FLEXIBLE SOLUTIONS INTERNATIONAL INC
Form 10-K
March 30, 2010

# SECURITIES AND EXCHANGE COMMISSION
**WASHINGTON, D.C. 20549**

# FORM 10-K

(Mark One)

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

For the Fiscal Year Ended December 31, 2009

OR

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

Commission File No. 001-31540

# FLEXIBLE SOLUTIONS INTERNATIONAL, INC.

(Exact name of registrant as specified in its charter)

| Nevada | 91-1922863 |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |
| 615 Discovery Street<br>Victoria, British Columbia, Canada | V8T 5G4 |
| (Address of Principal Executive Office) | Zip Code |

Registrant's telephone number, including Area Code: (250) 477-9969
Securities registered pursuant to Section 12(b) of the Act:

| **Title of each class** | **Name of each exchange on which registered** |
|---|---|
| Common Stock, $0.001 par value | NYSE AMEX |

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. o

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. o

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

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

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

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

| | |
|---|---|
| Large accelerated filer o | Accelerated filer o |
| Non-accelerated filer o<br>(Do not check if a smaller reporting company) | Smaller reporting company x |

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act): o Yes x No

As of June 30, 2009 the aggregate market value of the Company's common stock held by non-affiliates was approximately $10,601,067 based on the closing price for shares of the Company's common stock on the NYSE AMEX for that date.

As of March 15, 2010, the Company had 13,962,567 issued and outstanding shares of common stock.

Documents incorporated by reference: None

**CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This Annual Report on Form 10-K for the year ended December 31, 2009 ("Annual Report"), including the Notes to Audited Consolidated Financial Statements, contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, without limitation, those statements relating to development of new products, our financial condition, our ability to increase distribution of our products, integration of businesses we acquire and disposition of any of our current business. Forward-looking statements can be identified by the use of forward-looking terminology, such as "may," "will," "should," "expect," "anticipate," "estimat "continue," "plans," "intends," or other similar terminology. These forward-looking statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is anticipated or forecasted in these forward-looking statements due to numerous factors, including, but not limited to, our ability to generate or obtain sufficient working capital to continue our operations, changes in demand for our products, the timing of customer orders and deliveries and the impact of competitive products and pricing. In addition, such statements could be affected by general industry and market conditions and growth rates, and general domestic and international economic conditions.

Although we believe that the expectations reflected in these forward-looking statements are reasonable and achievable, such statements involve risks and uncertainties and no assurance can be given that our actual results will be consistent with these forward-looking statements. Except as otherwise required by applicable securities laws, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, changed circumstances or any other reason, after the date of this Annual Report.

**PART I**

**Item 1. Description of Business**

We were incorporated as Flexible Solutions, Ltd., a British Columbia corporation on January 26, 1991. On May 12, 1998, we merged Flexible Solutions Ltd. into Flexible Solutions International, Inc., a Nevada corporation. In connection with this merger, we issued 7,000,000 shares of common stock to the former shareholders of Flexible Solutions Ltd. in exchange for all of the outstanding shares of Flexible Solutions Ltd.

In June 2004 we purchased 52 U.S. and 139 International patents, as well as a 56,780 sq. ft. manufacturing plant near Chicago, Illinois from the bankruptcy estate of Donlar Corporation ("Donlar") for $6.15 million. The patents we acquired from Donlar relate to water-soluble chemicals ("TPAs") which prevent corrosion and scaling in water pipes used in the petroleum, chemical, utility and mining industries. TPAs are also used to enhance fertilizers and improve crop yields and as additives for household laundry detergents, consumer care products and pesticides.

We operate through two wholly-owned subsidiaries: Flexible Solutions Ltd., and NanoChem Solutions Inc. Unless otherwise indicated, all references to our business include the operations of these subsidiaries.

In November 2007, we purchased a building and 3.3 acres of land in Taber, Alberta, Canada. The price paid was CDN$1,325,000 and was financed by cash of $660,000 and an interest free mortgage that was paid in June 2008. The building will be renovated and operated as a fermentation facility for the production of aspartic acid, a key ingredient in TPAs. Aspartic acid made in Taber will be shipped to our plant in Illinois for finishing.

Our website is www.flexiblesolutions.com

**Our Products**

HEAT$AVR®/ECO$AVR

Our studies indicate that approximately 70% of the energy lost from a swimming pool occurs through water evaporation. HEAT$AVR® is a chemical product for use in swimming pools and spas that forms a thin, transparent layer on the water's surface. The transparent layer slows the evaporation of water, allowing the water to retain a higher temperature for a longer period of time and thereby reducing the energy required to maintain the desired temperature of the water. We have received reports from our commercial customers documenting energy savings of between $2,400 to $6,000 per year when using HEAT$AVR®.

ECO$AVR® is a patented, disposable dispenser designed for the residential pool and spa market. ECO$AVR® is made of molded plastic in the form of a ten-inch long colorful fish that is filled with enough HEAT$AVR® to cover the surface of a 400 sq. ft. swimming pool for about one month. The HEAT$AVR® solution inside the ECO$AVR® escapes into the water and rises to the surface to form a transparent layer on the water's surface. Once the ECO$AVR® is empty the dispenser is removed and replaced.

In outdoor pools, the HEAT$AVR® also provides convenience compared to pool blankets. Pool blankets are plastic covers, which are cut to the size and shape of the surface of the pool or spa. Pool blankets float on the surface and, like the HEAT$AVR®, reduce energy costs by inhibiting water

evaporation. However, it is often inconvenient to use conventional pool blankets because a pool blanket must be removed and stored before the pool can be used. Pool blankets do not provide any energy savings when not on the pool. Conversely, HEAT$AVR® eliminates the need to install, remove and store the blanket and works 24 hours a day. In addition, the use of HEAT$AVR® in an indoor pool results in even greater energy savings since indoor pool locations use energy not only to heat the pool water, but also to air condition the pool environment. By slowing the transfer of heat and water vapor from the pool to the atmosphere of the pool enclosure, less energy is required to maintain a pool at the desired temperature and there is a reduced load on the air-conditioning system.

HEAT$AVR® retails for between $200 and $300 per four gallon case in the United States. ECO$AVR® has a suggested retail price of between $11.95 and $14.95 in the United States. We market our HEAT$AVR® and ECO$AVR® products to homeowners with swimming pools and spas as well as operators of swimming pools and spas in hotels, motels, schools, and municipal and private recreational facilities.

We also manufacture and sell products which automatically dispense HEAT$AVR® into commercial size swimming pools or spas at the rate of one ounce per 400 sq. ft. of water surface per day.

We have 18 non-exclusive distributorships in Canada and the United States for the sale of bulk HEAT$AVR® (without the ECO$AVR® dispenser) and exclusive distributorships in Australia, Chile, Korea, Argentina, Taiwan, Romania and Weastern Europe. We support our distributors and seek additional market opportunities by annually attending the major pool industry trade shows in the United States. We also advertise in trade magazines, maintain a semi-annual newsletter that is sent to buyer associations, customers and potential customers, and maintain a website which has information about our products.

*WATER$AVR®*

This product utilizes our HEAT$AVR technology to reduce water evaporation in reservoirs, potable water storage tanks, livestock watering ponds, aqueducts, canals and irrigation ditches. WATER$AVR may also be used for lawn and turf care and potted and bedding plants.

WATER$AVR® is sold in granulated form and can be applied by hand, by fully automated scheduled metering, or by an automatic dispenser.

Tests have indicated that WATER$AVR®:

- Reduces daily water evaporation as much as 54%
- Reduces monthly water evaporation as much as 37%
- Is odorless
- Has no effect on invertebrates or vertebrates
- Has no anticipated effect on any current drinking water treatment processes and
- Is biodegradable

We have one full-time employee and one part-time employee who are involved in the sales and marketing of WATER$AVR®.

*WATER$AVR—BTI™*

WATER$AVR—BTI™ combines evaporation control with an environmentally friendly method of killing mosquito larvae during the first, second and third stages of development. Combined with our original WATER$AVR® product, WATER$AVR—BTI™ can be quickly and evenly spread across large and small water surfaces where larvae must go to obtain air. Tests conducted by the Entomology Department at the Louisiana State University Agricultural Center showed that the use of WATER$AVR—BTI™ resulted in a 100% kill rate of mosquito larvae in contact with the product.

*TPAs (thermal polyaspartate biopolymers)*

TPAs for Oilfields. TPAs are used to reduce scale and corrosion in various "topside" water systems. They are used in place of traditional phosphate and other products when biodegradability is required by environmental regulations. We have the ability to custom manufacture TPAs depending on the specific water conditions associated with any oil well.

TPAs for the Agricultural Industry. TPAs have the ability to reduce fertilizer crystallization before, during and after application and can also prevent crystal formation between fertilizer and minerals present in the soil. Once crystallized, fertilizer and soil minerals are not bio-available to provide plant nourishment. As a result, in select conditions the use of TPAs either blended with fertilizer or applied directly to crops can increase yields significantly. TPAs are designated for crop nutrient management programs and should not be confused with crop protection and pesticides or other agricultural chemical applications. Depending on the application, TPA products are marketed under a variety of brands including Amisorb, LYNX, MAGNET, AmGro and VOLT. Markets of significance include potatoes, sugar beets, cotton, tomatoes, almonds and other high value per acre crops.

TPAs for Irrigation. The crystallization prevention ability of TPAs can also be useful in select irrigation conditions. By reducing calcium carbonate scale propagation, TPAs can prevent early plugging of drip irrigation ports, reduce maintenance costs and lengthen the life of equipment. TPAs compete with acid type scale removers, but have the advantage of a positive yield effect on the plant, as well as an easier deployment formulation with liquid fertilizers when used as part of a "fertigation" program. Our TPAs for drip irrigation scale prevention are at an early stage of commercialization and will be marketed and sold through the same channels as TPAs used by the agricultural industry.

TPAs for Detergent. In detergents, TPAs are a biodegradable substitute for poly-acrylic acid. In select markets, the use of this substitute outweighs the added cost of TPAs, which has allowed for the continued growth of this TPA product line. However, to increase penetration of this market beyond specialty detergent manufacturers, we will need to decrease the cost of this product or wait for legislative intervention regarding biodegradability of detergent components. In the meantime, we are researching various methods to reduce production costs.

TPAs for Personal Care Products. TPAs can also be used in shampoo and cosmetic products for increased hydration that improves the feel of the core product to consumers. TPA's may also be used as an additive to toothpaste with the documented effect of reducing decay bacteria adhesion to tooth enamel and presumed reduction in total decay. We do not currently sell TPAs for use in personal care products.

**Competition**

*HEAT$AVR® and ECO$AVR™*

We are aware of two other companies that manufacture products that compete with HEAT$AVR® and ECO$AVR® and we believe our products are more effective and safer. We maintain fair pricing equal to or lower than our competitors and protect our intellectual property carefully. Our products are expected to maintain or increase market share in the competitive pool market.

HEAT$AVR® also competes with plastic pool blanket products. However, we believe that HEAT$AVR® is more effective and convenient than pool blankets.

*WATER$AVR®*

Ultimate Products (Aust) Pty Ltd. of Australia has a product called Aquatain that directly competes with WATER$AVR®. We believe our WATER$AVR® product is superior for the following reasons: it is safer, much less expensive and has much better test data. Aquatain has not expended the capital to test for environmental effects on insects and other aquatic life whereas WATER$AVR® has recognized third party environmental safety documentation.

As water conservation is an important priority throughout the world, numerous researchers are working to develop solutions that may compete with, or be superior to, WATER$AVR.

*WATER$AVR—BTI™*

Although we are not aware of any direct competition with WATER$AVR—BTI™, the pest control industry is very large and well funded and there are a multitude of alternative methods and materials that can be used for mosquito control. We believe that we will be able to compete by providing an environmentally sensitive product which is less expensive than traditional products.

*TPAs*

Our TPA products have direct competition with Lanxess AG (spun out of Bayer AG), a German manufacturer of TPAs, which uses a patented process different from ours. We have cross-licensed each other's processes and either company can use either process for the term of the patents involved. We believe that Lanxess has approximately the same production capacity and product costs as we do. We believe that we can compete effectively with Lanxess by offering excellent customer service in oilfield sales, superior distributor support in the agricultural marketplace and flexibility due to our relative size. In addition, we intend to continue to seek market niches that are not the primary targets of Lanxess.

Our TPA products face indirect competition from other chemicals in every market in which we are active. For purposes of oilfield scale prevention, phosphonates, phosphates and molibdonates provide the same effect. For crop enhancement, increased fertilizer levels or reduced concentrations can serve as a substitute for TPAs. In irrigation scale control, acid washes are our prime competitor. In detergent, poly-acrylic acid is most often used due to price advantage. Notwithstanding the above, we believe our competitive advantages include:

- Biodegradability compared to competing oil field chemicals;
- Cost-effectiveness for crop enhancement compared to increased fertilizer use;
- Environmental considerations, ease of formulation and increased crop yield opportunities in irrigation scale markets; and

- Biodegradability compared to poly-acrylic acid for detergents.

**Manufacturing**

Our HEAT$AVR® and ECO$AVR® products and dispensers are made from chemicals, plastic and other materials and parts that are readily available from multiple suppliers. We have never experienced any shortage in the availability of raw materials and parts for these products and we do not have any long term supply contracts for any of these items. We manufacture these products in our plant in Taber, Alberta, Canada.

Our WATER$AVR® products are manufactured by a third party. We are not required to purchase any minimum quantity of this product.

Our 56,780 sq. ft. facility in Peru, Illinois manufactures our TPA products. Raw materials for TPA production are sourced from various manufacturers throughout the world and we believe they are available in sufficient quantities for any increase in sales. Raw materials are, however, derived from crude oil and are subject to price fluctuations related to world oil prices.

In November 2007, we purchased a building and 3.3 acres of land in Taber, Alberta, Canada. The price paid was CDN$1,325,000 and was financed by cash of $660,000 and an interest free mortgage that was paid in June 2008. Once renovated, the building will operate as a fermentation facility for the production of aspartic acid, a key ingredient in TPAs. Aspartic acid made in Taber will be shipped to our plant in Illinois for finishing.

**Government Regulations**

*HEAT$AVR® and ECO$AVR®*

Chemical products for use in swimming pools are covered by a variety of governmental regulations in all countries where we sell these products. These regulations cover packaging, labeling, and product safety. We believe our products are in compliance with these regulations.

*WATER$AVR®*

Our WATER$AVR® product is subject to regulation in most countries, particularly for agricultural and drinking water uses. We do not anticipate that governmental regulations will be an impediment to marketing WATER$AVR® because the components in WATER$AVR® have historically been used in agriculture for many years for other purposes. Nevertheless, we will need to obtain approval to sell WATER$AVR® in the United States for agricultural and drinking water uses. We have received National Sanitation Foundation approval for the use of WATER$AVR in drinking water in the United States.

*WATER$AVR—BTI™*

As a pesticide, WATER$AVR—BTI™ was approved by the EPA for commercial sale in the United States on November 30, 2005. We began marketing this product commercially in 2006. While EPA approval applies only to registration of the product in the United States, we believe EPA approval may expedite product registration and approval processes in other parts of the world. We will apply for certification in any country where significant markets are identified.

*TPAs*

In the oil field and agricultural markets we have received government approval for all TPAs currently sold. In the detergent market, there are currently no regulatory requirements for use of TPAs in detergent formulations. For personal care products such as shampoo and toothpaste, there are various regulatory bodies, including the National Sanitation Foundation and the United States Food and Drug Administration, that regulate TPA use. If we begin to market our TPA products to these industries, we will need to satisfy applicable regulatory requirements.

**Proprietary Rights**

Our success is dependent, in part, upon our proprietary technology. We rely on a combination of patent, copyright and trade secret laws and nondisclosure agreements to protect our proprietary technology. We currently hold 56 U.S. patents and 139 International patents which expire at various dates between 2011 and 2020. We also have three U.S. patent applications pending and have applied to extend these pending patents to certain other countries where we operate. There can be no assurance that our pending patent applications will be granted or that any issued patent will be upheld as valid or prevent the development of competitive products, which may be equivalent to or superior to our products. We have not received any claims alleging infringement of the intellectual property rights of others, but there can be no assurance that we may not be subject to such claims in the future.

**Research and Development**

We spent $30,078 for the year ended December 31, 2009 and $80,381 for the year ended December 31, 2008 on research and development. This work relates primarily to the development of our water and energy conservation products, as well as new research in connection with our TPA products.

**Employees**

As of December 31, 2009 we had 33 employees, including one officer, twelve sales and customer support personnel, and twenty manufacturing personnel. None of our employees is represented by a labor union and we have not experienced any work stoppages to date.

**Item 1A. Risk Factors**

This Form 10-K contains forward-looking information based on our current expectations. Because our actual results may differ materially from any forward-looking statements made by us, this section includes a discussion of important factors that could affect our future operations and result in a decline in the market price of our common stock.

***We have incurred significant operating losses since inception and may not sustain profitability in the future.***

We have experienced operating losses and negative cash flow from operations and we currently have an accumulated deficit. If our revenues do not increase, our results of operations and liquidity will be materially adversely affected. If we experience slower than anticipated revenue growth or if our operating expenses exceed our expectations, we may not be profitable. Even if we become profitable in the future, we may not remain profitable.

***Fluctuations in our operating results may cause our stock price to decline.***

Given the nature of the markets in which we operate, we cannot reliably predict future revenues and profitability. Changes in competitive, market and economic conditions may cause us to adjust our operations. A high proportion of our costs are fixed, due in part to our sales, research and development and manufacturing costs. Thus, small declines in revenue could disproportionately affect our operating results. Factors that may affect our operating results and the market price of our common stock include:

- demand for and market acceptance of our products;
- competitive pressures resulting in lower selling prices;
- adverse changes in the level of economic activity in regions in which we do business;
- adverse changes in the oil and gas industry on which we are particularly dependent;
- changes in the portions of our revenue represented by various products and customers;
- delays or problems in the introduction of new products;
- the announcement or introduction of new products, services or technological innovations by our competitors;
- variations in our product mix;
- the timing and amount of our expenditures in anticipation of future sales;
- increased costs of raw materials or supplies; and
- changes in the volume or timing of product orders.

***Our operations are subject to seasonal fluctuation.***

The use of our swimming pool products increases in summer months in most markets and results in our sales from January to June being greater than in July through December. Markets for our WATER$AVR® product are also seasonal, dependent on the wet versus dry seasons in particular countries. We attempt to sell into a variety of countries with different seasons on both sides of the equator in order to minimize seasonality. Our TPA business is the least seasonal, however there is a small increase in the spring related to inventory building for the crop season in the United States and a small slowdown in December as oilfield customers run down stock in advance of year end, but otherwise, little seasonal variation. We believe we are able to adequately respond to these seasonal fluctuations by reducing or increasing production as needed.

***Interruptions in our ability to purchase raw materials and components may adversely affect our profitability.***

We purchase certain raw materials and components from third parties pursuant to purchase orders placed from time to time. Because we do not have guaranteed long-term supply arrangements with our suppliers, any material interruption in our ability to purchase necessary raw materials or components could have a material adverse effect on our business, financial condition and results of operations.

***Our WATER$AVR® product has not proven to be a revenue producing product and we may never recoup the cost associated with its development.***

The marketing efforts of our WATER$AVR® product may result in continued losses. We introduced our WATER$AVR® product in June 2002 and, to date, we have delivered quantities for testing by potential customers, but only a few customers have ordered the product for commercial use. This product can achieve success only if it is ordered in substantial quantities by commercial customers who have determined that the water saving benefits of the product exceed the costs of purchase and deployment of the product. We can offer no assurance that we will receive sufficient orders of this product to achieve profits or cover the additional expenses incurred to manufacture and market this product. We expect to spend $200,000 on the marketing and production of our WATER$AVR® product in fiscal 2010.

***If we do not introduce new products in a timely manner, our products could become obsolete and our operating results would suffer.***

Without the timely introduction of new products and enhancements, our products could become obsolete over time, in which case our revenue and operating results would suffer. The success of our new product offerings will depend upon several factors, including our ability to:

- accurately anticipate customer needs;
- innovate and develop new products and applications;
- successfully commercialize new products in a timely manner;
- price our products competitively and manufacture and deliver our products in sufficient volumes and on time; and
- differentiate our products from our competitors' products.

In developing any new product, we may be required to make a substantial investment before we can determine the commercial viability of the new product. If we fail to accurately foresee our customers' needs and future activities, we may invest heavily in research and development of products that do not lead to significant revenues.

***We are dependent upon certain customers.***

Among our current customers, we have identified six that are sizable enough that the loss of any one would be significant. Any loss of one or more of these customers could result in a substantial reduction in our revenues.

***Economic, political and other risks associated with international sales and operations could adversely affect our sales.***

Revenues from shipments made outside of the United States accounted for approximately 83% of our revenues in the year ended December 31, 2009, 79% in the year ended December 31, 2008 and 79% in the year ended December 31, 2007. Since we sell our products worldwide, our business is subject to risks associated with doing business internationally. We anticipate that revenues from international operations will continue to represent a sizable portion of our total revenue. Accordingly, our future results could be harmed by a variety of factors, including:

- changes in foreign currency exchange rates;
- changes in a country or region's political or economic conditions, particularly in developing or emerging markets;
- longer payment cycles of foreign customers and difficulty of collecting receivables in foreign jurisdictions;
- trade protection measures and import or export licensing requirements;
- differing tax laws and changes in those laws;
- difficulty in staffing and managing widespread operations;
- differing protection of intellectual property and changes in that protection; and
- differing regulatory requirements and changes in those requirements.

***We are subject to credit risk and may be subject to substantial write-offs if one or more of our significant customers default on their payment obligations to us.***

We currently allow our major customers between 30 and 45 days to pay for each sale. This practice, while customary, presents an accounts receivable write-off risk in that if one or more of our significant customers defaulted on their payment obligations to us, such write-off, if substantial, would have a material adverse effect on our business and results of operations.

***Our products can be hazardous if not handled, stored and used properly; litigation related to the handling, storage and safety of our products would have a material adverse effect on our business and results of operations.***

Some of our products are flammable and must be stored properly to avoid fire risk. Additionally, some of our products may cause irritation to a person's eyes if they are exposed to the concentrated product. Although we label our products to warn of such risks, our sales could be reduced if our products were considered dangerous to use or if they are implicated in causing personal injury or property damage. We are not currently aware of any circumstances in which our products have caused harm or property damage to consumers. Nevertheless, litigation regarding the handling, storage and safety of our products would have a material adverse effect on our business and results of operations.

***Our failure to comply with environmental regulations may create significant environmental liabilities and force us to modify our manufacturing processes.***

We are subject to various federal, state and local environmental laws, ordinances and regulations relating to the use, storage, handling and disposal of chemicals. Under such laws, we may become liable for the costs of removal or remediation of these substances that have been used by our consumers or in our operations. Such laws may impose liability without regard to whether we knew of, or caused, the release of such substances. Any failure by us to comply with present or future regulations could subject us to substantial fines, suspension of production, alteration of manufacturing processes or cessation of operations, any of which could have a material adverse effect on our business, financial condition and results of operations.

***Our failure to protect our intellectual property could impair our competitive position.***

While we own certain patents and trademarks, some aspects of our business cannot be protected by patents or trademarks. Accordingly, in these areas there are few legal barriers that prevent potential competitors from copying certain of our products, processes and technologies or from otherwise entering into operations in direct competition with us. In particular, we have been informed that our former exclusive agent for the sale of our products in North America is now competing with us in the swimming pool and personal spa markets. As a former distributor, they were given access to many of our sales, marketing and manufacturing techniques.

***Our products may infringe on the intellectual property rights of others, and resulting claims against us could be costly and prevent us from making or selling certain products.***

Third parties may seek to claim that our products and operations infringe their patent or other intellectual property rights. We 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 making, using or selling our products in the United States or abroad.

***A claim for damages could materially and adversely affect our financial condition and results of operations.***

Our business exposes us to potential product liability risks, particularly with respect to our consumer swimming pool and consumer TPA products. There are many factors beyond our control that could lead to liability claims, including the failure of our products to work properly and the chance that consumers will use our products incorrectly or for purposes for which they were not intended. There can be no assurance that the amount of product liability insurance that we carry will be sufficient to protect us from product liability claims. A product liability claim in excess of the amount of insurance we carry could have a material adverse effect on our business, financial condition and results of operations.

***Our ongoing success is dependent upon the continued availability of certain key employees.***

Our business would be adversely affected if the services of Daniel B. O'Brien ceased to be available to us because we currently do not have any other employee with an equivalent level of expertise in and knowledge of our industry. If Mr. O'Brien no longer served as our President and Chief Executive Officer, we would have to recruit one or more new executives, with no real assurance that we would be able to engage a replacement executive with the required skills on satisfactory terms. The market for skilled employees is highly competitive, especially for employees in the fields in which we operate. While our compensation programs are intended to attract and retain qualified employees, there can be no

assurance that we will be able to retain the services of all our key employees or a sufficient number to execute our plans, nor can there be any assurances that we will be able to continue to attract new employees as required.

**Item 1B. Unresolved Staff Comments.**

Not applicable.

**Item 2. Properties.**

We lease 4,300 sq. ft. in Victoria, British Columbia for administration and sales and research at $5,972 per month, effective through to June 2014, as well as 7,000 sq. ft. in Bedford Park, Illinois for offices and laboratories at a cost of $6,548 per month with a year to year lease. We own a 56,780 sq. ft. facility in Peru, Illinois which is used to manufacture our TPA line of products as well as a building and 3.3 acres of land in Taber, Alberta, Canada. Our building in Taber will be renovated and operated as a fermentation facility for the production of aspartic acid, a key ingredient in TPAs. Aspartic acid made in Taber will be shipped to Illinois for finishing as well as for manufacturing our swimming pool products. Our former manufacturing location in Calgary, AB, Canada was sublet through until the end of the lease, September 2009. Our former sales office in Richmond, BC, Canada has been sublet through the end of the lease pertaining to this location.

**Item 3. Legal Proceedings.**

None.

**Item 4. Submission of Matters to a Vote of Security Holders.**

The annual meeting of our shareholders was held on December 28, 2009. At the meeting the following persons were re-elected as directors for the upcoming year:

| Name | Votes For | Votes Against | Votes Abstained | Broker Non-Votes |
|---|---|---|---|---|
| Daniel O'Brien | 6,459,900 | 0 | 0 | 0 |
| Dr. Robert O'Brien | 6,459,900 | 0 | 0 | 0 |
| John H. Bientjes | 6,459,900 | 0 | 0 | 0 |
| Dale Friend | 6,459,900 | 0 | 0 | 0 |
| Eric Hodges | 6,459,900 | 0 | 0 | 0 |

At the meeting, the following were presented to the shareholders:

1) a proposal to ratify an option granted to John Bientjes which allows Mr. Bientjes to purchase 5,000 shares of our common stock at a price of $2.25 per share at any time after December 31, 2009 and on or before January 1, 2014;

2) a proposal to ratify an option granted to Dale Friend which allows Mr. Friend to purchase 5,000 shares of our common stock at a price of $2.25 per share at any time after December 31, 2009 and on or before January 1, 2014;

3) a proposal to ratify an option granted to Eric Hodges which allows Mr. Hodges to purchase 5,000 shares of our common stock at a price of $2.25 per share at any time after December 31, 2009 and on or before January 1, 2014;

4) a proposal to ratify the selection of Cinnamon Jang Willoughby & Company as our independent registered public accountants for the year ending December 31, 2009.

The following is a tabulation of the votes cast with respect to these proposals:

| Proposal | Votes For | Votes Against | Votes Abstained | Broker Non-Votes |
|---|---|---|---|---|
| 1 | 6,459,900 | 0 | 0 | 0 |
| 2 | 6,459,900 | 0 | 0 | 0 |
| 3 | 6,459,900 | 0 | 0 | 0 |
| 4 | 6,459,900 | 0 | 0 | 0 |

## PART II

**Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchase of Equity Securities.**

Our common stock is traded on the NYSE AMEX under the symbol "FSI". The following is the range of high and low closing prices for our common stock for the periods indicated:

| | | High | Low |
|---|---|---|---|
| **Year Ended December 31, 2009** | First Quarter | $ 1.89 | $ 1.01 |
| | Second Quarter | 1.42 | .98 |
| | Third Quarter | 1.80 | 1.20 |
| | Fourth Quarter | 2.47 | 1.61 |

| | | High | Low |
|---|---|---|---|
| **Year Ended December 31, 2008** | First Quarter | $ 2.40 | $ |