

SCIO DIAMOND TECHNOLOGY CORP

FORM 8-K (Current report filing)

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CIK 0001488934

Symbol SCIO

SIC Code 3290 - Abrasive, Asbestos, And Miscellaneous

Industry Constr. - Supplies & Fixtures

Sector Capital Goods

Fiscal Year 03/31



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: October 29, 2013 (Date of earliest event reported)

SCIO DIAMOND TECHNOLOGY CORPORATION

	(Exact name of registrant as specified in its ch	
	Commission File Number: 333-166786	
	Nevada (State or other jurisdiction of incorporation)	45-3849662 (IRS Employer Identification No.)
411 University Ridge Suite D Greenville, SC 29601 (Address of principal executive offices, including zip code)		
(864) 751-4880 (Registrant's telephone number, including area code)		
Not Applicable (Former name or former address, if changed since last report)		
Check the appropriate box below if the Form 8-K filing 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))	

Item 7.01 Regulation FD Disclosure.

The following information (including Exhibit 99.1) is being "furnished" in accordance with General Instruction B.2 of Form 8-K and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed to be incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.

On October 29, 2013, the Company posted its current investor slide presentation on its website. The slide presentation is attached hereto as Exhibit 99.1, and is available to the public under the Investor Relations section of the Company's website at www.sciodiamond.com, under "Webcasts and Presentations." The Company has prepared this slide presentation to provide public disclosure of certain operational information. The information provided in this presentation was based on information available to the Company as of the date of this filing. The Company does not undertake any obligation to update this investor slide presentation as conditions change or as additional information becomes available.

Item 9.01 Financial Statements and Exhibits.

- (d) Exhibits.
 - 99.1 Slide Presentation

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.

SCIO DIAMOND TECHNOLOGY CORPORATION

By: /s/ Michael McMahon Michael McMahon Chief Executive Officer

Date: October 29, 2013



October 2013



Safe Harbor Agreement & Disclosure

This presentation contains forward-looking statements that are based on the beliefs of Scio Diamond's management and reflect Scio's current expectations and projections about future results, performance, prospects and opportunities. Scio has tried to identify these statements by using words such as "anticipate," believe," "could," "estimate," "expect," "intend," "may," "plan," "project," "potential," "should," "will," "will be," "would" and similar expressions, but this is not an exclusive way of identifying such statements. Investors are cautioned that all forward-looking statements contained herein speak only as of the date of this presentation and involve risks and uncertainties that could cause Scio's actual results, performance and achievements to differ materially from those expressed in these forwardlooking statements, including, without limitation, the impact of the current challenging global economic conditions and recent financial crisis; the development of the market for cultured diamonds; competition; Scio's ability to raise the capital required for research, product development, operations and marketing; anticipated dependence on material customers and material suppliers. For a detailed discussion of factors that could affect Scio's future operating results, investors should see disclosures under "Risk Factors" in the company's applicable filings with the US Securities and Exchange Commission. These factors should be considered carefully and investors should not rely on any forward-looking statements contained herein, or that may be made elsewhere from time to time by Scio or on Scio's behalf. Scio undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as expressly required by law.



Key Facts

Symbol OTCBB: SCIO

Price as of 9/30/2013 \$0.40

Price (52-week range) \$0.15 - \$2.75

Daily Volume (90-day average) 18,426

Market Capitalization \$19.31M

Shares Outstanding 48.26M

Debt at 6/30/2013 \$0.94M

Cash at 6/30/2013 \$0.61M

Enterprise Value \$19.64M

Corporate Headquarters Greenville, South Carolina

Full-Time Employees (9/30/2013)

Accounting Firm Cherry Bekaert LLP

Significant intellectual property portfolio:

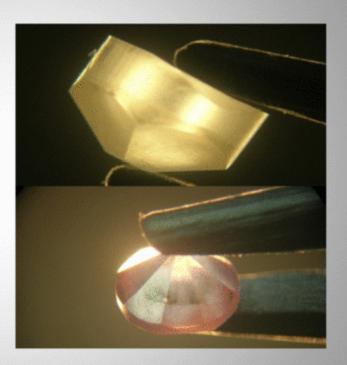
· 24 US patents, 8 foreign patents

15 US and 10 foreign patent applications in process



What We Do

- Scio manufactures diamond that is "real diamond"
- Vapor Deposition (CVD) process that produces high-quality, single crystal diamond in a controlled laboratory setting
- Scio produced diamond has chemical, physical and optical properties identical to mined diamonds
- Scio's manufacturing process enables it to produce high quality, high purity singlecrystal diamond that is colorless, near colorless and fancy colored
- Scio's proprietary technology offers the flexibility to produce lab-grown diamond in size, color, specification and quality combinations that are very rare in nature





Executives of Scio & Key Advisors

Executives of Scio Diamond Technology Corp.

Michael McMahon, Chief Executive Officer brings 35 years of executive experience in operations and business development of Fortune 100 companies such as Fluor and Jacobs Engineering. Throughout his career he was responsible for over \$19 billion of engineering, construction, startup and commissioning of facilities worldwide primarily serving clients in the high tech industry, DoE, and DoD. He has successfully led project turnarounds, business development, process controls and improvements, startups, joint ventures, mergers and acquisitions, and profit improvement initiatives. Mr. McMahon has a BS from the University of Cincinnati.

Jonathan Pfohl, Chief Financial Officer brings more than 25 years of leadership experience in the wireless industry, including roles as CEO of Wireless Express; CFO of Main Street Broadband; CFO of Movida Cellular; and VP, Finance of AirGate PCS, Inc. He has broad and deep experience in funding, planning, SEC reporting, business development and expense control for small to mid-sized companies. Mr. Pfohl has a BS-Management and an MBA-Finance from the State University of New York at Buffalo.

Board Member & Inventor of Diamond Technology

<u>Dr. Robert C. Linares</u> brings extensive and diverse experience in the field of crystal growth technologies, having held positions with Bell Laboratories, Perkin Elmer, M/A-COM (now part of Tyco Electronics) and Spectrum Technology, Inc., a company he founded and was sold to NERCO Advanced Materials (NYSE: NER). Dr. Linares holds a doctorate in chemical engineering as well as a master's in business administration.



Chemical Vapor Deposition (CVD)

Chemical Vapor Deposition(CVD), well understood technology that is widely employed in the electronics and materials industries, is a process that is used to produce solid materials that are high-purity and high-performance in quality.

Scio patented CVD Single Crystal > 1 mm thick

- Lowers stress in the crystal lattice which leads to great strength and hardness for industrial use.
- Produces low nitrogen Type IIa crystals (colorless/near colorless) less than 3% of all mined diamonds qualify as Type II a diamond

Scio has designed proprietary reactors that produce 7 to 10 times more diamond than competitors. Expected breakeven on capital investment per reactor is less than 18 months.

Scio CVD vs. HPHT/Microwave CVD (competitor processes)

- Growth of Scio CVD can be monitored and controlled during growth cycle
- Scio CVD has greater thickness potential because of its single growth process
- Scio diamond surface area potential is significantly greater than HPHT

Highest rate of productive growth in the world per reactor.



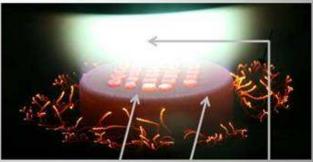
CVD Diamond Growing Process

- **Step 1** Place diamond seeds on pedestal; depressurize chamber
- **Step 2** Inject starting gases into chamber; heat until electrons separate from nuclei, forming plasma
- **Step 3** Freed carbon precipitates out of plasma cloud and is deposited on wafer seeds
- **Step 4** Wafer seeds gradually become diamond crystals
- **Step 5** Remove diamond crystals. Slice and shape for use in commercial and gemstone applications

Scio Proprietary Reactor



Scio CVD Process



Diamonds

Pedestal

Plasma Cloud



Opportunities - Gemstone & Industrial

Gemstone Opportunities

Scio-created gemstones are real diamond

Grown in a environmentally clean reactor instead of the earth-mined

Features of Scio-created diamond gemstones

- Perfection and Scalability stones of same size and color
- Colorless, yellow and Pink diamond capability
- Environmentally friendly alternative to earth-mined diamonds
- · No "conflict diamond" concerns

Gem market is rapidly developing and estimated at \$15-\$20B

Industrial Applications

Current Applications - Precision Cutting

Signed production deal for cutter blades with a South Korean tool manufacturer that has been in business for 20+ years

Other vendors have placed orders for water jet and cutting tool applications.

Future Applications

- Semiconductor Substrate / Quantum Computing / "Diamond Chip"
- · Scalpel Laser Scalpel
- Molecular Resolution MRI
- · Water Purification
- High Power Laser & Other Defense and Energy Applications











Strategic Opportunities

- Technology Licensing
- Cooperative Ownership
- Production Expansion



OTCBB:SCIO | WWW.SCIODIAMOND.COM



Gemstone Joint Venture in China

Scio announced definitive agreement for joint venture to produce Type IIA, single crystal CVD Diamond in China on September 17, 2013 targeting a specific gemstone market opportunity.

- Partners have 75 years combined experience in gemstone industry in distribution and technology processes
- Initially target of 100 reactors operational by summer 2014. Capacity to expand to 400 with 24 months
- Scio provides technology and intellectual property in exchange for 30% equity interest and licensing fees. No Scio capital requirements with partners provide funding and associated technology.
- Venture affirms acceptance of technology platform and Scio's ability to mass produce quality diamond



Technology Licensing

Offshore opportunities for licensing technology to 3rd party manufacturers in exchange for licensing revenue:

- · One time flat fee for limited rights to IP
- · On-going royalties based on revenue produced
- · Per machine licensing fees based on machines in production
- · Sale of Scio reactors/technology



Cooperative Ownership

Offshore opportunities to license technology for ownership interests in production joint venture.

- · One time flat fee for limited rights to IP
- · On-going royalties based on revenue of product produced
- · Per machine licensing fees based on machines in production
- Sale of Scio reactors/technology



Production Expansion

Strategic plan to expand growing platform to 4" technology and to expand capacity to 60 reactors total. Potential funding from strategic with dedicated production for partner:

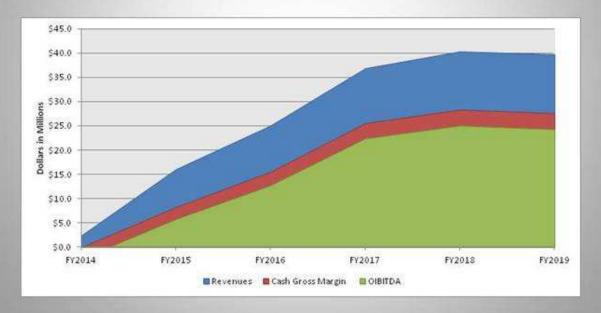
- 4" growing technology is being tested that will result in 70% increase in growing capacity
- Expansion to 60 growers will increase revenue potential by 600%
- Strategic partners potentially funding a portion of expansion capacity with dedicated production. Provides for competitive fixed gross margins and lower incremental cost of expansion
- Limited need for incremental overhead expenditures as revenue increases, enhancing overall cash flow margins.



Sample Economics of Production Expansion

Key assumptions:

- Use of 7mm x 7mm seed platform and implementation of 4" growing technology in FY 2017
- Expansion of production facility by 50 reactors from 10 to 60 total by end of FY 2016 with total new investment of \$25M required
- Revenue expectations are 50/50 from gemstones and industrial applications

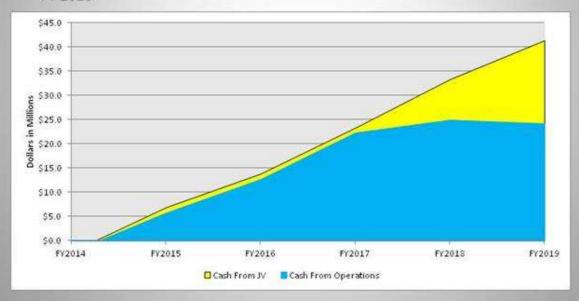




Potential Cash Flow Expectations

Key assumptions:

- Production expansion expectations are met with 7mm x7mm seed platform, 4" growing technology and expansion of production to 60 reactors
- Grace Rich Joint Venture launches with 100 reactors in FY2015 and expands to 400 by FY 2018





Summary

- Continue development of sustainable commercial applications for mass production of high quality single crystal diamond targeting industrial and gemstone markets
- Accelerating production capacity by advancing seed size from 4mm to 7mm, an increase of 110%; next phase of production expansion is 4" reactor technology with additional 70% increase in production capacity
- Seeking to expand production capacity in South Carolina by initially doubling growers to 20 and ultimately expanding to 60 total
- Exploring strategic technology licensing opportunities
- · High gross margins and incremental revenue flows to bottom line
- Looking to exploit expanding gemstone opportunities
- Long term objective is to be the world leader in the production of high-value added diamond material



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