UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 13, 2015

HORIZON TECHNOLOGY FINANCE CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation)

814-00802 (Commission File Number) **27-2114934** (I.R.S. Employer Identification No.)

312 Farmington Avenue Farmington, CT 06032

(Address of principal executive offices and zip code)

Registrant's telephone number, including area code: (860) 676-8654

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Section 2	Financial Information
Item 2.02	Results of Operations and Financial Condition

On January 13, 2015, Horizon Technology Finance Corporation (the "Company") issued a press release announcing its investment portfolio update for the three months ended December 31, 2014. A copy of this press release is attached hereto as Exhibit 99.1.

The information in Item 2.02 of this Current Report on Form 8-K, including Exhibit 99.1 furnished herewith, is being furnished and shall not be deemed "filed" for any purpose of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to liabilities of such Section. The information in this Current Report on Form 8-K shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Section 9	Financial Statements and Exhibits
Item 9.01	Financial Statements and Exhibits

(d) Exhibits.

99.1 Press release of the Company dated January 13, 2015.

2

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: January 13, 2015

HORIZON TECHNOLOGY FINANCE CORPORATION

By: /s/ Robert D. Pomeroy, Jr. Robert D. Pomeroy, Jr. Chief Executive Officer

3

Exhibit Index

Exhibit No.Description99.1Press release of the Company dated January 13, 2015

Horizon Technology Finance Provides Investment Portfolio Update for Fourth Quarter 2014

Active Origination and Portfolio Liquidity Events Drive Positive Momentum

Strong Liquidity to Grow Portfolio in 2015

FARMINGTON, Conn., January 13, 2015 – Horizon Technology Finance Corporation (NASDAQ: HRZN) ("Horizon"), a leading specialty finance company that provides capital in the form of secured loans to venture capital backed companies in the technology, life science, healthcare information and services, and cleantech industries, today provided a portfolio update for the fourth quarter of 2014.

"During the fourth quarter, we achieved our highest funding quarter of the year, drawing upon our solid liquidity position and disciplined underwriting to originate high quality deals with strong returns," said Gerald A. Michaud, President of Horizon. "Complementing this success, we experienced high yielding liquidity events, enabling Horizon to continue to provide upside for our shareholders."

Mr. Michaud continued, "Also, in the fourth quarter, we continued to execute on our 2014 strategic initiatives, which included improving our asset quality, maintaining liquidity for planned growth in 2015, and filing our application for an SBIC license. We enter 2015 well-positioned to capitalize on attractive investment opportunities which would grow our portfolio and generate strong yields."

New Loans Funded

Horizon funded new loans in the fourth quarter of 2014 totaling \$28.5 million to the following portfolio companies:

- \$5.0 million to a new portfolio company, Interleukin Genetics, Inc., a genetics-based personalized health testing company.
- \$5.0 million to a new portfolio company, Palatin Technologies, Inc., a biopharmaceutical company developing therapeutics for the treatment of diseases.
- \$5.0 million to an existing portfolio company, Systech International, Inc., a global leader in pharma serialization solutions.
- \$3.0 million to a new portfolio company, a provider of technology to create and manage secure digital signatures.
- \$3.0 million to an existing portfolio company, Recondo Technology, Inc., a software company that develops cloud computing solutions throughout the healthcare revenue cycle.
- \$2.5 million to a new portfolio company, Additech, Inc., a technology company that designs, builds and operates a unique at-the-pump automobile engine maintenance system.
- \$2.0 million to a new portfolio company in the mobile and social gaming industry.
- \$2.0 million to an existing portfolio company, New Haven Pharmaceuticals, Inc., a developer of prescription pharmaceuticals.
- \$1.0 million to an existing portfolio company, AccuVein Inc., a developer of vein illumination technology.

Liquidity Events

During the quarter ended December 31, 2014, Horizon experienced liquidity events from five portfolio companies, increasing the total number of portfolio companies with liquidity events to 18 for the year. Liquidity events for Horizon may consist of the sale of warrants and equity in portfolio companies, loan prepayments, sale of owned assets or receipt of success fees.

In October, Construction Software Technologies, Inc. prepaid the outstanding principal balance of \$7.7 million on its venture loan, plus interest, final payment and prepayment fee. Horizon received proceeds of approximately \$0.5 million pursuant to its exercise and sale of warrants in Construction. Horizon's fully realized internal rate of return on this investment is 16.9%.

In November, SimpleTuition, Inc. prepaid the outstanding principal balance of \$2.4 million on its venture loan, plus interest, final payment and prepayment fee. Horizon's current realized internal rate of return on this investment is 12.5%. Horizon continues to hold warrants in SimpleTuition.

In November, Optaros, Inc. prepaid the outstanding principal balance of \$1.2 million on its venture loan, plus interest, final payment and prepayment fee. Horizon's fully realized internal rate of return on this investment is 14.0%.

In December, Mitralign, Inc. prepaid the outstanding principal balance of \$2.9 million on its venture loan, plus interest, final payment and prepayment fee. Horizon's current realized internal rate of return on this investment is 14.4%. Horizon continues to hold warrants in Mitralign.

In November, Horizon sold its equity ownership in SolarBridge Technologies, Inc. for \$2.3 million.

Refinanced Principal Balances, Early Principal Payoffs, and Principal Payments Received

Horizon experienced early pay-offs during the fourth quarter totaling \$14.2 million, compared to early pay-offs totaling \$19.1 million during the third quarter of 2014. During the fourth quarter Horizon received regularly scheduled principal payments on investments totaling \$10.8 million compared to regularly scheduled principal payments totaling \$10.5 million during the third quarter of 2014.

Commitments

During the quarter ended December 31, 2014, Horizon closed new loan commitments totaling \$37.5 million to 11 companies, compared to the quarter ended September 30, 2014, wherein Horizon closed new loan commitments totaling \$33.5 million to eight companies.

Pipeline

As of December 31, 2014, Horizon's unfunded loan approvals and commitments ("Committed Backlog") were \$25.7 million to 11 companies, compared to a Committed Backlog of \$19.7 million to seven companies as of September 30, 2014. While Horizon's portfolio companies have discretion whether to draw down such commitments, in some cases, the right of a company to draw down its commitment is subject to the portfolio company achieving specific milestones.

About Horizon Technology Finance

Horizon Technology Finance Corporation is a leading specialty finance company that provides capital in the form of secured loans to companies backed by venture capital firms within the technology, life science, healthcare information and services, and cleantech industries. The investment objective of Horizon is to maximize total returns by generating current income from a portfolio of directly originated secured loans as well as capital appreciation from warrants that it receives when making such loans. Headquartered in Farmington, Connecticut, Horizon has regional offices in Walnut Creek, California and Reston, Virginia. Horizon's common stock trades on the NASDAQ Global Select Market under the ticker symbol "HRZN". To learn more, please visit www.horizontechnologyfinancecorp.com.

Forward-Looking Statements

Statements included herein may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Statements other than statements of historical facts included in this press release may constitute forward-looking statements and are not guarantees of future performance, condition or results and involve a number of risks and uncertainties. Actual results may differ materially from those in the forwardlooking statements as a result of a number of factors, including those described from time to time in our filings with the Securities and Exchange Commission. Horizon undertakes no duty to update any forward-looking statement made herein. All forward-looking statements speak only as of the date of this press release.

Contact: Horizon Technology Finance Corporation Christopher M. Mathieu Chief Financial Officer (860) 676-8653 chris@horizontechfinance.com

Investor Relations and Media Contacts: The IGB Group Matt Steinberg / Leon Berman (212) 477-8261 / (212) 477-8438 msteinberg@igbir.com/ lberman@igbir.com