UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

| | FORM 11-K |
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| (Ma ⊠ | rk One) ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 |
| | For the fiscal year ended December 31, 2017 |
| | 0r |
| | TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period fromto |
| | Commission file number 1-15399 |
| A. | Full title of the plan and the address of the plan, if different from that of the issuer named below: |
| | Boise Paper Holdings L.L.C. Retirement Savings Plan |
| B. | Name of the issuer of the securities held pursuant to the plan and the address of its principal executive office: |
| | Packaging Corporation of America 1955 West Field Court Lake Forest, IL 60045 |

Boise Paper Holdings, L.L.C. Retirement Savings Plan

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Report of Independent Registered Public Accounting Firm

To the Plan Participants and Plan Administrator of Boise Paper Holdings, L.L.C. Retirement Savings Plan

Opinion on the Financial Statements

We have audited the accompanying statements of net assets available for benefits of the Boise Paper Holdings, L.L.C. Retirement Savings Plan (the Plan) as of December 31, 2017 and 2016, and the related statement of changes in net assets available for benefits for the year ended December 31, 2017, and the related notes (collectively, the financial statements). In our opinion, the financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2017 and 2016, and the changes in net assets available for benefits for the year ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on the Plan's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Plan in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Accompanying Supplemental Information

The supplemental information in the accompanying Schedule H, Line 4i – Schedule of Assets (Held at End of Year) as of December 31, 2017, has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental information is the responsibility of the Plan's management. Our audit procedures included determining whether the supplemental information reconciles to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental information. In forming our opinion on the supplemental information, we evaluated whether the supplemental information, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental information is fairly stated, in all material respects, in relation to the financial statements as a whole.

/s/ KPMG LLP

We have served as the Plan's auditor since 2016.

Chicago, Illinois June 29, 2018

Boise Paper Holdings, L.L.C. Retirement Savings Plan Statements of Net Assets Available for Benefits

| December 31 | |
|---------------|---|
| 2017 | 2016 |
| | |
| \$370,963,490 | \$314,035,222 |
| 14,140,953 | 13,465,539 |
| | |
| 1,695,271 | 2,559,809 |
| 386,799,714 | 330,060,570 |
| | |
| 102,554 | 35,299 |
| \$386,697,160 | \$330,025,271 |
| | 2017 \$370,963,490 14,140,953 1,695,271 386,799,714 |

 $See\ accompanying\ Notes\ to\ the\ Financial\ Statements.$

Boise Paper Holdings, L.L.C. Retirement Savings Plan Statement of Changes in Net Assets Available for Benefits

| | Year Ended December 31, 2017 |
|---|------------------------------------|
| Additions | |
| Contributions: | |
| Participants | \$ 16,767,896 |
| Company | 14,613,674 |
| Rollovers | 177,971 |
| Net investment income from Master Trust | 53,218,113 |
| Interest income from notes receivable from participants | 545,717 |
| Total additions | 85,323,371 |
| Deductions | |
| Benefits paid to participants | 28,102,673 |
| Administrative expenses | 548,809 |
| Total deductions | 28,651,482 |
| Net increase | 56,671,889 |
| Net assets available for benefits: | |
| Beginning of year | 330,025,271 |
| End of year | \$386,697,160 |

See accompanying Notes to the Financial Statements.

Boise Paper Holdings, L.L.C. Retirement Savings Plan Notes to Financial Statements December 31, 2017 and 2016

1. Description of Plan

The following description of the Boise Paper Holdings, L.L.C. Retirement Savings Plan (the "Plan") provides general information. The Plan Sponsor is Packaging Corporation of America (the "Company" or "PCA"). Participants should refer to the plan document for a more complete description of the Plan's provisions.

General

The Plan is a defined contribution plan, established on February 21, 2008, and is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). The Plan covers certain hourly union employees, subject to collective bargaining arrangements as defined in the Plan, and non-union hourly employees of PCA. The Benefits Administration Committee is responsible for oversight of the Plan. The Investment Committee determines the appropriateness of the Plan's investment offerings and monitors investment performance. Both committees are appointed by the Board of Directors of the Company.

Alight, formerly Aon Hewitt, is the Plan's record keeper. Northern Trust is the Plan's trustee and custodian. The Pavilion Advisory Group is the investment advisor to the Plan.

Contributions

Eligible new employees in the Plan get a pretax contribution rate of 3% with contributions automatically invested in an appropriate target retirement date fund. They may opt out of participation, adjust their contribution rate or their investment selections at any time. Generally, participants may contribute up to 50% pretax of their annual compensation, as defined in the Plan, with such contributions limited to \$18,000 in 2017 and 2016, for employees under age 50 and \$24,000 in 2017 and 2016, for employees age 50 and older. Contributions may be made on a pre-tax basis or on a Roth after-tax basis, or a combination of the two. Participants may also contribute amounts representing distributions from other qualified defined contribution plans. Company contributions for hourly employees, including Company match and nonmatching contributions, vary by location and union contract.

Participant Accounts

Each participant's account is credited with the participant's contributions, Company contributions, and an allocation of Plan earnings or losses. The benefit to which a participant is entitled is the benefit that can be provided from the participant's account.

Vesting

Participants are immediately vested in their contributions plus earnings thereon. Company contributions and earnings thereon vest after three years of service. However, regardless of a participant's years of service or contribution, a participant is 100% vested upon his or her 65th birthday, death or disability while employed. Forfeited non-vested accounts are applied to reduce future Company contributions.

Investment Options

Participants may elect to invest their account balances in any of the available investment options provided by the Plan. Participants may change their investment options on any business day, subject to short-term trading restrictions outlined in the plan document.

The portion of the Plan currently invested in the PCA Common Stock Fund, and any future employee or employer contributions used to acquire PCA common stock, is invested in an Employee Stock Ownership Plan ("ESOP"). Plan participants have the ability to instruct the Plan's trustee to distribute directly to them future cash dividends paid on shares of PCA common stock credited to their PCA common stock ESOP. The election to receive cash dividends is made through the PCA Benefits Center, and dividends will be reported as taxable income.

Benefit Payments

On termination of employment, if an account balance is \$1,000 or less, a participant will receive a lump-sum amount equal to the value of the participant's vested interest in his or her account. On termination of employment, if an account balance is greater than \$1,000, a participant may elect the manner in which his or her account balance is received. For termination of service due to death, disability or retirement, a participant may elect to receive a lump-sum amount equal to the value of the participant's vested interest in his or her account; quarterly, semi-annual, or annual installments; or a combination of lump sum and installment payments. For termination of service due to other reasons, a participant may receive the value of the vested interest in his or her account as a lump-sum distribution or may defer distribution to his or her retirement date and then choose from the retirement distribution options. Participants may also choose partial withdrawals at any time after termination of employment. A participant's entire account balance shall be distributed no later than April 1 following the later of the calendar year in which the participant attains age 69 or the calendar year in which the participant's termination of employment occurs. Benefit payments are recorded when paid.

Administrative Expenses

Participant accounts are charged \$20.00 per quarter for administrative expenses and paid by the Company if administrative charges exceed the amount paid by the participants.

Notes Receivable from Participants

A participant may borrow from his or her account balance a minimum of \$1,000 up to a maximum equal to the lesser of \$50,000 (reduced by the highest outstanding balance during the previous 12 months less any outstanding notes receivable balance on the date of the new note), 50% of his or her vested account balance, or 100% of his or her account balance not including employer contributions and earnings thereon. The notes are secured by the balance in the participant's account. The interest rate on new notes is set at prime as published in the Wall Street Journal. Notes receivable from participants are repayable ratably through payroll deductions over a maximum of 60 months. Participants may take up to two general purpose loans. Prior to September 30, 2015, the Plan allowed for primary resident loans with payment beyond 60 months. A loan is considered in default and becomes a taxable event when a loan is not current at the end of the cure period, the quarter following the quarter in which the payment was missed.

Interest rates on loans outstanding in the Plan at December 31, 2017 ranged from 3.25% to 9.75%.

Forfeited Accounts

At December 31, 2017 and 2016, forfeited non-vested accounts totaled \$339,123 and \$247,660, respectively. These accounts will be used to reduce future employer contributions. In 2017, employer contributions were reduced by \$340,222 from forfeited non-vested accounts.

Plan Termination

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contribution (subject to collective bargaining agreements) at any time and to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, participants will become 100% vested in the Company contributions.

2. Significant Accounting Policies

Basis of Accounting

The financial statements have been prepared on the accrual basis of accounting.

Investment Valuation and Income Recognition

The Plan's beneficial interest in the Master Trust represents the Plan's share of the Master Trust's investments stated at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). See Note 4 for further discussion and disclosures related to fair value measurements.

Purchases and sales of securities are recorded on the settlement date. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation includes the gains and losses on investments bought and sold as well as held during the year.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the Plan Administrator to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Notes Receivable from Participants

Notes receivable from participants represent participant loans that are recorded at their unpaid principal balance plus any accrued but unpaid interest. Interest income on notes receivable from participants is recorded when it is earned. Related fees are recorded as administrative expenses and are expenses when they are incurred. If a participant ceases to make loan repayments and the provisions of plan document deems the participant loan to be a distribution, the participant loan balance is reduced and a benefit payment is recorded.

Recently Issued or Newly Adopted Accounting Standards

In February 2017, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2017-06, *Plan Accounting:* Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965) Employee Benefit Plan Master Trust Reporting. This update clarifies presentation requirements and provides more detailed disclosures for a plan's interest in a master trust. The ASU is effective for fiscal years beginning after December 15, 2018. The Plan is currently evaluating the impact the adoption of this guidance will have on the financial statements and related disclosures.

There were no other accounting standards recently issued that had or are expected to have a material impact on the Plan's financial statements and associated disclosures.

3. Master Trust

The Master Trust includes assets of the Plan, the Packaging Corporation of America Retirement Savings Plan for Salaried Employees, and the Packaging Corporation of America Thrift Plan for Hourly Employees. All of the Plan's investments are invested in the Master Trust. The purpose of the Master Trust is the collective investment of assets of participating plans. Each participating plan's interest in the Master Trust is based on the aggregate account balances of the participants in the respective participating plan. The Master Trust specifically identifies contributions, benefit payments, and planspecific expenses attributable to each participating plan. Investment gains (losses) are allocated to each participating plan in the Master Trust on a daily basis based on each plan's separate interest in the Master Trust. At December 31, 2017, and 2016, the Plan's interest in the net assets of the Master Trust at fair value was 21.2% and 22.6%, or \$370,963,490 and \$314,035,222, respectively.

The investments held by the Master Trust and the Plan's percentage interest in each of the investments within the Master Trust are presented below.

| | December 31, 2017 | Plan's Percentage Interest | December 31, 2016 | Plan's Percentage Interest |
|----------------------------------|----------------------|----------------------------------|----------------------|----------------------------------|
| Assets: | | | | |
| Mutual funds | \$ 247,977,112 | 12.4% | \$ 326,287,224 | 9.8% |
| Self-directed brokerage accounts | 33,277,291 | 44.6 | 29,196,323 | 41.9 |
| Common collective trust funds | 788,970,639 | 18.5 | 514,651,829 | 24.0 |
| Company common stock fund | 213,673,149 | 3.1 | 165,857,062 | 1.7 |
| Target date funds | 428,195,747 | 38.2 | 314,258,853 | 42.0 |
| Short-term investment funds | 36,984,930 | 25.8 | 40,334,372 | 29.5 |
| Total assets at fair value | \$1,749,078,868 | 21.2% | \$1,390,585,663 | 22.6% |

Investment income for the Master Trust was as follows:

| | | Year Ended December 31, 2017 |
|---|-----|------------------------------------|
| Interest income | \$ | 1,163,315 |
| Dividends | | 5,978,649 |
| Other income | | 1,618,162 |
| Net realized and unrealized appreciation in fair value of investments | 2 | 279,623,390 |
| Total investment income | \$2 | 288,383,516 |

4. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e., an exit price). The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets and liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described below:

Level 1 — Unadjusted quoted prices in active markets that are accessible to the reporting entity at the measurement date for identical assets and liabilities.

Level 2 — Inputs other than quoted prices in active markets for identical assets and liabilities that are observable either directly or indirectly for substantially the full term of the asset or liability. Level 2 inputs include the following:

- · Quoted prices for similar assets and liabilities in active markets
- · Quoted prices for identical or similar assets or liabilities in markets that are not active
- Observable inputs other than quoted prices that are used in the valuation of the assets or liabilities (e.g., interest rate and yield curve quotes at commonly quoted intervals)
- · Inputs that are derived principally from or corroborated by observable market data by correlation or other means

Level 3 — Unobservable inputs for the asset or liability (i.e., supported by little or no market activity). Level 3 inputs include management's own assumption about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk).

The level in the fair value hierarchy within which the fair value measurement is classified is determined based on the lowest level of input that is significant to the fair value measurement in its entirety.

The following is a description of the valuation techniques and inputs used for each major class of assets measured at fair value by the Plan.

Mutual funds: Valued at daily closing price as reported by the fund. Mutual funds held by the Plan are open-ended mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish daily net asset values ("NAV") and to transact at that price. The mutual funds held by the Plan are considered actively traded.

Self-directed brokerage account: Valued at the closing price reported on the active market on which the individual securities are traded.

Company common stock fund: Valued at its year-end unit closing price (comprised of year-end market price plus uninvested cash position).

Target date funds: Valued at the NAV provided by the Trustee. NAV is a readily determinable fair value of the underlying assets and is the basis for current transactions.

Common collective trust funds: Valued at the NAV provided by the administrator of the fund. The NAV is based on the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. The Plan has no contractual obligations to further invest in the funds.

Short-term investment funds: valued at NAV, which approximates fair value.

The following tables set forth by level, within the fair value hierarchy, the Master Trust's assets carried at fair value:

| | December 31, 2017 | | | |
|-----------------------------------|-------------------|-----------------|---------|-----------------|
| | Level 1 | Level 2 | Level 3 | Total |
| Master Trust investments: | | | | |
| Mutual funds (a) | \$247,977,112 | \$ — | \$ — | \$ 247,977,112 |
| Self-directed brokerage | 33,277,291 | _ | _ | 33,277,291 |
| Company common stock fund | 213,673,149 | _ | _ | 213,673,149 |
| Short-term investment funds | _ | 36,984,930 | _ | 36,984,930 |
| Target date funds | _ | 428,195,747 | _ | 428,195,747 |
| Common collective trust funds (a) | _ | 788,970,639 | _ | 788,970,639 |
| Total Master Trust investments | \$494,927,552 | \$1,254,151,316 | \$ — | \$1,749,078,868 |

| | December 31, 2016 | | | |
|--------------------------------|-------------------|----------------|---------|-----------------|
| | Level 1 | Level 2 | Level 3 | Total |
| Master Trust investments: | | | | |
| Mutual funds | \$326,287,224 | \$ — | \$ — | \$ 326,287,224 |
| Self-directed brokerage | 29,196,323 | _ | _ | 29,196,323 |
| Company common stock fund | 165,857,062 | _ | _ | 165,857,062 |
| Short-term investment funds | _ | 40,334,372 | _ | 40,334,372 |
| Target date funds | _ | 314,258,853 | _ | 314,258,853 |
| Common collective trust funds | _ | 514,651,829 | _ | 514,651,829 |
| Total Master Trust investments | \$521,340,609 | \$ 869,245,054 | \$ — | \$1,390,585,663 |

(a) Fidelity Large Cap Growth Fund transferred from Mutual funds — Level 1 to Common collective trust funds — Level 2 in 2017, as the Master Trust assets of \$182,978,899 were large enough to invest in a commingled version of the fund.

5. Tax Status

The Plan has received a determination letter from the Internal Revenue Service ("IRS") dated February 3, 2017 stating that the Plan is qualified under Section 401(a) of the Internal Revenue Code ("the Code") and therefore, the related trust is exempt from taxation. Subsequent to this determination by the IRS, the Plan was amended. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualified status. The Plan administrator believes the Plan is being operated in compliance with the applicable requirements of the Code and, therefore, believes the Plan, as amended, is qualified and the related trust is tax-exempt.

Accounting principles generally accepted in the United States require plan management to evaluate uncertain tax positions taken by the Plan. The financial statement effects of a tax position are recognized when the position is more likely than not, based on the technical merits, to be sustained upon examination by the IRS. The Plan Administrator has analyzed the tax positions taken by the Plan and has concluded that as of December 31, 2017, there are no uncertain positions taken or expected to be taken. The Plan has recognized no interest or penalties related to uncertain tax positions. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan Administrator believes it is no longer subject to federal income tax examinations for years prior to 2014.

6. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

7. Reconciliation of Financial Statements to Form 5500

The following is a reconciliation of net assets available for benefits per the financial statements to Form 5500:

| | December 31, | | |
|--|---------------|---------------|--|
| | 2017 | 2016 | |
| Net assets available for benefits per financial statements | \$386,697,160 | \$330,025,271 | |
| Deemed distributions | _ | (1,299,849) | |
| Amounts allocated to withdrawn participants | (67,903) | (143,690) | |
| Net assets available for benefits per Form 5500 | \$386,629,257 | \$328,581,732 | |

The following is a reconciliation of net increase per the financial statements to Form 5500:

| | Year ended December 31, 2017 | |
|--|---------------------------------|------------|
| Total net increase per the financial statements | \$ | 56,671,889 |
| Deemed distributions | | 1,299,849 |
| Amounts allocated to withdrawing participants at December 31, 2016 | | 143,690 |
| Amounts allocated to withdrawing participants at December 31, 2017 | | (67,903) |
| Total net increase per the Form 5500 | \$ | 58,047,525 |

8. Transactions with Parties-in-Interest

Under ERISA rules related to 401(k) plans, transactions with related parties of the Plan such as a sponsor, administrator, trustee, acquired entities by the Plan sponsor, or participant are considered either exempt or non-exempt from ERISA prohibited transaction provisions. Non-exempt transactions are subject to penalty taxes.

The Plan invests in the common stock of the Company through a common stock fund. These transactions qualify as party-in-interest transactions; however, they are exempt from the prohibited transactions rules under ERISA. During 2017, the Plan received \$109,641 in common stock dividends on 43,508 shares from the Company.

The Plan's record keeper, trustee, custodian and investment advisor described in Note 1 are each a party-in-interest to the Plan as defined by ERISA. KPMG LLP, the auditor of the Plan's financial statements, is also a party in interest.

9. Subsequent Event

The Plan has evaluated subsequent events after the Statement of Net Assets Available for Plan Benefits date through June 29, 2018, the date that the financial statements were issued.

Packaging Corporation of America Boise Paper Holdings, L.L.C. Retirement Savings Plan

Schedule H, Line 4i — Schedule of Assets (Held at End of Year) EIN 26-1279115 Plan 002

December 31, 2017

| *Plan's interest in master trust | \$370,963,490 |
|---|--|
| Notes Receivable from Participants *Various (2,075 loans to 1,317 participants) | Rate of Interest Maturity Cost Current Value 3.25%-9.75% Maturity dates through January 15, 2023 |
| Total Assets (Held at End of Year) | \$385,104,443 |

Denotes a party-in-interest to the Plan as defined by ERISA
 See accompanying report of independent registered public accounting firm.

INDEX TO EXHIBITS

Exhibit Number Description 23.1

Consent of KPMG LLP

Date: June 29, 2018

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the Benefits Administration Committee of Packaging Corporation of America has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Boise Paper Holdings L.L.C. Retirement Savings Plan

By: /s/ PAMELA A. BARNES

Pamela A. Barnes *Vice President*

Consent of Independent Registered Public Accounting Firm

To the Plan Participants and Plan Administrator of Boise Paper Holdings, L.L.C. Retirement Savings Plan:

We consent to the incorporation by reference in the registration statement (No. 333-206801) on Form S-8 of Packaging Corporation of America of our report dated June 29, 2018, with respect to the statements of net assets available for benefits of the Boise Paper Holdings, L.L.C. Retirement Savings Plan as of December 31, 2017 and 2016, the related statement of changes in net assets available for benefits for the year ended December 31, 2017 and the related notes (collectively, the "financial statements"), and the supplemental schedule of Schedule H, Line 4i — Schedule of Assets (held at end of year) as of December 31, 2017, which report appears in the December 31, 2017 annual report for Form 11-K of the Boise Paper Holdings, L.L.C. Retirement Savings Plan.

/s/ KPMG LLP

Chicago, Illinois June 29, 2018