



## Voting System Security Plan

### 1. Introduction

The San Francisco Department of Elections utilizes various security measures and departmental procedures to conduct an election in a manner that is free, fair, and functional. The Voting System Security Plan, developed according to the guidelines provided by the U.S. Election Assistance Commission and the California Secretary of State, outlines security safeguards for voting system in storage, in transit, in the polling place, in use on Election Day, and through the certification of election.

This Plan is organized according to the subject matters listed below.

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## **2. Access to and the security of the Department of Elections' facilities**

### **2.1. Security measures for the Department's main facilities**

#### **2.1.1. Employees**

- Keys

Managers and Lead employees of the Department are issued a key with a specific serial number that allows entry through any of the external, self-closing, self-locking doors of the Department's offices at Room 48. These keys are the property of the Department and are issued at the time of hiring and collected at the time an employee is released from the Department.

If a key is lost, the loss and the circumstances are immediately reported to the Administrative Division and the re-keying of the Department's locks may be required.

Employees who are not issued keys are admitted to the office through the door between the front counter and the Department's internal office which has a remote-controlled security lock to prevent unauthorized entry.

- Sign-in/out logs

All employees sign in upon arrival at the Department and sign out before departing. Managers and Leads sign a sheet located outside the Administrative area; all other employees sign a sheet located in their divisions.

If an employee does not sign in or out, the Administrative Division follows up with the employee.

- Identification badges

All persons who work for the Department wear a Department-issued identification badge while performing their duties. Badges are property of the Department and are issued at the time of hiring and collected at the time an employee is released from the Department. Badges for temporary employees have an expiration date coinciding with their expected date of separation.

If an employee loses his or her badge, the loss and circumstances are immediately reported to the Administrative Division. The employee wears a temporary or visitor's badge until a replacement can be issued.

- Computer access

Employees whose job involves tasks that must be performed using a computer are issued a log-in name and password which permits access only to their files and their division's files. Employees must log out of their terminals or lock them when not using them.

To access DIMS, which contains confidential voter and pollworker information, the user must enter a username which matches the username of the person logged on to that terminal. These terminals all have a notice posted on their monitors stating which information is confidential and cannot be released to the public.

All employees sign a "Computer Use Policy" agreeing to appropriate access and use of confidential information based on the City Attorney's template.

- Election Worker Oath

All Department employees (and any other personnel engaged in elections-related activities) are required to take and sign the Election Worker Oath (See Appendix A). Managers and Lead staff sign the Oath prior to every election. Temporary staff takes and signs the Oath on their first day of work before beginning their duties.

### **2.1.2. Visitors**

The main door of the Department is unlocked Monday-Friday 8:00am-5:00 pm to serve the public at the front counter area. The door between the front counter and the Department's internal offices has a remote-controlled security lock to prevent unauthorized entry.

When a visitor has business with the Department requiring admittance to the internal offices, a staff member meets the visitor at the front desk, remains with the visitor throughout the visit, and escorts the visitor out of the Department at the conclusion of business.

- Sign-in/out logs

Visitors requiring entry to the Department sign in at the front counter where they are issued a temporary visitor badge.

- Identification badges

Visitors wear badges at all times while in the Department's work area. The visitor pass is returned to the Department when the visit has ended.

## **2.2. Security measures for the Department's main office on Election Day**

### **2.2.1. Employees**

On Election Day, there are three security access levels for employees. The Department issues identification color-coded badges that indicate the level of access provided to an employee.

- Identification badges

To gain access to facilities or rooms designated first-, second- or third- level security, the employees must be wearing a security badge authorizing entry and be granted access by the Deputy Sheriff guarding that area.

### **2.2.2. Observers**

The Department establishes two security access levels for observers enforced by identification color-coded badges.

- Identification badges

To gain access to facilities or rooms to observe operations, visitors must be wearing a security badge authorizing entry and be accompanied by the Department staff.

During tabulation of vote-by-mail ballots and other election processes open to the public, visual access to the computer room is afforded to observers through a window in the wall shared by the public hallway and the computer room.

## **3. Voting system storage and security**

### **3.1. WinEDS Servers and WinEDS Workstations**

- Access to physical location

The servers are located in the computer room within the Department's main office.

City Hall has Deputy Sheriffs on-site 24 hours per day and is equipped with security cameras on all floors.

The computer room is locked at all times and can be accessed only by a limited number of personnel who have been issued a security combination code that must be entered to unlock the door. This combination code is issued by the IT/MIS Manager based on job duties and responsibilities.

A daily activity log is maintained to record date, time, staff person, and reason for entering the computer room.

No one is allowed in the computer room without at least one other authorized person present during election time.

Tamper-evident seals are signed and applied to the doors to ensure that even authorized Department personnel never access the room when not accompanied by at least one other person.

- Access to system

The IT/MIS Manager is the only password administrator and is responsible for issuing passwords to WinEDS Servers, maintaining a master list of all passwords issued, reissuing passwords

periodically, and monitoring password usage. Passwords to WinEDS servers are changed every 30 days.

Only designated MIS staff has passwords for Administrator, SQL Server accounts and “Tallyadmin” accounts. Login and password information must be entered only by MIS staff. The WinEDS servers automatically password-lock after 15 minutes of idle time. MIS staff must be contacted to unlock the servers.

A log is kept of which stations were used by whom and for what purpose.

Sequoia personnel is never allowed access to the WinEDS servers without a member of the Department staff present.

### **3.2. 400-C Machines/WinETP Stations**

400-C machines and WinETP stations are stored in the computer room at City Hall.

Only designated MIS staff has passwords for Administrator and WinETP accounts. Login and password information must only be entered by MIS staff. The WinETP stations automatically password-lock after 15 minutes of idle time. MIS staff must be contacted to unlock the stations. Passwords to WinETP stations are changed every 30 days.

### **3.3. AVC Edges, VeriVote Printers, card activators, Optech Insights**

- Access to physical location

Equipment is stored at the Department’s warehouse located on Pier 48. Pier 48 is monitored by 24-hour video surveillance cameras and equipped with alarm systems. There is a sign-in sheet on which all persons entering the warehouse sign their name, the date and time, and the reason for entering the warehouse.

In the event that cameras record unauthorized entry and/or the alarm systems go off, a call to the designated Department personnel is made for further investigation and to determine if 9-1-1 must be contacted.

- Access to secured storage facilities

The AVC Edge machines, VeriVote printers, card activators and Optech Insight machines are stored inside a locked cage within the warehouse. The cage can be accessed only by personnel who have been issued a Radio Frequency ID (RFID). RFIDs are issued to personnel based on job duties and responsibilities.

The Warehouse Manager maintains a RFID list of all personnel who are allowed access to the cage where voting equipment is stored. Additionally, the Warehouse Manager keeps an access log including sign-in and sign-out dates and times of all personnel, along with the purpose for entry.

It is required that at least two people be present when in the cage where voting equipment is stored.

Visitors, Sequoia personnel, observers, etc. must be accompanied at all times by at least one member of the Department staff while in the equipment storage area.

The Warehouse Manager maintains a list of equipment, serial numbers of each unit, and total quantities stored in the facility.

Any time voting equipment is moved within the Department's facilities, a "Custody Transfer sheet" (See Appendix B) is used to record and track equipment delivery information, including a description of the equipment, its serial numbers, and signatures of the equipment handlers and recipients.

An asset tracking system, "TigerEYES", is used for managing the inventory and custody of the voting equipment. Bar-coded labels are placed on each piece of the equipment and are scanned as each election preparation process is complete and/or the custody of the equipment is changed. The features of "TigerEYES" allow control of how and where the equipment is stored, loaded on delivery trucks, delivered to polling places, etc. Following the election, the Department uses the system to manage the equipment retrieval process, as the system produces logs of the items that have not been collected from a polling site. The "Voting System Tracking Flow Chart" (See Appendix C) outlines the custody of the equipment as it moves through multiple election and post-election stages.

### **3.4. Optech Insight Memory Packs and AVC Edge Results Cartridges**

- Access to secured storage facilities

The Optech Insight memory packs and the AVC Edge results cartridges are stored in the server room at the warehouse. It is locked at all times and can be accessed only by personnel who have been issued a key card that must be scanned to gain access to the room. The server room is monitored by a 24-hour video surveillance camera.

A daily activity log is maintained to record date, time, staff person, and reason for entering the server room.

No one is permitted to enter the server room without at least one other authorized person. Sequoia personnel must always be accompanied by at least one authorized member of the Department staff.

## **4. Acceptance Testing**

Acceptance Testing is performed by Sequoia staff with the presence of the Department employees for all new voting equipment, including replacement units. The objective of the testing is to ensure that the machines and their components are functioning properly prior to being transferred into the Department's custody. The testing process is conducted inside the secured equipment cage area in the warehouse.

The following documents are used to document Acceptance testing:

- The **Acceptance Test Check Lists** (See Appendix D and E) are used to ensure all acceptance testing items have been checked and tested for functionality.
- The **Acceptance Test Logs** (See Appendix F and G) are completed for each voting unit and used to record any physical damage (external, visual damage typically caused from shipping and handling), correctable parts (missing power cord or problem with latch), and functional issues (machine will not power up or respond).

Those machines falling into the physical damage and correctable parts categories do not constitute machine failures, and are considered as “accepted” machines. Sequoia personnel can replace or correct most issues on site. Machines in question are reviewed and repaired by Sequoia personnel under the supervision of Department personnel and undergo acceptance testing.

- The **Machine Summary Log** (See Appendix H) – a control sheet that identifies which voting units have been received, tested and accepted. There is also a space provided to note any voting equipment issues noted during testing.

Upon completion of the Acceptance Testing all documentation is filed and archived at the warehouse.

## 5. Compliance procedures

Compliance is the process of verifying and installing into the equipment and its components the firmware approved for use by the California Secretary of State. The software/firmware is contained in CDs that are issued to the Department by the Secretary of State upon request by the Department. This process is done one time only or when a new software/firmware version is certified for use. For any new equipment, the Compliance procedures take place immediately after the Acceptance Testing is completed.

- Firmware verification and installation

During this process Sequoia staff verify the equipment firmware versions against the firmware on the Trusted Build CD, issued by the California Secretary of State. The CD contains the entire Sequoia Software/Firmware System and is password protected. Only this CD may be used to install or upgrade firmware or software.

The CD is stored in a fire proof safe in the computer room in City Hall. Only the Department’s IT/MIS Manager has access to the CD and passwords. Whenever the CD is transferred for Compliance a custody transfer form is filled out.

- Security seals requirement

Tamper-evident security seals are used on all equipment to provide evidence of unauthorized access to the device or to a function. These seals take a variety of forms: tape or label seals which tear or delaminate if peeled or removed and plastic padlock-type seals that must be broken to gain access. All seals share the common function of closing a container or device and requiring the damage or destruction of the seal to gain access. All seals are serialized with unique serial numbers which are logged during transport.

Seals are used in two phases of the election process: during the Compliance when the software/firmware of a device has been securely installed/re-installed and prior to each election during L&A testing when the accuracy of the vote tabulation is verified.

The listing of security tamper-evident seals affixed to the equipment during Compliance is as follows:

1. (Optech Insight Memory Pack) Tamper-evident red tape seal on firmware
2. (Optech Insight Memory Pack) Tamper-evident holographic seal on a screw
3. (Optech Insight Memory Pack) Tamper-evident holographic seal on red tape and casing
4. (Optech Insight Memory Pack Reader) Tamper-evident red tape seal on firmware chip
5. (Optech Insight Memory Pack Reader) Tamper-evident orange seal on top cover case
6. (AVC Edge) Tamper-evident red tape seal on firmware
7. (AVC Edge) Tamper-evident orange seal on case bottom left screw
8. (AVC Edge) Tamper-evident orange seal on case bottom right screw
9. (AVC Edge) Tamper-evident holographic seals on display back cover screws
10. (AVC Edge) Tamper-evident holographic seals on reset switch
11. (AVC Edge Results Cartridge) Tamper-evident holographic seal
12. (Card Activator) Tamper-evident holographic seals on case screws
13. (400-C machine) Tamper-evident red tape seal on write-in liner
14. (400-C machine) Tamper-evident red tape seal on power panel cover
15. (400-C machine) Tamper-evident red tape seal on electrical panel cover
16. (400-C machine) Tamper-evident orange seal on rear door

## **6. Logic and Accuracy Testing (L&A)**

California Elections Code Section 15000 states, “No later than seven days prior to any election conducted pursuant to this code, the elections official shall conduct a test or series of tests to ensure that every device used to tabulate ballots accurately records each vote.”

The AVC Edge, Optech Insight and 400-C machines are tested to verify that the equipment will accurately count and correctly accumulate the votes cast for all offices and measures on the ballot. Various checklists are used during L&A testing (see [Appendix I, G and K](#)) which include steps for checking the integrity of the Compliance seals and affixing and recording the serial numbers of the security seals applied during L&A testing.

As required by the Certification Conditions issued by the California Secretary of State (see [Appendix L](#)), after L&A testing confirms the accuracy of the machines, serialized tamper-evident security seals are applied to the machines and transport cases to prevent unauthorized access to the machines. These seals are replaced every election, as they are broken by

pollworkers during the course of election day activities (i.e., setting up the machines, opening the polls, closing the polls, removing the memory devices for pickup) or by the Department staff after the election (i.e., retrieving paper records from VeriVote printers). The listing of security tamper-evident seals is as follows:

1. (Optech Insight) Locking seal on transport bag - “banker’s bag” in which the machine is sealed
2. (Optech Insight) Locking seal on memory pack door
4. (Optech Insight) Label seal on bin door
5. (AVC Edge) Locking seal on transport bag - “banker’s bag” in which the machine is sealed
7. (AVC Edge) Locking seal on results cartridge door
9. (AVC Edge) Locking seal on “Polls Open/Close” door
- 10 (AVC Edge) Locking seal on black cap placed over activation button
11. (VeriVote printer) Locking seal on printer case
13. (Card Activator) Label seal placed over cartridge port on right side

The serial numbers of the seals are recorded in the Inspector Workbook (IW) ([See Appendix M](#)) for verification by at least two pollworkers at the precinct on Election Day before voting begins. The information from the IW is also entered into a spreadsheet for reference on Election Day. The seal numbers are verified at least two times by the Department personnel. For any mislogged seal numbers on the IW a new form is created and the old one is discarded. No erasure is allowed on the IW to preserve the integrity of the form.

“TigerEYES” is utilized to track the status of the testing for each voting machine and also to insure that the right set of equipment is assigned to each precinct. This is accomplished by using the software’s “parenting” option that recognizes and disallows assignment of the wrong equipment to a particular precinct.

The L&A Manager keeps a detailed log of which Department and Sequoia employees worked on each the machine during L&A testing.

## **7. Securing voting equipment during early voting**

The Department provides early voting opportunities to voters beginning 29 days before each election via paper ballot or the accessible AVC Edge voting machine.

Voted ballots are sealed in vote-by-mail envelopes and inserted into a sealed ballot box. (Voters also have the option of taking the ballot with them and returning it at a later time, in person or via mail.) At the close of voting for the day, the ballot box is unsealed and the ballots are stored in a secure room within the Department’s main office for signature verification.

The AVC Edge is tested, delivered and set up in the same manner as voting equipment used on Election Day.

During early voting, a chain of custody log for each piece of equipment (AVC Edge and card activator) is maintained. At least two employees record, verify and sign off on the following: public counter numbers on the device, the integrity of the tamper-evident seals and the serial

numbers of those seals applied at the opening of the polls each day of early voting. Early voting staff rotates so that the same employee is not solely responsible for monitoring the voting equipment to ensure no unauthorized access to the equipment occurs.

After the close of the polls, at the end of each day of early voting, all voting equipment is secured in a combination-locked room, 53A, to prevent any tampering. The room can be accessed only by Department staff who have been issued a key combination.

## **8. Delivering voting equipment to the polls**

When all of the polling places have been confirmed, the owners are contacted to arrange delivery times for the voting equipment. Delivery routes are developed based on these dates and times and each route is assigned a number. This information is provided to Sequoia staff who assist in organizing the equipment by route and delivery date. A list of personnel tasked with the equipment delivery is maintained by the Precinct Services Division Manager.

Upon completion of the L&A testing each precinct- specific Optech Insight is placed inside a transport bag which is then sealed with a tamper-evident seal. The Optech Insight is then placed on top of the ballot bin assigned to the same precinct. The AVC Edge, sealed with a tamper-evident seal in its bag, is placed on top of the Optech Insight. The VeriVote printer, card activator and audio unit are locked inside the ballot bin. The ballot bin is then sealed with a tamper-evident seal. This unit is referred to as a “pod”. These pods are then moved to a holding area in the warehouse.

Sequoia personnel organize and line up the pods by route and delivery date. The pods that are to be delivered the next day are then scanned out of the holding area by the Department staff. They move the pod lines to the staging area which has been sectioned off and numbered by route. The Precinct Services Division staff scan this equipment into the staging area as it is being lined up. A bar-coded route number is then taped to the front pod in each line. The AVC Edges are removed from the pods and placed on a pallet beside their route lines. A bar-coded route number is then placed on this pallet. The Lead vans are assigned bar-coded route numbers which are placed on the inside of their windshields. As the vans back up to their assigned pallet, they get scanned. Each AVC Edge is scanned into the van and also recorded on a check off sheet by Precinct Services staff.

The moving trucks are assigned bar-coded route numbers which are placed on the inside of their windshields. As they back up to their respective pod lines for loading, the trucks get scanned. The drayage company staff then starts loading the pods which no longer have the AVC Edge. Each item is scanned into the truck and also recorded on a check- off sheet by Precinct Services staff. The trucks then back into the vacated pod line space. The van assigned to the same route then parks directly in front of the truck. The trucks and vans stay secured inside the warehouse until the next day’s delivery begins.

Individual “Delivery and Retrieval Check- off Sheets” (See Appendix N) are created for each polling place and contain the following information: the route number, delivery day and date, a box to record the Lead van driver’s name and the names of the drayage company personnel, the Precinct number, location address and contact information, a check off box for each item(s) to be

delivered, a comments box to note any additional supplies that might be needed and special notes regarding delivery/pick-up, location box to note where the equipment is stored and who has the key if the location is locked, a chain of custody box to be signed by the person accepting delivery, a line to record the number of the seal on the black bag that contains the Optech Insight, a line to record the number of the seal on the blue bag that contains the AVC Edge and a line to record the number of the seal on the grey ballot bin. The bottom half of the sheet is used during the retrieval of the voting equipment and has a check off box for each item to be picked up. It also indicates the date and time of the pick-up. When picking up the equipment the personnel must record on the same sheet whether the Optech Insight and the AVC Edge were sealed in their transport bags.

Each delivery route has approximately 11 stops. One Department employee and two staff members from the drayage company are assigned to each route and are given copies of the check-off sheets. The Department employee drives in a Lead van which carries the precinct-specific AVC Edge and additional precinct supplies. The truck which contains all of the other equipment follows the Lead van to each voting site on the route. The van and the truck deliver the equipment together to each location and both must fill out the check off sheets upon the delivery. They cross-check to confirm that each item of precinct-specific equipment has been delivered to the correct address, verify the integrity of the tamper-evident seals affixed to the transport cases, and record the serial numbers. The generic red supply box is made precinct-specific at each location by the Lead driver who affixes a bar-coded precinct label to the lid and another to the side of the box.

The property owners or their representatives receiving the delivery of the equipment sign off on the equipment to uphold the chain of custody.

At the end of delivery day, Precinct Services Division staff members verify that all precinct-specific equipment was delivered correctly by checking the seal serial numbers recorded on the check-off sheets against the list provided by the L&A staff. If a discrepancy is found, employees are dispatched to the polling place to investigate and correct the situation.

## **9. Securing voting equipment at the polls**

### **9.1. Polling Place Forms**

Three forms documenting the chain of custody and security of voting equipment and ballots are used by pollworkers on Election Day:

**9.1.1. Custody Transfer Form (CTF) (see Appendix O)** -quadruplicate form that documents a chain of custody for the following:

1. Precinct Ballots and Roster of Voters transferred from the Department of Elections to Inspector 5-7 days before the election.
2. Precinct Ballots transferred from the Field Election Deputy to Inspector at polling place on Election Day.
3. Generic Ballots transferred from the Field Election Deputy to Inspector at polling place on Election Day (if any).

4. Optech Insight Memory Pack, all-day results tape and AVC Edge results cartridge transferred from Inspector to the Department of Parking and Traffic Control Officer or Deputy Sheriff for transport to the Department of Elections after the close of the polls on Election Day.
5. Ballots, Roster of Voters and Street Index, Inspector Workbook, security seals, and Voting Machine Issue Logs transferred from Inspector to the Deputy Sheriff for transport to the Department of Elections after the close of the polls on Election Day.
6. Transfer of materials listed in Item 1.1.4 from the Department of Parking and Traffic Control Officer or Deputy Sheriff to the Department of Elections.
7. Transfer of materials listed in Item 1.1.5 from the Deputy Sheriff to the Department of Elections.

**9.1.2. Inspector Workbook (IW)**-form that documents serial numbers of security seals affixed to the voting equipment, outlines procedures for verifying security seals and function of voting machines at the opening of the polls, specifies procedures for maintaining security and issuing ballots during voting hours, and removing data devices and securing storage of voting machines at the polling site after the close of the polls.

**9.1.3. Posted Ballot Statement (PBS)** (see Appendix P) -triplicate form that documents the following:

1. Number of ballots issued to the precinct, and the number of voted precinct (and/or generic) ballots, unused ballots, spoiled ballots, voted and surrendered vote-by-mail ballots, and provisional ballots to be returned to the Department of Elections.
2. Number of signatures in the Roster of Voters.
3. Number of votes cast on the AVC Edge.

Pollworkers publicly post a copy of the PBS outside the polling place after the closing of the polls along with the signed Optech Insight totals tape. (San Francisco Charter Section 13.107.5).

## **9.2. Verifying security and functionality of the voting equipment during opening of the polls**

Voting machines are delivered to the polling sites in sealed transport cases. Prior to setting up the voting machines, the pollworkers verify that the seals are intact and the serial numbers match the recorded numbers in Inspector Workbook. A minimum of two pollworkers perform the following security seal verification:

1. (Optech Insight) Locking seal on transport case-“banker’s bag” in which the machine is sealed
2. (Optech Insight) Seal on memory pack door
3. (Optech Insight) Label seal on machine case (half on lid, half on base) below the control panel
4. (Optech Insight) Label seal on bin door
5. (AVC Edge) Locking seal on transport-“banker’s bag” in which the machine is sealed
6. (AVC Edge) 3 holographic seals over screws on the back of the case
7. (AVC Edge) Seal on results cartridge door
8. (AVC Edge) 2 label seals over screws on both sides of the case

9. (AVC Edge) Seal on “Polls Open/Close” door
- 10 (AVC Edge) Seal on black cap placed over activation button
11. (VeriVote printer) Seal on printer case
12. (Card activator) 2 holographic seals on the bottom of the case
13. (Card activator) Seal placed over cartridge port on right side

Note: VeriVote printer and card activator are locked in the Insight bins for secure transport.

The pollworkers verify that the Edge AVC machine serial number matches the number prerecorded in the IW.

The pollworkers verify that the Optech Insight LED counter and paper tape show zero votes cast and the AVC Edge public counter shows zero votes cast.

Once the voting machines are set up, the pollworkers affix the following seals to the equipment:

1. (AVC Edge) Seal on “Polls Open/Closed” door
2. (AVC Edge) Seal on top of VeriVote printer rail
3. (Optech Insight) Label seal on bin door

To prevent tampering and preserve the integrity of the vote, the pollworkers are instructed to set up the voting machines in plain view of the precinct board and the poll watchers (California Elections Code Section 19362). Furthermore, the pollworkers are instructed to never leave the voting machines unsupervised.

In each polling place, the pollworkers display trilingual information stating that tampering with voting equipment is a crime punishable by imprisonment in state prison or county jail (California Elections Code Section 18564).

### **9.3. Ensuring security of the voting equipment during voting hours**

Once an hour throughout Election Day, the pollworkers verify that all security seals remain intact.

Additionally, the Election Day troubleshooters-Field Election Deputies (FEDs)-are tasked to verify the integrity of the security seals during their frequent visits to the precincts.

Upon request, members of the public are permitted to observe and inspect, without physical contact, the integrity of all externally visible security seals used to secure voting equipment in a time and manner that does not interfere with the conduct of the election or the privacy of any voter.

### **9.4. Reporting signs of tampering/malfunction and replacing the voting equipment**

If at any time during opening of the polls, voting hours, or closing of the polls, tampering is suspected or voting equipment ceases operating, the pollworkers immediately notify the Department’s Election Center and consequently the Department’s Director.

The pollworkers complete a Voting Machine Issue Log (VMIL) (See Attachment Q) that remains at the polling place available for public inspection and review upon request. The VMIL is used to record all issues with the voting equipment in the polling place as reported by voters or observed by pollworkers.

Once the need to replace a voting machine has been reported/established, the replacement equipment brought to the polling place. Security procedures for accepting replacement equipment and relinquishing out-of-service equipment at the polling place are as follows:

#### **9.4.1. Optech Insight tabulator**

Nearly all tabulator issues are mechanical in nature, such as ballot jams. When the programming and election data are intact and uncompromised, the memory pack is transferred to a new tabulator:

1. In-field support personnel bring a spare tabulator to the polling place in a transport bag sealed with a serialized tamper-evident locking seal.
2. The Inspector verifies the seal on the transport bag is intact and its serial number matches the number prerecorded on the Equipment Custody Transfer Form (ECT) (See Appendix R).
3. The Inspector removes the tabulator from the transport bag and documents the label seal on the tabulator case is intact by checking a box on New Equipment Security Seals (NESS) form (See Appendix S) enclosed with the equipment. The NESS is kept with the IW and returned to the Department of Elections with the Workbook via Deputy Sheriff.
4. The Inspector unplugs the out-of-service tabulator, breaks the memory pack door seal, places the broken seal in a security bag, and transfers the memory pack to the replacement tabulator.
5. The in-field support personnel seal the new tabulator's memory pack door and record the seal in the IW.
6. The out-of-service tabulator is sealed in a transport bag with a serialized tamper-evident locking seal recorded on the ECT.
7. The Inspector signs the ECT form to transfer custody of the out-of-service machine to the in-field support personnel, who store it in their vehicle until returning at the end of Election Day to Pier 48, where the machine is quarantined until post-election evaluation.

#### **9.4.2. Optech Insight Memory Pack**

Occasionally, the memory pack becomes nonfunctional often due to pollworker operational error such as unplugging the machine with the memory pack still being inserted. In these cases, both the memory pack and the tabulator are replaced:

1. Ballots processed by the out-of-service tabulator are transferred from Bin 1 (ballots with write-in votes) and Bin 2 (all other ballots) to the Auxiliary Bin until a Field Election Deputy, witnessed by the Inspector, can reinsert the ballots into the replacement tabulator.
2. The tabulator with memory pack is transported to the polling place from the computer room by dispatch personnel.

3. The Inspector verifies the seal serial number on the transport bag matches the number prerecorded on the ECT.
4. Once the seal on the “banker’s bag” is verified, the Inspector opens it and documents the label seal on the tabulator case is intact and the tamper-evident locking memory pack seal serial number matches the number prerecorded on the NESS. The NESS is kept with the IW and returned to the Department with the IW via Deputy Sheriff.
5. The out-of-service tabulator is sealed in a transport bag with a serialized tamper-evident locking seal recorded on the ECT.
6. The Inspector signs the ECT form to transfer custody of the out-of-service machine to the dispatch personnel who returns it immediately to the Department warehouse where the machine is quarantined until post-election evaluation.

#### **9.4.3. AVC Edge**

Any issue—mechanical or programming—results in replacing both the AVC Edge and the results cartridge:

1. The AVC Edge with results cartridge is transported to the polling place from the computer room by dispatch personnel.
2. The Inspector verifies the seal serial number on the transport bag matches the number prerecorded on the ECT.
3. Once the seal on the “banker’s bag” is verified, the Inspector opens it and documents all seals are intact and serial numbers match prerecorded numbers by checking the appropriate boxes on the NESS enclosed with the equipment.
4. The VeriVote printer is removed from the out-of-service AVC Edge and attached to the replacement AVC Edge.
5. The replacement AVC Edge is powered on, and the polls are opened. New seals are applied to the “Polls Open/Closed” door and the printer rail and recorded on the NESS. The NESS is kept with the IW and returned to the Department with the IW via Deputy Sheriff.
6. The out-of-service AVC Edge is sealed in a transport bag.
7. The Inspector signs the ECT form to transfer custody of the out-of-service machine to the dispatch personnel who returns it immediately to the Department warehouse where the machine is quarantined until post-election evaluation.

#### **9.4.5. VeriVote Printer**

1. In-field support personnel bring a spare printer to the polling place in a transport bag sealed with a serialized tamper-evident locking seal.
2. The Inspector verifies the seal on the transport bag is intact and its serial number matches the number prerecorded on the ECT.
3. The Inspector removes the printer from the transport bag and documents the serialized tamper-evident locking seal on the printer case is intact and the serial number matches the number recorded on the NESS. The NESS is kept with the IW and returned to the Department with the IW via Deputy Sheriff.
4. The Inspector turns off the AVC Edge, breaks the printer rail seal, detaches and removes the out-of-service printer from the AVC Edge.
5. The Inspector attaches and installs the replacement printer on the Edge and turns the power on.

6. The in-field support personnel supply the Inspector with a serialized tamper-evident locking seal to reseal the printer rail, and the Inspector attaches the seal and records the serial number on the NESS.
7. The out-of-service printer is sealed in its transport bag with a serialized tamper-evident locking seal recorded on the ECT.
8. The out-of-service VeriVote printer cannot be removed from the polling place during voting hours because it may contain active votes. It remains at the polling place until the close of polls and is picked up by the Deputy Sheriff along with voted ballots and the replacement VeriVote printer for transport to the Department's Processing Center at Pier 48.

#### **9.4.6. Card activator**

1. In-field support personnel bring a spare card activator to the polling place in a transport bag sealed with a serialized tamper-evident locking seal.
2. The Inspector verifies the seal on the transport bag is intact and its serial number matches the number prerecorded on the ECT.
3. The Inspector removes the card activator from the transport bag and documents the three label seals are intact and match the prerecorded serial numbers on the NESS. The NESS is kept with the IW and returned to the Department with the IW via Deputy Sheriff.
4. The out-of-service card activator is sealed in a transport bag with a serialized tamper-evident locking seal recorded on the ECT.
5. The Inspector signs the ECT form to transfer custody of the out-of-service machine to the in-field support personnel who stores it in their vehicle until returning at the end of Election Day to Pier 48, where the machine is quarantined until post-election evaluation.

### **10. Retrieving memory devices and securing voting equipment after closing of the polls**

Prior to removing the results cartridge from the AVC Edge, the pollworkers record the number displayed on the AVC Edge public counter on the CTF and once again verify that all seals remain intact. The Inspector closes the polls, which triggers an automatic printing of the results report to the VeriVote printer, then turns off the power. The results cartridge is then removed and placed in the antistatic transport case.

Prior to removing the memory pack from the Optech Insight, the pollworkers must record the number displayed on the LED counter on front of the tabulator and once again verify that all seals remain intact. The Inspector then closes the polls and prints a totals report and an audit log at the end of the tape containing the opening report and all messages/errors printed during voting; this is the "all-day" tape which is placed in the antistatic transport case. The Inspector also prints a second totals report to post outside the polling place. The Inspector turns off the power and removes the memory pack, placing it in the antistatic transport case.

The Department of Parking and Traffic Parking Control Officer (DPT or PCO)<sup>1</sup> verifies possession of the items placed in the antistatic transport case and signs on the CTF with the Inspector to assume custody. The pollworkers will then sign the seal and use it to seal the

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<sup>1</sup> In some precincts located in areas of the City where physical safety is a possible concern, Deputy Sheriffs are assigned to complete this pickup instead of DPT PCOs.

antistatic transport case. The antistatic transport case will be transported to the Department of Elections.

The Inspector seals the AVC Edge (with the results cartridge removed) and the Optech Insight (with the memory pack removed) into their transport cases and records the serial numbers of the tamper-evident locking seals in the IW. The card activator is locked back in the Insight bins after the Deputy Sheriff inspects the bins to ensure no ballots were left in the bins. The Deputy Sheriff verifies the machines are properly secured and documents this on the CTF. This equipment remains at the polling place until retrieved by the Department staff (pick-ups begin election night and are usually completed within five days).

The pollworkers secure Election Day materials and ballots in closing bags or boxes with tamper-evident seals. The Deputy Sheriff verifies possession of all closing bags/boxes and VeriVote printer(s), and signs the CTF with the Inspector to assume custody. Sealed closing bags and boxes and the VeriVote printer are then placed in supply bag(s) and transported to the Department's warehouse by the Deputy Sheriff.

## **11. Retrieving voting equipment and supplies from the polls**

The day after the election, the Department, in conjunction with Sequoia and a drayage company, begins retrieving the voting equipment, including the AVC Edges, Optech Insights, grey ballot bins, and red supply boxes, and will continue to do so through the following Sunday. The personnel are provided with the same check-off sheets that were used for delivery to record what is retrieved and cross-check against what was delivered. On these sheets they record whether the AVC Edge and Optech Insight transport bags were sealed. The AVC Edges are placed in the Lead van and the rest of the equipment is placed in the truck. The Department staff member searches each polling place for any election-related materials that may have been overlooked on Election Night. If any materials are found, they are placed in the red supply box.

Upon arrival at the warehouse, the Optech Insights and grey ballot bins are scanned as they are unloaded from the trucks by Precinct Services staff. The AVC Edges are unloaded from the Lead vans at the same location and are also scanned by Precinct Services staff. The pods and the AVC Edges are then moved into the secure cage in the warehouse. The pods are placed into rows in precinct order prior to searching.

The red boxes are unloaded in the warehouse where they are scanned by Precinct Services staff and stacked into rows prior to inspection.

Precinct services employees then start to search each red box one at a time by emptying the contents, and returning the contents to the box piece-by-piece. The precinct number on each box is recorded on a spreadsheet. If any precinct-specific equipment such as card activator or audio unit is found, they are noted on the spreadsheet and are set aside to be returned to the corresponding pods later. Any precinct-specific materials such as Rosters of Voters, voted or unvoted ballots, etc. are also noted on the spreadsheet. These are then returned to the Canvass Supervisor. To uphold the chain of custody, Precinct Services staff and the Canvas Supervisor sign a receipt that has a list of what items are being handed over. Each party retains a copy.

Prior to searching the AVC Edge transport bags, Precinct Services staff note on a spreadsheet whether the bags were sealed by pollworkers. The bag is then opened, inspected and the AVC Edge is scanned. Any precinct-specific equipment or materials that are found are treated in the same manner as those found during the red box search.

Precinct Services staff then start to inspect the pods. On a spreadsheet they note whether the grey bin door was locked and whether the Optech Insight transport bag was sealed by pollworkers. The Optech Insight auxiliary bin, Bin #1 and Bin # 2 are then unlocked. All of the bins are searched and it is noted whether the corresponding card activator and audio unit are present. The card activator and the audio unit bags are scanned, then opened and inspected. Staff note on the spreadsheet if an item is missing or if any supplemental voting equipment pieces (i.e. AVC Edge cord) are found. When the AVC Edge cord is found it is removed and bound with painters tape. The precinct number is then written on the tape and it is placed into a crate to be returned to the correct AVC Edge later. If the card activator was left turned on, it is turned off and it is noted on the spreadsheet with the precinct number. The Optech Insight transport bag is opened and inspected and the Optech Insight is scanned. Any precinct-specific materials or equipment that are found in the bins or in the transport bag are recorded and treated in the same manner as those found during the red box search.

All rice bags that are picked up at the polling place are inspected and any items found are treated in the same manner as those found during the red box search.

When all the equipment inspected and accounted for, it is securely stored in designated areas of the warehouse.

## **12. Secretary of State System Use Procedures for California**

California Elections Code Section 19205 requires the Secretary of State to establish procedures for the use and testing of a voting system (see [Appendix T](#)). Regulations require those procedures to be reviewed biennially. Approval or certification of a proposed system does not take effect until all applicable procedures for the system's use have been formulated and approved. The vendor must supply a copy of those procedures ([See Appendix U and V](#)) to any prospective purchaser. Statewide procedures provide the following benefits:

- Guidance to election staff and vendor support staff for use of a voting system in an election to ensure compliance with election law;
- Verifiable established standards to protect the security, integrity and accuracy of the election and ensure the privacy of all voters;
- A baseline for testing and evaluating the suitability of a proposed voting system; and
- Protection of an election from legal challenge by establishing statewide uniformity on use of the system.

The Secretary of State recommends that initial voting system use procedures be developed by the vendor, working together with county election officials who are knowledgeable in the laws and

practices for conducting elections in California. Procedures should be drafted so that minimum standards are established to provide the secure and accurate use of a voting system in compliance with all Federal and State regulations and procedures. On the other hand, they should not be so detailed and rigid that they do not allow the election official reasonable flexibility to establish additional procedures for use of the system in their jurisdiction, as appropriate.

The System Use Procedures for California Template is meant as guidance for developing voting system use procedures for all systems. The drafting of use procedures should address each of these elements *as appropriate for use of that particular system* in an election. Where existing system documentation (e.g., equipment operating manuals) already addresses a topic in detail, it is acceptable to provide an overview of that element and reference to the appropriate document, provided overall readability of the document is preserved. Clearly identify all areas where it is appropriate or required for jurisdiction election officials to establish additional procedures.