# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION

**Washington, D.C. 20549**

# FORM 10-Q

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

**For the quarterly period ended June 30, 2009**

**OR**

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

**For the transition period from to**

**Commission file number 001-33133**

# METABOLIX, INC.

| | |
|---|---|
| **Delaware**<br>(State or other jurisdiction of incorporation or organization) | **04-3158289**<br>(I.R.S. Employer Identification No.) |
| **21 Erie Street**<br>**Cambridge, MA**<br>(Address of principal executive offices) | **02139**<br>(Zip Code) |

**(617) 583-1700**
(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report.)

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

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

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

The number of shares outstanding of the registrant's common stock as of August 3, 2009 was 23,011,137.



**Metabolix, Inc.**
**Form 10-Q**
**For the Quarter Ended June 30, 2009**

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## PART I. FINANCIAL INFORMATION

## ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS

**METABOLIX, INC.**
**CONSOLIDATED BALANCE SHEETS**
**UNAUDITED**
**(in thousands, except share and per share data)**

| | June 30, 2009 | December 31, 2008 |
|---|---|---|
| **Assets** | | |
| Current Assets: | | |
| Cash and cash equivalents | $ 9,314 | $ 26,194 |
| Short-term investments | 68,292 | 64,902 |
| Accounts receivable | 164 | 159 |
| Due from related parties | 752 | — |
| Unbilled receivables | 122 | 56 |
| Prepaid expenses and other current assets | 606 | 530 |
| Total current assets | 79,250 | 91,841 |
| Restricted cash | 593 | 593 |
| Property and equipment, net | 4,077 | 4,388 |
| Other assets | 96 | 124 |
| Total assets | $ 84,016 | $ 96,946 |
| **Liabilities and Stockholders' Equity** | | |
| Current Liabilities: | | |
| Accounts payable | $ 108 | $ 858 |
| Accrued expenses | 3,755 | 3,587 |
| Current portion of deferred rent and other current liabilities | 266 | 165 |
| Total current liabilities | 4,129 | 4,610 |
| Deferred rent | 634 | 717 |
| Long-term deferred revenue | 36,653 | 32,440 |
| Other long-term liabilities | 93 | 88 |
| Total liabilities | 41,509 | 37,855 |
| Commitments and contingencies (Note 11) | | |
| Stockholders' Equity: | | |
| Preferred stock ($0.01 par value per share): 5,000,000 shares authorized, no shares issued or outstanding | — | — |
| Common stock ($0.01 par value per share); 100,000,000 shares authorized at June 30, 2009 and December 31, 2008; 23,000,361 and 22,962,628 shares issued and outstanding at June 30, 2009 and December 31, 2008, respectively | 230 | 230 |
| Additional paid-in capital | 191,040 | 188,532 |
| Accumulated other comprehensive income | 135 | 446 |
| Accumulated deficit | (148,898) | (130,117) |
| Total stockholders' equity | 42,507 | 59,091 |
| Total liabilities and stockholders' equity | $ 84,016 | $ 96,946 |

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**METABOLIX, INC.**
**CONSOLIDATED STATEMENTS OF OPERATIONS**
**UNAUDITED**
**(in thousands, except share and per share data)**

| | Three Months Ended June 30, 2009 | Three Months Ended June 30, 2008 | Six Months Ended June 30, 2009 | Six Months Ended June 30, 2008 |
|---|---|---|---|---|
| Revenue: | | | | |
| Research and development revenue | $ 24 | $ 11 | $ 30 | $ 79 |
| License fee and royalty revenue from related parties | 41 | 35 | 66 | 70 |
| Grant revenue | 283 | 355 | 513 | 656 |
| Total revenue | 348 | 401 | 609 | 805 |
| Operating expense: | | | | |
| Research and development expenses, including cost of revenue | 6,323 | 6,008 | 12,331 | 11,942 |
| Selling, general, and administrative expenses | 3,938 | 4,048 | 7,652 | 8,145 |
| Total operating expenses | 10,261 | 10,056 | 19,983 | 20,087 |
| Loss from operations | (9,913) | (9,655) | (19,374) | (19,282) |
| Other income (expense): | | | | |
| Interest income, net | 241 | 730 | 593 | 1,909 |
| Net loss | $ (9,672) | $ (8,925) | $ (18,781) | $ (17,373) |
| Net loss per share: | | | | |
| Basic and Diluted | $ (0.42) | $ (0.39) | $ (0.82) | $ (0.76) |
| Number of shares used in per share calculations: | | | | |
| Basic and Diluted | 22,995,026 | 22,787,087 | 22,985,297 | 22,717,913 |

*The accompanying notes are an integral part of these interim consolidated financial statements*



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**METABOLIX, INC.**
**CONSOLIDATED STATEMENTS OF CASH FLOWS**
**UNAUDITED**
**(in thousands)**

| | Six Months Ended June 30, 2009 | Six Months Ended June 30, 2008 |
|---|---|---|
| **Cash flows from operating activities** | | |
| Net loss | $ (18,781) | $ (17,373) |
| Adjustments to reconcile net loss to cash used in operating activities: | | |
| Depreciation and amortization | 1,310 | 1,814 |
| Charge for 401(k) company common stock match | 279 | 212 |
| Stock-based compensation | 2,250 | 2,192 |
| Gain on the sale of equipment | (70) | — |
| Changes in operating assets and liabilities: | | |
| Receivables (billed and unbilled) | (71) | 90 |
| Due from related party | 226 | 119 |
| Prepaid expenses and other assets | (48) | 212 |
| Accounts payable | (750) | 245 |
| Accrued expenses | (215) | (996) |
| Deferred rent | (83) | (80) |
| Deferred revenue | 3,336 | 5,302 |
| Net cash used in operating activities | (12,617) | (8,263) |
| **Cash flows from investing activities** | | |
| Purchase of property and equipment | (655) | (483) |
| Proceeds from the sale of equipment | 70 | — |
| Purchase of short-term investments | (63,590) | (62,188) |
| Proceeds the from sale and maturity of short-term investments | 59,891 | 69,685 |
| Net cash provided by (used in) investing activities | (4,284) | 7,014 |

| | | |
|---|---|---|
| **Cash flows from financing activities** | | |
| Proceeds from options and warrants exercised | 21 | 664 |
| Net cash provided by financing activities | 21 | 664 |
| Net decrease in cash and cash equivalents | (16,880) | (585) |
| Cash and cash equivalents at beginning of period | 26,194 | 22,686 |
| Cash and cash equivalents at end of period | $ 9,314 | $ 22,101 |

*The accompanying notes are an integral part of these interim consolidated financial statements*



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**METABOLIX, INC.**
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**
**UNAUDITED**

*(All dollar amounts, except per share amounts, are stated in thousands)*

## 1. BASIS OF PRESENTATION

The accompanying consolidated financial statements are unaudited and have been prepared by Metabolix, Inc. (the “Company”) in accordance with accounting principles generally accepted in the United States of America (“GAAP”) and pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (“SEC”). Certain information and footnote disclosures normally included in the Company’s annual consolidated financial statements have been condensed or omitted. The year-end consolidated balance sheet data was derived from audited financial statements, but does not include all disclosures required by GAAP. The consolidated financial statements, in the opinion of management, reflect all adjustments (consisting only of normal recurring adjustments) necessary for a fair statement of the financial position and results of operations for the interim periods ended June 30, 2009 and 2008.

The results of operations for the interim periods are not necessarily indicative of the results of operations to be expected for any future period or the entire fiscal year. These interim consolidated financial statements should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2008, which are contained in the Company’s Annual Report on Form 10-K filed with the SEC.

***Subsequent Events***

During the quarter ended June 30, 2009, the Company implemented Statement of Financial Accounting Standards No. 165, *Subsequent Events*, or SFAS 165. This standard establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued. The adoption of SFAS 165 did not impact the Company’s financial position or results of operations. Events or transactions that occurred after June 30, 2009 up through August 5, 2009, the date the Company’s financial statements were filed with the SEC, were reviewed for subsequent event accounting and disclosure. During this period we did not have any material recognizable subsequent events.

## 2. ACCOUNTING POLICIES

There has been no material change in accounting policies since the Company’s fiscal year ended December 31, 2008, as described in Note 2 to the consolidated financial statements included in its Annual Report on Form 10-K for the year then ended.

## 3. RECENT ACCOUNTING PRONOUNCEMENTS

Effective January 1, 2009, the Company implemented Statement of Financial Accounting Standards No. 141(R), *Business Combination*, or SFAS 141(R). This standard requires an acquiring company to measure all assets acquired and liabilities assumed, including contingent considerations and all contractual contingencies, at fair value as of the acquisition date. In addition, an acquiring company is required to capitalize in process research and development and either amortize it over the life of the product, or write it off if the project is abandoned or impaired. The adoption of this standard did not impact the Company’s financial position or results of operations as SFAS 141(R) is applicable to acquisitions completed after January 1, 2009 and the Company did not complete any business combination transactions during the first six months of 2009.



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In April 2009, the FASB issued the following new accounting standards:

- FASB Staff Position FAS 157-4, *Determining Whether a Market Is Not Active and a Transaction Is Not Distressed*, or FSP FAS 157-4. FSP FAS 157-4 provides guidelines for making fair value measurements more consistent with the principles presented in SFAS 157. FSP FAS 157-4 provides additional authoritative guidance in determining whether a market is active or inactive, and whether a transaction is distressed, is applicable to all assets and liabilities (i.e. financial and nonfinancial) and will require enhanced disclosures.

- FASB Staff Position FAS 115-2, FAS 124-2, and EITF 99-20-2, *Recognition and Presentation of Other-Than-Temporary Impairments*, or FSP FAS 115-2, FAS 124-2, and EITF 99-20-2; FSP FAS 115-2, FAS 124-2, and EITF 99-20-2 provides additional guidance to provide greater clarity about the credit and noncredit component of an other-than-temporary impairment event and to more effectively communicate when an other-than-temporary impairment event has occurred. This FSP applies to debt securities.

· FASB Staff Position FAS 107-1 and APB 28-1, *Interim Disclosures about Fair Value of Financial Instruments*, or FSP FAS 107-1 and APB 28-1. FSP FAS 107-1 and APB 28-1, amends FASB Statement No. 107, *Disclosures about Fair Value of Financial Instruments*, to require disclosures about fair value of financial instruments in interim as well as in annual financial statements. This FSP also amends APB Opinion No. 28, *Interim Financial Reporting*, to require those disclosures in all interim financial statements.

These standards are effective for periods ending after June 15, 2009. The adoption of these standards did not impact the presentation of the Company's financial position or results of operations.

***Recently Issued Accounting Standards***

In June 2009, the FASB issued the following new accounting standards:

· SFAS No. 166, *Accounting for Transfers of Financial Assets, an amendment of FASB Statement No. 140*, or SFAS 166;

· SFAS No. 167, *Amendments to FASB Interpretation No. 46(R)*, or SFAS 167; and

· SFAS No. 168, *The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles, a replacement of FASB Statement No. 162, or SFAS 168*

SFAS 166 prescribes the information that a reporting entity must provide in its financial reports about a transfer of financial assets; the effects of a transfer on its financial position, financial performance, and cash flows; and a transferor's continuing involvement in transferred financial assets. Specifically, among other aspects, SFAS 166 amends Statement of Financial Standard No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*, or SFAS 140, by removing the concept of a qualifying special-purpose entity from SFAS 140 and removes the exception from applying FIN 46(R) to variable interest entities that are qualifying special-purpose entities. It also modifies the financial-components approach used in SFAS 140. SFAS 166 is effective for transfers of financial assets occurring on or after January 1, 2010. The Company has not determined the effect that the adoption of SFAS 166 will have on its financial position or results of operations, but the effect will generally be limited to future transactions, if any.

SFAS 167 amends FASB Interpretation No. 46, *Consolidation of Variable Interest Entities (revised December 2003) — an interpretation of ARB No. 51*, or FIN 46(R), to require an enterprise to determine





whether its variable interest or interests give it a controlling financial interest in a variable interest entity. The primary beneficiary of a variable interest entity is the enterprise that has both (1) the power to direct the activities of a variable interest entity that most significantly impact the entity's economic performance and (2) the obligation to absorb losses of the entity that could potentially be significant to the variable interest entity or the right to receive benefits from the entity that could potentially be significant to the variable interest entity. SFAS 167 also amends FIN 46(R) to require ongoing reassessments of whether an enterprise is the primary beneficiary of a variable interest entity. SFAS 167 is effective for all variable interest entities and relationships with variable interest entities existing as of January 1, 2010. The Company has not determined the effect that the adoption of SFAS 167 will have, if any, on its financial position or results of operations.

SFAS 168 replaces SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles*, to establish the *FASB Accounting Standards Codification* as the source of authoritative accounting principles recognized by the FASB to be applied by nongovernmental entities in preparation of financial statements in conformity with GAAP. SFAS 168 is effective for interim and annual periods ending after September 15, 2009. The Company does not expect the adoption of this standard to have an impact on its financial position or results of operations.

**4. COMPREHENSIVE LOSS**

Comprehensive loss is comprised of net loss and net unrealized gains or losses on marketable securities. Total comprehensive loss for the three and six months ended June 30, 2009 and 2008 is as follows:

| | Three Months Ended June 30, | | Six Months Ended June, 30 | |
|---|---|---|---|---|
| | **2009** | **2008** | **2009** | **2008** |
| Net loss | $ (9,672) | $ (8,925) | $ (18,781) | $ (17,373) |
| Other comprehensive income: | | | | |
| Change in unrealized gain on investments | (145) | (353) | (311) | (192) |
| Total other comprehensive income | (145) | (353) | (311) | (192) |
| Comprehensive loss | $ (9,817) | $ (9,278) | $ (19,092) | $ (17,565) |

**5. BASIC AND DILUTED NET LOSS PER SHARE**

In accordance with SFAS No. 128, *Earnings Per Share*, basic net loss per share is computed by dividing net loss by the weighted-average number of common shares outstanding and warrants outstanding during the period that were previously issued for little or no consideration, excluding the dilutive effects of common stock equivalents. Common stock equivalents include stock options and certain warrants. Diluted net loss per share is computed by dividing net loss by the weighted-average number of dilutive common shares outstanding during the period. Diluted shares outstanding is calculated by adding to the weighted shares outstanding any potential (unissued) shares of common stock from outstanding stock options and warrants based on the treasury stock method. In periods when a net loss is reported, all common stock equivalents are excluded from the calculation because they would have an anti-dilutive effect, meaning the loss per share would be reduced. Therefore, in periods when a loss is reported the calculation of basic and dilutive loss per share results in the same value.

The number of shares of potentially dilutive common stock related to options and warrants that were excluded from the calculation of dilutive shares since the inclusion of such shares would be anti-dilutive for the three and six months ended June 30, 2009 and 2008, respectively, are shown below:

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| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2009 | 2008 | 2009 | 2008 |
| Options | 3,032,506 | 2,385,352 | 3,032,506 | 2,385,352 |
| Warrants | 4,086 | 4,086 | 4,086 | 4,086 |
| Total | 3,036,592 | 2,389,438 | 3,036,592 | 2,389,438 |

In January 2009, the Company implemented FASB Staff Position EITF 03-6-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities*, or FSP EITF 03-6-1. FSP EITF 03-6-1 addresses whether instruments granted in share-based payment transactions are participating securities prior to vesting and, therefore, need to be included in the earnings allocation in computing earnings per share under the two-class method as described in SFAS No. 128, *Earnings per Share*. Under the guidance in FSP EITF 03-6-1, unvested share-based payment awards that contain non-forfeitable rights to dividends or dividend equivalents (whether paid or unpaid) are participating securities and shall be included in the computation of earnings per share pursuant to the two-class method. The Company's awards do not have nonforfeitable rights to dividends or dividend equivalents and therefore the adoption of FSP EITF 03-6-1 did not impact its financial statements.

## 6. STOCK-BASED COMPENSATION

On January 1, 2006, the Company adopted Statement of Financial Accounting Standards No. 123(R), *Share-Based Payment,* or SFAS 123(R). Under the provisions of SFAS 123(R), compensation cost recognized for the three and six months ended June 30, 2009 and 2008 included compensation cost for stock options granted to employees subsequent to January 1, 2006, based on the grant date fair value estimated in accordance with the provisions of SFAS 123(R) and recognized over the vesting period of the applicable award on a straight-line basis. The effect of SFAS 123(R) for the three and six months ended June 30, 2009 was an expense of $1,216 and $2,323. The corresponding increase in basic and diluted net loss per share for the three and six months ended June 30, 2009 was $0.05 and $0.10. The effect of SFAS 123(R) for the three and six months ended June 30, 2008 was an expense of $1,108 and $2,334. The corresponding increase in basic and diluted net loss per share for the three and six months ended June 30, 2008 was $0.05 and $0.10. There is no expense recorded for options which were granted prior to January 1, 2006 under the minimum value method if the exercise price was equal to the fair value of common stock and the measurement date was fixed at the time of grant.

A summary of option activity for the six months ended June 30, 2009 and 2008 is as follows:

| | 2009 | | 2008 | |
|---|---|---|---|---|
| | Number of Shares | Weighted Average Exercise Price | Number of Shares | Weighted Average Exercise Price |
| Outstanding at December 31, | 2,646,765 | $ 11.59 | 2,151,784 | $ 10.70 |
| Granted | 424,785 | 7.24 | 720,700 | 12.52 |
| Exercised | (11,220) | 1.86 | (291,053) | 2.32 |
| Cancelled | (27,824) | 17.64 | (196,079) | 14.39 |
| Outstanding at June 30, | 3,032,506 | 10.96 | 2,385,352 | 11.97 |
| Options exercisable at June 30, | 1,573,875 | | 1,118,881 | |
| Weighted average grant date fair value of options granted during the six months ended June 30, | | $ 4.89 | | $ 7.40 |

For the six months ended June 30, 2009 and 2008, the Company determined the fair value of stock options using the Black-Scholes option pricing model with the following assumptions for option grants, respectively:



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| | Six Months Ended June 30, | |
|---|---|---|
| | 2009 | 2008 |
| Expected dividend yield | — | — |
| Risk-free rate | 1.67% - 2.56% | 2.71% - 3.68% |
| Expected option term (in years) | 5.41 | 6.1 |
| Volatility | 81% | 61% |

### Non-employee Stock Option Awards

The compensation expense related to non-employee stock options is generally recognized over a period of four years. The grants generally vest quarterly and such vesting is contingent upon future services provided by the consultants to the Company. The Company recorded a consultant related stock-based compensation expense of $15 for the three months ended June 30, 2009 and recorded a benefit of $73 for the six months ended June 30, 2009. The Company recorded consultant related stock-based compensation expense of $3 for the three months ended June 30, 2008 and recorded a benefit of $142 for the six months ended June 30, 2008. Options remaining unvested for non-employees are subject to remeasurement each reporting period prior to vesting in full. Since the fair market value of the options issued to non-employees are subject to changes in the future, the compensation expense recognized in each quarter may not be indicative of future compensation charges.

## 7. SIGNIFICANT COLLABORATION

Effective in the quarter ended March 31, 2009, the Company implemented EITF No. 07-1, *Accounting for Collaborative Arrangements*, or EITF 07-1, which prescribes that certain transactions between collaborators be recorded in the income statement on either a gross or net basis, depending on the characteristics of the collaboration relationship, and provides for enhanced disclosure of collaborative relationships. In accordance with EITF 07-1, the Company evaluated its collaborative agreements for proper income statement classification based on the nature of the underlying activity. If payments to and from collaborative partners are not within the scope of other authoritative accounting literature, the income statement classification for the payments is based on a reasonable, rational analogy to authoritative accounting literature that is applied in a consistent manner. Amounts due from collaborative partners related to development activities are generally reflected as a reduction of research and development expense because the performance of contract development services is not central to the Company's operations. For collaborations with commercialized products, if the Company is the principal, as defined in EITF No. 99-19, *Reporting Revenue as a Principal versus Net as an Agent,* or EITF 99-19, it records revenue and the corresponding operating costs in the respective line items within the statement of operations. If the Company is not the principal, it records operating costs as a reduction of revenue. EITF 99-19 describes the principal as the party who is responsible for delivering the product or service to the customer, has latitude with establishing price, and has the risks and rewards of providing product or service to the customer, including inventory and credit risk. The adoption of EITF 07-1 did not affect the financial position or results of operations of the Company.

***ADM Agreement***

On November 3, 2004, the Company signed an agreement with ADM Polymer Corporation ("ADM"), a subsidiary of Archer Daniels Midland Company, to establish an alliance whereby the Company would provide technology and licenses thereto and research and development services, and ADM would provide manufacturing services and capital necessary to produce Mirel*TM* biobased plastic on a commercial scale basis. This agreement was amended by the parties on September 8, 2005 to define certain cost sharing activities related to pre-commercial manufacturing, to change certain milestones and to make other minor modifications.



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On July 12, 2006, ADM exercised an option to enter into a commercial alliance for further research, development, manufacture, use and sale of Mirel on the terms and conditions set forth in the Commercial Alliance Agreement.

***Commercial Alliance Agreement***

The Commercial Alliance Agreement specifies the terms and structure of the relationship between the Company and ADM. The primary function of this agreement is to establish the activities and obligations of the Company and ADM by which the parties will commercialize Mirel. These activities include: the establishment of a joint sales company, which has been named Telles, to market and sell Mirel, the construction of a manufacturing facility capable of producing 110 million pounds of material annually (the "Commercial Manufacturing Facility"), the licensing of technology to Telles and to ADM, and the conducting of various research, development, manufacturing, sales and marketing, compounding and administrative services by the parties.

Telles is a limited liability company, formed and equally owned by the Company and ADM, and is intended to: (i) serve as the commercial entity to establish and develop the commercial market for Mirel, and conduct the marketing and sales in accordance with the goals of the commercial alliance, (ii) assist in the coordination and integration of the manufacturing, compounding and marketing activities, and (iii) administer and account for financial matters on behalf of the parties. The Company and ADM each have 50% ownership and voting interest in Telles.

A summary of the key activities under this agreement is as follows: (i) ADM will arrange for, finance the construction of, and own, a facility in which it will manufacture Mirel under contract to Telles; (ii) the Company will either arrange for and finance the acquisition or construction of a facility in which it will compound Mirel or it will arrange for third parties to compound Mirel; (iii) the Company, acting in the name and on behalf of Telles, will establish the initial market for Mirel. The Company will also continue its research and development efforts to further advance the technology and expand and enhance the commercial potential of Mirel. Subject to certain limitations, ADM will finance the working capital requirements of Telles.

The Commercial Alliance Agreement called for Telles to pay the Company twelve quarterly support payments of $1,575 each during the period of construction of the Commercial Manufacturing Facility. The last of the twelve quarterly support payments was received in December 2008. In January 2009 Telles agreed to provide the Company with two additional quarterly payments of $1,575, both of which were received as of June 30, 2009. As of June 30, 2009, all quarterly support payments received from ADM on behalf of Telles, totaling $22,050, have been recorded as deferred revenue on the Company's balance sheet and the Company will continue to defer recognition of these and future payments received from ADM during the Construction Phase of the agreement.

During the Construction Phase of the agreement all pre-commercial material production expenses incurred by ADM and the Company are shared equally. Accordingly, from the execution of this agreement in July 2006 through June 30, 2009, ADM has reimbursed the Company $7,675. All amounts received from ADM, prior to the Commercial Phase, relating to this agreement are recorded as deferred revenue.

During the Commercial Phase of the agreement Telles will pay the Company royalties on sales of Mirel. In addition, if Telles engages the Company to perform certain services, and the Company accepts the service arrangement, Telles will reimburse the Company for the cost of the services provided pursuant to the Commercial Alliance Agreement.

While Telles is a fifty-fifty joint venture, ADM will be advancing a disproportionate share of the financial capital needed to construct the Commercial Manufacturing Facility and to fund its activities. Therefore, a preferential distribution of cash flow will be used, whereby all profits (after payment of all royalties, reimbursements and fees) from Telles will be distributed to ADM until ADM's disproportionate investment in the alliance has been returned in full. Once ADM has recovered such amounts, the profits of Telles will be distributed in equal amounts to the parties.



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The Commercial Alliance Agreement provides for expansion of the operations of Telles beyond the initial license of 110 million pounds annual production through an equally-owned joint venture. While certain principles of the joint venture have been agreed to, the detailed terms and conditions will not be determined until a later date.

Revenue recognition for amounts deferred through June 30, 2009 is expected to commence when the Commercial Phase of the alliance begins. The deferred amounts will be recognized on a straight line basis over the estimated period, of approximately ten years, in which the Company's obligations are fulfilled in accordance with the Commercial Alliance Agreement. The Company also expects to receive payments from Telles for the compounding services it provides as well as royalty payments. The compounding payments and royalty payments will be due to the Company as Telles sells product to its customers. These payments will be recognized as revenue during the period in which they are earned.

The Commercial Alliance Agreement and related agreements include detailed provisions setting out the rights and obligations of the parties in the event of a termination of the Commercial Alliance Agreement. These provisions include the right for either party to terminate the Commercial Alliance Agreement upon a material default of a material obligation by the other party after a notice and cure period has expired. The parties are also permitted to terminate the Commercial Alliance Agreement if a change in circumstances that is not reasonably within the control of a party makes the anticipated financial return from the project inadequate or too uncertain. The parties have specific obligations to fulfill in the event of termination or if they file for bankruptcy protection.

**8. INCOME TAXES**

The Company adopted FASB Interpretation No. 48 *Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109*, or FIN 48, on January 1, 2007 with no effect on financial position. In addition, the Company has no amounts recorded for any unrecognized tax benefits as of June 30, 2009 or June 30, 2008.

The tax years 2005 through 2008 remain open to examination by federal and state taxing jurisdictions to which the Company is subject, which are primarily in the U.S.

The Company's policy is to record estimated interest and penalties related to uncertain tax positions in income tax expense. As of June 30, 2009, and December 31, 2008, respectively, the Company had no accrued interest or penalties recorded related to uncertain tax positions.

At December 31, 2008 the Company had net operating loss carryforwards (NOLs) for federal and state income tax purposes of $62,855 and $47,603, respectively. Included in the federal and state net operating loss carryforwards is approximately $16,500 of deduction related to the exercise of stock options subsequent to the adoption of FAS 123(R). This amount represents an excess tax benefit as defined under FAS 123(R) and has not been included as part of the gross deferred tax asset. The Company's federal and state net operating loss carryforwards began to expire in 2009. The Company also had available research and development credits for federal and state income tax purposes of $2,743 and $2,217 respectively. The federal and state research and development credits will begin to expire in 2012 and 2015, respectively. As of December 31, 2008 the Company also had available investment tax credits for state income tax purposes of $92 which began to expire in 2009. Management of the Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets, which are comprised principally of net operating loss carryforwards and research and development credits. Under the applicable accounting standards, management has considered the Company's history of losses and concluded that it is more likely than not that the Company will not recognize the benefits of federal and state deferred tax assets. Accordingly, a full valuation allowance has been established against the deferred tax assets.

Utilization of NOLs and Research & Development, or R&D, credit carryforwards may be subject to a substantial annual limitation due to ownership change limitations that have occurred previously or that could occur in the future as provided by Section 382 and 383 of the Internal Revenue Code of 1986, as well





as similar state provisions. These ownership changes may limit the amount of NOL and R&D credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of certain shareholders or public groups in the stock of a corporation by more than 50 percentage points over a three year period. Since the Company's formation, the Company has raised capital through the issuance of capital stock which, combined with the purchasing shareholders' subsequent disposition of those shares, may have resulted in a change of control, as defined by Section 382, or could result in a change of control in the future upon subsequent disposition. The Company is conducting a study to assess whether there have been multiple changes of control since the Company's formation. If the Company has experienced a change in control at any time since the Company's formation, utilization of the Company's NOL or R&D credit carryforwards would be subject to an annual limitation under Section 382 and 383. Any limitation may result in expiration of a portion of the NOL or R&D credit carryforwards before utilization. Until a study is completed and any limitation known, no amounts are being presented as uncertain tax positions under FIN 48.

**9. ACCRUED LIABILITIES**

Accrued liabilities consisted of the following at:

| | June 30, 2009 | December 31, 2008 |
|---|---|---|
| Employee compensation and benefits | $ 1,604 | $ 1,618 |
| Pre-commercial manufacturing costs | 294 | 350 |
| Professional services | 283 | 206 |
| Contracted research and development | 248 | 317 |
| Other | 1,326 | 1,096 |
| Total accrued expenses | $ 3,755 | $ 3,587 |

**10. SEGMENT INFORMATION**

The Company operates in one segment. There have been no changes in the segment information since the fiscal year ended December 31, 2008, as described in Note 2 to the financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2008.

**11. COMMITMENTS AND CONTINGENCIES**

**Legal Proceedings**

From time to time, the Company may be subject to legal proceedings and claims in the ordinary course of business. The Company is not currently aware of any such proceedings or claims that it believes will have, individually or in the aggregate, a material adverse effect on the business, financial condition or results of operations.

**License Agreement with Massachusetts Institute of Technology ("MIT")**

The Company's exclusive license agreement with MIT requires the Company to pay annual license fees of $25 and additional potential royalty payments to MIT based on a percentage of sublicensing revenue or net sales of products or services covered by patents that are subject to the license. As of June 30, 2009, and December 31, 2008, the Company had accrued $4 and $2, respectively, for license fees and royalties attributable to this agreement.

**Joint Research Agreement with The Cooperative Research Centre for Sugar Industry Innovation through Biotechnology**

The Company entered a joint research arrangement, known as the Cooperative Research Centre for Sugar Industry Innovation through Biotechnology, with the Commonwealth of Australia and various other



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parties for the purpose of developing and gaining access to certain intellectual property. The Commonwealth of Australia established the program to enhance the transfer of research outputs into commercial or other outcomes of economic, environmental or social benefit to Australia. The terms of the contract stipulate that the contract commenced on January 1, 2007, and the Company's funding obligation continues until July 1, 2010. In connection with this agreement the Company was obligated at the beginning of the contract to provide funding in the form of cash in the amount of $805 Australian dollars and in kind contribution in the amount of $2,287 Australian dollars. As of June 30, 2009 the remaining cash portion of the Company's obligation, denominated in U.S. dollars, is $185 and the total remaining amount of in kind contribution the Company is committed to is $546, denominated in U.S. dollars. The in kind contribution consists of salaries and overhead attributable to research associated with the joint research agreement. The cash and in kind contributions are recorded as research and development expense as incurred, in the consolidated statement of operations.

**12. FAIR VALUE MEASUREMENTS**

In accordance with Statement of Financial Accounting Standards No. 157, *Fair Value Measurements*, or SFAS 157, the Company's assets and liabilities are measured at fair value on a recurring basis as of June 30, 2009 and December 31, 2008. Fair values determined by Level 1 inputs utilize observable data such as quoted prices in active markets. Fair values determined by Level 2 inputs utilize data points other than quoted prices in active markets that are observable either directly or indirectly. Fair values determined by Level 3 inputs utilize unobservable data points in which there is little or no market data, which require the reporting entity to develop its own assumptions.

The following table represents the Company's assets and liabilities measured at fair value on a recurring basis at June 30, 2009.

| | Fair value measurements at reporting date using | | | |
|---|---|---|---|---|
| **Description** | **Quoted prices in active markets for identical assets (Level 1)** | **Significant other observable inputs (Level 2)** | **Significant unobservable inputs (Level 3)** | **Balance as of 6/30/09** |
| Cash equivalents: | | | | |
| Money Market funds | $ — | $ 6,125 | $ — | $ 6,125 |
| Short-term investments: | | | | |
| Treasuries | — | 767 | — | 767 |
| Commercial paper | — | 6,498 | — | 6,498 |
| Government-sponsored enterprises | — | 61,027 | — | 61,027 |
| | $ — | $ 74,417 | $ — | $ 74,417 |

The following table represents the Company's assets and liabilities measured at fair value on a recurring basis at December 31, 2008.

| | Fair value measurements at reporting date using | | | |
|---|---|---|---|---|
| **Description** | **Quoted prices in active markets for identical assets (Level 1)** | **Significant other observable inputs (Level 2)** | **Significant unobservable inputs (Level 3)** | **Balance as of 12/31/08** |
| Cash equivalents: | | | | |
| Money Market funds | $ — | $ 23,152 | $ — | $ 23,152 |
| Commercial paper | — | 1,100 | — | 1,100 |
| Short-term investments: | | | | |
| Treasuries | — | 4,000 | — | 4,000 |
| Commercial paper | — | 23,497 | — | 23,497 |
| Government-sponsored enterprises | — | 37,405 | — | 37,405 |
| | $ — | $ 89,154 | $ — | $ 89,154 |

Short-term investments were valued at June 30, 2009 using information provided by a pricing service based on market observable information, or for investments in money market funds, at calculated net asset values, and are therefore classified as Level 2. Because the Company's investment portfolio may include securities that do not always trade on a daily basis, the pricing service applies other available



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information as applicable through processes such as benchmark yields, benchmarking of like securities, sector groupings and matrix pricing to prepare evaluations. The Company validates the prices provided by a third party pricing services by reviewing their pricing methods and obtaining market values from other pricing sources. The fair values of the Company's cash equivalents and short-term investments are determined through market and observable sources and have been classified as Level 2. After completing the validation procedures, the Company did not adjust or override any fair value measurements provided by its pricing services as of June 30, 2009 and December 31, 2008.

In January 2009, the Company implemented SFAS 157 for its nonfinancial assets and liabilities that are remeasured at fair value on a non-recurring basis. The adoption of SFAS 157 for its nonfinancial assets and liabilities that are remeasured at fair value on a non-recurring basis did not have a significant impact on the Company's financial statements.

**13. CHANGE IN ACCOUNTING ESTIMATE**

In the first quarter of 2009, due to an extended construction period and revised estimated completion date of the Commercial Manufacturing Facility, the Company determined it would extend the period of use of its pre-commercial manufacturing plant by six months to December 2009 from June 2009. In connection with this, the useful lives of the leasehold improvements connected to the pre-commercial manufacturing plant were increased by six months. This change in accounting estimate was adopted prospectively from January 1, 2009. The effect of the change in accounting estimate on the financial statements for the three and six months ended June 30, 2009 is a decrease in loss from operations and net loss of $354 and $708, respectively. Loss per share decreased by $0.02 and $0.03 for the three and six months ended June 30, 2009.

**14. RELATED PARTIES**

The Company recorded $41 and $66 of license and royalty revenue from Tepha, Inc., a related party, during the three and six months ended June 30, 2009. During the three and six months ended June 30, 2008 the Company recorded license and royalty revenue from Tepha, Inc. of $35 and $70, respectively. The Company had an outstanding receivable balance due from Tepha of $34 as of June 30, 2009. As of December 31, 2008 there was no outstanding receivable balance due from Tepha. The Company also had various transactions with its alliance partner ADM, a related party, during the three and six months ended June 30, 2009 and 2008. The Company had an outstanding receivable balance of $718 due from ADM at June 30, 2009. As of December 31, 2008 there was no significant outstanding receivable balance due from ADM. For more information on the Company's related party transactions, please see Note 8 to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2008.

**15. SHAREHOLDER RIGHTS PLAN**

The Company has adopted a Shareholder Rights Plan, the purpose of which is, among other things, to enhance the Board's ability to protect shareholder interests and to ensure that shareholders receive fair treatment in the event any coercive takeover attempt of the Company is made in the future. The Shareholder Rights Plan could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, the Company or a large block of the Company's Common Stock. The following summary description of the Shareholder Rights Plan does not purport to be complete and is qualified in its entirety by reference to the Company's Shareholder Rights Plan, which has been previously filed with the Securities and Exchange Commission as an exhibit to a Registration Statement on Form 8-A.

In connection with the adoption of the Shareholder Rights Plan, the Board of Directors of the Company declared a dividend distribution of one preferred stock purchase right (a "Right") for each outstanding share of Common Stock to shareholders of record as of the close of business on July 8, 2009. The Rights currently are not exercisable and are attached to and trade with the outstanding shares of Common Stock. Under the Shareholder Rights Plan, the Rights become exercisable if a person becomes an "acquiring person" by acquiring 15% or more of the outstanding shares of Common Stock or if a person commences a tender offer that would result in that person owning 15% or more of the Common Stock. If a





person becomes an "acquiring person," each holder of a Right (other than the acquiring person) would be entitled to purchase, at the then-current exercise price, such number of shares of the Company's preferred stock which are equivalent to shares of Common Stock having twice the exercise price of the Right. If the Company is acquired in a merger or other business combination transaction after any such event, each holder of a Right would then be entitled to purchase, at the then-current exercise price, shares of the acquiring company's common stock having a value of twice the exercise price of the Right.

**ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**
*(All dollar amounts are stated in thousands)*

**Forward Looking Statements**

This quarterly report on Form 10-Q contains "forward-looking statements" within the meaning of 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. In particular, statements contained in the Form 10-Q, including but not limited to, statements regarding our future results of operations and financial position, business strategy and plan prospects, projected revenue or costs and objectives of management for future research, development or operations, are forward-looking statements. These statements relate to our future plans, objectives, expectations and intentions and may be identified by words such as "may," "will," "should," "expects," "plans," "anticipate," "intends," "target," "projects," "contemplates," "believe," "estimates," "predicts," "potential," and "continue," or similar words.

Although we believe that our expectations are based on reasonable assumptions within the limits of our knowledge of our business and operations, the forward-looking statements contained in this document are neither promises nor guarantees. Our business is subject to significant risk and uncertainties and there can be no assurance that our actual results will not differ materially from our expectations. These forward looking statements include, but are not limited to, statements concerning: future financial performance and position, management's strategy, plans and objectives for future operations, plans and objectives for product development and commercialization, plans and objectives for present and future research and development and results of such research and development, plans and objectives for manufacturing, the commercialization of environmentally sustainable, economically attractive alternatives to petroleum-based plastics, chemicals and energy, the commercialization of Mirel™ biobased plastic ("Mirel") through our alliance with Archer Daniels Midland Company ("ADM"), sales of Mirel as an alternative to petroleum-based plastics, the construction of the Commercial Manufacturing Facility, the production of Mirel at the Commercial Manufacturing Facility, the commercial success of Mirel, the feasibility of extracting bioplastics from plant crops, the commercial viability of plant-produced plastics, recognition of revenue, and management's plans and expectations for revenue, expenses and capital and working capital requirements. Such forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated including, without limitation, the following risks: (1) we may not be successful at manufacturing Mirel on a commercial scale in a timely and economical manner, (2) we may not be successful in the development of commercial formulations of Mirel, (3) we may not be successful in the development of plant crops for production of plastics, (4) if there are additional delays or cost increases in ADM's construction and start-up of the Commercial Manufacturing Facility, our financial results will be negatively affected, (5) we may not be able to develop manufacturing capacity sufficient to meet demand in an economical manner or at all, (6) we may not achieve market acceptance of our products, (7) we have limited marketing and sales experience and capabilities, (8) we rely heavily on ADM and will rely heavily on future collaborative partners, (9) our success will be influenced by the price of petroleum relative to corn sugar (10) our future profitability is uncertain, and we have a limited operating history on which you can base your evaluation of our business, (11) we may need to secure additional funding and may be unable to raise additional capital on favorable terms or at all, (12) we may lose key personnel or are unable to attract and retain necessary talent, we may be unable to develop or commercialize our products, (13) we may not be able to obtain rights to intellectual property developed by others using our information and technology, (14) intellectual property protection for our products is important and uncertain, (15) a substantial portion of the technology used in our business is owned by or subject to retained rights of third parties, (16) third parties may claim we infringe





their intellectual property, (17) we may be unable to manage our growth effectively, (18) we may not be successful in identifying market needs for new technologies and developing new products to meet those needs, (19) our products may be, or may be perceived as being, harmful to human health or the environment, (20) we face and will face substantial competition in several different markets, (21) we are subject to significant foreign and domestic government regulations, including environmental and health and safety regulations, and compliance or failure to comply with these regulations could harm our business, (22) we may not have adequate insurance and may have substantial exposure to payment of product liability claims, (23) potential future acquisitions could be difficult to integrate, divert the attention of key personnel, disrupt our business, dilute stockholder value and impair our financial results, and (24) each segment of our operations is currently conducted at a single location which makes us susceptible to disruptions.

The forward-looking statements and risks factors presented in this document are made only as of the date hereof and we do not intend to update any of these risk factors or to publicly announce the results of any revisions to any of our forward-looking statements other than as required under the federal securities laws.

**Overview**

We are a bioscience company that develops and is in the process of commercializing environmentally sustainable, economically attractive alternatives to petroleum-based plastics, with work underway to do the same with chemicals and energy. Our corporate strategy is to develop technology platforms that integrate advanced biotechnology with current industrial practice and to commercialize these platforms with industry leading strategic partners.

Our first platform, which we are commercializing through Telles, a joint venture with Archer Daniels Midland Company, or ADM, is a proprietary, large-scale microbial fermentation system for producing a versatile family of polymers known as polyhydroxyalkanoates, which we have branded under the name Mirel™. Through Telles, we intend to sell these bioplastics as environmentally friendly, but functionally equivalent, alternatives to petroleum-based plastics. In addition, this family of polymers offers superior biodegradability characteristics and can be used in a wide range of commercial applications, including products used in agriculture and horticulture, compost and organic waste diversion bags, marine and aquatic applications, consumer products, business equipment and durable goods, and general packaging materials. Mirel will be produced in a commercial scale plant designed for a 110 million pound annual capacity, or the Commercial Manufacturing Facility, which is presently under construction by ADM in Clinton, Iowa. The plant is expected to begin production by the end of 2009. The Commercial Manufacturing Facility will produce biobased and biodegradable Mirel plastic using corn sugar, an abundant agriculturally-produced renewable resource. We are currently producing pre-commercial quantities of Mirel jointly with ADM at a small scale pre-commercial manufacturing facility.

Our second technology platform, which is in an early stage, is a biomass biorefinery system using plant crops to co-produce both bioplastics and bioenergy. For this system, we intend to extract polymer from the engineered plant crop, so that the remaining plant material can be used as a biomass feedstock for the production of bioenergy products including electricity and biofuel. We are engineering switchgrass to produce bioplastics in the leaf and stem of the plant. We have also collaborated with the Australian Cooperative Research Centre to do the same in sugarcane, and in 2008 we established a strategic research collaboration with the Donald Danforth Plant Science Center to develop an advanced industrial oilseed crop for co-production of bioplastics along with vegetable oil, biodiesel fuel, or oleochemicals. Switchgrass is a commercially and ecologically attractive, non-food energy crop that is indigenous to North America and is generally considered to be a leading candidate for cellulose-derived production of ethanol and other biofuels. Sugarcane is an established energy crop that is well suited for tropical regions of the world. We believe that using these crops to co-produce bioplastics with bioenergy products can offer superior economic value and productivity as compared to single product systems that produce them individually. We have been working on our biomass biorefinery platform using switchgrass for several years, and we believe that we are a scientific leader in this field. Our goal for this program is to have commercially viable





plant varieties in pre-commercial field trials in two to three years. We may also seek to establish alliances with partners to commercially exploit this platform.

As demonstrated by our first two technology platforms, we take an integrated systems approach to our technology development. We are focused on developing entire production systems from gene to end product as opposed to developing specific technologies (for example, gene sequencing, shuffling or directed evolution) or singular aspects of a product's production (for example, providing a key enzyme, catalyst or ingredient). We believe this systems approach optimizes manufacturing productivity and, when commercialized, will enable us to capture more economic value from any platform that we pursue. We have core capabilities in microbial genetics, fermentation process engineering, chemical engineering, polymer science, plant genetics and botanical science, and we have assembled these capabilities in a way that has allowed us to integrate biotechnology with chemical engineering and industrial practice. We believe that our approach can be applied to chemicals and other products to help establish and grow environmentally sustainable plastics, chemicals and energy industries.

For our third platform we intend to apply our core capabilities in microbial engineering and plant transformation to develop biological routes to other chemicals and chemical intermediates. In September 2007, the U.S. Department of Commerce's National Institute of Standards and Technology approved a $2 million award for us to develop a commercially viable process for producing biobased chemicals from renewable agricultural products. This award will contribute to our integrated bio-engineered chemicals program, which is developing sustainable solutions for widely used industrial chemicals. Specifically, this award is being utilized in the development of the four-carbon ("C4") family of chemical products.

To exploit our first technology platform, we are working with ADM as they build the Commercial Manufacturing Facility in Clinton, Iowa. The biodegradable bioplastics that this facility will produce are highly versatile and range in properties from hard and strong to soft and flexible. These properties allow for a wide variety of commercial applications, offering a biobased alternative to petroleum-derived synthetic materials which are not biodegradable. Through Telles we intend to position Mirel as a premium priced specialty material catering to customers who want to match the functionality of petroleum-based plastic, but add the dimension of environmental responsibility to their products and brands.

As of June 30, 2009, we had an accumulated deficit of $148,898 and total stockholders' equity was $42,507.

**Collaborative Arrangements**

Our strategy for collaborative arrangements is to retain substantial participation in the future economic value of our technology while receiving current cash payments to offset research and development costs and working capital needs. By their nature, these agreements are complex and have multiple elements that cover a variety of present and future activities.

We entered into our alliance with ADM in 2004. As of June 30, 2009, all payments received from ADM have been recorded as deferred revenue on our balance sheet. We expect that future payments from ADM, through at least the Construction Phase of the Commercial Alliance Agreement, will be classified as deferred revenue as well. We expect to begin recognizing this deferred revenue at the time of the First Commercial Sale of Mirel (as defined in the Commercial Alliance Agreement). All amounts will be recognized on a straight-line basis over the estimated period, of approximately ten years, in which our obligations are fulfilled in accordance with the terms of the Commercial Alliance Agreement.

We received the following payments from these arrangements to offset operating cash needs:

- upfront payment of $3,000 from ADM in November 2004;
- milestone payments of $2,000 from ADM in May 2006;





- support payments of $22,050 from ADM, on behalf of Telles, through June 30, 2009
- cumulative cost sharing payments from ADM for pre-commercial manufacturing plant construction and operations made in accordance with the Technology Alliance and Option Agreement of $1,209; and
- cumulative cost sharing payments from ADM for pre-commercial manufacturing plant construction and operations made in accordance with the Commercial Alliance Agreement of $7,675.

During the commercial alliance, ADM will construct, finance, own and operate the Commercial Manufacturing Facility through a manufacturing agreement with Telles, and we will provide or procure compounding services to convert the output from the Commercial Manufacturing Facility into forms that are suitable for various commercial applications.

We expect to incur increased research and development expenses through the Construction Phase of the ADM agreement for pre-commercial manufacturing and product development activities as we continue to develop, test, and refine product to meet the specification requirements of our customers. Upon commencement of the Commercial Phase of the ADM agreement, expenses relating to product development are expected to decrease as these expenses will be transferred to Telles. During the transition period between the initial start-up of the commercial manufacturing facility and the commencement of the Commercial Phase (as defined in the agreement), we will continue to bear these expenses.

Telles is a limited liability company, formed and equally owned by us and ADM, and is intended to: (i) serve as the commercial entity to establish and develop the commercial market for Mirel, and conduct the marketing and sales in accordance with the goals of the commercial alliance, (ii) assist in the coordination and integration of the manufacturing, compounding and marketing activities, and (iii) administer and account for financial matters on behalf of the parties. We and ADM each have 50% ownership and voting interest in Telles.

Even though Telles is a separate legal entity owned equally by us and ADM, ADM will disproportionately fund the activities of the joint venture. Specifically, the cost of the Commercial Manufacturing Facility, the working capital requirements of the joint venture and the support payments to us will exceed the investments made by us to establish compounding operations for the joint venture. In order to rebalance the respective investments made by the parties, a preferential distribution of cash flow will be used, whereby all profits, after payment of all royalties, reimbursements and fees, from the joint venture, will be distributed to ADM until ADM's disproportionate investment in the joint venture, and the costs of constructing the Commercial Manufacturing Facility, have been returned to ADM. Once ADM has recouped such amounts, the profits of the joint venture will be distributed in equal amounts to the parties. In order to track the disproportionate investments ADM has made, a Ledger Account has been established to record the respective investments made by the parties. As of June 30, 2009, the balance of the ADM Ledger Account was $327,010 and this balance is expected to increase as the construction of the Commercial Manufacturing Facility progresses and Telles becomes operational.

**United States Government Contracts and Grants**

As of June 30, 2009, expected gross proceeds of $837 remain to be received under our government contracts and grants, which include amounts for reimbursement to our subcontractors, as well as reimbursement for our employees' time, benefits and other expenses related to future performance under the various contracts.

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The status of our United States government contracts and grants is as follows:

| Program Title | Funding Agency | Total Government Funds | Total received through June 30, 2009 | Remaining amount available as of June 30, 2009 | Contract/Grant Expiration |
|---|---|---|---|---|---|
| Integrated Bio-Engineered Chemicals | Department of Commerce | $ 2,000 | $ 1,163 | $ 837 | October 2009 |
| Total | | $ 2,000 | $ 1,163 | $ 837 | |

**Critical Accounting Estimates and Judgments**

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition and stock-based compensation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates. The significant accounting policies used in preparation of these condensed consolidated financial statements for the three and six months ended June 30, 2009 are consistent with those discussed in Note 2 to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2008. The critical accounting policies and the significant judgments and estimates used in the preparation of our consolidated financial statements for the three and six months ended June 30, 2009 are consistent with those discussed in our Annual Report on Form 10-K for the year ended December 31, 2008 in the section captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Estimates and Judgments."

In the first quarter of 2009, due to an extended construction period and revised estimated completion date of the Commercial Manufacturing Facility, we determined we would extend the period of use of our pre-commercial manufacturing plant by six months from June 2009 to December 2009. In connection with this, the useful lives of the leasehold improvements connected to the pre-commercial manufacturing plant were increased by six months. This change in accounting estimate was adopted prospectively from January 1, 2009. The effect of the change in accounting estimate on the financial statements for the three and six months ended June 30, 2009 is a decrease in loss from operations and net loss of $ 354 and $708, respectively. Loss per share decreased by $0.02 and $0.03 for the three and six months ended June 30, 2009.



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**Results of Operations**

**Comparison of the Three Months Ended June 30, 2009 and 2008**

**Revenue**

| | Three Months Ended June 30, 2009 | Three Months Ended June 30, 2008 | Change |
|---|---|---|---|
| Research and development revenue | $ 24 | $ 11 | $ 13 |
| License fee and royalty revenue from related parties | 41 | 35 | 6 |
| Grant revenue | 283 | 355 | (72) |
| Total revenue | $ 348 | $ 401 | $ (53) |

Total revenue was $348 and $401 for the three months ended June 30, 2009 and 2008, respectively. During the three months ended June 30, 2009 we recognized $24 of research and development revenue compared to $11 for the respective period in 2008. Research and development revenue is derived from research and development services and delivery of sample product produced from research and development services. Grant revenue decreased during the three months ended June 30, 2009 to $283 from $355 during the three months ended June 30, 2008, primarily as a result of the completion of the Strategic Environmental Research Development Program grant that ended in February 2009.

**Expenses**

| | Three Months Ended June 30, 2009 | Three Months Ended June 30, 2008 | Change |
|---|---|---|---|
| Research and development expenses, including cost of revenue | $ 6,323 | $ 6,008 | $ 315 |
| Selling, general, and administrative expenses | 3,938 | 4,048 | (110) |
| Total operating expense | $ 10,261 | $ 10,056 | $ 205 |

***Research and development expenses, including cost of revenue***

Research and development expenses were $6,323 and $6,008 for the three months ended June 30, 2009 and 2008, respectively. The increase of $315 was primarily due to the addition of new employees and related benefit expenses partially offset by a reduction in pre-commercial manufacturing costs. Employee and benefit related costs were $2,911 for the three months ended June 30, 2009 compared to $2,215 for the respective period in 2008. The increase of $696 in payroll and benefits was primarily the result of hiring personnel needed to support our pre-commercial manufacturing process and microbial and plant research programs. Pre-commercial manufacturing expenses decreased to $1,103 compared to $1,701 for the three months ended June 30, 2009 and 2008, respectively. The decrease of $601 was primarily due to improvements in our production process made during the last year as we continue to focus our attention on reducing production costs, moving certain manufacturing processes in house and improving the quality of our pre-commercial manufacturing material.

We expect to incur increased research and development expenses through the Construction Phase of the ADM agreement for pre-commercial manufacturing and product development activities as we continue to develop, test, and refine product to meet the specification requirements of our customers. Upon commencement of the Commercial Phase of the ADM agreement, expenses relating to product development are expected to decrease as these expenses will be transferred to Telles. During the transition period between the initial start-up of the commercial manufacturing facility and the commencement of the Commercial Phase (as defined in the agreement), we will continue to bear these expenses.



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***Selling, general, and administrative expenses***

Selling, general, and administrative expenses were $3,938 and $4,048 for the three months ended June 30, 2009 and 2008, respectively. The decrease of $110 was primarily due to travel related expenses. Travel related expenses decreased to $119 from $205 for the three months ended June 30, 2009 compared to the respective period in 2008.

We expect that selling, general, and administrative expenses will increase through the Construction Phase of the ADM agreement due to increasing payroll and expanding infrastructure to support sales and marketing efforts relating to the commercialization of Mirel. Upon the commencement of the Commercial Phase of the agreement, selling, general, and administrative expenses are expected to decrease as the cost of sales and marketing efforts will be transferred to Telles. During the transition period between the initial start-up of the commercial manufacturing facility and the commencement of the Commercial Phase (as defined in the agreement), we will continue to bear these expenses.

**Other Income (Net)**

| | Three Months Ended June 30, 2009 | Three Months Ended June 30, 2008 | Change |
|---|---|---|---|
| Total other income (net) | $ 241 | $ 730 | $ (489) |

Other income (net) was $241 and $730 for the three months ended June 30, 2009 and 2008, respectively. Other income (net) during both periods consisted of investment income. The decrease of $489 was primarily due to a market decline in investment yields during the period, our decision to convert a majority of our investment portfolio to lower risk/lower yield U.S. Federal Treasury Notes and government -backed Federal Agency Notes and a decrease in average cash and short-term investments held during the comparative three month periods.

**Results of Operations**

**Comparison of the Six Months Ended June 30, 2009 and 2008**

**Revenue**

| | Six Months Ended June 30, 2009 | Six Months Ended June 30, 2008 | Change |
|---|---|---|---|
| Research and development revenue | $ 30 | $ 79 | (49) |
| License fee and royalty revenue from related parties | 66 | 70 | (4) |
| Grant revenue | 513 | 656 | (143) |
| Total revenue | $ 609 | $ 805 | (196) |

Total revenue was $609 and $805 for the six months ended June 30, 2009 and 2008, respectively. During the six months ended June 30, 2009 we recognized $30 of research and development revenue compared to $79 for the respective period in 2008. Research and development revenue is derived from research and development services and delivery of sample product produced from research and development services. Grant revenue decreased during the six months ended June 30, 2009 to $513 from $656 during the six months ended June 30, 2008, primarily as a result of the completion of the Strategic Environmental Research Development Program grant that ended in February 2009.



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**Expenses**

| | Six Months Ended June 30, 2009 | Six Months Ended June 30, 2008 | Change |
|---|---|---|---|
| Research and development expenses, including cost of revenue | $ 12,331 | $ 11,942 | $ 389 |
| Selling,general, and administrative expenses | 7,652 | 8,145 | (493) |
| Total operating expense | $ 19,983 | $ 20,087 | $ (104) |

***Research and development expenses, including cost of revenue***

Research and development expenses were $12,331 and $11,942 for the six months ended June 30, 2009 and 2008, respectively. The increase of $389 was primarily due to the addition of new employees and related benefit expenses and expenses related to the expansion of our research departments offset by a reduction in pre-commercial manufacturing costs. Employee and benefit related costs were $5,790 for the six months ended June 30, 2009 compared to $4,390 for the respective period in 2008. The increase of $1,400 in payroll and benefits was primarily the result of hiring personnel needed to support our pre-commercial manufacturing process and microbial and plant research programs. Expenses relating to the expansion of our research and development departments included increases in research and development supplies and an increase in facility related expenses. Expenses relating to research and development supplies increased to $477 for the six months ended June 30, 2009 compared to $310 for the comparative period in 2008. Facility related expenses increased to $1,221 for the six months ended June 30, 2009 compared to $1,024 for the comparative period in 2008. Pre-commercial manufacturing expenses offset most of these expense increases as a result of decreasing $1,494 in comparison to the six months ended June 30, 2008, primarily due to improvements in our production process made during the last year as we continue to focus our attention on reducing production costs, moving certain manufacturing processes in house and improving the quality of our pre-commercial manufacturing material.

We expect to incur increased research and development expenses through the Construction Phase of the ADM agreement for pre-commercial manufacturing and product development activities as we continue to develop, test, and refine product to meet the specification requirements of our customers. Upon commencement of the Commercial Phase of the ADM agreement, expenses relating to product development are expected to decrease as these expenses will be transferred to Telles. During the transition period between the initial start-up of the commercial manufacturing facility and the commencement of the Commercial Phase (as defined in the agreement), we will continue to bear these expenses.

***Selling, general, and administrative expenses***

Selling, general, and administrative expenses were $7,652 and $8,145 for the six months ended June 30, 2009 and 2008, respectively. The decrease of $493 was primarily due to a decrease in stock-based compensation expense and a decrease in recruiting expense. Stock-based compensation expense decreased to $1,468 for the six months ended June 30, 2009 from $1,707 for the comparable period in 2008. Stock-based compensation decreased mainly as a result of the completion, in May 2008, of the vesting period for options granted to our board of directors and an officer of the company. Recruiting expense decreased to $44 for the six months ended June 30, 2009 compared to $227 for the comparable period in 2008. The decrease of $183 in recruiting expense is primarily attributable to the recruitment of our CEO and CFO during the six months ended June 30, 2008. In addition, consulting related expenses decreased to $447 from $508 for the six months ended June 30, 2009 and 2008, respectively. The decrease of $61 was primarily due to decreased use of consultants to support administrative activities such as employee compensation reviews and accounting compliance.

We expect that selling, general, and administrative expenses will increase through the Construction Phase of the ADM agreement due to increasing payroll and expanding infrastructure to support sales and marketing efforts relating to the commercialization of Mirel. Upon the commencement of the Commercial



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Phase of the agreement, selling, general, and administrative expenses are expected to decrease as the cost of sales and marketing efforts will be transferred to Telles. During the transition period between the initial start-up of the commercial manufacturing facility and the commencement of the Commercial Phase (as defined in the agreement), we will continue to bear these expenses.

**Other Income (Net)**

| | Six Months Ended June 30, 2009 | Six Months Ended June 30, 2008 | Change |
|---|---|---|---|
| Total other income (net) | $ 593 | $ 1,909 | $ (1,316) |

Other income (net) was $593 and $1,909 for the six months ended June 30, 2009 and 2008, respectively. Other income (net) during both periods consisted of investment income. The decrease of $1,316 was primarily due to a market decline in investment yields during the period, our decision to convert a majority of our investment portfolio to lower risk/lower yield U.S. Federal Treasury Notes and government-backed Federal Agency Notes and a decrease in average cash and short-term investments held during the comparative six month periods.

**Liquidity and Capital Resources**

Currently, we require cash to fund our working capital needs, to purchase capital assets and to pay our operating lease obligations.

We fund our cash requirements primarily through the following methods:

· our strategic alliance with ADM;

· government grants;

· equity financing; and

· interest earned on cash and short-term investments.

Currently our products are in the pre-commercial stage of development, and large-scale commercial sales have not begun. In addition, we have incurred significant expenses relating to our research and development efforts. As a result, we have incurred net losses since our inception. As of June 30, 2009, we had an accumulated deficit of $148,898. Our total unrestricted cash, cash equivalents and short-term investments as of June 30, 2009 were $77,606 as compared to $91,096 at December 31, 2008. As of June 30, 2009, we had no outstanding debt.

Our cash, cash equivalents and short-term investments at June 30, 2009 were held for working capital purposes. We do not enter into investments for trading or speculative purposes. The primary objective of our investment activities is to preserve our capital to support the growth of our business. As of June 30, 2009 we had restricted cash of $593. Restricted cash consists of $493 held in connection with the lease agreement for our Erie Street facility in Cambridge, Massachusetts and $100 held in connection with our corporate credit card program. Short-term investments are made in accordance with our corporate investment policy, as approved by our Board of Directors. Investments are limited to high quality corporate debt, U.S. Treasury bills and notes, bank debt obligations, municipal debt obligations and asset-backed securities. The policy establishes maturity limits, concentration limits, and liquidity requirements. At June 30, 2009, we were in compliance with this policy.

We believe that our cash, cash equivalents and short-term investments, the interest we earn on these balances, as well as cash expected from government grants and our ADM alliance will be sufficient to meet our anticipated cash requirements, including cash requirements with respect to the commercial launch of Mirel, for at least the next 24 months. If our available cash, cash equivalents, and short-term securities are





insufficient to satisfy our liquidity requirements, or if we develop additional products, we may need to sell additional equity or debt securities or obtain a credit facility. The sale of additional equity and debt securities may result in additional dilution to our stockholders. If we raise additional funds through the issuance of debt securities or preferred stock, these securities could have rights senior to those of our common stock and could contain covenants that would restrict our operations. We may require additional capital beyond our currently forecasted amounts. Any such required additional capital may not be available on reasonable terms, if at all. If we are unable to obtain additional financing, we may be required to reduce the scope of, delay, or eliminate some or all of our planned research, development and commercialization activities, which could harm our business.

Net cash used in operating activities increased to $12,617 during the six months ended June 30, 2009 from $8,263 used during the six months ended June 30, 2008. Net cash used during the six months ended June 30, 2009 primarily reflects the net loss for the period partially offset by non-cash expenses, including stock-based compensation expense of $2,250, depreciation expense of $1,310 and the Company's 401(k) matching stock compensation of $279. The increase in cash used for operating activities during the six months ended June 30, 2009 as compared to the respective period in 2008 was primarily due to a decrease in pre-commercial cost sharing payments received from ADM and a decrease in funds received from investment income as a result of lower investment yields and lower average funds available for investing. We received $301 in pre-commercial cost sharing payments from ADM during the six months ended June 30, 2009 compared to $2,102 during the respective period in 2008. Pre-commercial cost sharing payments were lower during the six months ended June 30, 2009 due to a reduction in pre-commercial manufacturing costs. We received $593 in funds from investment income during the six months ended June 30, 2009 compared to $1,909 for the respective period in 2008.

After the Commercial Phase of the ADM alliance begins, Telles will reimburse us for the costs of services provided pursuant to the Commercial Alliance Agreement, including product development and sales and marketing. During the transition period between the initial start-up of the Commercial Manufacturing Facility and the commencement of the Commercial Phase, we will continue to bear these costs. If there are difficulties, delays or other unforeseen issues with the construction and start-up of the Commercial Manufacturing Facility or the ramp-up of commercial sales from the Commercial Manufacturing Facility, we may incur additional unreimbursed pilot manufacturing, product development, sales and marketing costs until the Commercial Phase of the alliance begins.

Net cash used in investing activities was $4,284 during the six months ended June 30, 2009 compared to net cash of $7,014 provided by investing activities during the six months ended June 30, 2008. Net cash used in investing activities during the six months ended June 30, 2009 primarily represents net cash of $3,699 used in the purchase, sale and maturity of investments and a cash outflow of $655 used to purchase new equipment for research purposes.

Net cash provided by financing activities was $21 and $664 for the six months ended June 30, 2009 and 2008, respectively. The cash provided by financing activity during the six months ended June 30, 2009 and 2008 was solely attributable to proceeds received from the exercise of stock options and warrants.

**Contractual Obligations**

The following table summarizes our contractual obligations at June 30, 2009 and the effects such obligations are expected to have on our liquidity and cash flows in future periods:

| | Payments Due by Period | | | | |
|---|---|---|---|---|---|
| | Total | Less than 1 year | 2-3 years | 4-5 years | More than 5 years |
| Purchase obligations | $ 415 | $ 250 | $ 90 | $ 50 | $ 25 |
| Operating lease obligations | 5,454 | 1,284 | 2,358 | 1,812 | — |
| Total | $ 5,869 | $ 1,534 | $ 2,448 | $ 1,862 | $ 25 |

**Off-Balance Sheet Arrangements**

As of June 30, 2009, we had no off-balance sheet arrangements as defined in Item 303(a) (4) of the Securities and Exchange Commission's Regulation S-K.





**Related Party Transactions**

We recorded $41 and $66 of license and royalty revenue from Tepha, Inc., a related party, during the three and six months ended June 30, 2009. During the three and six months ended June 30, 2008 we recorded license and royalty revenue from Tepha, Inc. of $35 and $70, respectively. We had an outstanding receivable balance due from Tepha of $34 as of June 30, 2009. As of December 31, 2008 there was no outstanding receivable balance due from Tepha. We also had various transactions with our alliance partner ADM, a related party, during the three and six months ended June 30, 2009 and 2008. We had an outstanding receivable balance of $718 due from ADM at June 30, 2009. As of December 31, 2008 there was no significant outstanding receivable balance due from ADM. For more information on our related party transactions, please see Note 8 to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2008.

**Recent Accounting Pronouncements**

Effective January 1, 2009, the Company implemented Statement of Financial Accounting Standards No. 141(R), *Business Combination*, or SFAS 141(R). This standard requires an acquiring company to measure all assets acquired and liabilities assumed, including contingent considerations and all contractual contingencies, at fair value as of the acquisition date. In addition, an acquiring company is required to capitalize in process research and development and either amortize it over the life of the product, or write it off if the project is abandoned or impaired. The adoption of this standard did not impact our financial position or results of operations as SFAS 141(R) is applicable to acquisitions completed after January 1, 2009 and we did not complete any business combination transactions during the first six months of 2009.

In April 2009, the FASB issued the following new accounting standards:

- FASB Staff Position FAS 157-4, *Determining Whether a Market Is Not Active and a Transaction Is Not Distressed*, or FSP FAS 157-4. FSP FAS 157-4 provides guidelines for making fair value measurements more consistent with the principles presented in SFAS 157. FSP FAS 157-4 provides additional authoritative guidance in determining whether a market is active or inactive, and whether a transaction is distressed, is applicable to all assets and liabilities (i.e. financial and nonfinancial) and will require enhanced disclosures.

- FASB Staff Position FAS 115-2, FAS 124-2, and EITF 99-20-2, *Recognition and Presentation of Other-Than-Temporary Impairments*, or FSP FAS 115-2, FAS 124-2, and EITF 99-20-2; FSP FAS 115-2, FAS 124-2, and EITF 99-20-2 provides additional guidance to provide greater clarity about the credit and noncredit component of an other-than-temporary impairment event and to more effectively communicate when an other-than-temporary impairment event has occurred. This FSP applies to debt securities.

- FASB Staff Position FAS 107-1 and APB 28-1, *Interim Disclosures about Fair Value of Financial Instruments*, or FSP FAS 107-1 and APB 28-1. FSP FAS 107-1 and APB 28-1, amends FASB Statement No. 107, *Disclosures about Fair Value of Financial Instruments*, to require disclosures about fair value of financial instruments in interim as well as in annual financial statements. This FSP also amends APB Opinion No. 28, *Interim Financial Reporting*, to require those disclosures in all interim financial statements.

These standards are effective for periods ending after June 15, 2009. The adoption of these standards did not impact the presentation of our financial position or results of operations.

***Recently Issued Accounting Standards***

In June 2009, the FASB issued the following new accounting standards:





- SFAS No. 166, *Accounting for Transfers of Financial Assets, an amendment of FASB Statement No. 140*, or SFAS 166;

- SFAS No. 167, *Amendments to FASB Interpretation No. 46(R)*, or SFAS 167; and

- SFAS No. 168, *The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles, a replacement of FASB Statement No. 162, or SFAS 168*

SFAS 166 prescribes the information that a reporting entity must provide in its financial reports about a transfer of financial assets; the effects of a transfer on its financial position, financial performance, and cash flows; and a transferor's continuing involvement in transferred financial assets. Specifically, among other aspects, SFAS 166 amends Statement of Financial Standard No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*, or SFAS 140, by removing the concept of a qualifying special-purpose entity from SFAS 140 and removes the exception from applying FIN 46(R) to variable interest entities that are qualifying special-purpose entities. It also modifies the financial-components approach used in SFAS 140. SFAS 166 is effective for transfers of financial assets occurring on or after January 1, 2010. We have not determined the effect that the adoption of SFAS 166 will have on our financial position or results of operations, but the effect will generally be limited to future transactions, if any.

SFAS 167 amends FASB Interpretation No. 46, *Consolidation of Variable Interest Entities (revised December 2003) — an interpretation of ARB No. 51*, or FIN 46(R), to require an enterprise to determine whether its variable interest or interests give it a controlling financial interest in a variable interest entity. The primary beneficiary of a variable interest entity is the enterprise that has both (1) the power to direct the activities of a variable interest entity that most significantly impact the entity's economic performance and (2) the obligation to absorb losses of the entity that could potentially be significant to the variable interest entity or the right to receive benefits from the entity that could potentially be significant to the variable interest entity. SFAS 167 also amends FIN 46(R) to require ongoing reassessments of whether an enterprise is the primary beneficiary of a variable interest entity. SFAS 167 is effective for all variable interest entities and relationships with variable interest entities existing as of January 1, 2010. We have not determined the effect that the adoption of SFAS 167 will have, if any, on our financial position or results of operations.

SFAS 168 replaces SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles*, to establish the *FASB Accounting Standards Codification* as the source of authoritative accounting principles recognized by the FASB to be applied by nongovernmental entities in preparation of financial statements in conformity with GAAP. SFAS 168 is effective for interim and annual periods ending after September 15, 2009. We do not expect the adoption of this standard to have an impact on our financial position or results of operations.

**ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

There have been no material changes in information regarding our exposure to market risk, as described in Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2008.

**ITEM 4. CONTROLS AND PROCEDURES**

**Evaluation of Disclosure Controls and Procedures**

Our management (with the participation of our Principal Executive Officer and Principal Financial Officer) evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), as of June 30, 2009. Disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported on a timely basis and that such information is accumulated and communicated to





management, including the Principal Executive Officer and Principal Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation, our Principal Executive Officer and Principal Financial Officer concluded that these disclosure controls and procedures are effective.

**Changes in Internal Control over Financial Reporting**

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended June 30, 2009 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## PART II — OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS

From time to time, we may be subject to legal proceedings and claims in the ordinary course of business. We are not currently aware of any such proceedings or claims that we believe will have, individually or in the aggregate, a material adverse effect on the business, financial condition or the results of operations.

### ITEM 1A. RISK FACTORS

Except as listed below there have been no material changes in information regarding our risk factors as described in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2008.

**If ADM does not successfully build and start up the Commercial Manufacturing Facility on time and on budget, our financial results will be negatively affected.**

The cost of planning, designing, constructing and operating the Commercial Manufacturing Facility being developed to serve the alliance with ADM, and the cost of ancillary facilities and services related to the production of Mirel by Telles, will be very significant. ADM will be advancing a disproportionate share of the financial capital needed for such activities and, therefore, under our agreement all profits, after payment of all royalties, reimbursements and fees, from Telles will first be distributed to ADM until ADM's disproportionate investment in the joint venture has been returned. Previously, we expected that commercial quantities of Mirel from the Commercial Manufacturing Facility would be available for customers by December 2008. We now expect that commercial quantities of Mirel from the Commercial Manufacturing Facility will be available for customers by the end of 2009. If there are further difficulties, delays or other unforeseen issues with the construction and start-up of the Commercial Manufacturing Facility, the cost of such activities will almost certainly increase, we may incur additional unreimbursed pilot manufacturing, product development, sales and marketing costs until the Commercial Phase of the alliance begins, and the revenue from sales, if any, of Mirel and the distribution of profits, if any, to us will be further delayed.

**We may not achieve market acceptance of our products.**

Telles currently has only limited customer commitments for commercial quantities of Mirel. Market acceptance of Mirel and our future products will depend on numerous factors, many of which are outside of our control, including among others:

- public acceptance of such products;
- ability to produce products that offer functionality comparable or superior to existing or new polymer products;
- our ability to produce products fit for their intended purpose;





- our ability to obtain necessary regulatory approvals for our products;
- the willingness and speed at which potential customers qualify Mirel for use in their products;
- pricing of our products compared to competitive products, including petroleum-based plastics;
- the strategic reaction of companies that market competitive products;
- our reliance on third parties who support or control distribution channels; and
- general market conditions.

Prospective customers are currently evaluating and performing tests on Mirel prior to making any large-scale purchase decisions. We may not be able to successfully demonstrate that our plastics have properties comparable or superior to those of environmentally sustainable competitors or similar to conventional petroleum-based plastics. There can be no assurance that products based on our technologies will be perceived as being comparable or superior to existing products or new products being developed by competing companies or that such products will otherwise be accepted by consumers. The market for our biobased plastics may not be willing to support premium prices to purchase environmentally sustainable plastics. If there is not broad market acceptance of our products, we may not generate significant revenues. Generally, new product applications require a long lead time and sufficient quantities of polymer for development and qualification before customers enter into sales commitments. Delays in the availability of material for product development, compounding scale-up and marketing activities could delay or slow the ramp-up of commercial sales from the Commercial Manufacturing Facility. If the start of the commercial phase of the alliance is delayed as a result of such delays or for other reasons, we may incur additional unreimbursed product development and sales and marketing costs until the commercial phase of the alliance begins. In addition, if such delays occur, or if we are unable to obtain the anticipated premium pricing for Mirel, there could be a material adverse effect on the timing of the distribution of Telles profits, if any, to us.

**Provisions in our certificate of incorporation and by-laws and Delaware law and our shareholder rights plan might discourage, delay or prevent a change of control of our company or changes in our management and, therefore, depress the trading price of our common stock.**

Provisions of our certificate of incorporation and by-laws and Delaware law may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which our stockholders might otherwise receive a premium for their shares of our common stock. These provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions include:

- limitations on the removal of directors;
- a classified board of directors so that not all members of our board are elected at one time;
- advance notice requirements for stockholder proposals and nominations;
- the inability of stockholders to act by written consent or to call special meetings;
- the ability of our board of directors to make, alter or repeal our by-laws;
- a supermajority stockholder vote requirement for amending certain provisions of our amended and restated certificate of incorporation and bylaws; and
- the ability of our board of directors to designate the terms of and issue new series of preferred stock without stockholder approval.

The affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote is necessary to amend or repeal the above provisions of our certificate of incorporation. In addition, absent approval of our board of directors, our by-laws may only be amended or repealed by the affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote.

We have adopted a shareholder rights plan, the purpose of which is, among other things, to enhance our Board's ability to protect shareholder interests and to ensure that shareholders receive fair treatment in the event any coercive takeover attempt of the company is made in the future. The shareholder rights plan could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, our company or a large block of our company's Common Stock.



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In addition, Section 203 of the Delaware General Corporation Law prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder, generally a person which together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner.

The existence of the foregoing provisions and anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our company, thereby reducing the likelihood that our stockholders could receive a premium for their common stock in an acquisition.

## ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

### Recent Sales of Unregistered Securities

On April 28, 2009, the Company issued 17,001 shares of common stock to participants in its Metabolix, Inc. 401(k) Plan as a matching contribution. The issuance of these securities is exempt from registration pursuant to Section 3(a)(2) of the Securities Act of 1933 as exempted securities.

### Issuer Purchases of Equity Securities

During the three months ended June 30, 2009, there were no repurchases made by us or on our behalf, or by any "affiliated purchasers," of shares of our common stock.

## ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

## ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

The Company's annual meeting of stockholders was held on May 28, 2009.

The stockholders elected Richard P. Eno, Edward M. Giles, and Anthony J. Sinskey to serve on the Board of Directors until the annual meeting of stockholders to be held in 2012. The tabulation of votes with respect to the election of such directors is as follows:

| | Number of Shares | | |
|---|---|---|---|
| | **For** | **Withheld** | **Abstain** |
| Richard P. Eno | 20,010,578 | 318,190 | 0 |
| Edward M. Giles | 19,750,414 | 578,354 | 0 |
| Anthony J. Sinskey | 15,876,259 | 4,452,509 | 0 |

Following the meeting, the Company's Board of Directors consists of Jay Kouba (Chairman), Richard P. Eno, Edward M. Giles, Peter N. Kellogg, Edward M. Muller, Oliver P. Peoples, Anthony J. Sinskey, Matthew Strobeck and Robert L. Van Nostrand.

## ITEM 5. OTHER INFORMATION

None.

**ITEM 6. EXHIBITS**

10.1 Employment Agreement between the Registrant and Johan van Walsem executed July 9, 2009 (filed herewith).

31.1 Certification Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934 of the Principal Executive Officer (furnished herewith).

31.2 Certification Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934 of the



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Principal Financial Officer (furnished herewith).

32.1 Section 1350 Certification (furnished herewith).



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**SIGNATURES**

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

METABOLIX, INC.

| | | |
|---|---|---|
| August 5, 2009 | By: | /s/ RICHARD P. ENO<br>Richard P. Eno<br>*President and Chief Executive Officer*<br>*(Principal Executive Officer)* |
| August 5, 2009 | By: | /s/ JOSEPH D. HILL<br>Joseph D. Hill<br>*Chief Financial Officer*<br>*(Principal Financial and Accounting Officer)* |

July 7, 2009

Johan van Walsem
5 Orchard Drive
Acton, MA 01720

Re: Employment Agreement

Dear Johan:

This letter is to confirm our understanding with respect to your employment by Metabolix, Inc. (the "Company"). The terms and conditions agreed to in this letter are hereinafter referred to as the "Agreement." In consideration of the mutual promises and covenants contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby mutually acknowledged, we have agreed as follows:

1. Employment.

1.1. General. The Company will employ you, and you will be employed by the Company, as Vice President of Strategy and Commercial Development of the Company, reporting to the Company's Chief Executive Officer, and you shall have the responsibilities, duty and authority commensurate with that position. You will also perform such reasonable other and/or different services for the Company as may be assigned to you from time to time. You agree that if your employment hereunder ends for any reason, you will tender to the Company your resignation of all offices with the Company as of the date of your termination.

1.2. Devotion to Duties. While you are employed hereunder, you will use your best efforts, skills and abilities to perform faithfully all duties assigned to you pursuant to this Agreement and will devote your full business time and energies to the business and affairs of the Company. While you are employed hereunder, you will not undertake any other employment from any person or entity without the prior written consent of the Company.

2. Term. The Company hereby agrees to employ you, and you hereby accept employment with the Company, upon the terms set forth in this Agreement, for the period commencing on August 17, 2009 (or such other date as the parties shall mutually agree) (the "Commencement Date") and ending on the first anniversary of the Commencement Date (such period is the "Initial Term"), subject to earlier termination as provided in Section 4;



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provided, however, that at the end of such Initial Term and each anniversary date thereafter, the term of this Agreement will automatically be extended for an additional year unless, not less than thirty (30) days prior to the end of such Initial Term or one (1) year extension period, as the case may be, the Company or you shall have given written notice that it or you elects not to have the term extended. The term of this Agreement as extended and defined by this Section shall be referred to as the "Agreement Term."

3. Compensation.

3.1. Base Salary. While you are employed hereunder, the Company will pay you a base salary at the annual rate of no less than $240,000 per year (the "Base Salary"). The Company will pay such Base Salary on a semi-monthly basis in accordance with the Company's normal payroll practices and will deduct from each monthly salary payment all amounts required to be deducted or withheld under applicable law or under any employee benefit plan in which you participate.

3.2. Bonus Opportunity. You will be eligible to receive an annual cash bonus in an amount of up to 150% of the Base Salary, based upon the Company's good faith assessment of your achievement of individual goals, and of the Company's achievement of its goals, which assessment shall be done by the Company's Compensation Committee in conjunction with the Company's Chief Executive Officer. Individual goals for each calendar year will be established, and modified, in good faith by you and the Chief Executive Officer in conjunction with the Company's Compensation Committee. The Company expects that the annual target bonus opportunity will be in the range of 70% of your Base Salary for performance fully meeting those expectations. To the extent the Company awards you a cash bonus, the bonus, if payable, shall be calculated and paid no later than two and a half months following the later of the close of the calendar or Company fiscal year to which such bonus relates. In order to receive an annual bonus, you must be employed at the time of a timely payment. For your first year of employment, and any other partial year, your cash bonus will be awarded on a pro rata basis.

3.3. Equity Compensation. At the first meeting of the Company's Compensation Committee following the Commencement Date, the Company shall grant you a stock option under the Metabolix, Inc. 2006 Stock Option and Incentive Plan, as amended and restated (the "2006 Stock Plan"), to purchase 50,000 shares of common stock of the Company (the "Option") at an exercise price equal to the Fair Market Value (as defined in the 2006 Stock Plan) of the Company's common stock on the date of such grant. Provided you are employed by the Company on the vesting date, the Option shall vest in equal installments as to 1/16 of the shares three months after the Commencement Date and on the last day of each three (3) month period following the first vesting date until the Option fully vests. Except as provided herein, the Option will be subject to the terms and conditions of the 2006 Stock Plan and the customary terms and conditions of the Company's standard form of stock option agreement. To the extent allowed pursuant to

Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), such option shall be deemed to be an incentive stock option.

3.4. Vacation. You will be entitled to paid vacation and paid holidays, accrued and used in accordance with the Company's policies as in effect from time to time. All vacation days will be taken at times mutually agreed by you and the Company and will be subject to the business needs of the Company.

3.5. Fringe Benefits. You will be entitled to participate in employee benefit plans which the Company provides or may establish for the benefit of its senior executives (for example, group life, disability, medical, dental and other insurance, retirement, pension, profit-sharing and similar plans) (collectively, the "Fringe Benefits"). Your eligibility to participate in the Fringe Benefits and receive benefits thereunder will be subject to the plan documents governing such Fringe Benefits. Nothing contained herein will require the Company to establish or maintain any Fringe Benefits.

3.6. Reimbursement of Certain Expenses. You shall be reimbursed for reasonable and necessary business expenses incurred by you while you are employed by the Company, which are directly related to the furtherance of the Company's business. You must submit any request for reimbursement no later than ninety (90) days following the date that such business expense is incurred in accordance with the Company's reimbursement policy regarding same, and business expenses must be substantiated by appropriate receipts and documentation. If a business expense reimbursement is not exempt from Section 409A of the Code, any reimbursement in one calendar year shall not affect the amount that may be reimbursed in any other calendar year and a reimbursement (or right thereto) may not be exchanged or liquidated for another benefit or payment. Any business expense reimbursements subject to Section 409A of the Code shall be made no later than the end of the calendar year following the calendar year in which you incur such business expense.

4. Termination. This Agreement shall terminate upon the occurrence of any of the following:

4.1. Expiration of the Agreement Term. This Agreement shall terminate at the expiration of the Agreement Term as set forth in Section 2.

4.2. Termination for Cause. This Agreement shall terminate, at the election of the Company, for Cause upon written notice by the Company to you. For the purposes of this Section, "Cause" for termination shall be limited to the following:

a) Your conviction of a felony; or

b) Your commission of fraud, or misconduct that results in material and demonstrable damage to the business or reputation of the Company; or



c) Your willful and continued failure to perform your duties hereunder (other than such failure resulting from your incapacity due to Disability, as defined herein) within 10 business days after the Company delivers a written demand for performance to you that specifically identifies the actions to be performed.

4.3. Termination by the Company Without Cause or by You for Good Reason. This Agreement shall terminate at the election of the Company, without Cause, at any time upon 30 days prior written notice by the Company to you or by you for Good Reason (as defined herein).

4.4. Death or Disability. This Agreement shall terminate upon your death or disability. If you shall be disabled so as to be unable to perform the essential functions of your position under this Agreement with or without reasonable accommodation, the Board may remove you from any responsibilities and/or reassign you to another position with the Company during the period of such disability, and such reassignment shall not trigger a Good Reason termination as provided herein. Notwithstanding any such removal or reassignment, you shall continue to receive your Base Salary (less any disability pay or sick pay benefits to which you may be entitled under the Company's policies) and benefits under this Agreement (except to the extent that you may be ineligible for one or more such benefits under applicable plan terms) for a period of three months, and your employment may be terminated by the Company at any time thereafter. Nothing in this Section shall be construed to waive your rights, if any, under existing law including, without limitation, the Family and Medical Leave Act of 1993, 29 U.S.C. §2601 *et seq*. and the Americans with Disabilities Act, 42 U.S.C. §12101 *et seq.*

Notwithstanding the foregoing, if and only to the extent that your disability is a trigger for the payment of deferred compensation, as defined in Section 409A of the Code, "disability" shall have the meaning set forth in Section 409A(a)(2)(C) of the Code.

4.5. Voluntary Termination by You. You may terminate this Agreement at your election upon not less than 30 days prior written notice to the Company.

4.6. Definition of Good Reason. As used in this Agreement, 'Good Reason' means that you have complied with the 'Good Reason Process' (hereinafter defined) following the occurrence of any of the following events: (i) a material diminution in your responsibilities, authority or duties; (ii) a material diminution in your Base Salary; (iii) a material change in the geographic location at which you provide services to the Company; or (iv) the material breach of this Agreement by the Company. 'Good Reason Process' shall mean that (i) you reasonably determine in good faith that a 'Good Reason' condition has occurred; (ii) you notify the Company in writing of the occurrence of the Good Reason condition within 60 days of the occurrence of such condition; (iii) you cooperate in good faith with the Company's efforts, for a period not less than 30 days following such notice (the 'Cure Period'), to remedy the condition; (iv) notwithstanding



such efforts, the Good Reason condition continues to exist; and (v) you terminate your employment within 60 days after the end of the Cure Period. If the Company cures the Good Reason condition during the Cure Period, Good Reason shall be deemed not to have occurred.

5. Effect of Termination.

5.1. Termination for Cause, Death, Disability or Voluntary Resignation. In the event (i) you are terminated for Cause; (ii) you are terminated for death or Disability; or (iii) you voluntarily resign (other than for Good Reason), unless otherwise specifically provided herein, you, or your estate, shall be eligible only to receive (i) the portion of your Base Salary as has accrued prior to the effectiveness of such termination and has not yet been paid, (ii) an amount equal to the value of your accrued unused vacation days, and (iii) reimbursement for expenses properly incurred by you on behalf of the Company prior to such termination if such expenses are properly documented in accordance with Company policy and practice and submitted for reimbursement within 30 days of the termination date (collectively, the "Accrued Obligations"). Such amounts will be paid promptly after termination in accordance with applicable law but in no event more than 45 days after the date on which your employment terminates.

5.2. Termination Without Cause or Resignation for Good Reason. In the event that (i) you are terminated without Cause; or (ii) you resign for Good Reason, then in addition to the Accrued Obligations, and contingent on your executing a complete release of claims against the Company, and provided you do not revoke the release (a fully effective release is hereafter, the "Release") within thirty (30) days after the date of termination, you shall be entitled, in addition to the Accrued Obligations, to receive continuation of your Base Salary in effect at the time of termination for a period of twelve (12) months, commencing on the 37th day after the date on which your employment terminates (provided the Release is effective prior to such date), payable in accordance with the Company's normal payroll practices, provided that the first payment will include all amounts which would have been paid in the 37 days following your termination of employment.

In addition to the foregoing, you shall be entitled to receive payment of COBRA premiums to maintain medical and dental benefits, if any, in effect at the time of termination for the earlier of (x) 12 months following the termination and (y) the date you become insured under a medical insurance plan providing similar benefits to that of the Company plan.

5.3. Expiration of Agreement. In the event the Agreement Term expires and the Company elects not to extend the Agreement, it shall be considered a termination by the Company without Cause and, in addition to the Accrued Obligations, you shall be entitled to the same benefits provided in Section 5.2 herein, upon your execution of the Release; provided, that notwithstanding the foregoing, if you continue in the employment of the



Company after the expiration of the Agreement Term, this Section 5.3 shall be of no further force and effect.

5.4. Additional Benefits upon Termination in Connection With a Change of Control. In the event that your employment is terminated by the Company without Cause or by you for Good Reason (each as defined herein) within 12 months immediately following or 6 months immediately prior to a Change of Control, then, in addition to the Accrued Obligations and the benefits described in Section 5.2, you shall be entitled to receive full vesting of all unvested equity, including but not limited to any options or restricted stock granted to you under the 2006 Stock Plan or any authorized successor stock plan, provided that the conditions to vesting other than the passage of time have been satisfied.

5.5. Excise Tax. You agree that the payments and benefits hereunder, and under all other contracts, arrangements or programs that apply to you (the "Company Payments"), shall be reduced to an amount that is one dollar less than the amount that would trigger an excise tax under Section 4999 of the Code, as determined in good faith by the Company's independent public accountants, provided, however, that the reduction shall occur only if the reduced Company Payments received by you (after taking into account further reductions for applicable federal, state and local income, social security and other taxes) would be greater than the unreduced Company Payments to be received by you minus (i) the excise tax payable with respect to such Company Payments under Section 4999 of the Code; and (ii) all applicable federal, state and local income, social security and other taxes on such Company Payments. You and the Company agree to cooperate in good faith with each other in connection with any administrative or judicial proceedings concerning the existence or amount of golden parachute penalties with respect to payments or benefits that you receive. In the event that such payments are required to be reduced pursuant to this Section, such payments shall be reduced in the following order: (1) cash payments not subject to Section 409A of the Code; (2) cash payments subject to Section 409A of the Code; (3) equity-based payments and acceleration; and (4) non-cash forms of benefits, and to the extent any payment is to be made over time (e.g., in installments, etc.), then the payments shall be reduced in reverse chronological order.

5.6. "Change of Control". As used herein, a "Change of Control" shall occur or be deemed to have occurred only upon any one or more of the following events:

a) any "person" (as such term is used in Sections 13(d) and 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) becomes a "beneficial owner" (as such term is defined in Rule 13d-3 promulgated under the Exchange Act) (other than the Company, any trustee or other fiduciary holding securities under an employee benefit plan of the Company, or any corporation owned, directly or indirectly, by the stockholders of the Company, in substantially the same proportions as their ownership of stock of the Company), directly or indirectly, of securities of the



Company, representing fifty percent (50%) or more of the combined voting power of the Company's then outstanding securities; or

b) persons who, as of the Commencement Date, constituted the Company's Board of Directors (the "Incumbent Board") cease for any reason including, without limitation, as a result of a tender offer, proxy contest, merger, consolidation or similar transaction, to constitute at least a majority of the Board of Directors, provided that any person becoming a director of the Company subsequent to the Commencement Date whose election was approved by at least a majority of the directors then comprising the Incumbent Board shall, for purposes of this Section, be considered a member of the Incumbent Board; or

c) the consummation of a merger or consolidation of the Company with any other corporation or other entity, other than (1) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than fifty percent (50%) of the combined voting power of the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation or

(2) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no "person" (as hereinabove defined) acquires more than fifty percent (50%) of the combined voting power of the Company's then outstanding securities; or

d) the stockholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets.

5.7. Separation from Service. Notwithstanding anything set forth in Sections 4 and 5 of this Agreement, a termination of employment shall be deemed not to have occurred until such time as you incur a "separation from service" with the Company in accordance with Section 409A(a)(2)(A)(i) of the Code and the applicable provisions of Treasury Regulation Section 1.409A-1(h).

5.8. Section 409A. Anything in this Agreement to the contrary notwithstanding, if at the time of your 'separation from service,' the Company determines that the you are a 'specified employee' within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that you become entitled to under this Agreement on account of your separation from service would be considered deferred compensation subject to the 20 percent additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) six months and one day after your separation from service, or (B) your death. If any such delayed cash payment is otherwise payable on an installment basis, the first



payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule. Solely for purposes of Section 409A of the Code, each installment payment described in Section 5 is considered a separate payment.

6. Taxes. All payments required to be made by the Company to you under this Agreement shall be subject to the withholding of such amounts for taxes and other payroll deductions as the Company may reasonably determine it should withhold pursuant to any applicable law or regulation. To the extent applicable, it is intended that this Agreement be exempt from, or comply with, the provisions of Section 409A of the Code, and this Agreement shall be construed and applied in a manner consistent with this intent. In the event that any severance payments or benefits hereunder are determined by the Company to be in the nature of nonqualified deferred compensation payments, you and the Company hereby agree to take such actions as may be mutually agreed to ensure that such payments or benefits comply with the applicable provisions of Section 409A of the Code and the official guidance issued thereunder. Notwithstanding the foregoing, the Company does not guarantee the tax treatment or tax consequences associated with any payment or benefit arising under this Agreement.

7. Noncompetition, Confidentiality and Inventions Obligations. You agree to execute the enclosed Employee Noncompetition, Confidentiality and Inventions Agreement simultaneously with the execution of this Agreement.

8. Disclosure to Future Employers. You will provide, and the Company, in its discretion, may similarly provide, a copy of the covenants contained in the Employee Noncompetition, Confidentiality and Inventions Agreement to any business or enterprise which you may, directly or indirectly, own, manage, operate, finance, join, control or in which you may participate in the ownership, management, operation, financing, or control, or with which you may be connected as an officer, director, employee, partner, principal, agent, representative, consultant or otherwise.

9. Representations. You hereby represent and warrant to the Company that you understand this Agreement, that you enter into this Agreement voluntarily and that your employment under this Agreement will not conflict with any legal duty owed by you to any other party.

10. General.

10.1. Notices. Whenever any notice is required hereunder, it shall be given in writing addressed as follows:



| | |
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| To Company: | Metabolix, Inc.<br>21 Erie Street<br>Cambridge, MA 02139<br>Attention: General Counsel |
| To the Executive: | Johan van Walsem<br>5 Orchard Drive<br>Acton, MA 01720 |

All notices, requests, consents and other communications hereunder which are required to be provided, or which the sender elects to provide, in writing, will be addressed to the receiving party's address set forth above or to such other address as a party may designate by notice hereunder, and will be either (i) delivered by hand, (ii) sent by overnight courier, or (iii) sent by registered or certified mail, return receipt requested, postage prepaid. All notices, requests, consents and other communications hereunder will be deemed to have been given either (i) if by hand, at the time of the delivery thereof to the receiving party at the address of such party set forth above, (ii) if sent by overnight courier, on the next business day following the day such notice is delivered to the courier service, or (iii) if sent by registered or certified mail, on the 5$^{th}$ business day following the day such mailing is made.

10.2. Entire Agreement. This Agreement, together with any Stock Option Agreements executed by you and the Company (either prior to or in conjunction with this Agreement) and the Employee Noncompetition, Confidentiality and Inventions Agreement, embody the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof. No statement, representation, warranty, covenant or agreement of any kind not expressly set forth in this Agreement will affect, or be used to interpret, change or restrict, the express terms and provisions of this Agreement.

10.3. Modifications and Amendments. The terms and provisions of this Agreement may be modified or amended only by written agreement executed by the parties hereto.

10.4. Waivers and Consents. The terms and provisions of this Agreement may be waived, or consent for the departure therefrom granted, only by written document executed by the party entitled to the benefits of such terms or provisions. No such waiver or consent will be deemed to be or will constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent will be effective only in the specific instance and for the purpose for which it was given, and will not constitute a continuing waiver or consent.

10.5. Assignment. The Company shall cause its rights and obligations hereunder to be assumed by any person or entity that succeeds to all or substantially all of the



Company's business or that aspect of the Company's business in which you are principally involved and may assign its rights and obligations hereunder to any Company affiliate. You may not assign your rights and obligations under this Agreement without the prior written consent of the Company and any such attempted assignment by you without the prior written consent of the Company will be void; provided, however, in the event of your death, your rights, compensation and benefits under this Agreement shall inure to the benefit of your estate, such that, for example, stock issuable to you, and awards and payments payable to you, shall be issued and paid to your estate.

10.6. Governing Law. This Agreement and the rights and obligations of the parties hereunder will be construed in accordance with and governed by the law of Massachusetts, without giving effect to the conflict of law principles thereof.

10.7. Jury Waiver. You and the Company agree to waive trial by jury in connection with any action arising from or relating to this Agreement.

10.8. Severability. The parties intend this Agreement to be enforced as written. However, if any portion or provision of this Agreement is to any extent declared illegal or unenforceable by a duly authorized court having jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, will not be affected thereby, and each portion and provision of this Agreement will be valid and enforceable to the fullest extent permitted by law.

10.9. Headings and Captions. The headings and captions of the various subdivisions of this Agreement are for convenience of reference only and will in no way modify or affect the meaning or construction of any of the terms or provisions hereof.

10.10. Acknowledgments. You recognize and agree that the enforcement of the Noncompetition, Nondisclosure and Inventions Agreement is necessary to ensure the preservation, protection and continuity of the business, trade secrets and goodwill of the Company. You agree that, due to the proprietary nature of the Company's business, the restrictions set forth in the Noncompetition, Confidentiality and Inventions Agreement are reasonable as to time and scope.

10.11. Counterparts. This Agreement may be executed in two or more counterparts, and by different parties hereto on separate counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

10.12. Conditions. This Agreement is subject to and contingent upon the Company's receipt of proof that you have appropriate authorization to work in the United States as required by U.S. laws and regulations, and upon satisfactory completion of a background check.



If the foregoing accurately sets forth our agreement, please so indicate by signing and returning to us the enclosed copy of this Agreement.

Very truly yours,

METABOLIX, INC.

By: /s/ Richard P. Eno
Name: Richard P. Eno
Title: President & CEO

**Accepted and Agreed:**

/s/ Johan van Walsem
Johan van Walsem

07/09/2009
Date

**Enclosure:**
Employee Noncompetition, Confidentiality and Inventions Agreement

**EXHIBIT 31.1**

**CERTIFICATION**

I, Richard P. Eno certify that:

1. I have reviewed this quarterly report on Form 10-Q of Metabolix, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) 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 registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 5, 2009

/s/ RICHARD P. ENO

Name: Richard P. Eno
Title: *President and Chief Executive Officer*
*(Principal Executive Officer)*

**EXHIBIT 31.2**

**CERTIFICATION**

I, Joseph D. Hill certify that:

1. I have reviewed this quarterly report on Form 10-Q of Metabolix, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) 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 registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 5, 2009

/s/ JOSEPH D. HILL

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|---|---|
| Name: | Joseph D. Hill |
| Title: | *Chief Financial Officer* |
| | *(Principal Financial and Accounting Officer)* |

**EXHIBIT 32.1**

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the quarterly report on Form 10-Q of Metabolix, Inc. (the “Company”) for the quarter ended June 30, 2009 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), we, Richard P. Eno, President, Chief Executive Officer and Principal Executive Officer of the Company and Joseph D. Hill, Chief Financial Officer and Principal Financial and Accounting Officer of the Company, certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to our knowledge that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

2. The information in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

This certification is being provided pursuant to 18 U.S.C. 1350 and is not to be deemed a part of the Report, nor is it to be deemed to be “filed” for any purpose whatsoever.

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| Dated: August 5, 2009 | /s/ RICHARD P. ENO |
| | *President and Chief Executive Officer* |
| | *(Principal Executive Officer)* |
| Dated: August 5, 2009 | /s/ JOSEPH D. HILL |
| | *Chief Financial Officer* |
| | *(Principal Financial and Accounting Officer)* |