

NEOGEN CORP
Form 10-K
July 30, 2014
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended May 31, 2014

.. TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For The Transition Period From _____ To _____.

COMMISSION FILE NUMBER 0-17988

NEOGEN CORPORATION

(Exact name of registrant as specified in its charter)

MICHIGAN
*(State or other jurisdiction of
incorporation or organization)*

38-2367843
*(I.R.S. Employer
Identification No.)*

620 Leshar Place

Lansing, Michigan 48912

(Address of principal executive offices, including zip code)

517-372-9200

(Registrant's telephone number, including area code)

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT: NONE

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:

COMMON STOCK, \$0.16 par value per share

(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by a check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act.

(Check one):

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Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

Based on the closing sale price on November 30, 2013 the aggregate market value of the voting stock held by non-affiliates of the registrant was \$1,862,000,000. For these purposes, the registrant considers its Directors and executive officers to be its only affiliates.

The number of outstanding shares of the registrant's Common Stock was 36,734,222 on June 30, 2014.

Table of Contents

DOCUMENTS INCORPORATED BY REFERENCE

The Registrant's definitive proxy statement to be prepared pursuant to Regulation 14a and filed in connection with solicitation of proxies for its October 2, 2014 annual meeting of shareholders is incorporated by reference into part III of this Form 10-K.

Table of Contents

TABLE OF CONTENTS

PART I

ITEM 1.	<u>BUSINESS</u>	4
ITEM 1A.	<u>RISK FACTORS</u>	13
ITEM 1B.	<u>UNRESOLVED STAFF COMMENTS</u>	16
ITEM 2.	<u>PROPERTIES</u>	16
ITEM 3.	<u>LEGAL PROCEEDINGS</u>	17
ITEM 4.	<u>SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS</u>	17

PART II

ITEM 5.	<u>MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES</u>	17
ITEM 6.	<u>SELECTED FINANCIAL DATA</u>	19
ITEM 7.	<u>MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</u>	19
ITEM 7A.	<u>QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISKS</u>	29
ITEM 8.	<u>FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA</u>	30
ITEM 9.	<u>CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE</u>	30
ITEM 9A.	<u>CONTROLS AND PROCEDURES</u>	30
ITEM 9B.	<u>OTHER INFORMATION</u>	32

PART III

ITEM 10.	<u>DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT AND CORPORATE GOVERNANCE</u>	32
ITEM 11.	<u>EXECUTIVE COMPENSATION</u>	33
ITEM 12.	<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS, MANAGEMENT AND RELATED STOCKHOLDER MATTERS</u>	33
ITEM 13.	<u>PRINCIPAL ACCOUNTANT FEES AND SERVICES</u>	33

PART IV

ITEM 14.	<u>EXHIBITS, FINANCIAL STATEMENT SCHEDULE</u>	33
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<u>SIGNATURES</u>	34
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LIST OF FINANCIAL STATEMENTS AND FINANCIAL STATEMENT SCHEDULE

Subsidiaries

Consent of independent registered public accounting firm BDO USA, LLP
 Consent of independent registered public accounting firm Ernst & Young LLP
 Section 302 Certification of Chief Executive Officer
 Section 302 Certification of Chief Financial Officer
 Section 1350 Certification pursuant to Section 906

Table of Contents

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

Forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, are made throughout this Annual Report on Form 10-K, including statements relating to management's expectations regarding new product introductions; the adequacy of the Company's sources for certain components, raw materials and finished products; and the Company's ability to utilize certain inventory. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words believes, anticipates, plans, expects, seeks, estimates, and similar expressions are intended to identify forward-looking statements. There are a number of important factors that could cause Neogen Corporation's results to differ materially from those indicated by such forward-looking statements, including those detailed in ITEM 1A. RISK FACTORS and under the caption Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates and Future Operating Results.

In addition, any forward-looking statements represent management's views only as of the day this Annual Report on Form 10-K was first filed with the Securities and Exchange Commission and should not be relied upon as representing management's views as of any subsequent date. While management may elect to update forward-looking statements at some point in the future, it specifically disclaims any obligation to do so, even if its views change.

Table of Contents**PART I.****ITEM 1. BUSINESS**

Neogen Corporation and subsidiaries (Neogen or the Company) develop, manufacture and market a diverse line of products dedicated to food and animal safety. The Company's Food Safety segment consists primarily of diagnostic test kits and complementary products (e.g., dehydrated culture media) sold to food producers and processors to detect dangerous and/or unintended substances in human food and animal feed, such as foodborne pathogens, spoilage organisms, natural toxins, food allergens, genetic modifications, ruminant by-products, meat speciation, drug residues, pesticide residues and general sanitation concerns. These products are marketed by Company sales personnel in North America, the United Kingdom and other parts of Europe, Mexico and Brazil and by distributors through the rest of the world. The diagnostic test kits are generally less expensive, easier to use and provide greater accuracy and speed than conventional diagnostic methods. The majority of the tests are disposable, single-use, immunoassay and DNA detection products that rely on the Company's proprietary antibodies and RNA and DNA testing methodologies to produce rapid and accurate test results. The Company's expanding line of food safety products also includes bioluminescence-based diagnostic technology.

Neogen's Animal Safety segment is engaged in the development, manufacture and marketing of pharmaceuticals, rodenticides, disinfectants, vaccines, veterinary instruments, topicals, diagnostic products and genetic testing services for the worldwide animal safety market. The majority of these consumable products are marketed through a network of national and international distributors, as well as a number of large farm supply retail chains in the United States and Canada. The Company's USDA-licensed facility in Lansing, MI, produces immunostimulant products for horses and dogs, and a unique equine botulism vaccine. The Company's line of drug detection products are sold worldwide for the detection of abused and therapeutic drugs in animals and animal products.

Management's vision is for Neogen to become a world leader in the development and marketing of products dedicated to food and animal safety. To meet this vision, a growth strategy consisting of the following elements has been developed: (i) increasing sales of existing products; (ii) introducing new products and product lines; (iii) expanding international sales; and (iv) acquiring businesses and forming strategic alliances. While each of the elements of the strategy is important over the long term, the Company has been historically successful at acquiring products and/or businesses; accordingly, the Company maintains an active acquisition program to identify and capitalize on opportunities as they arise.

Neogen Corporation was formed as a Michigan corporation in June 1981 and actual operations began in 1982. The Company's principal executive offices are located at 620 Leshar Place, Lansing, Michigan 48912-1595 and its telephone number is (517) 372-9200.

Neogen's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports are available free of charge via our Internet website (www.neogen.com) as soon as reasonably practicable after such information is filed with, or furnished to, the United States Securities and Exchange Commission.

PRODUCTS

Product trademarks and registered trademarks owned by Neogen include: **Corporate:** Acumedia®, Acumedia logo, Neogen®, Neogen flask®; **Food Safety:** AccuClean®, AccuPoint®, AccuScan®, Agri-Screen®, Alert®, ANSR®, BetaStar®, Centrus®, F.A.S.T., GeneQuence®, GENE-TRAK®, ISO-GRID®, NeoCare, NeoColumn, NeoFilm, NeoSeek, NEO-GRIDzyme®, Reveal®, Revive®, Soleris®, Veratox®, Simple. Accurate. Supported. Food Safety SolutionsSM, Microbiology at the Speed of Light®; **Life Sciences:** Alert®, K-Blue®, K-Blue Substrate®, K-Gold®, NeoSal; **Animal Safety:** Aero-ssault, Ag-Tek, AluShield®, BMV®, BotVax®, BreederSleeve®, Calf Eze, Calf Sense®, Calf Sense logo®, Chem-Tech, Ltd., Chem-Tech's CT logo (with circle), Cowboy Syringe®, CT-511®, Cykill, D3 Needles, DC&R Di-Kill®, Dr. Frank's®, Dy-Fly®, ElectroJac®, ELISA Technologies®, EqStim®, EquiSleeve®, E-Z Bond, E-Z Catch, Fatal-Fly®, Final-Fly-T®, Fly-Die Defense, Furazone®, Gold Nugget®, Horse Sense®, Ideal®, ImmunoRegulin®, Insectrin®, Insight, Jolt, LD-44®, LD-44T, MaxiSleeve®, Macleod®, MegaShot, MycAseptic, NeedleGard, NFZ, One Bark, PamaKare, Parvosol, Pet Sense®, PolyPetite, PolyShield, PolySleeve, Poridon®, Prima®, Prima BMV®, Prima Marc, Prima Tech, Prima Tech logo®, Pro-Fix®, Pro-Flex®, Pro-Shot, PRO-TECT 6 MIL, PRO-TECT 6 MIL logo®, Prozap®, Prozap (stylized mark), PY-75, Ramik, RenaKare, Rodent Elimination Station, Rodex, Rot-Not, Safe-T-Flex, Spectrasol, Spec-Tuss, Squire, Stress-Dex®, SuperVet®, SureKill®, SyrFlex®, SyrFlo®, SyrTek®, SyrVet®, SyrVet logo®, ThyroKare, TopHoof®, Tri-Hist®, Tri-Seal, Tryal, Turbocide®, Turbocide Gold®, Udder Shield®, Unibute®, Uniprim®, Unixin®, UriCon®, UriKare, VAP-5, VAP-20, Vet-Tie, Vita-15, War Puff, We keep 'em moving, Zipcide®, Man in a circle logo for Squire is registered; **BioSentry Brands:** Acid-A-Foam, AquaPrime, BioCres 50, BioPhene, BioQuat, Chlor-A-Foam®, DSC 1000®, Farm Fluid®, Farm Fluid S®, GenQuat, LongLife®, LongLife 250S®, X-185, BioSentry barn, chicken, and pig logos are registered to Neogen; **AgriGenomics:** GeneSeek®, Genomic Profiler, Genomic Solutions for Food Security®, Igenity®, Igenity logo®, SeekGain, SeekSire, SeekTrace.

Table of Contents

Neogen operates in two primary business areas: the Food Safety segment, which develops and markets products for the detection of pathogens, natural toxins, allergens and other unwanted substances in food and feed products; and the Animal Safety segment, which develops and markets products and services dedicated to animal health. See Notes to Consolidated Financial Statements elsewhere in this Form 10-K for financial information about the Company's business segments and international operations.

FOOD SAFETY SEGMENT

Neogen's Food Safety segment is primarily engaged in the production and marketing of diagnostic test kits and complementary products marketed to food and feed producers and processors to detect dangerous and/or unintended substances in food and animal feed, such as foodborne pathogens, spoilage organisms, natural toxins, food allergens, genetic modifications, ruminant by-products, meat speciation, drug residues, pesticide residues and general sanitation concerns.

Many of Neogen's food safety test kits use immunoassay technology to rapidly detect target substances. The Company's ability to produce high quality antibodies sets its products apart from immunoassay test kits produced and sold by other companies. The Company's kits are available in microwell formats, which allow for automated and rapid processing of a large number of samples, and lateral flow and other similar devices that provide distinct visual results. Typically, test kits use antibody-coated test devices and chemical reagents to indicate a positive or negative result for the presence of a target substance in a test sample; the simplicity of the tests makes them accessible to all levels of food producers, processors and handlers.

The Company's kits are generally based on internally developed technology or technology that is acquired in connection with acquisitions. In fiscal 2014, the Food Safety segment incurred royalty expense totaling \$1,527,000 for licenses and royalties for technology used in the Company's products, including expense of \$436,000 for licenses related to the dairy antibiotics product line, \$297,000 for allergen products and \$319,000 for the pathogen product line. The majority of our royalty rates are in the low single-digit range. Some licenses involve technology that is exclusive to Neogen's use while others are nonexclusive and involve technology licensed to multiple licensees.

Neogen's test kits are used to detect potential hazards in food and animal feed by testers ranging from small local grain elevators to the largest, best-known food and feed processors in the world, and numerous regulatory agencies.

Meat and poultry processors, seafood processors, fruit and vegetable producers and many other market segments are the primary users of the Neogen's ANSR and Reveal tests for foodborne bacteria, including *E. coli* O157:H7, *Salmonella*, *Listeria* and *Campylobacter*. Grain producers and processors of all types and sizes use the Company's Veratox, Agri-Screen, Reveal, and Reveal Q+ tests for mycotoxins, including aflatoxin, deoxynivalenol, fumonisin, ochratoxin, zearalenone and T-2 toxin, to help ensure product safety and quality. The world's largest producers of cookies, crackers, candy, ice cream, and many other foods, use the Company's Veratox, Alert and Reveal, Reveal 3-D and BioKits testing products for food allergens to help protect their food-allergic customers from the inadvertent contamination of products with food allergens, such as peanut, milk, casein, egg, almond, gliadin (gluten), soy, and hazelnut residues. The Company's 2009 acquisition of the BioKits food safety business of Gen-Probe Incorporated added more than 50 test kits for food allergens, meat and fish speciation, and plant genetics, including tests in an advanced lateral flow format for gluten and casein. The 2011 acquisition of the assets of the VeroMara seafood testing laboratory brought additional testing services to the Company for the shellfish and salmon aquaculture industries. These include testing for shellfish toxins, general foodborne pathogens, including *E. coli*, noroviruses and salmon husbandry.

Dairies are primary users of Neogen's BetaStar, BetaStar Combo, BetaStar 4D and Penzyme diagnostic tests to detect the presence of beta lactam and tetracycline antibiotics in milk. The presence of these drugs in milk is a public health hazard and an economic risk to processors as it limits the milk's further processing.

Neogen developed the first rapid immunoassay test kits to detect ruminant by-products in animal feed ingredients and finished feed. The Reveal tests were designed to help prevent ruminants (e.g., cattle, sheep and goats) from being fed rendered materials containing ruminant by-products in an effort to prevent the spread of BSE, bovine spongiform encephalopathy (a.k.a., mad cow disease) from animal to animal. The Company's specialty products for the seafood market include tests for histamine, a highly allergenic substance that occurs when certain species of fish begin to decay; chloramphenicol, a banned antibiotic in most of the world, but still used by some shrimp farmers to improve the yield of their product; and sulfite, an effective but potentially allergenic shrimp preservative.

Neogen also offers other test methods and products to complement its immunoassay tests. The Company's line of GENE-TRAK and GeneQuence assays utilize DNA probe hybridization technology to create exceptionally sensitive and specific tests to detect foodborne bacteria. Instead of using antibodies as in an immunoassay to capture a target pathogen that may be present in a sample, this technology uses a portion of the target pathogen's unique ribosomal RNA (rRNA) sequence to bind to complementary rRNA strands of the pathogen in a sample. The result is a test with the ease and speed of a rapid test method, but the specificity of a time-consuming conventional laboratory method (specificity is a

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test's ability to distinguish between a target pathogen and a closely-related but innocuous bacterium). Neogen's ANSR pathogen detection system is an isothermal amplification reaction test method

Table of Contents

which exponentially amplifies the DNA of any bacteria present in food and environmental samples to detectable levels in 10 minutes. Combined with ANSR's single enrichment step, Neogen's pathogen detection method can provide DNA-definitive results in a fraction of the time of other molecular detection methods on the market today. ANSR is designed for use in food and pet food production facilities, and laboratories that serve those industries.

Neogen's Soleris products are used by food processors to identify the presence of spoilage organisms (e.g., yeast and mold) and other microbiological contamination.

Neogen's Acumedia subsidiary offers dehydrated culture media for varied purposes, including traditional bacterial testing, and growing beneficial bacteria, such as cultures for sausages and beer. The Company's customers for dehydrated culture media also include commercial and research laboratories and producers of pharmaceuticals, cosmetics and veterinary vaccines.

Neogen manufactures and markets its AccuPoint rapid sanitation test for adenosine triphosphate (ATP), a chemical found in all living cells. This easy-to-use and inexpensive test uses bioluminescence to quickly determine if a food contact surface has been completely sanitized. When ATP comes into contact with the firefly reagents luciferin and luciferase contained in the test device, a reaction takes place that produces light. More light is indicative of higher levels of ATP and a need for more thorough sanitation. The Company's worldwide customer base for its ATP sanitation testing products includes food and beverage processors, the food service and healthcare industries, as well as many other users.

Revenues from Neogen's Food Safety segment accounted for 47.0%, 51.2% and 49.5% of the Company's total revenues for fiscal years ended May 31, 2014, 2013 and 2012, respectively.

ANIMAL SAFETY SEGMENT

Neogen's Animal Safety segment is primarily engaged in the development, manufacture and marketing of pharmaceuticals, rodenticides, disinfectants, vaccines, veterinary instruments, topicals, diagnostic products and genomics services.

Animal Safety's NeogenVet product line provides innovative, value-added, high quality products to the veterinary market. Top NeogenVet products include PanaKare, a digestive aid that serves as a replacement therapy where digestion of protein, carbohydrate and fat is inadequate due to exocrine pancreatic insufficiency; Natural Vitamin E-AD, which aids in the prevention and treatment of vitamin deficiencies in swine, cattle and sheep; and RenaKare, a supplement for potassium deficiency in cats and dogs. Other products sold under the NeogenVet brand include Vita-15 and Liver 7, which are used in the treatment and prevention of nutritional deficiencies in horses.

In 2003, Neogen acquired Hacco, Inc., a manufacturer of rodenticides, including the brand Ramik and Hess & Clark, Inc., whose principal products are disinfectants, such as DC&R, used in animal and food production facilities.

In 2009, Neogen acquired a product line of 14 different product formulations used in animal health and hygiene applications from DuPont Animal Health Solutions (DAHS). These products, including 904 Disinfectant, Acid-A-Foam, and FarmFluid S added to the Company's strategy of providing biosecurity solutions in the farm production markets. The products also have the potential for use in the veterinary clinic market to maintain sanitary conditions and limit the potential hazards of bacteria, fungi and viruses.

Neogen's in-house equine protozoal myeloencephalitis (EPM) testing service offers veterinarians accurate, timely results for early diagnosis of the disease that can devastate a horse's central nervous system. In addition, the Company's BotVax B vaccine has successfully protected thousands of high-value horses and foals against Type B botulism, commonly known as Shaker Foal Syndrome. The Company's product is the only USDA-approved vaccine for the prevention of Type B botulism in horses.

Years of research and many thousands of doses have proven Neogen's EqStim immunostimulant to be safe and effective as a veterinarian-administered adjunct to conventional treatment of equine bacterial and viral respiratory infections. The Company's ImmunoRegulin product uses similar immunostimulant technology to aid in the treatment of pyoderma (a bacterial skin inflammation) in dogs.

With the October 2012 acquisition of Macleod Pharmaceuticals, Neogen added Uniprim to its product offering. Uniprim is a leading veterinary antibiotic widely distributed throughout the U.S., and is also available in Canada through an exclusive distribution agreement.

Neogen markets a broad line of veterinary instruments and animal health delivery systems under the Ideal product brand name. Approximately 250 different products are offered, many of which are used to deliver animal health products, such as antibiotics and vaccines. Ideal's D3 Needles and the HDN, HDDI and DTN needle product lines are stronger than conventional veterinary needles, and are uniquely detectable by common meat processing facility metal detectors—a big market advantage in the safety-conscious beef and swine industries.

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Animal Safety products offered by Neogen to the retail over-the-counter (OTC) market include many of the Ideal brand veterinary instruments and products sold under the Squire brand. Squire products also include Stress-Dex oral electrolyte replacer for

Table of Contents

performance horses, and Furazone, for the prevention and treatment of surface bacterial infections in wounds, burns and cutaneous ulcers. Ag-Tek and other hoof care, disposables and artificial insemination supplies are marketed to the dairy and veterinary industries.

In July 2013, Neogen acquired the assets of SyrVet Incorporated, a veterinary instrument business and important supplier to farmers, ranchers and veterinarians in more than 30 countries worldwide based in Waukee, Iowa. SyrVet's product line ranges from animal handling products to sophisticated supplies for artificial insemination, and earned it significant shelf space in major farm store suppliers throughout the U.S. The majority of SyrVet's products are used in the production of food animals; however, its Horse Sense product line provides a wide array of tack products to the professional equine market.

The November 2013 acquisition of the assets of Prima Tech Incorporated added additional veterinary instruments to Neogen's offerings. The Kenansville, North Carolina-based business was started in 1998, and had become an important supplier of veterinary instruments in the U.S. and major portions of Europe. The Prima Tech product line is designed around highly accurate devices used by farmers, ranchers, and veterinarians to inject animals, provide topical applications, and to use for oral administration. Prima Tech is also a unique supplier of products used in artificial insemination in the swine industry. Other products include animal identification and handling equipment.

In January 2014, Neogen acquired the stock of Chem-Tech Ltd., a manufacturer of insecticides for the animal and food industries, which operates a manufacturing and distribution facility in Pleasantville, Iowa. Chem-Tech's highly effective insecticides utilize environmentally friendly technical formulas, and several are approved for use in food establishments. The company's Prozap insecticide brand is well known in the large animal production industry, and is particularly popular with dairy and equine producers. For a number of years, Neogen has shared the Prozap trademark with Chem-Tech, with Neogen using the brand for certain rodenticides.

Neogen's line of approximately 100 drug detection immunoassay test kits is sold worldwide for the detection of approximately 300 abused and therapeutic drugs in farm animals and racing animals, such as horses, greyhounds and camels, and for detection of drug residues in meat and meat products. The test kits are also used for human forensic toxicology drug screening applications. This line includes tests for narcotics, analgesics, stimulants, depressants, tranquilizers, anesthetics, steroids and diuretics.

Neogen also has several products used by researchers for the detection of biologically-active substances. These products include tests for cyclic nucleotides, hormones, leukotrienes, prostaglandins and steroids. Marketed under the trademarks of K-Blue and K-Gold, Neogen offers proprietary substrates that it uses in its own testing products, and that are sold to other diagnostic test kit manufacturers.

In April 2010, Neogen acquired GeneSeek, a leading commercial agricultural genetics testing laboratory in the United States. GeneSeek's technology employs high-resolution DNA genotyping for identity and trait analysis in a variety of important animal and agricultural plant species. Through the use of single nucleotide polymorphism (SNP) discovery and analysis, GeneSeek empowers its customers to speed genetic improvement efforts, as well as identify economically important diseases, primarily in large-herd beef and dairy cattle, swine, poultry and sheep producers. The Company's May 2012 acquisition of the assets of Igenity provides the extensive bioinformatics system needed to help identify the animal's positive or negative traits. In January 2013, Neogen acquired the assets of Scidera Genomics, LLC, which performs parentage testing and trait analysis for the cattle and canine industries. The Scidera acquisition further complements the genotyping technology Neogen offers to worldwide animal genomics customers.

Many of the genomics services use licensed technology. Animal Safety incurred royalty expense totaling \$751,000 for licenses and royalties in fiscal 2014 for technology used in the segment's products and services, including expense of \$501,000 for licenses related to the genomics services line.

Revenues from Neogen's Animal Safety segment accounted for 53.0%, 48.8% and 50.5% of the Company's total revenues for fiscal years ended May 31, 2014, 2013 and 2012, respectively.

GENERAL SALES AND MARKETING

Neogen's sales efforts are generally organized by specific markets, rather than by products or geography. During the fiscal year that ended May 31, 2014, the Company had approximately 18,500 customers for its products. Since many customers for animal safety products are distributors, and certain animal safety products are offered to the general retail market, the total number of end users of the Company's products is considerably greater than 18,500. As of May 31, 2014, a total of 255 employees were assigned to sales and marketing functions within the Company, compared to 237 at the end of May 2013. During the years ended May 31, 2014, 2013 and 2012, no single customer or distributor accounted for 10% or more of the Company's revenues.

Table of Contents

DOMESTIC SALES AND MARKETING

FOOD SAFETY

To reach each customer and prospect with expertise and experience, Neogen has a staff of specialized food safety sales and technical service representatives assigned to specific markets. This staff sells Company products directly to end users, and also handles technical support issues that arise with customers in the United States and Canada.

Neogen's food safety markets are primarily comprised of: milling and grain, including grain elevators, feed mills, pet food manufacturers, and grain inspection companies; meat and poultry, including meat and poultry processors, producers of ready-to-eat meat and poultry products; and the USDA's Food Safety Inspection Service (FSIS); grocery products, including flour millers, malters, bakeries, candy and confection manufacturers, manufacturers of prepared meals, nuts, spices, cookies, crackers and other snack foods; fruits and vegetables, including growers and processors of juice and packaged fresh cut grocery items; seafood, including harvesters and processors of a wide variety of seafood products; dairy and beverage, including milk processors and soft drink bottlers; healthcare, including hospitals and distributors to the healthcare industry; Acumedia dehydrated culture media, including commercial and research laboratories and producers of pharmaceuticals, cosmetics and veterinary vaccines; food service and retail, including fast food service establishments and retail grocery market chains, and nutraceuticals, including producers and marketers of a wide variety of nutritional and holistic consumer products.

ANIMAL SAFETY

Neogen markets a broad range of pharmaceuticals, vitamin injectable, wound care products, topicals, instruments, genomics services and biologicals to the ethical veterinary market. The product range is focused on the food (e.g., cattle, swine and poultry) and companion (e.g., horses, dogs, and cats) animal markets. Neogen's sales group works directly with veterinarians, clinics and universities and markets through established ethical distributors by supporting the efforts of over 500 domestic distributor sales representatives calling on 35,000 plus veterinarians. Neogen further supports its veterinary distribution channel through product training, field support, promotions and technical service.

The Company believes the OTC animal health market offers growth opportunities for Neogen and its products. Neogen offers a broad range of products including well-recognized brands of rodenticides, disinfectants, insecticides, instruments and horse care products. To reach the OTC market, Neogen's sales team works with a large network of animal health distributors including marketing groups, traditional two-step distributors, catalogers and large retail chains. Support includes product training, field support, planogram solutions, promotions and advertising. As a commercial laboratory, GeneSeek provides services direct to large-herd beef and dairy cattle, swine, poultry and sheep producers, as well as parentage testing for various canine breed associations.

INTERNATIONAL SALES AND MARKETING

FOOD SAFETY:

Neogen Europe, Ltd., located in Ayr, Scotland, provides the Company access to the European Union (EU), and sells food safety products and certain genomics services to its network of customers and distributors throughout the EU. Customers in the United Kingdom, France, Germany and the Netherlands are served by Company employees. Other European region customers generally are serviced by distributors managed by Neogen Europe personnel. Neogen Europe's research and development continue to be a strong asset in the development of products tailored to meet the unique requirements of the European market.

The Company formed a subsidiary in 2008 in Mexico, Neogen Latinoamérica. The company, headquartered in Mexico City, distributes Neogen's food and animal safety products throughout Mexico. Neogen Latinoamérica unifies the Company's widespread business activities throughout the region to animal and crop producers, and food processors.

In October 2009, the Company formed a subsidiary in Brazil, Neogen do Brasil (Neogen of Brazil). The company, headquartered near Sao Paulo, distributes Neogen's food and animal safety products throughout Brazil. Neogen do Brasil was created to accelerate the penetration of the Company's products in Brazil. Brazil is one of the world leaders in the export of numerous food commodities, including beef, poultry, soybeans, coffee, sugar, and orange juice.

Internationally, outside of the Company locations mentioned above, Neogen uses its own sales managers to work closely with and coordinate the efforts of a network of approximately 120 distributors in more than 100 countries. The distributors provide local training and technical support, perform market research, and promote Company products within designated countries around the world.

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Neogen's dairy antibiotics diagnostic products are distributed outside of North America, Brazil and China by Denmark based Chr. Hansen, an international supplier of natural ingredient solutions for the food, health and nutritional industries.

Table of Contents

Since 2002, Neogen has maintained a presence in Shanghai, China, to better serve the expanding food safety market there, as well as more closely manage its Chinese food and animal product procurement. Neogen established a consulting office in Shanghai in 2012 and converted to a trading enterprise in 2013. The Company recently began selling products from the Shanghai office and intends to continue to use local distributors as well as direct Neogen employees to introduce the Company's products in the Chinese market.

ANIMAL SAFETY:

Animal Safety has a strong presence in several key international markets with rodenticides, disinfectants, instruments, diagnostics and veterinary products. Utilizing Company personnel in Brazil and Mexico, as well as in-country distributors and US-based exporters, these markets include Canada, Mexico and Central America, South America, the Caribbean, Australia, Europe and Asia.

GENERAL:

Sales to customers outside the United States accounted for 38.8%, 40.1% and 41.7% of the Company's total revenues for fiscal years ended May 31, 2014, 2013 and 2012, respectively.

Risks associated with export sales and foreign operations include the need for regulatory approvals, possible disruptions of product delivery, the differing product needs of foreign customers, difficulties in building and managing foreign operations, fluctuations in the value of foreign currencies, import/export duties and quotas, and unexpected regulatory, economic or political changes in foreign markets.

RESEARCH AND DEVELOPMENT

Management maintains a strong commitment to Neogen's research and development activities. The Company's product development efforts are focused on the enhancement of existing product lines and in development of new products that fit its business strategy. As of May 31, 2014, the Company employed 77 individuals in its worldwide research and development group, including immunologists, chemists and microbiologists. Research and development costs were approximately \$8.3 million, \$7.8 million and \$6.6 million representing 3.4%, 3.7% and 3.6% of total revenues in fiscal years 2014, 2013 and 2012, respectively. Management currently expects the Company's future research and development expenditures to approximate 3% to 5% of total revenues.

Neogen has ongoing development projects for new diagnostic tests and other complementary products for both the food safety and animal safety markets. Management expects that a number of these products will be commercially available at various times during fiscal years 2015 to 2017.

Portions of certain technologies utilized in some products manufactured and marketed by Neogen were acquired from or developed in collaboration with affiliated partnerships, independent scientists, governmental units, universities and other third parties. The Company has entered into agreements with these parties that provide for the payment of license fees and royalties based upon sales of products that utilize the pertinent technology. License fees and royalties expensed under these agreements amounted to \$2,278,000, \$1,837,000 and \$1,371,000 in fiscal years 2014, 2013 and 2012, respectively.

PROPRIETARY PROTECTION AND APPROVALS

Neogen uses trade secrets as proprietary protection in many of its food and animal safety products. In many cases, the Company has developed unique antibodies capable of detecting microorganisms and residues at minute levels. The supply of these antibodies, and the proprietary techniques utilized for their development, may offer better protection than the filing of patents. Such proprietary reagents are maintained in secure facilities and stored in more than one location to reduce exposure to complete destruction by natural disaster or other means.

Patent and trademark applications are submitted whenever appropriate. Since its inception, Neogen has acquired and received numerous patents and trademarks, and has several pending patents and trademarks. The patents expire at various times over the next 15 years.

Table of Contents

A summary of patents by product categories follows:

	USA	International	Expiration
Natural Toxins, Allergens & Drug Residues	2	43	2018-2038
Bacterial & General Sanitation	13	7	2014-2026
Life Science	0	7	2024
Vaccine	1	0	2018
Veterinary Instruments & Other	10	32	2015-2021
Genomics	8	1	2016-2029

The Company does not expect the near-term expiration of any patent to have a significant effect on future results of operations.

Management believes that Neogen has adequate protection as to proprietary rights for its products. However, it is aware that substantial research has taken place at universities, governmental agencies and other companies throughout the world and that numerous patents have been applied for and issued. To the extent some of the Company's products may now, or in the future, embody technologies protected by patents, copyrights or trade secrets of others, licenses to use such technologies may need to be obtained in order to continue to sell the products. These licenses may not be available on commercially reasonable terms. Failure to obtain any such licenses may delay or prevent the sale of certain new or existing products. In addition, patent litigation is not uncommon. Accordingly, there can be no assurance that the Company's existing patents will be sufficient to completely protect its proprietary rights.

One of the major areas affecting the success of biotechnology development involves the time, cost and uncertainty surrounding regulatory approvals. Neogen products requiring regulatory approval, which the Company currently has in place, include BotVax B, EqStim, ImmunoRegulin, Uniprim and BetaStar. The Company's general strategy is to select technical and proprietary products that do not require mandatory approval to be marketed. Neogen's rodenticide, disinfectant and insecticide products are subject to registration in the United States and internationally.

Neogen utilizes third-party validations on many of its disposable test kits as a marketing tool to provide its customers with the proper assurances. These include validation by the AOAC International, independently administered third-party, multi-laboratory collaborative studies and approvals by the U.S. Federal Grain Inspection Service and the U.S.D.A. Food Safety Inspection Service for the use of Company products in their operations.

PRODUCTION AND SUPPLY

Neogen manufactures its products in Michigan, Kentucky, Wisconsin, Colorado, North Carolina, Iowa and Scotland. As of May 31, 2014, there were approximately 425 full-time employees assigned to manufacturing in these locations, operating on one or two shifts; with occasional 24/7 production during high demand periods; future demand increases could be accommodated by adding shifts. Management believes it could increase the current output of its primary product lines by more than 50% using the current space available; to do so could require investment of additional capital equipment.

Manufacturing of diagnostic tests for detection of natural toxins, pathogens, food allergens, spoilage organisms and pesticides, final kit assembly, quality assurance and shipping takes place in the Company's facilities in Lansing, Michigan. Proprietary monoclonal and polyclonal antibodies for Neogen's diagnostic kits are produced on a regular schedule in the Company's immunology laboratories in Lansing. Manufacturing of diagnostic tests for the presence of dairy antibiotics in milk is completed in the Company's Lansing facilities. Generally, final assembly and shipment of diagnostic test kits to customers in Europe are performed in the Company's Ayr, Scotland facility.

Assembly and shipment of electronic readers and disposable single-use samplers takes place in the Company's facilities in Lansing. Soleris instrument readers are produced by third party vendors, quality tested in Lansing, Michigan and then shipped to customers.

Dehydrated culture media products are manufactured in a FDA-registered facility in Lansing. Products are blended following strict formulations or custom blended to customer specification and shipped directly to customers from Lansing.

Manufacturing of animal health products, pharmacological diagnostic test kits and test kits for drug residues takes place in the Company's FDA-registered facilities in Lexington. In general, manufacturing operations including reagent manufacturing, quality assurance, final kit assembly and packaging are performed by Neogen personnel. Certain animal health products that are purchased finished or that are toll manufactured by third party vendors and veterinary instruments are warehoused and shipped from the Company's Lexington facility. Other

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veterinary instruments are produced in the Company's facilities in Lansing, and are generally then shipped to Lexington, for distribution to customers.

Table of Contents

Manufacture of rodenticides and certain cleaners and disinfectants takes place in Randolph, Wisconsin. Manufacturing of rodenticides consists of blending technical material (active ingredient) with bait consisting principally of various grains. Certain cleaners and disinfectants are manufactured in Randolph, while others are purchased from other manufacturers and sold, or toll manufactured by third parties.

Neogen maintains a Lansing-based USDA-approved manufacturing plant devoted to the production of the biologic products EqStim and ImmunoRegulin. *P. acnes* seed cultures are added to media and then subjected to several stages of further processing resulting in a product that is filled and packaged within the facility. The Company's BotVax B vaccine is also produced in the Lansing facility utilizing Type B botulism seed cultures and a traditional fermentation process. All completed biologic products are then shipped to Neogen's Lexington facilities for inventory and distribution to customers.

Uniprim, a veterinary antibiotic, is manufactured in an FDA-registered facility in Fort Collins, Colorado.

With its 2010 acquisition of GeneSeek and more recent acquisitions of Igenity and Scidera Genomics, Neogen offers agricultural genetics laboratory services and bioinformatics in Lincoln, Nebraska. Through its laboratory services and bioinformatics (primarily in beef and dairy cattle, pigs, sheep, horses and dogs), GeneSeek empowers its customers to speed genetic improvement efforts, as well as identify economically important diseases. The Company purchased and renovated a building during fiscal 2014 to meet its current and future needs.

Products acquired in the November 2013 acquisition of Prima Tech continue to be manufactured in a facility in Kenansville, North Carolina. These include devices used for animal injections, topical applications and oral administration.

Chem-Tech Ltd. manufactures insecticides and other pesticides at its facility in Pleasantville, Iowa.

Neogen purchases component parts and raw materials from more than 500 suppliers. Though many of these supplies are purchased from a single source in order to achieve the greatest volume discounts, the Company believes it has identified acceptable alternative suppliers for most of its key components and raw materials where it is economically feasible to do so. There can be no assurance that the Company would avoid a disruption of supply in the event a supplier discontinues shipment of product. Shipments of products are generally accomplished within a 48-hour turnaround time. As a result of this quick response time, Neogen's backlog of unshipped orders at any given time is not significant.

COMPETITION

Although competitors vary in individual markets, management knows of no competitor that is pursuing Neogen's fundamental strategy of developing and marketing a broad line of products, ranging from disposable tests and dehydrated culture media to veterinary pharmaceuticals and veterinary instruments for a large number of food safety and animal safety concerns. For each of its individual products, the Company faces intense competition from companies ranging from small businesses to divisions of large international companies. Some of these organizations have substantially greater financial resources than the Company. Neogen competes primarily on the basis of ease of use, speed, accuracy, and other similar performance characteristics of its products. The breadth of the Company's product line, the effectiveness of its sales and customer service organizations, and pricing are also components in management's competitive plan.

Future competition may become even more intense, including the development of changing technologies, which could affect the marketability and profitability of Neogen's products. The Company's competitive position also will depend on management's ability to develop proprietary products, attract and retain qualified scientific and other personnel, develop and implement production and marketing plans and obtain patent protection. Additionally, the Company must have adequate capital resources to execute its strategy.

FOOD SAFETY:

Neogen's Food Safety segment has well established distribution of its products using Company employees in North America, Europe, Mexico and Brazil, and from an active and engaged distributor group elsewhere. With a large professional sales organization, management believes that it maintains a general competitive advantage as its sales personnel are in a position to be in contact with customers and prospects more frequently than its competitors. Additionally, Neogen has what it believes to be a unique insight into the food industry compared to clinically based competition.

Competition for pathogen detection products includes traditional methods and antibody and genetic-based platforms. Neogen's product offerings compete across the entire spectrum of methods. Competition for natural toxins and allergen detection products include instrumentation and antibody-based tests. While for these and other food safety products the Company's offerings will not always compete on all platforms in all markets, the products that are offered provide tests that can be well utilized by most customers to meet their testing needs.

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Besides its extensive product offerings and extensive distribution network, the Company focuses its competitive advantage in the areas of customer service, product performance and speed and ease of use of its products. Additionally, by aggressively maintaining itself as a low-cost producer, Neogen believes that it can be competitive with new market entrants that may choose a low pricing strategy in an attempt to gain market share.

Table of Contents

ANIMAL SAFETY:

Neogen's Animal Safety segment faces no one competitor across the products and markets it serves. In the racing industry market, the Company believes it holds a leading market share position. In the life sciences market, the Company competes against several other diagnostic and reagent companies with similar product offerings.

In the veterinary market, Neogen markets BotVax B, the only USDA approved vaccine for the prevention of botulism Type B in horses. The Company competes on other key products through differentiated product performance and superior customer and technical support. With some of its products, the Company provides solutions as a lower cost alternative and offers a private label option for its distributors.

Competition in the rodenticide market includes several companies of comparable size that offer products into similar market segments. The rodenticide retail market is not dominated by a single brand. While the technical materials used by competing companies are similar, Neogen uses manufacturing and bait formula techniques which the Company believes better attracts rodents to the product and thereby improves overall product performance.

Within the insecticide market, Chem-Tech products specifically focus on the area of insect control for food and animal safety applications. There are several competitors offering similar products, however, the Company has a proprietary formulation chemistry that optimizes the delivery and safe application of the insecticides at the customer's location. These products are currently only sold in the U.S. through a combination of direct sales and distributors.

Several companies compete for sales in the disinfectant and cleaner product segment. Neogen's products are sold through its distributor network around the world, primarily to assist in the cleaning and disinfecting of animal production facilities.

Neogen competes in the retail market by providing solutions to common retail problems—stock outs, wasted floor space, and inconsistent brand identity. The Company offers planograms and reordering systems to maximize turns and profitability for its retail customers.

Neogen entered the genomics market through its 2010 acquisition of GeneSeek, the leading commercial agricultural genetics laboratory in the U.S., and in 2012 added to its capability with the asset purchase of Igenity, which offers proprietary bioinformatics. In January 2013, Neogen acquired the assets of Scidera Genomics, LLC, a company that performs parentage testing and trait analysis, primarily for the cattle and canine industries. GeneSeek, Igenity and Scidera are not involved in cloning or the development of transgenic animals, but do employ cutting-edge technology in the area of genomics. The result of this technology allows the acceleration of natural selection through selective breeding of traits such as disease resistance and meat quality. Competition comes mainly from service providers whose primary focus is the human and pharmaceutical industries, as well as several smaller companies offering genomics services.

GOVERNMENT REGULATION

A significant portion of Neogen's products and revenues are affected by the regulations of various domestic and foreign government agencies, including the U.S. Department of Agriculture, the Environmental Protection Agency, and the U.S. Food and Drug Administration. Changes in these regulations could affect revenues and/or costs of production and distribution.

Neogen's development and manufacturing processes involve the use of certain hazardous materials, chemicals and compounds. Management believes that the Company's safety features for handling and disposing of such commodities comply with the standards prescribed by local, state and federal regulations; however, changes in such regulations or rules could involve significant costs to the Company and could be materially adverse to its business.

The rodenticides, insecticides, disinfectants and sanitizers manufactured and distributed by Neogen are subject to Environmental Protection Agency and various state regulations. In general, any international sale of the product must also comply with similar regulatory requirements in the country of destination. Each country has its own individual regulatory construct with specific requirements (e.g., label in the language of the importing country). To the best of our knowledge Neogen products are in compliance with applicable regulations in the countries where such products are sold.

Dairy products used in National Conference on Interstate Milk Shipments (NCIMS) and other milk monitoring programs are regulated by the FDA. Before products requiring FDA approval can be sold in the U.S., extensive product performance data must be submitted in accordance with the FDA approved protocol administered by AOAC Research Institute (AOAC RI). Following approval

Table of Contents

of a product by the FDA, the product must also be approved by NCIMS, an oversight body that includes state, federal and industry representatives. Our BetaStar U.S. dairy antibiotic residue testing product has been approved by the FDA, NCIMS, and AOAC RI. While some foreign countries accept AOAC RI approval as part of their regulatory approval processes, many countries have their own regulatory processes.

Many of the food safety diagnostic products to detect allergens, spoilage organisms and mycotoxins do not require direct government approval. However, the Company has pursued AOAC approval for many of the products to enhance their marketability. Products for mycotoxin detection, which are used by federal inspectors, must be approved by the USDA. Neogen has obtained and retained the necessary approvals to conduct its current operations.

Neogen's veterinary vaccine products and one pharmaceutical product require government approval to allow for lawful sales. The vaccine products are approved by United States Department of Agriculture, Center for Veterinary Biologics (USDA-CVB) and the pharmaceutical product is approved by the FDA. The products, and the facilities in which they are manufactured, are in a position of good standing with both agencies. The Company has had no warning letters based on any review or inspection, no recalls on any of these products, and knows of no reason why its freedom to manufacture and market such products in the future is in any danger.

Other animal safety and food safety products generally do not require additional registrations or approvals. However, Neogen's regulatory staff routinely monitors amendments to current regulatory requirements to ensure compliance.

EMPLOYEES

As of May 31, 2014, the Company employed 926 full-time persons. None of the employees are covered by collective bargaining agreements. There have been no work stoppages or slowdowns due to labor-related problems, and management believes that its relationship with its employees is generally good. Employees having access to proprietary information have executed confidentiality agreements with the Company.

ITEM 1A. RISK FACTORS

An investment in our common shares involves a high degree of risk. The risks described below are not the only ones that an investor faces. Additional risks that are not yet known to us or that we currently think are immaterial could also impair our business, financial condition or results of operations. If any of the following risks actually occurs, our business, financial condition or results of operations could be adversely affected.

Risks Relating to Our Business

Our business strategy is dependent on successfully identifying and integrating acquisitions as well as promoting internal growth.

Our business has grown significantly over the past several years as a result of both internal growth and acquisitions of existing businesses and their products. Identifying and pursuing acquisition opportunities, integrating these acquisitions into our business and managing their growth requires a significant amount of management's time and skill. We cannot assure that we will be effective in identifying, integrating or managing future acquisition targets. Our failure to successfully integrate and manage a future acquisition may have a material adverse effect on our operating results and financial condition.

In addition, if we continue to experience growth in our business, such growth could place a significant strain on our management, customer service, operations, sales and administrative personnel and other resources. To serve the needs of our existing and future customers we will be required to recruit, train, motivate and manage qualified employees. We have incurred and will continue to incur significant costs to retain qualified management, sales and marketing, engineering, production, manufacturing and administrative personnel, as well as expenses for marketing and promotional activities. Our ability to manage our planned growth depends upon our success in expanding our operating, management, information and financial systems, which might significantly increase our operating expenses.

We may not be able to effectively manage our future growth, and if we fail to do so, our business, financial condition and results of operations would be adversely affected.