

MDS INC.
ANNUAL INFORMATION FORM
FOR THE YEAR ENDED OCTOBER 31, 2009

January 25, 2010
Toronto, Canada

MDS INC.
ANNUAL INFORMATION FORM

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MDS INC.
ANNUAL INFORMATION FORM

INTERPRETATION

In this Annual Information Form (AIF), “we”, “us”, “our”, “MDS”, and “the Company” refer to MDS Inc., its subsidiaries and joint ventures. In this AIF, all references to specific years are references to the fiscal year ended October 31, 2009. All references to “\$” or “dollars” are references to U.S. dollars and all reference to C\$ are to Canadian dollars, unless otherwise specified.

Certain terms and abbreviations used in this AIF are defined in **Appendix II - Definitions**.

ITEMS AFFECTING THE COMPARABILITY OF FINANCIAL INFORMATION OF PRIOR YEARS

In the first quarter of fiscal 2009, the Company’s Board of Directors formed a Special Committee to review strategic alternatives to enhance shareholder value. During fiscal 2009, as a result of the strategic review process, the Company sold its MDS Pharma Services Phase II-IV and Central Labs operations and announced our intention to sell MDS Pharma Services Early Stage operations. MDS also announced that the Company entered into an agreement to sell MDS Analytical Technologies (AT Sale).

All financial references in this document, unless otherwise indicated, are based on continuing operations, primarily consisting of MDS Nordion and corporate operations. All other operations are reported as discontinued operations including MDS Analytical Technologies, MDS Early Stage Pharma Services, and previously divested operations including our Phase II-IV and Central Lab operations of MDS Pharma Services, the Diagnostic Laboratories business, certain early-stage pharmaceutical research services operations, and our interests in Source Medical Corporation (Source). All financial references for the prior years have been restated to reflect this treatment.

DOCUMENTS INCORPORATED BY REFERENCE

The following sections of the MDS 2009 Annual Report Financial Review (2009 Financial Review) are incorporated by reference into this AIF:

1. The audited consolidated financial statements of MDS Inc. for the years ended October 31, 2009, October 31, 2008 and October 31, 2007, reported on by Ernst & Young LLP, Chartered Accountants (2009 Financial Statements) on pages 41 to 46 of the 2009 Financial Review; and
2. Management's Discussion and Analysis of financial condition and results of operations of MDS Inc. for the fiscal year ended October 31, 2009 (2009 MD&A) contained on pages 1 to 40 of the 2009 Financial Review.
3. The Management Proxy Circular dated September 17, 2009 issued in relation to the Special Meeting of Shareholders of MDS Inc. on October 20, 2009 regarding the approval of the sale of MDS Analytical Technologies.

Also incorporated by reference is the Management Proxy Circular, dated January 8, 2010, with respect to the March 11, 2010 Annual and Special Meeting of Shareholders.

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

From time to time, we make written or oral forward-looking statements within the meaning of certain securities laws, including under applicable Canadian securities laws and the "safe harbour" provisions of the United States Private Securities Litigation Reform Act of 1995. This document contains forward-looking statements, including statements with respect to the impact of the completion of the sale of MDS Analytical Technologies on the Company's operations and financial results, the strategy of the continuing businesses, the proposed use of proceeds from the sale of MDS Analytical Technologies, if completed, the Company's intention to sell MDS Pharma Services' Early Stage operations, as well as statements with respect to our beliefs, plans, objectives, expectations, anticipations, estimates and intentions. The words "may", "could", "should", "would", "outlook", "believe", "plan", "anticipate", "estimate", "expect", "intend", "forecast", "objective", "optimistic", and words and expressions of similar import, are intended to identify forward-looking statements.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, which give rise to the possibility that predictions, forecasts, projections and other forward-looking statements will not be achieved. We caution readers not to place undue reliance on these statements as a number of important factors could cause our actual results to differ materially from the beliefs, plans, objectives, expectations, anticipations, estimates and intentions expressed in such forward-looking statements. These factors include, but are not limited to: management of operational risks; the strength of the global economy, in particular the economies of Canada, the U.S., the European Union, Asia, and the other countries in which we conduct business; the stability of global equity markets; our ability to complete the sale of MDS Analytical Technologies and our intended sale of MDS Pharma Services Early Stage operations in a timely manner, or at all; our ability to retain customers as a result of any perceived uncertainty relating to the planned sale of MDS Analytical Technologies and the intended sale of MDS Pharma Services Early Stage operations; the

fact that our operations will be substantially reduced as a result of the sale of MDS Analytical Technologies and the intended sale of MDS Pharma Services Early Stage operations; liabilities that we will retain from businesses sold; our ability to complete other strategic transactions and to execute them successfully; our ability to remain in compliance with our senior unsecured notes and credit facilities covenants; our ability to negotiate future credit agreements which may or may not be on terms favourable to us; our ability to secure a reliable supply of raw materials, particularly cobalt and critical medical isotopes including the return to service of the National Research Universal reactor owned and operated by Atomic Energy of Canada Limited; the impact of the movement of certain currencies relative to other currencies, particularly the U.S. dollar, Canadian dollar and the Euro; changes in interest rates in Canada, the U.S., and elsewhere; the effects of competition in the markets in which we operate; the timing and technological advancement of new products introduced by us or by our competitors; our ability to manage our research and development; the impact of changes in laws, trade policies and regulations, and enforcement thereof; regulatory actions; judicial judgments and legal proceedings; our ability to maintain adequate insurance; our ability to successfully realign our organization, resources and processes; our ability to retain key personnel; our ability to have continued and uninterrupted performance of our information technology systems; our ability to compete effectively; the risk of environmental liabilities; our ability to maintain effectiveness of our clinical trials; new accounting standards that impact the policies we use to report our financial condition and results of operations; uncertainties associated with critical accounting assumptions and estimates; the possible impact on our businesses from third-party special interest groups; our ability to negotiate and maintain collective bargaining agreements for certain of our employees; natural disasters; public health emergencies and pandemics; international conflicts and other developments including those relating to terrorism; other risk factors described in section 3.10; and our success in anticipating and managing these risks.

The foregoing list of factors that may affect future results is not exhaustive. When relying on our forward-looking statements to make decisions with respect to the Company, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. We do not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by us or on our behalf, except as required by law.

1. CORPORATE STRUCTURE

1.1 Jurisdiction of Incorporation

MDS Inc. was incorporated on April 17, 1969 under the laws of the Province of Ontario under the name Medical Data Sciences Limited. The Company changed its name to MDS Health Group Limited in April of 1973 and to MDS Inc. in November 1996. The Company was continued under the *Canada Business Corporations Act* (CBCA) in October 1978 and remains subject to that statute.

The head office of MDS, and its principal place of business, is located at 2810 Matheson Boulevard East, Suite 500, Mississauga, Ontario, Canada, L4W 4X7. MDS combined its head-office location from two nearby office locations into the current premises in April 2009.

1.2 Current Organization

On February 2, 2009, our Board of Directors formed a Special Committee to review strategic alternatives to enhance shareholder value. The Special Committee reviewed an extensive range of strategic alternatives for MDS.

On September 2, 2009, MDS announced that it entered into an agreement to sell MDS Analytical Technologies and that it intends to sell our MDS Pharma Services Early Stage business. MDS expects to complete the sale of MDS Analytical Technologies during the first calendar quarter of 2010. On July 1, 2009, MDS completed the sale of the Phase II-IV operations; as of October 31, 2009, the Company completed the sale of the Central Lab operations. Assuming completion of the aforementioned divestitures, MDS expects to remain a publicly traded entity consisting solely of the MDS Nordion business and corporate operations.

Significant operating subsidiaries and partnerships are defined as those companies/partnerships that contribute 10% or more of the consolidated revenues or consolidated operating income of MDS, or account for 10% or more of the consolidated total assets of the Company. The significant operating subsidiaries and partnerships of the Company set forth below include subsidiaries whose results are reported in discontinued operations in the consolidated financial statements.

Continuing Operations

- MDS (Canada) Inc., a Canadian (CBCA) corporation.

Discontinued Operations

- MDS Analytical Technologies (US) Inc., a Delaware corporation;
- MDS Pharma Services (US) Inc., a Nebraska corporation;
- MDS Pharma Services GB Limited, a company incorporated in England and Wales;
- MDS Pharma Services Central Lab, S.A.S. incorporated in France; and
- Applied Biosystems/MDS Analytical Technologies Instruments partnership, an Ontario partnership.

MDS beneficially owns, directly or indirectly, 100% of the shares of each of the above-named operating subsidiaries and a 50% interest in the above-named partnership.

The entities outlined above are consolidated in the financial statements of MDS and are referred to hereafter as subsidiaries, with the exception of Applied Biosystems/MDS Analytical Technologies Instruments, which is accounted for on an equity basis and is referred to hereafter as a joint venture.

Until February 26, 2007, the Company conducted the majority of its diagnostic laboratories business through the following partnerships:

- MDS Laboratory Services, L.P., a partnership established under the laws of Ontario in which MDS held an indirect 99.6% interest; and
- Metro-McNair Clinical Laboratories Limited Partnership (Metro-McNair), a limited partnership established under the laws of British Columbia in which MDS held a 75% interest.

On February 26, 2007, the Company sold its interest in its diagnostic laboratories business, including its interest in these partnerships, to Borealis Infrastructure Management Inc. (see **Section 2.1 - General Development of the Businesses of MDS: Overview**).

In addition to its subsidiaries, including its ownership interests previously described, the Company owns: a 99.6% non-controlling equity interest in LPBP Inc., an Ontario corporation, through which it held its former indirect interest in the Ontario diagnostic laboratories business; and a 52% interest in Lumira Capital Corp. (formerly MDS Capital Corp.). Lumira Capital Corp. is described in **Section 3.6 - Significant Investees**.

2. GENERAL DEVELOPMENT OF THE BUSINESSES OF MDS

2.1 Overview

MDS is a global life sciences company that provides market-leading products and services that our customers need for the development of drugs, and for the prevention, diagnosis and treatment of disease. We have been a leading global provider of pharmaceutical contract research, medical isotopes and analytical instruments. We have been operating with three business segments: MDS Nordion, which is focused on medical imaging and radiotherapeutics, and sterilization technologies. MDS Pharma Services, which provides pharmaceutical contract research; and MDS Analytical Technologies, which involves the development, manufacture, and sale of analytical instruments.

Key events of fiscal 2009

- | | |
|------------------|--|
| February 2, 2009 | • MDS announces formation of Special Committee to review strategic alternatives. |
| May 18, 2009 | • MDS incurs medical-isotope supply disruption due to Atomic Energy of Canada Limited shutdown of the National Research Universal reactor. |

- | | |
|-------------------|---|
| June 1, 2009 | • MDS announces agreement to sell MDS Pharma Services Phase II-IV operations and its intention to sell its MDS Pharma Services Central Labs operations. |
| July 1, 2009 | • MDS Pharma Services Phase II-IV operations sold for \$50 million in cash. |
| September 2, 2009 | • MDS announces strategic repositioning. |
| | • MDS announces its intention to sell its remaining MDS Pharma Services Early Stage operations. |
| | • MDS announces agreement to sell MDS Analytical Technologies for \$650 million in cash. |
| | • MDS announces intent to return \$400 million to \$450 million of proceeds from the AT Sale to shareholders through a Substantial Issuer Bid. |
| October 31, 2009 | • MDS Pharma Services Central Labs operations sold for \$6 million in cash. |

As noted above, in 2009 the Board of Directors formed a Special Committee to review strategic alternatives to enhance shareholder value. The strategic review of the Company's businesses resulted in the sale of MDS Pharma Services Phase II-IV (Phase II-IV) to INC Research, Inc. (INC) for \$50 million and MDS Pharma Services Central Labs (Central Labs) to Czura Thornton for \$6 million. On September 2, 2009, MDS announced that the Company had entered into a definitive agreement to sell MDS Analytical Technologies to Danaher Corporation (Danaher) for \$650 million and our intention to sell the remaining Early Stage (Early Stage) operations of MDS Pharma Services (see **Section 2.4.3 – Divestitures, Discontinuances and Other Transactions**). Additional details of the Board of Directors decision to sell MDS Analytical Technologies can be found under "Background to the Sale" in the Company's Management Proxy Circular dated September 17, 2009. Assuming completion of the aforementioned divestitures, we expect MDS to remain a publicly traded entity consisting solely of the MDS Nordion business and corporate functions.

In 2005, the Company announced a strategic plan (2005 Strategic Plan) to focus on the global life sciences market. In November 2005, the Company sold its interest in Source to Cardinal Health Inc. for C\$79 million, and in April 2006, the Calgary Health Region in Calgary, Canada exercised its option to acquire the Company's partnership interest in Calgary Laboratory Services (CLS) for C\$21 million, (see **Section 2.4.3 – Divestitures, Discontinuances and Other Transactions**).

On February 26, 2007, the Company completed another step in the 2005 Strategic Plan by selling its remaining diagnostic laboratories businesses to Borealis Infrastructure Management Inc. for gross proceeds of C\$1.3 billion, (see **Section 2.4.3 – Divestitures, Discontinuances and Other Transactions**).

In line with the Company's 2005 Strategic Plan, on March 20, 2007, MDS finalized the acquisition of Sunnyvale, U.S.-based Molecular Devices Corporation (MD), a provider of measurement tools for high-content screening, cellular analysis, and biochemical testing for, \$621 million (see **Section 2.4.2 – Acquisitions**).

In 2007, MDS carried out restructuring activities and took steps to further optimize the global footprint of MDS Pharma Services. During 2007, the Company finalized the sale of its Phase I clinical facility in Hamburg, Germany, transferred its Liquid Chromatography/Mass Spectrometry

(LC/MS) bioanalytical, and drug metabolism and pharmacokinetics (DMPK) operations from Montreal, Canada to its Lincoln, U.S. and Bothell, U.S. sites, respectively. The Company also consolidated Central Laboratory operations from Hamburg, Germany into Baillet, France and transferred bioanalytical operations in Sittingbourne, U.K. to its Zurich, Switzerland site. The Company invested in new customer-facing information technology (IT) systems, expanded Central Laboratory operations in Beijing, China, and initiated a 300-bed expansion at its Phase I facility in Phoenix, U.S. The latter opened in January 2008.

In 2008, the Company continued to execute its 2005 Strategic Plan. During the year, the Company closed several MDS Pharma Services offices, reduced headcount in various businesses and continued to transition the MDS Analytical Technologies primary manufacturing base to Asia. In May 2008, MDS completed the sale of its non-core external beam therapy and self-contained irradiator products lines. In June 2008, the Company acquired California-based Blueshift Biotechnologies, Inc., a developer of screening platforms for life sciences research.

On February 2, 2009, our Board of Directors formed a Special Committee to review strategic alternatives to enhance shareholder value. The Special Committee reviewed an extensive range of strategic alternatives for MDS and, on September 2, 2009, MDS announced a strategic repositioning of the Company that it believed would provide the greatest opportunity to unlock the value of MDS's businesses in the near-term, and enable a substantial portion of the sale proceeds to be returned to shareholders. The strategic review also considered the significant negative impact on the business from the economic downturn, and the unexpected and prolonged shutdown of the Atomic Energy of Canada Limited (AECL) National Research Universal (NRU) reactor.

Assuming the completion of the sale of the MDS Analytical Technologies business, MDS currently intends to retire all the outstanding Senior Unsecured Notes, cancel its existing revolving credit facility, and currently intends to distribute approximately \$400 million to \$450 million of the sale proceeds to shareholders pursuant to a substantial issuer bid. The actual amount used to fund the Substantial Issuer Bid will be determined at the time the bid is commenced, and will take into account the expected impact on the liquidity of the Common Shares subsequent to the Substantial Issuer Bid and current estimates of future cash requirements to fund transactions and restructuring costs, ongoing operations and future expenditures. The Company currently intends to proceed with a Substantial Issuer Bid within 30 days following completion of the sale of MDS Analytical Technologies.

Upon completion of the sales of MDS Analytical Technologies and MDS Pharma Services Early Stage operations, we expect MDS to remain a publicly traded entity consisting solely of the MDS Nordion business and corporate operations. As part of the strategic repositioning, we are currently planning to seek shareholder approval at the next Annual and Special Meeting of Shareholders to be held in March 2010 to change the Company's name to Nordion Inc. The Company also intend to wind-down the existing head-office functions in Toronto, Canada, which currently employ approximately 150 people, and to establish a new corporate office in Ottawa, Canada. This transition is intended to result in the establishment and hiring of approximately 50 positions in Ottawa with the remaining 100 current corporate positions being eliminated due to the reduced scale of the ongoing operations.

Following the intended business sales, our operations would consist of the MDS Nordion business as well as certain corporate functions, which we report as Corporate and Other in our 2009 annual

consolidated financial statements and Management Discussion and Analysis (MD&A). Included in Corporate and Other are finance, information technology and systems, real estate, human resources, and certain assets and liabilities expected to be retained by the Company upon the completion of the aforementioned strategic repositioning.

2.1.1 Life Sciences

The Company currently has three life sciences business units: MDS Nordion, a global leader in the provision of innovative technologies for use in medical imaging and radiotherapeutics, and sterilization technologies; MDS Pharma Services, which provides pre-clinical and early-stage clinical research services; and MDS Analytical Technologies, which designs, manufactures and sells analytical instruments. In 1991, pursuant to a privatization initiative by the Government of Canada and under the *Nordion and Theratronics Divestiture Authorization Act*, a statute of the Government of Canada, MDS entered into the medical-isotope manufacturing and distribution business with the acquisition of an 83% interest in Nordion International Inc. (Nordion) from the Canadian Development Investment Corporation. In 1995, the Company increased its ownership interest in Nordion to 100%.

Also in 1995, MDS entered into the pharmaceutical contract research business with the acquisition of several privately held companies in the United States and, in fiscal 2000, acquired Phoenix International Life Sciences Inc., a public company based in Montreal, Canada with additional operations in the United States and Europe. These pre-clinical and early-stage clinical research services businesses collectively operate globally under the name MDS Pharma Services. In 2009, MDS sold our Late Stage operations and we currently intend to sell our Early Stage operations. If we complete the sale of our Early Stage operations, MDS will no longer compete in the pharmaceutical contract research industry.

In 1981, MDS entered the analytical instruments business with the acquisition of Sciex (acronym for SCientific EXport). In 2007, MDS expanded its analytical instruments business with the acquisition of Molecular Devices (MD) and renamed this business “MDS Analytical Technologies”. In 2009, we entered into an agreement to sell the entire MDS Analytical Technologies business, including both the Sciex and MD businesses, to Danaher Corporation. We expect the sale to close in the first calendar quarter of 2010.

2.1.2 Diagnostic Laboratories

Until February 2007, the Company also operated in the health-care industry in Canada primarily through its diagnostic laboratories business, MDS Laboratory Services. The diagnostic laboratories business was the largest operator of private-sector clinical diagnostics laboratories in Canada. Services provided by the Company included clinical laboratory testing for physicians and non-hospital health-care institutions, management of hospital laboratories under contract; and other support services for clinical diagnostics. MDS completed the sale of the diagnostic laboratories business to Borealis Infrastructure Management Inc. on February 26, 2007 as disclosed in **Section 2.4.3 – Divestitures, Discontinuances and Other Transactions.**

2.1.3 Customers

Customers of MDS Nordion include a broad range of manufacturers of medical products including pharmaceutical manufacturers, biotechnology companies, manufacturers of medical supplies and devices, plus academic and government institutions. The Company's other two businesses – MDS Pharma Services and MDS Analytical Technologies - also sell to a similar group of customers. Certain of MDS Nordion's radiotherapeutic products are sold directly to health-care providers including hospitals and clinics. MDS Nordion also provides products and services related to sterilization to customers in the food and consumer goods industries, and MDS Analytical Technologies provides products and services to food and environmental-testing industries, which are referred to as the Applied Market. The customers of MDS Nordion and the Company's other businesses are located in virtually all major international markets.

Through its former Canadian diagnostic laboratories business, MDS provided products and services directly to health-care providers, including physicians and hospitals.

For the year ended October 31, 2009, one major customer accounted for \$38 million or 17% (2008 - \$53 million or 18%; 2007 - \$55 million or 19%) of the Company's continuing operations' product revenues.

The Company's business and customer base are global. MDS's total revenues, as invoiced to customers in 2009, were approximately 55% U.S., 13% Europe, 19% Asia, 3% Canada, and 10% rest of world.

2.1.4 Employees

As at October 31, 2009, MDS had more than 3,600 employees in 13 countries. MDS Nordion employs approximately 650 people and the MDS Corporate Headquarters employs approximately 150 people. The headcount at MDS Pharma Services and MDS Analytical Technologies on October 31, 2009 was approximately 1,700 and 1,100 employees, respectively.

2.2 Recent Industry Developments

MDS's overall business including MDS Nordion, as well as both MDS Pharma Services and MDS Analytical Technologies, serve the life sciences industry including pharmaceutical, biotechnology, academic, government and other areas of the health-care market. MDS has been affected by a number of factors that affect the life sciences market in general including:

- growth in the global demand for drugs;
- pressure to accelerate drug development and contain costs;
- investment in new technologies associated with the development of sophisticated drug treatment options;
- increased regulatory pressure particularly concerning food, drug, and medical product safety; and

- the state of the global economy including access to capital.

In addition, MDS Nordion has been directly affected by the global fragility of medical-isotope supply.

2.2.1 Industry Developments – MDS Nordion

MDS Nordion's medical imaging and radiotherapeutic products are focused on the diagnosis and treatment of disease. Governments in the U.S., Canada, Europe and elsewhere in the world have recognized the benefits of medical procedures that help provide for early diagnosis of disease and generally support reimbursement of these procedures, which in turn encourages use by physicians and patients. Medical isotopes are most commonly used in imaging for heart disease and the detection and monitoring of cancer. As well, there have been a number of products developed that use medical isotopes to provide radiation which, when combined with another drug compound, can be used to target treatment to cancerous cells. As with any drug treatment, when these radiotherapeutic products demonstrate effectiveness and receive regulatory approval, they are adopted for use in patients and usually accompanied by reimbursement by government healthcare organizations and/or private insurers.

The segment of the health-care industry that is involved in use of medical isotopes for the diagnosis and treatment of disease is affected by trends of the broader pharmaceutical industry, as well as certain other factors, particularly related to product supply. Some of the key drivers that are increasing the global use of drugs for the diagnosis and treatment of disease, including those drugs that utilize medical isotopes, include: the improvement of health-care systems and standards in developing countries, including increased access and reimbursement for medical procedures and treatments in these countries; the aging of the population, particularly in many of the developed countries; and increased incidence of disease related to obesity and other factors.

The majority of the global supply of medical isotopes are produced from five multi-purpose research reactors, all of which are over 40 years old. These reactors are the AECL's NRU reactor in Chalk River, Canada; the European Commission's High Flux Reactor (HFR) in Petten, Netherlands; the Centre d'Etude de l'Energie Nucleaire's Belgian Nuclear Radiopharmacy Centre (BR2) in Mol, Belgium; the Commissariat a l'Energie Atomique's Osiris reactor in Saclay, France, and the Nuclear Energy Corporation of South Africa's (NЕСSA) SAFARI-1 reactor in Pelindaba, South Africa. In the past several years, and again in 2010, two of these reactors - AECL's NRU reactor in Canada and the HFR in the Netherlands - have been or are expected to be out of service for an extended period of time. The NRU reactor is currently out of service and, according to AECL, is expected to be repaired and online by the end of the first calendar quarter of 2010. The HFR is expected to be out of service for approximately six months beginning in mid-February 2010. As a result of past and present outages, there have been several periods where there has been a global shortage in the supply of medical isotopes. In addition, these five reactors use highly enriched uranium (HEU) in the production of medical isotopes. Many countries, led by the U.S. government, are working to eliminate the export and use of HEU due to concerns over the proliferation of nuclear weapons and safety, and convert to low-enriched uranium (LEU). In this regard, in November 2009, Bill H.R. 3276, also known as, the American Medical Isotopes Production Act, was passed by the House of Representatives. Included in H.R. 3276 is language related to phasing out the export of all HEU for use in making medical isotopes within a decade. It is uncertain whether the bill will become law, including the phasing out of exports of HEU. As a result of the disruptions of medical-isotope

supply and the potential impact of the focus on conversion to LEU to produce medical isotopes, the medical-isotope industry is working toward developing new technologies for viable long-term supply alternatives to produce medical isotopes, alongside the use of additional medical isotopes produced by methods other than nuclear reactors, including cyclotrons.

The sterilization technology segment of the health-care industry is focused on the prevention of disease through the sterilization of medical products and devices, as well as food and consumer products. Medical products and devices make up the majority of current demand, where growth is primarily driven by growth in the number of medical procedures worldwide and overall global health-care spending. A smaller, but likely faster growing part of the current sterilization market encompasses the sterilization of food and consumer products. As there has been an increase in consumer acceptance of irradiated and sterilized products, these market segments have become an area of focus within the industry.

2.2.2 Industry Developments – MDS Analytical Technologies and MDS Pharma Services

The demand for the services of Contract Research Organizations (CROs) and analytical instrument products within the life sciences industry has declined over the past 12 – 18 months, primarily as a result of large pharmaceutical company mergers and consolidation within the pharmaceutical industry, lack of financing for biotechnology companies, and broader economic conditions. As a result, many pharmaceutical and biotechnology companies have delayed or cancelled certain drug-development programs as they reassessed their drug-development priorities in an effort to reduce costs and improve the effectiveness of their Research and Development (R&D) programs. As well, with the decrease in the availability of capital during the economic downturn, a number of biotechnology companies were unable to obtain necessary funding, and therefore, had to cancel some, or all, of their development activities. In addition, decreased spending by life sciences companies has resulted in a delay and/or decline in spending for new capital equipment such as mass spectrometers and other instruments used in drug research and development, and in the Applied Markets for the food, water and other safety testing.

2.3 Business Focus of MDS

MDS Inc. has operated as a global life sciences company that provides market-leading products and services that its customers need for the development of drugs, diagnosis and treatment of disease. The Company has been operating with three business segments: MDS Nordion, which is focused on molecular imaging and radiotherapeutics, and sterilization technologies; MDS Pharma Services, which provides pharmaceutical contract research; and MDS Analytical Technologies, which involves the development, manufacture, and sale of analytical instruments.

On September 2, 2009, the Company announced that as a result of a strategic repositioning, it intended to focus its ongoing operations on its MDS Nordion business.

MDS Nordion (see **Section 3.2 – MDS Nordion – Continuing Operations**) is a global leader and historically has supplied more than half of the world's medical isotopes for medical imaging and radiotherapeutics to help diagnose and treat disease. MDS Nordion is also the leading provider of sterilization technologies for disease prevention. Securing reliable sources of supply for key isotopes and building safe, dependable logistics capability are key strategic objectives for this business. MDS

Nordion is also focused on identifying new uses for medical isotopes and building the necessary manufacturing and development capabilities to be the provider of choice for companies that are developing new products with applications employing isotopes.

Discontinued Operations

MDS Pharma Services (see **Section 3.3 – MDS Pharma Services – Discontinued Operations**) offers global pharmaceutical research services with a focus on building global scale and delivering quality, on-time studies through uniform global quality practices and procedures. MDS Pharma Services is one of the largest CROs in early-stage research (Discovery through Phase IIa).

MDS Analytical Technologies (see **Section 3.4 – MDS Analytical Technologies – Discontinued Operations**) is a global leader in certain key life sciences instruments and products which are sold to pharmaceutical, biotechnology and academic customers. This business unit relies heavily on leading-edge research and engineering, as well as extensive expertise in molecular and cell biology and chemistry to develop mass spectrometers and bioanalytical measurement instruments that target a clear advantage over competitive offerings.

2.4 Financial and Other Developments

Factors affecting the comparability of the Company's financial data for fiscal years 2006 through 2009 include the following:

2.4.1 Capital Structure

- In December 2002, MDS completed a private placement of \$311 million of Senior Unsecured Notes. The Senior Unsecured Notes bear interest at rates between 5.52% and 6.19% per annum, and have maturities ranging from December 2009 to December 2014. The Company repaid approximately \$23 million in December 2009, and has now made scheduled repayments of over \$113 million. Following the completion of the sale of MDS Analytical Technologies, the Company intends to use the sale proceeds plus existing cash on hand, to redeem the balance of the Senior Unsecured Notes.
- Following the completion of the sale of MDS Analytical Technologies, MDS currently intends to return between \$400 million and \$450 million to shareholders by way of a share buyback through a Substantial Issuer Bid. The actual amount will be determined at the time the bid is commenced and will take into account, among other things, the expected impact on the liquidity of the Common Shares of MDS subsequent to the intended substantial issuer bid. The Company expects the sale of MDS Analytical Technologies to be completed in the first calendar quarter of 2010.
- In July 2005, the Company entered into a C\$500 million, five-year committed, revolving credit facility with a syndicate of lenders. This facility is scheduled to expire July 14, 2010 and was unused as of October 31, 2009. Upon the closing of the sale of MDS Analytical Technologies, we would not be able to access the C\$500 million revolving credit facility under the terms of the associated credit facility agreement. As a result of losing access to the credit facility, we would also be required to cash-collateralize approximately \$20 million of

existing letters of credit. We expect to retain sufficient cash from the sale of the businesses in absence of having a revolving credit facility. Due to the current higher costs and restrictions associated with a new revolving credit facility, we are not in negotiations for a new credit facility. We may, however, enter into a new credit facility if terms become more favourable.

- In April 2007, MDS completed a Substantial Issuer Bid and repurchased approximately 22.8 million Common Shares for \$441 million at a price of C\$21.90 per share, reducing the number of Common Shares outstanding from approximately 144 million to 122 million.
- In 2008, under the Company's Normal Course Issuer Bid, we repurchased approximately 2.9 million shares, reducing the number of Common Shares outstanding to approximately 120 million. Our Senior Unsecured Notes contain a covenant that restricts the Company's use of cash for certain purposes if cumulative net income from the date of issuance of the notes falls below a predefined amount. As a result of the write-off of the MAPLE Facilities in fiscal 2008, the cumulative net income was below the amount defined in the debt covenants. The restrictions on the use of cash include the repurchase of shares, payment of dividends and investments in businesses that the Company does not control. We currently expect these restrictions to remain in place until the Senior Unsecured Notes are retired.
- In fiscal 2009, the Company did not make any share repurchases.

2.4.2 Acquisitions

- On March 20, 2007, MDS completed the acquisition of Sunnyvale, U.S.-based Molecular Devices Corporation (MD), a leading provider of high-performance measurement tools for high-content screening, cellular analysis, and biochemical testing. The total cost of the acquisition was \$621 million, including the cost of the tender offer, the cost to acquire outstanding in-the-money options held by MD employees, and transaction costs. Upon completion of this acquisition, MDS established a new business unit, MDS Analytical Technologies, which combined MDS Sciex with MD.
- In the third quarter of fiscal 2008 MDS Analytical Technologies acquired Blueshift Biotechnologies Inc. of Sunnyvale, California. The major product suite is the IsoCyte™ benchtop laser scanning cytometer technology which compliments our microarray product line within the BioResearch line of business.

Both of these acquisitions are being sold as part of the sale of MDS Analytical Technologies to Danaher.

2.4.3 Divestitures, Discontinuances and Other Transactions

- In 2005, the Company announced a strategic plan to focus on the global life sciences market. During 2005, the Company's interest in Source was classified as a discontinued operation, and as stated previously, in November, 2005, the Company disposed of its interest in Source. In addition, during 2006, the Company's partner in CLS exercised its right to buy out the Company's partnership interest.

- In 2005, the Company approved a plan to divest its pharmaceuticals, fermentation biopharmaceuticals/biosafety, and in vitro Pharmacology operations within the MDS Pharma Services business unit. These businesses were classified as discontinued operations. During 2006, these businesses were either sold or shut down.
- In February 2006, MDS and Atomic Energy of Canada Limited (AECL) reached an agreement on disputes related to the MAPLE Facilities, which resulted in MDS exchanging its ownership of the uncompleted MAPLE Facilities for a long-term capital lease of the MAPLE Facilities and a long-term isotope supply contract, (See **Section 3.2 – MDS Nordion – Continuing Operations**). Under the 2006 agreement, AECL assumed complete ownership of the MAPLE Facilities and took responsibility for all costs associated with completing the facilities.
- On May 16, 2008, AECL and the Government of Canada announced their intention to discontinue AECL's work on the MAPLE Facilities at AECL's Chalk River, Canada laboratories. During the fourth quarter of fiscal 2008, MDS wrote-off the long-term capital lease associated with the MAPLE Facilities.
- On October 5, 2006, the Company entered into a series of agreements to sell its Canadian diagnostics laboratory businesses, MDS Diagnostic Services, to Borealis Infrastructure Management Inc. for gross proceeds of C\$1.3 billion. The sale was completed on February 26, 2007.
- On May 1, 2008, MDS Nordion sold its external beam therapy and self-contained irradiator product lines to Best Medical International Inc.
- On July 1, 2009, the Company closed the sale of its MDS Pharma Services Phase II-IV operations to INC Research, Inc.
- On September 2, 2009, the Company entered into an agreement to sell MDS Analytical Technologies to Danaher Corporation for gross proceeds of US\$650 million. The sale is expected to close by March 31, 2010. At the same time, the Company announced that it is seeking a buyer for its MDS Pharma Services Early Stage business. The Company has not yet entered into an agreement to sell its Early Stage business.
- On October 31, 2009, the Company closed the sale of its MDS Pharma Services Central Labs operations to Czura Thornton.

2.4.4 MDS Nordion Strategic Considerations

As a participant in the nuclear industry, MDS Nordion is subject to the Nordion and Theratronics Divestiture Authorization Act (Canada). This Act effectively imposes restrictions on the beneficial ownership or control of voting shares of MDS (Canada) Inc., a wholly owned subsidiary of MDS and the entity which holds the Nordion assets, by “non-residents” of Canada (as such term is defined in the Act). In addition, if MDS Nordion or any of its assets were to be the subject of an acquisition or merger transaction with a third party, such transaction would need to comply with competition statutes in Canada, and other jurisdictions in which we carry on business to assess whether the transaction is likely to substantially prevent or lessen competition in one or more markets. In addition, The Investment Canada Act provides that

acquisitions by “non-Canadians” of control of Canadian businesses are subject to, amongst other things, review and approval according to a “net benefit to Canada” test. Under the 2006 Interim and Long-Term Supply Agreement (2006 Agreement) between MDS (Canada) Inc., on behalf of MDS Nordion, and AECL, MDS (Canada) Inc. has granted rights of first offer and first refusal in favour of AECL in the event that MDS (Canada) Inc. proposes to transfer all or a substantial portion of its isotopes business to certain designated third parties.

3. NARRATIVE DESCRIPTION OF THE BUSINESSES OF MDS

3.1 Reportable Operating Segments

The Company has been operating with three business segments: MDS Nordion, which is focused on medical imaging and radiotherapeutics, and sterilization technologies; MDS Pharma Services, which provides pharmaceutical contract research; and MDS Analytical Technologies, which involves the development, manufacture, and sale of analytical instruments.

As a result of a strategic repositioning in fiscal 2009, the Company has reported MDS Pharma Services and MDS Analytical Technologies as discontinued operations in the Consolidated Statements of Operations for all periods presented therein. The Company’s remaining business segment, MDS Nordion, is included and reported as continuing operations

Prior to February 26, 2007, as disclosed in **Section 2.4.3 – Divestitures, Discontinuances and Other Transactions**, the Company was, through various operating business units, the leading provider of diagnostic laboratory services in Canada.

3.2 MDS Nordion – Continuing Operations

Through MDS Nordion, MDS is a global leader in the provision of innovative technologies for use in medical imaging and radiotherapeutics, and sterilization technologies for medical products and food safety; and the development and manufacture of radiopharmaceuticals. MDS Nordion distributes its products in more than 70 countries.

Product Overview and Industry Background

A radioisotope is a form of a chemical element that emits radiation during its decay to a stable form. Radioisotopes have important uses in medical diagnosis, treatment, and research, and are referred to as medical isotopes. Medical isotopes can be used in medical imaging and radiotherapeutics. In medical imaging, isotopes are used because of their ability to assist in such diagnostic procedures as Single Photon Emission Computed Tomography (SPECT) and Positron Emission Tomography (PET). Isotopes used in medical imaging decay relatively rapidly and emit particles such as photons or positrons, commonly referred to as radiation, which can be detected by SPECT or PET cameras. When formulated in combination with chemical compounds that are attracted to, or accumulate in, particular cells, these isotopes can aid physicians to create images of tissues and organs of the body. These images can then be used in the identification and treatment of disease. Certain isotopes can be used alone to deliver radiation therapy directly to cancerous cells. Using the same principles, radiotherapeutics use medical isotopes in various ways such as linked to antibodies that target cancer

cells, incorporated into microspheres or (“seeds”), or nanoparticle delivery systems to place the radiation-producing isotopes directly in or near diseased tissue, such as a malignant tumour.

Processing raw isotopes into a form suitable for the intended medical use is highly specialized. Many medical isotopes have a half-life, or time it takes for half the material to decay, of several hours to several days. While this is an important medical characteristic, it imposes constraints on the manufacturing process and the logistics procedures needed to deliver refined product to an end-user. Security of supply is a key customer concern due to the short lifespan of the products; hence, efficient and safe transportation systems are vital components of the business.

Molecular imaging is a growing market. A key driver of growth includes chronic disease in aging populations worldwide which are expected to increase demand for the procedures which medical isotopes make possible. In addition, considerable research is under way to identify new diagnostic and therapeutic uses for existing isotopes.

Sterilization of medical devices, which accounts for the large majority of sterilization, is a relatively mature industry with 4%-7% annual market growth. Medical devices are sterilized in facilities that are specifically constructed to allow the products to be exposed to radiation. Cobalt 60 (Co^{60}) is the predominant isotope used to produce the radiation that sterilizes medical devices by destroying any contaminating microorganisms. Co^{60} has a half-life of over five years; therefore processing and shipping efficiency is not as time-sensitive as those for isotopes used in medical imaging and radiotherapeutics. It does, however, take approximately two years to produce Co^{60} in nuclear reactors; therefore, forecasting supply and working closely with suppliers to manage the amount and timing of shipments is important in this part of the business.

Alternate applications for this technology are continuously under investigation. The U.S Food and Drug Administration (FDA) has approved the use of irradiation of certain foods for microbial control of pathogens (e.g., *E.coli*) and as a quarantine treatment for fruit and vegetables to eliminate agricultural pests. To date, the commercial use of irradiation has largely been limited to spices, some red meat, poultry, and certain fresh fruits and vegetables.

Food irradiation in the U.S. and around the world continues to strengthen and evolve. Spices have been irradiated for over a decade in the U.S. where millions of pounds are sterilized every year. The technology is endorsed by the World Health Organization (WHO), United Nations Food and Agriculture Organization, the FDA, National Aeronautics and Space Administration (NASA) and the American Medical Association (AMA). Globally, food irradiation has been adopted by as many as 40 countries that are focused on both safety of their food supply and export (i.e., countries in Asia and South America).

Entry into the medical imaging and radiotherapeutics, and sterilization technologies businesses require significant capital investment, extensive process development and access to limited supplies of raw materials. The manufacture of raw isotopes is dependent upon the availability of capacity in acceptable types of nuclear reactors and cyclotrons. Processing facilities such as those operated by MDS are centralized, capital intensive, and expensive to operate. In addition, due to the nature of the materials handled by the facilities, government and environmental regulation are significant factors in the business.

Overview of Business

MDS Nordion develops, manufactures, and distributes radioactive isotopes to produce products that include:

- medical isotopes that are used alone or coupled to targeting molecules for use in clinical research; diagnosis of cardiac function and other diseases, including cancer; and treatment of cancer;
- radiopharmaceutical products, which use medical isotopes, developed by MDS Nordion, or in collaboration with our partners, for targeted imaging in diagnosis and targeted therapy for the treatment of disease; and
- industrial isotopes and production irradiators for the sterilization of disposable medical products and for treating food.

MDS Nordion purchases reactor-produced medical isotopes such as Molybdenum-99 (Mo^{99}), Iodine-131 (I^{131}), Iodine-125 (I^{125}) and Xenon-133 (Xe^{133}) in an unfinished, non-purified form, and transports them to its own facilities in Ottawa, Canada for further processing. In the past, MDS Nordion's principal source of such isotopes was the NRU. On May 18, 2009, AECL announced that the NRU would be out of service for more than a month due to a heavy water leak in the NRU vessel. On August 12, 2009, AECL announced that the reactor would be out of service until at least the first quarter of 2010. On January 13, 2010 AECL stated that the current schedule targets return to service by the end of March 2010, however if there are continuing challenges to the repair process, the NRU return-to-service schedule could extend into April 2010. Until the NRU returns to service, the vast majority of this medical- isotope business of MDS Nordion will be inactive. MDS Nordion has been able to source a limited supply of certain isotopes from other reactors during the period the NRU has been out of service and, as part of its ongoing business sources, certain reactor-produced medical isotopes from reactors other than the NRU.

MDS Nordion also manufactures and processes cyclotron-produced isotopes such as Iodine-123 (I^{123}), Thallium-201 (Tl^{201}), Palladium-103 (Pd^{103}) and Yttrium-90 (Y^{90}) at its facilities in Vancouver, Canada and Fleurus, Belgium. In addition, in May 2009, MDS Nordion started production of a finished radiopharmaceutical FDG comprised of Fluorine-18 (F^{18}) used in PET imaging at its facility in Fleurus. Prior to this date, the isotope was produced only through an arrangement with the University of Liege in Belgium.

The active pharmaceutical ingredient forms of Nordion-processed isotopes are incorporated by pharmaceutical companies into radiopharmaceuticals used to diagnose and treat numerous serious disease states, such as coronary artery disease and cancer. Mo^{99} decays into Technetium-99m ($\text{Tc}^{99\text{m}}$), which is the most widely used diagnostic imaging isotope in the world. Approximately 130 million scans are performed each year and 80% use a $\text{Tc}^{99\text{m}}$ radiopharmaceutical. The number of scans is expected to grow as the population in developed countries ages and as the use of molecular imaging in the management of coronary artery disease expands. Prior to the shutdown of the NRU in May 2009, MDS Nordion was the world's leading supplier of Mo^{99} .

MDS Nordion is also focused on the development and manufacture of radiotherapeutics and radiation-based medical devices. For the treatment of inoperable liver cancer, MDS Nordion manufactures and markets TheraSphere®. TheraSphere® involves injecting tiny irradiated glass beads that target

cancerous tumours in the liver. In targeting liver cancer cells, the impact on the patient's healthy tissues is minimized.

In addition, MDS Nordion is working toward identifying new radiotherapeutic uses for medical isotopes and building the necessary manufacturing and development capabilities to be the provider of choice for companies that are developing new products with applications employing isotopes. In collaboration with commercial partners, MDS Nordion is developing radiopharmaceuticals such as Zemiva™ to detect cardiac ischemia and Azedra™ to treat neuroblastoma and pheochromocytoma with Molecular Insight Pharmaceuticals, Inc. MDS Nordion has a contract to manufacture two commercially available radiotherapeutics: Bexxar® and Zevalin® for GlaxoSmithKline, Inc. and Spectrum Pharmaceuticals, respectively. Both products are based on monoclonal antibodies and are used to treat non-Hodgkin's lymphoma. Zevalin uses Y⁹⁰ as the active agent while Bexxar uses I¹³¹.

In 2009, MDS Nordion commissioned a new dedicated manufacturing facility in Ottawa in partnership with Bracco Diagnostics, Inc. and commenced manufacturing of CardioGen-82® used in PET for cardiac perfusion imaging.

MDS Nordion has an 80,000-square-foot manufacturing facility at its Ottawa, Canada site that is utilized on a partnership basis in the development and the direct manufacture of radiopharmaceuticals.

MDS Nordion is a leading supplier of Co⁶⁰ for sterilization of single-use medical devices and various applications in food irradiation and phytosanitary processing. The majority of raw Co⁶⁰ material is produced under long-term supply contracts with nuclear power suppliers such as Bruce Power L.P. (Bruce Power), Ontario Power Generation (OPG) and Energoatom (formerly Rosenergoatom), the utility operator responsible for Russia's nuclear power plants. Bruce Power supplies the majority of MDS Nordion's Co⁶⁰ from four reactors under an exclusive contract with MDS that extends to 2018. OPG is MDS Nordion's second-largest supplier of Co⁶⁰ with an exclusive contract that extends to 2015. MDS Nordion further processes the raw Co⁶⁰ into a finished form for commercial use at its Ottawa, Canada facilities. The resulting processed material, or gamma source, is delivered to customers using approved transport containers and procedures. Customers include major sterilization contractors, as well as large medical-product manufacturers which maintain their own in-house sterilization facilities and certain food producers.

MDS Nordion also markets related equipment and services such as industrial-scale production irradiators. Delivery or construction of this equipment is usually accompanied by an initial shipment ("loading") of a gamma source. Resupply or replenishment of the gamma source is required from time to time as the radioactivity level of Co⁶⁰ declines over time at a rate of approximately 12% per year.

The nature of MDS Nordion's products, and the highly regulated environment in which the Company operates, require compliance with a multitude of regulations as well as legislation governing radioactive material transportation. The receipt, processing, handling, shipping and use of radioisotopes are highly regulated, and MDS Nordion proactively complies with all existing and new security requirements from multiple authorities around the world. MDS Nordion uses these regulations as a minimum standard and applies its own controls and procedures, over and above the required protocols. The logistics system at MDS Nordion can process isotopes, deliver them to manufacturers and then on to hospitals or treatment centres within a few days.

Regulatory standards include the following:

- Transport Canada regulations for the Transportation of Dangerous Goods.
- Canadian Nuclear Safety Commission (CNSC) regulations for Transport of Radioactive Materials, Import/Export controls and source tracking requirements.
- International Atomic Energy Agency's (IAEA) Code of Conduct.
- International Transport Regulations for Radioactive Materials (Safety Series and Safety Standards for transportation of radioactive materials).
- International Civil Aviation Organization (ICAO) and International Maritime Organization (IMO) requirements for safe transport by air and sea, respectively.
- U.S. Department of Transportation requirements.
- U.S. Nuclear Regulatory Commission requirements.
- Member state requirements for the transportation of radioactive materials.

MDS Nordion is committed to complying with all environmental, health, and safety (EH&S) laws and regulations relevant to its operations. Our Ottawa, Canada facility has received ISO 14001 (environmental management systems) certification from an external authority. In addition, MDS Nordion maintains a comprehensive EH&S program, including training for employees and contractors. MDS Nordion protects the natural environment by using environmentally sound operation practices, including ALARA (as low as reasonably achievable), which is designed to keep radiation doses at a minimum for workers and the public. MDS Nordion maintains insurance coverage for third-party claims relating to bodily injury or property damage arising from the release of pollutants or exposure to isotopes.

MDS Nordion is dependent on staff with specialized skills and knowledge necessary to operate a highly regulated processing facility for radioactive materials. Some technical and production employees of MDS Nordion belong to the Public Service Alliance of Canada, a collective-bargaining agent representing, among others, certain employees of the Government of Canada. Labour relations are judged to be good with the unions. Globally, MDS Nordion employs approximately 650 people.

NRU and MAPLE Facilities

MDS Nordion's principal source of Mo⁹⁹ is the existing NRU reactor located in Chalk River, Canada, which is owned and operated by AECL. The NRU reactor is currently licensed until 2011. The Government of Canada announced in May 2008 that it had asked AECL to pursue the extension of the NRU operation beyond 2011. This license, if renewed, is typically renewed for a five-year period. While the Government of Canada has publicly stated a commitment to support license renewal, there can be no assurance of renewal, or of the time period of such a renewal. It is critical that AECL obtain an extension of the site license to maintain supply of medical isotopes in the near to mid-term.

In 1991, MDS acquired the Nordion business from the Government of Canada. At that time, MDS assumed an existing 1988 isotope supply agreement (the 1988 Agreement) between Nordion and AECL, a Canadian Crown corporation. The 1988 Agreement provided for the supply of isotopes from AECL to Nordion for a maximum of 23 years. The isotopes were being produced at the AECL's NRU reactor, and were eventually to be produced from a new AECL-owned reactor called MAPLE X, which was to be constructed and operated within this period to provide MDS Nordion with the assurance of a long-term supply of isotopes. The obligation to build MAPLE X became

the subject matter of a dispute between MDS, AECL, and the Government of Canada in 1993 to 1994, which resulted in the entering into a new agreement between AECL and MDS in 1996 (the 1996 Agreement).

The 1996 Agreement replaced the 1988 Agreement, provided for ongoing interim supply from the NRU, and provided for AECL to design, develop, construct and operate two nuclear reactors and a processing centre (the MAPLE Facilities) which were to be owned by MDS. The MAPLE project was intended to replace the majority of the isotope-producing capacity of AECL's NRU reactor, and to also provide a back-up source of supply. AECL agreed to provide interim supply of medical isotopes from NRU until the MAPLE Facilities were operational. The MAPLE Facilities were required to achieve certain operational criteria by the year 2000 at a planned cost to MDS of C\$145 million.

By 2005, the project had not yet been completed and the costs had more than doubled, with MDS's investment exceeding C\$350 million. To address those issues, in March 2005, the Company entered into mediation with AECL related to disputes arising from the 1996 Agreement. In February 2006, both parties agreed to a new agreement (the 2006 Agreement) under which MDS exchanged all of its ownership rights and obligations in the MAPLE Facilities for a new 40 year long-term supply of isotopes to be produced in the now AECL-owned MAPLE Facilities. AECL also acquired \$46 million of raw material inventory (Moly-99 targets) and consumable fuel bundles (highly enriched uranium) from MDS which are used to produce medical isotopes. In return, MDS received a cash payment of \$22 million and a non-interest bearing note receivable for \$46 million. In addition, the interim supply agreement in the 1996 Agreement was exchanged for essentially the same interim supply agreement in the 2006 Agreement. Under the 2006 Agreement, AECL assumed complete ownership of the MAPLE Facilities and took responsibility for all costs associated with completing the facilities and all associated ownership responsibilities including maintenance, repair, production of isotopes, and decommissioning of the MAPLE Facilities. The MAPLE Facilities were required to meet certain operational criteria by October 31, 2008 as specified in the 2006 Agreement. The parties retained certain rights related to existing claims. The terms of this agreement are the subject of the Company's current dispute with AECL as discussed below.

On May 16, 2008, AECL and the Government of Canada announced their intention to discontinue AECL's work on the MAPLE Facilities located at its Chalk River, Canada laboratories, effective immediately. MDS was neither consulted nor informed in advance by AECL or the Government of Canada about their decision. Prior to its May 16, 2008 announcement, AECL had consistently maintained in regular project review meetings with the Company that it would complete the MAPLE Facilities. AECL's announcement and position represents a different perspective on AECL's obligations than that held by MDS.

On July 8, 2008, MDS served AECL with Notice of Arbitration proceedings seeking an order to compel AECL to fulfill its contractual obligations under the 2006 Agreement, and, in the alternative and in addition to such order, seeking significant monetary damages. MDS concurrently filed a court claim against AECL and the Government of Canada. MDS is seeking against AECL (i) damages in the amount of C\$1.6 billion for negligence and breach of contract relating to the 1996 Agreement; and (ii) interim, interlocutory and final orders directing AECL to continue to supply radioisotopes under a certain agreement, i.e., the 2006 Agreement, pending any final judgment and completion of the MAPLE Facilities; and, against the Government of Canada, MDS is seeking (i) damages in the amount of C\$1.6 billion for inducing breach of contract and interference with economic relations in

respect to the 2006 Agreement; (ii) an order that MDS Nordion may set-off the damages owing to it by the Government of Canada as a result of the Government's conduct set out herein against any amounts owing by MDS Nordion to the Government of Canada under the Facilities Development and Construction Funding Agreement (FDCFA), a loan agreement between the Government of Canada and MDS for C\$100 million of which C\$64 million is outstanding); and (iii) an interim and interlocutory order suspending any payments that may be owing to the Government of Canada under the FDCFA pending the determination of the issues in this litigation and an interim or interlocutory order requiring the return of all security instruments delivered in connection with the FDCFA.

AECL and the Government of Canada also announced on May 16, 2008 that their decision to discontinue the MAPLE Facilities project would not impact the current supply of medical isotopes; that AECL would continue to supply medical isotopes using the NRU reactor; and that AECL would pursue an extension of the NRU operation beyond the expiry date of its current license of October 31, 2011. While MDS supports the decision to pursue an extension of the license, the Company believes the approach does not adequately address long-term supply. It is the Company's position that AECL has breached its contract with MDS, and the Company believes that it has a strong case against AECL and the Government of Canada with respect to the 2006 Agreement. MDS's current focus is on the confidential arbitration proceedings. However, given the present stage and complex nature of the proceedings, the uncertainty in projecting the probability of any particular outcome of a dispute of this nature and the range of remedies that may be awarded under the arbitration and/or lawsuit if MDS is successful in its claim, the Company is unable to project a specific outcome related to the resolution of this dispute.

MDS has and continues to receive payments from AECL related to the non-interest bearing note associated with the MAPLE-related inventories.

Strategy

MDS Nordion is a leading supplier of key isotopes. Revenue growth for isotopes generally has historically been in line with the overall increase in health-care spending and population growth - both of which have an impact on the growth in the utilization of diagnostic tests and the use of disposable medical products. Sales of medical isotopes do not follow any notable seasonal patterns or other cycles and demand is relatively constant. The short half-life of the isotopes used for medical purposes limits the ability of any market participant to build significant inventories.

Security of supply is a significant objective for the majority of the Company's customers. MDS Nordion has developed a strong supply and logistics network to meet these demands and is seeking alternatives for long-term supply of Mo⁹⁹. While short-term alternative supply is not available, MDS continues to seek alternate long-term supply, which will not likely generate meaningful supply for at least five years, if at all. In relation to long-term supply, on April 28, 2009, we announced that MDS Nordion has entered into an agreement with TRIUMF, Canada's national laboratory for particle and nuclear physics, to study the preliminary stage of feasibility of producing a viable and reliable supply of photo fission-based Mo⁹⁹. Subsequently, on June 15, 2009, we announced an agreement with the Karpov Institute of Physical Chemistry in Moscow, Russia, to study the feasibility of providing us with a viable and reliable reactor-based supply of Mo⁹⁹. Although we are also actively seeking other sources of isotope supply, it is uncertain as to whether, and/or when, any of these alternate sources of supply, which are all in feasibility assessment, will become commercially viable.

In addition, the Company is developing new and complementary lines of business based on its expertise with isotopes. For example, the cancer treatment market is expected to develop rapidly over the next several years, particularly in emerging economies. Many of these countries are now able to afford modern cancer therapies and are expected to make significant investments in this technology as their health-care systems develop. Furthermore, MDS Nordion is building its radiopharmaceutical capabilities targeting drug manufacturers which may not wish to incur the capital cost or regulatory delays associated with building their own facilities, and which may want to leverage MDS Nordion's highly specialized expertise in radiopharmaceutical development, clinical and commercial manufacturing.

In January 2007, MDS Nordion announced that the FDA had approved the use of TheraSphere® to treat patients with hepatocellular carcinoma (HCC), who have partial or branch portal vein thrombosis and have been identified as suitable candidates by their physicians. HCC is the most common form of primary liver cancer. Portal vein thrombosis is a blockage, by a blood clot, of the portal vein, which brings blood to the liver. TheraSphere® is the first medical device approved in the U.S. to treat primary liver cancer patients with this condition. This expanded use extends the current approval of TheraSphere® as a Humanitarian Use Device for the treatment of HCC.

In February 2007, MDS Nordion established four Centres of Excellence in Europe for TheraSphere®, its innovative liver cancer treatment. The Centres will serve to train and educate oncology professionals on the use of this innovative technique. The Centres of Excellence are: BCLC Group Hospital Clinic, Barcelona, Spain; Centre Eugene Marquis, Rennes, France; University-Hospital Essen, Essen, Germany; and University of Pisa, Pisa, Italy.

In June 2007, MDS Nordion entered into a collaboration with the University of Ottawa Heart Institute, Canada's largest cardiovascular health centre, to establish a Molecular Imaging Centre of Excellence to advance cardiology research. Molecular imaging is an emerging technology that differs from traditional medical imaging as it examines changes at the molecular level within the body to support early disease detection and treatment assessment. MDS Nordion has invested in this new centre, which is equipped with a research and development radiochemistry laboratory to support cardiology research. This collaboration represents a unique opportunity to expand MDS Nordion's molecular imaging business.

MDS Nordion supplies the majority of Co⁶⁰ used in sterilization technologies on a global basis. MDS Nordion's sterilization technologies are used to sterilize more than 40% of the world's single-

use medical supplies, such as bandages, catheters and syringes. It has been estimated that 80% of all surgical gloves in the world are sterilized using Co^{60} . A vast array of consumer products, including contact-lens solution, cosmetics, and certain foods, are also sterilized with MDS Nordion technology. It is expected that the need to safely and effectively sterilize products will continue to grow.

Isotopes used for sterilization tend to be somewhat more cyclical, due primarily to the length of time required to convert Cobalt-59 (Co^{59}) into Co^{60} and the limited number of facilities in which this can be done economically. In 2005, the company took steps to increase its supply of cobalt and signed a 12-year agreement with Energoatom (formerly Rosenergoatom), the operating utility of Russia's nuclear power plants. In October 2007, the Company signed an amendment to the 2005 agreement, which provided for an increased and more consistent supply of Co^{60} to MDS Nordion until 2024. In June 2009, MDS Nordion signed another amendment to the agreement. This amendment, was initiated by a change in the Russian government's policy on nuclear products, removed the incremental volume associated with two reactors that had been expected to begin producing Co^{60} in 2015, thereby reducing the future supply commitment by approximately one-third. Pricing and other terms were unchanged. Although the available supply and volumes in the amended agreement are now lower, compared with prior years Energoatom is still expected to provide an increased and more consistent supply of Co^{60} to MDS Nordion until 2024.

Competition

There is significant capital and logistics investments required to successfully compete in the molecular imaging market, making the Company's established position a competitive advantage. Since Mo^{99} is the most significant isotope on world markets, the majority of competition faced by the Company is in this product. Major competitors are: Covidien Ltd.; Institute National des Radioelements (IRE) of Belgium; and the NTP Radioisotopes (Pty) Ltd. (a wholly owned subsidiary of Nuclear Energy Corporation of South Africa). Due to the current instability in isotope supply, it is possible that new entrants could decide to enter the market and identify alternative modalities for testing or develop alternative reactor sources of supply to current reactors, including funding initiatives for reactor capacity in the U.S. The OPAL reactor in Australia is also expected to manufacture medical isotopes. New entrants likely would require a minimum of three years to build any such facility.

Competition in the sterilization technologies market is different from the medical-isotopes market due to the substantially different half-life of the products. Co^{60} is often bought and sold in large quantities, and can be produced by any of several nuclear power reactors around the world. While delivery and logistics expertise remains an MDS Nordion advantage, the most significant competition in the sterilization market and Co^{60} supply comes from Reviss Services (U.K.) Ltd. based in England, which acquires cobalt from Russian and Argentine sources. Competition for sterilization spending also comes from alternative technologies, the most significant of which are Ethylene Oxide (EtO) and electron-beam. Balchem Corporation is the most substantial EtO supplier, and Ion Beam Applications, S.A. is the major manufacturer of electron-beam sterilization technologies. The Company believes that gamma-based sterilization technologies continue to enjoy advantages over these competitive technologies in some applications. In addition, there is a significant installed base of industrial irradiators that should ensure that gamma irradiation remains a key technology in this market.

3.3 MDS Pharma Services – Discontinued Operations

MDS operates as a global contract research organization (CRO) through MDS Pharma Services. MDS Pharma Services provides drug discovery and early-stage development services to the pharmaceutical, biotechnology and generic industries and is one of the top-three CROs in the pre-clinical and early clinical segments of the CRO market. MDS Pharma Services operates in six countries.

Industry Background

During the 1970s, integrated pharmaceutical companies conducted the majority of research leading up to development of pharmaceutical products in-house. At that time, the only significant research function that was contracted out was pre-clinical toxicology screening.

The drug-development process is extremely expensive due to the cost of the infrastructure required to support the full range of processes necessary for drug development and the long period of time required to achieve full regulatory approval of a new compound. On average, it takes 10 to 12 years and over \$800 million to bring a new pharmaceutical from discovery through Phases I to III of clinical trials and make it available to consumers. Since patent protection for new products extends for only 17 to 20 years, the profitability of a new compound can be greatly enhanced by reducing the total cost of development and by shortening the elapsed period over which development occurs.

As a result, companies began to outsource to meet the occasional surge in internal demand that could not be addressed with in-house capabilities. In an effort to reduce both time and costs, major drug companies began outsourcing portions of the development work to companies that provide specialized research services. These companies have become known as Contract Research Organizations, or CROs. Individual CROs tend to specialize in particular stages of the drug-development process and, therefore, develop expertise in those areas. Reliance on CRO expertise can enable the pharmaceutical and biotech companies to achieve cost efficiencies and to shorten the research time for that stage of the development process while avoiding capital investments.

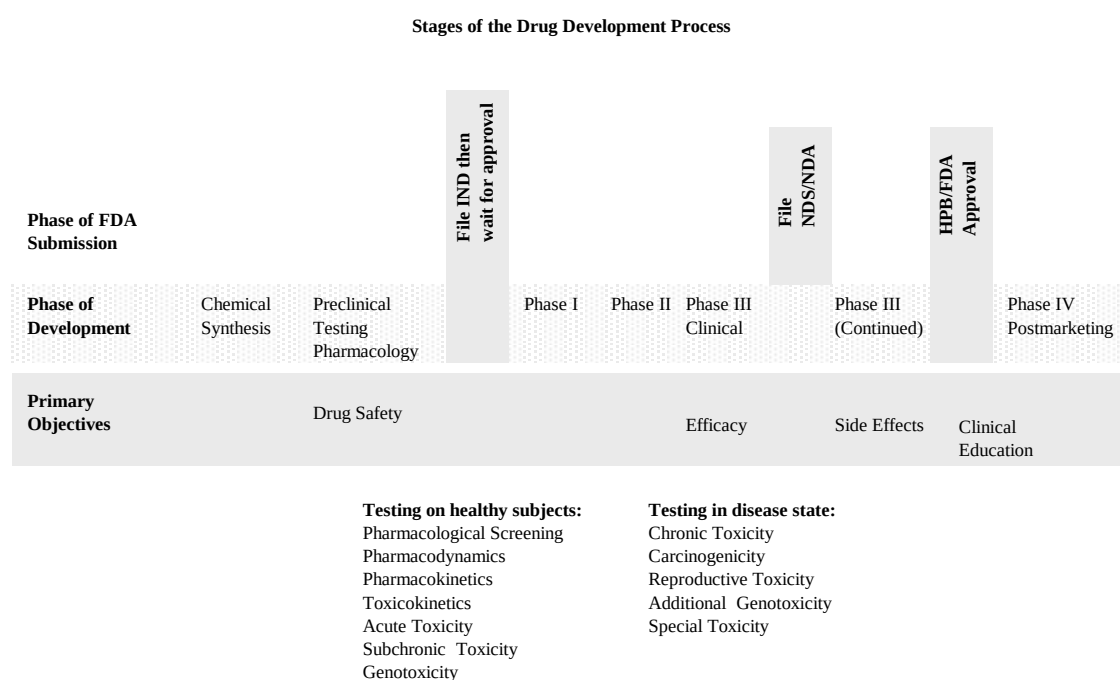
The decision by MDS to enter the CRO business in 1995 was influenced by a number of key trends that were beginning to affect the industry. The Company believes that these trends remain in place. In particular, corporate mergers and cost-containment pressures at pharmaceutical companies are expected to continue to lead to downsizing of in-house research-and-development capabilities, and pharmaceutical companies are anticipated to continue to focus increasingly on marketing and product distribution. Outside suppliers will increasingly be relied upon to provide services previously secured from in-house departments. Aside from reducing infrastructure costs for the pharmaceutical companies, outsourcing is expected to lead to reduced cycle time for development.

Globalization of pharmaceutical markets driven by ongoing mergers of major international pharmaceutical companies has influenced the selection of a CRO. Those with an international presence and the ability to conduct trials in multiple jurisdictions and emerging countries, such as China and India, have greater chances of becoming preferred providers or strategic partners. The growth of the biotechnology industry is also significantly influencing the growth of CROs, as many smaller biotechnology companies elect not to build the infrastructure to conduct the various phases of the development of their products in-house.

More recently, the decline in the global stock market and valuations, and reduction in available credit in 2008 resulted in reduced availability of funds which may reduce the market for outsourcing particularly in the biotech sector, and may lead to consolidation of clients. In particular, small biopharma companies may become more appealing acquisition targets by large pharmaceutical companies due to reduced capitalizations.

As a CRO, MDS provides our clients with services in the early stages of drug discovery and development. During this process, certain compounds will fail to meet the desired effectiveness or safety level and our clients will stop development work on these compounds. If this occurs during a trial or test that the Company is performing, the contract may be cancelled by the client. In these situations, MDS is normally paid for work completed up to the time of cancellation and, in certain cases, receive a cancellation fee.

A general overview of the drug development process is provided in the diagram below:



Overview of Business

Headquartered in King of Prussia, U.S., MDS Pharma Services is a provider of drug discovery and early-stage development services to the pharmaceutical, biotechnology, and generic industries. MDS has provided services to pharmaceutical manufacturers since 1992, beginning as a centralized support laboratory providing testing services in connection with Phase III clinical trials. MDS is now one of the top three CROs in the pre-clinical and early clinical segment of the Early Stage market. MDS is actively exploring the sale of the MDS Pharma Services Early Stage business. Provided that the Company is able to obtain what it believes would be the fair value for the Early Stage business, MDS intends to sell the MDS Pharma Services Early Stage business. While we believe it is probable that a sale of Early Stage will occur, in the unlikely event that a transaction does not occur, we currently intend to retain and invest in building the business.

The pharmaceutical research process can be broken down into three primary components - laboratory-based research, clinic-based testing, and out-patient-based testing. MDS includes most laboratory-based research and clinic-based research in early – stage; the Company has been the leading competitor in this phase of research based on the installed base of mass spectrometers and on the number of available clinic beds. MDS Pharma Services' significant capacity in each of these areas enables it to take on client work on very short notice and to develop the necessary expertise in these fields to participate in the most complex studies.

Key service lines for this business include:

- **Pre-clinical**, in which the Company's vast library of assays is applied to study the effects of compounds on living organisms and in-vitro targets and in which advanced understanding of drug safety and toxicology is obtained under strict Good Laboratory Practices (GLP) regulated conditions.
- **Bioanalysis**, in which advanced technology and analytical science is applied to biological fluids to gain an understanding of the drug's absorption, distribution, metabolism and elimination.
- **Early-stage clinical or first-in-man testing:** Phase I, in which new investigational drugs are tested for the first time in healthy participants to assess drug safety and to determine how the drugs are processed by the body; through Phase IIa clinical proof-of-concept studies, which provide an early indication of efficacy in patients thereby allowing sponsors to decide whether to off-license or take the compound forward.

MDS pre-clinical and early clinical operations are in Montreal, Canada; Lincoln, U.S.; Phoenix, U.S.; Bothell, U.S.; Belfast, Northern Ireland; Zurich, Switzerland; Lyon, France and Taipei, Taiwan. These facilities include Phase I clinics and diagnostics laboratories, as well as support functions.

During 2004, 2006 and 2007, MDS Pharma Services received written communication from the FDA related to certain generic bioequivalence studies carried out at MDS Pharma Services' bioanalytical laboratory facilities in Montreal, Canada.

In January 2007, the FDA issued statements that outlined steps that those clients of our Montreal bioanalytical facilities would be required to take to resolve any outstanding issues. The FDA directed the sponsors of approved and pending generic drug submissions containing study data produced in these facilities during the period between January 2000 and December 2004 to take actions to address FDA concerns about the accuracy and validity of these bioanalytical studies. In addition, the FDA wrote to sponsors of innovator submissions, and requested that they advise the FDA of any submissions containing data from those facilities during the affected period.

In their letter to generic sponsors, the FDA imposed a six-month time limit to complete the generic work. This time has since passed, and MDS believes that the Company has substantially completed all related generic site audits. MDS continues to receive a limited number of study audit requests from innovator clients, and expects that the Company may continue to receive these requests in low numbers in 2010.

MDS has responded to questions from European regulators about the nature of the work that was done for the FDA. The European regulators have reviewed studies in Montreal that are

representative of the work done at that site, and issued a final report indicating that they have no significant concerns.

MDS Pharma Services is dependent on staff with highly specialized skills. Individuals with the requisite credentials – including MD and PhD designations - are recruited on a global basis. Globally, approximately 1,700 employees work in MDS Pharma Services, of which approximately 300 are located in Canada, 800 in the U.S., 500 in Europe and 100 in Asia.

Strategy

MDS Pharma Services is currently one of the leading early - stage CROs in the world. Management intends to focus on its core business, and where appropriate in the future, may assess strategic transactions to focus the business and to expand its global capabilities. In addition, LeanSigma and other operational improvements are intended to be used to enhance this business' ability to serve clients and drive profitability. The Company continues to focus this business in areas that extend leadership in key fields and build on existing strengths to enhance client services. Where MDS Pharma Services' operations do not meet the Company's expected returns or do not fit with the strategic markets in which the Company has chosen to compete, MDS seeks to divest such businesses. During 2006 and 2007, MDS sold or closed a number of smaller, non-strategic lines of business, and consolidated operations to a reduced number of larger facilities.

In 2008, MDS Pharma Services launched its Quality On Time[™] brand to highlight its leadership in providing quality, compliance and client service. As well, MDS Pharma Services has developed strong client relationships and, through customized processes and proprietary software solutions, has focused on delivering the services and information that fully meet our client requirements in the drug-discovery and development process.

In June 2009, the Company announced its strategic intent to focus MDS Pharma Services on the delivery of early - stage services and its intent to divest its Late-Stage operations which included Phase II-IV operations and Central Labs business. MDS subsequently sold its Phase IIb-IV operations to INC Research, Inc. on July 1, 2009, and its Central Labs business to Czura Thornton on October 31, 2009.

In September 2009, as part of the strategic repositioning, the Company announced its intent to divest MDS Pharma Services' Early Stage operations. MDS is actively seeking a buyer for these operations.

Competition

The growth of the pharmaceutical research services industry has been driven by the increase in outsourcing by pharmaceutical and biotechnology companies. The market has experienced high growth rates, although has seen set-backs in past twelve to eighteen months, and has become highly competitive. Competition for individual research contracts often includes in-house research departments of pharmaceutical and biotechnology companies, as well as universities, teaching hospitals, and other CROs. Industry consolidation and globalization have affected pharmaceutical companies as well as CROs resulting in the use of fewer, larger CROs. The Company believes that outsourcing will continue to grow as an economically attractive alternative to in-house research.

Companies active in this industry, including MDS, may improve their competitive position by building scale. This enhances the ability to service clients with consistent global quality in their preferred location or in a more timely fashion, and internal operating efficiencies, which translates into sound and predictable execution and opportunity to expand profitability. In addition, management believes that MDS Pharma Services' expertise and capabilities result in a unique offering that contributes to its competitive position. MDS Pharma Services' strength in Pre-Clinical, Phase I and bioanalytical services allows it to integrate its offerings under complete Early Stage drug development programs to help pharmaceutical and biotechnology companies advance their compounds through this development stage more rapidly.

There are Early Stage (pre-clinical to Phase IIa) competitors, some of which are significantly larger and may have more resources than MDS Pharma Services. While there are numerous small CROs with either functional specialties or local geographic presence, the market continues to consolidate with market share being gained by the large, global, diversified CROs.

3.4 MDS Analytical Technologies – Discontinued Operations

MDS provides life sciences tools and services to customers around the world through MDS Analytical Technologies. Applications include drug discovery and development, bioresearch and mass spectrometry. MDS Analytical Technologies designs, develops, manufactures, and markets high-performance bioanalytical measurement systems acquired through the 2007 acquisition of Molecular Devices (MD). In addition, it designs, develops and manufactures high-end mass spectrometers that are marketed through our joint venture partners Applied Biosystems (LC/MS high-end mass spectrometers) and PerkinElmer (ICP/MS high-end mass spectrometers).

Industry Background

In recent years, research in the life sciences industry has accelerated. This expansion of research activity has yielded discoveries that are currently increasing our understanding of human health and disease. With a better understanding of biology at the level of genes, proteins and cells, researchers hope to discover the underlying causes of human diseases and determine ways to treat them.

Drugs typically fight illness by binding to proteins, known as “targets”, and modify their behaviour to reduce their disease-causing effects. Once a protein's link to a disease is understood, the task of finding a drug that acts on the protein and treats the disease is undertaken primarily by pharmaceutical and biotechnology companies. Drug manufacturers typically own libraries of potential drug candidates comprising hundreds of thousands, or even millions, of chemical compounds from which they screen against known targets. As life sciences research continues to unveil new targets, the task of screening large libraries of compounds against these targets represents both a great opportunity and a technological challenge for pharmaceutical and biotechnology companies.

Drug compounds that progress and become potential drug candidates for in-man use are rigorously tested for, among other factors, safety, absorption, distribution, metabolism and excretion (ADME), efficacy and pharmacokinetics. High-sensitivity and high-resolution instruments are necessary to quantify and analyze the physical and biological properties of substances and metabolites.

In the process of developing new and improved drugs to treat diseases, our customers are looking for the latest in instruments, software, consumables and services to increase productivity and

provide high-quality data that enables decision-making in the high-cost drug-discovery and development process.

Overview of Business

MDS first entered the analytical instruments industry in 1981 with the acquisition of Sciex and, in 1988, introduced the first liquid-chromatography mass spectrometer for use on organic compounds to take advantage of the opportunities that exist in drug discovery and pharmaceutical research services outsourcing for drug-development companies.

The acquisition of Molecular Devices in 2007 brought to MDS a portfolio of high-performance measurement tools for high-content screening, cellular analysis, and biochemical testing. MD's flagship product lines such as SpectraMax® and FLIPR® are considered industry standard instruments in liquid handling and high-throughput screening, respectively.

MDS Analytical Technologies also supplies the life sciences industry with high-sensitivity mass spectrometers under the Sciex brand name. Sciex mass spectrometers are marketed through partnerships with Applied Biosystems (now part of Life Technologies Corporation) and PerkinElmer, Inc. (PerkinElmer) to a global customer base; sales outside of Canada account for more than 95% of end-user revenues from MDS's Sciex products. For both partnerships, MDS Analytical Technologies is responsible for manufacturing and has primary responsibility for research and development. The Company's partners are responsible for marketing, sales and service. The partnerships are structured so that each partner shares equally in the earnings before taxes. On November 21, 2008 Applied Biosystems merged with Invitrogen Corporation to form Life Technologies Corporation (Life).

Historically, MDS has been a major innovator of technologically sophisticated mass spectrometry instrumentation. In many of its product lines, MDS has been a leader. Accomplishments include the introduction of the first triple-quad mass spectrometers, inductively coupled plasma mass spectrometers, and techniques for detecting ultra-trace amounts of small or large molecules by atmospheric pressure ionization (electrospray). Most of these products have evolved through multiple generations and continue to hold significant shares of their market segments.

The pharmaceutical and biotechnology markets are the major users of technology based on the principles of liquid chromatography coupled with mass spectrometry (LC/MS) for detecting organic compounds. Early models of this equipment changed and expanded our customers' ability to search for new drugs or biotechnology products. Productivity and sensitivity improvements remain the primary basis for product differentiation for MDS equipment.

MDS Analytical Technologies and its partner, Applied Biosystems (now Life), are the market leader in high-sensitivity LC/MS equipment and have delivered technological innovation within this industry. This innovation is a result of significant research and development spending each year.

A smaller portion of the Company's mass-spectrometry market is outside of the pharmaceutical industry and relies on similar equipment for the detection of inorganic compounds. For this group of customers, the Company with its partner, PerkinElmer, produces the ELAN® Inductively Coupled Plasma Mass Spectrometer (ICP/MS) that provides high sensitivity with extremely high specificity for a wide range of elements in the analysis of a single sample. The range of market areas that are addressed with the ELAN® is broad and includes environmental monitoring (drinking and wastewater

analysis), toxicology (role of trace metals in human disorders), semiconductors (trace impurities), and the nuclear industry (impurities in uranium). These machines are marketed on a worldwide basis.

The following table summarizes the mass spectrometers offered by the Applied Biosystems/MDS Analytical Technologies and PerkinElmer Sciex Instruments joint ventures. In April 2009, MDS Analytical Technologies introduced a newly designed mass spectrometer, the AB SCIEX TOF/TOF™ 5800 System.

<u>Instrument Name</u>	<u>Joint Venture Partner</u>
AB SCIEX TOF/TOF™ 5800 System	Applied Biosystems
API 5000™ LC/MS/MS System	Applied Biosystems
API 4000™ LC/MS/MS System	Applied Biosystems
API 3200™ LC/MS/MS System	Applied Biosystems
API 2000™ LC/MS/MS System	Applied Biosystems
QSTAR® Elite LC/MS/MS System	Applied Biosystems
QSTAR® XL Hybrid LC/MS/MS System	Applied Biosystems
4000 QTRAP® LC/MS/MS System	Applied Biosystems
3200 QTRAP® LC/MS/MS System	Applied Biosystems
4800 MALDI TOF/TOF™ Analyzer	Applied Biosystems
AB SCIEX QTRAP® 5500 LC/MS/MS System	Applied Biosystems
AB SCIEX Triple Quad™ 5500 LC/MS/MS System	Applied Biosystems
ELAN® DRC II ICP-MS System	PerkinElmer
ELAN® DRC-e ICP-MS System	PerkinElmer
ELAN® 9000 ICP-MS System	PerkinElmer

MDS also offers a full range of high-performance bioanalytical tools, including automated systems for pharmaceutical screening, and a variety of general-purpose research instruments under the MD brand, which are grouped into two families: BioResearch and Drug Discovery.

BioResearch products include microplate detection products, microarray scanners, laser-capture microdissection, cellular imaging and analysis, microplate washers and Threshold® product lines. Our microplate detection products consist of the SpectraMax®, Maxline and FlexStation® lines of advanced microplate readers; they address the increasing need for the acquisition and processing of large quantities of biochemical and biological data. The GenePix® family of products is a complete line of instruments and software for analyzing microarrays, which enable the high-throughput

identification of large numbers of genes. For cellular imaging and analysis, the Company offers the ImageXpress® line of products for high-throughput and cell-based screening and the MetaMorph®, MetaFluor® and MetaVue™ systems for cellular imaging in the research environment. In April 2009, MDS released the MetaXpressPowerCore™ and MetaXpress® 3.0 Cellular Imaging Software which are designed to accelerate the throughput of high-content screening and expand toxicity applications. The Arcturus® line of laser-capture microdissection products, help researchers to visualize and extract individual cells or groups of cells from tissue samples with minimal damage. AquaMax is a line of state-of-the-art microplate washers and other related tools, including cell harvesters, included in the bioresearch product family. The Threshold® system emerged from a need by biopharmaceutical companies for more sensitive and reproducible methods to detect contaminants in biopharmaceuticals during the manufacturing and quality-control processes.

Drug Discovery products are used to screen large numbers of chemical compounds to assess their effects on disease targets. Drug discovery products include: FLIPR® system and reagent kits, the label-free based CellKey™ platforms, automated electrophysiology systems, Cellular Neuroscience amplifiers, data-acquisition systems and software, and the Analyst system and reagent kits. Since its introduction in 1995, the FLIPR® system has become the industry standard for the automated testing of compounds in live cells. FLIPR® instrumentation is complemented by FLIPR® reagent kits for calcium and membrane potential measurement, which use a proprietary technology to reduce the number of steps involved in live cell testing. Automated electrophysiology products are automated systems that obtain the same high-quality information from cells as conventional patch clamping, but at a much faster rate and requiring far less operator skill.

The CellKey™ System uses patented impedance-based measurements to enable the measurement of endogenous receptors for more biorelevant screening data. In June 2008, the Company introduced the CellKey™384 system. The instrument is deployed in the drug discovery market and offers a label-free technology for biological screening. To efficiently visualize cellular events, our high-throughput imaging systems provide automation of image capture and analysis to allow tens of thousands of microscopic cellular assays to be performed in a single day. The Analyst family of products provides industry-leading flexibility and throughput for a wide range of biochemical assays. For cellular neurosciences research, the Company offers a range of products for voltage recording, current and voltage clamping and patch clamping. In the fiscal year, several new software introductions were delivered to the market across business areas.

MDS also provides services to its installed base of customers on both a contract, and time and materials basis, as well as a variety of post-warranty contract options for all instrument offerings.

MDS Analytical Technologies' business is dependent on a staff with highly specialized skills and knowledge in various branches of physics, chemistry and biology. Individuals with the requisite credentials are recruited on a global basis and their knowledge is further developed by in-house training. Approximately 1,100 people are directly employed by MDS Analytical Technologies globally. As a technology-delivery organization within scientific instruments, a significant percentage of staff in the research-and-development area of MDS Analytical Technologies have post-graduate-qualifications at Masters and/or PhD level. MDS Analytical Technologies senior research staff includes a number of thought leaders in their respective fields.

Strategy

MDS Analytical Technologies is a leading global provider of life sciences research and analysis solutions, with a particular focus on the application of these technologies within the drug-discovery and development process. As announced on September 2, 2009, MDS signed an agreement (the “AT Sale Agreement”) to sell MDS Analytical Technologies to Danaher Corporation. This transaction is expected to close in the first calendar quarter of 2010.

Competition

The Company’s principal competitors in the life sciences tools market include: Agilent Technologies Inc.; Alpha Innotech Corp.; Becton, Dickinson and Company; Biotek Instruments, Inc.; Bruker Daltonics, Inc.; General Electric Company; Hamamatsu Photonics K.K.; Innopsys SA; Leica Microsystems GmbH; Applied Biosystems Corp; Nikon Corp.; PerkinElmer, Inc.; Sophion Inc.; Tecan Group Ltd.; Thermo Fisher Scientific Inc.; Waters Corporation; Carl Zeiss, Inc. Competition includes other manufacturers selling similar technology and also companies that sell competing but different technologies for certain applications.

Since technological superiority is a key product differentiator, MDS Analytical Technologies, along with our partners, seeks to take necessary actions to protect and defend our intellectual property. The Company owns numerous United States, Canadian and foreign patents, and has patent applications pending in the U.S., Canada and abroad. In addition to our patent portfolio, MDS possesses a wide array of unpatented proprietary technology and know-how. MDS also owns numerous United States, Canada and foreign trademarks and trade names for a variety of our product names, and has applications for the registration of trademarks and trade names pending in the U.S., Canada and abroad. MDS believes that patents and other proprietary rights are important to develop and maintain the competitive position of our business.

In 2006, MDS leased and built a 10,000-square-foot manufacturing facility in Singapore in an effort to improve the cost base of its instrumentation and materials, and position the Company to take advantage of the increasing importance of the Asian market with respect to future sales growth. To date, the manufacturing of all LC mass spectrometer product lines have been transferred to the site, which has since been expanded to 45,000 square feet.

The majority of MDS Analytical Technologies’ infrastructure, manufacturing and research and development activities take place in North America: Concord, Canada and Sunnyvale, U.S. However, in addition to the Singapore facility, the Company has manufacturing operations in Shanghai, China as well as a global network of sales offices throughout Europe, Asia and Latin America.

The operations of MDS Analytical Technologies to a certain degree have been impacted and could be impacted, by the cyclical nature of the pharmaceutical industry, the investment cycle in the biotech industry and government regulation of environmental issues.

3.5 Diagnostic Laboratories

Until 2006, the Company also operated in the health-care industry primarily through its Canadian diagnostic laboratories business, MDS Diagnostic Services. The diagnostic laboratories business was the largest operator of private-sector clinical diagnostics laboratories in Canada. Services provided by the Company included clinical laboratory testing for physicians and non-hospital health-care

institutions, management of hospital laboratories under contract and other support services for clinical diagnostics.

The diagnostic laboratories business was determined not to be consistent with the Company's strategic focus and was sold to Borealis Investment Management. This transaction was completed on February 26, 2007 as disclosed under **Section 2.4.3 – Divestitures, Discontinuances and Other Transactions**.

3.6 Significant Investees

3.6.1 Lumira Capital Corp. (formerly MDS Capital Corp.)

Lumira Capital Corp., in which MDS has a 52% interest, is a venture-capital and fund-management company focused on the health-care and life sciences industry. Lumira Capital Corp. earns management fees from the management of investment funds, including incentive fees based on the overall success of the funds. In 2006, Lumira Capital Corp. sold its retail funds management business.

3.7 Principal Facilities

The following were the principal operating facilities of the Company as at October 31, 2009:

<u>Location of Facility</u>	<u>Type of Facility</u>	<u>Owned/ Leased</u>	<u>Business Unit</u>	<u>Approximate Square Footage</u>
Ottawa, Canada	Manufacturing Plant	Owned	MDS Nordion	337,300
Concord, Canada	Manufacturing Plant	Owned	MDS Analytical Technologies	147,500
Sunnyvale, U.S.	Manufacturing/Office	Leased	MDS Analytical Technologies	143,100
Lyon, France	Research Facility	Owned	MDS Pharma Services	134,200
Lincoln, U.S.	Clinical Trials Facility	Owned	MDS Pharma Services	130,200
Montreal, Canada	Research Laboratory and Clinical Trials Facility	Leased	MDS Pharma Services	111,400
Tempe, U.S.	Clinical Trials Facility	Owned	MDS Pharma Services	104,500
Bothell, U.S.	Research Laboratory	Leased	MDS Pharma Services	81,100
Vancouver, Canada	Manufacturing Plant	Leased	MDS Nordion	54,800
King of Prussia, U.S.	Division Office	Leased	MDS Pharma Services	16,000
Toronto, Canada	Corporate Offices	Leased	MDS Corporate	54,300
Zurich, Switzerland	Research Laboratory	Leased	MDS Pharma Services	40,200

Neptune, U.S.	Clinical Trials Facility	Leased	MDS Pharma Services	39,700
Taipei, Taiwan	Research Laboratory	Owned	MDS Pharma Services	39,500
Fleurus, Belgium	Manufacturing Plant	Leased	MDS Nordion	157,900
Singapore	Manufacturing Plant	Leased	MDS Analytical Technologies	44,900
Belfast, N. Ireland	Clinical Trials Facility	Owned	MDS Pharma Services	28,500
Downingtown, U.S.	R&D	Leased	MDS Analytical Technologies	27,900
Shanghai, China	Manufacturing Plant	Leased	MDS Analytical Technologies	18,900
Winnersh, U.K.	Division Office	Leased	MDS Analytical Technologies	14,000
Laval, Canada	Manufacturing Plant	Leased	MDS Nordion	13,500

3.8 Research and Development

MDS carries on various research-and-development (R&D) programs largely focused on product development at MDS Analytical Technologies and, to a lesser extent, at MDS Nordion. Accounting for R&D is described in Note 2 to the 2009 Financial Statements, which are incorporated by reference into this AIF.

3.9 Environmental Compliance

MDS has established a series of policies to facilitate compliance with applicable environmental laws and regulations. The policies require that business units conduct regular environmental assessments of Company activities, establish remedial and contingency plans to deal with any incidents, and establish processes to report to senior corporate management and to the Board through the Environment, Health & Safety Committee of the Board on the environmental status of the Company and its subsidiaries. MDS uses an independent third party environmental auditing firm to conduct regular regulatory audits of MDS operations. MDS believes its approach to environmental compliance meets all regulatory requirements. It is not expected that this policy will have a significant impact on capital expenditures, consolidated earnings, or our competitive position.

MDS Nordion as part of its licensing with CNSC has pledged a \$14 million letter of credit in support of future site remediation costs at its Ottawa, Canada facility.

3.10 Other Business Matters

3.10.1 Risk Factors

The businesses in which MDS operates are subject to a number of risks and uncertainties discussed below and under the heading “Risks and Uncertainties” on pages 26 to 28 of the 2009 MD&A and in other documents incorporated herein by reference. Additional risks and uncertainties not

presently known to the Company or that the Company does not currently anticipate may be material, and may impair the Company's business operations. If any such risks occur, the Company's business, financial condition and results of operations could be materially adversely affected.

Continued interruption and future interruptions in the supply of reactor-produced isotopes could have a material adverse effect on the Company's financial results.

To provide greater security for the future supply of molybdenum-99 and other reactor-produced radioisotopes commonly used in nuclear medicine, in 1996, the Company contracted with AECL for the construction and operation of two special-purpose reactors and a processing facility (the MAPLE Facilities) to produce such isotopes. In May 2008, AECL and the Government of Canada announced their intention to discontinue the MAPLE project without prior notice to or consultation with MDS. See "Narrative Description of the Business of MDS – MDS Nordion - National Research Universal Reactor and MAPLE Facilities".

In July 2008, MDS served AECL with Notice of Arbitration proceedings seeking an order to compel AECL to fulfill its contractual obligations under the 2006 Agreement, and, in the alternative and in addition to such order, seeking significant monetary damages. MDS concurrently filed a court claim against AECL and the Government of Canada. The Company is currently focused on the confidential arbitration proceedings.

MDS believes that it has a strong case against AECL in the arbitration, AECL and the Government of Canada in the court action with respect to the breach of and inducing breach of the 2006 Agreement respectively. The Company is currently focused on the arbitration proceedings. The Company believes it has a strong defence to AECL's counterclaim in the arbitration and a strong claim against AECL in the court action regarding the 1996 Agreement. However, given the present stage and complex nature of the proceedings, the uncertainty in projecting the probability of any particular outcome of a dispute of this nature, the range of remedies that may be awarded under the arbitration and/or lawsuit if the Company is successful in its claim, the Company is unable to project a specific outcome for this dispute. An unfavourable outcome would have an adverse effect on the business, financial condition, and results of operations of the Company which could be material.

In the absence of the MAPLE Facilities, the Company depends upon the NRU reactor operated by AECL in Chalk River, Canada for the supply of a majority of its reactor-produced radioisotopes. On May 18, 2009, AECL announced that its NRU reactor would be out of service due to a heavy water leak in the reactor vessel. On August 12, 2009, AECL further clarified that the reactor would be out of service until at least the first quarter of 2010. On January 13, 2010 AECL stated that the current schedule targets return to service by the end of March 2010, however if there are continuing challenges to the repair process, the NRU return-to-service schedule could extend into April 2010. Unless and until the NRU returns to service, MDS Nordion will be unable to obtain supply of substantially all of its reactor-based medical isotope requirements.

The NRU reactor is 50 years old and its current license extends to 2011. While AECL and the Government of Canada have stated that they intend to apply to extend the license for an additional five years to 2016, there can be no assurance that the license will be extended past 2011. There can also be no assurance that the NRU reactor, if it returns to service following the current outages, will not experience other planned or unplanned shutdowns in the future. An extension of the current

shutdown or further prolonged planned or unplanned shutdowns would have an adverse effect on the business, financial condition, and results of operations of the Company which could be material.

If the sale of MDS Pharma Services Early Stage business is not completed there could be a negative impact on the market price of the Common Shares, and/or the use of cash required to invest in and operate the business may have a significant negative impact on our cash flow and operations.

We have announced our intention to sell Early Stage and initially stated that upon completion of the Early Stage sale, we intended to make a secondary distribution to shareholders with a portion of the net cash proceeds. This secondary distribution would be in addition to the planned shareholder distribution of \$400 million to \$450 million following the sale of MDS Analytical Technologies. There can be no assurance that MDS will complete a transaction involving Early Stage. During the first quarter of fiscal 2010, continued deterioration of market conditions, the declining Early Stage customer base and new developments in the ongoing Strategic Review process, including recent discussions with interested parties, are now likely to result in lower sale proceeds than previously expected, and we now believe the sale proceeds from Early Stage may not be sufficient to fund a second distribution to shareholders. Shareholders may be expecting the sale and subsequent distribution to be completed, and if we are unable to complete the sale of Early Stage and/or make a distribution, the market price of our Common shares may decline.

The early-stage contract research organization market has recently seen reductions in orders and revenue as a result of economic conditions, mergers between major pharmaceutical companies and the reduced availability of funding for biotechnology companies. In addition, some customers have expressed concern regarding the uncertainty created by MDS's Strategic Review process. The Company's Early Stage business has seen reduced orders and revenue, which we believe is driven by these factors. Considering the high portion of fixed costs within Early Stage, profitability has declined as a result of reduced revenue, and Early Stage is currently generating an EBITDA loss. While we believe it is probable that a sale of Early Stage will occur, in the unlikely event that MDS does not complete the intended sale of Early Stage, in order to increase revenue and improve profitability, MDS may have to invest additional capital and incur restructuring costs to strengthen the business. The cost and length of time for which MDS would have to incur cash outflows related to Early Stage is uncertain. Those outflows may have a material adverse effect on the business, financial condition and cash flows of the Company.

The Company has retained, or expects it may have to retain, certain obligations in relation to businesses it has sold or intends to sell, that may result in future charges that are significant in relation to cash flow and could have a material adverse effect on the financial position of the Company.

Certain liabilities, relating to the businesses which have been sold or are expected to be sold, have been or will be retained by the Company. In particular, the Company may remain the defendant in current lawsuits, and potentially future lawsuits, that relate to activities, which occurred prior to the sale of the businesses, which have been or will be sold. The Company has retained liabilities relating to studies that were closed prior to the sale of MDS Pharma Services Phase II-IV business. The Company may also retain certain pre-closing liabilities of the businesses sold, such as environmental liabilities. As well, the Company may be required to reimburse the purchasers of the businesses sold under certain circumstances, including for breaches of representations and warranties in the

applicable sale agreement. Given its reduced size, the Company now has less of a financial base upon which to sustain such retained liabilities, and any payments required to be made as a result of such liabilities could have a material adverse effect on the Company and its financial condition.

As a result of the Strategic Review announced on February 2, 2009, certain customers, suppliers and partners of MDS may express concern about the long term strategic direction of the Company, which could have a negative impact on proposals, new business generation and revenues, and the value we obtain if we sell the MDS Pharma Services Early Stage business.

Customers in the contract research organization industry often work with a small number of suppliers or in partnership arrangements due to their reliance on their suppliers to comply with regulatory quality and reporting requirements. In response to the uncertainty created by the Strategic Review, our customers, suppliers and strategic partners may delay or defer decisions concerning transacting business with us which could have an adverse effect on the revenues of our Early Stage Pharma Services business.

There can be no certainty that all conditions precedent to the sale of MDS Analytical Technologies (AT Sale) will be satisfied or that other factors will prevent the AT Sale. Failure to complete the AT Sale could negatively impact the market price of the Common Shares.

The completion of the planned sale of MDS Analytical Technologies is subject to a number of conditions precedent, certain of which are outside the control of the Company, including regulatory approvals and the completion of the sale by Life to Danaher of its interest in the Applied Biosystems MDS Analytical Technologies Instruments joint venture. There can be no certainty that these conditions will be satisfied or, if satisfied, when they will be satisfied. Danaher is also not required to consummate the sale of MDS Analytical Technologies in the event of a change having a Material Adverse Effect (as defined in the sale agreement between MDS and Danaher) prior to the consummation of the planned sale of MDS Analytical Technologies. Although a Material Adverse Effect excludes certain events that are beyond the control of the Company, such as changes in general economic conditions or general conditions in any of the markets in which the MDS Analytical Technologies business operates, there are a number of other events that would be consider as having a Material Adverse Effect. If the sale of MDS Analytical Technologies is not completed, the market price of the Common shares may decline to the extent that the market price reflects a market assumption that the sale of MDS Analytical Technologies will be completed. If the sale of MDS Analytical Technologies is not completed and our Board of Directors decide to seek another merger or business combination, there can be no assurance that it will be able to find a party willing to pay an equivalent or more attractive price than the price to be paid pursuant to the agreement between MDS and Danaher in relation to the sale of MDS Analytical Technologies.

The Company's business, financial condition, and results of operations could be subject to significant fluctuation, and the Company may not be able to adjust its operations to effectively address changes it does not anticipate.

The Company cannot reliably predict future sales and profitability. Changes in competitive, market and economic conditions may require the Company to adjust its operations, and it may not be able to make those adjustments or to make them quickly enough to adapt to changing conditions. A high

proportion of the Company's costs are fixed and thus, declines in sales could disproportionately affect its business, financial condition, and results of operations in any particular quarter.

Factors that may negatively affect sales and operating results include:

- access to supplies of key materials, such as medical isotopes, required to deliver products to the Company's markets;
- the timing of supply of cobalt which is primarily obtained from suppliers when they shutdown their reactors for maintenance;
- global or regional economic downturns including instability of equity markets and financial markets;
- lack of demand for, or market acceptance of, the Company's products and services;
- adverse changes in industries on which the Company is dependent, such as the pharmaceutical and biomedical industries;
- changes in the volume or timing of product or service orders;
- inability of the Company's customers to obtain regulatory approval or funding to continue the development of certain drug compounds including radiopharmaceuticals;
- changes in the relative amounts of sales represented by various products, services and customers which have different gross margin levels;
- delays or problems in the introduction of new products or services;
- competitors' announcement or introduction of new products, services or technological innovations;
- competitive pressures resulting in lower selling prices;
- changes in foreign exchange rates and interest rates;
- increased costs of raw materials or supplies;
- changes in import licenses or duties changes; or
- changes in the financial stability of customers or suppliers, including their ability to obtain financing at a reasonable cost.

The Company believes that operating results for any particular quarter are not necessarily a meaningful indication of future results. While fluctuations in the Company's quarterly operating results could negatively or positively affect the market price of the Common Shares, these fluctuations may not be related to the future overall operating performance of the Company.

An interruption in the Company's ability to manufacture its products or deliver its services or an inability to obtain key components or raw materials may adversely affect its business.

A number of the Company's products are manufactured at single locations, with limited alternate facilities. Any event including, a labour dispute, natural disaster, fire, power outage, security, regulatory, health or other issue that results in a prolonged business disruption or shutdown to one or more of the Company's facilities, could create conditions that prevent it from manufacturing products at previous levels or at all.

In addition, the Company purchases certain components and raw materials from sole suppliers and may not be able to quickly establish additional or replacement sources for certain components or materials at acceptable prices. A reduction or interruption in manufacturing, or an inability to secure alternative sources of raw materials or components, could have a material adverse effect on the business, financial condition or results of operations of the Company.

The NRU reactor which supplies the substantial majority of the Company's reactor-based medical isotopes is currently out of service and if, and when, the NRU returns to service there is uncertainty as to the extent of short and long term adverse affects to the business of the Company.

The Government of Canada publicly stated its intent to exit the isotope business and as result of this statement and the impact of the NRU reactor being out of service, various governments, including the U.S., and companies have undertaken to create new sources of supply of Mo⁹⁹ or alternative modalities to the use of Mo⁹⁹. MDS Nordion may not receive supply from these new sources and these new sources could result in a deterioration of the Company's market position and/or the price of Mo⁹⁹, adversely affecting the Company's results. As result of the NRU reactor being out of service, the Company's customers may have secured supply from other suppliers and when the NRU reactor returns to service there is uncertainty as to whether such customers will purchase from the Company and the amount that they will purchase from the Company. As well, in the past, the Company marketed its medical isotopes based on the reliability of supply that was provided by the NRU. The NRU outage negatively impacted the Company's marketing position and may result in a reduction of purchases by the Company's customers. The impact of the outage of the NRU and other reactors has led to an increase in the number of alternate isotope supply initiatives to address the current fragility of medical isotope supply, including the introduction of the "American Medical Isotopes Production Act".

Covenants and Restrictions in our Senior Unsecured Notes and bank credit facilities and other debt instruments may require us to repay our debt and/or lose access to our credit facilities or limit our activities.

Our Senior Unsecured Notes, as well as our revolving credit facility, require us to meet certain debt covenants, including specified financial ratios that are defined under the terms of the note purchase agreement relating to our Senior Unsecured Notes and revolving credit facility. Failure to meet these financial ratios may result in an event of default which could result in acceleration of our indebtedness, under the Senior Unsecured Notes and require us to prepay the Senior Unsecured Notes before their scheduled due date. Non-compliance with certain financial ratios could also

impair our ability to draw funds on the revolving credit facility. Future debt instruments to which we may become subject to could also contain similar provisions.

The earnings impact from an extended NRU reactor shutdown, combined with the continued negative impact of existing market conditions, may cause a breach of these debt covenants. A breach of these covenants may require repayment of our Senior Unsecured Notes have a principal amount outstanding of \$199 million (\$221 million as of October 31, 2009) plus accrued interest and an associated tax-deductible make-whole payment of approximately \$23 million that would prevent us from accessing the existing revolving credit facility. As a result of losing access to the revolving credit facility, we would also be required to cash collateralize approximately \$20 million of letters of credit. Depending on the timing of the sale of MDS Analytical Technologies, and based on the reporting of compliance with the covenants with respect to our first quarter of fiscal 2010, a breach of certain debt covenants related to the senior unsecured notes and the revolving credit facility may occur during our second quarter of fiscal 2010. We may, however, not violate our covenants, or we may be able to obtain a waiver if we expect to be in violation of the covenants.

While we intend to redeem our Senior Unsecured Notes using cash on hand and a portion of the proceeds from the AT Sale and cancel the revolving credit facility upon completion of the sale, if we fail to meet the financial ratios at some point prior to the completion of the sale of MDS Analytical Technologies we would be required to seek a waiver from the note holders or obtain new financing at market rates. The Company may not be able to obtain a waiver or obtain new financing, and may not have sufficient cash on hand to repay the Senior Unsecured Notes, including the make-whole payment, cash collateralize letters of credit and fund its operations. In addition, our Senior Unsecured Notes and our revolving credit facility contain restrictive covenants limiting our ability to engage in certain activities. The note purchase agreement that governs our Senior Unsecured Notes includes restrictions on our ability and the ability of our subsidiaries to:

- pay dividends (see **Section 4.2 – Dividends**);
- repurchase Common Shares (see **Section 2.4.1 – Capital Structure**);
- invest in businesses that the Company does not control;
- sell assets;
- incur obligations that restrict the ability of our subsidiaries to pay dividends or other amounts to us;
- guarantee or secure indebtedness;
- enter into transactions with affiliates;
- consolidate, merge, or transfer all or substantially all of our assets and the assets of our subsidiaries on a consolidated basis; or
- initiate refinancing of debt.

Under a restricted payments covenant in our Senior Unsecured Notes, MDS is currently unable to pay dividends or repurchase Common Shares which may limit our ability to access new capital and may negatively affect our share price.

The Company's access to cash for ongoing operations or for strategic transactions may be restricted due to the cost or availability of financing and/or government regulations.

While MDS intends to finance on-going operations, capital expenditures and transaction and restructuring costs from existing cash, cash flow from operations, and cash proceeds from the AT Sale, cash financing required for large strategic transactions or unexpected operating needs may prove costly, and difficult or impossible to obtain.

Following the AT Sale, the remaining MDS businesses will be less profitable, particularly if the NRU does not return to service. In addition, the Company must fund ongoing transaction and restructuring costs following the AT Sale. As a result, banks and other lenders may not be willing to provide financing to the Company, or financing on acceptable terms, until the Company has completed its transition services, the NRU is back in service and/or the Company has shown a successful reduction in its corporate costs.

The Company faces significant competition and it may not be able to compete effectively.

MDS competes with many companies ranging from multinationals to start-up companies. Competition takes many forms, including aggressive pricing for products or services that are comparable to its own, and development of new products or services that are more cost-effective, or have superior performance than its current products or services. The Company's products or services can be rendered obsolete or uneconomical as a result of this competition. Failure to compete effectively could cause the Company to lose market share to its competitors and have a material adverse effect on the business, financial condition and results of operations of the Company.

The Company also faces competition for marketing, distribution and collaborative development agreements, for establishing relationships with academic and research institutions, and for licenses to intellectual property. In addition, academic institutions, governmental agencies and other public and private research organizations also may conduct research, seek patent protection and establish collaborative arrangements for discovery, research, clinical development and marketing of products or services similar to those of MDS. These companies and institutions compete with MDS in recruiting and retaining qualified scientific and management personnel as well as in acquiring necessary product technologies.

Globalization of the Company's industries also impacts its competitiveness. As competitors and new entrants establish operations in lower-cost labour markets, pricing in these industries may be reduced resulting in lower revenues and profitability for the Company.

The Company is subject to complex and costly regulation.

All of the Company's facilities that handle or store radioactive material are government regulated and inspected. Operating licenses related to radioactive materials could be subject to cancellation under certain circumstances. Failure to obtain or maintain future operating licenses could have a material adverse effect on the business, financial condition, or results of operations of the Company. Governmental agencies throughout the world strictly regulate the drug development process. The MDS facilities devoted to pharmaceutical development are subject to regular inspection by the FDA, Health Canada, the European Medicines Agency (EMA) and other regulatory agencies. Customers also are subject to periodic review by drug approval authorities. The Company's failure, or any of its customers' failure, to pass an inspection conducted by the FDA, Health Canada, the EMA, and any other regulatory body could result in disciplinary action leading to increased cost and/or reduced customer demand that would have a material adverse effect on the business, financial condition or results of operations of the Company.

The nature of MDS Nordion's products, and the highly regulated environment in which MDS Nordion operates, requires compliance with a multitude of regulations as well as legislation governing radioactive material transportation. The receipt, processing, handling, shipping and use of radioisotopes are highly regulated. See "Narrative Description of the Business – MDS Nordion - Overview of the Business".

The health and life sciences industries are subject to extensive and frequently changing laws and regulations. If the Company fails to comply with applicable laws and regulations, it could suffer civil and criminal damages, fines and penalties, loss of various licenses, certificates and authorizations necessary to operate its business, as well as incur liabilities from third-party claims, all of which could have a material adverse effect on the business of the Company.

The Company will be required to implement restructuring actions primarily related to the resizing of its corporate functions subsequent to the sale of MDS Analytical Technologies and may be required to incur additional charges in the future to implement additional restructuring.

Following the completion of the AT Sale, MDS intends to close its corporate offices in Toronto, Canada and establish its corporate offices in Ottawa, Canada. In addition, MDS operates in markets in which demand for products and services may vary on a global basis. As a result of these factors, MDS intends to implement restructuring programs to better align its workforce and facilities to match demand and to maintain or improve mid- to long-term profitability. Significant restructuring actions and consequent workforce reductions could have the effect of reducing our employee talent pool and available resources of the Company. Consequently this could have long-term effects on the Company's business by decreasing or slowing improvements in its products, thereby affecting the Company's ability to respond to customer demand, and limiting its ability to hire and retain key personnel. In addition, restructuring costs may have a negative impact on the operations of the Company, and these actions may not achieve the desired improvement in profitability.

The majority of the Company's existing corporate employees, including its executive officers, are expected to leave the Company in 2010 and as a result the business may be adversely affected.

During 2010, following the completion of the AT Sale, MDS intends to close its corporate offices in Toronto, Canada and establish its new corporate headquarters in Ottawa, Canada. There has been a change in the Company's CEO and effective February 1, 2010; there is a planned change in the Company's CFO. The Company's executive officers and corporate employees are responsible for, or significantly involved in, many of the Company's business decisions and activities, including among other things, financial reporting, taxation and the strategic repositioning plan. The Company intends to implement a transition plan to support the transfer of work, processes and knowledge between incumbent employees in Toronto and new employees to be hired in Ottawa, retention plans for key employees in Toronto, records retention programs, and the transfer of certain staff from Toronto to the Ottawa office. However, given the expected significant change in employees, including executive officers, the extent of activities being undertaken, including the completion of the strategic repositioning and transition service agreements associated with the businesses being sold, not all activities may be properly completed and certain key aspects of knowledge of the business may not be transferred to the new corporate staff. In addition, because of such changes we may be at higher risk of not maintaining sufficient controls over financial reporting, which could result in a material weakness and the restatement of financial reports; in addition we may not be successful in supporting audits of tax filings; and suffer increased difficulty in administering certain aspects of the agreements related to the businesses we have sold.

From time to time during the normal course of business, the Company and its subsidiaries are subject to litigation.

From time to time, the Company may be the plaintiff or defendant in litigation, including potential litigation regarding products and services it provides or products and services it expects or receives from others. Lack of success in such litigation may expose the Company to financial loss or prevent it from enforcing rights that are important to the Company, thereby having an adverse effect on the business or results of operations of the Company. During fiscal 2009, MDS Inc. was served with two complaints related to repeat study costs, mitigation costs related to certain bioequivalence studies carried out at our Quebec, Canada facility, and claims for lost profits. MDS maintains an accounting provision in respect of study costs as well as errors and omissions insurance with respect to damages. MDS has assessed these claims and no provision has been recorded related to claims for lost profit. In addition, material litigation that is not covered by insurance policies, or falls within retained liability under the Company's policies, could have a material adverse impact on the business, financial condition, or results of operations of the Company.

The Company's insurance coverage may not be adequate in all circumstances. There can be no assurance that such coverage will continue to be available at rates and on terms acceptable to MDS.

MDS maintains a global liability insurance policy covering all of its operating units. The policy provides coverage for normal operating risks and includes annual liability coverage of up to \$50 million for MDS Analytical Technologies, \$100 million for MDS Nordion, and \$97.5 million for MDS Pharma Services. The Company also maintains a global policy covering property and business interruption risks with a total insured value of \$1.7 billion and directors' and officers' insurance having a limit of \$140 million. There is no certainty that the amount of coverage is adequate to

protect the Company in all circumstances or that the Company will be able to acquire such insurance on an ongoing basis at rates acceptable to the Company. In addition, the Company is expected to retain liabilities for businesses which are divested, and may not be able to acquire adequate insurance to cover these potential liabilities. Failure to obtain or maintain adequate insurance may have a material adverse affect on the Company's business and operations.

MDS may not be able to successfully execute strategic transactions.

MDS may be unable to complete the acquisition of promising businesses, divestitures of all or portions of businesses including MDS Pharma Services Early Stage business or license technologies for many reasons, including:

- global market conditions and lack of credit availability;
- the need for regulatory and other approvals;
- the inability by the Company, or others, to raise capital to fund transactions;
- current valuations of businesses and technologies;
- potential restrictions in instruments governing the Company's indebtedness; or
- regulatory or statutory restrictions including with respect to foreign ownership of shares of MDS (Canada) Inc. See "Narrative Description of the Business of MDS - MDS Nordion – Strategic Considerations".

Any business MDS may seek to acquire or technology it may seek to license may fall short of expectations or may prove to be unprofitable. Accordingly, the earnings or losses from any such business that is acquired or technology that is licensed may dilute earnings. In addition, any failure to complete an acquisition, divest a business or license a technology may result in adverse market reaction.

Under agreements that govern each of our joint ventures in MDS Analytical Technologies, a change of control at one of the joint ventures would entitle the other joint venture party to terminate the joint venture.

MDS is party to joint venture agreements with Applied Biosystems, (now a part of Life Technologies) and PerkinElmer. The agreements governing these joint ventures provide termination rights in various circumstances, including a right in favour of each party to terminate the joint venture, absent the consent of the other party, and subject to certain transition rights of both parties, in the event of a change of control of the other party. Any early termination of either joint venture could adversely affect our working relationship with the partner of the terminated joint venture and adversely impact our business.

MDS may incur product liability losses and other litigation liability.

In the ordinary course of business, the Company is subject to product liability claims and lawsuits, including potential class actions, alleging that our products have resulted or could result in an unsafe condition or injury. Any product liability claim brought against us, with or without merit, could be

costly to defend and could result in an increase of our insurance premiums. Some claims brought against us might not be covered by our insurance policies. In addition, MDS has significant self-insured retention amounts which the Company would have to pay in full before obtaining any insurance proceeds to satisfy a judgment or settlement. Furthermore, even where the claim is covered by our insurance, our insurance coverage might be inadequate and MDS would have to pay the amount of any settlement or judgment that is in excess of our policy limits. Manufacturing flaws, component failures, design defects, off-label uses or inadequate disclosure of product-related information could result in an unsafe condition or the injury or death of a patient. These problems could lead to a recall of, or issuance of a safety alert relating to, our products and result in significant costs and negative publicity.

If the AT Sale is completed, the size and scope of the Company's business will be substantially reduced.

Historically, the financial performance of the MDS Analytical Technologies business has been a significant contributor to the Company's financial results. If the AT Sale is completed, the size and scope of the Company's business will be substantially reduced. This may have a negative impact on the ability of the Company to access financing, and increase the cost of financing. This may also increase variability in quarterly financial performance due to changes in cost, demand, availability of raw materials, foreign exchange fluctuation, and other factors.

Foreign currency exchange rates may adversely affect results.

The Company derives a large portion of revenues from international sales. For the year ended October 31, 2009, the Company derived approximately 45% of total revenues from continuing operations, from outside the U.S. In addition, MDS Analytical Technologies and MDS Pharma Services generate a significant portion of their revenues from outside of the U.S. The Company's financial statements are denominated in U.S. dollars. As a result, factors associated with international operations, including changes in foreign currency exchange rates, could significantly affect the business, financial condition and results of operations of the Company. As a global company, the Company's exposure to foreign-exchange rate changes includes but is not limited to, the following:

- Costs and revenues incurred in foreign currencies, when translated into U.S. dollars for financial reporting purposes, can fluctuate due to exchange rate movements.
- Embedded derivatives based on the currency of certain contracts the Company enters into with customers and suppliers are valued at market rates. The Company may report significant gains or losses based on changes in current and expected future, or commonly referred to as forward, exchange rates.
- The Company's foreign subsidiaries, on occasion, invoice third-party customers in foreign currencies other than the functional currency in which they primarily conduct business. Movements in the invoiced currency, compared with their functional currency, can result in either realized or unrealized transaction losses that directly impact cash flows and results of operations of the Company.

- Certain long-term contracts with suppliers or customers may experience significant fluctuations in foreign exchange rates over several years thereby impacting cash flows and results of operations of the Company.
- The Company's manufacturing and distribution organization is multinational in nature resulting in a variety of intercompany transactions that are billed and paid in many different currencies. Cash flows and results of operations of the Company are therefore directly impacted by volatility in these currencies.
- The cash flow needs of each of the Company's foreign subsidiaries vary over time. Accordingly, there may be times when a subsidiary is on the receiving side or the lending side of a short-term advance from either the Company or one of its subsidiaries. These advances, being denominated in currencies other than a particular entity's functional currency, can expose the Company to volatility in exchange rates that can adversely impact both its cash flows and results of operations.
- To repay debt or take advantage of tax saving opportunities, the Company may remit cash from its foreign locations to Canada. When this occurs, the Company is liquidating foreign-currency net asset positions and converting them into Canadian or U.S. dollars. Cash flows and results of operations of the Company may therefore be adversely impacted by these transactions.

Changes in government and regulatory policies may reduce demand for the Company's products and services, and increase expenses.

MDS competes in markets in which it, or its customers, must comply with federal, state, local, and foreign regulations, such as environmental, health and safety, and food and drug regulations. These regulations may also create or impact market demand for products and services. Because of the high cost to develop, configure, and market products and services to meet customer needs, any significant change in these regulations could reduce demand for the Company's products or services or increase the costs of producing these products and services. Sales of our products depend, in part, on the extent to which the costs of our products are reimbursed by governmental health administration authorities, private health coverage insurers and other third-party payors. Our potential customers' ability to obtain appropriate reimbursement for products and services from these third-party payors affects the selection of products they purchase and the prices they are willing to pay. In addition, demand for new products may be limited unless MDS obtains reimbursement approval from governmental and private third-party payors prior to introduction. Reimbursement criteria vary by country, are becoming increasingly stringent and require management expertise and significant attention to obtain and maintain qualification for reimbursement.

In addition, changes to government health-care reimbursement policies could have a significant impact on spending decisions of certain of the Company's customers. In recent years, the United States Congress and U.S. state legislatures have considered various types of health-care reform in order to control growing health-care costs. Similar reform movements have occurred in Europe and Asia. Implementation of health-care reform legislation to reduce costs could limit the profits that can be made from the development of new drugs. This could adversely affect research and

development expenditures by pharmaceutical and biotechnology companies which could in turn decrease the business opportunities available to the Company both in the U.S. and abroad.

Changes in trends in the pharmaceutical and biotechnology industries could adversely affect operating results.

Industry trends and economic and political factors that affect pharmaceutical and biotechnology companies also affect the Company's business. For example, R&D budgets fluctuate due to changes in global and regional economic conditions, availability of resources, availability of financing or funding, mergers of pharmaceutical and biotechnology companies, spending priorities and institutional budgetary policies. The Company's business could be adversely affected by any significant decrease in life sciences research and development expenditures by pharmaceutical and biotechnology companies, as well as by academic institutions, government laboratories and private foundations.

The Company may be unable to effectively introduce and market new products and services, or may fail to keep pace with advances in technology.

Without the timely introduction of new products and enhancements, the Company's products could become technologically obsolete over time, which could have a material adverse effect on the Company's business, financial condition and results of operations. New product offerings will not succeed if the Company is unable to:

- accurately anticipate customer needs;
- accurately anticipate evolving government and regulatory policies;
- innovate and develop new products and services;
- successfully commercialize new technologies in a timely manner;
- price products competitively;
- source, manufacture and deliver high-quality products in sufficient volumes and on time; or
- differentiate product offerings from its competitors' product offerings.

Developing new products may require significant investments before the Company, or its customers, can determine the commercial viability of the new product. Investments may be made in research and development of products that do not become commercially viable.

The Company is dependent upon the services of key personnel.

The Company's success depends, to a significant extent, upon the continued service of its executive officers and key management and technical personnel - particularly scientific, technical and sales staff - and the Company's ability to continue to attract, retain, develop and motivate qualified personnel. The competition for these employees is intense. The loss of the services of one or more of the Company's key personnel could have a material adverse effect on the business, financial condition and results of operations of the Company. The investment required to retain key staff,

including the provision of compensation packages that are competitive, could have an impact on the profitability of the business of the Company. The Company does not maintain key person life insurance policies on any of its officers or employees. The Company believes that its employees may experience uncertainty about their future roles with the Company until the Company's strategies with respect to its business are announced and executed. This may adversely affect the Company's ability to attract or retain key employees. The Company has established retention programs to mitigate this risk but there can be no assurance that they will be effective.

The Company could be subject to claims as a result of product failure in clinical trials testing.

During clinical trials testing, the Company will typically administer pharmaceutical products owned and developed by others to individuals acting as test subjects. The terms of the contracts the Company enters into with the sponsor of the product vary and do not prevent individuals to whom the products have been administered from filing claims against the Company even though it may be indemnified in these circumstances. Furthermore, the indemnity obligations established under these contracts are not secured and it is possible that the indemnifying party may not have the financial ability to meet its obligations to the Company in the case of an adverse event.

Contract research services create a risk of liability.

In contracting to work on drug development trials and studies, the Company faces a range of potential liabilities, including:

- errors or omissions that create harm during a trial to study volunteers or after a trial to consumers of the drug after regulatory approval of the drug;
- general risks associated with clinical pharmacology facilities, including negative consequences from the administration of drugs to clinical trial participants or the professional malpractice of clinical pharmacology medical care providers; and
- errors and omissions during a trial or study that may undermine the usefulness of a trial or data from the trial or study, or impact customers' regulatory submissions.

MDS adheres to Canadian, European Union and other applicable laws regulating the handling of confidential personal information. This is accomplished through the implementation of a comprehensive program that encompasses globally recognized information protection practices. MDS continually monitors its compliance with applicable privacy and data protection regulations. Contractual indemnifications and some limitations may not generally protect the Company against liability arising from certain of its own actions, such as negligence or misconduct. MDS could be materially and adversely affected if it were required to pay damages or bear the costs of defending any claim which is not covered by a contractual indemnification provision or in the event that a party who must indemnify MDS does not fulfill its indemnification obligations or which is beyond the level of the Company's insurance coverage. There can be no assurance that MDS will be able to maintain such insurance coverage on terms acceptable to the Company.

MDS is subject to a number of risks due to the fact that it carries on business in several countries.

MDS's operations are subject to the risks of carrying on business in various countries in North America, Europe and Asia. Accordingly, future business, financial condition and results of operations of the Company could be materially adversely affected by a variety of factors including, but not limited to:

- changes in a country's or region's political or economic conditions, particularly in developing or emerging markets;
- exposure to foreign-exchange rate fluctuations between currencies;
- tax consequences and/or other potential restrictions on the transfer of funds between subsidiaries;
- longer payment cycles of foreign customers and difficulty of collecting receivables in foreign jurisdictions;
- trade protection measures and import or export licensing requirements;
- potential nationalization of industries, properties or assets that the Company relies on;
- differing tax laws and changes in those laws including investment tax credits, or changes in the countries in which MDS is subject to tax;
- differing cultural and business practices associated with foreign operations;
- differing labour laws, including being subject to certain European regulations relating to work counsels and changes in those laws;
- differing protection of intellectual property and changes in that protection; or
- differing regulatory requirements and changes in those requirements.

MDS could be subject to tax reassessment and may be required to pay additional income taxes.

MDS tax filings are subject to audit and review by government tax authorities who may disallow certain deductions or disagree with the Company's interpretation of tax laws, which may result in its having to pay additional taxes and incur additional tax expense. This obligation extends to MDS filings prior to the sale of those subsidiaries sold by the Company.

The terms of MDS Pharma Services' contracts entitle clients to cancellation rights, which, if exercised, could have a material adverse effect on the business, financial condition, and results of operations of the Company.

The majority of the revenues earned by MDS Pharma Services are under contracts that typically run several months for drug discovery to more than one year for Phase I clinical trials. Terms of most contracts entered into by MDS Pharma Services entitle clients to cancellation rights that may be exercised by the client in the event of regulatory delays or if unexpected results are encountered at any stage of the development program. The cancellation of contracts by these customers could have a material adverse effect on MDS Pharma Services' business, financial condition and results of operations.

The uncertainty of the Company's strategic direction may make it difficult to retain or attract employees and may have a negative impact on operations.

As described in the risk factor "MDS is dependent upon the services of key personnel", certain employees are critical to the Company's operations and the Company believes that its current and prospective employees may experience uncertainty about their future roles with the Company until the Company's strategies with respect to the business are announced and executed. This may adversely affect the Company's ability to attract or retain key employees in the period until the Company has executed on its strategic repositioning. The Company has established retention programs to mitigate this risk but there can be no assurance that they will be effective.

Potential changes to regulations regarding the export and use of highly enriched uranium could cause supply disruptions.

Certain purchased medical isotopes are produced in reactors and are by-products of the decay of the uranium in the reactor. MDS's supplier of medical isotopes, AECL, obtains the majority of its uranium from the United States. The U.S. Department of Energy (DOE) strictly controls exports of HEU. Delays in obtaining HEU could cause supply disruption for certain isotopes. Currently the DOE must approve each shipment of HEU. There is political pressure by the U.S. Government on medical isotope manufacturers to convert to low-enriched uranium (LEU). Any conversion to LEU, should such conversion become technologically, commercially and economically viable, could require significant additional capital investment to convert both reactors and related processing facilities, and could impact the profitability and potential viability of the Company's medical isotope business. In November 2009, Bill H.R. 3276, also known as, the American Medical Isotopes Production Act, was passed by the House of Representatives. Included in H.R. 3276 is language related to phasing out the export of all HEU for use in making medical isotopes within a decade. It is uncertain whether the bill will become law, including the phasing out of exports of HEU.

Failure to gain FDA acceptance of Study Reviews could have a continuing material adverse effect on the financial performance of MDS Pharma Services bioanalytical operations.

During 2004, 2006 and 2007, MDS Pharma Services received written communication from the FDA related to certain generic bioequivalence studies carried out at MDS Pharma Services' bioanalytical laboratory facilities in Montreal, Canada. The communication resulted from inspections carried out by the FDA in 2003 and 2004, a subsequent FDA audit in March 2006, and the FDA's review of the Company's responses to the audit and related communications. The communications from the

FDA outlined concerns in certain studies about unexpected results in a limited number of study samples, the standard procedures in place at that time to investigate the root cause of the unexpected results, and the policies and procedures in place to address such results.

In January 2007, the FDA issued statements that outlined certain steps that those customers of MDS Pharma Services' Montreal bioanalytical facilities would be required to take to resolve any outstanding issues. The FDA directed sponsors of approved and pending generic drug submissions containing study data produced in these facilities between January 2000 to December 2004 to take one of three actions within six months to address FDA concerns about the accuracy and validity of these bioanalytical studies: 1) repeat their bioanalytical studies; 2) re-analyze their original study samples at a different bioanalytical facility; or 3) independently audit original study results. In addition, the FDA wrote to sponsors of innovator submissions and requested that they advise the FDA of any submissions containing data from those facilities from the affected period. In some instances, the FDA also required these innovator sponsors to validate their studies by also choosing one of the three requested approaches.

In September 2007, MDS Pharma Services responded to questions from European regulators about the bioanalytical work performed in the Montreal facility. The European regulators reviewed studies in Montreal that are representative of the work done at that site, and issued a final report in July 2008 indicating that they have no significant concerns and that no further actions were required. While the Company's support for generic and innovator clients is substantially completed, there can be no assurance that further work will not be required, or that there will not be further impact from the work, such as the failure of clients' studies to gain FDA clearance. Such results could impact the Company's ability to attract and retain work, cause the Company to incur further support or reimbursement expenses, or lead to other adverse results which could have a material adverse effect on the overall financial results of the Company.

The Company is required to provide transition services to certain of its divested businesses; the failure to deliver services may subject MDS to reduced payments, penalties and its operations may be adversely affected.

The Company may be required to provide transition services to several companies concurrently in relation to recently completed and expected sales of businesses. The Company has a limited number of employees and/or contractors who are able to provide these services and complete these activities. The majority of the employees providing transition services are expected to be terminated upon the completion of the transition services and therefore may be difficult to retain. Although the Company has implemented certain retention plans, there can be no assurance that all key employees will be retained and that all transition services will be provided.

There can be no assurance as to the amount of the proceeds from the AT Sale, if any, that will be used to repurchase shares of the Company pursuant to the proposed substantial issuer bid or otherwise distributed to Shareholders.

The quantum and method of any distribution of AT Sale proceeds to Shareholders will be finally determined by the Board of Directors following the completion of the AT Sale. The terms of the proposed substantial issuer bid are subject to the discretion of the Board and applicable law and the satisfaction of solvency tests set forth in the CBCA. While the Board currently intends to use

approximately \$400 million to \$450 million of the proceeds of the AT Sale to complete a substantial issuer bid, intervening events could cause the amount of such funds to be reduced or could cause the Board to determine that the substantial issuer bid be deferred indefinitely or that the method of distribution of proceeds should be other than by way of substantial issuer bid.

There can be no certainty that the net proceeds we receive from the intended sale of MDS Pharma Services Early Stage business will allow us to make a distribution to shareholders or equal the fair value used in determining loss on sale that was booked when the business was moved into discontinued operations.

Assuming the sale of MDS Pharma Service Early Stage business is completed, proceeds from the sale after deducting the associated transaction and restructuring costs (net proceeds) may be lower than the fair value used in the determination of the carrying value of the business, which would require us to book a loss on the sale that may be significant. While management believes that the estimated loss as of October 31, 2009 was its then best estimate and that its valuation methods are reasonable and appropriate in the circumstances, the ultimate amount of this estimated loss may vary significantly. During the first quarter of fiscal 2010, continued deterioration of market conditions, the declining Early Stage customer base and new developments in the ongoing strategic review process, including recent discussions with interested parties, are now likely to result in lower sale proceeds than previously expected, which could lead to an additional loss on sale in the range of \$30 million to \$60 million. As such, we also believe that these reduced net cash proceeds from the sale may not be sufficient to fund a secondary distribution to shareholders beyond the planned shareholder distribution of \$400 million to \$450 million following the sale of MDS Analytical Technologies. To the extent that investors have used the fair value of Early Stage, which the Company has determined for accounting purposes; or used the revised estimated range of additional loss; and/or have assumed the secondary distribution to Shareholders subsequent to the Early Stage sale in their valuation of the Company; and actual net proceeds are lower than the fair value and/or are insufficient to fund the secondary distribution to shareholders, the market price of our Common Shares may decline.

The AT Sale may result in an Event of Default under the Company's Credit Agreement

If the Company's Credit Agreement is not terminated at or prior to the closing of the AT Sale, the AT Sale will constitute a default under the Company's Credit Agreement which if not remedied would result in an Event of Default. In order to avoid a potential Event of Default, the Company has completed negotiations with its banking syndicate and has received an amendment to waive the default provisions in return for the cancellation of the Credit Agreement at or prior to the closing of the AT Sale. The Company intends to terminate the Credit Agreement at or prior to the closing of the AT Sale. We expect to retain sufficient cash from the AT Sale of the businesses in absence of having a revolving credit facility, and therefore due to the costs and restrictions associated with a new revolving credit facility, we currently are not in negotiations for a new credit facility. However, we may enter into future negotiations if terms become more favourable

The AT Sale may result in an Event of Default under our Senior Unsecured Notes.

Completion of the AT Sale will result in a default under our Senior Unsecured Notes, which, if not remedied within three days, would result in the occurrence of an Event of Default. In order to avoid a potential default and/or Event of Default, the Company has completed negotiations with its note holders and has received an amendment to waive the default provisions in return for an expedited repurchase of all outstanding notes within three days following the completion of the AT Sale. If an Event of Default occurs, the Company may experience a default under other agreements as a result of the cross-default provisions in such agreements.

The Company's business depends on the continued and uninterrupted performance of its information technology systems and the communication systems that support those systems, including the Internet.

The Company's business depends, in part, on the continued and uninterrupted performance of its information technology systems. Sustained system failures or interruptions could disrupt the Company's ability to perform many of the functions that are critical to the Company's business, including processing customer orders, transportation of raw materials and finished products, manufacturing of products, processing laboratory requisitions, and timely invoicing and collections. In performing testing of samples or the examination from clinical trials, MDS is required to deliver the results of testing within certain preset time intervals. If MDS fails to deliver the results of testing on time, or the integrity of results are compromised, the safety of clinical trial participants may be impacted and affect the success of the client's clinical trial. In addition, the Company's business, financial condition and results of operations could have a material adverse effect from a prolonged system failure.

The Company's computer systems are vulnerable to damage from a variety of sources, including telecommunications failures, malicious human acts, and natural disasters. Additionally, unanticipated problems affecting systems could cause interruption in information technology systems. The Company's insurance policies may not adequately compensate the Company for any losses that may occur due to any failures in its information technology systems.

Cost of research and development could increase in the event certain tax credits were to become unavailable.

Most of the research and development activities, including those performed on behalf of, or in partnership with customers, that the Company conducts in Canada are eligible for tax credits. Elimination or significant reduction of these tax credits would have a material impact on the overall costs of research and development, which would have a material adverse effect on the business, financial condition, or results of operations of the Company. In addition, if the Company is not profitable, the benefit of these credits would be limited as they can only be applied as a credit to income taxes payable.

MDS may bear financial risk if the Company under-prices its contracts or overruns cost estimates.

Since the Company's contracts are often structured as fixed price or fee-for-service with a cap, MDS bears the financial risk if it under-prices contracts or otherwise overruns cost estimates. Certain contracts may also involve foreign exchange risk when costs are incurred in a different currency than

revenue. As a result, under pricing or significant cost overruns, or foreign exchange risk could have a material adverse effect on the business, financial condition, and results of operations of the Company.

The Company's ability to reduce tax payments on the AT Sale is dependent on achieving certain reorganizations of MDS's corporate structure.

There are several legal entities within MDS involved in the AT Sale and the Company's ability to offset the various gains and losses arising from the AT Sale necessitates the appropriate timing and execution of certain reorganizations and other transactions within MDS's existing corporate structure. These reorganizations and transactions rely on existing tax laws and announced amendments, and related interpretations. If the Company is unable to complete these reorganizations and transactions as planned, or in the event that there is an unfavourable change in tax law, expected amendments, or interpretation thereof, there may be an adverse impact on the Company's estimate of tax payments arising on the AT Sale.

If MDS is unable to attract suitable participants for its clinical trials, its business might suffer.

The clinical research studies that MDS runs rely on the ready accessibility and willing participation of subjects. The Company's clinical research activities could be adversely affected if it is unable to attract suitable and willing participants on a consistent basis.

Operating licenses related to handling and storage of radioactive materials could be subject to cancellation by the CNSC under certain circumstances.

All MDS facilities that handle or store radioactive materials are government regulated and inspected. Failure to obtain future operating licenses could impact the Company's ability to receive, store, process or ship products and could adversely affect the business, financial condition, or results of operations of the Company.

MDS may not be able to integrate acquired businesses or licensed technologies into its existing business, or make acquired businesses or licensed technologies profitable.

MDS may be unable to integrate acquired businesses or licensed technologies into its existing business, or make the acquired businesses or licensed technologies profitable for various reasons including:

- its ability to retain key employees;
- its ability to integrate business information systems and processes;
- its ability to complete the development of products and sell them into the market; or
- incompatible management or other cultural differences.

Life, the Company's joint venture partner, entered into an agreement to sell its ownership interest in the joint venture and its associated operations to Danaher; if the AT Sale is not

completed there may be a change in the Company's or Life's mass spectrometer strategy, which may adversely affect the Company's operations.

In the past, the success of the joint venture partnership with Life is believed to have been based on the good working relationship and common view of the strategic direction between the joint venture partners. If the At Sale is not completed and the two companies do not have the same strategy going forward, it may result in uncertainty for customers, suppliers and employees which may negatively affect the operations of the joint venture.

MDS depends on joint venture partners for sales of our mass spectrometers.

Essentially all sales of mass spectrometry products are made through partnerships with Applied Biosystems (now a part of Life Technologies Inc.) and PerkinElmer. The relationships are governed by partnership agreements that define the rights and responsibilities of each party. While each partnership is for a fixed term, both agreements extend automatically in the absence of any notice to terminate the agreements. Our mass spectrometry business at MDS Analytical Technologies focuses primarily on the development and manufacturing of analytical instruments while our partners focus primarily on marketing, sales, and service. Failure by either partner to carry out its respective obligations could adversely affect our mass spectrometry business, financial condition, or results of operations.

Patent protection for our proprietary products, processes, and technologies may be difficult and expensive to obtain or maintain, and may not result in sufficient protection for our technology.

MDS has applied, or intends to apply, for additional patents to cover our newest products. The Company may not obtain issued patents from any pending or future patent applications owned by or licensed to us. Of the U.S. and foreign patents MDS currently holds, the claims allowed may not be broad enough to protect our technology. In addition, competitors may design around our technology or develop competing technologies. Intellectual property rights may also be unavailable or limited in some foreign countries, which could make it easier for some of our competitors to capture increased market position.

Third parties may seek to challenge, invalidate or circumvent issued patents owned by us, or claim that our products and operations infringe on their patent or other intellectual property rights.

In addition to our patents, the Company possesses an array of unpatented proprietary technologies and know-how. MDS also licenses intellectual property rights to and from third parties. The measures that the Company employs to protect these technologies and these rights may not be adequate. Moreover, in some cases, the licensor can terminate a license or convert it to a non-exclusive arrangement if MDS fails to meet specified performance targets.

MDS may incur significant expense in any legal proceedings to protect our proprietary rights or to defend infringement claims by third parties. In addition, claims of third parties against us could result in awards of substantial damages or court orders that could effectively prevent us from manufacturing, using, importing or selling our products in the U.S. or in any other country. It could

also, depending on the quantum of damages awarded, have a material adverse affect on our financial results.

Our reported results of operations will be adversely affected if the intangible assets or goodwill the Company acquired as part of historical acquisitions are determined to be impaired.

As at October 31, 2009, our total assets included approximately \$412 million of goodwill and \$120 million of intangible assets substantially all of which were reported in discontinued operations. Goodwill represents the value MDS paid to acquire a business in excess of its tangible and intangible assets and liabilities. The Company reviews these assets for potential impairment on a regular basis.

Adverse changes in the global economy, our business or the failure to grow our business may result in impairment of our goodwill and/or intangible assets. A corresponding write-down could adversely affect our reported operating income and capitalization (See Note 12 - Goodwill in the Notes to the 2009 Consolidated Financial Statements).

3.10.2 Legal Proceedings and Regulatory Actions

In July, 2008, MDS served AECL with Notice of Arbitration proceedings seeking an order to compel AECL to fulfill its contractual obligations under the 2006 Agreement, and, in the alternative and in addition to such order, seeking significant monetary damages. MDS concurrently filed a court claim against AECL and the Government of Canada seeking against AECL damages in the amount of C\$1.6 billion for negligence and breach of contract relating to the 1996 Agreement; and, against the Government of Canada, MDS is seeking damages in the amount of C\$1.6 billion for inducing breach of contract and interference with economic relations in respect to the 2006 Agreement. AECL has served certain counterclaims claiming damages for breach of contract in the amount of \$250 million and other relief. The Company believes it has a strong defence to such counterclaims on the merits. In addition, MDS believes that it has a strong case against AECL and the Government of Canada with respect to the 2006 agreement. The Company's current focus is on the confidential arbitration proceedings which are confidential. Given the present stage and complex nature of the proceedings, the uncertainty in projecting the probability of any particular outcome of a dispute of this nature, and the range of remedies that may be awarded under the arbitration and/or lawsuit if the Company is successful in our claim, the Company is unable to project a specific outcome for this dispute. An unfavorable outcome would have an adverse effect on our business, financial condition, and results of operations which could be material.

During fiscal 2009, the Company became a defendant in two lawsuits relating to certain bioequivalence studies carried out at the Company's Quebec, Canada facilities in the period from January 1, 2000 to December 31, 2004. In November 2008, Apotex Inc. filed a claim in the Superior Court of Justice in Toronto, Ontario related to repeat study and mitigation costs of C\$5 million and lost profits of C\$30 million. In April 2009, Dr. Reddy's Laboratories Limited filed a claim in the Superior Court of New Jersey related to repeat study and mitigation costs of approximately US\$10 million and lost profits of approximately US\$70 million. MDS has filed a statement of defense and answer, respectively in connection with these actions, and intends to defend them vigorously. MDS currently maintains an accounting reserve of US\$19 million to cover any agreements reached with clients for study audits, study reruns and other related costs. The

Company also maintains errors and omissions insurance. MDS has assessed these claims and no provision has been recorded related to the claims for lost profits. The Company is a defendant in certain other litigation which, net of insurance coverage and amounts reserves, is not anticipated at this time to have a material impact on the results of operations.

In December 2009, the Company was served with a Notice of Application (the “Notice”) from PerkinElmer, Inc., with whom MDS has a joint - venture to develop, manufacture and sell inductively coupled plasma mass spectrometers (ICP/MS). The Notice filed with the Ontario Superior Court of Justice related to the sale of MDS Analytical Technologies to Danaher Corporation, and sought a range of alternative possible remedies: court direction with respect to the development of protocols to enforce key provisions of the joint-venture agreement between MDS and PerkinElmer; an injunction preventing enforcement of provisions of the MDS Analytical Technologies/Danaher sale agreement; or an interim and permanent injunction preventing the completion of the sale of MDS Analytical Technologies business to Danaher. On January 25, 2010, the above action was dismissed.

3.10.3 Interest of Management and Others in Material Transactions

No director or executive officer of MDS nor any associate or affiliate of any of the foregoing, and, to the knowledge of the directors and executive officers of MDS, no person or company that is the direct or indirect beneficial owner of, or who exercises control or direction over, more than 10 percent of our Common Shares or any of such person or company’s associates or affiliates, has had an interest in any material transaction entered into by the Company since November 1, 2006.

3.10.4 Transfer Agent and Registrar

The transfer agent of the Company is CIBC Mellon Trust Company, Toronto, Canada.

3.10.5 Material Contracts

Following are the only material contracts, other than contracts entered into in the ordinary course of business, which have been entered into by the Company within the most recently completed fiscal year, or were entered into before the most recently completed fiscal year and are still in effect, deemed to be material:

- (a) The Note Purchase Agreement governing our Senior Unsecured Notes issued on December 18, 2002. The Senior Unsecured Notes bear interest at rates between 5.52% and 6.19% and have maturities ranging from December 2009 to December 2014. (See **Section 2.4.1 – Capital Structure**).
- (b) A C\$500 million, five-year committed, revolving credit facility provided on July 14, 2005, (see **Section 2.4.1 – Capital Structure**).
- (c) Interim and Long-term Supply Agreement between Atomic Energy Canada Limited and MDS (Canada) Inc., (see **Section 3.2 – MDS Nordion – Continuing Operations: NRU and MAPLE Facilities**).

- (d) Stock and Asset Purchase Agreement among MDS Inc. and other sellers and DH Technologies Development PTE LTD and Danaher Corporation dated as of September 2, 2009.

The terms of our Senior Unsecured Notes and credit facility are typical for debt instruments of this nature (see **Section 3.10.1 - Risk Factors**).

3.10.6 Experts

The 2009 Financial Statements have been audited by Ernst & Young LLP, P.O. Box 251, 222 Bay Street, Toronto, Ontario, M5K 1J7. During fiscal 2009, MDS's Audit Committee obtained written confirmation from Ernst & Young LLP confirming that they are independent with respect to the Company within the meaning of the Rules of Professional Conduct of the Institute of Chartered Accountants of Ontario.

In addition, the Company engaged other experts in fiscal 2009 to advise MDS in matters related to the Strategic Repositioning who gathered information and provided opinions related to the Management Proxy Circular to approve the sale of MDS Analytical Technologies. These included:

Blair Franklin Capital Partners Inc.	Commerce Court West, Suite 1905 199 Bay Street, P.O. Box 147 Toronto, Ontario M5L 1E2 Canada
Fasken Martineau DuMoulin LLP	55 King St. W., 37th Floor TD Bank Tower, Toronto Dominion Centre P.O. Box 20 Toronto, Ontario M5K 1N6 Canada
Goldman, Sachs & Co.	85 Broad Street New York, New York 10004 USA
RBC Capital Markets	RBC Capital Markets 200 Bay Street, P.O. Box 50 Royal Bank Plaza 4th Floor, South Tower Toronto, Ontario M5J 2W7
Skadden, Arps, Slate, Meagher & Flom LLP	222 Bay Street, Suite 1750 P.O. Box 258 Toronto, ON M5J 1J5 Canada

4. SELECTED CONSOLIDATED FINANCIAL INFORMATION

4.1 Summary Annual Information (Year to October 31)

(amounts in U.S.\$ millions except per share amounts)

Consolidated Statements of Operations

(U.S. GAAP)

	2009	2008	2007
Revenues from continuing operations	231	296	290
Operating loss from continuing operations	(2)	(355)	(9)
(Loss) income from continuing operations, before income taxes	(2)	(344)	14
(Loss) income from continuing operations	(15)	(246)	12
(Loss) income from discontinued operations, net of income taxes	(120)	(307)	769
Net (loss) income	(135)	(553)	781
Basic (loss) earnings per share	(1.12)	(4.54)	5.93
Diluted (loss) earnings per share	(1.12)	(4.54)	5.92

2009 2008 2007

Consolidated Statements of Financial Position

(U.S. GAAP)

Total assets	1,626	1,836	3,243
Long-term debt	267	274	384
Total shareholders' equity	994	1,090	1,941
Weighted average number of Common shares outstanding	120	122	132
Long-term debt/shareholders' equity	27%	25%	20%

2009 2008 2007

Consolidated Statements of Cash Flows

(U.S. GAAP)

Cash provided by (used in) operating activities of continuing operations	81	(110)	156
Capital assets purchased	(10)	(13)	(15)
Cash provided by discontinued operations, net	100	26	225
Repayment of long-term debt	(6)	(79)	(8)

Items on the pre-tax basis that impact the comparability of operating income include:

- Results for the year ended October 31, 2009 reflect \$9 million of restructuring charges related to aligning the Company to its new strategic focus and \$1 million write-down of long-term investment related to the investment in Entelos.
- Results for the year ended October 31, 2008, reflect the \$341 million write-off of the MAPLE Facilities, and \$10 million write-down of long-term investments, primarily related to the investment in Entelos and the investment in ABCP.
- Results for the year ended October 31, 2007 reflect \$9 million of restructuring charges.

4.2 Dividends

The declaration of dividends is at the discretion of the Board of Directors. Both the Company's credit facility and Senior Unsecured Notes contain provisions which restrict the amount of any dividend payment. As noted below, the Company has discontinued the payment of dividends.

Prior to October 2004, dividends were declared payable in April and October. Effective for the October 2004 dividend, the Company adopted a policy of paying quarterly dividends. Pursuant to the policy, dividends, when declared, were paid in January, April, July and October. In the past three years, MDS has paid the following cash dividends:

<u>Fiscal Year</u>	<u>Aggregate Dividend Amount per Common Share</u>
2007	C\$0.0325
2008	C\$0.0000
2009	C\$0.0000

On October 5, 2006, the Company announced that it would discontinue paying dividends following completion of the sale of the diagnostics laboratory business. The final dividend was declared on December 12, 2006 and was paid January 8, 2007 to shareholders of record on December 20, 2006.

As a result of MDS's cumulative net loss as of October 31, 2009, a certain debt covenant under our Senior Unsecured Notes restricts us from further dividend payments for the foreseeable future. Our Senior Unsecured Notes contain a covenant that restricts the Company's use of cash for certain purposes if cumulative net income from the date of issuance of the notes falls below a predefined amount. As a result of the write-off of the MAPLE Facilities in fiscal 2008, the cumulative net income was below the amount defined in the debt covenants. The restrictions on the use of cash include the repurchase of shares, payment of dividends and investments in businesses that the Company does not control. MDS currently expects these restrictions to remain in place until our Senior Unsecured Notes are retired.

4.3 Capital Structure

MDS uses a combination of equity and long-term debt to finance its business. The Company has one class of shares authorized and outstanding, being Common Shares. As at October 31, 2009, there were 120,137,229 Common Shares outstanding.

The Common Shares entitle the holder thereof to receive notice of, to attend, and to vote at all meetings of holders of Common Shares. Each Common share entitles the holder thereof to one vote per share and to share rateably in the assets of the Company on liquidation or dissolution.

The Company's share capital has been restructured or converted several times from Common Shares in 1973 to Class A Common and Class B Non-Voting in 1980 and back to Common Shares in March 2000. Under the terms of the 2000 conversion, each Class A share was converted into 1.05 Common Shares and each Class B non-voting share was converted into 1.0 Common share.

The Company's shares have been split on a two-for-one basis four times, on the following dates: September 26, 1980, July 13, 1983, March 15, 1990, and, November 15, 1996. In addition, on September 14, 2000, the directors of the Company declared a one-for-one share dividend paid on October 10, 2000 to shareholders of record on September 26, 2000. This share dividend had the same effect as a two-for-one stock split.

MDS had a Normal Course Issuer Bid (NCIB) in place to purchase up to 4,136,766 Common Shares that expired on July 2, 2009. As at October 31, 2009, the Company repurchased no Common Shares in fiscal 2009 under this NCIB (2008 - 1,417,900 Common Shares), and the Company repurchased no Common Shares in fiscal 2009 under our prior NCIB (2008 - 1,485,300 Common Shares).

The Company repurchased no Common Shares under an NCIB in fiscal 2006 or fiscal 2007. In the second quarter of 2007, the Company conducted a Substantial Issuer Bid and repurchased approximately 22.8 million Common Shares at a price of C\$21.90 per share on April 9, 2007. As a result of MDS's cumulative net loss as of October 31, 2008, a certain debt covenant under our Senior Unsecured Notes restricts us from further share repurchases.

The Company currently intends to repurchase \$400 million to \$450 million of Common Shares following the close of the sale of MDS Analytical Technologies and to redeem our Senior Unsecured Notes.

The Company has Senior Unsecured Notes payable totalling \$198 million (\$221 million as at October 31, 2009), has a defeased non-interest bearing government loan, and a note payable associated with the purchase of specific assets. At October 31, 2009, the value of all of the Company's outstanding debt was \$267 million. In addition, the Company has available C\$500 million of undrawn committed term credit facilities at October 31, 2009.

5. MANAGEMENT'S DISCUSSION AND ANALYSIS

Please refer to the disclosure contained on pages 1 to 40 of the 2009 Annual Financial Review under the heading "Management's Discussion and Analysis" which is incorporated by reference into this AIF.

6. MARKET FOR SECURITIES

The outstanding Common Shares are listed for trading on the Toronto Stock Exchange (TSX: MDS) and the New York Stock Exchange (NYSE: MDZ). The following table sets forth the price ranges and volume of Common Shares traded on the Toronto Stock Exchange and the New York Stock Exchange for each month of fiscal 2008.

	TSX			NYSE		
	High	Low	Volume	High	Low	Volume
	(CDN\$)			(US\$)		
Fourth Quarter of 2009						
October	9.19	8.48	8,591,348	8.75	7.97	17,869,813
September	8.80	6.42	22,335,811	8.19	5.86	23,401,771
August.....	6.96	6.27	5,832,637	6.46	5.75	4,019,996
Third Quarter of 2009						
July.....	6.97	6.06	9,662,332	6.42	5.18	5,460,176
June	6.11	5.42	14,391,730	5.44	4.79	5,930,756
May.....	7.27	5.07	13,623,437	6.36	4.54	2,608,771
Second Quarter of 2009						
April	7.35	5.99	5,147,777	6.09	4.73	2,485,815
March.....	8.18	5.74	8,428,241	6.32	4.54	4,971,030
February	9.23	7.36	8,708,880	7.44	5.91	3,978,433
First Quarter of 2009						
January	9.60	7.22	6,152,900	7.77	5.70	8,241,907
2008						
December.....	8.88	6.21	12,373,850	7.09	5.20	6,361,099
November	13.14	8.55	8,295,422	11.26	6.62	3,514,457

Other than the Common Shares, no other class of securities of the Company is traded or quoted on any exchange or market.

7. DIRECTORS AND OFFICERS

7.1 Directors

Each director of the Company is elected to serve until the next Annual Meeting of the Company or until their successor is elected or appointed. The disclosure under the heading “Election of Directors” in the Company’s Management Proxy Circular dated January 8, 2009 contains information about each director of the Company and is incorporated herein by reference.

7.2 Executive Officers

The Company's Executive Management team currently comprises the following individuals:

Executive Officer Name	Position with MDS	Province or State and Country of Residence
Andrew W. Boorn	President MDS Analytical Technologies	Ontario, Canada
Mary E. Federau	Executive Vice-President, Global Human Resources	Ontario, Canada
Thomas E. Gernon	Executive Vice-President, Information Technology and Chief Information Officer (CIO)	Ontario, Canada
Kenneth L. Horton	Executive Vice-President, Corporate Development and General Counsel	Massachusetts, U.S.
Janet Ko	Senior Vice-President, Communications	Ontario, Canada
Douglas S. Prince	Executive Vice-President, Finance and Chief Financial Officer (CFO)	Ontario, Canada
David Spaight	President MDS Pharma Services	Pennsylvania, U.S.
Steven M. West	Chief Executive Officer (CEO) MDS	Ontario, Canada

Effective January 8, 2010, Stephen P. DeFalco, former President and Chief Executive Officer, left the Company and Steven M. West, former Chief Operating Officer of the Company and President of MDS Nordion, was appointed CEO of MDS Inc. In addition, the Company announced a succession plan for the role of CFO, with Douglas S. Prince expected to leave the Company by the end of March 2010. G. Peter Dans, currently Senior Vice President, Finance of MDS Inc., will assume the role of CFO, effective February 1, 2010.

Andrew W. Boorn, Mary E. Federau, and Steven M. West have held their present positions or other senior positions with MDS Inc. or its subsidiaries during the past five years. The executive officers listed below have not held their present positions or other senior positions with MDS or its subsidiaries for the last five years and their previous occupations are as follows:

- a) **G. Peter Dans** will be appointed Chief Financial Officer effective February 1, 2010. Mr. Dans joined MDS in 2007 from Nortel Networks, where he spent more than 15 years in global finance leadership roles, including positions in North America, South Korea, Singapore and the Philippines. In addition to significant external reporting and financial operating experience, Mr. Dans has a thorough understanding of MDS operations and the Company's repositioning plan.

- b) **Thomas E. Gernon** joined MDS in 2005, was previously Chief Operating Officer of D2Hawkeye Inc., a health-care software development company and held CIO positions at both PerkinElmer, Inc. and J.P. Morgan Investments.
- c) **Janet Ko** was appointed Senior Vice-President, Communications, in April 2008. Since joining MDS in November 2003, she has held increasingly senior roles in Communications and Organizational Development. Prior to joining MDS, she was head of communications for Pharmacia Canada, and held senior communications posts at GlaxoSmithKline and Ontario's Ministry of the Attorney General.
- d) **Kenneth L. Horton** joined MDS in December 2005 and was previously Vice-President, Acquisitions, Ventures and General Counsel for the Life and Analytical Sciences business unit at PerkinElmer, Inc. and previously an attorney at Ropes & Gray LLP.
- e) **David Spaight** joined MDS in April 2006 and was previously Senior Vice-President, Global Sales and Marketing at Fisher Scientific Products (Fisher). Prior to joining Fisher, Mr. Spaight held the role of Vice-President, Global Sales and Marketing for the Life and Analytical Sciences business unit at PerkinElmer, Inc.
- f) **Douglas S. Prince** joined MDS in 2007 and was previously Vice-President, Enterprise Risk Management at PerkinElmer, Inc. He also served as Vice-President and CFO for the Life and Analytical Sciences business unit at PerkinElmer, Inc.

To the knowledge of MDS, the directors and executive officers of MDS, as a group, beneficially own, directly or indirectly, or exercise control or direction over an aggregate of 57,508 MDS Common Shares representing 0.05% of MDS's issued and outstanding Common Shares.

7.3 Additional Disclosure for Directors and Executive Officers

To the knowledge of MDS, no director or executive officer of MDS (a) is at the date hereof or has been, in the last 10 years before the date hereof, a director, chief executive officer (CEO) or chief financial officer (CFO) of any company, including MDS that, while that person was acting in that capacity, (i) was the subject of a cease trade order, similar order or an order that denied the company or MDS access to any exemptions under securities legislation, for a period of more than 30 consecutive days, (ii) was subject to an order that was issued, after that person ceased to be a director, CEO or CFO and which resulted from an event that occurred while that person was acting in that capacity as a director, CEO or CFO, (b) is at the date hereof or has been in the 10 years before the date hereof, a director or executive officer of a company, including MDS that, while that person was acting in that capacity or within a year of that person ceasing to act in that capacity became bankrupt, made a proposal under any bankruptcy or insolvency legislation or became subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver or manager or trustee appointed to hold assets or (c) has within the last 10 years become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangements or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold the assets of any director, or executive officer except for Mr. Robert Luba, a director of MDS who was an independent director of Safety-Kleen Corp., a New York Stock Exchange listed company, which filed for bankruptcy in 2000.

8. AUDIT COMMITTEE INFORMATION

8.1 Composition of the Audit Committee

The Audit Committee of MDS is composed of the following four members: William D. Anderson (Chair), William G. Dempsey, Robert W. Luba, and Richard H. McCoy. The responsibilities and duties of the Committee are set out in the Committee's charter, the text of which is set forth in Appendix I to this AIF.

The Board of Directors believes that the composition of the Audit Committee reflects a high level of financial literacy and expertise. Each member of the Audit Committee has been determined by the Board to be "independent" and "financially literate" as such terms are defined under Canadian and United States securities laws and the NYSE Corporate Governance Listing Standards. In addition, the Board has determined that each of William D. Anderson, and Robert W. Luba, are each an "Audit Committee Financial Expert" as such term is defined under United States securities laws. The Board has made these determinations based on the education and breadth and depth of experience of each member of the Committee. The following is a description of the education and experience of each member of the Committee that is relevant to the performance of his or her responsibilities as a member of the Audit Committee:

William D. Anderson, a Chartered Accountant, is a Corporate Director, having retired in 2005 after serving 14 years with BCE Inc. (a global communications company headquartered in Montreal, Canada). Mr. Anderson was appointed to the Board of MDS Inc. in 2007. From 2001 to 2004, Mr. Anderson was President of BCE Ventures and from 1997 to 2000 was Chief Financial Officer of BCE Inc. Mr. Anderson currently serves on the public boards of TransAlta Corporation and Gildan Activeware Inc. He serves as the Chair of the TransAlta and Gildan Activeware Inc. audit committees.

William G. Dempsey was appointed to the Board in 2008. Mr. Dempsey was an executive with Abbott Laboratories for 25 years, prior to his retirement in 2007. His assignments included Executive Vice-President of the Pharmaceutical Products Group and Senior Vice-President of International Operations. He currently serves on the public Board of Landaeur, Inc. where he is the Chair of the compensation committee.

Robert W. Luba, a Chartered Accountant, is President of Luba Financial Inc. (an investment company in Toronto, Canada). Prior to 1994, he was President and Chief Executive Officer of Royal Bank Investment Management Inc., President and Chief Financial Officer (CFO) of Crown Life Insurance Company and Senior Vice-President and CFO of John Labatt Limited. Mr. Luba currently serves on the public boards of Invesco Trimark Funds and Softchoice Corporation. He also serves on the audit committee of Softchoice Corporation.

Richard H. McCoy is a Corporate Director. He was in the investment banking business for over 35 years. Prior to retiring in 2003, he was Vice-Chairman, Investment Banking at TD Securities Inc. (one of Canada's largest investment firms in Toronto, Canada). Mr. McCoy currently serves on the public boards of Aberdeen Asia-Pacific Income Investment Company Limited; Gerdau Amersteel Corp.; Jazz Air Income Fund; Pizza Pizza Royalty Income Fund; and Uranium Participation

Corporation. He also serves on the audit committees of Ace Aviation Holdings Inc., Aberdeen Asia-Pacific Income Investment Company Limited and Uranium Participation Corporation.

8.2 Auditor Service Fees

The fees for all services performed by the auditors for the years ended October 31, 2009 and October 31, 2008 are set out below.

	2009 (US\$'000s)	2008 (US\$'000s)
Audit services	\$4,853	\$6,100
Audit-related services	\$2,301	872
Tax services	\$ 285	271
Total	\$7,439	\$7,243

In fiscal 2009, the Company paid additional fees related to services rendered for fiscal 2008 in the amount of \$1,070,000 (Audit services: \$871,000, Audit-related services \$165,000 and Tax services \$34,000) that are not reflected in the table above.

Audit Services – an audit engagement is one in which Ernst & Young LLP, or a foreign affiliate, has been hired to render an audit opinion on a set of financial statements or related financial information. These engagements include the opinion issued on the consolidated financial statements of MDS, the opinions issued on subsidiaries of MDS as required by statute in certain jurisdictions, and opinions issued on the financial statements of subsidiaries or entities over which MDS exercises management discretion. The latter category includes audit opinions issued on Pension Plans established for the benefit of MDS employees.

Audit-Related Services – an audit-related engagement is one in which some sort of assurance is provided that is not an audit opinion or one which supports the ability of Ernst & Young LLP to render an audit opinion in an indirect manner. Such engagements include reviews of the interim financial statements, the reports of which are provided to the Audit Committee, accounting assistance and advice and translation services related solely to our filed financial reports. From time to time, Ernst & Young LLP may also be engaged to provide audit-related services in connection with acquisitions, including audits of transaction-date balance sheets and similar services.

Tax Services – a tax engagement is one in which Ernst & Young LLP has been engaged to provide tax services, including assistance with tax compliance and tax advice and planning. Tax compliance assistance is generally provided to the foreign subsidiaries of MDS and to certain entities that are controlled by MDS but in which there are other minority interests. Tax compliance services include assistance with the preparation and filing of tax returns, and assistance in dealing with tax audits. Tax advice and planning services are provided to the Company and many of its subsidiaries and relate to both income taxes and sales and use taxes.

8.3 Pre-Approval Policy for External Auditor Services

The Audit Committee has adopted processes for the pre-approval of engagements for services of its external auditors. The Audit Committee's policy requires pre-approval of all audit and non-audit services provided by the external auditor. The policy identifies three categories of external auditor services and the pre-approval procedures applicable to each category, as follows:

- Audit and audit-related services – these are identified in the annual audit service plan presented by the external auditor and require annual approval. Changes to these fees are reported to the Audit Committee at least quarterly.
- Pre-approved list of non-audit services – non-audit services which are reasonably likely to occur have been identified and receive general pre-approval of the Audit Committee, and as such, do not require specific pre-approvals. The term of any general pre-approval is 12 months from approval unless otherwise specified. The Audit Committee annually reviews and pre-approves the services on this list.
- Other proposed services – all proposed services not categorized above are brought forward on a case-by-case basis and specifically pre-approved by the Audit Committee.

All fees paid to the independent auditors for fiscal 2009 were approved in accordance with the pre-approval policy.

9. ADDITIONAL INFORMATION

Additional information about MDS is available on the Company's web site at www.mdsinc.com, on SEDAR (System for Electronic Document Analysis and Retrieval) at www.sedar.com, and on the U.S. Securities and Exchange web site at www.sec.gov.

Additional information, including directors' and executive officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans is contained in the Management Proxy Circular dated as of January 7, 2009 prepared in connection with the Company's Annual and Special Meeting of Shareholders to be held on March 11, 2010.

Additional financial information is provided in the 2009 Financial Statements and the 2009 MD&A, each included in the 2009 Annual Report Financial Review of MDS for its fiscal year ended October 31, 2009.

Copies of this AIF, as well as copies of the 2009 Annual Report Financial Review of MDS for the year ended October 31, 2009 and the Management Proxy Circular dated January 8, 2010, may be obtained from:

Peter Brent

Senior Vice-President Legal & Corporate Secretary,

MDS Inc.

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APPENDIX I – MDS INC. AUDIT COMMITTEE CHARTER

CHARTER OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS OF MDS INC.

Purpose

The primary function of the audit committee (the “Audit Committee”) of the board of directors (the “Board”) of MDS Inc. (the “Corporation”) is to assist the Board in fulfilling its oversight responsibilities for the financial reporting process including responsibility for overseeing:

- the integrity of the Corporation’s financial statements and financial reporting process, including the system of internal control over financial reporting, the audit process and the processes for identifying, evaluating and managing the Corporation’s principal risks impacting financial reporting;
- compliance with legal and regulatory requirements, other than those otherwise assigned from time to time by the Board;
- financial oversight of Pension Plan management;
- the qualifications and independence of the independent auditor; and
- the Corporation’s internal audit function.

Consistent with these functions, the Audit Committee should encourage continuous improvement of, and should foster adherence to, the Corporation’s policies, procedures and practices.

Approval of Charter

This Charter and any future changes to this Charter require approval by the Board.

Structure and Composition

The Audit Committee shall consist of no fewer than three members from among the Board.

Each member of the Audit Committee shall: (i) be free from any relationship that, in the opinion of the Board, would reasonably be expected to interfere with the exercise of his or her independent judgment as a member of the Audit Committee; and (ii) meet the independence and financial literacy requirements of all applicable corporate, exchange and securities statutes, rules and regulations in Canada and the United States (the “Regulations”).

Each member of the Audit Committee shall be financially literate as contemplated by applicable regulations and as determined by the Board in its business judgment.

At least one member of the Audit Committee shall be an “audit committee financial expert” as such term is defined by the Regulations. The Board shall make determinations as to whether any particular member of the Audit Committee satisfies this requirement.

The members of the Audit Committee shall be appointed by the Board annually on the recommendation of the Nominating and Corporate Governance Committee or until successors are duly appointed.

The Board shall normally designate the Chair of the Audit Committee. In the event that a Board designation is not made, the members of the Audit Committee shall elect a Chair by majority vote of the full Audit Committee.

In the event that the Chair of the Audit Committee does not attend a meeting of the Audit Committee, the members of the Audit Committee shall elect a temporary Chair for such meeting by majority vote of the members in attendance at the meeting.

Once appointed, Audit Committee members shall cease to be a member of the Audit Committee only upon:

- (a) resignation from the Audit Committee or the Board,
- (b) death,
- (c) disability, as determined by an independent physician retained by the Board; or
- (d) not being re-appointed pursuant to the annual appointment process described above.

Members of the Audit Committee shall not simultaneously serve on the audit committees of more than three public companies, including the Corporation, unless the Board determines that such simultaneous service would not impair the ability of such member to effectively serve on the Audit Committee.

Meetings

The Audit Committee shall meet at least quarterly and more frequently as circumstances dictate.

A majority of Audit Committee members is required for meeting quorum.

The Audit Committee shall meet separately at their quarterly meetings with management, the Internal Auditor and the independent auditor in separate committee sessions.

The Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer, Vice President Tax and Treasury, Vice President Financial Planning and Analysis, Vice President Internal Audit and Risk and Corporate Secretary of the Corporation and representatives of the independent auditor shall normally attend meetings of the Audit Committee. The Audit Committee may request any officer or employee of the Corporation or the Corporation’s outside counsel or independent auditor to attend a meeting of the Audit Committee or to meet or provide consultations to the Audit Committee or any member thereof. Others may also attend meetings as the Audit Committee may request.

Notice of all meetings of the Audit Committee shall be sent to all Audit Committee members and to those persons referred to in the preceding paragraph.

Chair

The Chair of the Committee shall have the duties and responsibilities set forth in Appendix "A".

Resolutions

Resolutions of the Audit Committee shall require approval by a simple majority of members voting on such resolution.

Responsibilities and Duties

(i) Minutes and Reporting to the Board

The Audit Committee shall prepare written minutes of all of its meetings. The Audit Committee shall make regular reports to the Board, but not less frequently than quarterly. In addition, after each meeting of the Audit Committee, the Chair of the Audit Committee or designate shall report to the Board on the significant matters addressed by the Audit Committee at such meeting and a copy of the minutes shall be made available to all members of the Board.

(ii) Selection, Evaluation and Oversight of Independent Auditor

With respect to the Corporation's independent auditor the Audit Committee shall:

- have the sole authority to recommend to the Board the appointment, retention or replacement of the independent auditor (subject, if applicable, to shareholder approval)
- be directly responsible for establishing the compensation of the independent auditor
- have the independent auditor report directly to the Audit Committee and otherwise be directly responsible for overseeing the work of the independent auditor
- have the authority to communicate directly with the independent auditor
- meet with the independent auditor prior to the annual audit to discuss the planning, scope and staffing of the audit and approve the selection of the coordinating partner having primary responsibility for the audit
- provide for the periodic rotation of the coordinating partner having primary responsibility for the audit and the audit partner responsible for reviewing the audit as required by law
- at least on an annual basis, evaluate the qualifications, performance and independence of the independent auditor and the senior audit partners having primary responsibility for the audit

- obtain and review a report from the independent auditor at least annually regarding: (i) the independent auditor's internal quality-control procedures, (ii) any material issues raised by the most recent internal quality-control review, or peer review, of the firm, or raised by any inquiry or investigation by governmental or professional authorities within the preceding five years respecting one or more independent audits carried out by the firm, (iii) any steps taken to deal with any issues, (iv) all relationships between the independent auditor and the Corporation, and (v) the independence of the independent auditor as required by the Regulations
- review and approve the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and former independent auditor
- obtain confirmation from management that the Corporation has not hired employees or former employees of the independent auditor who have participated in any capacity in the audit of the Corporation for the immediately previous 12 month period

pre-approve all auditing services and permitted non-audit services (including fees and terms thereof) to be performed for the Corporation or its subsidiaries by the independent auditor

(iii) Internal Audit

With respect to the Corporation's lead of internal audit (the "Internal Auditor"), the Audit Committee shall:

- have the authority to approve the appointment and termination of the Internal Auditor
- have the Internal Auditor report directly on a functional basis to the Audit Committee (although the Internal Auditor may report administratively to the CEO or the CFO)
- have the authority to communicate directly with the Internal Auditor
- meet with the Internal Auditor to discuss the planning, scope and staffing of the internal audit plan
- approve the internal audit mandate and annual plan, including the responsibilities, budget, compensation and staffing of the Corporation's internal audit function, through inquiry with the Corporation's independent auditor, management and the Corporation's internal auditing department

(iv) Financial Reporting of Quarterly Financial Results

With respect to the Corporation's reporting of unaudited quarterly financial results, the Audit Committee shall:

- prior to their public release and filing with securities regulatory agencies, review and discuss with management, the internal auditor and the independent auditor:
 - earnings press release

- financial statements and notes thereto
- management's discussion and analysis

The review of the Corporation's unaudited quarterly financial results shall include:

- critical accounting policies and practices
- significant financial reporting issues and judgments (e.g. estimates and reserves) made in the preparation of the Corporation's financial statements, including any significant changes in the Corporation's selection or application of accounting principles
- the extent to which changes or improvements in financial or accounting practices, as approved by the Audit Committee, have been implemented
- results of the independent auditor's review
- any written communications between the independent auditor and management (e.g. management letters, schedule of unadjusted differences)
- any significant disagreements among management and the independent auditor in connection with the preparation of financial statements
- adequacy of internal controls over financial reporting and any major issues as to the adequacy of the Corporation's internal controls and any special steps adopted in light of material control deficiencies
- management certifications of reports filed by the Corporation pursuant to applicable regulations
- the effect of regulatory and accounting initiatives as well as off-balance sheet structures on the Corporation's financial statements
- the Corporation's use of "pro forma" or "adjusted" non-GAAP information
- the Corporation's use of forward-looking financial guidance
- any correspondence with, or published reports by, regulators or governmental agencies which raise material issues regarding the Corporation's financial statements or accounting policies
- approve the unaudited quarterly financial statements of the Corporation

(v) Financial Reporting of Year-End Financial Results

With respect to the Corporation's annual audit, the Audit Committee shall:

- prior to their public release and filing with securities regulatory agencies, review and discuss with management, the internal auditors and the independent auditor the:
 - earnings press release
 - financial statements and notes thereto
 - management's discussion and analysis
 - results of the independent auditor's audit

The review of the Corporation's audited financial results shall include:

- all matters described above under "Financial Reporting of Quarterly Financial Results"
 - results of the independent auditor's audit
 - discussions with the independent auditor on the matters required to be discussed by Statement on Auditing Standards No. 61, including significant adjustments, management judgments and accounting estimates, significant new accounting policies, any difficulties encountered in the course of the audit work, any restrictions on the scope of activities or access to requested information, and any significant disagreements with management
 - a report from the independent auditor describing (i) all critical accounting policies and practices to be used, (ii) all alternative treatments of financial information within generally accepted accounting principles that have been discussed with management, ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the independent auditor and (iii) other material communications between the independent auditor and management, such as the annual management letter or schedule of unadjusted differences
- recommend to the Board whether the audited consolidated financial statements of the Corporation should be approved by the Board

(vi) Financial Oversight of Pension Plan Management

With respect to the Corporation's management of Pension Plans, the Audit Committee shall fulfill duties related to financial oversight of pension plan management including funding, asset management, and reporting.

The review of the Corporation's Pension Plan's shall include:

- External Auditor reports and financial statements of the plans, including compliance with pension reporting regulations

- Actuarial valuations and contribution and funding policies
- Plan solvency and compliance with pension legislation
- Review of the investment fund strategy and performance and investment manager selection

(vii) Regulatory Filings and Guidance

The Audit Committee shall:

- consider the effectiveness of the procedures that are in place for the review of the Corporation's public disclosure of financial information extracted or derived from the Corporation's financial statements, other than management's discussion and analysis and annual and interim earnings press releases, and shall periodically assess the adequacy of those procedures
- issue any reports required of the Audit Committee to be included in the Corporation's annual proxy statement
- prior to their public release or filing with securities regulatory agencies, review and recommend to the Board the approval of the following documents:
 - Annual Information Form
 - Annual Report on Form 40-F
 - prospectuses
- review financial information and review and approve annual earnings guidance provided by the Corporation to analysts and rating agencies or which the Corporation or any of its officers or employees intends to publicly disclose by way of press release (other than press releases referred to under "Financial Reporting of Quarterly Financial Results" and under "Financial Reporting of Year-End Financial Results") or otherwise (which review may be done generally (i.e., discussion of the types of information to be provided or disclosed and type of presentations to be made); the Audit Committee need not discuss in advance each instance in which the Corporation may provide or disclose earnings guidance)

(viii) Related Party Transactions and Off-Balance Sheet Structure

The Audit Committee shall:

- review all proposed related-party transactions including those between the Corporation and its officers or directors and, if deemed appropriate, recommend approval of any particular transaction to the Board
- review all material off-balance sheet structures which the Corporation is a party to

(ix) Internal Controls, Risk Management and Legal Matters

The Audit Committee shall:

- consider the effectiveness of the Corporation's internal controls over financial reporting
- discuss with management the Corporation's major financial risk exposures and the steps management has taken to monitor and control such exposures, including the Corporation's risk assessment and risk management policies including the use of derivative financial instruments. Areas to be considered in this respect include:
 - insurance coverage
 - foreign currency exposure
 - interest rate exposure
- review with management at least annually reports demonstrating compliance with risk assessment and with risk management policies
- review quarterly with management, and if necessary, the Corporation's counsel, any legal matter which could reasonably be expected to have a material impact on the Corporation's financial statements or accounting policies
- review the yearly report prepared by management, and attested to by the Corporation's independent auditor, assessing the effectiveness of the Corporation's internal control over financial reporting and stating management's responsibility for establishing and maintaining adequate internal control over financial reporting prior to its inclusion in the Corporation's annual filings under applicable securities laws
- review quarterly with the Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer, Internal Auditor and Independent Auditor, periodically, the following:
 - all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Corporation's ability to record, process, summarize and report financial information; and
 - any fraud, whether or not material, that involves management or other employees who have a significant role in the Corporation's internal control over financial reporting
- review and approve the Corporation's disclosure policy

(x) Capital Structure, Investment and Cash Management Policies, Disclosure Policy

The Audit Committee shall:

- review and approve any changes to the Corporation's capital structure

- review and approve the Corporation's treasury management policies
- review and approve the Corporation's disclosure policy

(xi) "Whistle Blower" and Related Procedures

The Audit Committee shall oversee the establishment of procedures for the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal controls, auditing matters or fraud, and for the confidential and/or anonymous submission by employees of the Corporation of concerns regarding questionable accounting auditing matters, internal control failures or fraud, which procedures shall include the requirement to advise the Audit Committee of all such complaints received.

(xii) Review of Charter and Self Assessment

The Audit Committee shall:

- review and reassess annually the adequacy of this Charter
- review annually the Audit Committee's own performance

(xiii) Other Activities

The Audit Committee shall carry out such other activities consistent with this Charter, the Corporation's by-laws and governing law, that the Audit Committee or the Board deems necessary or appropriate.

Resources and Authority

The Audit Committee shall have the authority to retain independent legal, accounting or other advisors, including consulting with the national office of the independent auditor, as it determines necessary to carry out its duties. The Corporation shall provide for appropriate funding, as determined by the Audit Committee, for payment of compensation to the independent auditor for the purpose of rendering or issuing an audit report or performing other audit, review or attest services and to any advisors employed by the Audit Committee and for ordinary administrative expenses of the Audit Committee.

The Audit Committee shall have the authority to conduct any investigation necessary and appropriate to fulfilling its duties and in connection therewith, to inspect all books and records of the Corporation and its subsidiaries and to discuss such books and records and any matters relating to the financial position, risk management and internal controls of the Corporation and its subsidiaries with the officers of the Corporation and with the independent auditor.

Limitations on Committee's Duties

It is recognized that members of the Audit Committee are not full-time employees of the Corporation and do not represent themselves to be accountants or auditors by profession. Each

member of the Audit Committee shall be entitled to rely on (i) the integrity of those persons and organizations within and outside the Corporation from whom such member receives information, and (ii) the accuracy of the financial and other information provided to the Audit Committee by such persons or organizations absent actual knowledge to the contrary.

While the Audit Committee has the responsibilities and power set forth in this Charter, it is not the duty of the Audit Committee to plan or conduct audits or to determine that the Corporation's financial statements and disclosures are complete and accurate and are in accordance with generally accepted accounting principles and applicable rules and regulations. These are the responsibilities of either management and/or the independent auditor.

In discharging its duties, each member of the Committee shall be obliged only to exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. Nothing in this Charter, including designating any member of the Committee as an "audit committee financial expert" is intended, or should be determined to impose on any member of the Committee a standard of care or diligence that is in any way more onerous or extensive than the standard to which all members of the Board are subject.

The essence of the Committee's responsibilities is to monitor and review the activities described in this Charter to gain reasonable assurance (but not to ensure) that such activities are being conducted properly and effectively by the Corporation.

APPENDIX "A"

POSITION DESCRIPTION

CHAIR OF THE AUDIT COMMITTEE

In addition to the duties and responsibilities set out in the Board of Directors Charter and the Charter of the Audit Committee, the chair (the "Chair") of the Audit Committee (the "Committee") of MDS Inc. (the "Company") has the duties and responsibilities described below. The Committee Chair will:

1. Provide overall leadership to enhance the effectiveness of the Committee, including:
 - a. Recommend and oversee the appropriate structure, composition, membership and activities delegated to the Committee;
 - b. Chair all meetings of the Committee and manage agenda items so appropriate consideration can be given to agenda items;
 - c. Encourage Committee members to ask questions and express viewpoints during meetings;
 - d. Schedule and set the agenda for Committee meetings with input from other Committee members, the Chair of the Board of Directors and management as appropriate;
 - e. Facilitate the timely, accurate and proper flow of information to and from the Committee;
 - f. Arrange for management, internal personnel, external advisors and others to attend and present at Committee meetings as appropriate;
 - g. Arrange sufficient time during Committee meetings to fully discuss agenda items; and

- h. Carry out the responsibilities and duties of the Committee, as outlined in its Charter and review the Charter and duties and responsibilities with Committee members on an annual basis;
- 2. Foster ethical and responsible decision-making by the Committee and its individual members.
- 3. Provide for in-camera sessions at the quarterly meetings of the Committee and at such times as required.
- 4. Following each meeting of the Committee, report to the Board of Directors on the activities, findings and any recommendations of the Committee.
- 5. Carry out such other duties as may reasonably be requested by the Board of Directors.

APPENDIX II - DEFINITIONS

Acronyms:

AECL	Atomic Energy of Canada Limited A nuclear technology and services company providing services to utilities worldwide. AECL delivers a range of nuclear services including R&D support, construction management, design and engineering to specialized technology, waste management and decommissioning in support of CANada Deuterium Uranium (CANDU) reactor products.
CBCA	Canada Business Corporations Act The law applicable to business corporations incorporated to carry on business throughout Canada.
CLS	Calgary Laboratory Services A medical diagnostic laboratory that offers a full range of laboratory services to the Calgary, Canada region.
CNSC	Canadian Nuclear Safety Commission An independent federal government agency that regulates the use of nuclear energy and material to protect health, safety, security and the environment and to respect Canada's international commitments on the peaceful use of nuclear energy.
Co ⁵⁹ and Co ⁶⁰	Cobalt-59 and Cobalt-60 Cobalt-59 is the stable form of cobalt. Cobalt-60 is a <i>radioisotope</i> with a <i>half-life</i> of 5.2 years.
CRO	Contract Research Organization A company that conducts research on behalf of a pharmaceutical or biotechnology company.
DMPK	Drug Metabolism and Pharmacokinetics Measuring the movement of drugs in the body, including the processes of absorption, distribution, localization in tissues, biotransformation and excretion.

EMEA	European Medicines Agency
	A decentralized body of the European Union whose main responsibility is the protection and promotion of public and animal health, through the evaluation and supervision of medicines for human and veterinary use.
FDA	Food and Drug Administration
	The U.S. regulatory agency charged with maintaining the safety of food, drugs, and cosmetics.
FDCFA	Facilities Development and Construction Funding Agreement
	A loan agreement between the Government of Canada and MDS for C\$100 million of which C\$68 million is outstanding.
FDG	Fluorine-18 Fluorodeoxyglucose
	A short-lived isotope of fluorine used predominantly in PET scans.
GAAP	Generally Accepted Accounting Principles
	The standard framework of guidelines for financial accounting. It includes the standards, conventions, and rules accountants follow in recording and summarizing transactions, and in the preparation of financial statements.
GCP and GLP	Good Clinical Practices and Good Laboratory Practices
	Standards for the conduct of clinical trials (including laboratory studies), the data from which are expected to be submitted to a regulatory agency such as the FDA. In the case of GLP, these practices are defined by regulation. GCP have arisen from general accepted clinical practices within the industry.
HCC	Hepatocellular Carcinoma
	The most common primary malignant tumour of the liver.
HEU	Highly Enriched Uranium
	Uranium that contains the <i>isotope</i> uranium 235 in a concentration of 20% or more. Naturally occurring uranium has a uranium ²³⁵ content of about 0.7%.

ICP/MS	Inductively Coupled Plasma Mass Spectrometry
	A type of mass spectrometry that combines inductively coupled plasma as a method of producing ions with a mass spectrometer as a method of separating and detecting the ions to determine the contents of a sample.
LC/MS	Liquid Chromatography/Mass Spectrometry
	A type of mass spectrometry that combines the physical separation capabilities of liquid chromatography with a mass spectrometer as a method of determining the specific contents of a sample.
LEU	Low-Enriched Uranium
	Uranium that contains the isotope uranium ²³⁵ in a concentration 20% or less.
MALDI	Matrix-Assisted Laser Desorption/Ionization
	A form of mass spectrometer that uses this technology to give a more detailed measure of the molecular mass of a sample.
MD&A	Management Discussion and Analysis
	A section of a company's financial report in which management discusses numerous aspects of the company, both past and present.
MD	Molecular Devices Corporation
	An analytical tools company acquired by MDS in 2007.
Mo ⁹⁹	Molybdenum-99
	A radioactive chemical formed by nuclear reactions during the fission of uranium which decays into Technetium-99m (Tc ^{99m}). It is the most common isotope used for medical purposes.
NCE	New Chemical Entity
	A chemical compound being studied for possible use as a drug. Compounds are generally referred to as NCEs until a NDA is filed.

NCIB	Normal Course Issuer Bid
	The action of a company buying back its own outstanding shares from the market so it can cancel them.
NDA	New Drug Application
	An NDA is submitted to the FDA reporting the results of clinical trials and must be approved by the FDA before marketing can begin.
PET	Positron Emission Tomography
	A diagnostic imaging technology that uses positron emission to measure in detail the functioning of distinct areas of the human brain while the patient is comfortable, conscious and alert.
SPECT	Single Proton Emission Computed Tomography
	A diagnostic imaging technology that allows a physician to see a three-dimensional image of a particular organ or body system. A SPECT scan is often used to visualize the brain cerebral blood flow, and thereby indicate metabolic activity patterns in the brain.
Tc ⁹⁹ m	Technetium-99m
	Tc ⁹⁹ m is the metastable nuclear form of Technetium-99. Metastable refers to the stable nature of this element in that it does not change into another element as it decays over time. It emits <i>gamma rays</i> and is used in radioactive medical isotope tests.
TOF	Time of Flight
	A form of mass spectrometry that uses differences in the transit times of molecules through a known distance to determine their molecular weight.
Technical Terms:	
Assay	Analysis of biological fluids or structure to determine how much or how little drug has been absorbed into the fluid or structure.
Bioanalytical	Methods for determining the concentration of drugs in biological samples such as blood.
Bioequivalence	The study of different formulations of the same drug to determine if the metabolic effects are equivalent.

Biomarker	A distinctive biochemical or physiological indicator of a biological process or event.
Biopharmaceuticals	Pharmaceutical products (drugs) developed using biotechnology instead of chemical synthesis.
Biotechnology	The scientific manipulation of living organisms, especially at the molecular genetic level, to produce useful products.
Clinical Trials	Broadly, the regulated process by which new drugs proceed after discovery through to acceptance for marketing to patients. The term most correctly refers to the period during which new compounds are tested in human subjects and encompasses the following broad phases:
Phase I	Segment of clinical trials research allocated to assessing the safety, tolerance, and pharmacokinetics of a NCE generally using otherwise healthy study subjects.
Phase II	Segment of clinical trials research allocated to assessing the safety and efficacy of a NCE in selected disease states using patients having the condition.
Phase III	Segment of clinical trials research allocated to assessing the safety and efficacy of a NCE often in comparison with standard therapies, conducted in an expanded, multi-centre manner using patients having the condition.
Phase IV	Follow-on clinical studies completed after the FDA has approved the NCE for marketing.
Cobalt-60	A radioactive isotope of cobalt containing one additional neutron (electrically neutral particle) compared with cobalt in its natural state.
Cyclotron	A form of particle accelerator that can be used to produce radioisotopes.
Decay	A spontaneous radioactive process by which the number of radioactive atoms in a material decreases over time resulting in the release of a defined amount of radiant energy.
E. coli	A member of the family of microorganisms called coliforms. Many strains of E. coli live peacefully in the gut; however, one strain (E. coli 0157:H7) has been identified as the cause of a specific form of gastroenteritis characterized by abdominal cramps and bloody diarrhea, leading to kidney failure and sometimes death.

Efficacy	Capacity for producing a desired result or effect.
Electron (or E) Beam	A type of particle accelerator that creates a stream of high-energy electrons.
Gamma Radiation	Very high-energy electromagnetic radiation that is released from the decay of radioactive sources.
Genome	The entire genetic information present in a particular organism.
Genomics	The study of the organization, structure and function of the genome
Half-life	The time required for radioisotopes to decay to one-half the level of radioactivity originally present.
Humanitarian Use Device	A device that is intended to benefit patients in the treatment and diagnosis of diseases or conditions that affect or is manifested in fewer than 4,000 individuals in the United States per year.
Ionization	The process by which neutral atoms become electrically charged by the loss of one or more electrons (electrically negative particles).
Investigator	The individual from a clinic site who is ultimately in charge of a study, typically a physician.
Irradiation	The process of exposing product to gamma radiation, or X-rays, or electrons under controlled conditions.
Isotope	A form of an element having the same number of protons (electrically positive particles) but a different number of neutrons from its ordinary state. Most elements exist in more than one form of isotope, and most isotopes are stable (unchanging). Isotopes are typically identified by an element name followed by a number (e.g. Molybdenum-99).
Liquid Chromatography	A separation technique in which the sample is injected into a liquid stream pumped at high pressure through a column packed with materials which absorb the components of the sample to varying extents, such that over the length of the column the components of the sample become separated and are detected sequentially by the mass spectrometer.
Mass Spectrometry	The science that measures the masses and relative concentrations of atoms and molecules to determine the make-up of the substance.

Molybdenum-99	The most common isotope used for medical purposes. It is processed into technetium-99m for these purposes.
Particle Accelerator	A machine that increases the kinetic energy of electrons or protons by accelerating them through electric fields.
Pharmacology	The study of drugs and their origins, nature, properties, and effects on living organisms.
Pre-clinical Studies	Designates those studies generally completed prior to human clinical trials.
Proteomics	The study of protein location, interaction, structure, and function that aims to identify and characterize the proteins present in normal versus diseased states in biological samples.
Radioisotopes	An isotope that is unstable and returns to a stable state through the release of energy in a process called decay. MDS processes and distributes radioisotopes for use in medical applications and for sterilization processing.
Radiopharmaceuticals	A specially designed pharmaceutical having as part of its ingredients a minute amount of a radioisotope. After injection or ingestion, the radiopharmaceutical is designed to collect in specific organs or types of cells such as tumour cells.
Substantial Issuer Bid	Substantial Issuer Bid is a process that allows a company to buy back its shares from shareholders. A Substantial Issuer Bid operates like an auction; a company offers to repurchase a specific number of shares within a set price range, and shareholders are invited to tender shares during the offer period. Shareholders must specify the lowest price within the range that they are willing to accept. At the end of the offer period, the company will collect investor offers and select the lowest tendered price that allows it to buy the maximum number of shares up to a pre-determined dollar amount. This price becomes the purchase price and all shares that are tendered at or below the purchase price will be purchased by the company. If the company receives more offers at the accepted price than the specified maximum number of shares, all shareholders who tendered at or below the accepted price will receive a pro-rata allocation.
Synthesis	The process of creating a molecule through chemical reaction.
Target	The cells, tissues, or structures that a drug is intended to interact with as part of its pharmacological effect.

Toxicology (also called Safety
Pharmacology)

Toxicology in the biomedical area is primarily concerned with the prediction of adverse effects in humans resulting from exposure to drugs as well as the demonstration of safety or hazard associated with their use.