VECTOR CONTROL JOINT POWERS AGENCY
INVESTMENT POLICY
Amended March 3, 2017

I. Introduction

The purpose of this document is to formalize policies and procedures for the management of an investment portfolio for the Vector Control Joint Powers Agency (the "Agency").

The investment policies and practices of the Agency are based on state law and prudent money management. All funds will be invested in accordance with the Agency's Investment Policy (the "Policy") and all applicable California Government Code sections.

II. Scope

This Policy shall apply to all funds and investment activities under the direct authority and control of the Agency.

III. Objectives

The investment objectives of the Agency are, in priority order:

1. Safety. Investments of the Agency shall be undertaken in a manner that seeks to ensure preservation of principal in the portfolio.

2. Liquidity. The investment portfolio will remain sufficiently liquid to enable the Agency to meet its normal cash flow requirements.

3. Return on Investment. The investment portfolio shall be designed to maximize return consistent with the Agency's objectives of safety and liquidity.

IV. Prudence

All persons authorized to make investment decisions on behalf of the Agency are trustees and therefore fiduciaries subject to the prudent investor standard: "When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to the general economic conditions and the anticipated needs of the agency, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency."

Investment officers acting in accordance with written procedures and the Investment Policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

V. Delegation of Authority

The Treasurer is authorized by the Agency's Board of Directors to manage the investment needs of the Agency. This delegation of authority will be made annually. The Treasurer may delegate his/her investment decision-making and execution authority to an investment advisor. The advisor shall follow this Investment Policy, herein stated, and such other written instructions as are provided.

The Treasurer acting in accordance with this Investment Policy and written procedures and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

VI. Ethics and Conflict of Interest

Officers and employees will maintain the highest standards of ethical conduct and fiduciary responsibility. Individuals involved in the investment process shall refrain from personal business activities that could conflict with proper execution of the investment program or which could impair their ability to make impartial decisions.

VII. Reporting Requirements

The Treasurer shall submit a monthly investment report as is encouraged by California Government Code §53646 et. al.

VIII. Internal Control

The Treasurer will establish an annual process of independent review by an external auditor. This review will provide independent verification of compliance with policies and procedures.

IX. Transfer of Funds

The Assistant Treasurer or designated staff shall notify the Treasurer and each member of the Executive Committee prior to any transfer of funds to the investment manager in excess of $250,000.

X. Safekeeping and Custody

All Agency investments shall have the Agency as depositor and registered owner. Non-deliverable Agency investments (including FDIC-insured Certificates of Deposit) shall be kept in the custody of the Agency. All deliverable securities (including the securities described in Section XIV subsections 1 through 7, 9, 14 and 15 of this Policy) will be held for safekeeping in the trust department of the Agency's designated third party institution. When the Agency investments are in safekeeping of third parties, the Agency shall have on file from its designated third party, a written statement that the Agency has a satisfactory title or interest in all securities held in the trust department. The trust department shall be required to send the Agency a monthly statement designating securities are being kept, the monthly income there from, and their current value. The Agency shall have access to buy and sell securities, if held for safekeeping, independent of any broker. All security transactions, excluding FDIC insured deposits, but including collateralized repurchase agreements shall be executed using the deliver vs. payment procedure.

XI. Authorized Financial Dealers and Institutions

The Treasurer will maintain a list of financial dealers and institutions qualified and authorized to transact business with the Agency.

The purchase by the Agency of any investment other than those purchased directly from the issuer, will be purchased either from an institution licensed by the State as a broker-dealer, as defined in Section 25004 of the Corporations Code, which is a member of the Financial Industry Regulatory Authority (FINRA), or a member of a federally regulated securities exchange, a national or state chartered bank, a federal or state association (as defined by Section 5102 of the Financial Code), or a brokerage firm designated as a Primary Government Dealer by the Federal Reserve Bank.

The Treasurer will investigate all institutions that wish to do business with the Agency, to determine if they are adequately capitalized, make markets in securities appropriate for the Agency's needs, and agree to abide by the conditions set forth in the Vector Control Joint Powers Agency Investment Policy and any other guidelines that may be provided. This will be done annually by having the financial institutions:

(1) Provide written notification that they have read, and will abide by, the Agency's Investment Policy.

(2) Submit their most recent audited Financial Statement within 120 days of the institution's fiscal year end.

If the Agency has an investment advisor, the investment advisor may use its own list of authorized broker/dealers to conduct transactions on behalf of the Agency. The advisor shall make their list of authorized broker/dealers available upon request.

Purchase and sale of securities will be made on the basis of competitive bids and offers with a minimum of three quotes being obtained.

XII. Investment Pools/Money Market Funds

A thorough investigation of investment pools and money market funds is required prior to investing, and on a continual basis.

XIII. Investment Maturity & Diversification

Investment maturities shall be based on a review of cash flow requirements. Maturities will be scheduled so as to permit the Agency to meet all projected obligations.

Investments shall be diversified among institutions, types of securities, and maturities to maximize safety and yield. The Agency may not invest in a security whose maturity exceeds five years from the date of purchase unless the Board has provided approval for a specific purpose at least 90 days before the investment is made.

XIV. Permitted Investment Instruments

Permitted Investment Summary

Type	Minimum Credit Rating Category*	Maximum Maturity	Maximum Portfolio Percentage*	Maximum Individual Holding*
1. U.S. Treasury		5 years	100%	100%
2. Federal Agency		5 years	100%	100%
3. California Municipals	A-1 or equivalent /A or equivalent	5 years	100%	5%
4. Other State Municipals	A-1 or equivalent /A or equivalent	5 years	100%	5%
5. Bankers' Acceptances	A-1 or equivalent	180 days	40%	5%
6. Commercial Paper	A-1 or equivalent	270 days	25%	5%
7. Negotiable C.D.*s*	A-1 or equivalent /A or equivalent	5 years	30%	5%
8. Repurchase Agreements		30 days	100%	5%
9. Medium Term Notes	A or equivalent	5 years	30%	5%

10. L.A.I.F.			100% up to statutory limits	100%
Type	**Minimum Credit Rating Category***	**Maximum Maturity**	**Maximum Portfolio Percentage***	**Maximum Individual Holding***
11. Money Market Funds	AAA or the equivalent by 2 NRSROs**		20%	10%
12.Local Government Investment Pools (LGIPs)	AAA or equivalent		100%	100%
13. Insured C.D.'s	FDIC Insured	2 years	100%	$250,000
14. Supranational securities	AA or equivalent	5 years	30%	5%
15. Pass-through securities	AA or equivalent	5 years	20%	5%

* Percentage/amount and credit quality apply at time of purchase. Amount refers to par value.
** NRSRO = Nationally Recognized Statistical Rating Organization

The purchase of structured notes, inverse floaters, range notes, interest-only strips that are derived from a pool of mortgages or any security that could result in zero interest accrual if held to maturity or any other derivative products and the use of leverage are prohibited regardless of security type or issuer.

Excluding U.S. Treasury obligations, federal agency and GSE obligations, and local government investment pools and money market funds, no more than 5% of the Authority's investment portfolio may by invested with any one issuer, regardless of security type.

The following sections define in detail the parameters of each approved investment type.

1. U.S. Treasury and other government obligations for which the full faith and credit of the United States are pledged for the payment of principal and interest. There are no limits on the dollar amount or percentage that the Agency may invest in U.S. Treasuries. Purchases of U.S. Treasuries may not exceed 5 years in maturity.

2. Federal agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued by or fully guaranteed

as to principal and interest by federal agencies or United States government-sponsored enterprises.

There are no limits on the dollar amount or percentage that the Agency may invest in U.S. Agency obligations. Purchases in U.S. Agency securities shall not exceed 5 years in maturity.

3. Obligations issued by the State of California or any local agency within the state that are rated in a rating category of “A-1” or its equivalent or better for short-term obligations or are rated in a rating category of “A” or its equivalent or better for long-term obligations by a nationally recognized statistical rating organization (an “NRSRO”). Purchases of California Municipals may not exceed 5 years in maturity.

4. Registered treasury notes or bonds of any of the other 49 states in addition to California that are rated in a rating category of “A-1” or its equivalent or better for short-term obligations or are rated in a rating category of “A” or its equivalent or better for long-term obligations by an NRSRO, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by a state, or by a department, board, agency, or authority of any of these states. Purchases of treasury notes of the other 49 states may not exceed 5 years in maturity.

5. Banker's Acceptances issued by domestic or foreign commercial banks, which are eligible for purchase by the Federal Reserve System, the short-term paper of which is rated in the highest category by a nationally recognized statistical-rating organization. Eligible bankers' acceptances shall be rated in a rating category of “A-1” or its equivalent or better by an NRSRO.

   Purchases of Banker's Acceptances may not exceed 180 days maturity or 40 percent of the Agency's investment portfolio.

6. Commercial Paper of prime quality rated in the highest short-term rating category, as provided by a nationally recognized statistical-rating organization. The entity that issues the commercial paper shall meet all of the following conditions in either paragraph (1) or paragraph (2):

   (1) The entity meets the following criteria: (A) Is organized and operating in the United States as a general corporation. (B) Has total assets in excess of five hundred million dollars ($500,000,000). (C) Has debt other than commercial paper, if any, that is rated in a rating category of “A” or its equivalent or higher by an NRSRO

   (2) The entity meets the following criteria: (A) Is organized within the United States as a special purpose corporation, trust, or limited liability company. (B) Has program wide credit enhancements including, but not limited to, over collateralization, letters of credit, or surety bond. (C) Has

commercial paper that is rated "A-1" or higher, or the equivalent, by an NRSRO.

Eligible commercial paper shall have a maximum maturity of 270 days or less. No more than 25 percent of the Agency's portfolio may be invested in eligible commercial paper and the Agency may purchase no more than 10 percent of the outstanding commercial paper of any single issuer.

7. Negotiable certificates of deposit or deposit notes issued by a nationally or state-chartered bank, a savings association or a federal association (as defined by Section 5102 of the Financial Code), a state or federal credit union, or by a federally- or state-licensed branch of a foreign bank provided that the senior debt obligations of the issuing institution are rated in a rating category of "A" or better by a nationally recognized statistical-rating organization.

   Eligible negotiable certificates of deposit shall be rated in a rating category of "A" for long-term, "A-1" for short-term, their equivalent, or better by an NRSRO.

   Purchases or negotiable certificates of deposit may not exceed five years in maturity or 30 percent of the Agency's investment portfolio.

8. Repurchase Agreements used solely as short-term investments not to exceed a term of 30 days.

   The following collateral restrictions will be observed: Only U.S. Treasury securities or Federal Agency securities, as described in subdivisions 1 and 2 of section XIV, will be acceptable collateral. All securities underlying repurchase agreements must be delivered to the Agency's custodian bank versus payment or be handled under a tri-party repurchase agreement. The Agency or its trustee shall have a perfected first security interest under the Uniform Commercial Code in all securities subject to repurchase agreement. The market value of securities that underlie a repurchase agreement shall be valued at 102% or greater of the funds borrowed against those securities, and the value shall be reviewed on a regular basis and adjusted no less than weekly. Market value of underlying collateral must be reviewed regularly or each time there is a substitution of collateral.

   The Agency may enter into repurchase agreements only with primary dealers in U.S. Government securities who are eligible to transact business with, and who report to the Federal Reserve Bank of New York. The Agency shall require a properly executed Master Repurchase Agreement with each firm with which it enters into repurchase agreements. Reverse repurchase agreements are not allowed.

   Purchases of repurchase agreements may not exceed thirty days in maturity.

9. Medium-term corporate notes defined as all corporate and depository institution

debt securities, issued only by corporations operating within the United States or by depository institutions licensed by the U.S. or any state and operating within the U.S. shall be permitted. Medium-term corporate notes shall be rated in a rating category of "A" or its equivalent or better by an NRSRO.

Purchases or medium term corporate notes may not exceed five years in maturity or 30 percent of the Agency's investment portfolio.

10. Local Agency Investment Fund *(L.A.I.F.)* - There are no limits on the dollar amount or percentage that the Agency may invest in LAIF. Currently, LAIF limits total investment by any agency to $65,000,000.

11. Shares of beneficial interest issued by diversified management companies that are money market funds registered with the Securities and Exchange Commission under the Investment Company Act of 1940 (15 U.S.C. Sec. 80a-1, et seq.). To be eligible for investment pursuant to this subdivision these companies will either: (i) attain the highest ranking letter or numerical rating provided by at least two NRSROs or (ii) have retained an investment advisor registered or exempt from registration with the Securities and Exchange Commission with not less than five years of experience managing money market mutual funds and with assets under management in excess of $500,000,000. No more than 20% of the Agency's investment portfolio may be invested in money market funds.

12. Shares of beneficial interest issued by a joint powers authority (Local Government Investment Pools) organized pursuant to Government Code Section 6509.7 that invests in the securities and obligations authorized in subdivisions (a) to (q) of California Government Code Section 53601, inclusive. Each share will represent an equal proportional interest in the underlying pool of securities owned by the joint powers authority. The Pool will be rated in a rating category of "AAA" or its equivalent by a NRSRO. To be eligible under this section, the shares will maintain a stable net asset value (NAV) and the joint powers authority issuing the shares will have retained an investment adviser that meets all of the following criteria:

    (1) The adviser is registered or exempt from registration with the Securities and Exchange Commission.

    (2) The adviser has not less than five years of experience investing in the securities and obligations authorized in subdivisions (a) to (q) Government Code Section 53601, inclusive.

    (3) The adviser has assets under management in excess of five hundred million dollars ($500,000,000).

13. FDIC-Insured C.D.'s are certificates of deposit issued by financial institutions located in California. Certificates of Deposit shall not exceed $250,000 in any

one financial institution.

14. United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), or Inter-American Development Bank (IADB) (sometimes referred to as "supranationals"), with a maximum remaining maturity of five years or less, and eligible for purchase and sale within the United States. Investments under this subdivision shall be rated in a rating category of "AA," its equivalent, or better by at least one NRSRO. Purchases of supranationals shall not exceed 30 percent of the investment portfolio of the Agency.

15. Mortgage passthrough securities, collateralized mortgage obligations, mortgage-backed or other pay-through bonds, equipment lease-backed certificates, consumer receivable passthrough certificates, or consumer receivable-backed bonds of a maximum of five years' maturity. Securities eligible for investment under this subdivision shall be issued by an issuer rated in a rating category of "A" or its equivalent or better for the issuer's debt as provided by an NRSRO and rated in a rating category of "AA" or its equivalent or better by at least one NRSRO. Purchase of securities authorized by this subdivision may not exceed 20 percent of the Agency's total portfolio. Agency shall not invest in any pass-through or asset-backed security that includes any student loans.

Credit criteria listed in this section refers to the credit of the issuing organization at the time the security is purchased. In the event a security held by the Agency is subject to a rating change that brings it below the minimum credit ratings specified in this Policy, the Agency shall require investment advisors engaged in the investment of Agency funds to notify Agency staff of the downgrade, and provide a plan of action to address the downgrade.

XV. Compliance with State Law

All Agency investments shall comply with Government Code Sections 53600 through 53684, and other applicable statutes as may be amended from time to time. If there is ever any conflict between a provision of this Agency Investment Policy and the Government Code, the provision of the Government Code shall govern.

This Investment Policy and any other changes hereto shall be submitted by the Treasurer to the Board of Directors for review and amendment at a public meeting annually to ensure its consistency with:

(1) The California Government Code sections that regulate the investment and reporting of public funds.

(2) The overall objectives of preservation of principal, sufficient liquidity, and a market return.

Wesley A. Maffei

President

Board Secretary

Glossary

Asset-backed securities (ABS) are securities whose income payments and hence value is derived from and collateralized (or "backed") by a specified pool of underlying assets which are receivables. Pooling the assets into financial instruments allows them to be sold to general investors, a process called securitization, and allows the risk of investing in the underlying assets to be diversified because each security will represent a fraction of the total value of the diverse pool of underlying assets. The pools of underlying assets can comprise common payments credit cards, auto loans, mortgage loans, and other types of assets. Interest and principal is paid to investors from borrowers who are paying down their debt.

Bankers' Acceptances are short-term credit arrangements to enable businesses to obtain funds to finance commercial transactions. They are time drafts drawn on a bank by an exporter or importer to obtain funds to pay for specific merchandise. By its acceptance, the bank becomes primarily liable for the payment of the draft at maturity. An acceptance is a high-grade negotiable instrument.

Broker-Dealer is a person or a firm who can act as a broker or a dealer depending on the transaction. A broker brings buyers and sellers together for a commission. They do not take a position. A dealer acts as a principal in all transactions, buying and selling for his own account.

Certificates Of Deposit

1. **Negotiable Certificates of Deposit** are large-denomination CDs. They are issued at face value and typically pay interest at maturity, if maturing in less than 12 months. CDs that mature beyond this range pay interest semi-annually. Negotiable CDs are issued by U.S. banks (domestic CDs), U.S. branches of foreign banks (Yankee CDs), and thrifts. There is an active secondary market for negotiable domestic and Yankee CDs. However, the negotiable thrift CD secondary market is limited. Yields on CDs exceed those on U.S. treasuries and agencies of similar maturities. This higher yield compensates the investor for accepting the risk of reduced liquidity and the risk that the issuing bank might fail. State law does not require the collateralization of negotiable CDs.

2. **Non-negotiable Certificates of Deposit** are time deposits with financial institutions that earn interest at a specified rate for a specified term. Liquidation of the CD prior to maturity incurs a penalty. There is no secondary market for these instruments, therefore, they are not liquid. They are classified as public deposits, and financial institutions are required to collateralize them. Collateral may be waived for the portion of the deposits that are covered by FDIC insurance.

Collateral refers to securities, evidence of deposits, or other property that a borrower pledges to secure repayment of a loan. It also refers to securities pledged by a bank to secure deposits. In California, repurchase agreements, reverse repurchase agreements, and public deposits must be collateralized.

Commercial Paper is a short term, unsecured, promissory note issued by a corporation to raise working capital.

Federal Agency Obligations are issued by U.S. Government Agencies or Government Sponsored Enterprises (GSE). Although they were created or sponsored by the U.S. Government, most Agencies and GSEs are not guaranteed by the United States Government. Examples of these securities are notes, bonds, bills and discount notes issued by Fannie Mae (FNMA), Freddie Mac (FHLMC), the Federal Home Loan Bank system (FHLB), and Federal Farm Credit Bank (FFCB). The Agency market is a very large and liquid market, with billions traded every day.

Issuer means any corporation, governmental unit, or financial institution that borrows money through the sale of securities.

Liquidity refers to the ease and speed with which an asset can be converted into cash without loss of value. In the money market, a security is said to be liquid if the difference between the bid and asked prices is narrow and reasonably sized trades can be done at those quotes.

Local Agency Investment Fund (LAIF) is a special fund in the State Treasury that local agencies may use to deposit funds for investment. There is no minimum investment period and the minimum transaction is $5,000, in multiples of $1,000 above that, with a maximum of $65 million for any California public agency. It offers high liquidity because deposits can be converted to cash in twenty-four hours and no interest is lost. All interest is distributed to those agencies participating on a proportionate share determined by the amounts deposited and the length of time they are deposited. Interest is paid quarterly via direct deposit to the agency's LAIF account. The State keeps an amount for reasonable costs of making the investments, not to exceed one-quarter of one per cent of the earnings.

Market Value is the price at which a security is trading and could presumably be purchased or sold.

Maturity is the date upon which the principal or stated value of an investment becomes due and payable.

Medium-Term Notes are debt obligations issued by corporations and banks, usually in the form of unsecured promissory notes. These are negotiable instruments that can be bought and sold in a large and active secondary market. For the purposes of California Government Code, the term "Medium Term" refers to a maximum remaining maturity of five years or less. They can be issued with fixed or floating-rate coupons, and with or without early call features, although the vast majority are fixed-rate and non-callable. Corporate notes have greater risk than Treasuries or Agencies because they rely on the ability of the issuer to make payment of principal and interest.

Money Market Fund is a type of investment comprising a variety of short-term securities with high quality and high liquidity. The fund provides interest to shareholders and must strive to maintain a stable net asset value (NAV) of $1.00 per share.

Nationally Recognized Statistical Ratings Organizations ("NRSROs") are credit rating agencies that issue credit ratings that the U.S. Securities and Exchange Commission (the "SEC") permits other financial firms to use for regulatory purposes. Credit rating agencies provide assessments of an investment's risk. The issuers of investments, especially debt securities, pay credit rating agencies to provide them with ratings. A credit rating agency must apply to the SEC for registration as an NRSRO, and the SEC's Office of Credit Ratings administers the SEC's rules relating to NRSROs, including monitoring the activities of the NRSROs and conducting examinations of NRSROs to assess and promote compliance with statutory requirements. As of January 21, 2016, there were ten NRSROs. Of these ten, the three most prominent are Fitch, Inc., Moody's Investors Service, Inc., and Standard & Poor's Ratings Services.

Principal describes the original cost of a security. It represents the amount of capital or money that the investor pays for the investment.

Repurchase Agreements are short-term investment transactions. Banks buy temporarily idle funds from a customer by selling him U.S. Government or other securities with a contractual agreement to repurchase the same securities on a future date at an agreed upon interest rate. Repurchase Agreements are typically for one to ten days in maturity. The customer receives interest from the bank. The interest rate reflects both the prevailing demand for Federal Funds and the maturity of the Repo. Repurchase Agreements must be collateralized.

Supranational Entities are entities are formed by two or more central governments with the purpose of promoting economic development for the member countries. Supranational institutions finance their activities by issuing debt, such as supranational bonds. Examples of supranational institutions include the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), and the Inter-American Development Bank (IADB). Similarly to the government bonds, the bonds issued by these institutions are considered direct obligations of the issuing nations and have a high credit rating.

U.S. Treasury Issues are direct obligations of the United States Government. They are highly liquid and are considered the safest investment security. U.S. Treasury issues include:

1. **Treasury Bills** which are non-interest-bearing discount securities issued by the U.S. Treasury to finance the national debt. Bills are currently issued in one, three, six, and twelve month maturities.

2. **Treasury Notes** that have original maturities of one to ten years.

3. **Treasury Bonds** that have original maturities of greater than 10 years.

Yield to Maturity is the rate of income return on an investment, minus any premium above par or plus any discount with the adjustment spread over the period from the date of the purchase to the date of maturity of the bond.