures used to determine the accuracy of the computer programs. This will include submitting as public record the

certificate prepared in accordance with part 8220.1450 that all precincts have been tested using the test deck prepared under the direction of the election jurisdiction.

The sealed container containing the computer programs, test deck, and predetermined results must be opened and the computer programs tested to determine their accuracy on the voting systems on which they are to be used on election day. The testing of the voting systems and programs must be with the test deck prepared under the direction of the election jurisdiction. In election jurisdictions with three or fewer precincts, all the precincts must be tested. In election jurisdictions with more than three precincts, a minimum of three precincts must be tested. One precinct from each congressional district, legislative district, county commissioner district, ward, and school district on the ballot must be tested. The official conducting the election shall select the precincts to be tested.

If an error is detected in any part of the testing, the cause must be ascertained, the error corrected, and an errorless count must be made on all precincts. At the discretion of the election jurisdiction, the meeting may be adjourned to a time and date certain.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *10 SR 1690; 20 SR 2787; 23 SR 459; 25 SR 616*

#### **8220.1650 ADDITIONAL TEST DECKS.**

Upon request, the secretary of state must be provided a set of blank ballots to be used as a test deck for any state, county, municipal, special district, or school district election computer program. The secretary's request shall indicate the number of blank ballots to be delivered for the test deck. The use of test decks provided by the secretary of state does not substitute for the requirement for an election jurisdiction to prepare and use a test deck in accordance with parts 8220.1050 and 8220.1150.

**Statutory Authority:** *MS s 206.57; 206.81*

**History:** *10 SR 1690; 17 SR 8; 23 SR 459*

#### **8220.1750 CERTIFICATE OF PUBLIC ACCURACY TEST.**

After the completion of the public accuracy test and an errorless count has been made, the election jurisdiction must certify the results of the test conducted. The certificate must be signed by the witnesses. The certificate may be combined with the certificate required in part 8220.1450, item D.

**Statutory Authority:** *MS s 206.57; 206.81*

**History:** *10 SR 1690; 23 SR 459*

#### **8220.1850 SECURING COMPUTER PROGRAMS.**

Immediately after certifying the results of the public accuracy test, the election jurisdiction must secure all computer programs, software utilized, test decks, certified computer results of the test, and the predetermined results in a container which must be sealed in a manner so that the container cannot be opened without breaking the seal. If a precinct count voting system is used to count ballots, it must be sealed with the memory pack containing the election programs inside. Attached to or inside the container must be a certificate describing its contents. The certificate must be signed by the witnesses.

All computer programs, test decks, and other related materials must be clearly identified as to the voting system on which they were tested and must be used on no other voting system until tested in accordance with parts 8220.1550 to 8220.1850.

**Statutory Authority:** *MS s 206.57; 206.81*

**History:** *10 SR 1690; 23 SR 459*

**8220.1950** [Repealed, 20 SR 2787]

**8220.2000** [Repealed, 10 SR 1690]

## SECURITY OF VOTING SYSTEMS AND PROGRAMS

**8220.2050 ISOLATION OF CENTRAL COUNT VOTING SYSTEM AND PRECINCT COUNT VOTING SYSTEM.**

The central count voting system or precinct count voting system must be set up so that the vote-tallying procedures will function in isolation while being tested or operated on election day. No physical connection must exist between a central count voting system or precinct count voting system and any other computer during hours that voting is occurring in that precinct on election day or while the central count voting system or precinct count voting system is tabulating results for a precinct.

**Statutory Authority:** *MS s 206.57; 206.81; 206.82*

**History:** *10 SR 1690; 23 SR 459; 25 SR 616*

**8220.2100** [Repealed, 10 SR 1690]

**8220.2150** [Repealed, 23 SR 459]

**8220.2200** [Repealed, 10 SR 1690]

**8220.2250 SUPPORT SOFTWARE.**

All the support software used with the vote-tallying computer programs must be maintained on media under the control of the election administration.

**Statutory Authority:** *MS s 206.57*

**History:** *10 SR 1690*

**8220.2300** [Repealed, 10 SR 1690]

**8220.2350** [Repealed, 23 SR 459]

**8220.2400** [Repealed, 10 SR 1690]

**8220.2450** [Repealed, 23 SR 459]

**8220.2500** [Repealed, 10 SR 1690]

**8220.2550** [Repealed, 23 SR 459]

**8220.2600** [Repealed, 10 SR 1690]

**8220.2650** [Repealed, 23 SR 459]

**8220.2700** [Repealed, 10 SR 1690]

**8220.2750** [Repealed, 20 SR 2787]

**8220.2800** [Repealed, 10 SR 1690]

**8220.2850 CONTROL OF COMPUTER PROGRAM CHANGES.**

After completion of the public accuracy test, every change to a computer program used for vote tallying and under control of the election jurisdiction must be authorized, approved, and documented by the responsible authority of the election jurisdiction. The documentation must include the time and date of each action.

**Statutory Authority:** *MS s 206.57; 206.81*

**History:** *10 SR 1690; 23 SR 459*

**8220.2900** [Repealed, 10 SR 1690]

**8220.2950** [Repealed, 23 SR 459]

**8220.3000** [Repealed, 10 SR 1690]

# MINNESOTA RULES 2003

637

## VOTING SYSTEM TESTING

- 8220.3050 [Repealed, 23 SR 459]
- 8220.3100 [Repealed, 10 SR 1690]
- 8220.3150 [Repealed, 23 SR 459]
- 8220.3200 [Repealed, 10 SR 1690]
- 8220.3250 [Repealed, 23 SR 459]
- 8220.3350 [Repealed, 23 SR 459]
- 8220.3450 [Repealed, 23 SR 459]
- 8220.3550 [Repealed, 23 SR 459]
- 8220.3650 [Repealed, 23 SR 459]
- 8220.3750 [Repealed, 23 SR 459]
- 8220.3850 [Repealed, 23 SR 459]
- 8220.3950 [Repealed, 23 SR 459]
- 8220.4000 [Repealed, 10 SR 1690]
- 8220.4050 [Repealed, 23 SR 459]
- 8220.4100 [Repealed, 10 SR 1690]
- 8220.4150 [Repealed, 23 SR 459]
- 8220.4200 [Repealed, 10 SR 1690]
- 8220.4250 [Repealed, 23 SR 459]
- 8220.4300 [Repealed, 10 SR 1690]
- 8220.4400 [Repealed, 10 SR 1690]
- 8220.4500 [Repealed, 10 SR 1690]
- 8220.4600 [Repealed, 10 SR 1690]
- 8220.4700 [Repealed, 10 SR 1690]
- 8220.4800 [Repealed, 10 SR 1690]
- 8220.5000 [Repealed, 10 SR 1690]
- 8220.5100 [Repealed, 10 SR 1690]
- 8220.5200 [Repealed, 10 SR 1690]
- 8220.5300 [Repealed, 10 SR 1690]
- 8220.5400 [Repealed, 10 SR 1690]
- 8220.5500 [Repealed, 10 SR 1690]
- 8220.5600 [Repealed, 10 SR 1690]
- 8220.5700 [Repealed, 10 SR 1690]
- 8220.5800 [Repealed, 10 SR 1690]

# MINNESOTA RULES 2003

## VOTING SYSTEM TESTING

638

**8220.5900** [Repealed, 10 SR 1690]

**8220.6000** [Repealed, 10 SR 1690]

**8220.6100** [Repealed, 10 SR 1690]

**8220.6200** [Repealed, 10 SR 1690]

**8220.6300** [Repealed, 10 SR 1690]

**8220.6400** [Repealed, 10 SR 1690]