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CERTIFICATION, TESTING, AND USE OF VOTING 8220.0100

CHAPTER 8220 SECRETARY OF STATE CERTIFICATION, TESTING, AND USE OF VOTING MACHINES

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8220.0100 DEFINITIONS.

Subpart 1. Scope. The following terms shall have the meanings given them.

Subp. 2. Acceptance tests. "Acceptance tests" mean initial tests that shall be successfully completed before a vendor shall be licensed to sell voting machines in Minnesota.

Subp. 3. Application program. "Application program" means a computer program that solves a problem posed by a computer user.

Subp. 4. Approved computer. "Approved computer" means vendor's model which has been approved by the secretary of state to tabulate official ballots in Minnesota.

Subp. 5. **Backup program; duplicate program.** "Backup program" or "duplicate program" mean an identical computer program for vote recording and vote tallying to be prepared and tested and held in readiness should it be needed to replace the computer program prepared for use in the election.

Subp. 6. **Ballot card.** "Ballot card" means a data processing card that is preprinted with numbers or names of the offices, candidates for those offices, and propositions to be voted on in an election. The ballot card is used by the voter to designate his choices and is subsequently tabulated by a computer.

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Subp. 7. **Ballot envelope.** "Ballot envelope" means a paper container approved by the secretary of state into which the ballot card is inserted by a voter after voting.

Subp. 8. **Ballot image.** "Ballot image" means a corresponding representation in electronic form on tape or disc of the punch or mark pattern of a voted ballot.

Subp. 9. **Ballot label.** "Ballot label" means that portion of the cardboard, paper, or other material within the ballot frames, the cards, papers, booklets, pages, or other material containing the names of the candidate, the official title, party designation, or a statement of a proposed constitutional amendment or other question or proposition, with the word "Yes" for voting for any question or the word "No" for voting against any question.

Subp. 10. **Bit-for-bit comparison.** "Bit-for-bit comparison" means a method for comparison of machine encoded characters.

Subp. 11. Chad. "Chad" means the prescored portion of the ballot card that is removed from the ballot card by the voter when casting his ballot.

Subp. 12. Combination ballot card. "Combination ballot card" means a ballot card with a card attached by perforation for write-ins, containing instructions and spaces for write-ins.

Subp. 13. Computer. "Computer" means a data processor that can automatically perform a sequence of logical and/or arithmetic operation without human interventions.

Subp. 14. Computer expert. "Computer expert" means a person knowledgeable in the engineering, programming, and operation of a computer for the purposes of vote recording and vote tallying.

Subp. 15. Computer facility. "Computer facility" means the counting center where votes are tabulated from all the precincts included in the election jurisdiction.

Subp. 16. Computer program. "Computer program" means the set of operating instructions for a computer by which it examines, counts, tabulates, and prints votes recorded by a voter on a ballot card or other electronic medium.

Subp. 17. Console log; computer log; log book. "Console log," "computer log," "log book," mean computer-generated listing of actions performed by the computer, including both normal and abnormal operations.

Subp. 18. Counting center. "Counting center" means a location selected by the governing body of a municipality subject to approval of the secretary of state where an electronic system is used for the automatic tabulation of ballots.

Subp. 19. Crimp hinge. "Crimp hinge" means a hinge with locking spurs which is attached to the ballot label pages to allow for insertion, proper alignment, and positioning of the ballot label pages in the ballot frame assembly.

Subp. 20. **Damaged ballot.** "Damaged ballot" means a valid ballot cast by a voter that is mutilated at the precinct, in transportation to the counting center, and/or in processing at the counting center to the extent that it cannot be entered into the computer and must be duplicated.

Subp. 21. **Defective ballot.** "Defective ballot" means a voted ballot card which the election judges have determined that the voter either mutilated or placed thereon some mark, printing, or writing, for the purpose of distinguishing it. A ballot may also be declared defective in whole or in part because of the inability of the judges to determine the intent of the voter.

Subp. 22. **Demonstration ballot card.** "Demonstration ballot card" means a ballot card of a distinctive color used to instruct voters in the use of the voting device.

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Subp. 23. **Demonstration model.** "Demonstration model" means an approved copy of the voting machine in use in a precinct containing ballot labels representing offices and containing fictitious names, to demonstrate to voters the method of voting.

Subp. 24. Detachable stub. "Detachable stub" means a two-part section of each ballot card, each part of which is printed with the identical number, which is part of a serial numbering of all ballot cards assigned to that precinct.

Subp. 25. **Duplicate ballot card.** "Duplicate ballot card" means a ballot card on which the word "DUPLICATE" is printed, stamped, or written and which may be of a different color to which election judges transfer a voter's selections from the original ballot card when necessary.

Subp. 26. Edit listing. "Edit listing" means a computer-generated listing showing the names, rotation sequence, and ballot position numbers for each candidate as they appear in the computer program for each precinct.

Subp. 27. Election jurisdiction. "Election jurisdiction" means any municipality, township, county, or special election district holding original responsibility for an election or part thereof.

Subp. 28. Election official in charge of the counting center. "Election official in charge of the counting center" means if one election jurisdiction is using the counting center, the official in charge of the election for that jurisdiction; if more than one election jurisdiction is involved, the county auditor of the county in which these jurisdictions are located.

Subp. 29. End card. "End card" means a data processing card which instructs the computer program that all ballots of a precinct have been counted.

Subp. 30. Hardware. "Hardware" means physical equipment, as opposed to computer program, used in vote recording and vote tallying by computer.

Subp. 31. Header cards. "Header cards" means data processing cards which contain the necessary data to identify the precinct of the following ballot cards to the computer.

Subp. 32. List of persons voting. "List of persons voting" means the list maintained by election judges in the precinct from the voters certificates completed by voters as they qualify to receive a ballot.

Subp. 33. Marking devices. "Marking devices" means either an apparatus in which ballots or ballot cards are inserted and used in conjunction with a punch apparatus for the piercing of ballots by the voter or any approved device for marking a paper ballot with ink or other substance which will enable the ballot to be tabulated by means of automatic tabulating equipment. The mark or punch made by such marking device may be in the form of a round dot, a square, or any other shape that will clearly indicate the intent of the voter.

Subp. 34. Municipal corporation. "Municipal corporation" means an election jurisdiction however constituted; same meaning in these rules as "election jurisdiction."

Subp. 35. **Object code.** "Object code" means the machine code of a computer program on which the computer operates.

Subp. 36. Official in charge of the election for the election jurisdiction. "Official in charge of the election for the election jurisdiction" means the city or township clerk or a designated official of the special district holding the election.

Subp. 37. **Operating systems.** "Operating systems" means software that controls the execution of computer programs and provides scheduling, debugging, input/output control, accounting, compilation, storage assignment, data management, and related services.

Subp. 38. 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.

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Subp. 39. **Precinct certification.** "Precinct certification" means the certification supplied by the election jurisdiction to each precinct on which to record unusual occurrences at the precinct, the number of voters who registered on election day, the number who voted, and other information as may be requested by the election jurisdiction and the secretary of state.

Subp. 40. **Programmer.** "Programmer" means person, persons, or commercial vendor designated by an election jurisdiction to write a computer program to record and tally votes in an election.

Subp. 41. **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 computer which will be used to count the ballots and to demonstrate and explain the testing procedures being used to determine the accuracy.

Subp. 42. **Rules.** "Rules" means rules of procedures for conduct of elections in accordance with Minnesota election law that, when duly promulgated by the secretary of state, shall have the force of law.

Subp. 43. Seal. "Seal" means device of metal or other material with a number on it. Such a seal is used to secure voting machines. Another seal is used to secure transfer cases.

Subp. 44. Self-contained voting station. "Self-contained voting station" means a unit that contains a voting machine or marking device having all four sides enclosed and lighted; when assembled the unit creates one individual voting station.

Subp. 45. Software. "Software" means computer programs, procedures, rules, and possibly assorted documentation concerned with the operation of a data processing system; contrast with "hardware"; computer program and paper media used in vote recording and vote tallying for computer use.

Subp. 46. Source code. "Source code" means the instructional language in which a programmer writes a computer program. The object code is a translation of this language.

Subp. 47. Spoiled ballot card. "Spoiled ballot card" means a ballot that has been returned to the election judges by a voter and for which a new ballot card may have been issued.

Subp. 48. State office. "State office" means any office in nomination or election of candidates for president and vice-president, U.S. senate, U.S. congress, state legislature, and state constitutional office.

Subp. 49. Stylus. "Stylus" means an instrument which a voter uses to punch out the prescored position of a ballot card.

Subp. 50. Support software. "Support software" means all software, such as an operating system, that does not pertain to any specific user need.

Subp. 51. Test deck. "Test deck" means a set of preaudited mock voted ballot cards used to determine that the computer and software to be used in the election count the votes.

Subp. 52. **Transfer case.** "Transfer case" means a container for transporting ballots to the counting center.

Subp. 53. Unassigned locations. "Unassigned locations" means voting positions on the voting machine or data processing card not programmed to receive an indication of votes in the election in progress.

Subp. 54. 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. 55. Valid vote. "Valid vote" means a voted ballot cast according to the instructions on the voting machine in keeping with the Minnesota election law and these rules.

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Subp. 56. Vendor. "Vendor" means organization contracting to supply any elements of a vote-counting and vote-tallying system which can include hardware, support software, and computer program.

Subp. 57. Vote. "Vote" means an indication by a voter of intent recorded by a variety of mechanical or electronic methods.

Subp. 58. Vote-recording medium. "Vote-recording medium" means the material or configuration thereof on which data are recorded, such as paper tape, cards, magnetic tape.

Subp. 59. Voter registration list. "Voter registration list" means a list of voters registered in that precinct sometimes used for the purpose of checking off each voter who comes to vote in that election.

Subp. 60. Voting booth. "Voting booth" means a structure constructed in a manner prescribed in Minnesota Statutes, section 204A.11, subdivision 2 so that the voter while preparing his ballot may be free from observation. Each booth has a facility to hold a voting machine.

Subp. 61. Voting machine. "Voting machine" means a lever machine or an electronic or mechanical equivalent thereof utilized by a voter to record his choices relative to candidates and issues to be voted on in an election.

Subp. 62. Voting system. "Voting system" means a system in which votes are recorded and such votes are subsequently counted and tabulated by automatic tabulating equipment.

Subp. 63. Write-in. "Write-in" means a vote for a candidate whose name does not appear on the official ballot for the office for whom a voter elects to vote.

Statutory Authority: MS s 206.08 subd 2

8220.0200 STATUTORY TERMS AND SCOPE.

As used in parts 8220.0100 to 8220.4800, terms defined in Minnesota Statutes, section 206.01 shall have the meanings given them in that section.

Statutory Authority: MS s 206.08 subd 2

8220.0300 CONDUCT OF ELECTIONS.

Except as provided in Minnesota Statutes or in these rules, election judges shall conduct elections in the manner prescribed for precincts using paper ballots in the Minnesota election law.

Statutory Authority: MS s 206.08 subd 2

8220.0400 MINIMUM STANDARDS.

These rules set minimum standards for procedures in the use of voting machines. An election jurisdiction may by resolution require additional procedures. A copy of such resolution including the procedures shall be filed with the secretary of state within five days after its adoption.

Statutory Authority: MS s 206.08 subd 2

CERTIFICATION AND ACCEPTANCE

8220.0500 SCOPE OF CERTIFICATION RULES.

Parts 8220.0500 to 8220.1400 pertain to the vendor only, not to computer center operators or responsible authorities of election jurisdictions.

Statutory Authority: MS s 206.08 subd 2

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8220.1000 ACCEPTANCE TESTING.

In addition to the general testing of the integrity of the computer program, the voting system (both hardware and software) shall demonstrate its storage requirements and its speed of operation which may include its printout capability to provide speed for unofficial results and full audit capability for official results to be certified. There shall be demonstrated any special parameter alteration that can be programmed into it and a full explanation of any modification that can be inserted. Test conditions shall involve a simulation of realistic conditions, coupled with a checkoff of the design specifications which were imposed.

Vendor of the program shall identify all the hardware configurations with which the computer program is intended to operate and also identify the maximum values of election parameters which the program can support. These parameters shall include the maximum number of precincts, offices and issues, candidates per office, as well as statistical data required by the secretary of state as identified in law and these rules.

When the computer program is to be used with several different hardware configurations, a test of the computer program with each configuration shall be completed including the various election arrangements of different numbers of voters, precincts, offices, numbers of candidates, and issues.

Statutory Authority: MS s 206.08 subd 2

8220.1100 SIMULATION OF VOTE COUNTING FOR ACCEPTANCE TESTING.

Simulation of vote counting for the purpose of acceptance testing shall involve a configuration of number of voters, precincts, offices, and candidates which involves the largest number of voters in an election in which it is expected to be used. Testing should be in a manner commensurate with the logic of the computer program, the capabilities of the program and storage to correctly tally the quantity of votes anticipated. Simulated ballots may be prepared by use of ballot images on tape or disc. Simulated ballots, however produced, shall include those involving no overvotes or marks in unassigned locations as well as ballots showing overvotes, undervotes, and invalid votes.

Statutory Authority: MS s 206.08 subd 2

8220.1200 USE OF BALLOT-GENERATING PROGRAM.

To develop a computer-readable medium of randomly configurated ballot images which is the inverse of the vote-tallying program under test, the secretary of state may begin with a set of results for every precinct and every office and issue and decompose the results into a set of ballots, including some which involve valid votes, overvotes, and undervotes, in many different combinations. Results obtained by the vote-tallying program under test shall match the results of the tape of ballot images at the option of the secretary of state.

At the option of the secretary of the state the ballot-generating program may also be used to generate actual ballots as well as a tape of ballot images.

Statutory Authority: MS s 206.08 subd 2

8220.1300 AUDIT TRAIL.

There shall be a complete printout of overvotes and undervotes as an audit trail.

The program shall be designed so that undervotes are recorded directly from the ballots and not determined by subtraction of candidate totals from nonovervoted ballots.

The computer printout containing the tally shall include the following:

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A. for each precinct the candidates and issues shall be listed in rotational order given in the instructions for voters in that precinct;

B. the number of ballots counted for that precinct shall be shown; and

C. the number of overvotes, the number of undervotes, and the number of nonovervoted ballots for each office and issue shall be shown.

Statutory Authority: MS s 206.08 subd 2

8220.1400 CERTIFICATION BY SECRETARY OF STATE.

Subpart 1. **Deposit as condition.** For certification, the vendor shall deposit with the secretary of state a copy of the source vote-tallying program, documentation describing the program, and copies of all compilers and other support software that are used to convert the vote-tallying program to object code. If the vendor considers these data proprietary, the secretary of state shall maintain the integrity and security of the program. The secretary of state shall notify the vendor of decision in the matter of the approval of the voting machine tested within five working days of the completion of the tests described in these rules. Approval shall be valid as long as the voting machine meets the standards set out in the statutes and rules.

Subp. 2. Decertification. If a voting machine no longer meets the standards of the statutes and rules, the secretary of state may withdraw approval of the voting machine after a hearing.

Statutory Authority: MS s 206.08 subd 2

PREELECTION CHECK OF COMPUTER PROGRAMS

8220.2000 DESIGN OF COMPUTER PROGRAMS.

Computer programs shall be written 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 the laws of the state of Minnesota and these rules.

Computer programs shall include instructions requiring that precinct identification be punched on all ballot cards. Two identical header cards may precede the deck of ballot cards of each precinct. The program may provide that if two identical header cards do not appear in front of the ballot cards of a precinct, no counting of ballots for that precinct shall take place.

A data processing card may follow the ballots of each precinct instructing the computer that all ballots of the precinct have been counted. The program may provide that if header cards contain instructions to the computer that all ballots of the preceding precinct have been counted, no separate end card is needed.

Computer programs may be contained on data processing cards, magnetic tape, disc, ROM (read only memories), PROM (programmable read only memories), or any combination thereof.

Statutory Authority: MS s 206.08 subd 2

8220.2100 EDIT LISTINGS.

The operators shall prepare at least two edit listings from the computer program showing candidates' names and respective ballot position numbers as they appear in the computer program for each precinct. The edit listings shall be delivered to the appropriate election jurisdiction at least 14 days prior to the election.

Statutory Authority: MS s 206.08 subd 2

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8220.2200 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 shall supply any information such as candidates' names and rotation to the programmers designated to write the computer program.

The computer program for any election must be completed and delivered to the election jurisdiction or the county auditor, when two or more election jurisdictions elect to use a common counting center, at least 14 days prior to the election. The programmers shall also prepare and deliver to the election jurisdiction or to the county auditor, when two or more election jurisdictions elect to use a common counting center, at the same time an exact duplicate or duplicates of the program for use as backup. One duplicate shall be required if county offices are included in the election, and a second duplicate shall be required if state offices and questions are included in the election. Instructions containing the necessary information, steps, and procedures required to operate the computer program shall be prepared to accompany the original program and the backup program or programs delivered with them. There shall be at least two copies of the instructions for each computer facility. It shall be the responsibility of the election jurisdiction to see that the instructions are made available to the computer operators.

Statutory Authority: MS s 206.08 subd 2

8220.2300 VOTE TABULATION PORTION OF PROGRAM.

The vote tabulation portion of the computer program shall be written as follows:

A. In nonpartisan races in all elections and in the partisan primary elections, the computer program shall reflect the rotation sequence of the candidates' names and ballot position numbers as they appear on the ballot labels in the various precincts.

B. The computer program shall count valid votes cast by a voter for candidates for an office.

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

D. The computer program shall 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 such office or question, but it shall record that there is an overvote condition as referred to in part 8220.1300.

E. The computer program shall ignore marks and/or punches in a ballot card in positions where no candidates' names or questions appear on the official ballot; these marks and/or punches shall have no effect on any portion of the ballot.

F. For the purpose of programming, the partisan, nonpartisan, and proposal sections of the ballot are to be considered independent ballots. No action of a voter on one such section of the ballot shall affect his action on another section of the ballot.

G. In partisan primary elections, the computer program shall 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.

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

Statutory Authority: MS s 206.08 subd 2

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8220.2400 PREPARATION OF TEST DECK OR BALLOT IMAGE.

It shall be the duty of the election jurisdiction requesting the computer program to prepare a test deck of ballot cards to be used to determine that the computer and the computer program will correctly count the votes cast for all offices and/or all proposals in compliance with the laws of the state of Minnesota.

Simulated ballots through use of ballot images on tape or disc may be used to evaluate the logic of the computer program.

The test deck or ballot image shall include ballots involving no overvotes or marks in unassigned locations as well as ballots involving overvotes, undervotes, and invalid votes in many different combinations.

The test deck or ballot image shall test in a manner commensurate with the logic of the computer program, the capabilities of the program and storage to correctly tally the maximum number of votes which might be cast for any office or question in the election.

The test deck shall conform to part 8220.0100, subpart 51. A test deck shall be prepared specifically for each election.

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

Statutory Authority: MS s 206.08 subd 2

8220.2500 TEST DECK PROVIDED.

The secretary of state may provide a test deck for any computer program. If so, it shall be delivered at the public accuracy test. The computers and computer programs shall be tested by use of this test deck. Thereafter, at the discretion of the secretary of state it shall be used in lieu of or in addition to the test deck prepared by the election jurisdiction.

Statutory Authority: MS s 206.08 subd 2

8220.2600 TEST BALLOTS.

Ballots shall 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 shall be prepared with the number of votes allowed by law for that office in that district and also shall include votes in positions which are assigned to that office for which no candidate's name appears in those positions for that district.

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

Test ballots shall be prepared in which votes appear in positions other than those used for candidates or proposals. In preparing the test deck or ballot image a number of the ballots shall be voted to include valid votes in each section of the ballot, i.e. partisan, nonpartisan, and proposal sections.

At least 50 blank ballot cards shall be run before the test deck is run. Blank ballots in which no positions have been voted shall be included in the test deck or ballot image.

At least one test ballot shall be prepared with votes in all positions where there is a candidate or measure on the ballot.

A duplicate of the test deck shall be prepared to be used with the duplicate or backup computer program. The duplicate test deck may consist of standard

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data processing cards.

Statutory Authority: MS s 206.08 subd 2

8220.2700 DOCUMENTING TEST BALLOTS.

A documentation, record, chart; or listing shall be prepared indicating the punches recorded in the test ballots. Said documentation shall indicate whether punches are valid or invalid.

Statutory Authority: MS s 206.08 subd 2

8220.2800 PRELIMINARY TESTING OF COMPUTER PROGRAMS.

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

The election jurisdiction requesting the computer programs shall compare the edit listing against the ballot labels of all precincts to ascertain that the appropriate labels are in each precinct, and the ballot position numbers for each candidate and proposal appearing on the ballot labels agree with those recorded on the edit listing for each precinct. It shall be the duty of each election jurisdiction to make a certificate as to the above and file it with the county auditor. In elections where state and county officers are to be voted for, an additional certificate shall be filed with the secretary of state.

The test shall be conducted using the test deck or ballot image prepared under the direction of the election jurisdiction, and the results shall be compared against the predetermined results of the test deck or ballot image. For the purpose of this test, the test deck may be reproduced onto standard data processing cards.

Statutory Authority: MS s 206.08 subd 2

8220.2900 DUTIES UPON COMPLETION.

When an errorless count has been made on all precincts, it shall be the duty of the election jurisdiction providing the computer program to:

A. secure all computer programs, including the object code, all support software utilized except the operating system, test decks, and predetermined results of the test decks, in a metal container that shall be sealed with a metal seal and stored in a secured area that is subject to normal computer temperature humidity restraints;

B. prepare a certificate that all precincts have been tested using the test deck or ballot image prepared under the direction of the election jurisdiction and that the results agree with the predetermined results of the test deck (the certificate shall also contain the seal number that was used in item A, and shall be attached to the computer results of the test); and

C. deliver the items mentioned in items A and B to the county auditor.

Statutory Authority: MS s 206.08 subd 2

8220.3000 PUBLIC ACCURACY TEST.

A public accuracy test shall be held within five days prior to the election for the purpose of demonstrating the accuracy of the computer programs and computers to be used at the election. The public accuracy test shall be conducted according to Minnesota Statutes, section 206.17.

The time and place of the public accuracy test shall be designated by the election jurisdiction providing the computer program, which shall give public notice of the time and place of the test at least 48 hours before by publication in official newspapers.

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The test shall be open to the public. 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 8220.2900, item B, that all precincts have been tested using the test deck or ballot image prepared under the direction of the election jurisdiction.

The sealed container containing the computer programs, test deck, predetermined results, and header cards shall be opened and the computer programs and computers tested to determine their accuracy on the computer on which they are to be used on election night. The initial testing of the computers and programs shall be with the test deck or ballot image prepared under the direction of the election jurisdiction. The number of precincts to be tested shall be at the discretion of the election jurisdiction.

Persons allowed in the immediate area of the computer at the public accuracy test shall be limited to those persons allowed in the immediate area on election night provided in Minnesota Statutes, section 206.185, subdivision 3. Each of the above named parties may be accompanied by a computer expert of his choice. In conventional data processing installations, the immediate area of the computer shall mean the room in which the computer is located. All other interested persons may observe from an observation area.

Any backup or duplicate computer programs prepared and delivered according to part 8220.2200 shall be tested on the computer on which they would be used on election night. The test decks used in these procedures shall be the ones prepared in accordance with parts 8220.2000 to 8220.3200. Any test cards made under parts 8220.2000 to 8220.3200 shall be marked "TEST."

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

Statutory Authority: MS s 206.08 subd 2

8220.3100 CERTIFICATION OF PUBLIC ACCURACY TEST.

After the completion of the public accuracy test and an errorless count has been made, the election jurisdiction shall certify the results of the test conducted. Certification shall be signed by the witnesses specified in Minnesota Statutes, section 206.17 and shall be attached to or written on the computer results of the public accuracy test. A copy of the certification shall be sent to the secretary of state.

Statutory Authority: MS s 206.08 subd 2

8220.3200 SECURING COMPUTER PROGRAMS.

Immediately after certifying the results of the public accuracy test, the election jurisdiction shall secure all computer programs, including the object code, software utilized, test decks, certified computer results of the test, and the predetermined results in a metal container which shall be sealed with a metal seal in a manner so that the container cannot be opened without breaking the seal. Attached to or inside the container shall be a certificate describing its contents and on which the number of the seal has been recorded. The certificate shall be signed by at least two witnesses as specified in Minnesota Statutes, section 206.17, and if attached to the container in a plastic envelope it shall be attached in such a manner that it cannot be removed without breaking the seal.

All computer programs, test decks, and other related materials shall be clearly identified as to the computer on which they were tested and shall be used on no other computer until tested in accordance with parts 8220.2500 and 8220.3000 to 8220.3200.

8220.3200 CERTIFICATION, TESTING, AND USE OF VOTING

The election jurisdiction shall immediately deliver to the county auditor or his designee the metal case containing the computer programs and test decks which are to be used to tabulate the results of the election. The county auditor shall retain and secure the programs and deliver them to the counting center on election night no earlier than 6:00 p.m. The container containing backup or duplicate computer programs and related material shall be delivered to and secured by the county auditor. It shall be the responsibility of the county auditor to store the original and duplicate or backup computer program in separate locations. If state offices and questions are included in the election, the container containing the second backup or duplicate computer program and related materials shall be delivered to and secured by the secretary of state.

Statutory Authority: MS s 206.08 subd 2

SECURITY OF COMPUTER SYSTEMS AND PROGRAMS

8220.4000 ISOLATION FROM OTHER INFLUENCES.

A computing system shall be set up so that the vote-tallying procedures will function in isolation from other influences while being tested or run.

Statutory Authority: MS s 206.08

8220.4100 PREPARATION BEFORE TESTING SYSTEM.

Before beginning vote-tallying computer program testing or running on a computer also used for other purposes, make certain that computer programs are not influenced by extraneous peripheral equipment. The erasure of memory locations that are to remain accessible to the system, except those minimally required to load a new operating system, if any, shall be accomplished. Active measures shall be undertaken to assure that all tapes and discs to be used that are supposed to be initially blank are actually blank, except for machine-readable inventory identifiers and have no defects.

Statutory Authority: MS s 206.08

8220.4200 SUPPORT SOFTWARE.

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

Statutory Authority: MS s 206.08

8220.4300 PHYSICAL PROTECTION OF OBJECT CODES.

Master copies of all computer programs including support software and application programs shall be retained in secured locations, separate from the location of working copies. Once generated the master copy shall be used in a read-only mode. No writing shall be done on the storage medium of the master copy. Before use of the working copy it shall be computed bit-for-bit against the master copy. Any difference must be explainable.

Statutory Authority: MS s 206.08

8220.4400 LABELING OF DISCS AND TAPES.

Discs and tapes employed for any vote tallying purpose shall have both human-readable and machine-readable labels. When the machine-readable label is read by the operating system, a halt in further operation shall occur until the computer operator enters the human-readable label. A match between the two labels must precede any further computer operation.

Statutory Authority: MS s 206.08

6754

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8220.4500 CONTROL OF SYSTEM CONTROL CARDS.

Punched cards used for modification of operating system conditions shall have a use code and version number punched in identification fields of the cards. Each card shall be checked for proper use and version when read by the operating system, and the effect of the card on system operation shall be reported on the system output printer.

Statutory Authority: MS s 206.08

8220.4600 LOGGING OF OPERATIONS.

The operating system of the computer must be programmed to report automatically on the system printer all actions taken by the operators to change conditions and their times of occurrence. These actions may include mounting and dismounting tapes, connecting or removing peripherals, insertion of data, or a changing of control switch settings.

Statutory Authority: MS s 206.08

8220.4700 SEPARATION OF COMPUTER ROOM DUTIES.

A basic principle of internal control is to divide the execution of critical functions among two or more persons. One individual shall not be totally responsible for a given activity, such as computer operation.

Statutory Authority: MS s 206.08

8220.4800 CONTROL OF COMPUTER PROGRAM CHANGES.

Every change to a computer program used for vote tallying and under control of the election jurisdiction, even those involving only one statement, shall be authorized, approved, and documented by the responsible authority of the election jurisdiction with no exceptions.

Statutory Authority: MS s 206.08

ELECTION SUPPLIES

8220.5000 PREPARATION OF BALLOT CARDS.

All ballot cards used in an election shall have attached by perforation a detachable stub on which duplicate numbers shall be printed in consecutive order. On all ballot cards, the words "OFFICIAL BALLOT CARD" shall be printed or stamped on the face of the detachable stub. The ballot card shall have a corner cut on one corner. The following statement shall be printed or stamped on the back of the stub of all official ballot cards in bold face capital letters:

STOP

WRONG SIDE

TURN CARD OVER

The precinct number designation shall be printed, stamped, or written and punched on each ballot card used in an election so as to identify in which precinct it originated. In the case of a combination ballot card/write-in ballot, the portion of the ballot for write-ins shall contain instructions and spaces for write-ins. Numbers of the offices to be voted for and of the candidates for those offices shall be printed on the ballot cards and on the ballot labels so that the voter may review his choices before leaving the voting booth or station.

Statutory Authority: MS s 206.08

8220.5100 CERTIFICATION, TESTING, AND USE OF VOTING

8220.5100 BALLOT ENVELOPES.

The ballot envelope shall be of sufficient size and construction so that when the ballot is inserted in it all portions thereof indicating voting marks are hidden from view. Instructions shall be printed on the ballot envelope and shall include the following:

After you have voted, check your ballot with the ballot label to be sure that your vote is recorded for the candidate and/or question of your choice.

Insert ballot in this envelope with the stub exposed.

Return this envelope with the ballot enclosed to the election judge.

If you spoil your ballot or if you make a mistake in voting, return it to the election judge and receive another ballot.

In voting machine systems where write-in votes are not written on the media contained in the machine or the cards inserted in the machine, the inside flap of the envelope shall contain language which clearly indicates that this is the place to vote for write-in candidates. It shall contain the following language: "A write-in vote will not be counted unless it includes the name of the person voted for and the title of the office."

Statutory Authority: MS s 206.08

8220.5200 VOTING INSTRUCTIONS ON BALLOT.

Voting instructions shall be printed on the first page of the ballot label pages. Following each page of the ballot label pages containing candidates or measures, instructions shall be printed as to where the voter is to proceed to continue voting. Additional instructions which conform with the election laws may be printed on the ballot labels when deemed advisable so as to assist the voter in casting his ballot.

Statutory Authority: MS s 206.08

8220.5300 BALLOT COPIES TO SECRETARY OF STATE.

When a state office or question appears on the ballot, five days before the election the election jurisdiction shall forward to the secretary of state two copies of the sample ballot, two copies of a ballot card, and two copies of a ballot envelope.

Statutory Authority: MS s 206.08 PREPARING VOTER MACHINES

8220.5400 IDENTIFYING MACHINES.

All voting machines shall be identified as to the precinct in which they will be used.

The identifying number of the voting machine and the seal number used to seal the ballot label pages assembly to the machine shall be recorded on the precinct certification for the precinct in which the device will be used. The election official who sealed the machine shall also sign the certification.

Statutory Authority: MS s 206.08

8220.5500 BALLOT LABEL PAGES.

All ballot label pages shall have a crimp hinge attached for insertion and positioning in the ballot frame. Ballot label pages attached by tape to a rod or which are placed into a clear plastic envelope through which a rod is inserted are not allowed.

Ballot label pages assembly shall be inserted and sealed into each voting machine so that the ballot label pages assembly cannot be removed without breaking the seal. Flat metal or wire seals shall be used for this purpose. On voting machines which do not have permanent rivets on the back or sides which prevent the removal of the ballot label pages assembly, a second seal must be used so that the ballot pages assembly cannot be removed without breaking the

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seal.

6757

Statutory Authority: MS s 206.08

8220.5600 MASKS.

If a machine uses masks, the official in charge of the election jurisdiction shall prepare or cause to be prepared the masks to be used. The masks shall have holes punched in appropriate positions for which the elector will be entitled to vote and in no others.

The ballot label pages of each voting machine shall be examined to ascertain that holes in the mask appear directly opposite each arrow and that no other holes appear in the mask and that the ballot label pages are in proper sequence.

Statutory Authority: MS s 206.08

8220.5700 COMPARING LABELS TO EDIT LIST.

The ballot labels in each voting machine of a precinct shall be compared against the edit listing and/or sample ballot for that precinct to ascertain that the offices, candidates' names, and ballot position numbers are the same and appear in the same position.

Statutory Authority: MS s 206.08

8220.5800 TEST USE OF DEMONSTRATION BALLOT CARD.

Operation of each voting machine using a ballot card shall be tested by inserting a demonstration ballot card and voting for each candidate and proposition appearing on the ballot. The ballot card shall then be examined to ensure that each received a clear punch or mark.

Statutory Authority: MS s 206.08

8220.5900 CERTIFICATE OF MACHINE PREPARATION.

Subpart 1. **Preparing machines.** The election official in charge of the election jurisdiction shall prepare the voting machines so that in every particular they will meet the requirements for voting and counting at such election.

Subp. 2. Certification. When a voting machine has been prepared for the election, it shall be the duty of the official in charge of the election jurisdiction to make a certificate in writing which shall be filed with the county auditor. This certificate shall contain precinct number, identifying number of the machine, and number of the metal seal or seals used to seal the machine and state that the ballot labels have been compared against the edit list and/or sample ballot for that precinct and that the candidates' names and ballot numbers agree and appear in the same position and that the machine has been properly prepared and tested.

Statutory Authority: MS s 206.08

8220.6000 ADDITIONAL CERTIFICATION.

In elections where state or county officers are to be voted for, an additional certificate as required in part 8220.5900, subpart 2 shall be filed with the secretary of state.

Statutory Authority: MS s 206:08 PREPARATION OF ELECTION SUPPLIES

8220.6100 BALLOT CARDS.

The municipal clerk of the election jurisdiction which owns the voting machines shall prepare and package or place into a transfer case the ballot cards for each precinct. Each package shall be sealed with a red paper seal or, if a transfer case is used, sealed with a metal seal. The package or transfer case shall contain a certificate signed by the municipal clerk setting forth the number of ballots therein and that such ballots were counted, packaged, and sealed by

8220.6100 CERTIFICATION, TESTING, AND USE OF VOTING

that clerk personally or by his duly authorized assistant. All ballot cards not issued to a precinct or assigned for absentee voting shall be secured and accounted for by the municipal clerk. The municipal clerk shall maintain a record of the number of ballot cards and serial numbers issued to each precinct. The ballot cards shall be delivered to the chief election judge of the proper precinct.

An approved ballot box shall be provided to each precinct for the deposit of voted ballot cards. This ballot box need not be made of metal but must be capable of being sealed during election day.

Statutory Authority: MS s 206.08

8220.6200 ADDITIONAL PRECINCT SUPPLIES.

The following additional items shall be included in the precinct supplies:

A. edit listing for precinct;

B. ballot envelopes in sufficient quantity to match quantity of ballots;

C. envelopes marked "spoiled ballot cards," "defective ballot cards," "absentee ballots";

D. envelope for "original ballot cards for which duplicates are to be made for any reason";

E. precinct certification form;

F. set of instructions for operating the precinct on election day; and

G. copy of current Minnesota election laws published by the secretary of state.

Statutory Authority: MS s 206.08

8220.6300 PRECINCT HEADER CARD.

If the precinct header card is to be sent to the precinct, it shall be contained in an envelope for that purpose, placed into the transfer case of the precinct, and delivered to the appropriate precinct.

Statutory Authority: MS s 206.08

8220.6400 NO VENDOR PRESENT.

No vendor or vendor's representative shall be present during election day activities in precincts.

Statutory Authority: MS s 206.08