

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2007

OR

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: 001-33137

**EMERGENT BIOSOLUTIONS INC.**  
(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction of Incorporation or  
Organization)

**14-1902018**  
(I.R.S. Employer Identification No.)

**2273 Research Boulevard, Suite 400**

**Rockville, Maryland**  
(Address of Principal Executive Offices)

**20850**  
(Zip Code)

**(301) 795-1800**  
(Registrant's Telephone Number, Including Area Code)

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

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

Large Accelerated Filer     Accelerated Filer     Non-Accelerated Filer

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

As of July 31, 2007, the registrant had 29,730,483 shares of common stock outstanding.

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Index to Form 10-Q  
Page

Part I.	Financial Information	4
Item 1.	Financial Statements	4
	Consolidated Balance Sheets	4
	Consolidated Statements of Operations	5
	Consolidated Statements of Cash Flows	6
	Notes to Consolidated Financial Statements	7
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	13
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	25
Item 4.	Controls and Procedures	25
Part II.	Other Information	26
Item 1.	Legal Proceedings	26
Item 1A.	Risk Factors	27
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	52
Item 3.	Defaults Upon Senior Securities	53
Item 4.	Submission of Matters to a Vote of Security Holders	53
Item 5.	Other Information	53
Item 6.	Exhibits	53
	Signatures	54
	Exhibit Index	55

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This quarterly report on Form 10-Q and the documents incorporated by reference herein contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and Section 21E of the Securities Exchange Act of 1934, as amended, that involve substantial risks and uncertainties. All statements, other than statements of historical fact, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “will,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

These forward-looking statements include, among other things, statements about:

- our ability to obtain new contracts with the U.S. government for sales of BioThrax® (Anthrax Vaccine Adsorbed), our FDA-approved anthrax vaccine, and our performance under those contracts, including the timing of deliveries;
- our plans for future sales of BioThrax;
- our plans to pursue label expansions and improvements for BioThrax;
- our plans to expand our manufacturing facilities and capabilities;
- the rate and degree of market acceptance and clinical utility of our products;
- our ongoing and planned development programs, preclinical studies and clinical trials;
- our ability to identify and acquire or in-license products and product candidates that satisfy our selection criteria;
- the potential benefits of our existing collaboration agreements and our ability to enter into selective additional collaboration arrangements;
- the timing of and our ability to obtain and maintain regulatory approvals for our product candidates;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our intellectual property portfolio; and
- our estimates regarding expenses, future revenues, capital requirements and needs for additional financing.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this quarterly report, particularly in the “Risk Factors” section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this quarterly report, including the documents that we have incorporated by reference herein and filed as exhibits hereto, completely and with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements.

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Emergent BioSolutions Inc. and Subsidiaries  
 Consolidated Balance Sheets  
 (in thousands, except share and per share data)

	June 30, 2007	December 31, 2006
	(unaudited)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 33,980	\$ 76,418
Accounts receivable	19,397	43,331
Inventories	28,885	24,721
Income taxes receivable	14,787	869
Deferred tax assets	-	295
Prepaid expenses and other current assets	2,561	1,703
<b>Total current assets</b>	<b>99,610</b>	<b>147,337</b>
Property, plant and equipment, net	96,576	78,174
Deferred tax assets, net of current	9,378	11,477
Other assets	1,432	1,267
<b>Total assets</b>	<b>\$ 206,996</b>	<b>\$ 238,255</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 17,347	\$ 27,366
Accrued expenses and other current liabilities	3,537	3,253
Accrued compensation	7,609	7,190
Indebtedness under lines of credit	-	8,930
Long-term indebtedness, current portion	2,597	2,456
Notes payable to employees	-	17
Income taxes payable	-	13,703
Deferred tax liability	195	-
Deferred revenue, current portion	976	1,432
<b>Total current liabilities</b>	<b>32,261</b>	<b>64,347</b>
Long-term indebtedness, net of current portion	30,020	31,368
Deferred revenue, net of current portion	2,773	2,997
Other liabilities	1,922	1,071
<b>Total liabilities</b>	<b>66,976</b>	<b>99,783</b>
Commitments and contingencies	-	-
Stockholders' equity:		
Preferred Stock \$0.001 par value; 15,000,000 shares authorized, 0 shares issued and outstanding at June 30, 2007 and December 31, 2006	-	-
Common Stock, \$0.001 par value; 100,000,000 shares authorized, 29,730,483 and 27,596,249 shares issued and outstanding at June 30, 2007 and December 31, 2006, respectively	30	28
Additional paid-in capital	101,203	90,920
Accumulated other comprehensive loss	(954)	(473)
Retained earnings	39,741	47,997
<b>Total stockholders' equity</b>	<b>140,020</b>	<b>138,472</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 206,996</b>	<b>\$ 238,255</b>

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

**Emergent BioSolutions Inc. and Subsidiaries**  
**Consolidated Statements of Operations**  
(in thousands, except share and per share data)

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2007	2006	2007	2006
	(Unaudited)		(Unaudited)	
<b>Revenues:</b>				
Product sales	\$ 22,518	\$ 8,212	\$ 47,964	\$ 20,408
Contracts and grants	668	3,234	1,670	3,261
<b>Total revenues</b>	<b>23,186</b>	<b>11,446</b>	<b>49,634</b>	<b>23,669</b>
<b>Operating expense:</b>				
Cost of product sales	5,842	1,509	11,358	4,370
Research and development	13,342	6,701	28,912	15,696
Selling, general and administrative	12,659	9,430	23,851	19,195
<b>Loss from operations</b>	<b>(8,657)</b>	<b>(6,194)</b>	<b>(14,487)</b>	<b>(15,592)</b>
<b>Other income (expense):</b>				
Interest income	599	123	1,473	326
Interest expense	(21)	(62)	(47)	(232)
Other income (expense), net	1	117	178	124
<b>Total other income (expense)</b>	<b>579</b>	<b>178</b>	<b>1,604</b>	<b>218</b>
<b>Loss before benefit from income taxes</b>	<b>(8,078)</b>	<b>(6,016)</b>	<b>(12,883)</b>	<b>(15,374)</b>
<b>Benefit from income taxes</b>	<b>(3,117)</b>	<b>(2,962)</b>	<b>(5,233)</b>	<b>(7,684)</b>
<b>Net loss</b>	<b>\$ (4,961)</b>	<b>\$ (3,054)</b>	<b>\$ (7,650)</b>	<b>\$ (7,690)</b>
<b>Earnings (loss) per share - basic</b>	<b>\$ (0.17)</b>	<b>\$ (0.14)</b>	<b>\$ (0.27)</b>	<b>\$ (0.34)</b>
<b>Earnings (loss) per share - diluted</b>	<b>\$ (0.17)</b>	<b>\$ (0.14)</b>	<b>\$ (0.27)</b>	<b>\$ (0.34)</b>
<b>Weighted-average number of shares - basic</b>	<b>28,599,405</b>	<b>22,371,614</b>	<b>28,233,897</b>	<b>22,360,316</b>
<b>Weighted-average number of shares - diluted</b>	<b>28,599,405</b>	<b>22,371,614</b>	<b>28,233,897</b>	<b>22,360,316</b>

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

**Emergent BioSolutions Inc. and Subsidiaries**  
**Consolidated Statements of Cash Flows**  
(in thousands)

	Six Months Ended	
	June 30,	
	2007	2006
	(Unaudited)	
<b>Cash flows from operating activities:</b>		
Net loss	\$ (7,650)	\$ (7,690)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Stock-based compensation expense	1,160	289
Depreciation and amortization	2,332	2,002
Deferred income taxes	9,297	(835)
Excess tax benefits from stock-based compensation	(6,708)	-
Loss on disposal of property and equipment	-	5
Changes in operating assets and liabilities:		
Accounts receivable	23,934	1,099
Inventories	(4,164)	(12,236)
Income taxes	(27,621)	(8,160)
Prepaid expenses and other assets	(1,023)	(3,038)
Accounts payable	(3,410)	(6,464)
Accrued expenses and other liabilities	526	(223)
Accrued compensation	420	(927)
Deferred revenue	(680)	22,551
Net cash used in operating activities	(13,587)	(13,627)
<b>Cash flows from investing activities:</b>		
Purchases of property, plant and equipment	(27,343)	(14,421)
Net cash used in investing activities	(27,343)	(14,421)
<b>Cash flows from financing activities:</b>		
Proceeds from borrowings on long term indebtedness and lines of credit	-	8,500
Issuance of common stock subject to exercise of stock options	2,419	43
Redemption of Class B common stock	-	(201)
Principal payments on long term indebtedness, notes payable to employees, and lines of credit	(10,154)	(814)
Excess tax benefits from stock-based compensation	6,708	-
Net cash provided by (used in) financing activities	(1,027)	7,528
Effect of exchange rate changes on cash and cash equivalents	(481)	(37)
Net decrease in cash and cash equivalents	(42,438)	(20,557)
Cash and cash equivalents at beginning of period	76,418	36,294
Cash and cash equivalents at end of period	33,980	15,737
<b>Supplemental disclosure of cash flow information:</b>		
Cash paid during the period for interest	\$ 1,518	\$ 148
Cash paid during the period for income taxes	\$ 13,960	\$ 1,200
<b>Supplemental information on non-cash investing and financing activities:</b>		
Purchases of property, plant and equipment unpaid at period end	\$ 4,531	\$ 5,889

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

**EMERGENT BIOSOLUTIONS INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**(UNAUDITED)**  
**(dollars in thousands, except per share data)**

**1. Summary of significant accounting policies**

**Basis of presentation and consolidation**

The accompanying unaudited consolidated financial statements include the accounts of Emergent BioSolutions Inc. (the "Company" or "Emergent") and its wholly owned subsidiaries. All significant inter-company accounts and transactions have been eliminated in consolidation.

The unaudited consolidated financial statements included herein have been prepared in accordance with U.S. generally accepted accounting principles for interim financial information and in accordance with the instructions to Form 10-Q and Article 10 of Regulation S-X of the Securities and Exchange Commission. Certain information and footnote disclosures normally included in consolidated financial statements prepared in accordance with U.S. generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. These consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2006, as filed with the Securities and Exchange Commission.

In the opinion of the Company's management, any adjustments contained in the accompanying unaudited consolidated financial statements are of a normal recurring nature, and are necessary to present fairly the financial position of the Company as of June 30, 2007, results of operations for the three and six month periods ended June 30, 2007 and 2006, and cash flows for the six month periods ended June 30, 2007 and 2006. Interim results are not necessarily indicative of results that may be expected for any other interim period or for an entire year.

**Significant customers and accounts receivable**

The Company's primary customers are the U.S. Department of Defense (the "DoD") and the U.S. Department of Health and Human Services ("HHS"). For the three months ended June 30, 2007 and 2006, sales of BioThrax to the DoD and HHS comprised 97% and 72% of total revenues, respectively. For the six months ended June 30, 2007 and 2006, sales of BioThrax to the DoD and HHS comprised 97% and 84% of total revenues, respectively. As of June 30, 2007, 97% of the Company's receivable balance was comprised of amounts due from these customers. Accounts receivable are stated at invoice amounts and consist primarily of amounts due from the DoD and HHS as well as amounts due under reimbursement contracts with other government entities and non-government and philanthropic organizations.

**Capitalized interest**

The Company capitalizes interest expense in accordance with Statement of Financial Accounting Standards ("SFAS") No. 34, *Capitalization of Interest Cost*, based on the cost of major ongoing capital projects which have not yet been placed in service. For the three months ended June 30, 2007 and 2006, the Company capitalized \$659 and \$107 of interest, respectively. For the six months ended June 30, 2007 and 2006, the Company capitalized \$1,336 and \$107 of interest, respectively.

**Earnings per share**

Basic net income (loss) per share of common stock excludes dilution for potential common stock issuances and is computed by dividing net income (loss) by the weighted average number of shares outstanding for the period. Diluted net income per share reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock during the period. For the three and six months ended June 30, 2007 and 2006, diluted net loss per share is equal to basic net loss per share, as the inclusion of outstanding stock options would be anti-dilutive.

**Accounting for stock-based compensation**

Effective January 1, 2006, the Company adopted the fair value provisions of SFAS No. 123 (revised 2004), *Share-Based Payment* ("SFAS No. 123(R)"), using the modified prospective method. Under the fair value recognition provisions of SFAS No. 123(R), the Company recognizes stock-based compensation net of an estimated forfeiture rate.

Under the modified prospective method, compensation cost recognized in 2007 and 2006 includes: (1) compensation cost for all share-based payments granted prior to but not yet vested as of December 31, 2005, based on the grant date fair value estimated in accordance with the original provisions of SFAS No. 123, and (2) compensation cost for all share-based payments granted and vested subsequent to December 31, 2005, based on the grant date fair value estimated in accordance with the provisions of SFAS No. 123(R).

The Company accounts for equity instruments issued to non-employees in accordance with SFAS No. 123, *Accounting for Stock-Based Compensation* ("SFAS No. 123"), and Emerging Issues Task Force ("EITF") Issue No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling Goods or Services*, ("EITF No. 96-18").

Based on options granted to employees as of June 30, 2007, total compensation expense not yet recognized related to unvested options is approximately \$3,351, after tax. The Company expects to recognize that expense over a weighted average period of 3.0 years.

The Company utilizes the Black-Scholes valuation model for estimating the fair value of all stock options granted. The fair value of each option is estimated on the date of grant. Set forth below are the weighted-average assumptions used in valuing the stock options granted and a discussion of the Company's methodology for developing each of the assumptions used:

	Three Months Ended		Six Months Ended	
	June 30, 2007	June 30, 2006	June 30, 2007	June 30, 2006
Expected dividend yield	0%	0%	0%	0%
Expected volatility	50%	50%	50%	50%
Risk-free interest rate	4.51%-5.09%	5.21%	4.50%-5.09%	5.21%
Expected average life of options	3.0 years	3.0 years	3.0 years	3.0 years

- Expected dividend yield — The Company does not pay regular dividends on its common stock and does not anticipate paying any dividends in the foreseeable future;
- Expected volatility — Volatility is a measure of the amount by which a financial variable, such as share price, has fluctuated (historical volatility) or is expected to fluctuate (expected volatility) during a period. The Company analyzed the expected volatility used by similar companies at a similar stage of development to estimate expected volatility. The volatility used by these similar companies ranged from 33% to 79%, with an average estimated volatility of 53%;
- Risk-free interest rate — This is the range of U.S. Treasury rates with a term that most closely resembles the expected life of the option as of the date the option was granted; and
- Expected average life of options — This is the period of time that the options granted are expected to remain outstanding. This estimate is based primarily on the employee position profile of option holders and the trading lock out periods that result from employee access to stock price sensitive information.

Prior to the adoption of SFAS No. 123(R), the Company presented all tax benefits of deductions resulting from the exercise of stock options as operating cash flows in the statement of cash flows. SFAS No. 123(R) requires the cash flows resulting from the tax benefits of deductions in excess of the compensation cost recognized for those options (excess tax benefits) to be classified as financing cash flows.

#### Comprehensive income (loss)

SFAS No. 130, *Reporting Comprehensive Income* ("SFAS No. 130"), requires the presentation of the comprehensive income (loss) and its components as part of the financial statements. Comprehensive income (loss) is comprised of net income and other changes in equity that are excluded from net income. The Company includes gains and losses on inter-company transactions with foreign subsidiaries that are considered to be long-term investments and translation gains and losses incurred when converting its subsidiaries' financial statements from their functional currency to the U.S. dollar in accumulated other comprehensive income (loss). Comprehensive loss for the three months ended June 30, 2007 and 2006 was \$5,270 and \$2,997, respectively. Comprehensive loss for the six months ended June 30, 2007 and 2006 was \$8,130 and \$7,727, respectively.

#### Reclassifications

Certain prior period balances have been reclassified to conform to current period presentation.



## Recent accounting pronouncements

In September 2006, the Financial Accounting Standards Board (“FASB”) issued SFAS No. 157, *Fair Value Measurements* (SFAS No. 157). SFAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles and expands disclosures about fair value measurements. SFAS No. 157 emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. The provisions of SFAS No. 157 are effective for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. The Company has not yet determined the impact of the adoption of this statement on its financial statements.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities—Including an Amendment of FASB Statement No. 115* (“SFAS No. 159”). SFAS No. 159 permits entities to choose to measure many financial instruments and certain other items at fair value. The objective is to improve financial reporting by providing entities with the opportunity to mitigate volatility in reported earnings caused by measuring related assets and liabilities differently without having to apply complex hedge accounting provisions. The provisions of SFAS No. 159 are effective for fiscal years beginning after November 15, 2007. The Company has not yet determined the impact of adoption of this statement on its financial statements.

## 2. Inventories

Inventories consist of the following:

	June 30, 2007	December 31, 2006
Raw materials and supplies	\$ 2,252	\$ 2,133
Work-in-process	26,300	22,239
Finished goods	333	349
Total inventories	<u>\$ 28,885</u>	<u>\$ 24,721</u>

## 3. Property, plant and equipment

Property, plant and equipment consist of the following:

	June 30, 2007	December 31, 2006
Land and improvements	\$ 5,173	\$ 5,173
Buildings and leasehold improvements	25,146	25,074
Furniture and equipment	17,113	15,401
Software	4,578	4,499
Construction-in-progress	60,375	41,563
	112,385	91,710
Less: Accumulated depreciation and amortization	<u>(15,809)</u>	<u>(13,536)</u>
Total Property, plant and equipment, net	<u>\$ 96,576</u>	<u>\$ 78,174</u>

## 4. Stockholders' equity

### Preferred stock

The Company is authorized to issue up to 15,000,000 shares of preferred stock, \$0.001 par value per share (“Preferred Stock”). Any Preferred Stock issued may have dividend rates, voting rights, conversion privileges, redemption characteristics, and sinking fund requirements as approved by the Company’s Board of Directors. As of June 30, 2007, no Preferred Stock has been issued.

### Common stock

The Company currently has one class of common stock, \$0.001 par value per share (“Common Stock”), authorized and outstanding. The Company is authorized to issue up to 100,000,000 shares of Common Stock. Holders of Common Stock are entitled to one vote for each share of Common Stock held on all matters as may be provided by law.

On September 20, 2006, the Company's Board of Directors recommended to the stockholders of the Company an amendment of the Company's amended and restated certificate of incorporation, which the stockholders approved on October 27, 2006, that, among other things, reclassified the Company's previously outstanding class A common stock, \$0.01 par value per share, as Common Stock, increased the number of authorized shares of Common Stock to 100,000,000 shares and adjusted the par value of the Preferred Stock from \$0.01 par value per share to \$0.001 par value per share. The amendment became effective on October 27, 2006. On September 20, 2006, the Company's Board of Directors also authorized the pricing committee of the Board of Directors to effect a stock split of the Common Stock, in the form of a dividend of shares of Common Stock, and the Company's previously outstanding class B common stock, \$0.01 par value per share ("Class B Common Stock"), in the form of a dividend of shares of Class B Common Stock. The pricing committee subsequently declared a 2.8771-for-one stock split of Common Stock and Class B Common Stock effective as of October 27, 2006.

Each share of Class B Common Stock automatically converted into one share of Common Stock immediately prior to the closing of the Company's initial public offering on November 20, 2006. The par values, the number of authorized shares and all share and per share amounts in the consolidated financial statements have been retroactively adjusted to give effect to the filing of the certificate of amendment of the Company's amended and restated certificate of incorporation, the stock split and the conversion of the Class B Common Stock into Common Stock.

### Stock options

As of June 30, 2007, the Company has two stock-based employee compensation plans, the Emergent BioSolutions Inc. 2006 Stock Incentive Plan (the "2006 Plan") and the Emergent BioSolutions Employee Stock Option Plan (the "2004 Plan") (together, the "Emergent Plans"), under which the Company has granted options to purchase shares of Common Stock. The Emergent Plans have both incentive and non-qualified stock option features.

The 2006 Plan initially authorized the issuance of up to 1,089,461 shares of Common Stock. In addition, the 2006 Plan contains an "evergreen provision" that allows for increases in the number of shares authorized for issuance under the 2006 Plan in the first and third quarter of each year from 2007 through 2009. Each semi-annual increase in the number of shares will be equal to the lowest of: (1) a specified number of shares stipulated in the 2006 Plan; (2) a specified percentage of the aggregate number of shares outstanding; and (3) an amount determined by our Board of Directors. The maximum specified number of shares per semi-annual increase ranges from 428,700 to 937,900. The maximum specified percentage of outstanding shares for each semi-annual increase ranges from 1.5% to 3.0%. Accordingly, an aggregate of 1,503,405 shares of Common Stock are authorized for issuance under the 2006 Plan as of June 30, 2007. The Company has granted options to purchase a total of 1,323,261 shares of Common Stock under the 2006 Plan as of June 30, 2007. The maximum number of options that may be granted per year under the 2006 Plan to a single participant is 287,700. The exercise price of each incentive option must be not less than 100% of the fair market value of the shares on the date of grant. Options granted under the 2006 Plan have a vesting period of no more than 5 years and a contractual life of no more than 10 years. No shares remain reserved for issuance under the 2004 Plan.

Each option granted under the Emergent Plans becomes exercisable as specified in the relevant option agreement, and no option can be exercised after ten years from the date of grant. The following is a summary of stock option plan activity:

	2004 Plan		2006 Plan		Aggregate Intrinsic Value
	Number of Shares	Weighted-Average Exercise Price	Number of Shares	Weighted-Average Exercise Price	
Outstanding at December 31, 2006	2,936,389	\$ 2.53	1,030,500	\$ 10.13	
Granted	-	-	376,761	10.51	
Exercised	(2,134,234)	1.13	-	-	
Forfeited	(39,222)	2.73	(84,000)	10.58	
Cancelled	(5,214)	1.49	-	-	
Outstanding at June 30, 2007	757,719	\$ 6.46	1,323,261	\$ 10.21	\$ 3,024,765
Exercisable at June 30, 2007	388,496	\$ 6.98	-	\$ -	\$ 1,289,807

The weighted average remaining contractual term of options outstanding as of June 30, 2007 and December 31, 2006 was 5.9 and 3.2 years, respectively. The weighted average remaining contractual term of options exercisable as of June 30, 2007 and December 31, 2006 was 4.7 and 1.1 years, respectively.

The weighted average grant date fair value of options granted during the three and six months ended June 30, 2007 was \$3.62 and \$3.98, respectively. The total intrinsic value of options exercised during the three and six months ended June 30, 2007 was \$15,575 and \$20,359, respectively. The total fair value of shares vested during the three and six months ended June 30, 2007 was \$274 and \$383, respectively.

Stock-based compensation expense was recorded in the following financial statement line items:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2007	2006	2007	2006
Cost of sales	\$ 19	\$ -	\$ 34	\$ -
Research and development	90	14	175	21
Selling, general and administrative	522	179	951	268
Total stock-based compensation expense	\$ 631	\$ 193	\$ 1,160	\$ 289

A summary of the status of the Company's non-vested stock options at June 30, 2007 is presented below:

	Emergent 2004 Plan		Emergent 2006 Plan	
	Number of Shares	Weighted- Average Price	Number of Shares	Weighted- Average Price
Non-vested at December 31, 2006	537,532	\$ 7.45	1,030,500	\$ 10.13
Granted	-	-	376,761	10.51
Exercised	-	-	-	-
Vested	(129,948)	7.96	-	-
Forfeited	(38,361)	2.74	(84,000)	10.58
Non-vested at June 30, 2007	369,223	\$ 7.76	1,323,261	\$ 10.21

During the three and six months ended June 30, 2007, the Company received a tax benefit from stock options exercised of approximately \$5,100 and \$6,700, respectively.

## 5. Income taxes

Significant components of the provision for income taxes attributable to operations consist of the following:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2007	2006	2007	2006
Current				
Federal	\$ (5,004)	\$ (1,794)	\$ (7,956)	\$ (6,949)
State	69	-	103	100
Total current	(4,935)	(1,794)	(7,853)	(6,849)
Deferred				
Federal	1,568	(1,133)	2,343	(832)
State	250	(35)	277	(3)
Total deferred	1,818	(1,168)	2,620	(835)
Total benefit for income taxes	\$ (3,117)	\$ (2,962)	\$ (5,233)	\$ (7,684)

The estimated effective annual tax rate for the six months ended June 30, 2007 and 2006 was 41% and 50%, respectively. The estimated effective tax rate differs from statutory rates due primarily to the impact of foreign and state net operating losses and permanent differences, including incentive stock options.

In June 2006, the FASB issued FASB Interpretation 48, *Accounting for Uncertainty in Income Taxes — an interpretation of FASB Statement No. 109, Accounting for Income Taxes* ("FIN 48"). FIN 48 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 requires that the Company recognize in its financial statements the impact of a tax position if that position is more likely than not to be sustained on audit based on the technical merits of the position. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods and disclosure.

The Company adopted the provisions of FIN 48 on January 1, 2007. As a result of the implementation of FIN 48, the Company recognized, as a cumulative effect of change in accounting principle, a \$607 increase in tax-related liabilities for unrecognized tax benefits and a \$607 reduction to beginning retained earnings. The Company recognizes interest in interest expense and recognizes potential penalties related to unrecognized tax benefits in selling, general and administrative expense. The Company accrued approximately \$172 for the payment of interest and penalties as of June 30, 2007.

As of January 1, 2007, the Company recorded approximately \$607 for unrecognized tax benefits, including accrued interest and penalties, related to prior years. During the six months ended June 30, 2007, the Company accrued \$37 of interest expense related to unrecognized tax benefits of prior years. Substantially all of these reserves would impact the effective tax rate if released into income. Of the total unrecognized tax benefits recorded at June 30, 2007, \$60 is classified as a current liability and \$584 is classified as a non-current liability on the balance sheet. As of June 30, 2007, \$426 of unrecognized tax benefits will reverse within the next twelve months.

The Company's federal and state income tax returns for the tax years 2003, 2004, 2005 and 2006 remain open to examination. The Company's tax returns in the United Kingdom remain open to examination for the tax years 2001, 2002, 2003, 2004, 2005 and 2006, and tax returns in Germany remain open indefinitely. A federal income tax audit of the Company's tax return for the 2004 tax year was completed in March 2007. As a result of this audit, the Company paid an assessment of \$722, including \$96 of interest. The Company is the subject of an ongoing federal income tax audit for the tax year ended December 31, 2005. The financial statement impact of the audit has been estimated at approximately \$257, including \$27 of interest. This amount has been accrued as of June 30, 2007.

## 6. Litigation

From time to time, the Company is involved in product liability claims and other litigation considered normal in the nature of its business. The Company does not believe that any such proceedings would have a material, adverse effect on the results of its operations. For claims filed against the Company for use of BioThrax by the DoD, the Company expects to rely on contractual indemnification provisions with the DoD, statutory protections and product liability insurance to limit its potential liability resulting from the pending lawsuits.

## 7. Segment information

The Company operates in two business segments: biodefense and commercial. In the biodefense business, the Company develops, manufactures and commercializes immunobiotics, consisting of vaccines and therapeutics, for use against biological agents that are potential weapons of bioterrorism and biowarfare. Revenues in this segment relate to the Company's FDA-approved product, BioThrax. In the commercial business, the Company develops immunobiotics for use against infectious diseases that have resulted in significant unmet or underserved public health needs. Revenues in this segment consist predominantly of milestone payments and development and grant revenues received under collaboration and grant arrangements. The "All Other" segment relates to the general operating costs of the business and includes costs of the centralized services departments that are not allocated to the other segments. The assets in this segment consist primarily of cash and fixed assets.

	Reportable Segments				Total
	Biodefense	Commercial	All Other		
<b>Six Months Ended June 30, 2007</b>					
External revenue	\$ 47,964	\$ 1,670	\$ -	\$ -	\$ 49,634
Inter-segment revenue (expense)	-	-	-	-	-
Research and development	16,183	11,551	1,178	-	28,912
Interest income	-	-	1,473	-	1,473
Interest expense	-	-	(47)	-	(47)
Depreciation and amortization	1,685	444	203	-	2,332
Net income (loss)	9,353	(13,533)	(3,470)	-	(7,650)
Assets	126,462	16,425	64,109	-	206,996
Expenditures for long-lived assets	25,251	632	1,460	-	27,343
<b>Six Months Ended June 30, 2006</b>					
External revenue	\$ 20,149	\$ 3,520	\$ -	\$ -	\$ 23,669
Inter-segment revenue	-	-	-	-	-
Research and development	7,174	8,274	248	-	15,696
Interest income	-	-	326	-	326
Interest expense	-	-	(232)	-	(232)
Depreciation and amortization	1,539	378	85	-	2,002
Net income (loss)	(868)	(6,062)	(760)	-	(7,690)
Assets	63,101	16,009	40,003	-	119,113
Expenditures for long-lived assets	3,504	1,633	9,284	-	14,421

The accounting policies of the segments are the same as those described in Note 1 — Summary of significant accounting policies. There are no inter-segment transactions.

## 8. Related party transactions

The Company has engaged Wilmer Cutler Pickering Hale and Dorr LLP ("WilmerHale") to provide legal services. The Company's Senior Vice President Legal Affairs and General Counsel is married to a partner at WilmerHale, who has not participated in providing legal services to the Company. The Company has incurred fees for legal services rendered by WilmerHale of approximately \$544 in 2007. Of this amount, approximately \$194 was in accounts payable at June 30, 2007.

For the six months ended June 30, 2007 and 2006, the Company paid approximately \$110 and \$246, respectively, in consulting, lease and transportation agreements with various persons or entities affiliated with the Chief Executive Officer or members of the Board of Directors. Of these amounts, approximately \$2 was in accounts payable at both June 30, 2007 and 2006. The Company currently has an agreement with a director to perform corporate strategic issues consultation and direct project support to the marketing and communications group, and an agreement with a company owned by the Chief Executive Officer to provide transportation and logistical support.

## 9. Indebtedness

On June 8, 2007, the Company entered into a loan agreement with Fifth Third Bank, whereby Fifth Third Bank agreed to extend to the Company a revolving line of credit up to \$15,000. Collateral for this loan consist of accounts receivable under supply contracts with the DoD and HHS. The Company can borrow under this line of credit through May 2008, at which time the agreement expires. No borrowings under this revolving line of credit were outstanding as of June 30, 2007.

On June 29, 2007, the Company entered into a loan agreement with HSBC Realty Credit Corporation (USA) ("HSBC") under which HSBC provided the Company with a term loan of \$30 million. This loan replaced a prior loan arrangement with HSBC under which HSBC agreed to loan the Company \$15 million, consisting of a \$10 million term loan and a \$5 million revolving line of credit. On July 3, 2007, the Company received and recorded \$14,806 in net proceeds related to the new loan agreement. Under the new loan agreement, the Company is required to make monthly payments in the amount of \$250 in principal plus accrued interest beginning in August 2007, with a residual principal payment due upon maturity in June 2012. Interest on the loan accrues at an annual rate of LIBOR plus 2.75%. Payment of the loan is secured by substantially all of the assets of Emergent BioDefense Operations, other than accounts receivable under BioThrax supply contracts with the DoD and HHS that are pledged as collateral to secure the \$15 million revolving line of credit with Fifth Third Bank.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the related notes and other financial information included elsewhere in this quarterly report on Form 10-Q. Some of the information contained in this discussion and analysis or set forth elsewhere in this quarterly report on Form 10-Q, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. You should review the "Special Note Regarding Forward-Looking Statements" and the "Risk Factors" section of this quarterly report for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.*

### Overview

We are a biopharmaceutical company focused on the development, manufacture and commercialization of immunobiotics, consisting of vaccines and therapeutics that assist the body's immune system to prevent or treat disease. We operate in two business segments: biodefense and commercial. Our biodefense business focuses on immunobiotics for use against biological agents that are potential weapons of bioterrorism and biowarfare. Our marketed product, BioThrax® (Anthrax Vaccine Adsorbed), or BioThrax, is the only vaccine approved by the U.S. Food and Drug Administration, or FDA, for the prevention of anthrax infection. Our commercial business focuses on immunobiotics for use against infectious diseases and other medical conditions that have resulted in significant unmet or underserved public health needs. We expect to continue to seek to obtain marketed products and development stage product candidates through acquisitions and licensing arrangements with third parties.

Our biodefense business has generated net income for each of the last three fiscal years. However, in our commercial business, we have not received approval to market any of our product candidates and, to date, have not received any product sales revenues.

Our only sources of revenue in our commercial business are development grant funding and an upfront license fee and additional payments for development work under a collaboration agreement with Sanofi Pasteur. As a result, our commercial business has incurred a net loss for each of the last three fiscal years.

### **Biodefense**

We have derived and expect for the foreseeable future to continue to derive substantially all of our revenues from BioThrax sales to the U.S. Department of Defense, or the DoD, and the U.S. Department of Health and Human Services, or HHS. Our total revenues from BioThrax sales were \$127.3 million in 2005, \$148.0 million in 2006 and \$48.0 million for the six months ended June 30, 2007. We are focused on increasing sales of BioThrax to U.S. government customers, expanding the market for BioThrax to other customers and pursuing label expansions and improvements for BioThrax.

In addition to BioThrax, our biodefense product portfolio includes multiple biodefense product candidates in preclinical development and a next generation anthrax vaccine program, which includes a product candidate in Phase I clinical development. We are independently developing an anthrax immune globulin candidate, in part with funding from the National Institute of Allergy and Infectious Diseases, or the NIAID. We have entered into collaboration agreements with the U.K. Health Protection Agency, or HPA, for the development of a recombinant bivalent botulinum vaccine candidate and a new botulinum toxoid vaccine that we plan to use as the basis for a botulinum immune globulin candidate. We are actively pursuing additional government sponsored development grants and working with various government agencies to encourage them to conduct studies relating to BioThrax and our other biodefense product candidates.

### **Commercial**

Our commercial product portfolio includes a typhoid vaccine candidate and a hepatitis B therapeutic vaccine candidate, both of which are in Phase II clinical development, a group B streptococcus vaccine candidate in Phase I clinical development and a chlamydia vaccine candidate and a meningitis B vaccine candidate, both of which are in preclinical development.

We plan to encourage government entities and non-government and philanthropic organizations to provide development funding for, or to conduct clinical studies of, one or more of our commercial product candidates. For example, the Wellcome Trust provided funding for the Phase I clinical trial of our typhoid vaccine candidate in Vietnam and is providing funding for the Phase II clinical trial of this vaccine candidate in Vietnam. In addition, the NIAID agreed to sponsor the Phase I clinical development of our group B streptococcus vaccine candidate.

### **Manufacturing Infrastructure**

We operate vaccine manufacturing facilities at a multi-building campus on approximately 12.5 acres in Lansing. To augment our existing manufacturing capabilities, we are constructing a new 50,000 square foot manufacturing facility on our Lansing campus. We expect the facility to cost approximately \$75 million when complete, including approximately \$55 million for the building and associated capital equipment, with the balance related to validation and qualification activities required for regulatory approval and initiation of manufacturing. We have incurred costs of approximately \$56 million for these purposes through June 2007.

We substantially completed construction of this facility in 2006, and expect to conduct installation, validation and qualification activities required for regulatory approval during 2007 and 2008. This new facility is a large scale manufacturing plant that we can use to produce multiple vaccine products, subject to complying with appropriate change-over procedures. We also own two buildings in Frederick that are available to support our future manufacturing requirements. We have incurred costs of approximately \$2 million through June 2007 related to initial engineering design and preliminary utility build out of these facilities. Because we are in the preliminary planning stages of our Frederick build out, we cannot reasonably estimate the timing and costs that would be necessary to complete this project. If we proceed with this project, we expect the costs to be substantial and to likely require external sources of funds to finance the project. We may elect to lease all or a substantial portion of one of these facilities to third parties.

### **Critical Accounting Policies and Estimates**

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses.

On an ongoing basis, we evaluate our estimates and judgments, including those related to accrued expenses, fair value of stock related to stock-based compensation and income taxes. We based 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 values of assets and liabilities and the reported amounts of revenues and expenses that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our financial statements.

#### **Revenue Recognition**

We recognize revenues from product sales in accordance with Staff Accounting Bulletin No. 104, *Revenue Recognition*, or SAB 104. SAB 104 requires recognition of revenues from product sales that require no continuing performance on our part if four basic criteria have been met:

- there is persuasive evidence of an arrangement;
- delivery has occurred or title has passed to our customer based on contract terms;
- the fee is fixed and determinable and no further obligation exists; and
- collectibility is reasonably assured.

We have generated BioThrax sales revenues under U.S. government contracts with the DoD and HHS. Under the DoD contract, we invoice the DoD for progress payments upon reaching contractually specified stages in the manufacture of BioThrax. We record as deferred revenue the full amount of each progress payment invoice that we submit to the DoD. The earnings process is complete upon FDA release of the product for sale and distribution. Following FDA release of the product, we segregate the product for later shipment and recognize as period revenue all deferred revenue related to the released product in accordance with the “bill and hold” sale requirements under SAB 104. At that time, we also invoice the DoD for the final progress payment and recognize the amount of that invoice as period revenue. Under previous contracts with HHS, we invoiced HHS and recognized the related revenues upon delivery of the product to the government carrier, at which time title to the product passed to HHS.

Under the collaboration agreement that we entered into with Sanofi Pasteur in May 2006 for our meningitis B vaccine candidate, we received an upfront license fee and are entitled to additional payments for development work under the collaboration and upon achieving contractually defined development and commercialization milestones. We evaluated the various components of the collaboration in accordance with Emerging Issues Task Force, or EITF, Issue No. 00-21, *Accounting for Revenue Arrangements with Multiple Deliverables*, or EITF No. 00-21, which addresses whether, for revenue recognition purposes, there is one or several units of accounting in an arrangement. We concluded that under EITF No. 00-21, the upfront license fee, the development work and the milestone payments under our agreement with Sanofi Pasteur should be accounted for as a single unit of accounting.

We recognize amounts received under this agreement over the estimated development period as we perform services. We recorded the amount of the upfront license fee as deferred revenue. We are recognizing this revenue over the estimated development period under the contract, currently estimated at seven years, as adjusted from time to time for any delays or acceleration in the development of the product candidate. Under the collaboration agreement, we are entitled to payments up to specified levels for development work we perform for Sanofi Pasteur. We invoice Sanofi Pasteur in advance of each quarter for the estimated work to occur in the upcoming quarter. We record the invoice amount as deferred revenue. As services are completed, we recognize the amount of the related deferred revenue as period revenues. Under the collaboration agreement, we also will be entitled to royalty payments on any future net sales of this product candidate.

From time to time, we are awarded reimbursement contracts for services and development grant contracts with government entities and non-government and philanthropic organizations. Under these contracts, we typically are reimbursed for our costs in connection with specific development activities and may also be entitled to additional fees. We record the reimbursement of our costs and any associated fees as contract and grant revenues and the associated costs as research and development expense. We issue invoices under these contracts after we incur the reimbursable costs. We recognize revenue upon invoicing the sponsoring organization.

#### **Inventories**

Inventories are stated at the lower of cost or market, with cost being determined using a standard cost method, which approximates average cost. Average cost consists primarily of material, labor and manufacturing overhead expenses and includes the services and products of third party suppliers.

We analyze our inventory levels quarterly and write down in the applicable period inventory that has become obsolete, inventory that has a cost basis in excess of its expected net realizable value and inventory in excess of expected customer demand. We also write off in the applicable period the costs related to expired inventory. We capitalize the costs associated with the manufacture of BioThrax as inventory from the initiation of the manufacturing process through the completion of manufacturing, labeling and packaging.

### **Income Taxes**

We account for income taxes in accordance with Statement of Financial Accounting Standards No. 109, *Accounting for Income Taxes*, or SFAS No. 109. Under the asset and liability method of SFAS No. 109, deferred tax assets and liabilities are determined based on the differences between the financial reporting and the tax bases of assets and liabilities and are measured using the tax rates and laws that are expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. A net deferred tax asset or liability is reported in the balance sheet. Our deferred tax assets include the unamortized portion of in-process research and development expenses, the anticipated future benefit of the net operating losses that we have incurred and other timing differences between the financial reporting basis of assets and liabilities.

We have historically incurred net operating losses for income tax purposes in some states and in some foreign jurisdictions, primarily the United Kingdom. The amount of the deferred tax assets on our balance sheet reflects our expectations regarding our ability to use our net operating losses to offset future taxable income. The applicable tax rules in particular jurisdictions limit our ability to use net operating losses as a result of ownership changes. In particular, we believe that these rules will significantly limit our ability to use net operating losses generated by Microscience Limited, or Microscience, and Antex Biologics, Inc., or Antex, prior to our acquisition of Microscience in June 2005 and our acquisition of substantially all of the assets of Antex in May 2003.

We review our deferred tax assets on a quarterly basis to assess our ability to realize the benefit from these deferred tax assets. If we determine that it is more likely than not that the amount of our expected future taxable income will not be sufficient to allow us to fully utilize our deferred tax assets, we increase our valuation allowance against deferred tax assets by recording a provision for income taxes on our income statement, which reduces net income, or increases net loss, for that period and reduces our deferred tax assets on our balance sheet. If we determine that the amount of our expected future taxable income will allow us to utilize net operating losses in excess of our net deferred tax assets, we reduce our valuation allowance by recording a benefit from income taxes on our income statement, which increases net income, or reduces net loss, for that period and increases our deferred tax assets on our balance sheet.

We account for uncertainty in income taxes in accordance with Financial Accounting Standards Board, or FASB, Interpretation 48, *Accounting for Uncertainty in Income Taxes — An Interpretation of FASB Statement No. 109, Accounting for Income Taxes*, or FIN 48. FIN 48 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Under FIN 48, the Company recognizes in its financial statements the impact of a tax position if that position is more likely than not of being sustained on audit, based on the technical merits of the position. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods and disclosure.

### **Stock-based Compensation**

We adopted Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment*, or SFAS No. 123(R), on January 1, 2006 using the modified prospective method. SFAS No. 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their estimated fair values.

We value our share-based payment transactions using the Black-Scholes valuation model. Under the modified prospective method, we recognize compensation cost in our financial statements for all awards granted after January 1, 2006 and for all awards outstanding as of January 1, 2006 for which the requisite service had not been rendered as of the date of adoption. We measure the amount of compensation cost based on the fair value of the underlying equity award on the date of grant. We recognize compensation cost over the period that an employee provides service in exchange for the award. We recorded stock-based compensation expense of \$631 and \$1,160 for the three and six months ended June 30, 2007, respectively, and \$193 and \$289 for the three and six months ended June 30, 2006, respectively.



The effect of adopting SFAS No. 123(R) on net loss and net loss per share is not necessarily representative of the effects in future years due to, among other things, the vesting period of the stock options and the fair value of additional stock option grants in future years. Based on options granted to employees as of June 30, 2007, total compensation expense not yet recognized related to unvested options is approximately \$3.4 million, after tax. We expect to recognize that expense over a weighted average period of 3.0 years. Based on options granted to employees as of June 30, 2007, we expect to recognize amortization of stock-based compensation, after tax, of approximately \$0.8 million during the remainder of 2007, \$1.4 million in 2008, \$1.1 million in 2009, and \$86,000 in 2010.

## **Financial Operations Overview**

### **Revenues**

Since 1998, we have been a party to two supply agreements for BioThrax with the DoD. Pursuant to these contracts, we have supplied approximately 10 million doses of BioThrax through June 2007 for immunization of military personnel. Our most recent contract with the DoD, as amended in October 2006, provided for the supply of a minimum of approximately 1.5 million doses of BioThrax to the DoD through September 2007. As a result of a further amendment of the DoD contract in June 2007, we completed delivery of all doses to the DoD under this contract prior to June 30, 2007.

On May 7, 2007, the DoD issued a request for proposal, or RFP, for the manufacture, storage and delivery of BioThrax during a base contract period from October 2007 through September 2008, with three one-year option periods through September 2011. The RFP seeks a minimum of 1.0 million doses and a maximum of 3.6 million doses of BioThrax during the base year with options to purchase a minimum of 1.0 million doses and a maximum of 3.6 million doses in each of the three option periods. The RFP also seeks up to an additional 70,000 doses of BioThrax in the base year and in each of the three option years for foreign military sales. We submitted a response to this RFP on July 3, 2007.

Since May 2005, we have supplied 10.0 million doses of BioThrax to HHS for inclusion in the strategic national stockpile, or SNS, under a base contract for 5.0 million doses for a fixed price of \$123 million and a modification for an additional 5.0 million doses for a fixed price of \$120 million. We completed delivery of all doses to HHS under this contract in February 2007. On May 3, 2007, HHS issued an RFP for the procurement of another 10.4 million doses of BioThrax during a base contract period from July 2007 through September 2010, with the option for HHS to acquire up to an additional 8.35 million doses of BioThrax during the same period. We submitted a response to this RFP on June 8, 2007.

We have provided responses to the RFPs and entered into negotiations with both the DoD and HHS with respect to the entry into new agreements. We currently anticipate that we will be able to enter into at least one of these agreements before the end of the third quarter. However, the negotiating process is complex and involves a number of factors, and it is possible that neither agreement will be consummated prior to the end of the third quarter.

In May 2006, we entered into a collaboration agreement with Sanofi Pasteur relating to the development and commercialization of our meningitis B vaccine candidate under which we granted Sanofi Pasteur an exclusive, worldwide license under our proprietary technology to develop and commercialize our meningitis B vaccine candidate and received a \$3.8 million upfront license fee. This agreement also provides for a series of milestone payments upon the achievement of specified development and commercialization objectives, payments for development work under the collaboration and royalties on net sales of this product. We deferred the upfront license fee, milestone payments and development reimbursement payments under this agreement, and record revenue in accordance with our revenue recognition policies.

Our revenue, operating results and profitability have varied, and we expect that they will continue to vary, on a quarterly basis, primarily because of the timing of our fulfilling orders for BioThrax and work done under new and existing contracts and grants.

### **Cost of Product Sales**

The primary expense that we incur to deliver BioThrax to our customers is manufacturing costs, which are primarily fixed costs. These fixed manufacturing costs consist of attributable facilities, utilities and salaries and personnel-related expenses for indirect manufacturing support staff. Variable manufacturing costs for BioThrax consist primarily of costs for materials, direct labor and contract filling operations. We expect our manufacturing costs to remain relatively stable during 2007.

We determine the cost of product sales for doses sold for a period based on the average manufacturing cost per dose for the period in which the doses sold were produced. We calculate the average manufacturing cost per dose by dividing the actual costs of manufacturing in the applicable period by the number of units produced in that period. In addition to the fixed and variable manufacturing costs described above, the average manufacturing cost per dose depends on the efficiency of the manufacturing process, utilization of available manufacturing capacity and the production yield for the period of production.

### Research and Development Expenses

We expense research and development costs as incurred. Our research and development expenses consist primarily of:

- salaries and related expenses for personnel;
- fees to professional service providers for, among other things, preclinical and analytical testing, independently monitoring our clinical trials and acquiring and evaluating data from our clinical trials;
- costs of contract manufacturing services;
- costs of materials used in clinical trials and research and development;
- depreciation of capital assets used to develop our products; and
- operating costs, such as the operating cost of facilities and the legal costs of pursuing patent protection of our intellectual property.

The successful development of our product candidates is highly uncertain. We believe that significant investment in product development is a competitive necessity and plan to continue these investments in order to be in a position to realize the potential of our product candidates. We cannot reasonably estimate or know the nature, timing and projected costs of the efforts that will be necessary to complete the remainder of the development for our product candidates, or the period, if any, in which material net cash inflows may commence from any of our product candidates. This is due to the numerous risks and uncertainties associated with developing biological products, including the uncertainty of:

- the scope, rate of progress and expense of our clinical trials and other research and development activities;
- our ability to obtain adequate supplies of our product candidates required for later stage clinical trials, including from third party manufacturers;
- the potential benefits of our product candidates over other products;
- our ability to market, commercialize and achieve market acceptance for any of our product candidates that we are developing or may develop in the future;
- future clinical trial results;
- the terms and timing of regulatory approvals; and
- the expense of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights.

A change in the outcome of any of these variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate.

We expect to continue to incur significant development spending for all of our biodefense product candidates as our product development activities continue and we prepare for regulatory submissions and other regulatory activities. We expect our development expenses in our commercial business to increase in connection with our ongoing activities, particularly as we conduct additional and later stage clinical trials for our product candidates.

We expect that the magnitude of our research and development spending will be dependent upon such factors as the results from our ongoing preclinical studies and clinical trials, the size, structure and duration of any follow-on clinical program that we may initiate, costs associated with manufacturing our product candidates on a large scale basis for later stage clinical trials, our ability to use data generated by government agencies, such as the ongoing studies by the Centers for Disease Control and Prevention, or the CDC, with BioThrax, and our ability to rely upon and utilize clinical and non-clinical data, such as the data generated by the CDC from use of the pentavalent botulinum toxoid vaccine previously manufactured by the State of Michigan.

## **Selling, General and Administrative Expenses**

Selling, general and administrative expenses consist primarily of salaries and other related costs for personnel serving the executive, sales and marketing, business development, finance, accounting, information technology, legal and human resource functions. Other costs include facility costs not otherwise included in cost of product sales or research and development expense and professional fees for legal and accounting services. We currently market and sell BioThrax directly to the DoD and HHS with a small, targeted marketing and sales group. As we seek to broaden the market for BioThrax and if we receive marketing approval for additional products, we expect that we will increase our spending for marketing and sales activities.

### **Total Other Income (Expense)**

Total other income (expense) consists principally of interest income and interest expense. We earn interest on our cash, cash equivalents and short-term investments, and we incur interest expense on our indebtedness. We capitalize interest expense in accordance with Statement of Financial Accounting Standards No. 34, *Capitalization of Interest Cost*, based on the cost of major ongoing projects which have not yet been placed in service, such as our new manufacturing facility. Our total interest cost will increase in future periods as compared to prior periods as a result of the mortgage loan that we entered into in April 2006 and the term loans that we entered into in August 2006 and June 2007, as well as any borrowings under our revolving line of credit. In addition, some of our existing debt arrangements provide for increasing amortization of principal payments in future periods.

## **Results of Operations**

### **Quarter Ended June 30, 2007 Compared to Quarter Ended June 30, 2006**

#### ***Revenues***

Product sales revenues in our biodefense segment increased by \$14.3 million to \$22.5 million for the three months ended June 30, 2007 from \$8.2 million for the three months ended June 30, 2006. This increase in product sales revenues was primarily due to a 169% increase in the number of doses of BioThrax delivered and a 2% increase in the average sales price per dose. Product sales revenues for the three months ended June 30, 2007 consisted of BioThrax sales to the DoD of \$22.5 million. Product sales revenues for the three months ended June 30, 2006 consisted of BioThrax sales to HHS of \$6.3 million and to the DoD of \$1.9 million.

Contracts and grant revenues in our commercial segment decreased by \$2.6 million to \$668,000 for the three months ended June 30, 2007 from \$3.2 million for the three months ended June 30, 2006. Contracts and grant revenues for the three months ended June 30, 2007 consisted of \$668,000 from recognition of the upfront payment received in 2006 and development program revenue from the Sanofi Pasteur collaboration. Contracts and grants revenues for the three months ended June 30, 2006 consisted of \$1.8 million from recognition of the upfront payment received in 2006 and development program revenue from the Sanofi Pasteur collaboration, and \$1.5 million in grant revenue from the Wellcome Trust.

#### ***Cost of Product Sales***

Cost of product sales increased by \$4.3 million to \$5.8 million for the three months ended June 30, 2007 from \$1.5 million for the three months ended June 30, 2006. This increase was primarily attributable to a 169% increase in the number of doses delivered, coupled with increased costs associated with our annual production shut-down, the related impact on production yield, and the write-off of waste during the period.

#### ***Research and Development Expense***

Research and development expenses increased by \$6.6 million, or 99%, to \$13.3 million for the three months ended June 30, 2007 from \$6.7 million for the three months ended June 30, 2006. This increase reflects increased expenses of \$3.8 million in the biodefense segment, \$2.4 million in the commercial segment, and approximately \$472,000 in other research and development expense.

The increase in biodefense spending, detailed in the table below, was attributable to increased efforts on all our biodefense programs as we completed various studies and began subsequent studies and trials. This increase primarily reflects additional personnel and contract service costs.

The increase in spending for BioThrax enhancements is related to conducting animal efficacy studies to support applications for marketing approval of these enhancements, which we expect to submit to the FDA in late 2008 or 2009. The increase in spending for our immune globulin candidate development programs related primarily to costs associated with the plasma collection and fractionation program for our anthrax immune globulin. The increase in spending for the recombinant botulinum vaccine program, which is in preclinical development, resulted from advancing this program to the process development stage. The increase in spending for the next generation anthrax vaccine program, which has product candidates in preclinical and Phase I clinical development, resulted from feasibility studies and formulation development of product candidates. We continue to assess, and may alter, our future development plans for our products based on the interest of the U.S. government or other non-governmental organizations in providing funding for further development or procurement.

The increase in commercial spending, detailed in the table below, primarily reflects additional personnel and contract service costs. The spending in 2007 for our typhoid vaccine candidate resulted from the ongoing Phase II study in Vietnam, which commenced in the first quarter 2007. The spending in 2006 for typhoid resulted from ongoing work for the Phase I clinical trial in Vietnam, completed in the second quarter of 2006. The spending in 2007 for our hepatitis B therapeutic vaccine candidate resulted from conducting our Phase II clinical trial which commenced in the first quarter 2007. The spending in 2007 for our group B streptococcus vaccine candidate resulted from costs associated with preparation for Phase I clinical trials for two of the protein components of the vaccine candidate, which the NIAID has agreed to sponsor. Both our chlamydia vaccine and meningitis B vaccine candidates are in preclinical development.

The increase in other research and development expenses was primarily attributable to spending associated with preclinical programs that we acquired from ViVacs GmbH, or ViVacs, in July 2006.

Our principal research and development expenses for the three months ended June 30, 2007 and 2006 are shown in the following table:

(in thousands)	Three Months Ended	
	June 30,	
	2007	2006
<b>Biodefense:</b>		
BioThrax enhancements	\$ 1,172	\$ 519
Immune globulin	3,606	1,327
Recombinant bivalent botulinum vaccine	1,017	241
Next generation anthrax vaccine	436	351
Total biodefense	6,231	2,438
<b>Commercial:</b>		
Typhoid vaccine	2,738	1,757
Hepatitis B therapeutic vaccine	1,327	157
Group B streptococcus vaccine	1,431	1,308
Chlamydia vaccine	939	238
Meningitis B vaccine	130	729
Total commercial	6,565	4,189
Other	546	74
<b>Total</b>	<b>\$ 13,342</b>	<b>\$ 6,701</b>

#### ***Selling, General and Administrative Expenses***

Selling, general and administrative expenses increased by \$3.2 million, or 34%, to \$12.7 million for the three months ended June 30, 2007 from \$9.4 million for the three months ended June 30, 2006. Selling, general and administrative expenses related to our biodefense segment increased by \$2.4 million, or 32%, to \$9.8 million for the three months ended June 30, 2007 from \$7.4 million for the three months ended June 30, 2006.

Selling, general and administrative expenses related to our commercial segment increased by \$858,000, or 42%, to \$2.9 million for the three months ended June 30, 2007 from \$2.0 million for the three months ended June 30, 2006. The increase in both segments was primarily attributable to an increase in general and administrative expenses of approximately \$2.5 million resulting from the addition of personnel related to our transition to a publicly traded company and increased legal and other professional services for our headquarters organization.

### ***Total Other Income (Expense)***

Total other income increased by \$401,000 to \$579,000 for the three months ended June 30, 2007 from \$178,000 for the three months ended June 30, 2006. This increase resulted primarily from an increase in interest income of \$476,000 as a result of higher investment return on increased average cash balances, including the net proceeds of our initial public offering, a decrease in interest expense of \$41,000 related primarily to the capitalization of interest based on the cost of major ongoing capital projects which have not yet been placed in service, and a decrease in other income of \$116,000.

### ***Income Taxes***

Benefit from income taxes increased by \$155,000 to \$3.1 million for the three months ended June 30, 2007 from \$3.0 million for the three months ended June 30, 2006. Our effective tax rate was 39% for the three months ended June 30, 2007 and 49% for the three months ended June 30, 2006. The effective estimated annual tax rate differs from statutory rates due primarily to the impact of foreign and state net operating losses and permanent differences, including incentive stock options. The benefit from income taxes also reflects research and development tax credits of \$289,000 for the three months ended June 30, 2007 and \$0 for the three months ended June 30, 2006.

### **Six Months Ended June 30, 2007 Compared to Six Months Ended June 30, 2006**

#### ***Revenues***

Product sales revenues in our biodefense segment increased by \$27.6 million to \$48.0 million for the six months ended June 30, 2007 from \$20.4 million for the six months ended June 30, 2006. This increase in product sales revenues was primarily due to a 143% increase in the number of doses of BioThrax delivered, partially offset by a 3% decrease in average sales price per dose.

Product sales revenues for the six months ended June 30, 2007 consisted of BioThrax sales to HHS of \$21.7 million and to the DoD of \$26.2 million. Product sales revenues for the six months ended June 30, 2006 consisted of BioThrax sales to HHS of \$17.9 million, sales to the DoD of \$1.9 million and aggregate international and other sales of \$630,000.

Contracts and grant revenues in our commercial segment decreased by \$1.6 million to \$1.7 million for the six months ended June 30, 2007 from \$3.3 million for the six months ended June 30, 2006. Contracts and grant revenues for the six months ended June 30, 2007 consisted of \$1.7 million from recognition of the upfront payment received in 2006 and development program revenue from the Sanofi Pasteur collaboration. Contracts and grant revenues for the six months ended June 30, 2006 consisted of \$1.8 million from recognition of the upfront payment and development program revenues from the Sanofi Pasteur collaboration and \$1.5 million in grant revenue from the Wellcome Trust.

#### ***Cost of Product Sales***

Cost of product sales increased by \$7.0 million to \$11.4 million for the six months ended June 30, 2007 from \$4.4 million for the six months ended June 30, 2006. This increase was primarily attributable to a 143% increase in the number of doses delivered, coupled with increased costs associated with our annual production shut-down, the related impact on production yield, and the write-off of waste during the period.

#### ***Research and Development Expense***

Research and development expenses increased by \$13.2 million, or 84%, to \$28.9 million for the six months ended June 30, 2007 from \$15.7 million for the six months ended June 30, 2006. This increase reflects increased expenses of \$9.1 million in the biodefense segment, \$3.3 million in the commercial segment, and approximately \$791,000 million in other research and development expense.

The increase in biodefense spending, detailed in the table below, was attributable to increased efforts on all our biodefense programs as we completed various studies and began subsequent studies and trials. This increase primarily reflects additional personnel and contract service costs. The increase in spending for BioThrax enhancements is related to preparing for and conducting animal efficacy studies to support applications for marketing approval of these enhancements, which we expect to submit to the FDA in late 2008 or 2009. The increase in spending for our immune globulin candidate development programs related primarily to costs associated with the plasma collection and fractionation program for our anthrax immune globulin.

The increase in spending for the recombinant botulinum vaccine program, which is in preclinical development, resulted from advancing this program to the process development stage and the manufacture of clinical trial material. The increase in spending for the next generation anthrax vaccine program, which has product candidates in preclinical and Phase I clinical development, resulted from feasibility studies and formulation development of product candidates.

The increase in commercial spending, detailed in the table below, primarily reflects additional personnel and contract service costs. The spending in 2007 for our typhoid vaccine candidate resulted from the ongoing Phase II study in Vietnam, which commenced in the first quarter 2007. The spending in 2006 for typhoid resulted from ongoing work for the Phase I clinical trial in Vietnam, completed in the second quarter of 2006. The spending in 2007 for our hepatitis B therapeutic vaccine candidate resulted from preparing for and initiating our Phase II clinical trial which commenced in the first quarter 2007. The spending in 2007 for our group B streptococcus vaccine candidate resulted from costs associated with preparation for Phase I clinical trials for two of the protein components of the vaccine candidate, which the NIAID has agreed to sponsor. Both our chlamydia vaccine and meningitis B vaccine candidates are in preclinical development.

The increase in other research and development expenses was primarily attributable to spending associated with preclinical programs that we acquired from ViVacs in July 2006.

Our principal research and development expenses for the six months ended June 30, 2007 and 2006 are shown in the following table:

(in thousands)	Six Months Ended	
	June 30,	
	2007	2006
<b>Biodefense:</b>		
BioThrax enhancements	\$ 3,201	\$ 2,264
Immune globulin	9,560	3,858
Recombinant bivalent botulinum vaccine	2,414	701
Next generation anthrax vaccine	1,147	351
Total biodefense	16,322	7,174
<b>Commercial:</b>		
Typhoid vaccine	4,522	3,243
Hepatitis B therapeutic vaccine	2,468	1,206
Group B streptococcus vaccine	2,580	1,835
Chlamydia vaccine	1,394	647
Meningitis B vaccine	587	1,343
Total commercial	11,551	8,274
Other	1,039	248
<b>Total</b>	<b>\$ 28,912</b>	<b>\$ 15,696</b>

#### ***Selling, General and Administrative Expenses***

Selling, general and administrative expenses increased by \$4.7 million, or 24%, to \$23.9 million for the six months ended June 30, 2007 from \$19.2 million for the six months ended June 30, 2006. Selling, general and administrative expenses related to our biodefense segment increased by \$2.8, or 18%, to \$18.6 million for the six months ended June 30, 2007 from \$15.8 million for the six months ended June 30, 2006.

Selling, general and administrative expenses related to our commercial segment increased by \$1.9 million, or 55%, to \$5.2 million for the six months ended June 30, 2007 from \$3.3 million for the six months ended June 30, 2006. The increase in both segments was primarily attributable to an increase in general and administrative expenses of approximately \$3.7 million resulting from the addition of personnel related to our transition to a publicly traded company and increased legal and other professional services for our headquarters organization.

#### ***Total Other Income (Expense)***

Total other income increased by \$1.4 million to \$1.6 million for the six months ended June 30, 2007 from \$218,000 for the six months ended June 30, 2006. This increase resulted primarily from an increase in interest income of \$1.1 million as a result of higher investment return on increased average cash balances, including the net proceeds of our initial public offering, a decrease in interest expense of \$185,000 related primarily to the capitalization of interest based on the cost of major ongoing capital projects which have not yet been placed in service, and an increase in other income of \$54,000.

#### ***Income Taxes***

Benefit from income taxes decreased by \$2.5 million to \$5.2 million for the six months ended June 30, 2007 from \$7.7 million for the six months ended June 30, 2006. Our effective tax rate was 41% for the six months ended June 30, 2007 and

50% for the six months ended June 30, 2006. The effective estimated annual tax rate differs from statutory rates due primarily to the impact of foreign and state net operating losses and permanent differences, including incentive stock options. The benefit from income taxes also reflects research and development tax credits of \$515,000 for the six months ended June 30, 2007 and \$0 for the six months ended June 30, 2006.

## Liquidity and Capital Resources

### Sources of Liquidity

We require cash to meet our operating expenses and for capital expenditures, acquisitions and principal and interest payments on our debt. We have funded our cash requirements from inception through June 30, 2007 principally with a combination of revenues from BioThrax product sales, debt financings of facilities and equipment leases, revenues under our collaboration agreement with Sanofi Pasteur, development funding from government entities and non-government and philanthropic organizations, the proceeds from our initial public offering, and to a lesser extent, from the sale of our common stock upon exercise of stock options. We have operated profitably for each of the years in the three year period ended December 31, 2006.

As of June 30, 2007, we had cash and cash equivalents of \$34.0 million. On November 20, 2006, we completed our initial public offering, in which we raised \$54.2 million, net of issuance costs.

### Cash Flows

The following table provides information regarding our cash flows as of June 30, 2007 and 2006:

(in thousands)	Six Months Ended	
	2007	2006
Net cash provided by (used in):		
Operating activities(1)	\$ (14,068)	\$ (13,664)
Investing activities	(27,343)	(14,421)
Financing activities	(1,027)	7,528
<b>Total net cash used</b>	<b>\$ (42,438)</b>	<b>\$ (20,557)</b>

(1) Includes the effect of exchange rate changes on cash and cash equivalents.

Net cash used in operating activities of \$14.1 million for the six months ended June 30, 2007 resulted principally from a decrease in income taxes payable of \$13.7 million due to the timing of payment of our 2006 income tax liability, billed but uncollected accounts receivable from the DoD of \$18.8 million at June 30, 2007, a non-cash benefit from income taxes of \$13.9 million, reflecting our net loss before benefit from income taxes for the period and tax deductible compensation expense from stock option exercises, and our net loss of \$7.7 million for the six months ended June 30, 2007, partially offset by \$43.3 million received from the DoD and HHS relating to amounts billed in December 2006.

Net cash used in operating activities of \$13.7 million for the six months ended June 30, 2006 resulted principally from our net loss of \$7.7 million, a non-cash benefit from income taxes of \$8.2 million reflecting our net loss before benefit from income taxes for the period, and an increase in inventories of \$12.2 million, reflecting the value of work in process for BioThrax lots being manufactured or awaiting delivery, partially offset by an increase in deferred revenue of \$22.6 million, related to progress billings to the DoD for product not yet released or shipped and therefore not recorded as revenue.

Net cash used in investing activities for the six months ended June 30, 2007 and 2006 resulted principally from the purchase of property, plant and equipment. Capital expenditures of \$27.3 million and \$14.4 million for the six months ended June 30, 2007 and 2006, respectively, relate primarily to construction, installation, validation and qualification activities for our new building in Lansing and, in 2006, the purchase of our second facility in Frederick.

Net cash used in financing activities of \$1.0 million for the six months ended June 30, 2007 resulted primarily from \$10.2 million of principal payments on long-term indebtedness, including the repayment of \$8.9 million from our revolving line of credit with Fifth Third Bank, partially offset by \$2.4 million in proceeds from the exercise of stock options and \$6.7 million related to excess tax benefits from the exercise of stock options.

Net cash provided by financing activities of \$7.5 million for the six months ended June 30, 2006 resulted primarily from proceeds from the financing of the purchase of our Frederick facility in May 2006.

### Debt Financing

As of June 30, 2007, we had \$32.6 million principal of debt outstanding, comprised primarily of the following:

- \$2.5 million outstanding under a forgivable loan from the Department of Business and Economic Development of the State of Maryland used to finance eligible costs incurred to purchase the first facility in Frederick;
- \$6.8 million outstanding under a mortgage loan from Mercantile Potomac Bank used to finance the remaining portion of the purchase price for the first Frederick facility;
- \$8.3 million outstanding under a mortgage loan from HSBC Realty Credit Corporation (USA) used to finance the purchase price for the second Frederick facility;
- \$0.3 million outstanding under a term loan from Fifth Third Bank used to finance the purchase of an enterprise resource planning system;
- \$9.7 million outstanding under a term loan from HSBC Realty Credit Corporation (USA) used to finance a portion of the costs of our facility expansion in Lansing, which has been refinanced as described below; and
- \$5.0 million outstanding under a \$5.0 million revolving line of credit with HSBC Realty Credit Corporation (USA), which has been refinanced as described below.

We also have a revolving line of credit for up to \$15.0 million with Fifth Third Bank. We can borrow under this line of credit through May 2008.

On June 29, 2007, we entered into a loan agreement with HSBC Realty Credit Corporation (USA) under which HSBC provided us with a term loan of \$30 million. This loan replaced our loan arrangement with HSBC under which HSBC had provided a \$10 million term loan and a \$5 million revolving line of credit. On July 3, 2007, we received and recorded \$14.8 million in net proceeds related to the new loan agreement. Under the new loan agreement, we are required to make monthly payments in the amount of \$250,000 in principal plus accrued interest beginning in August 2007, with a residual principal payment due upon maturity in June 2012. Interest on the loan accrues at an annual rate of LIBOR plus 2.75%. Payment of the loan is secured by substantially all of the assets of Emergent BioDefense Operations, other than accounts receivable under BioThrax supply contracts with the DoD and HHS that are pledged as collateral to secure a \$15 million revolving line of credit with Fifth Third Bank.

#### ***Tax Benefits***

In connection with our facility expansion in Lansing, the State of Michigan and the City of Lansing have provided us a variety of tax credits and abatements. We estimate that the total value of these tax benefits may be up to \$18.5 million over a period of up to 15 years, beginning in 2006. These tax benefits are based on our \$75 million planned investment in our Lansing facility. In addition, we must maintain a specified number of employees in Lansing to continue to qualify for these tax benefits.

#### ***Funding Requirements***

We expect to continue to fund our anticipated operating expenses, capital expenditures and debt service requirements from existing cash and cash equivalents, revenues from BioThrax product sales and other committed sources of funding. There are numerous risks and uncertainties associated with BioThrax product sales and with the development and commercialization of our product candidates.

We may seek to raise additional external debt financing to provide additional financial flexibility. Our committed external sources of funds consist of the remaining borrowing availability under our revolving line of credit with Fifth Third Bank, development funding under our collaboration agreement with Sanofi Pasteur, funding from the NIAID, including for animal efficacy studies of our anthrax immune globulin candidate and clinical trials for our group B streptococcus vaccine candidate, and funding from the Wellcome Trust for our Phase II clinical trial of our typhoid vaccine candidate in Vietnam. Our ability to borrow additional amounts under our loan agreements is subject to our satisfaction of specified conditions. Our future capital requirements will depend on many factors, including:

- the level and timing of BioThrax product sales and cost of product sales;
- the timing of, and the costs involved in, constructing our new manufacturing facility in Lansing and the build out of our manufacturing facilities in Frederick;
- the scope, progress, results and costs of our preclinical and clinical development activities;
- the costs, timing and outcome of regulatory review of our product candidates;
- the number of, and development requirements for, other product candidates that we may pursue;
- the costs of commercialization activities, including product marketing, sales and distribution;
- the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims and other patent-related costs, including litigation costs and the results of such litigation;



- the extent to which we acquire or invest in businesses, products and technologies;
- our ability to obtain development funding from government entities and non-government and philanthropic organizations; and
- our ability to establish and maintain collaborations, such as our collaboration with Sanofi Pasteur.

We may require additional sources of funds for future acquisitions that we may make or, depending on the size of the obligation, to meet balloon payments upon maturity of our current borrowings. To the extent our capital resources are insufficient to meet our future capital requirements, we will need to finance our cash needs through public or private equity offerings, debt financings or corporate collaboration and licensing arrangements.

Additional equity or debt financing, grants, or corporate collaboration and licensing arrangements may not be available on acceptable terms, if at all. If adequate funds are not available, we may be required to delay, reduce the scope of or eliminate our research and development programs or reduce our planned commercialization efforts. If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Any debt financing or additional equity that we raise may contain terms, such as liquidation and other preferences, that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish valuable rights to our technologies or product candidates or grant licenses on terms that may not be favorable to us.

#### **Recent Accounting Pronouncements**

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements* (SFAS No. 157). SFAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles and expands disclosures about fair value measurements. SFAS No. 157 emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. The provisions of SFAS No. 157 are effective for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. We have not yet determined the impact of the adoption of this statement on our financial statements.

In February 2007, the Financial Accounting Standards Board, or FASB, issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities—Including an Amendment of FASB Statement No. 115*, or SFAS No. 159. SFAS No. 159 permits entities to choose to measure many financial instruments and certain other items at fair value. The objective is to improve financial reporting by providing entities with the opportunity to mitigate volatility in reported earnings caused by measuring related assets and liabilities differently without having to apply complex hedge accounting provisions. The provisions of SFAS No. 159 are effective for fiscal years beginning after November 15, 2007. We have not yet determined the impact of the adoption of this statement on our financial statements.

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

Our exposure to market risk is currently confined to our cash and cash equivalents and restricted cash that have maturities of less than three months. We currently do not hedge interest rate exposure or foreign currency exchange exposure. We have not used derivative financial instruments for speculation or trading purposes. Because of the short-term maturities of our cash and cash equivalents, we do not believe that an increase in market rates would have a significant impact on the realized value of our investments, but would likely increase the interest expense associated with our debt.

#### **ITEM 4. CONTROLS AND PROCEDURES**

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2007. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Management recognizes that any controls or procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of June 30, 2007, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the six months ended June 30, 2007 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**

*BioThrax product liability litigation.* On October 14, 2005, January 9, 2006 and January 17, 2006, we were named as a defendant in three federal lawsuits filed on behalf of three individuals who claimed damages resulting from personal injuries allegedly suffered because of vaccinations of BioThrax by the DoD.

The plaintiffs in each of these three lawsuits claimed different injuries and sought varying amounts of damages. The first plaintiff alleged that the vaccine caused erosive rheumatoid arthritis and requested damages in excess of \$1 million. The second plaintiff alleged that the vaccine caused Bell's palsy and other related conditions and requested damages in excess of \$75,000. The third plaintiff alleged that the vaccine caused a condition that originally was diagnosed as encephalitis related to a gastrointestinal infection and caused him to fall into a coma for many weeks and requested damages in excess of \$10 million. We moved to dismiss these three lawsuits for lack of personal jurisdiction, or in the alternative, to transfer the lawsuits to federal court in Michigan. On October 27, 2006, one of these lawsuits was transferred to the U.S. District Court for the Western District of Michigan. On October 31, 2006, another of these lawsuits was dismissed for lack of personal jurisdiction. The plaintiff in this lawsuit appealed that decision to the U.S. Court of Appeals for the Ninth Circuit. The appeal has not yet been fully briefed and oral argument is not scheduled. The court denied our motion in the third lawsuit. These lawsuits are in the preliminary stages of litigation, and we believe that we are entitled to indemnification under our contract with the DoD for legal fees and any damages that may result from these claims.

In April 2006, the U.S. District Court for the Western District of Michigan entered summary judgment in our favor in four other consolidated lawsuits asserting similar claims brought by approximately 120 individuals. The District Court's ruling in the four cases was based on two grounds. First, the District Court found that we were entitled to protection under a Michigan state statute that provides immunity for drug manufacturers if the drug was approved by the FDA and its labeling is in compliance with FDA approval, unless the plaintiffs establish that the manufacturer intentionally withheld or misrepresented information to the FDA and the drug would not have been approved, or the FDA would have withdrawn approval, if the information had been accurately submitted. Second, the District Court found that we were entitled to the immunity afforded by the government contractor defense, which, under specified circumstances, extends the sovereign immunity of the United States to government contractors who manufacture a product for the government. Specifically, the government contractor defense applies when the government approves reasonably precise specifications, the product conforms to those specifications and the supplier warns the government about known dangers arising from the use of the product. The District Court found that we established each of those factors. We intend to rely on similar defenses with respect to the substantive claims asserted in our pending lawsuits. We also expect to rely on contractual indemnification provisions with the DoD and statutory protections to limit our potential liability resulting from the pending lawsuits.

*Insurance coverage litigation.* On December 26, 2006, we were named as a defendant in a lawsuit brought by Evanston Insurance Company in the U.S. District Court for the Western District of Michigan captioned *Evanston Insurance Company v. BioPort Corporation and Robert C. Myers*. Evanston issued a general liability policy to us in 2000, and we made a claim for coverage under that policy for defense and indemnity costs incurred as a result of the claims asserted in the BioThrax product liability litigation discussed above and the thimerosal litigation discussed below. In its complaint, Evanston asserts a number of purported bases for the court to void or reduce its obligation to defend or indemnify us, including a claim that we failed to disclose on our insurance application our alleged knowledge of "incidents, conditions, circumstances, effects or suspected defects which may result in claims." Evanston seeks rescission or reformation of the policy to exclude a duty to defend or indemnify us for the claims asserted in the BioThrax product liability litigation and the thimerosal litigation. Evanston also seeks a refund of the approximately \$331,000 that it has reimbursed us for defense costs.

*MilVax litigation.* In 2003, six unidentified plaintiffs filed suit in the U.S. District Court for the District of Columbia against the U.S. government seeking to enjoin the Anthrax Vaccine Immunization Program administered under MilVax under which all military personnel were required to be vaccinated with BioThrax. On October 27, 2004, the District Court enjoined the DoD from administering BioThrax to military personnel on a mandatory basis without their informed consent or a Presidential waiver. This ruling was based in part on the District Court's finding that the FDA, as part of its review of all biological products approved prior to 1972, had not properly issued a final order determining that BioThrax is safe and effective and not misbranded. In December 2005, the FDA issued a final order determining that BioThrax is safe and effective and not misbranded. On February 9, 2006, the U.S. Court of Appeals for the District of Columbia, on appeal of the injunction by the government, ruled that the injunction had dissolved by its own terms as a result of the FDA's final order. The matter remains pending in the District Court, where subsequent proceedings have focused on whether the plaintiffs are entitled to recover attorneys' fees from the government.

In October 2006, the DoD announced that it was resuming a mandatory vaccination program for BioThrax for designated military personnel and emergency DoD civilian personnel and contractors. On December 14, 2006, the same counsel who represented the plaintiffs in the 2003 litigation filed a new lawsuit against the government in the same federal court, on behalf of unnamed service members and the DoD civilian employees or contractors and purportedly on behalf of a class of similarly situated individuals. The suit contends on various grounds that the FDA's 2005 final order should be set aside as substantively and procedurally flawed and that BioThrax is not properly approved for use in the DoD's vaccination program. The plaintiffs seek a declaration that BioThrax is improperly licensed and is not approved for use against inhalation anthrax, an order vacating the FDA's 2005 final order, and an injunction prohibiting the DoD from using BioThrax in a mandatory vaccination program. On February 26, 2007, the government moved to dismiss the case. Although we are not a party to either of the Milvax lawsuits, if the District Court were to grant all or part of the requested relief, the amount of future purchases of BioThrax could be affected.

*Other.* We are, and may in the future become, subject to other legal proceedings, claims and litigation arising in the ordinary course of our business in connection with the manufacture, distribution and use of our products and product candidates. For example, Emergent BioDefense Operations is a defendant, along with many other vaccine manufacturers, in a series of lawsuits that have been filed in various state and federal courts in the United States alleging that thimerosal, a mercury-containing preservative used in the manufacture of some vaccines, caused personal injuries, including brain damage, central nervous system damage and autism. No specific dollar amount of damages has been claimed. Emergent BioDefense Operations is currently a named defendant in 41 lawsuits pending in two jurisdictions: four in California and 37 in Illinois. The products at issue in these lawsuits are pediatric vaccines and immune globulins. Because we are not currently and have not historically been in the business of manufacturing or selling pediatric vaccines, we do not believe that we manufactured the pediatric vaccines at issue in the lawsuits.

Under a contractual obligation to the State of Michigan, we manufactured one batch of vaccine suitable for pediatric use. However, the contract required the State to use the vaccine solely for Michigan public health purposes. One plaintiff in a thimerosal lawsuit alleges that he was injured by immune globulin containing thimerosal. We previously manufactured human immune globulin that contained thimerosal. We no longer manufacture any products that contain thimerosal. We have submitted a request for coverage of the defense and indemnity costs incurred as a result of these thimerosal claims to our insurance carriers. The insurance carrier that issued our general liability policies during the relevant years is disputing coverage.

## **ITEM 1A. RISK FACTORS**

### **Risks Related to Our Dependence on U.S. Government Contracts**

***We have derived substantially all of our revenue from sales of our BioThrax anthrax vaccine, our only marketed product, under contracts with the U.S. Department of Defense and the U.S. Department of Health and Human Services. If we are unable to obtain new contracts with, and deliver BioThrax to, these customers, our business, financial condition and operating results could be materially harmed.***

We have derived and expect for the foreseeable future to continue to derive substantially all of our revenue from sales of BioThrax, our FDA-approved anthrax vaccine and only marketed product. In 2006 and for the six months ended June 30, 2007, we derived substantially all of our revenue from our BioThrax contracts with the DoD and HHS. The DoD has issued an RFP for the manufacture, storage and delivery of up to an additional 14.68 million doses of BioThrax through September 2011 and HHS has issued an RFP for the procurement of up to an additional 18.75 million doses of BioThrax through September 2010, though neither the DoD nor HHS has awarded a new contract to us. We may not be awarded a follow-on contract by either the DoD or HHS, or we may be awarded a contract on less favorable terms than our prior contracts with the DoD and HHS.

Our prior contracts with the DoD and HHS do not necessarily increase the likelihood that we will secure future comparable contracts with the U.S. government. The success of our business and our operating results for the foreseeable future are substantially dependent on the price per dose, the number of doses and the timing of deliveries for BioThrax sales to the U.S. government.

***Our business may be harmed as a result of the government contracting process, which is a competitive bidding process that involves risks not present in the commercial contracting process.***

We expect that a significant portion of the business that we will seek in the near future will be under government contracts or subcontracts awarded through competitive bidding. Competitive bidding for government contracts presents a number of risks that are not typically present in the commercial contracting process, including:

- the need to devote substantial time and attention of management and key employees to the preparation of bids and proposals for contracts that may not be awarded to us;
- the need to accurately estimate the resources and cost structure that will be required to perform any contract that we might be awarded; and
- the expenses that we might incur and the delays that we might suffer if our competitors protest or challenge contract awards made to us pursuant to competitive bidding, and the risk that any such protest or challenge could result in the resubmission of bids based on modified specifications, or in termination, reduction or modification of the awarded contract.

The U.S. government may choose to award future contracts for the supply of anthrax vaccines and other biodefense product candidates that we are developing to our competitors instead of to us. If we are unable to win particular contracts, we may not be able to operate in the market for products that are provided under those contracts for a number of years. For example, if any other company is successful in developing a next generation anthrax vaccine, U.S. government customers may purchase only the next generation vaccine and not BioThrax.

If we are unable to consistently win new contract awards over an extended period, or if we fail to anticipate all of the costs and resources that will be required to secure such contract awards, our growth strategy and our business, financial condition, and operating results could be materially adversely affected.

***Our U.S. government contracts for BioThrax require ongoing funding decisions by the government. The failure to fund one or more of these contracts could cause our financial condition and operating results to suffer materially.***

Our principal customer for BioThrax, our only marketed product, is the U.S. government. In addition, we anticipate that the U.S. government will be the principal customer for any other biodefense products that we successfully develop. Over its lifetime, a U.S. government program may be implemented through the award of many different individual contracts and subcontracts. The funding of government programs is subject to Congressional appropriations, generally made on a fiscal year basis even though a program may continue for several years. For example, our prior DoD contracts for BioThrax were structured with one base year during which the DoD agreed to purchase a minimum number of doses of BioThrax with options for the DoD to purchase further quantities in future years. Any future contract that we enter into with the DoD may be structured in a similar manner.

Our government customers are subject to stringent budgetary constraints and political considerations. If levels of government expenditures and authorizations for biodefense decrease or shift to programs in areas where we do not offer products or are not developing product candidates, our business, revenues and operating results may suffer.

***The success of our business with the U.S. government depends on our compliance with additional regulations and obligations under our U.S. government contracts.***

Our business with the U.S. government is subject to specific procurement regulations and a variety of other legal compliance obligations. These obligations include those related to:

- procurement integrity;
- export control;
- government security regulations;
- employment practices;
- protection of the environment;
- accuracy of records and the recording of costs; and
- foreign corrupt practices.

In addition, before awarding us any future contracts, the U.S. government could require that we respond satisfactorily to a request to substantiate our commercial viability and industrial capabilities. Compliance with these obligations increases our performance and compliance costs.

Failure to comply with these regulations and requirements could lead to suspension or debarment, for cause, from government contracting or subcontracting for a period of time. The termination of a government contract or relationship as a result of our failure to satisfy any of these obligations would have a negative impact on our operations and harm our reputation and ability to procure other government contracts in the future.

***The pricing under our fixed price government contracts is based on estimates of the time, resources and expenses required to deliver the specified doses of BioThrax. If our estimates are not accurate, we may not be able to earn an adequate return under these contracts.***

Historically, our contracts for the supply of BioThrax with the DoD and HHS were fixed price contracts. We expect that our future contracts with the U.S. government for biodefense product candidates that we successfully develop also may be fixed price contracts. Under a fixed price contract, we are required to deliver our products at a fixed price regardless of the actual costs we incur and absorb any costs in excess of the fixed price. Estimating costs that are related to performance in accordance with contract specifications is difficult. Our failure to anticipate technical problems, estimate costs accurately or control costs during performance of a fixed price contract could reduce the profitability of a fixed price contract or cause a loss.

***Unfavorable provisions in government contracts may harm our business, financial condition and operating results.***

Government contracts customarily contain provisions that give the government substantial rights and remedies, many of which are not typically found in commercial contracts, including provisions that allow the government to:

- terminate existing contracts, in whole or in part, for any reason or no reason;
- unilaterally reduce or modify contracts or subcontracts;
- cancel multi-year contracts and related orders if funds for contract performance for any subsequent year become unavailable;
- decline to exercise an option to renew a contract;
- exercise an option to purchase only the minimum amount specified in a contract;
- decline to exercise an option to purchase the maximum amount specified in a contract;
- claim rights in products, including intellectual property, developed under the contract;
- take actions that result in a longer development timeline than expected;
- direct the course of a development program in a manner not chosen by the government contractor;
- suspend or debar the contractor from doing business with the government or a specific government agency;
- pursue criminal or civil remedies under the False Claims Act and False Statements Act; and
- control or prohibit the export of products.

Generally, government contracts, including our U.S. government contracts for BioThrax, contain provisions permitting unilateral termination or modification, in whole or in part, at the government's convenience. Under general principles of government contracting law, if the government terminates a contract for convenience, the terminated company may recover only its incurred or committed costs, settlement expenses and profit on work completed prior to the termination. If the government terminates a contract for default, the defaulting company is entitled to recover costs incurred and associated profits on accepted items only and may be liable for excess costs incurred by the government in procuring undelivered items from another source.

One or more of our government contracts could be terminated under these circumstances. In addition, if the U.S. government decides to withdraw military personnel from high threat areas, including Iraq, or otherwise determines that it will decrease the number of military personnel to be immunized with BioThrax, the DoD's demand for BioThrax may be reduced substantially. In addition, any follow-on contract with the DoD may not provide sufficient indemnification, and the DoD may require us to accept a greater risk of loss for the product manufacture, storage and delivery. Some government contracts grant the government the right to use, for or on behalf of the U.S. government, any technologies developed by the contractor under the government contract. If we were to develop technology under a contract with such a provision, we might not be able to prohibit third parties, including our competitors, from using that technology in providing products and services to the government.

***Ongoing legal proceedings or any future similar lawsuits could limit future purchases of BioThrax by the U.S. government.***

The results of ongoing or future legal proceedings could reduce demand for BioThrax by the U.S. government. For example, in 2003, a group of unnamed military personnel filed a lawsuit seeking to enjoin the DoD from administering BioThrax on a mandatory basis without informed consent of the recipient or a Presidential waiver, and, in October 2004, a federal court issued the requested injunction. In December 2005, the FDA issued an order affirming the BioThrax license, and, as a result, an appellate court ruled in February 2006 that the injunction was dissolved. In October 2006, the DoD announced that it was resuming a mandatory vaccination program for BioThrax for designated military personnel and emergency DoD civilian personnel and contractors.

In December 2006, the same counsel who brought the prior lawsuit filed a new lawsuit contending that the FDA's 2005 final order should be set aside and that BioThrax is not properly approved for use in the DoD's vaccination program. In February 2007, the government moved to dismiss the case. Although we are not a party to either of these lawsuits, if a court were to again enjoin the DoD's use of BioThrax on a mandatory basis, the amount of future purchases of BioThrax could be affected. Lawsuits brought against us by third parties, even if not successful, require us to spend time and money defending the related litigation. Furthermore, contractual indemnification provisions and statutory liability protections may not fully protect us from all related liabilities, and statutory liability protections could be revoked or amended to reduce the scope of liability protection.

#### **Risks Related to Our Financial Position and Need for Additional Financing**

##### ***We may not maintain profitability in future periods or on a consistent basis.***

We commenced operations in 1998, and the FDA approved the manufacture of BioThrax at our renovated facilities in Lansing in December 2001. Although we were profitable for each of the last five fiscal years, we have not been profitable for every quarter during that time. Our profitability is substantially dependent on revenues from BioThrax product sales. Revenues from BioThrax product sales have fluctuated significantly in recent quarters, and we expect that they will continue to fluctuate significantly from quarter to quarter based on the timing of our fulfilling orders from the U.S. government. We may not be able to achieve consistent profitability on a quarterly basis or sustain or increase profitability on an annual basis.

##### ***Our indebtedness may limit cash flow available to invest in the ongoing needs of our business.***

As of June 30, 2007, we had \$32.6 million principal amount of debt outstanding and remaining borrowing availability of \$15.0 million under our revolving lines of credit. In addition, on June 29, 2007, we entered into a term loan agreement under which we incurred an additional \$15.0 million of debt. We may seek to raise substantial external debt financing to provide additional financial flexibility. Our leverage could have significant adverse consequences, including:

- requiring us to dedicate a substantial portion of any cash flow from operations to the payment of interest on, and principal of, our debt, which will reduce the amounts available to fund working capital, capital expenditures, product development efforts and other general corporate purposes;
- increasing the amount of interest that we have to pay on debt with variable interest rates if market rates of interest increase;
- increasing our vulnerability to general adverse economic and industry conditions;
- limiting our flexibility in planning for, or reacting to, changes in our business and the industry in which we compete; and
- placing us at a competitive disadvantage compared to our competitors that have less debt.

We may not have sufficient funds or may be unable to arrange for additional financing to pay the amounts due under our existing debt. In addition, a failure to comply with the covenants under our existing debt instruments could result in an event of default under those instruments. In the event of an acceleration of amounts due under our debt instruments as a result of an event of default, we may not have sufficient funds or may be unable to arrange for additional financing to repay our indebtedness or to make any accelerated payments, and the lenders could seek to enforce security interests in the collateral securing such indebtedness. The covenants under our existing debt instruments and the pledge of our existing assets as collateral limit our ability to obtain additional debt financing.

##### ***We expect to require additional funding and may be unable to raise capital when needed, which would harm our business, financial condition and operating results.***

We expect our development expenses to increase in connection with our ongoing activities, particularly as we conduct additional and later stage clinical trials for our product candidates. We also expect our commercialization expenses to increase in the future as we seek to broaden the market for BioThrax and if we receive marketing approval for additional products. We also are committed to substantial capital expenditures in connection with our facility expansion in Lansing and may undertake additional facility projects in the future.

As of June 30, 2007, we had \$34.0 million of cash and cash equivalents and we received an additional \$14.8 million under our loan agreement with HSBC on July 3, 2007. Our future capital requirements will depend on many factors, including:

- the level and timing of BioThrax product sales and cost of product sales;
- the timing of, and the costs involved in, constructing our new manufacturing facility in Lansing and the build out of our manufacturing facilities in Frederick;
- the scope, progress, results and costs of our preclinical and clinical development activities;
- the costs, timing and outcome of regulatory review of our product candidates;
- the number of, and development requirements for, other product candidates that we may pursue;
- the costs of commercialization activities, including product marketing, sales and distribution;
- the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims and other patent-related costs, including litigation costs and the results of such litigation;
- the extent to which we acquire or invest in businesses, products and technologies;
- our ability to obtain development funding from government entities and non-government and philanthropic organizations; and
- our ability to establish and maintain collaborations, such as our collaboration with Sanofi Pasteur.

Our committed external sources of funds are remaining borrowing availability under our revolving lines of credit, development funding under our collaboration agreement with Sanofi Pasteur, funding from the NIAID for animal efficacy studies of our anthrax immune globulin candidate and clinical trials for our group B streptococcus vaccine candidate, and funding from the Wellcome Trust for our Phase II clinical trial of our typhoid vaccine candidate in Vietnam. To the extent our capital resources are insufficient to meet our future capital requirements, we will need to finance our cash needs through public or private equity offerings, debt financings or corporate collaboration and licensing arrangements, which we may not be able to obtain when needed or on attractive terms, which would force us to delay, reduce the scope of or eliminate our research and development programs or reduce our planned commercialization efforts.

Our ability to borrow additional amounts under our loan agreements is subject to our satisfaction of specified conditions. Additional equity or debt financing, grants, or corporate collaboration and licensing arrangements, may not be available on acceptable terms, if at all. If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Any debt financing or additional equity that we raise may contain terms, such as liquidation and other preferences, that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish valuable rights to our technologies or product candidates or grant licenses on terms that may not be favorable to us.

#### **Risks Related to Manufacturing and Manufacturing Facilities**

*We have initiated a manufacturing facility expansion program. Delays in completing and receiving regulatory approvals for these manufacturing facility projects could limit our potential revenues and growth.*

We are spending significant amounts for the installation, validation and qualification activities for our new 50,000 square foot manufacturing facility on our Lansing campus, which has been designed and constructed to enable us to manufacture BioThrax on a large scale for our existing and potential future customers. We expect this new facility to accommodate large scale commercial manufacturing of multiple vaccine products, subject to complying with appropriate change-over procedures.

We also own two buildings in Frederick that are available to address our future manufacturing requirements and have initiated initial engineering design and preliminary utility build out for these facilities. The completion of the Lansing facility and, if we proceed, the build out of the Frederick facilities, will involve substantial expenditures and likely require external sources of funds. Any delays in the installation, validation and qualification activities may adversely affect our ability to manufacture our commercial product candidates for clinical trials or commercial sale.

We anticipate that we will initiate large scale manufacturing of BioThrax for commercial sale at the new Lansing facility in 2008. Our plans assume that the FDA will not require us to complete a human bridging trial demonstrating that BioThrax manufactured at our new facility is bioequivalent to BioThrax manufactured at our existing facility. We currently expect to rely on non-clinical studies for these purposes. However, the FDA has not approved our plan to rely on non-clinical studies without conducting a human bridging trial and may not do so. If the FDA requires us to conduct a human bridging trial, the initiation of large scale manufacturing of BioThrax for commercial sale at our new Lansing facility will be delayed and we will incur additional unanticipated costs.

Constructing and preparing a facility for commercial vaccine manufacturing is a significant project. For example, constructing the new Lansing facility with increased manufacturing capacity requires that we scale-up both fermentation and downstream processing compared to levels at our existing production facility. These projects may result in unanticipated delays and cost more than expected due to a number of factors, including regulatory requirements. The FDA must approve our new manufacturing facilities before they can be used to commercially manufacture our products. For example, we are required to show that the product we manufacture in our new Lansing facility is comparable to BioThrax manufactured at our existing facility, which may require additional clinical studies. The costs and time required to comply with the FDA's current Good Manufacturing Practice, or cGMP, regulations, or similar regulatory requirements for sales of our products outside the United States, may be significant. If installation, validation and qualification activities of our new facility in Lansing are delayed, we may not be able to manufacture sufficient quantities of BioThrax to allow us to increase sales of BioThrax to the U.S. government and other customers, which would limit our opportunities for growth. Cost overruns associated with constructing either our Lansing or Frederick facilities could require us to raise additional funds from external sources. We may not be able to do so on favorable terms or at all.

***BioThrax and our immunobiotic product candidates are complex to manufacture, especially on a large scale commercial basis, which could cause us to delay product launches or experience shortages of products.***

BioThrax and all of our product candidates are biologics. Manufacturing biologic products, especially in large quantities, is complex. The products must be made consistently and in compliance with a clearly defined manufacturing process. FDA approval is required for the release of each lot. We will not be able to sell lots that are not released by the FDA. Accordingly, it is essential to be able to validate and control the manufacturing process to assure that it is reproducible. Slight deviations anywhere in the manufacturing process, including the obtaining of materials, filling, labeling, packaging, storage and shipping and quality control and testing, some of which we experience from time to time, may result in lot failures, delay in the release of lots, product recalls or spoilage. For example, the FDA release process requires us to provide FDA with potency testing results for each lot before it will be released. Under our current product license for BioThrax, we have one mechanism for conducting the potency testing that is reliant on a unique animal strain for which we currently have no redundancy. In the event of a problem with the strain, if we have not developed redundancy, we would not be able to provide FDA with required potency test results. In developing redundancy, we may face significant technical and regulatory hurdles.

In addition, BioThrax must be maintained at a prescribed temperature range during shipping, and variations from that temperature range could result in loss of product and could adversely affect profitability.

Delays in lot release, lot failures, and shipping deviations or spoilage could cause us to fail to satisfy customer orders or contractual commitments, lead to a termination of one or more of our contracts, lead to delays in our clinical trials or result in litigation or regulatory action against us, any of which could be costly to us and otherwise harm our business.

***Disruption at, damage to or destruction of our manufacturing facilities could impede our ability to manufacture BioThrax, which would harm our business, financial condition and operating results.***

We currently rely on our manufacturing facilities at a single location in Lansing for the production of BioThrax. Any interruption in manufacturing operations at this location could result in our inability to satisfy the product demands of our customers. A number of factors could cause interruptions, including:

- equipment malfunctions or failures;
- technology malfunctions;
- work stoppages or slow downs;
- protests, including by animal rights activists;
- damage to or destruction of the facility;
- regional power shortages; or
- product tampering.



In addition, providers of bioterrorism countermeasures could be subject to an increased risk of terrorist activities. For example, the U.S. government has designated our Lansing facility as a facility requiring additional security to protect against potential terrorist threats to the facility. Any disruption that impedes our ability to manufacture and ship BioThrax in a timely manner could reduce our revenues and materially harm our business, financial condition and operating results.

***Our business may be harmed if we do not adequately forecast customer demand.***

The timing and amount of customer demand is difficult to predict. We may not be able to scale-up our production quickly enough to fill any new customer orders on a timely basis. This could cause us to lose new business and possibly existing business. For example, under our most recent BioThrax supply contract with the DoD, the DoD was obligated to acquire a minimum number of doses of BioThrax and had the right to acquire up to a maximum number of doses. Any future contract with the DoD may contain a similar provision. If in connection with such a contract, the DoD elects to purchase the maximum number of doses of BioThrax under the contract, we may not have sufficient available production capacity at our existing manufacturing facility in Lansing to increase sales of BioThrax to customers other than the U.S. government.

In addition, we may not be able to scale-up manufacturing processes for our product candidates to allow production of commercial quantities at a reasonable cost or at all. Furthermore, if we overestimate customer demand, we could incur significant unrecoverable costs from creating excess capacity. For example, if we do not maintain and increase sales of BioThrax to the U.S. government and other customers, we may not be able to generate an adequate return on the significant amounts that we have spent on construction and are spending for installation, validation and qualification activities for our new manufacturing facility in Lansing. In addition, if we do not successfully develop and commercialize any of our product candidates, we may never require the production capacity that we expect to have available at our Frederick site.

***If third parties do not manufacture our product candidates or products in sufficient quantities and at an acceptable cost or in compliance with regulatory requirements and specifications, the development and commercialization of our product candidates could be delayed, prevented or impaired.***

We currently rely on third parties to manufacture the supplies of our immunobiotic product candidates that we require for preclinical and clinical development, including our immune globulin product candidates, typhoid vaccine, hepatitis B therapeutic vaccine, and Group B streptococcus vaccine candidates. Any significant delay in obtaining adequate supplies of our product candidates could adversely affect our ability to develop or commercialize these product candidates. Although we recently commissioned a new pilot plant manufacturing facility on our Lansing campus and plan to construct a pilot plant in Maryland for production of preclinical and clinical supplies of our product candidates, we expect that we will continue to use third parties for these purposes.

In addition, we expect that we will rely on third parties for a portion of the manufacturing process for commercial supplies of product candidates that we successfully develop, including fermentation for some of our vaccine product candidates, plasma fractionation and purification for our immune globulin product candidates and contract fill and finish operations. If our contract manufacturers are unable to scale-up production to generate enough materials for commercial launch, the success of those products may be jeopardized. Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our ability to develop product candidates and commercialize any products that receive regulatory approval on a timely and competitive basis.

Third party manufacturers under short-term supply agreements are not obligated to accept any purchase orders we may submit. If any third party terminates its agreement with us, based on its own business priorities, or otherwise fails to fulfill our purchase orders, we would need to rely on alternative sources or develop our own manufacturing capabilities to satisfy our requirements.

If alternative suppliers are not available or are delayed in fulfilling our requirements, or if we are unsuccessful in developing our own manufacturing capabilities, we may not be able to obtain adequate supplies of our product candidates on a timely basis. A change of manufacturers may require review from the FDA and satisfaction of comparable foreign requirements. This review may be costly and time consuming. There are a limited number of manufacturers that operate under the FDA's cGMP requirements and that are both capable of manufacturing for us and willing to do so. Our only current long-term manufacturing agreements are our agreement with Talecris Biotherapeutics, Inc., for fractionation and purification of plasma for our anthrax immune globulin candidate, and our collaboration with HPA, under which HPA provides specialized manufacturing capabilities for our recombinant bivalent botulinum vaccine candidate and the bivalent botulinum toxoid vaccine that we plan to use as the basis for our botulinum immune globulin candidate.

We currently rely on third parties for regulatory compliance and quality assurance with respect to the supplies of our product candidates that they produce for us. We also will rely for these purposes on any third party that we use for production of commercial supplies of product candidates that we successfully develop. Manufacturers are subject to ongoing, periodic, unannounced inspection by the FDA and corresponding state and foreign agencies or their designees to ensure strict compliance with cGMP regulations and other governmental regulations and corresponding foreign standards. We cannot be certain that our present or future manufacturers will be able to comply with cGMP regulations and other FDA regulatory requirements or similar regulatory requirements outside the United States. We do not control compliance by manufacturers with these regulations and standards. If we or these third parties fail to comply with applicable regulations, sanctions could be imposed on us, which could significantly and adversely affect supplies of our product candidates. The sanctions that might be imposed include:

- fines, injunctions and civil penalties;
- refusal by regulatory authorities to grant marketing approval of our product candidates;
- delays, suspension or withdrawal of regulatory approvals, including license revocation;
- seizures or recalls of product candidates or products;
- operating restrictions; and
- criminal prosecutions.

If as a result of regulatory requirements or otherwise we or third parties are unable to manufacture our product candidates at an acceptable cost, our product candidates may not be commercially viable.

***Our use of hazardous materials, chemicals, bacteria and viruses requires us to comply with regulatory requirements and exposes us to significant potential liabilities.***

Our development and manufacturing processes involve the use of hazardous materials, including chemicals, bacteria, viruses and radioactive materials, and produce waste products. Accordingly, we are subject to federal, state, local and foreign laws and regulations governing the use, manufacture, distribution, storage, handling, disposal and recordkeeping of these materials. In addition to complying with environmental and occupational health and safety laws, we must comply with special regulations relating to biosafety administered by the CDC, HHS and the DoD.

The Public Health Security and Bioterrorism Preparedness and Response Act and the Agricultural Protection Act require us to register with the CDC and the Department of Agriculture our possession, use or transfer of select biological agents or toxins that could pose a threat to public health and safety, to animal or plant health or to animal or plant products. This legislation requires increased safeguards and security measures for these select agents and toxins, including controlled access and the screening of entities and personnel, and establishes a comprehensive national database of registered entities.

We also are subject to export control regulations governing the export of BioThrax and technology and materials used to develop and manufacture BioThrax and our product candidates. If we fail to comply with environmental, occupational health and safety, biosafety and export control laws, we could be held liable for fines, penalties and damages that result, and any such liability could exceed our assets and resources. In addition, we could be required to cease immediately all use of a select agent or toxin, and we could be prohibited from exporting our products, technology and materials. Our general liability and excess insurance policies provide for coverage up to annual aggregate limits of \$12 million, with coverage of \$1 million per occurrence and \$2 million in the aggregate for general liability and \$10 million per occurrence and in the aggregate for excess liability.

The general liability policy currently has a \$15,000 per occurrence deductible. Both policies exclude coverage for liabilities relating to the release of pollutants. We do not currently hold insurance policies expressly providing for coverage relating to our use of hazardous materials other than storage tank liability insurance for our Lansing facility with a \$1 million annual aggregate limit and a \$10,000 per claim deductible. The insurance that we currently hold may not be adequate to cover all liabilities relating to accidental contamination or injury as a result of pollution conditions or other extraordinary or unanticipated events.

***If the company on whom we rely for filling BioThrax vials is unable to perform these services for us, our business may suffer.***

We have outsourced the operation for filling BioThrax into vials to a single company, Hollister-Stier Laboratories LLC. Our contract with Hollister-Stier expires on December 31, 2010.

We have not established internal redundancy for our filling functions and currently have no substitute provider that can handle our filling needs. If Hollister-Stier is unable to perform filling services for us, we would need to identify and engage an alternative filling company or develop our own filling capabilities. Any new contract filling company or filling capabilities that we acquire or develop will need to obtain FDA approval for filling BioThrax at its facilities. Identifying and engaging a new contract filling company or developing our own filling capabilities and obtaining FDA approval could involve significant cost and delay. As a result, we might not be able to deliver BioThrax orders on a timely basis and our revenues could decrease.

### **Risks Related to Product Development**

***Our business depends significantly on our success in completing development and commercializing product candidates that are still under development. If we are unable to commercialize these product candidates, or experience significant delays in doing so, our business will be materially harmed.***

We have invested a significant portion of our efforts and financial resources in the development of our immunobiotic product candidates. In addition to BioThrax product sales, our ability to generate near term revenue is particularly dependent on the success of our anthrax immune globulin candidate. The commercial success of our product candidates will depend on many factors, including:

- successful development, formulation and cGMP scale-up of biological manufacturing that meets FDA requirements;
- successful development of animal models by the U.S. government;
- successful completion of non-clinical development, including in approved animal models;
- successful completion of clinical trials;
- receipt of marketing approvals from the FDA and similar foreign regulatory authorities;
- a determination by the Secretary of HHS that our biodefense product candidates should be purchased for the SNS prior to FDA approval;
- establishing commercial manufacturing processes of our own or arrangements with contract manufacturers;
- manufacturing stable commercial supplies of product candidates, including materials based on recombinant technology;
- launching commercial sales of the product, whether alone or in collaboration with others; and
- acceptance of the product by potential government customers, physicians, patients, healthcare payors and others in the medical community.

We expect to rely on FDA regulations known as the animal rule to obtain approval for our biodefense product candidates. The animal rule permits the use of animal efficacy studies together with human clinical safety and immunogenicity trials to support an application for marketing approval. These regulations are relatively new, and we have limited experience in the application of these rules to the product candidates that we are developing. It is possible that results from these animal efficacy studies may not be predictive of the actual efficacy of our immunobiotic product candidates in humans. In addition, our development plans for our botulinum immune globulin candidate require the development of a new botulinum toxoid vaccine that we would use to vaccinate individuals who would then donate plasma for use in our botulinum immune globulin candidate. If the development of this new botulinum toxoid vaccine is delayed or not completed, for regulatory or other reasons, we may not be able to successfully develop our botulinum immune globulin candidate.

If we are not successful in completing the development and commercialization of our immunobiotic product candidates, or if we are significantly delayed in doing so, our business will be materially harmed.

***We will not be able to commercialize our product candidates if our preclinical development efforts are not successful, our clinical trials do not demonstrate safety or our clinical trials or animal studies do not demonstrate efficacy.***

Before obtaining regulatory approval for the sale of our product candidates, we must conduct extensive preclinical development, clinical trials to demonstrate the safety of our product candidates and clinical or animal trials to demonstrate the efficacy of our product candidates. Preclinical and clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. Success in preclinical testing and early clinical trials does not ensure that later clinical trials or animal efficacy studies will be successful, and interim results of a clinical trial or animal efficacy study do not necessarily predict final results.

A failure of one or more of our clinical trials or animal efficacy studies can occur at any stage of testing. We may experience numerous unforeseen events during, or as a result of, preclinical testing and the clinical trial or animal efficacy study process that could delay or prevent our ability to receive regulatory approval or commercialize our product candidates, including:

- regulators or institutional review boards may not authorize us to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may decide, or regulators may require us, to conduct additional preclinical testing or clinical trials, or we may abandon projects that we expect to be promising, if our preclinical tests, clinical trials or animal efficacy studies produce negative or inconclusive results;
- we might have to suspend or terminate our clinical trials if the participants are being exposed to unacceptable health risks;
- regulators or institutional review boards may require that we hold, suspend or terminate clinical development for various reasons, including noncompliance with regulatory requirements;
- the cost of our clinical trials could escalate and become cost prohibitive;
- any regulatory approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the product not commercially viable;
- we may not be successful in recruiting a sufficient number of qualifying subjects for our clinical trials; and
- the effects of our product candidates may not be the desired effects or may include undesirable side effects or the product candidates may have other unexpected characteristics.

In addition, because some of our current and future vaccine candidates contain live attenuated viruses, our testing of these vaccine candidates is subject to additional risk. For example, there have been reports of serious adverse events following administration of live vaccine products in clinical trials conducted by other vaccine developers. Also, for some of our current and future vaccine candidates, we expect to conduct clinical trials in chronic carriers of the disease that our product candidate seeks to prevent. There have been reports of disease flares in chronic carriers following administration of live vaccine products.

If we are required to conduct additional clinical trials or other testing of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete our clinical trials or other testing or if the results of these trials or tests are not positive, we may:

- be delayed in obtaining marketing approval for our product candidates;
- not be able to obtain marketing approval; or
- obtain approval for indications that are not as broad as intended.

For example, the FDA could require us to conduct additional clinical development in our botulinum immune globulin program that we currently do not plan to conduct. We expect to rely on safety and immunogenicity data from a pentavalent botulinum toxoid vaccine previously manufactured by the State of Michigan in the development of a new bivalent botulinum toxoid vaccine that we plan to use as the basis for our botulinum immune globulin candidate. We plan to conduct a Phase I clinical trial to evaluate the safety of the botulinum toxoid vaccine.

If the results are favorable, we expect that the Phase I clinical trial will provide data sufficient to support an acceptable dose for the vaccine and the optimal dosing schedule. As a result, we anticipate that the FDA will not require us to conduct a Phase II clinical trial for the botulinum toxoid vaccine before permitting us to initiate a donor stimulation program for our botulinum immune globulin candidate. However, the FDA has not approved our plan to proceed directly to a donor stimulation program without conducting a Phase II clinical trial for the botulinum toxoid vaccine and may not do so. If the FDA requires us to conduct a Phase II clinical trial for the botulinum toxoid vaccine, the development plans for our botulinum immune globulin candidate will be delayed.

In addition, our development plan for BioThrax as a post-exposure prophylaxis for anthrax infection provides for a non-human primate efficacy study. However, the timing of our non-human primate efficacy study depends upon the successful development of a non-human primate model by the NIAID. If the NIAID does not successfully develop a non-human primate model, our development plans for BioThrax as a post-exposure prophylaxis for anthrax infection will be delayed, possibly significantly.

Our product development costs will also increase if we experience delays in testing or approvals. Significant clinical trial delays also could allow our competitors to bring products to market before we do and impair our ability to commercialize our products or product candidates.

Under the Project BioShield Act, the Secretary of HHS can contract to purchase countermeasures for the SNS prior to FDA approval of the countermeasure in specified circumstances. Project BioShield also allows the Secretary of HHS to authorize the emergency use of medical products that have not yet been approved by the FDA. However, our product candidates may not be selected by the Secretary under this authority. Moreover, this authority could result in increased competition for our products and product candidates.

### **Risks Related to Commercialization**

***If we fail to achieve significant sales of BioThrax to customers in addition to the U.S. government, our opportunities for growth could be harmed.***

An element of our business strategy is to establish a market for sales of BioThrax to customers in addition to the U.S. government. These potential customers include the U.S. Postal Service, foreign governments, state and local governments, which we expect will be interested in BioThrax to protect first responders and emergency personnel, such as police, fire and emergency medical personnel, multinational companies, non-governmental organizations and hospitals. The market for sales of BioThrax to customers other than the U.S. government is new and undeveloped, and we may not be successful in generating meaningful sales of BioThrax to these potential customers. To date, we have made only minimal sales to these customers. In particular, we have supplied small amounts of BioThrax directly to several foreign governments. In 2006, our sales of BioThrax to customers other than the U.S. government represented less than one percent of our revenue. If we fail to significantly increase our sales of BioThrax to these customers, our business and opportunities for growth could be materially harmed.

Government regulations and the terms of our U.S. government contracts may make it difficult for us to achieve significant sales of BioThrax to customers other than the U.S. government. For example, we are subject to export control laws imposed by the U.S. government. Although there are currently only limited restrictions on the export of BioThrax, the U.S. government may decide, particularly in the current environment of elevated concerns about global terrorism, to increase the scope of export prohibitions. These controls could limit our sales of BioThrax to foreign governments and other foreign customers.

In addition, the DoD has contractual and statutory rights that could interfere with sales of BioThrax to customers other than the U.S. government. For example, our efforts to develop domestic commercial and international sales may be impeded by the DoD's right under the Defense Production Act to require us to deliver more doses than are otherwise specified in our contract with the DoD. If the DoD required delivery of these additional doses, it could affect our production schedule and deplete BioThrax supplies that would otherwise be available for commercial sales. In addition, the DoD could either sell BioThrax directly to foreign governments at a lower price than we may offer or donate BioThrax to foreign governments under the DoD's Foreign Military Sales program.

Our ability to meet any potential increased demand that develops for sales of BioThrax to customers other than the U.S. government depends on our available production capacity. We use substantially all of our current production capacity at our facility in Lansing to manufacture BioThrax for sale to U.S. government customers.

Our plan is to initiate large scale manufacturing of BioThrax for commercial sale at our new manufacturing facility in 2008. If installation, validation and qualification activities for our new facility in Lansing are delayed, we may not be able to manufacture sufficient quantities of BioThrax to allow us to increase sales of BioThrax to customers other than the U.S. government which would limit our opportunities for growth.

***The commercial success of BioThrax and any products that we may develop will depend upon the degree of market acceptance by the government, physicians, patients, healthcare payors and others in the medical community.***

Any products that we bring to the market may not gain or maintain market acceptance by potential government customers, physicians, patients, healthcare payors and others in the medical community. In particular, our biodefense immunobiotic products and product candidates are subject to the product criteria that may be specified by potential U.S. government customers. The product specifications in any government procurement request may prohibit or preclude us from participating in the government program if our products or product candidates do not satisfy the stated criteria. For example, in 2004, HHS issued a request for proposals for the supply of anthrax vaccine for the SNS. The HHS request was limited to a recombinant anthrax vaccine. Because BioThrax is not a recombinant vaccine, BioThrax was precluded from consideration under that procurement program.

In addition, notwithstanding favorable findings regarding the safety and efficacy of BioThrax by the FDA in its final ruling in December 2005, the U.S. Government Accountability Office reiterated concerns regarding BioThrax in Congressional testimony in May 2006 that it had previously identified beginning in 1999. These concerns include the need for a six-dose regimen and annual booster doses, questions about the long-term and short-term safety of the vaccine, including how safety is affected by gender differences, and uncertainty about the vaccine's efficacy.

The use of vaccines carries a risk of adverse health effects. The adverse reactions that have been associated with the administration of BioThrax are similar to those observed following the administration of other adult vaccines and include local reactions, such as redness, swelling and limitation of motion in the inoculated arm, and systemic reactions, such as headache, fever, chills, nausea and general body aches. In addition, some serious adverse events have been reported to the vaccine adverse event reporting system database maintained by the CDC and the FDA with respect to BioThrax. The report of any such adverse event to the vaccine adverse event reporting system database is not proof that the vaccine caused such event. These serious adverse events, including diabetes, heart attacks, autoimmune diseases, including Guillian Barre syndrome, lupus and multiple sclerosis, lymphoma and death, have not been causally linked to the administration of BioThrax.

If any products that we develop do not achieve an adequate level of acceptance, we may not generate material revenues with respect to these products. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the prevalence and severity of any side effects;
- the efficacy and potential advantages over alternative treatments;
- the ability to offer our product candidates for sale at competitive prices;
- the relative convenience and ease of administration;
- the willingness of the target patient population to try new products and of physicians to prescribe these products;
- the strength of marketing and distribution support; and
- the sufficiency of coverage or reimbursement by third parties.

***Political or social factors, including related litigation, may delay or impair our ability to market BioThrax and our biodefense product candidates and may require us to spend time and money to address these issues.***

Products developed to treat diseases caused by or to combat the threat of bioterrorism will be subject to changing political and social environments. The political and social responses to bioterrorism have been highly charged and unpredictable. Political or social pressures or changes in the perception of the risk that military personnel or civilians could be exposed to biological agents as weapons of bioterrorism may delay or cause resistance to bringing our products to market or limit pricing or purchases of our products, which would harm our business. In addition, substantial delays or cancellations of purchases could result from protests or challenges from third parties. Furthermore, lawsuits brought against us by third parties or activists, even if not successful, require us to spend time and money defending the related litigation. The need to address political and social issues may divert our management's time and attention from other business concerns.

For example, between 2001 and 2004, members of the military and various activist groups who opposed mandatory inoculation with BioThrax petitioned the FDA and a federal court to revoke the license for BioThrax and to terminate the DoD program for the mandatory administration of BioThrax to military personnel. Although the DoD prevailed in the challenge to its mandatory vaccination program, the actions of these groups created negative publicity about BioThrax. Lawsuits or publicity campaigns could limit the demand for BioThrax and our biodefense product candidates and harm our future business.

***We have a small marketing and sales group. If we are unable to expand our sales and marketing capabilities or enter into sales and marketing agreements with third parties, we may be unable to generate product sales revenue from sales to customers other than the U.S. government.***

To achieve commercial success for any approved product, we must either develop a sales and marketing organization or outsource these functions to third parties. We currently market and sell BioThrax directly to the DoD and HHS through a small, targeted marketing and sales group. We plan to continue to do so and expect that we will use a similar approach for sales to the U.S. government of any other biodefense product candidates that we successfully develop. However, to increase our sales of BioThrax to state and local governments and foreign governments and create an infrastructure for future sales of other biodefense products to these customers, we plan to expand our sales and marketing organization, which will be expensive and time consuming.

We may not be able to attract, hire, train and retain qualified sales and marketing personnel to build a significant or effective marketing and sales force for sales of biodefense product candidates to customers other than the U.S. government or for sales of our commercial product candidates. If we are not successful in our efforts to expand our internal sales and marketing capability, our ability to independently market and sell BioThrax and any other product candidates that we successfully develop will be impaired. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed as a result of FDA requirements or other reasons, we would incur related expenses too early relative to the product launch. This may be costly, and our investment would be lost if we cannot retain our sales and marketing personnel.

***We face substantial competition, which may result in others developing or commercializing products before or more successfully than we do.***

The development and commercialization of new immunobiotics is highly competitive. We face competition with respect to BioThrax, our current product candidates and any products we may seek to develop or commercialize in the future from major pharmaceutical companies and biotechnology companies worldwide. Potential competitors also include academic institutions, government agencies, and other public and private research institutions that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

Our competitors may develop products that are safer, more effective, have fewer side effects, are more convenient or are less costly than any products that we may develop. Our competitors may also obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours. We believe that our most significant competitors in the area of immunobiotics are a number of pharmaceutical companies that have vaccine programs, including GlaxoSmithKline, Sanofi-Aventis, Wyeth, Merck and Novartis, as well as smaller more focused companies engaged in immunobiotic development, such as Cangene, Human Genome Sciences, Acambis, Avant Immunotherapeutics, Dor BioPharma, Dynport Vaccine Corporation, Elusys, Bavarian Nordic, Pharmathene and Avecia.

Any immunobiotic product candidate that we successfully develop and commercialize is likely to compete with currently marketed products, such as vaccines and therapeutics, including antibiotics, and with other product candidates that are in development for the same indications. In many cases, the currently marketed products have well known brand names, are distributed by large pharmaceutical companies with substantial resources and have achieved widespread acceptance among physicians and patients. In addition, we are aware of product candidates of third parties that are in development, which, if approved, would compete against product candidates for which we intend to seek marketing approval.

Although BioThrax is the only anthrax vaccine approved by the FDA for the prevention of anthrax infection, we face significant competition for the supply of this vaccine to the U.S. government. We also face significant competition for our biodefense immunobiotic product candidates.

HHS has awarded SNS supply contracts to Cangene for an anthrax immune globulin and Human Genome Sciences for a monoclonal antibody to anthrax as a post-exposure therapeutic for anthrax infection. HHS has advised us that it is supplying Cangene with BioThrax doses that we delivered to HHS for placement into the SNS in order that Cangene can immunize donors and obtain plasma for its anthrax immune globulin product candidate. Several companies have botulinum vaccines in early clinical or preclinical development, and HHS is procuring from Cangene a botulinum immune globulin derived from equine plasma for the SNS.

One oral typhoid vaccine and one injectable typhoid vaccine are currently approved and administered in the United States and Europe. Numerous companies have vaccine candidates in development that would compete with any of our commercial immunobiotic product candidates for which we obtain marketing approval.

Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel, as well as in acquiring products, product candidates and technologies complementary to, or necessary for, our programs or advantageous to our business.

***Legislation and contractual provisions limiting or restricting liability of manufacturers may not be adequate to protect us from all liabilities associated with the manufacture, sale and use of our products.***

Provisions of our BioThrax contracts with the DoD and HHS and federal legislation enacted to protect manufacturers of biodefense and anti-terrorism countermeasures may limit our potential liability related to the manufacture, sale and use of BioThrax and our biodefense product candidates. However, these contractual provisions and legislation may not fully protect us from all related liabilities.

The Public Readiness and Emergency Preparedness Act, or PREP Act, which was signed into law in December 2005, creates general immunity for manufacturers of biodefense countermeasures, including security countermeasures, when the Secretary of HHS issues a declaration for their manufacture, administration or use. The declaration is meant to provide general immunity from all claims under state or federal law for loss arising out of the administration or use of a covered countermeasure. Manufacturers are not entitled to this protection in cases of willful misconduct.

Upon a declaration by the Secretary, a compensation fund is created to provide “timely, uniform, and adequate compensation to eligible individuals for covered injuries directly caused by the administration or use of a covered countermeasure.” The “covered injuries” to which the program applies are defined as serious physical injuries or death. Individuals are permitted to bring a willful misconduct action against a manufacturer only after they have exhausted their remedies under the compensation program. However, a willful misconduct action could be brought against us if any individuals exhausted their remedies under the compensation program and thereby expose us to liability. Although we may petition the Secretary to make such a declaration with respect to anthrax generally and BioThrax specifically, we do not know if any such petition would be successful or that, if successful, the PREP Act will provide adequate coverage or survive anticipated legal challenges to its validity.

In August 2006, the Department of Homeland Security approved our application under the Safety Act enacted by the U.S. Congress in 2002 for liability protection for sales of BioThrax. The Safety Act creates product liability limitations for qualifying anti-terrorism technologies for claims arising from or related to an act of terrorism. In addition, the Safety Act provides a process by which an anti-terrorism technology may be certified as an “approved product” by the Department of Homeland Security and therefore entitled to a rebuttable presumption that the government contractor defense applies to sales of the product. The government contractor defense, under specified circumstances, extends the sovereign immunity of the United States to government contractors who manufacture a product for the government. Specifically, for the government contractor defense to apply, the government must approve reasonably precise specifications, the product must conform to those specifications and the supplier must warn the government about known dangers arising from the use of the product. Although we are entitled to the benefits of the Safety Act, it may not provide adequate protection from any claims made against us.

In addition, although our existing and prior contracts with the DoD and HHS provide that the government will indemnify us for any damages resulting from product liability claims, we cannot be certain that we will be able to continue to negotiate similar rights in future contracts or that the U.S. government will honor this obligation. For example, although we have notified the DoD of the lawsuits filed against us by current and former members of the U.S. military claiming damages as the result of personal injuries allegedly suffered from vaccination with BioThrax, the DoD has not yet acted on our claim for indemnification pending resolution of our claims under our product liability insurance.

In addition, members of Congress have proposed and may in the future propose legislation that reduces or eliminates these and other liability protections for manufacturers of biodefense countermeasures.

***Product liability lawsuits could cause us to incur substantial liabilities and require us to limit commercialization of any products that we may develop.***

We face an inherent risk of product liability exposure related to the sale of BioThrax and any other products that we successfully develop and the testing of our product candidates in clinical trials. In late 2005 and early 2006, we were named as a defendant in three federal lawsuits filed on behalf of three individuals who alleged that they were vaccinated with BioThrax by the DoD and claimed damages resulting from personal injuries allegedly suffered because of the vaccinations. The plaintiff in each of these three lawsuits claimed different injuries and sought varying amounts of damages. The first plaintiff alleged that the vaccine caused erosive rheumatoid arthritis and requested damages in excess of \$1 million. The second plaintiff alleged that the vaccine caused Bell’s palsy and other related conditions and requested damages in excess of \$75,000. The third plaintiff alleged that the vaccine caused a condition that originally was diagnosed as encephalitis related to a gastrointestinal infection and caused him to fall into a coma for many weeks and requested damages in excess of \$10 million. If we cannot successfully defend ourselves against claims that our product or product candidates caused injuries and if we are not entitled to indemnity by the U.S. government, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we may develop;
- injury to our reputation;



- withdrawal of clinical trial participants;
- withdrawal of a product from the market;
- costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue; and
- the inability to commercialize any products that we may develop.

We have product liability insurance for coverage up to a \$10 million annual aggregate limit with a deductible of \$75,000 per claim. The amount of insurance that we currently hold may not be adequate to cover all liabilities that may occur. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost and we may not be able to obtain insurance coverage that will be adequate to satisfy any liability that may arise. For example, from 2002 through February 2006, we were unable to obtain product liability insurance for sales of BioThrax on commercially reasonable terms. We do not believe that the amount of insurance we have been able to obtain for BioThrax is sufficient to manage the risk associated with the potential deployment of BioThrax as a countermeasure to bioterrorism threats. We rely on contractual indemnification provisions and statutory protections to limit our liability for BioThrax.

***If we are unable to obtain adequate reimbursement from governments or third party payors for any products that we may develop or to obtain acceptable prices for those products, our revenues will suffer.***

Our revenues and profits from any products that we successfully develop, other than with respect to sales of our biodefense products under government contracts, will depend heavily upon the availability of adequate reimbursement for the use of such products from governmental and other third party payors, both in the United States and in other markets. Reimbursement by a third party payor may depend upon a number of factors, including the third party payor's determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Obtaining a determination that a product is covered is a time-consuming and costly process that could require us to provide supporting scientific, clinical and cost-effectiveness data for the use of our products to each payor. We may not be able to provide data sufficient to gain coverage. Even when a payor determines that a product is covered, the payor may impose limitations that preclude payment for some uses that are approved by the FDA or comparable authorities but are determined by the payor to not be medically reasonable and necessary. Moreover, eligibility for coverage does not imply that any product will be covered in all cases or that reimbursement will be available at a rate that permits the health care provider to cover its costs of using the product.

We expect that the success of some of our commercial vaccine candidates for which we obtain marketing approval will depend on inclusion of those product candidates in government immunization programs. Most non-pediatric commercial vaccines are purchased and paid for, or reimbursed by, managed care organizations, other private health plans or public insurers or paid for directly by patients. In the United States, pediatric vaccines are funded by a variety of federal entitlements and grants, as well as state appropriations. Foreign governments also commonly fund pediatric vaccination programs through national health programs. In addition, with respect to some diseases affecting the public health generally, particularly in developing countries, public health authorities or non-governmental, charitable or philanthropic organizations fund the cost of vaccines.

Federal legislation, enacted in December 2003, has altered the way in which physician-administered drugs and biologics covered by Medicare are reimbursed. Under the new reimbursement methodology, physicians are reimbursed based on a product's "average sales price." This new reimbursement methodology has generally led to lower reimbursement levels. The new federal legislation also has added an outpatient prescription drug benefit to Medicare, which went into effect in January 2006. These benefits will be provided primarily through private entities, which we expect will attempt to negotiate price concessions from pharmaceutical manufacturers.

***Any products we may develop may also be eligible for reimbursement under Medicaid. If the state-specific Medicaid programs do not provide adequate coverage and reimbursement for any products we may develop, it may have a negative impact on our operations.***

The scope of coverage and payment policies varies among third party private payors, including indemnity insurers, employer group health insurance programs and managed care plans. These third party carriers may base their coverage and reimbursement on the coverage and reimbursement rate paid by carriers for Medicare beneficiaries. Furthermore, many such payors are investigating or implementing methods for reducing health care costs, such as the establishment of capitated or prospective payment systems. Cost containment pressures have led to an increased emphasis on the use of cost-effective products by health care providers. If third party payors do not provide adequate coverage or reimbursement for any products we may develop, it could have a negative effect on our revenues and results of operations.

***Foreign governments tend to impose strict price controls, which may adversely affect our revenues.***

In some foreign countries, particularly the countries of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be adversely affected.

Legislation has been introduced into Congress that, if enacted, would permit more widespread re-importation of drugs from foreign countries into the United States, which may include re-importation from foreign countries where the drugs are sold at lower prices than in the United States. Such legislation, or similar regulatory changes, could decrease the price we receive for any approved products which, in turn, could adversely affect our operating results and our overall financial condition.

***If we fail to attract and keep senior management and key scientific personnel, we may be unable to sustain or expand our BioThrax operations or develop or commercialize our product candidates.***

Our success depends on our continued ability to attract, retain and motivate highly qualified managerial and key scientific personnel. We consider the following executives to be key to our BioThrax operations and our efforts to develop and commercialize our product candidates: Fuad El-Hibri, chief executive officer and chairman of our Board of Directors; Daniel J. Abdun-Nabi, president, chief operating officer and secretary; R. Don Elsey, chief financial officer and treasurer; and Robert G. Kramer, executive vice president manufacturing operations. All of these key employees are at will employees and can terminate their employment at any time. We do not maintain "key person" insurance on any of our employees.

In addition, our growth will require us to hire a significant number of qualified scientific and commercial personnel, including clinical development, regulatory, marketing and sales executives and field sales personnel, as well as additional administrative personnel. There is intense competition from other companies and research and academic institutions for qualified personnel in the areas of our activities. If we cannot continue to attract and retain, on acceptable terms, the qualified personnel necessary for the continued development of our business, we may not be able to sustain our operations or grow.

**Additional Risks Related to Sales of Biodefense Products to the U.S. Government**

***Our business could be adversely affected by a negative audit by the U.S. government.***

U.S. government agencies such as the Defense Contract Audit Agency, or the DCAA, routinely audit and investigate government contractors. These agencies review a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards. The DCAA also reviews the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's purchasing, property, estimating, compensation and management information systems. Any costs found to be improperly allocated to a specific contract will not be reimbursed, while such costs already reimbursed must be refunded. If an audit uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including:

- termination of contracts;
- forfeiture of profits;
- suspension of payments;
- fines; and
- suspension or prohibition from doing business with the U.S. government.

In addition, we could suffer serious reputational harm if allegations of impropriety were made against us.

***Laws and regulations affecting government contracts make it more costly and difficult for us to successfully conduct our business.***

We must comply with numerous laws and regulations relating to the formation, administration and performance of government contracts, which can make it more difficult for us to retain our rights under these contracts. These laws and regulations affect how we do business with federal, state and local government agencies. Among the most significant government contracting regulations that affect our business are:

- the Federal Acquisition Regulations, and agency-specific regulations supplemental to the Federal Acquisition Regulations, which comprehensively regulate the procurement, formation, administration and performance of government contracts;
- the business ethics and public integrity obligations, which govern conflicts of interest and the hiring of former government employees, restrict the granting of gratuities and funding of lobbying activities and incorporate other requirements such as the Anti-Kickback Act and Foreign Corrupt Practices Act;
- export and import control laws and regulations; and
- laws, regulations and executive orders restricting the use and dissemination of information classified for national security purposes and the exportation of certain products and technical data.

In addition, *qui tam* lawsuits have been brought against us in which the plaintiffs argued that we defrauded the U.S. government by distributing non-compliant doses of BioThrax. Although we ultimately prevailed in this litigation, we spent significant time and money defending the litigation.

The states, many municipalities and foreign governments typically also have laws and regulations governing contracts with their respective agencies. These domestic and foreign laws and regulations affect how we and our customers can do business and, in some instances, impose added costs on our business. Any changes in applicable laws and regulations could restrict our ability to maintain our existing contracts and obtain new contracts, which could limit our ability to conduct our business and materially adversely affect our revenues and results of operations.

***We rely on property and equipment owned by the DoD in the manufacturing process for BioThrax.***

Our BioThrax supply contract with the DoD grants us the right to use property and equipment owned by the DoD in the manufacture of BioThrax. This property and equipment, referred to as government furnished equipment, is in service at our Lansing site. Some of this government furnished equipment is important to our business. We pay the DoD a small usage fee for the government furnished equipment based on the number of doses of BioThrax that we produce for sale to customers other than the U.S. government.

We have the option to purchase all or part of the government furnished equipment at any time during the contract period for approximately \$21 million. If the DoD modifies the terms under which we use the government furnished equipment in a manner unfavorable to us, including raising the usage fee, our business could be harmed. If DoD terminated our supply contract, we could be required to rent or purchase all or a part of the government furnished equipment to continue production of BioThrax in our current facility.

**Risks Related to Regulatory Approvals**

***If we are not able to obtain required regulatory approvals, we will not be able to commercialize our product candidates, and our ability to generate revenue will be materially impaired.***

Our product candidates and the activities associated with their development and commercialization, including their testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. Failure to obtain regulatory approval for a product candidate will prevent us from commercializing the product candidate. We have limited experience in preparing, filing and prosecuting the applications necessary to gain regulatory approvals and expect to rely on third party contract research organizations and consultants to assist us in this process. Securing FDA approval requires the submission of extensive preclinical and clinical data, information about product manufacturing processes and inspection of facilities and supporting information to the FDA to establish the product candidate's safety and efficacy. Our future products may not be effective, may be only moderately effective or may prove to have significant side effects, toxicities or other characteristics that may preclude our obtaining regulatory approval or prevent or limit commercial use.

In the United States, BioThrax, our biodefense product candidates and our commercial product candidates are regulated by the FDA as biologics. To obtain approval from the FDA to market these product candidates, other than biodefense products purchased by HHS for the SNS, we will be required to submit to the FDA a biologics license application, or BLA. Ordinarily, the FDA requires a sponsor to support a BLA application with substantial evidence of the product's safety and effectiveness in treating the targeted indication based on data derived from adequate and well controlled clinical trials, including Phase III safety and efficacy trials conducted in patients with the disease or condition being targeted. Because humans are rarely exposed to anthrax or botulinum toxins under natural conditions, and cannot be intentionally exposed, statistically significant effectiveness of our biodefense product candidates cannot be demonstrated in humans, but instead must be demonstrated, in part, by utilizing animal models before they can be approved for marketing.

We believe that, according to the FDA's current BLA requirements for biologics that cannot be ethically or feasibly tested in humans in Phase III efficacy trials, we may instead be able to obtain BLA approval based on clinical data from Phase II and Phase III trials in healthy subjects that demonstrate adequate safety and immune response and effectiveness data from studies in animals. Specifically, we intend to pursue FDA approval of BioThrax as a post-exposure prophylaxis, our immune globulin candidates, our recombinant bivalent botulinum vaccine candidate and a next generation anthrax vaccine under the FDA animal rule.

Under the animal rule, if human efficacy trials are not ethical or feasible, the FDA can approve drugs or biologics used to treat or prevent serious or life threatening conditions caused by exposure to lethal or permanently disabling toxic chemical, biological, radiological or nuclear substances based on human clinical data demonstrating safety and immunogenicity and evidence of efficacy from appropriate non-clinical animal studies and any additional supporting data. Products approved under the animal rule are subject to additional regulation not normally required of other products. Additional regulation may include post-marketing study requirements, restrictions imposed on marketing or distribution or requirements to provide information to patients.

We have applied to the FDA to reduce the number of required doses of BioThrax for pre-exposure prophylaxis from six to five, with an annual booster dose thereafter. Our application is based on an interim analysis of data from an ongoing clinical trial being conducted by the CDC to evaluate whether as few as three doses of BioThrax, administered over six months, with booster doses up to three years apart, will confer adequate immune response. In April 2006, the FDA issued a complete response letter to our application, requesting clarification and requiring additional analysis of the data that we submitted. The data is being further analyzed, and we plan to submit an amendment to our application when this analysis is completed. If the FDA does not find our response to be adequate, we might be required to conduct additional independent testing to continue to pursue the development of this reduced dosing regimen. Responding to the FDA's complete response letter will delay potential approval of our application. If we are unable ultimately to respond satisfactorily to the FDA, our application will not be approved.

The process of obtaining regulatory approvals is expensive, often takes many years, if approval is obtained at all, and can vary substantially based upon the type, complexity and novelty of the product candidates involved. Changes in the regulatory approval policy during the development period, changes in or the enactment of additional statutes or regulations, or changes in the regulatory review for each submitted product application, may cause delays in the approval or rejection of an application.

The FDA has substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of a product candidate.

***Our products could be subject to restrictions or withdrawal from the market and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.***

Any immunobiotic product for which we obtain marketing approval, along with the manufacturing processes, post-approval clinical data, labeling, advertising and promotional activities for such product, will be subject to continual requirements of and review by the FDA and other regulatory bodies, including through inspections of our facilities. As an approved product, BioThrax is subject to these requirements and ongoing review. These requirements include submissions of safety and other post-marketing information and reports, registration requirements, cGMP requirements relating to quality control, quality assurance and corresponding maintenance of records and documents, and recordkeeping. The FDA enforces its cGMP and other requirements through periodic unannounced inspections of manufacturing facilities. The FDA is authorized to inspect manufacturing facilities without a warrant at reasonable times and in a reasonable manner.

After we acquired BioThrax and related vaccine manufacturing facilities in Lansing in 1998 from the Michigan Biologic Products Institute, we spent significant amounts of time and money renovating those facilities before the FDA approved a supplement to our manufacturing facility license in December 2001. The State of Michigan had initiated renovations after the FDA issued a notice of intent to revoke the FDA license to manufacture BioThrax in 1997. The notice of intent to revoke cited significant deviations by the Michigan Biologic Products Institute from cGMP requirements, including quality control failures. In March 2007, the FDA notified us that our manufacturing facility license is no longer subject to the notice of intent to revoke. After approving the renovated Lansing facilities in December 2001, the FDA conducted routine, biannual inspections of the Lansing facilities in September 2002, May 2004 and May 2006. Following each of these inspections, the FDA issued inspectional observations on Form FDA 483.

We responded to the FDA regarding the inspectional observations relating to each inspection and, where necessary, implemented corrective action. In December 2005, the FDA stated in its final order on BioThrax that at that time we were in compliance with all regulatory requirements related to the manufacture of BioThrax and that the FDA would continue to evaluate the production of BioThrax to assure compliance with federal standards and regulations. We have filed with the FDA our responses to all inspectional observations relating to the May 2006 inspection. The FDA has acknowledged receipt of our responses and has advised us that it has concluded that the May 2006 inspection is closed. Pursuant to its standard procedures, we expect that the FDA will review and assess our corrective actions at its next inspection. If in connection with any future inspection the FDA finds that we are not in substantial compliance with cGMP requirements, the FDA may undertake enforcement action against us.

Even if regulatory approval of a product is granted, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the product. Later discovery of previously unknown problems with our products or manufacturing processes, or failure to comply with regulatory requirements, may result in:

- restrictions on the marketing or manufacturing of a product;
- warning letters;
- withdrawal of the product from the market;
- refusal to approve pending applications or supplements to approved applications;
- voluntary or mandatory product recall;
- fines or disgorgement of profits or revenue;
- suspension or withdrawal of regulatory approvals, including license revocation;
- shut down, or substantial limitations of the operations in, manufacturing facilities;
- refusal to permit the import or export of products;
- product seizure; and
- injunctions or the imposition of civil or criminal penalties.

***We may not be able to obtain orphan drug exclusivity for our products. If our competitors are able to obtain orphan drug exclusivity for their products that are the same as our products, we may not be able to have competing products approved by the applicable regulatory authorities for a significant period of time.***

Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs and biologics for relatively small patient populations as orphan drugs. Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the product is entitled to a seven-year period of marketing exclusivity, which precludes the FDA from approving another marketing application for the same drug or biologic for that time period for the same indication.

Orphan drug exclusivity in Europe lasts for ten years, but can be reduced to six years if a drug or biologic no longer meets the criteria for orphan drug designation or if the drug or biologic is sufficiently profitable so that market exclusivity is no longer justified. If a competitor obtains orphan drug exclusivity for an indication for a product that competes with one of the indications for one of our product candidates before we obtain orphan drug designation, and if the competitor's product is the same drug as ours, the FDA would be prohibited from approving our product candidate for the same orphan indication unless we demonstrate that our product is clinically superior. None of our products or product candidates have been designated as orphan drugs. Even if we obtain orphan drug exclusivity for one or more indications for one of our product candidates, we may not be able to maintain it. For example, if a competitive product that is the same drug or biologic as our product is shown to be clinically superior to our product, any orphan drug exclusivity we may have obtained will not block the approval of that competitive product.

***The Fast Track designation for BioThrax as a post-exposure prophylaxis for anthrax infection may not actually lead to a faster development or regulatory review or approval process.***

If a drug or biologic is intended for the treatment of a serious or life-threatening condition and demonstrates the potential to address unmet medical needs for this condition, the sponsor may apply for FDA Fast Track designation. We have obtained a Fast Track designation from the FDA for BioThrax as a post-exposure prophylaxis for anthrax infection. However, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw our Fast Track designation if the FDA believes that the designation is no longer supported by data from our clinical development program. Our Fast Track designation does not guarantee that we will qualify for or be able to take advantage of the FDA's expedited review procedures or that any application that we may submit to the FDA for regulatory approval will be accepted for filing or ultimately approved.

***Failure to obtain regulatory approval in international jurisdictions would prevent us from marketing our products abroad.***

We intend to have our products marketed outside the United States. To market our products in the European Union and many other foreign jurisdictions, we may need to obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. With respect to some of our product candidates, we expect that a future collaborator will have responsibility to obtain regulatory approvals outside the United States, and we will depend on our collaborators to obtain these approvals. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ from that required to obtain FDA approval.

The foreign regulatory approval process may include all of the risks associated with obtaining FDA approval. We may not obtain foreign regulatory approvals on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or jurisdictions or by the FDA. We and our collaborators may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize our products in any market.

**Risks Related to Our Dependence on Third Parties**

***We may not be successful in maintaining and establishing collaborations, which could adversely affect our ability to develop and commercialize our product candidates domestically and internationally.***

For each of our product candidates, we plan to evaluate the merits of retaining commercialization rights for ourselves or entering into collaboration arrangements with leading pharmaceutical or biotechnology companies or non-governmental organizations, such as our collaboration agreement with Sanofi Pasteur for our meningitis B vaccine candidate. We expect that we will selectively pursue collaboration arrangements in situations in which the collaborator has particular expertise or resources for the development or commercialization of our products and product candidates or for accessing particular markets.

If we are unable to reach agreements with suitable collaborators, we may fail to meet our business objectives for the affected product or program. We face, and will continue to face, significant competition in seeking appropriate collaborators. Moreover, collaboration arrangements are complex and time consuming to negotiate, document and implement. We may not be successful in our efforts to establish and implement collaborations or other alternative arrangements. The terms of any collaborations or other arrangements that we establish may not be favorable to us.

Any collaboration that we enter into may not be successful. The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. It is likely that our collaborators will have significant discretion in determining the efforts and resources that they will apply to these collaborations. In particular, the successful development of our meningitis B vaccine candidate will initially depend on the success of our research collaboration with Sanofi Pasteur and whether Sanofi Pasteur selects one or more viable candidates pursuant to the collaboration for development of a product.

Thereafter, Sanofi Pasteur will have significant discretion in the development and commercialization of any such candidate. Sanofi Pasteur may choose not to pursue further development and commercialization of any candidate that it selects based on many factors outside our control. Sanofi Pasteur has the ability to suspend development of a candidate under the collaboration in various circumstances. The risks that we are subject to in our current collaborations, and anticipate being subject to in future collaborations, include the following:

- our collaboration agreements are likely to be for fixed terms and subject to termination by our collaborators in the event of a material breach by us;
- our collaborators may have the first right to maintain or defend our intellectual property rights and, although we may have the right to assume the maintenance and defense of our intellectual property rights if our collaborators

do not do so, our ability to maintain and defend our intellectual property rights may be compromised by our collaborators' acts or omissions;

- our collaborators may utilize our intellectual property rights in such a way as to invite litigation that could jeopardize or invalidate our intellectual property rights or expose us to potential liability; or
- our collaborators decide not to continue to work with us in the development of our product candidates.

Collaborations with pharmaceutical companies and other third parties often are terminated or allowed to expire by the other party. For example, Sanofi Pasteur has the right to terminate our meningitis B vaccine collaboration at any time after April 1, 2007 upon six months' prior written notice. Sanofi Pasteur can also terminate the collaboration upon a change of control or insolvency event involving us or upon our uncured material breach. Those terminations or expirations would adversely affect us financially and could harm our business reputation.

***If third parties on whom we rely for clinical trials do not perform as contractually required or as we expect, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business may suffer.***

We do not have the ability to independently conduct the clinical trials required to obtain regulatory approval for our products. We depend on independent clinical investigators, contract research organizations and other third party service providers to conduct the clinical trials of our product candidates and expect to continue to do so. We rely heavily on these third parties for successful execution of our clinical trials, but do not exercise day-to-day control over their activities. We are responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with standards, commonly referred to as Good Clinical Practices, for conducting and recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements. Third parties may not complete activities on schedule, or may not conduct our clinical trials in accordance with regulatory requirements or our stated protocols. The failure of these third parties to carry out their obligations could delay or prevent the development, approval and commercialization of our product candidates.

In addition, we encourage government entities and non-government organizations to conduct studies of, and pursue other development efforts for, our product candidates. For example, the CDC is currently conducting an independent clinical trial to evaluate the administration of BioThrax in a regimen of fewer doses. We participate in monthly meetings with the trial investigators and in the annual review meeting for this trial and provide input to the CDC for responses to FDA questions and requests for additional information.

We expect to rely on data from these development efforts in seeking marketing approval for our product candidates. For example, our BLA supplement for a label expansion of BioThrax for a regimen of fewer doses is based on the interim trial report provided to us by the CDC from its ongoing clinical trial. We currently are awaiting the final data from the CDC trial. These government entities and non-government organizations have no obligation or commitment to us to conduct or complete any of these studies or clinical trials and may choose to discontinue these development efforts at any time. In addition, government entities depend on annual Congressional appropriations to fund these development efforts. In prior years, there has been some uncertainty whether Congress would choose to fund the CDC trial. Although the trial has been funded to date, Congress may not continue to fund the trial.

### **Risks Related to Our Intellectual Property**

***We may fail to protect our intellectual property rights, which would harm our business.***

Our success, particularly with respect to our commercial business, will depend in large part on our ability to obtain and maintain protection in the United States and other countries for the intellectual property covering or incorporated into our technology and products. The patent situation in the field of immunobiotics and other pharmaceuticals generally is highly uncertain and involves complex legal and scientific questions.

We may not be able to obtain additional issued patents relating to our technology or products. Even if issued, patents may be challenged, narrowed, invalidated or circumvented, which could limit our ability to stop competitors from marketing similar products or limit the length of term of patent protection we may have for our products. Changes in patent laws or administrative patent office rules or changes in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection.

Our patents also may not afford us protection against competitors with similar technology. Because patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing, or in some cases not at all, and because publications of discoveries in the scientific literature often lag behind actual discoveries, neither we nor our licensors can be certain that we or they were the first to make the inventions claimed in issued patents or pending patent applications, or that we or they were the first to file for protection of the inventions set forth in these patent applications. In addition, patents generally expire, regardless of their date of issue, 20 years from the earliest claimed non-provisional filing date. As a result, the time required to obtain regulatory approval for a product candidate may consume part or all of the patent term. We are not able to accurately predict the remaining length of the applicable patent term following regulatory approval of any of our product candidates.

Our collaborators and licensors may not adequately protect our intellectual property rights. These third parties may have the first right to maintain or defend our intellectual property rights and, although we may have the right to assume the maintenance and defense of our intellectual property rights if these third parties do not do so, our ability to maintain and defend our intellectual property rights may be compromised by the acts or omissions of these third parties. Under our collaboration agreement with Sanofi Pasteur for our meningitis B vaccine candidate, we have the right to prosecute and maintain our patent rights under the collaboration agreement. Sanofi Pasteur is responsible for prosecuting and maintaining joint patent rights under the collaboration agreement, although we have the right to support the continued prosecution or maintenance of the joint patent rights if Sanofi Pasteur fails to do so.

In addition, Sanofi Pasteur has the first right to pursue claims against third parties for infringement of the patent rights under the collaboration agreement and assume the defense of any infringement claims that may arise, although we have the right to pursue infringement claims against third parties and assume the defense of infringement claims if Sanofi Pasteur fails to do so. Under our licenses with HPA relating to our recombinant bivalent botulinum vaccine candidate and the botulinum toxoid vaccine that we plan to use as the basis for our botulinum immune globulin candidate, HPA is responsible for prosecuting and maintaining patent rights, although we have the right to support the continued prosecution or maintenance of the patent rights if HPA fails to do so. In addition, we have the first right to pursue claims against third parties for infringement of the patent rights and assume the defense of any infringement claims that may arise.

***If we are unable to in-license any intellectual property necessary to develop, manufacture or sell any of our product candidates, we will not be successful in developing or commercializing such product candidate.***

We expect that we may need to in-license various components or technologies, including, for example, adjuvants and novel delivery systems, for some of our current or future product candidates. We may be unable to obtain the necessary licenses on acceptable terms, or at all. If we are unable to obtain such licenses, we could be prevented or delayed from continuing further development or from commercially launching the applicable product candidate.

***If we fail to comply with our obligations in our intellectual property licenses with third parties, we could lose license rights that are important to our business.***

We are a party to a number of license agreements. We consider our licenses with HPA relating to our recombinant bivalent botulinum vaccine candidate and the botulinum toxoid vaccine that we plan to use as the basis for our botulinum immune globulin candidate to be material to our business. Under these license agreements, we obtained the exclusive, worldwide right to develop, manufacture and commercialize pharmaceutical products that consist of botulinum toxoid components or recombinant botulinum toxin components for the prevention or treatment of illness in humans caused by exposure to the botulinum toxin, subject to HPA's non-exclusive right to make, use or sell recombinant botulinum products to meet public health requirements in the United Kingdom. We expect to enter into additional licenses in the future. Our existing licenses impose, and we expect future licenses will impose, various diligence, milestone payment, royalty, insurance and other obligations on us. If we fail to comply with these obligations, the licensor may have the right to terminate the license, in which event we might not be able to market any product that is covered by the licensed patents.

***If we are unable to protect the confidentiality of our proprietary information and know-how, the value of our technology and products could be adversely affected.***

In addition to patented technology, we rely upon unpatented proprietary technology, processes and know-how, particularly as to our proprietary manufacturing processes. Because we do not have patent protection for BioThrax, the label expansions and improvements that we are pursuing for BioThrax, our only intellectual property protection for BioThrax is confidentiality regarding our manufacturing capability and specialty know-how, such as techniques, processes and biological starting materials. However, these types of trade secrets can be difficult to protect. We seek to protect this confidential information, in part, with agreements with our employees, consultants and third parties.



These agreements may be breached, and we may not have adequate remedies for any such breach. In addition, our trade secrets may otherwise become known or be independently developed by competitors. If we are unable to protect the confidentiality of our proprietary information and know-how, competitors may be able to use this information to develop products that compete with our products, which could adversely impact our business.

***If we infringe or are alleged to infringe intellectual property rights of third parties, it will adversely affect our business.***

Our development and commercialization activities, as well as any product candidates or products resulting from these activities, may infringe or be claimed to infringe patents and other intellectual property rights of third parties under which we do not hold licenses or other rights. Third parties may own or control these patents and intellectual property rights in the United States and abroad. These third parties could bring claims against us or our collaborators that would cause us to incur substantial expenses and, if successful against us, could cause us to pay substantial damages. Further, if a patent infringement or other similar suit were brought against us or our collaborators, we or they could be forced to stop or delay development, manufacturing or sales of the product or product candidate that is the subject of the suit.

As a result of patent infringement or other similar claims, or to avoid potential claims, we or our collaborators may choose or be required to seek a license from the third party and be required to pay license fees or royalties or both. These licenses may not be available on acceptable terms, or at all. Even if we or our collaborators were able to obtain a license, the rights may be non-exclusive, which could result in our competitors gaining access to the same intellectual property. Ultimately, we could be prevented from commercializing a product, or be forced to cease some aspect of our business operations, if, as a result of actual or threatened patent infringement claims, we or our collaborators are unable to enter into licenses on acceptable terms. This could harm our business significantly.

There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the biotechnology and pharmaceutical industries. For example, we are aware of and are monitoring ongoing litigation between Bavarian Nordic and Acambis relating to the manufacture of the modified vaccinia Ankara virus, or MVA, as a smallpox vaccine for biodefense use by the U.S. government.

We have licensed from the Bavarian State Ministry of the Environment, Public Health and Consumer Protection rights to materials and technology related to MVA. Our MVA platform technology, which is based on these licensed rights, could potentially be used as a viral vector for delivery of several vaccine antigens for different disease-causing organisms, including influenza, using recombinant technology. As a result, our licensed rights and our ability to use our MVA platform technology could be negatively affected by the outcome of this ongoing litigation. It also is possible that we could be named as a defendant in future similar litigation relating to MVA. In addition to infringement claims against us, we may become a party to other patent litigation and other proceedings, including interference and reexamination proceedings declared by the U.S. Patent and Trademark Office and opposition proceedings in the European Patent Office, regarding intellectual property rights with respect to our products and technology.

For example, we have filed an opposition in the European Patent Office against Bavarian Nordic's patent covering certain aspects of the MVA technology. We may also become a party to trademark invalidation and interference proceedings in foreign trademark offices. The cost to us of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Patent litigation and other proceedings may also absorb significant management time.

#### **Risks Related to Our Acquisition Strategy**

***Our strategy of generating growth through acquisitions may not be successful.***

We have pursued an acquisition strategy since our inception to build our business of developing, manufacturing and commercializing immunobiotics. We commenced operations in September 1998 through an acquisition of rights to BioThrax, vaccine manufacturing facilities at a multi-building campus on approximately 12.5 acres in Lansing and vaccine development and production know-how from the Michigan Biologic Products Institute. We acquired our pipeline of commercial vaccine candidates through our acquisition of ViVacs in 2006 and Microscience in 2005 and our acquisition of substantially all of the assets of Antex in 2003.

In the future, we may be unable to license or acquire suitable products or product candidates from third parties for a number of reasons. In particular, the licensing and acquisition of pharmaceutical and biological products is a competitive area. A number of more established companies are also pursuing strategies to license or acquire products in the immunobiotics field. These established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities. Other factors that may prevent us from licensing or otherwise acquiring suitable products and product candidates include the following:

- we may be unable to license or acquire the relevant technology on terms that would allow us to make an appropriate return on the product;
- companies that perceive us to be their competitor may be unwilling to assign or license their product rights to us; or
- we may be unable to identify suitable products or product candidates within our areas of expertise.

In addition, we expect competition for acquisition candidates in the immunobiotic field to increase, which may mean fewer suitable acquisition opportunities for us as well as higher acquisition prices. If we are unable to successfully obtain rights to suitable products and product candidates, our business, financial condition and prospects for growth could suffer.

***If we fail to successfully manage any acquisitions, our ability to develop our product candidates and expand our product candidate pipeline may be harmed.***

As part of our business strategy, we intend to continue to seek to obtain marketed products and development stage product candidates through acquisitions and licensing arrangements with third parties. The failure to adequately address the financial, operational or legal risks of these transactions could harm our business. Financial aspects of these transactions that could alter our financial position, reported operating results or stock price include:

- use of cash resources;
- higher than anticipated acquisition costs and expenses;
- potentially dilutive issuances of equity securities;
- the incurrence of debt and contingent liabilities, impairment losses or restructuring charges;
- large write-offs and difficulties in assessing the relative percentages of in-process research and development expense that can be immediately written off as compared to the amount that must be amortized over the appropriate life of the asset; and
- amortization expenses related to other intangible assets.

Operational risks that could harm our existing operations or prevent realization of anticipated benefits from these transactions include:

- challenges associated with managing an increasingly diversified business;
- disruption of our ongoing business;
- difficulty and expense in assimilating the operations, products, technology, information systems or personnel of the acquired company;
- diversion of management's time and attention from other business concerns;
- inability to maintain uniform standards, controls, procedures and policies;
- the assumption of known and unknown liabilities of the acquired company, including intellectual property claims; and
- subsequent loss of key personnel.

If we are unable to successfully manage our acquisitions, our ability to develop new products and continue to expand our product pipeline may be limited.

#### **Risks Related to Our Common Stock**

Fuad El-Hibri, chief executive officer and chairman of our Board of Directors, has substantial control over us, including through his ability to control the election of the members of our Board of Directors, and could delay or prevent a change of control.

Mr. El-Hibri has the ability to control the election of the members of our Board of Directors through his ownership interests and voting arrangements among our significant stockholders. As of July 31, 2007, Mr. El-Hibri was the beneficial owner of 63% of our outstanding common stock. Because Mr. El-Hibri has the ability to control the election of the members of our board, and because of his substantial control of our capital stock, Mr. El-Hibri will likely have the ability to delay or prevent a change of control of us that may be favored by other directors or stockholders and otherwise exercise substantial control over all corporate actions requiring board or stockholder approval, including any amendment of our certificate of incorporation or by-laws. The control by Mr. El-Hibri may prevent other stockholders from influencing significant corporate decisions and may result in conflicts of interest that could cause our stock price to decline.

***Provisions in our corporate charter documents and under Delaware law may prevent or frustrate attempts by our stockholders to change our management and hinder efforts to acquire a controlling interest in us.***

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

- the classification of our directors;
- limitations on changing the number of directors then in office;
- limitations on the removal of directors;
- limitations on filling vacancies on the board;
- limitations on the removal and appointment of the chairman of our Board of Directors;
- following November 20, 2008, advance notice requirements for stockholder nominations for election of directors and other proposals;
- the inability of stockholders to act by written consent;
- the inability of stockholders to call special meetings; and
- the ability of our Board of Directors to designate the terms of and issue new series of preferred stock without stockholder approval.

Until November 20, 2008, the affirmative vote of holders of our capital stock representing a majority of the voting power of all outstanding stock entitled to vote is required to amend or repeal the above provisions of our certificate of incorporation. Following November 20, 2008, the affirmative vote of holders of our capital stock representing at least 75% of the voting power of all outstanding stock entitled to vote is required to amend or repeal the above provisions of our certificate of incorporation. Until November 20, 2008, the affirmative vote of either at least 75% of the directors then in office or holders of our capital stock representing a majority of the voting power of all outstanding stock entitled to vote is required to amend or repeal our by-laws. Following November 20, 2008, the affirmative vote of either a majority of the directors present at a meeting of our Board of Directors or holders of our capital stock representing at least 75% of the voting power of all outstanding stock entitled to vote is required to amend or repeal our by-laws.

In addition, Section 203 of the General Corporation Law of Delaware 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% or more 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. Accordingly, Section 203 may discourage, delay or prevent a change in control of us.

***Our stockholder rights plan could prevent a change in control of us in instances in which some stockholders may believe a change in control is in their best interests.***

Under a rights agreement that establishes our stockholder rights plan, we issue to each of our stockholders one preferred stock purchase right for each outstanding share of our common stock. Each right, when exercisable, will entitle its holder to purchase from us a unit consisting of one one-thousandth of a share of series A junior participating preferred stock at a purchase price of \$150 in cash, subject to adjustments.

Our stockholder rights plan is intended to protect stockholders in the event of an unfair or coercive offer to acquire us and to provide our Board of Directors with adequate time to evaluate unsolicited offers. The rights plan may have anti-takeover effects. The rights plan will cause substantial dilution to a person or group that attempts to acquire us on terms that our Board of Directors does not believe are in our best interests and those of our stockholders and may discourage, delay or prevent a merger or acquisition that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares.

*If our stock price is volatile, purchasers of our common stock could incur substantial losses.*

Our stock price has been, and is likely to continue to be, volatile. From November 15, 2006, when our common stock first began trading on the New York Stock Exchange, through July 31, 2007, our common stock has traded as high as \$17.75 per share and as low as \$8.33 per share. The stock market in general and the market for biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their common stock at or above the initial public offering price. The market price for our common stock may be influenced by many factors, including:

- the success of competitive products or technologies;
- results of clinical trials of our product candidates or those of our competitors;
- decisions and procurement policies by the U.S. government affecting BioThrax and our biodefense product candidates;
- regulatory developments in the United States and foreign countries;
- developments or disputes concerning patents or other proprietary rights;
- the recruitment or departure of key personnel;
- variations in our financial results or those of companies that are perceived to be similar to us;
- market conditions in the pharmaceutical and biotechnology sectors and issuance of new or changed securities analysts' reports or recommendations;
- general economic, industry and market conditions; and
- the other factors described in this "Risk Factors" section.

*We do not anticipate paying any cash dividends in the foreseeable future.*

We currently intend to retain our future earnings, if any, to fund the development and growth of our business. Any future debt agreements that we enter into may limit our ability to pay dividends. As a result, capital appreciation, if any, of our common stock will be the sole source of gain for our stockholders for the foreseeable future.

*A significant portion of our total outstanding shares are restricted from immediate resale but may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.*

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. Moreover, holders of an aggregate of approximately 22.3 million shares of our common stock outstanding as of July 31, 2007 have the right to require us to register these shares of common stock under specified circumstances.

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

### **Recent Sales of Unregistered Securities**

Not applicable.

### **Use of Proceeds**

On November 20, 2006, we completed an initial public offering of 5,000,000 shares of our common stock pursuant to a registration statement on Form S-1 (File No. 333-136622), which was declared effective by the SEC on November 14, 2006. We received net proceeds from the offering of approximately \$54.2 million, after deducting underwriting discounts and commissions and other offering expenses.

Through June 30, 2007, we have used approximately \$2.3 million of the net proceeds from the offering to fund development of our biodefense product candidates, comprised of approximately \$630,000 for label expansions and improvements for BioThrax, approximately \$390,000 for a next generation anthrax vaccine candidate and approximately \$1.3 million for our anthrax immune globulin candidate; approximately \$2.2 million of the net proceeds to fund development of our commercial product candidates, comprised of approximately \$1.1 million for our typhoid vaccine candidate and approximately \$1.1 million for our hepatitis B therapeutic vaccine candidate; and approximately \$11.6 million of the net proceeds to fund a portion of the construction, installation, validation and qualification activities costs for our new manufacturing facility in Lansing. We have not used any of the net proceeds from the offering to make payments, directly or indirectly, to any director or officer of ours, or any of their associates, to any person owning 10 percent or more of our common stock or to any affiliate of ours. We have invested the balance of the net proceeds from

the offering in short-term, investment grade, interest-bearing instruments. There has been no material change in our planned use of the balance of the net proceeds from the offering as described in our final prospectus filed with the SEC pursuant to Rule 424(b) under the Securities Act.

**ITEM 3. DEFAULTS UPON SENIOR SECURITIES**

Not applicable.

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

The following matters were submitted to a vote of our stockholders at our 2007 Annual Meeting of Stockholders held on June 14, 2007 and approved by the requisite vote of our stockholders as follows:

1. The election of Fuad El-Hibri, Jerome M. Hauer and Ronald B. Richard to our Board of Directors to serve as Class I directors, each for a term of three years.

Nominee	Number of Shares	
	For	Withheld
Fuad El-Hibri	21,636,903	133,318
Jerome M. Hauer	21,672,046	98,175
Ronald B. Richard	21,667,603	102,618

2. The ratification of the selection by the audit committee of our Board of Directors of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2007.

For	Number of Shares		Abstain
	Against		
21,758,187	10,700		1,334

The number of shares of our common stock eligible to vote as of the record date of April 19, 2007 was 28,128,718 shares.

**ITEM 5. OTHER INFORMATION**

On May 10, 2007, we entered into a lease agreement with Slough Estates (Winnersh) Limited for the lease of approximately 13,000 square feet of office and laboratory space in Wokingham, England. We anticipate conducting product development programs primarily for our commercial product candidates in the space. The lease provides for an initial rent of £163,000 per annum commencing on November 10, 2007, which is subject to review in 2012. The lease expires in November 2016.

On May 14, 2007, we entered into an amendment to our Filling Services Agreement dated March 18, 2002 with Hollister-Stier Laboratories LLC. The amendment extends the term of the agreement from December 31, 2007 to December 31, 2010.

**ITEM 6. EXHIBITS**

The exhibits required to be filed by Item 601 of Regulation S-K are listed in the Exhibit Index immediately preceding the exhibits hereto.

**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.

**EMERGENT BIOSOLUTIONS INC.**

Date: August 7, 2007

By: /s/ Fuad El-Hibri  
Fuad El-Hibri  
Chief Executive Officer and  
Chairman of the Board of Directors  
(Principal Executive Officer)

Date: August 7, 2007

By: /s/R. Don Elsey  
R. Don Elsey  
Sr. Vice President Finance, Chief Financial  
Officer and Treasurer  
(Principal Financial and Accounting Officer)

EXHIBIT INDEX

<b>Exhibit Number</b>	<b>Description</b>
10.1	Loan Agreement, dated June 29, 2007, among Emergent BioDefense Operations Lansing Inc., Emergent BioSolutions Inc. and HSBC Realty Credit Corporation (USA)
10.2	Promissory Note, dated June 29, 2007, from Emergent BioDefense Operations Lansing Inc. to HSBC Realty Credit Corporation (USA)
10.3	Loan Agreement, dated June 8, 2007, between Emergent BioDefense Operations Lansing Inc. and Fifth Third Bank
10.4	Revolving Credit Note, dated June 8, 2007, from Emergent BioDefense Operations Lansing Inc. to Fifth Third Bank
10.5	Lease Agreement, dated May 10, 2007, among Slough Estates (Winnersh) Limited, Emergent Product Development UK Limited, and Emergent BioSolutions Inc.
10.6	Amendment No.5 to the Filling Services Agreement dated March 18, 2002, dated May 14, 2007, between Emergent BioDefense Operations Lansing, Inc. and Hollister-Stier Laboratories LLC
31.1	Certification of the Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a)
31.2	Certification of the Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a)
32.1	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

**LOAN AGREEMENT**

THIS LOAN AGREEMENT (this "**Agreement**") is dated as of June 29, 2007, by and among **EMERGENT BIODEFENSE OPERATIONS LANSING INC.**, formerly known as BioPort Corporation, a Michigan corporation, which maintains its chief executive office at 3500 N. Martin Luther King, Jr. Blvd., Building One, Third Floor, Lansing, Michigan 48906 (the "**Borrower**"), and **EMERGENT BIOSOLUTIONS INC.**, a Delaware corporation (the "**Guarantor**") and **HSBC REALTY CREDIT CORPORATION (USA)**, a Delaware corporation (the "**Bank**").

WHEREAS, Borrower previously executed and delivered to Bank that certain Promissory Note dated as of August 25, 2006 in the original principal amount of \$15,000,000.00 (the "**Original Note**"). The Original Note was issued pursuant to a Loan Agreement dated as of August 25, 2006 among Borrower, Guarantor and Bank (the "**Original Loan Agreement**") and was secured by among other things that certain Guaranty dated as of August 25, 2006 from Guarantor in favor of Bank (the "**Original Guaranty**").

WHEREAS, of the date hereof Bank has agreed to lend Borrower an additional \$15,000,000.00, pursuant to that certain Promissory Note dated as of the date hereof from Borrower payable to the order of Bank (the "**Note**", which term shall include any and all amendments, restatements and modifications thereto) evidencing that certain term loan in the original principal amount of (\$30,000,000.00) (hereinafter referred to as the "**Loan**"); and

WHEREAS, the Loan will be of benefit to the Guarantor and the Guarantor desires to induce the Bank to make the Loan by guaranteeing the payment of the Loan pursuant to that certain Guaranty dated as of the date hereof (the "**Guaranty**", as also defined below);

WHEREAS, the Bank is willing to make the Loan to the Borrower upon the terms and subject to the conditions hereinafter set forth;

WHEREAS, in connection with the execution and delivery of the Note, the Guaranty, this Loan Agreement and the other documents related to the Loan, the Original Note, the Original Guaranty and the Original Loan Agreement and any other documents previously delivered to the Bank in connection with the Original Note shall be hereby terminated and replaced with the Note, the Guaranty, this Loan Agreement and the other documents related to the Loan dated as of the date hereof.

NOW, THEREFORE, in consideration of the foregoing and of the agreements, covenants and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows;

**SECTION 1. DEFINITIONS**

As used herein, the following terms, when initial capital letters are used, shall have the respective meanings set forth below. In addition, all terms defined in the applicable Uniform Commercial Code shall have the meanings given therein unless otherwise defined herein.

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1.01 Defined Terms. As used in this Agreement, the following terms shall have the following meanings, unless the context otherwise requires:

“**Affiliate**” shall mean (a) any entity in which the Borrower legally or beneficially owns or holds, directly or indirectly, any capital stock, membership interest or other equity interest; (b) any person or entity that is a partner in or member of the Borrower or a partnership or limited liability company in which the Borrower is a partner, (c) any person that is a director, officer, member, stockholder (legally or beneficially) or other affiliate of any of the foregoing or of the Borrower; and (d) any person or entity that directly or indirectly controls, is under the control of, or is under common control with, the Borrower, including, without limitation, any person or entity that directly or indirectly has the right or power to direct the management or policies of the Borrower and any person or entity whose management or policies the Borrower directly or indirectly has the right or power to direct.

“**Collateral**” shall mean the real property and personal property of the Borrower upon which the Borrower has granted a lien to the Bank pursuant to the Security Agreement and the Mortgage.

“**Developed Campus**” shall mean the portion of the Property located in Ingham County, Michigan.

“**Environmental Laws**” shall mean all federal, state and local laws, whether now or hereafter enacted, and as amended from time to time, relating to pollution or protection of the environment and the handling of Hazardous Materials; including, without limitation, laws relating to emissions, discharges, releases or threatened releases of Hazardous Materials into the environment (including, without limitation, ambient air, surface water, ground water or land), or otherwise relating to the manufacture, generation, production, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, and any and all regulations, codes, plans, orders, decrees, judgments, injunctions, notices or demand letters issued, entered, promulgated or approved thereunder.

“**ERISA**” shall mean the Employee Retirement Income Security Act of 1974, as amended from time to time, and any successor legislation, and all regulations, codes, orders, decrees, judgments, injunctions, notices or demand letters issued, entered, promulgated or approved thereunder.

“**Event of Default**” shall mean any of the events specified in Section 6 hereof, provided that any requirement for the giving of notice, the lapse of time, or both has been satisfied.

“**Fifth Third Loan**” shall mean that certain financing arrangement with Fifth Third Bank related to (i) that certain revolving credit loan in the amount of \$15,000,000.00 evidenced by that certain Amended and Restated Loan Agreement dated June 11, 2007 by and between the Borrower and Fifth Third Bank, a Michigan banking corporation and that certain Amended and Restated Security Agreement dated June 11, 2007 by and between the Borrower and Fifth Third Bank, (ii) that certain term loan in the amount of \$2,400,000 evidenced by that certain term note dated August 10, 2004 by and between the Borrower and Fifth Third Bank, and (iii) various other notes, security agreements, loan agreements and credit documents related to such revolving

loan and term loan (collectively, the “**Fifth Third Loan Documents**”), which are secured, respectively, by a lien on the proceeds of Government Contracts (as defined in the Fifth Third Loan Documents) and a lien on certain computer software known as the “The Enterprise Resource Planning System”.

“**GAAP**” shall mean generally accepted accounting principles as in effect from time to time.

“**Guaranty**” shall mean the Guaranty, of even date herewith, made and executed by the Guarantor for the benefit of the Bank, as amended, supplemented, restated or modified from time to time.

“**Hazardous Materials**” shall mean any (i) hazardous, regulated and/or toxic chemicals, materials, substances or wastes occurring in the air, water, soil or ground water or noise in, on, over or under the Property or the improvements thereon, as defined by the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund or CERCLA), and the Superfund Amendments and the Reauthorization Act of 1986 (SARA), 42 U.S.C. § 9601 et seq., the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. § 11001 et seq., the Resource Conservation and Recovery Act (the Solid Waste Disposal Act or RCRA), 42 U.S.C. § 6901 et seq., the Federal Water Pollution Control Act, (CWA), 33 U.S.C. § 1251 et seq., the Clean Air Act (CAA), 42 U.S.C. § 7401 et seq., the Hazardous Materials Transportation Act, 49 U.S.C. § 1801 et seq., the Federal Water Pollution Control Act, 33 U.S.C. § 1251 et seq., the Safe Drinking Water Act, 42 U.S.C. § 300 et. seq. and the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C.A. §136 et seq., the Uranium Mill Tailings Radiation Control Act, 42 U.S.C. § 7901 et seq., the Occupational Safety and Health Act, 29 U.S.C. § 655 et seq., the National Environmental Policy Act, 42 U.S.C. § 4321 et seq., and the Noise Control Act, 42 U.S.C. § 4901 et seq., or comparable state statutes, as each such statute may be amended from time to time, and/or as defined in regulations promulgated thereunder; (ii) oil, petroleum products, and their by-products; (iii) any substance, the presence of which is prohibited or controlled by any other applicable federal or state or local laws, regulations, statutes or ordinances now in force or hereafter enacted relating to waste disposal or environmental protection with respect to hazardous, toxic or other substances generated, produced, leaked, released, spilled or disposed of at or from the Property; (iv) any other substance which by law requires special handling in its collection, storage, treatment or disposal including, but not limited to, asbestos or asbestos-containing material in any form that could be friable, polychlorinated biphenyls (PCBs), was formaldehyde foam insulation and lead-based paints, but not including small quantities of such materials present on the Property in retail containers, (v) Microbial Matter or infectious substances; (vi) underground or above-ground storage tanks, whether empty or containing any substance, the presence of which on the Property is prohibited by any federal, state or local authority; (vii) any substance that requires special handling; and (viii) any other material or substance now or in the future defined as a “hazardous substance,” “hazardous material,” hazardous waste,” “toxic substance,” “toxic pollutant,” “contaminant,” or “pollutant” within the meaning of any Environmental Laws. “Microbial Matter” shall mean the presence of fungi or bacterial matter (which is not normally found in the environment) which reproduces through the release of spores or the splitting of cells, including, but not limited to, mold, mildew and viruses, whether or not such Microbial Matter is living.

“**Intercreditor Agreement**” shall mean that certain Intercreditor Agreement between Fifth Third Bank and the Bank, consented to by the Borrower and the Guarantor, dated as of August 25, 2006.

“**Lien**” shall mean any mortgage, pledge, assignment, security interest, encumbrance, hypothecation, lien, encroachment, reservation, right of way, easement, covenant, condition, restriction or charge of any kind (including any conditional sale or other title retention agreement, any financing lease having substantially the same economic effect as any of the foregoing, and the filing or authorization of, any financing statement under the Uniform Commercial Code or comparable law of any jurisdiction).

“**Loan**” means the loan of even date herewith from the Bank to the Borrower evidenced by the Note.

“**Loan Documents**” shall mean the Note, this Agreement, the Guaranty, the Mortgage, the Security Agreement and any other agreement or document referred to herein or now or hereafter delivered and executed by the Borrower and/or the Guarantor and/or the Bank in connection with the Loan contemplated hereby, together with any and all revisions, amendments, restatements and modifications to, replacements of and substitutions for, any of the foregoing.

“**Mortgage**” shall mean the Mortgage dated as of August 25, 2006, as amended by the First Amendment to Mortgage dated as of the date hereof, made and executed by the Borrower for the benefit of the Bank, as further amended, supplemented, restated or modified from time to time, to secure the Note, which Mortgage creates a first lien on the Property.

“**Note**” shall mean that certain Promissory Note of even date herewith in the principal amount of \$30,000,000.00 from the Borrower payable to the order of the Bank.

“**Permitted Liens**” shall mean with respect to the Borrower and the Collateral: (a) Liens, if any, for taxes, front foot benefit charges, assessments and other charges enumerated in Section 1.03(a) of the Mortgage, not yet due or payable; (b) applicable building and zoning laws and regulations; (c) any mechanic’s, artisan’s, materialman’s, landlord’s, carrier’s or other like Lien arising in the ordinary course of business with respect to obligations which are not due; (d) any and all municipal and public utility easements of record; (e) any Lien arising out of a judgment, order or award with respect to which the Borrower shall in good faith be prosecuting diligently an appeal or proceeding for review and with respect to which there shall be in effect a subsisting stay of execution pending such appeal or proceeding for review, provided appropriate reserves therefor are established by the Borrower in accordance with GAAP and provided such Lien is subordinate to any security interest of the Bank in the property encumbered by such Lien; (f) any deposit of funds made in the ordinary course of business to secure obligations of the Borrower under worker’s compensation laws, unemployment insurance laws or similar legislation, to secure public or statutory obligations of the Borrower, to secure surety, appeal or customs bonds in proceedings to which the Borrower is a party, or to secure the Borrower’s performance in connection with bids, tenders, contracts (other than contracts for the payment of money), leases or subleases made by the Borrower in the ordinary course of business; (g) any Lien set forth in the Title Insurance Policy Nos. TRO-06-100063 and TRO-06-100064 issued by Lawyers Title Insurance Corporation, as updated; (h) any lease, sublease or agreement for occupancy or use of

any part of the Property, so long as those leases, subleases or agreements are subordinate to the Mortgage and have been approved by the Bank; (i) a Lien in favor of the Bank; (j) such other matters affecting title to the Property as are approved by the Bank in writing; (k) subject to the terms of the Intercreditor Agreement, Liens arising out of or related to the Fifth Third Loan, including any extension, amendment or renewal of such Liens; (l) the liens listed on Schedule 1.1 attached hereto; (m) any liens related to licenses and use agreements in favor of such vendors or licensors related to intellectual property used by Borrower; and (n) any restrictions and encumbrances imposed on Borrower pursuant to intellectual property out-licensed by Borrower to third parties in the ordinary course of Borrower's business.

**"Property"** shall mean that certain real property, improvements, fixtures and other real property interests owned by the Borrower and located in Clinton County and Ingham County, Michigan, as more particularly described in the Mortgage.

**"Security Agreement"** shall mean the Security Agreement of even date herewith from the Borrower to the Bank granting to the Bank a Lien on the personal property of the Borrower (excepting the collateral for the Fifth Third Loan as permitted pursuant to the Intercreditor Agreement), as amended, supplemented, restated or modified from time to time.

**"Subsidiary"** shall mean any corporation, partnership or limited liability company, at least a majority of the outstanding equity interests of which, now or in the future, is owned or controlled by the Borrower, directly or indirectly, or through one or more intermediaries.

**"UCC Collateral"** shall mean all of the personal property of the Borrower upon which the Borrower has granted the Bank a lien pursuant to the Security Agreement.

1.02 Accounting Terms. As used in this Agreement and any of the other Loan Documents, as well as in any certificate, report or other document made or delivered pursuant to or in connection with this Agreement, accounting terms not defined herein and accounting terms only partly defined herein shall have the respective meanings given to them under GAAP.

1.03 Use of Defined Terms. All terms defined in this Agreement shall have the defined meanings when used in any of the other Loan Documents or in any certificate, report or other document made or delivered pursuant to or in connection with this Agreement, unless the context shall require otherwise.

## SECTION 2. LOAN AND REPAYMENT

2.01 Loan. Subject to the terms and conditions set forth herein and in the Note, the Bank agrees to lend to the Borrower, in a single advance to be made on or about the date hereof, the sum of Thirty Million and No/100 Dollars (\$30,000,000.00). The Note shall be payable on the 1<sup>st</sup> day of each month in monthly installments of principal in the amount of \$250,00.00, plus accrued interest, being the amount required to amortize the Loan over a period of 10 years, beginning August 1, 2007. All accrued interest and outstanding principal on the Loan shall be due and payable in a final balloon payment on June 29, 2012.

2.02 Note, Interest, Payment Terms. The Borrower's indebtedness to the Bank for the Loan together with interest accrued thereon, shall be evidenced by the Note. The Note shall bear interest and be payable as set forth therein.

2.03 Fee. As of the date hereof, the Borrower has paid to the Bank an aggregate commitment fee in the amount of \$150,000.00 (the "**Commitment Fee**") for the Loan.

SECTION 3. CONDITIONS PRECEDENT.

The Bank shall have no obligation to make any advance under the Loan Documents unless and until:

3.01 Delivery of Documents. The Borrower shall have delivered to the Bank the following:

(i) certificates of good standing for the Borrower certified by the Secretary of State, or other appropriate governmental authority, of the state of incorporation of the Borrower and of the Borrower's principal place of business;

(ii) a certificate of the Borrower, certifying as to attached copies of its certificate of incorporation and bylaws and the resolutions of its Board of Directors authorizing the execution, delivery and performance of the Loan Documents to which the Borrower is a party, the borrowings by the Borrower hereunder, and the granting of the Liens contemplated by the Loan Documents, and certifying as to the incumbency, authority and signatures of the officers of the Borrower authorized to sign the Loan Documents on behalf of the Borrower;

(iii) certificates of good standing for the Guarantor certified by the Secretary of State, or other appropriate governmental authority, of the state of incorporation of the Guarantor and of the Guarantor's principal place of business;

(iv) a certificate of the Guarantor, certifying as to attached copies of its certificate of incorporation and bylaws and the resolutions of its Board of Directors authorizing the execution, delivery and performance of the Loan Documents to which the Guarantor is a party, and certifying as to the incumbency, authority and signatures of the officers of the Guarantor authorized to sign the Loan Documents on behalf of the Guarantor;

(v) the original Agreement executed by the Borrower and the Guarantor;

(vi) the original Note executed by the Borrower and consented to by the Guarantor;

(vii) the original Guaranty executed by the Guarantor;

(viii) the original Mortgage executed by the Borrower;

(ix) the original Security Agreement executed by the Borrower;

(x) a written opinion of counsel to the Borrower and the Guarantor dated as of the date of this Agreement and addressed to the Bank, which opinion must be, in form and content, satisfactory to the Bank;

(xi) such financing statements or other documents which the Bank may reasonably request in connection with the Collateral; evidence satisfactory to the Bank that all filings under the Uniform Commercial Code or with any federal or state agency or department that the Bank or its counsel deems necessary or desirable in connection with the creation and perfection of the security interests granted under the Loan Documents have been effected; and such other evidence as the Bank may require that confirms that, as a result of such filings, the Bank's security interest in the Collateral is consistent with the representation contained in this Agreement relating thereto;

(xii) the insurance policies evidencing the insurance coverages required by the Loan Documents, together with proof of payment of the premiums for such insurance;

(xiii) with respect to the initial advance of the Loan, the Commitment Fee due to the Bank, plus all other fees and expenses payable to the Bank and third parties in connection with its due diligence, preparation and negotiation of the Loan Documents, filing of various security documents, including legal and administrative fees;

(xiv) such executed agreements, notices or other documents in form and substance satisfactory to the Bank in connection with the Bank's control of any rights in any deposit accounts, electronic chattel paper, investment property or letter of credit; and

(xv) such other loan documents, agreements, consents, approvals, certificates, resolutions, instruments, opinions and other documents and materials as listed on any closing checklist or as the Bank may reasonably request.

3.02 Compliance. The Borrower and the Guarantor shall have complied and shall then be in compliance in all material respects with all material terms, covenants and conditions of this Agreement.

3.03 No Default. There shall exist no Event of Default and no event which, upon notice or lapse of time or both, would constitute an Event of Default.

3.04 Representations True. The representations and warranties contained in this Agreement shall be true and correct in all material respects.

3.05 No Material Adverse Change. There shall have been no materially adverse change in the total financial condition of the Borrower or the Guarantor, taken as a whole, from the financial condition of the Borrower or the Guarantor, as the case may be, as set forth in the financial statements furnished to the Bank pursuant to this Agreement or from the financial condition of the Borrower or any Guarantor previously disclosed to the Bank in any other manner.

3.06 Appraisal. The Bank shall have received, at the Borrower's expense, an appraisal for the Property showing that the amount of the Loan is no more than 80% of the fair market value of the Property, and being otherwise satisfactory in form and substance to the Bank.

3.07 Environmental. The Bank shall have received, at the Borrower's expense, environmental reports with respect to the Property which are satisfactory in form and substance to the Bank.

#### SECTION 4. REPRESENTATIONS AND WARRANTIES

To induce the Bank to enter into this Agreement, the Borrower and the Guarantor represent, warrant and agree as follows:

4.01 Corporate Status: Subsidiaries. The Borrower is a corporation, duly organized and validly existing in the jurisdiction in which it is organized, has the power and authority to own its properties and to carry on its business as currently conducted, and is duly qualified to do business and is in good standing in each jurisdiction in which the transaction of its business makes such qualification necessary. The Borrower has no Subsidiaries.

4.02 Mergers and Consolidations. Except as has been previously disclosed to Bank, no entity has merged into the Borrower or been consolidated with the Borrower, and the business of the Borrower has not ever been conducted as a partnership or proprietorship in the past.

4.03 Purchase of Assets. Except as disclosed in Schedule 4.03 attached hereto or as previously disclosed to Bank, no entity has sold substantially all of its assets to the Borrower or sold assets to the Borrower outside the ordinary course of such seller's business or in a transaction subject to the bulk transfer laws at any time in the past.

4.04 Borrower's and Guarantor's Authority and Capacity. The Borrower and the Guarantor have the full legal right, authority and capacity to execute, deliver and perform the Loan Documents to which they are a party and to incur the obligations provided for therein. The execution, delivery and performance of the Loan Documents and the obligations provided for therein have been duly and validly authorized by all necessary corporate actions on the part of the Borrower and the Guarantor (all of which actions are in full force and effect), and do not and will not require any consent or approval of the stockholders of the Borrower which has not been obtained.

4.05 Binding Agreement of Borrower and the Guarantor. The Loan Documents are the valid and legally binding obligations and agreements of the Borrower and of the Guarantor, enforceable in accordance with their respective terms.

4.06 No Conflicting Law and Agreements. Except as disclosed in Schedule 4.06 attached hereto, the execution, delivery and performance by the Borrower and the Guarantor of the Loan Documents to which it is a party will not violate any provision of law, any order of any court or government instrumentality or agency, any indenture, any loan or credit agreement or any other material agreement, commitment, lease, contract, mortgage, note or other instrument binding on the Borrower or Guarantor or affecting the Property, or be in conflict with, result in a breach of, in any material respect, or constitute (with due notice, lapse of time, or both) a default

(as defined therein) under any such indenture, agreement, commitment, lease, contract, mortgage, note or other instrument, or result in the creation or imposition of any Lien (other than a Permitted Lien) of any nature whatsoever upon any of the Collateral, or result in or require the acceleration of any indebtedness of the Borrower or Guarantor.

4.07 Compliance with Laws. The Borrower and the Guarantor are in compliance in all material respects with any federal, state and local laws, rules and regulations including, but not limited to Environmental Laws and the Fair Labor Standards Act. The Borrower and the Guarantor maintain all of the necessary material permits, licenses and certifications necessary for the operation of their businesses. All of the foregoing are in full force and effect and not in known conflict with the rights of others. The Borrower is not in breach of or default (as defined therein) under the provisions of any of the foregoing, nor is there any event, fact, condition or circumstance which, with notice or passage of time or both, would constitute or result in a conflict, breach, default or event of default (as defined therein) under, any of the foregoing which, if not remedied within any applicable grace or cure period could reasonably be expected to have a material adverse effect on the Borrower.

4.08 Taxes. The Borrower and the Guarantor have filed or caused to be filed all Federal, state and local income, excise, property and other tax returns which are required to be filed. All such returns are true and correct in all material respects and the Borrower and the Guarantor have paid or caused to be paid all taxes, assessments, interest and penalties as shown on such returns or on any assessment received by them, to the extent that such taxes have become due, including, but not limited to, all F.I.C.A. payments and withholding taxes. Except as disclosed in Schedule 4.08 attached hereto, the amounts reserved as a liability for income and other taxes payable in the most recent financial statements of the Borrower and the Guarantor provided to the Bank pursuant to this Agreement are sufficient for the payment of all unpaid Federal, state, county and local income, excise, property and other taxes, whether or not disputed, of the Borrower and the Guarantor accrued for or applicable to the period and on the dates of such financial statements and all years and periods prior thereto and for which the Borrower, any existing Subsidiary or the Guarantor may be liable in its or their own right or as a transferee of the assets of, or as successor to, any other person or entity.

4.09 Financial Condition. The financial statements of the Borrower and the Guarantor and other related information previously submitted to the Bank are true, complete and correct in all material respects, fairly represent the financial condition of the Borrower and the Guarantor and the results of their respective operations and transactions as of the dates and for the periods of such statements and have been prepared in accordance with GAAP applied on a consistent basis throughout the period involved. There are no liabilities, direct or indirect, fixed or contingent, matured or unmatured, known to the Borrower or the Guarantor which are not required to be reflected therein pursuant to GAAP. There has been no material adverse change in the business, operations, prospects, assets, properties or condition (financial or otherwise) of the Borrower or the Guarantor, taken as a whole since the date of said financial statements.

4.10 Title To Properties. The Borrower has good, valid, insurable (in the case of real property) and marketable title to all of its properties and assets including the Collateral (whether real or personal, tangible or intangible) reflected on the financial statements referred to in this Agreement, except for such properties and assets as have been disposed of since the date of such



financial statements as no longer used or useful in the conduct of its business or as have been disposed of in the ordinary course of business, and all such properties and assets are free and clear of all Liens except for Permitted Liens. Except as noted in Title Insurance Policies issued by Lawyers Title Insurance Corporation in favor of Bank, as updated, none of the real property included in such properties of the Borrower is subject to any covenant or other restriction preventing or limiting the right of the record owner to convey or use it, all such real property has adequate rights of ingress and egress, and the Developed Campus has direct and unobstructed access to electric, gas, water, sewer and telephone lines, all of which are adequate for the uses to which such property is currently devoted.

4.11 **Litigation.** Except as disclosed in Schedule 4.11 attached hereto, there are no actions, claims, suits or proceedings pending, or, to the knowledge of the Borrower or the Guarantor, threatened or reasonably anticipated against or affecting the Borrower or the Guarantor at law or in equity including, without limitation, under ERISA or any Environmental Laws or before or by any governmental instrumentality or agency (domestic or foreign), commission, board, bureau, arbitrator or arbitration panel, and there is no probable judgment, liability or award which may reasonably be expected to result in any material adverse change in the business, operations, prospects, properties or assets or condition, financial or otherwise, of the Borrower or the Guarantor. The Borrower is not in default with respect to any judgment, order, writ, injunction, decree, rule, award or regulation of any court, governmental instrumentality or agency, commission, board, bureau, or arbitrator or arbitration panel.

4.12 **No Other Defaults.** Except as disclosed in Schedule 4.12 attached hereto, neither the Borrower nor the Guarantor is in default under any contract, agreement, commitment or other instrument which default would have a material adverse effect on the business, properties or condition, financial or otherwise, of the Borrower or the Guarantor, or in the performance of any covenants or conditions respecting any of their indebtedness. No holder of any indebtedness of the Borrower or Guarantor has given notice of any asserted default thereunder. No liquidation or dissolution of the Borrower or the Guarantor and no receivership, insolvency, bankruptcy, reorganization or other similar proceeding relative to the Borrower or the Guarantor or their properties is pending or, to the knowledge of the Borrower or the Guarantor, is threatened against them or any of them.

4.13 **ERISA.** (a) The pension, profit sharing, savings, stock bonus and other deferred compensation plans established and maintained by the Borrower, the Guarantor and any Commonly Controlled Entity (as defined below) which are subject to the requirements of ERISA, if any, were stated in their inception or have, since ERISA became effective with respect to such plans, been amended and restated in a manner designed to qualify under the applicable requirements of ERISA and the Internal Revenue Service Code of 1986, as amended (the "**Code**"); and subsequent to such statement, or restatement, those plans and their related trusts have received favorable determinations from the Internal Revenue Service holding that such plans and trusts so qualify; (b) to the knowledge of the Borrower and the Guarantor, there is no current matter which would materially adversely affect the qualified tax-exempt status of any pension, profit-sharing, savings, stock bonus or other deferred compensation plan and their related trusts of either of the Borrower or any Commonly Controlled Entity under the Code; (c) neither the Borrower, the Guarantor, nor any Commonly Controlled Entity has incurred in connection with any such plan any "accumulated funding deficiency" (as defined in Section 302

of ERISA or Section 412(a) of the Code) whether or not waived; (d) there has been no "prohibited transaction" (within the meaning of Section 4975 of the Code or Section 406 of ERISA) involving any such plan of the Borrower, the Guarantor, or any Commonly Controlled Entity; (e) no "reportable event," as defined by Title IV of ERISA, has occurred with respect to any plan subject to the minimum funding requirements of Section 412 of the Code maintained for employees of the Borrower or any Commonly Controlled Entity; (f) no "multi-employer plan" (as defined in ERISA) to which either the Borrower, the Guarantor or any Commonly Controlled Entity has an obligation to contribute, has "terminated," as that term is defined in ERISA; (g) neither the Borrower, the Guarantor, nor any Commonly Controlled Entity has withdrawn, in a "complete withdrawal" (as defined in ERISA), from any "multi-employer plan" to which either the Borrower or such Commonly Controlled Entity had an obligation to contribute; (h) neither the Borrower, the Guarantor nor any Commonly Controlled Entity has withdrawn, in a "partial withdrawal" (as defined in ERISA), from any "multi-employer plan" to which either the Borrower, the Guarantor or such Commonly Controlled Entity had an obligation to contribute; and (i) no "multi-employer plan" to which either the Borrower, the Guarantor or any Commonly Controlled Entity had an obligation to contribute is in "reorganization" (as defined in ERISA and the Code) nor has notice been received from the administrator of any "multi-employer plan" to which either the Borrower, the Guarantor, or any Commonly Controlled Entity has an obligation to contribute that any such plan will be placed in "reorganization." For purposes of this Section, the term "Commonly Controlled Entity" means any corporation which is a member of a controlled group of corporations (as defined for purposes of Section 414(6) of the Code) of which the Borrower is a member and any trade or business (whether or not incorporated) which is under "common control" (as defined for purposes of Section 414(c) of the Code) with the Borrower.

4.14 Other Security Interests. The Borrower is the owner of the Collateral, free from any Lien except a Permitted Lien.

4.15 Franchises, Patents, Etc. Borrower owns or licenses all franchises, licenses, trademarks, trade names, copyrights or patents necessary to the conduct of the present business of the Borrower. The Borrower has no actual knowledge of and has not received any notice to the effect that any product it manufactures or sells, or any service it renders, or any process, method, know-how, trade secret, part or material it employs in the manufacture of any product it makes or sells or any service it renders, or the marketing or use by it or another of any such product or service, may infringe any trademark, trade name, copyright, patent, trade secret or legally protectable right of any other person or entity.

4.16 Approvals. No approval, consent or other action by any governmental instrumentality or agency or any other person or entity, which approval, consent, or other action has not been obtained or taken or which does not remain in effect as of the date hereof, is or will be necessary to permit the valid execution, delivery and performance by the Borrower and the Guarantor of the Loan Documents.

4.17 Tradenames. Except as disclosed in Schedule 4.17 attached hereto, the Borrower utilizes no tradenames in the conduct of its business and has not changed its name.

4.18 Labor Relations. There are no strikes, work stoppages, material grievance proceedings or other material controversies pending or, to the best of the Borrower's knowledge,

threatened between the Borrower and any employees engaged in the business of the Borrower or any union or other collective bargaining unit representing such employees. The Borrower has complied and is in material compliance with all laws relating to the employment of labor, including, without limitation, provisions relating to wages, hours, collective bargaining, occupational safety and health, equal employment opportunities and the withholding of income taxes and social security contributions, the non-compliance with which might materially adversely affect its business, operations, prospects, assets, properties or condition (financial or otherwise).

#### SECTION 5. COVENANTS

The Borrower and the Guarantor covenant and agree that, so long as any of the Loan Documents shall remain in effect, unless the Bank shall otherwise consent in writing, they will:

5.01 Payment of Loan. Comply with the terms and conditions for repayment of the Loan in accordance with the terms of the Note and Guaranty.

5.02 Financial Statements. Furnish to the Bank:

(a) as soon as available but in no event more than one hundred twenty (120) days after the last day of each fiscal year of the Borrower and the Guarantor, consolidated financial statements of the Borrower and the Guarantor containing a balance sheet, a statement of income and expenses and a statement of changes in financial condition as of the close of such period, prepared in accordance with GAAP applied on a basis consistent with prior periods, showing the financial condition of the Borrower and the Guarantor at the close of such year in form reasonably satisfactory to the Bank and prepared and audited by Ernst & Young, or another independent certified public accountant reasonably satisfactory to the Bank and on an annual basis forward looking management prepared projections for the Borrower and the Guarantor;

(b) as soon as available but in no event more than forty five (45) days after the last day of each quarter of each fiscal year of the Borrower and the Guarantor, consolidated financial statements of the Borrower and the Guarantor containing a balance sheet, a statement of income and expenses and a statement of changes in financial condition as of the close of such period, prepared in accordance with GAAP applied on a basis consistent with prior periods, showing the financial condition of the Borrower and the Guarantor at the close of such period, in form reasonably satisfactory to the Bank;

(c) in the event that a portion of the Property has been leased to third party, unaffiliated tenants, as soon as available but in no event more than forty five (45) days after the last day of each quarter of each fiscal year, a detailed budget and report of operating expenses for the Property;

(d) in the event that a portion of the Property has been leased to third party, unaffiliated tenants, as soon as available but in no event more than forty five (45) days after the last day of each fiscal year, projections for the Property for the following fiscal year;

(e) promptly, and from time to time, such other information regarding the operation, business, affairs and financial condition of the Borrower and the Guarantor as the

Bank may reasonably request, including, but not limited to interim financial statements including an income statement, balance sheet, aging of accounts receivable and/or accounts payable; and

(f) within forty five (45) days after the last day of each of the quarters of each fiscal year of the Borrower, a certificate of the chief financial officer of the Borrower certifying that to the best of his knowledge no Event of Default has occurred and is continuing or, if an Event of Default has occurred and is continuing, a statement as to the nature thereof and the action which is proposed to be taken with respect thereto.

The financial statements of the Borrower and the Guarantor delivered to the Bank pursuant to this Section shall each be certified by the president or chief financial officer of the Borrower or the Guarantor, as the case may be, as to the authenticity, accuracy of integrity of the representation contained therein and as having been prepared in accordance with GAAP applied on a basis consistent with prior periods. Any such financial information provided to the Bank shall be maintained by the Bank as confidential proprietary records. The Bank hereby acknowledges that the Borrower may not have its own separate financial statements and shall be permitted to supply financial statements consolidated with Guarantor's and other subsidiaries of the Guarantor's financial statements.

5.03 Maintaining Records: Access to Properties and Inspections. Maintain financial records in accordance with GAAP consistently applied and permit any authorized representative designated by the Bank to visit and inspect any of the properties of the Borrower or the Guarantor (including, without limitation, their books of account, records, correspondence and other papers and to make extracts therefrom) and to discuss their affairs, finances and accounts with their respective officers and their respective independent certified public accountants or other parties preparing statements for or on behalf of the Borrower or the Guarantor, subject to advance notice and subject to safety limitations and legal limits of general applicability.

5.04 Place of Business, Location of Records; Notices. Provide fourteen (14) days advance written notice of a change in their executive offices or in such office where their records are kept.

5.05 Maintenance of Business. (a) Maintain the corporate existence of the Borrower and the Guarantor in good standing and in existence in the State of its original formation; and (b) maintain and keep in full force and effect all material necessary licenses and permits for the proper conduct of the Borrower's and the Guarantor's business and shall immediately cure any failure to maintain necessary permits and licenses as soon as it has knowledge of such failure.

5.06 Insurance. The Borrower shall maintain and pay for insurance covering such risks and in such amounts and with such insurance companies as shall be satisfactory to the Bank, and deliver the policies or certificates of all such insurance to the Bank with satisfactory lender's loss payable endorsements naming the Bank as loss payee; and maintain, with financially sound and reputable insurers, insurance with respect to their properties and business against such casualties and contingencies of such types (including personal injury and property damage liability insurance, automobile liability insurance, product liability insurance, biomedical insurance, worker's compensation insurance, business interruption insurance, employee dishonesty insurance, and directors' and officers' liability insurance) and in such amounts as is customary in

the case of persons or entities in the same or similar business. Each policy or insurance required hereunder shall require the insurer to give not less than thirty (30) days prior written notice to the Bank in the event of cancellation of such policy for any reason whatsoever, and shall provide that the interest of the Bank thereunder shall not be impaired or invalidated by any act or neglect of the Borrower or the owner of any of the insured property or by the occupation of the premises wherein such property is located for purposes more hazardous than are permitted by such policy. If the Borrower fails to provide and pay for such insurance, the Bank may, at the Borrower's expense, procure the same, but shall not be required to do so. The Borrower agrees to deliver to the Bank, promptly as rendered, true copies of any reports made to any insurance company.

5.07 Execution of Documents. At the reasonable request of the Bank, execute and deliver such financing statements, documents and instruments including, but not limited to, written acknowledgments from any third party holding all or any portion of the Collateral that it does so for the Bank's benefit and any control agreements with respect to any investment property, letter of-credit rights, deposit accounts or electronic chattel paper, and perform all other acts as the Bank deems necessary or desirable, and pay, upon demand, all reasonable costs and expenses (including reasonable attorneys' fees and disbursements) incurred by the Bank in connection therewith.

5.08 Obligations and Taxes. Pay all indebtedness and obligations promptly and in accordance with their terms, and pay and discharge promptly all taxes, assessments and governmental charges or levies imposed upon them or in respect of their property and the Collateral, including, but not limited to, all F.I.C.A. payments and withholding taxes, before the same shall become in default, as well as all claims for labor, materials, and supplies or otherwise which, if unpaid, might become a Lien upon such properties or any part thereof, provided, however, that the Borrower and the Guarantor are not required hereby to pay and discharge or to cause to be paid and discharged any such indebtedness, obligation, tax, assessment, charge, levy or claim so long as the validity thereof shall be contested in good faith by appropriate proceedings and the Borrower and the Guarantor shall set aside on their books reserves which are in conformity with generally accepted accounting principles and which the Bank deems adequate with respect to any such tax, assessment, charge, levy or claim so contested.

5.09 Litigation Notice. Give the Bank prompt notice of any action, suit or proceeding at law or in equity or by or before any governmental instrumentality or agency (domestic or foreign), commission, board, bureau, arbitrator or arbitration panel which, if adversely determined, could materially impair or affect the right of the Borrower to carry on its business substantially as now conducted or could materially affect its respective business, operations, prospects, properties, assets (including the Collateral) or condition, financial or otherwise, in each case if in excess of \$1,000,000.00.

5.10 Notification Relating to Hazardous Materials. Immediately advise the Bank in writing of (a) any and all enforcement, cleanup, remediation or removal, pursuant to any governmental or regulatory actions instituted, completed or threatened pursuant to any applicable federal, state, or local laws, ordinances or regulations relating to any Hazardous Material and/ or violation of Environmental Laws affecting the Property or the business operations of the Borrower, and (b) all claims made or threatened by any third party against the Borrower relating to damages, contribution, cost recovery compensation, loss or injury resulting from any

violations of Environmental Laws. The Borrower shall immediately notify the Bank of any remedial action related to a release of Hazardous Materials in violation of Environmental Laws taken by the Borrower with respect to the Property or the business operations of the Borrower.

5.11 Access Onto Property and to the UCC Collateral. Allow the appropriate agents and contractors of the Bank to enter upon the Property and to have reasonable access to the UCC Collateral for the purposes of conducting environmental investigations and audits (including taking physical samples) and such other action deemed necessary by the Bank to insure compliance by the Borrower with all Environmental Laws, subject to advance notice and subject to safety limitations and legal limits of general applicability. The Borrower acknowledges that no adequate remedy at law exists for a violation of this covenant and agrees that the Bank is entitled to specific performance of its rights under this covenant, subject to advance notice and subject to safety limitations and legal limits of general applicability. The right of access granted herein shall continue until this Agreement is terminated

5.12 Notice of Default; Material Adverse Change. Promptly notify the Bank of any condition or event that constitutes, or with the running of time, the giving of notice, or both, would constitute, an Event of Default, and promptly inform the Bank of any material adverse change in the financial condition of the Borrower or of the Guarantor, as set forth in Section 6.11 below.

5.13 Borrower's Claims. Promptly notify the Bank in writing of any action or omission of the Bank which the Borrower claims caused or may cause injury, loss or damage to the Borrower. Failure of the Borrower to so notify the Bank of such claim of which it has knowledge within one hundred eighty (180) days after the Borrower determines that it has such claim shall constitute a waiver of such claim.

5.14 Defense of Collateral. Defend the Collateral, and the Bank's security interest therein, against all claims and demands of all persons at any time claiming the same or any interest therein (except to the extent Bank agrees to waive such failure to defend as Bank has determined such failure would not have a material adverse effect on Bank) and pay, upon demand, all reasonable costs and expenses (including reasonable attorneys' fees and disbursements) incurred by the Bank in connection therewith.

5.15 Use of Proceeds. Use the proceeds of the Loan for any commercial purpose not violative of or inconsistent with any provision of this Agreement or the Loan Documents.

5.16 Compliance with Laws. Comply, in all material respects, with all federal, state and local laws, rules and regulations including, but not limited to Environmental Laws and the Fair Labor Standards Act applicable to its business, whether now in effect or hereafter enacted, and upon request of the Bank, the Borrower will provide the Bank with such evidence of compliance as the Bank may reasonably request.

5.17 Hazardous Materials. With respect to all property owned, subleased, operated or occupied by the Borrower, maintain and cause all operators, tenants, subtenants, licensees and occupants of all such property to maintain such property free of all Hazardous Materials, other than those Hazardous Materials used in material compliance with all Environmental Laws and

prevent all such property from being used for the manufacture, generation, production, processing, distribution, use, treatment, storage, disposal, transport or handling of any Hazardous Materials other than in material compliance with all Environmental Laws; and deliver to the Bank copies of all reports prepared by Borrower or its Affiliates, excepting clinical trial reports, or provided to Borrower or its Affiliates by any governmental authority, any environmental auditor or engineer, or any other person, relating to or in connection with the Borrower's compliance with or violation of any Environmental Laws, unless the Borrower cannot obtain such reports or copies thereof.

5.18 Deposit Relationship. The Guarantor shall maintain its primary deposit relationship with the Bank and shall establish a deposit account and cash management facility with the Bank.

5.19 Liens. Not create or permit to exist any Lien on the Property or the UCC Collateral except Permitted Liens.

5.20 Disposition of Property. The Borrower shall not sell, lease or otherwise dispose of any assets with a value in excess of \$250,000 except for the sale of inventory in the ordinary course of business and the disposition, in the ordinary course of business, of machinery, technology, intellectual property and equipment that has become obsolete, damaged, unsuitable or unnecessary for its business.

5.21 Loan. The Borrower shall not make loans or advances to any person except for (a) loans and advances to Affiliates and Subsidiaries, and (b) loans and advances to other persons not exceeding \$250,000 at any time.

5.22 Guarantees. The Borrower shall not guarantee, endorse, assume or otherwise incur or allow to exist any contingent liability in respect of any obligation of any other person, except an Affiliate or Subsidiary, except by the endorsement of negotiable instruments for deposit or collection in the ordinary course of business and except for guarantees with a maximum aggregate liability for the Borrower of \$500,000.00.

5.23 Merger, Name Changes, etc. Not enter into any merger, consolidation, reorganization or recapitalization, or purchase or otherwise acquire all or substantially all of the assets, obligations, capital stock or other equity interest in any other person, if an uncured Event of Default has occurred or such transaction would result in an Event of Default. The Borrower shall provide prior written notice to the Bank of any anticipated name change and will execute any additional Loan Documents necessary to confirm and re-affirm the obligations of the Loan Documents in connection with any such name change.

5.24 Affiliate Transactions. Not engage in any transaction with an Affiliate on terms that are less favorable than could be obtained in a commercially reasonable transaction with a person who is not an Affiliate.

5.25 Indebtedness. The Borrower shall not incur or permit to exist any indebtedness for borrowed money other than (a) indebtedness to the Bank, (b) the Fifth Third Loan, and any refinancing thereof, (c) purchase money indebtedness, and (d) other indebtedness that does not exceed \$500,000 in the aggregate at any time outstanding. The Guarantor shall not incur any

indebtedness for borrowed money if such transaction would result in the occurrence of an Event of Default.

5.26 Guarantor Financial Covenants. The Guarantor covenants and agrees that it shall:

(a) Book Leverage Ratio. Maintain a book leverage ratio of less than 1.25. The book leverage ratio shall be calculated by dividing total liabilities by total net worth, as determined by GAAP. For purposes of calculating GAAP liabilities, deferred revenues specific to contracts with the Federal Government will be excluded. The book leverage ratio shall be tested annually by the Bank for the Guarantor's most recently completed fiscal year, with the first such test to be performed for the fiscal year ending December 31, 2007.

(b) Debt Coverage Ratio. Maintain a debt coverage ratio ("**Debt Coverage Ratio**") of no less than 1.25 to 1.00. The debt coverage ratio shall be calculated as follows: (i) earnings before interest, taxes, depreciation and amortization for the most recent four (4) quarters; (ii) divided by the sum of current obligations under capital leases and principal obligations and interest expenses for borrowed monies, in each case due and payable for the following four (4) quarters. The debt coverage ratio shall be tested on a quarterly basis by Bank and provided to Bank no later than Borrower's SEC filing date or 45 days after the end of such quarter, with the first such test to be performed on the results of the second quarter of 2007 (ending June 30, 2007). Notwithstanding the foregoing, Borrower shall not be required to meet the Debt Coverage Ratio provided that Borrower shall maintain a minimum balance of \$5,000,000.00 in that certain deposit account number 389498521 held by Bank which has been pledged to Bank (the "**Pledged Account**"). At such times a Borrower shall have satisfied the Debt Coverage Ratio requirement for the prior quarter, Bank shall permit Borrower, in Bank's sole discretion, to draw down funds in the Pledged Account, however such funds must be restored to maintain a minimum balance of \$5,000,000.00 if at any further date (as determined by quarterly testing) Borrower does not satisfy the Debt Coverage Ratio.

#### SECTION 6. EVENTS OF DEFAULT

The occurrence of any one or more of the following events shall constitute an Event of Default hereunder (subject to any applicable notice and cure periods contained in the Loan Documents):

6.01 Payments. Default shall be made in the payment of the principal of, or any installment of principal of, or interest on, the Note within ten (10) days of when due, whether at the due date thereof, at a date fixed for prepayment thereof, upon acceleration thereof or otherwise.

6.02 Representations. Any representation or warranty made in or in connection with any of the Loan Documents shall prove to have been false or misleading in any material respect when made or deemed to have been made.

6.03 Covenants. Default shall be made in the due observance or performance of any covenant, condition or agreement on the part of the Borrower or the Guarantor pursuant to the



terms of any of the Loan Documents and such default shall continue unremedied for thirty (30) business days after notice to the Borrower and the Guarantor thereof.

6.04 (a) Voluntary Bankruptcy, Etc. The Borrower or the Guarantor: (i) voluntarily is adjudicated as bankrupt or insolvent, (ii) seeks or consents to the appointment of a receiver or trustee for itself or for all or any part of its property, (iii) files a petition seeking relief under the bankruptcy or similar laws of the United States or any state or any other competent jurisdiction, (iv) makes a general assignment for the benefit of creditors, or (v) admits in writing its inability to pay its debts as they mature.

(b) Involuntary Bankruptcy, Etc. A court of competent jurisdiction enters an order, judgment or decree appointing, without the consent of the Borrower or the Guarantor, a receiver or trustee for the Borrower or the Guarantor or for all or any part of their property, or a petition is filed against the Borrower or the Guarantor seeking relief under the bankruptcy or other similar laws of the United States or any state or other competent jurisdiction, and such petition, order, judgment or decree shall remain in force undischarged or unstayed for a period of 60 calendar days.

6.05 Intentionally Deleted.

6.06 Cross Default. The occurrence of (a) an uncured event of default (as defined therein) under any of the Loan Documents, (b) any uncured event of default under (i) any promissory note payable to the Bank under which the Borrower or the Guarantor is an obligor, or (ii) any other agreement between the Borrower or the Guarantor and the Bank, (c) an uncured event of default (as defined therein) under the Fifth Third Loan, or (d) an uncured event of default (as defined therein) under any other indebtedness or liability for borrowed money of the Borrower in an amount in excess of \$1,000,000.00, if the effect of such default is to accelerate the maturity of such evidence of indebtedness or liability or to permit the holder thereof to cause any indebtedness to become due prior to its stated maturity and the Bank determines, in its discretion, that such default impairs or prevents the Borrower from performing its obligations under the Loan Documents.

6.07 Judgment. Unless, in the opinion of the Bank, adequately covered by insurance, the entry of one or more final judgments, decrees or orders for the payment of money involving more than \$1,000,000.00 in the aggregate against the Borrower or the Guarantor and all applicable periods for appeal have terminated and such judgment or decree is not satisfied within sixty (60) days thereafter.

6.08 Loss, Damage to Collateral. Loss, theft, damage, or destruction of any material portion of the Collateral for which there is either no insurance coverage or for which, in the opinion of the Bank, there is insufficient insurance coverage.

6.09 Validity of Loan Documents. Any Loan Document shall, at any time after its execution and delivery and for any reason, cease to be in full force and effect or shall be declared null and void, or the validity or enforceability thereof shall be contested by the Borrower or the Guarantor, or the Borrower or the Guarantor shall deny it has any further liability or obligation thereunder.

6.10 Payments to Subordinated Creditors. The Borrower makes any payment on account of indebtedness that has been subordinated to the Loan, other than payments specifically permitted by the terms of such subordination or in the ordinary course of business.

6.11 Material Adverse Change. There shall be a materially adverse change in the total financial condition of the Borrower or the Guarantor, taken as a whole.

## SECTION 7. RIGHTS AND REMEDIES

7.01 Remedies. If any one or more Events of Default shall occur, then in each and every such case, the Bank may at any time thereafter exercise and/or enforce any of the following rights and remedies:

(a) Acceleration. Declare the Note to be immediately due and payable, together with accrued interest thereon, without presentment, demand, protest or notice of dishonor, all of which the Borrower and the Guarantor hereby waive.

(b) Possession and Collection (i) Take possession or control of, sell or otherwise dispose of all of any part of the Collateral, subject to the terms of Section 4.2 of the Security Agreement; (ii) endorse as the agent of the Borrower any chattel paper, documents, or instruments forming all or any part of the Collateral; (iii) pay, purchase, contest, or compromise any encumbrance, charge, or lien that, in the opinion of the Bank, appears to be prior or superior to its Lien and pay all reasonable expenses incurred in connection therewith; (iv) take any other action which the Bank deems necessary or desirable to protect and realize upon its security interest in the Collateral; and (v) in addition to the foregoing, and not in substitution therefor, exercise any one or more of the rights and remedies exercisable by the Bank under other provisions of this Agreement, under the Note, under any of the other Loan Documents, or provided by applicable law (including, without limitation, the Uniform Commercial Code as in effect in any applicable jurisdiction) and may specifically disclaim any warranties of title or the like. In taking possession of the Collateral the Bank may proceed without legal process, if this can be done without breach of the peace. The Borrower waives any right it may have to require the Bank to pursue any third person for payment of the Loan.

(c) Receiver. Obtain appointment of a receiver for all or any of the Collateral, the Borrower and the Guarantor hereby consenting to the appointment of such a receiver and each agreeing not to oppose any such appointment. Any receiver so appointed shall have such powers as may be conferred by the appointing authority including any or all of the powers, rights and remedies which the Bank is authorized to exercise by the Loan Documents, and shall have the right to incur such obligations and to issue such certificates therefor as the appointing authority shall authorize.

(d) Performance by Bank. Make such payment or perform any of the conditions, covenants, terms, stipulations or agreements contained in this Agreement or any of the other Loan Documents for the account and at the expense of the Borrower.

7.02 Sales on Credit. If the Bank sells any of the Collateral upon credit, the Borrower will be credited only with payments actually made by the purchaser, received by the Bank and applied to the indebtedness of the purchaser. In the event the purchaser fails to pay for the

Collateral, the Bank may resell the Collateral and the Borrower shall be credited with the proceeds of the sale.

7.03 Proceeds. Any proceeds of the collection of the Loan or of the sale or other disposition of the Collateral will be applied by the Bank to the payment of fees and costs, and any balance of such proceeds (if any) will be applied by the Bank to the payment of the remaining Loan (whether then due or not), at such time or times and in such order and manner of application as the Bank may from time to time in its sole discretion determine. If the sale or other disposition of the Collateral fails to pay the Loan in full, the Borrower and the Guarantor shall remain jointly and severally liable to the Bank for any deficiency.

7.04 Notices. Any notices required under the Uniform Commercial Code with respect to the sale or other disposition of the Collateral shall be deemed reasonable if mailed by the Bank to the persons entitled thereto at their last known address at least ten (10) days prior to disposition of the Collateral.

7.05 Waiver of Jury Trial. **THE BORROWER, THE GUARANTOR AND THE BANK HEREBY VOLUNTARILY AND KNOWINGLY WAIVE ANY RIGHT THEY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY ACTION, PROCEEDING, OR COUNTERCLAIM BROUGHT BY ANY PARTY AGAINST THE OTHER ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED HEREIN. THE BORROWER AND THE GUARANTOR ACKNOWLEDGE THAT THEY HAVE BEEN INFORMED BY THE BANK THAT THE PROVISIONS OF THIS PARAGRAPH CONSTITUTE A MATERIAL INDUCEMENT UPON WHICH THE BANK HAS RELIED, IS RELYING AND WILL RELY IN MAKING THE LOAN. THE BORROWER AND THE GUARANTOR HEREBY CERTIFY THAT NO REPRESENTATIVE OR AGENT OF THE BANK (INCLUDING ITS COUNSEL) HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT THE BANK WOULD NOT, IN THE EVENT OF LITIGATION, ENFORCE THIS WAIVER OF RIGHT TO JURY TRIAL. THE BORROWER AND THE GUARANTOR ACKNOWLEDGE THAT THEY HAVE CONSULTED WITH AN ATTORNEY AND FULLY UNDERSTAND THE LEGAL EFFECT OF THE PROVISIONS OF THIS PARAGRAPH.**

7.06 Cumulative Remedies. Each right, power and remedy of the Bank as provided for in the Loan Documents, or now or hereafter existing at law or in equity or by statute or otherwise shall be cumulative and concurrent and shall be in addition to every other such right, power or remedy, and the exercise or beginning of the exercise by the Bank of any one or more of such rights, powers or remedies shall not preclude the simultaneous or later exercise by the Bank of any or all other such rights, powers or remedies. The Bank may comply with any applicable state or federal law requirements in connection with a disposition of the Collateral and compliance will not be considered to adversely affect the commercial reasonableness of any sale of the Collateral.

7.07 No Waiver. No failure or delay by the Bank in insisting upon the strict performance of any term, condition, or covenant of the Loan Documents or in exercising any right, power or remedy consequent upon an Event of Default shall constitute a waiver of any

such term, condition or covenant or of any such breach, or preclude the Bank from exercising any such right, power or remedy at any later time or times. By accepting payment after the due date of any amount payable under the Loan Documents, the Bank shall not be deemed to waive the right either to require prompt payment when due of all other amounts payable under the Loan Documents, or to declare a default for failure to effect such prompt payment of any such other amount.

#### SECTION 8. MISCELLANEOUS

8.01 Survival. All covenants, agreements, representations and warranties made in this Agreement and the Loan Documents shall survive the execution and delivery of the Note and shall continue in full force and effect so long as the Note, or any of the other obligations under the Loan Documents, or any renewal or extensions of the Note, is outstanding and unpaid.

8.02 Notices. All notices, demands, instructions and other communications required or permitted to be given to or made upon any party hereto shall be in writing, personally delivered or sent by postage prepaid first class certified mail, return receipt requested, overnight courier or by facsimile machine, and shall be deemed to be given on the day that such writing is delivered or sent by facsimile machine or one (1) business day after such notice is sent by overnight courier or three (3) business days after said notice is sent by certified mail. Unless otherwise specified in a notice sent or delivered in accordance with the foregoing provisions of this paragraph, notices, demands, instructions and other communications in writing shall be given to or made upon the respective parties hereto at their respective addresses indicated for such party below:

**Bank:** HSBC Realty Credit Corporation (USA)  
1130 Connecticut Avenue, N. W., 12<sup>th</sup> Floor  
Washington, D. C. 20036  
Attention: Jeffrey M. Henry, Vice President  
Facsimile Number: (202) 496-8758

With a simultaneous copy to: McGuireWoods LLP  
1750 Tysons Boulevard, Suite 1800  
McLean, Virginia 22102-3915  
Attn: E. Kristen Moye, Attorney-at-Law  
Facsimile Number: 703-712-5238

**Borrower and  
Guarantor:**

Emergent BioSolutions Inc.  
2273 Research Boulevard, Suite 400  
Rockville, Maryland 20850  
Attn: Finance Department  
Attn: Legal Department  
Facsimile Number: (301) 944-0173

With a simultaneous copy to: Emergent BioDefense Operations Lansing Inc.  
3500 N. Martin Luther King, Jr. Blvd.

Building One, Third Floor  
Lansing, MI 48906  
Attn: Finance Department  
Facsimile Number: 517-327-1560

With a simultaneous copy to:

Thelen Reid Brown Raysman & Steiner LLP  
701 Eighth Street, N.W.  
Washington, DC 20001  
Attn: Carl A. Valenstein, Esq.  
Facsimile Number: 202-654-1836

or at such other address as the parties may have furnished to each other in writing, and shall be deemed to be given on delivery or upon mailing.

8.03 Costs and Expenses. The Borrower and the Guarantor shall bear any and all reasonable fees, costs and expenses, of whatever kind and nature, including any taxes of any kind and reasonable attorneys' fees and disbursements, which the Bank may incur: (a) in connection with the closing of the Loan, including, without limitation, the filing of public notices, the preparation of the Loan Documents, the recording of the UCC financing statements, and the making of title examinations, and in connection with any amendment of the Loan Documents; (b) in maintaining, preserving, enforcing or foreclosing any pledge, lien, encumbrance or security interest granted hereunder or in connection herewith, whether through judicial proceedings or otherwise; (c) in conducting audits of the Borrower's business and with respect to the Collateral; and (d) in successfully defending or prosecuting any actions or proceedings arising out of or relating to transactions with any one or more of the Borrower and the Guarantor. All such fees, costs and expenses until paid shall be included in the Loan or deducted from any amount due the Borrower or the Guarantor. The Borrower and the Guarantor agree that the attorneys retained by the Bank shall represent only the interests of the Bank.

8.04 Indemnification of Bank. The Borrower and the Guarantor shall protect and indemnify the Bank from and against any and all demands, suits, losses, assessments, fines, claims, damages, penalties, causes of action, costs or other expenses (including, without limitation, reasonable attorneys' fees and disbursements), imposed upon or incurred by or asserted against the Bank or the directors, officers, agents or employees of the Bank, except those arising out of the willful misconduct or gross negligence of the Bank, by reason of and including but not limited to liability or damage resulting from: (a) any failure on the part of the Borrower to perform or comply with any of the terms of this Agreement; (b) any action brought against the Bank attacking the validity of this Agreement or any other Loan Document; and/or (c) actual or threatened damage to the environment, agency costs of investigation, personal injury or death, or property damage, due to a release or alleged release of Hazardous Materials, on or under the Property or arising from the Borrower's business operations or in the surface or ground water located on or under the Property arising from the Borrower's business operations, or gaseous emissions from the Property or arising from the Borrower's business operations resulting from the use or existence of Hazardous Materials, whether such claim proves to be true or false. The term "property damage" as used in this Section includes, but is not limited to, damage of any real or personal property of the Borrower, the Bank, and of any third parties. Any amounts payable to the Bank under this Section which are not paid within thirty (30) days after

written demand therefor by the Bank shall bear interest at the rate of interest in effect under the Note from the date of such demand. In the event any action, suit or proceeding is brought against the Bank or the directors, officers, agents or employees of the Bank by reason of any such occurrence, the Borrower, upon the request of the Bank and at the Borrower's expense, shall resist and defend such action, suit or proceeding or cause the same to be resisted and defended by counsel designated by the Borrower and approved by the Bank. Such obligations under this Section as shall have accrued at the time of any termination of this Agreement shall survive any such termination.

8.05 Reinstatement of Liens. If, at any time after payment in full by the Borrower of the Loan and termination of the Bank's Liens, any payments on the Loan previously made by the Borrower or any other person must be disgorged by the Bank for any reason whatsoever (including, without limitation, the insolvency, bankruptcy, or reorganization of the Borrower or such other person), this Agreement and the Bank's Liens granted hereunder shall be reinstated as to all disgorged payments as though such payments had not been made, and the Borrower shall sign and deliver to the Bank all documents and things necessary to reperfect all terminated Liens.

8.06 Bank Disclosures. Upon the prior written consent of the Borrower (such consent not to be unreasonably withheld or delayed), the Bank may issue press releases concerning, and otherwise publicly announce or publicize, financings provided by the Bank to the Borrower. The Borrower hereby authorizes the Bank to disclose to any parent, subsidiary or affiliate of the Bank, and hereby authorizes all such parents, subsidiaries and affiliates of the Bank, to disclose to the Bank, the financial record of the Borrower.

8.07 Participation. The Bank shall have the right to grant participations in the Loan held by it to others at any time and from time to time, and the Bank may divulge to any such participant or potential participant all information, reports, financial statements and documents obtained in connection with this Agreement, the Note and any of the other Loan Documents or otherwise.

8.08 Change, etc. Neither this Agreement nor any term, condition, representation, warranty, covenant or agreement contained herein may be changed, waived, discharged or terminated orally, but only by an instrument in writing signed by the party against whom such change, waiver, discharge or termination is sought.

8.09 Governing Law. This Agreement, the Note and the other Loan Documents shall be governed and construed in accordance with the laws of the State of New York, except to the extent that the law of other jurisdictions governs the creation, perfection and enforcement of Liens on the Property pursuant to the Mortgage and on the UCC Collateral pursuant to the Security Agreement.

8.10 Terms Binding. All of the terms, conditions, stipulations, warranties, representations and covenants of this Agreement shall apply to and be binding upon and shall inure to the benefit of the Borrower, the Guarantor and the Bank and each of their respective heirs, executors, personal representatives, successors and assigns and all persons or entities who become bound as a debtor under this Agreement, but neither the Borrower nor the Guarantor

shall have the right to assign this Agreement to any person or entity without the prior written consent of the Bank.

8.11 Invalidity of Certain Provisions. If any term or provision of this Agreement or the application thereof to any person or circumstances shall, to any extent, be invalid or unenforceable, the remainder of such term or provision or the application thereof to persons or circumstances other than those as to which it is held invalid or unenforceable shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

8.12 Merger Integration and Interpretation. The Loan Documents contain the entire agreement of the parties with respect to the matters covered and the transactions contemplated hereby and thereby, and no other agreement, statement or promise made by any such party, or by any employee, officer, agent or attorney of any such party, which is not contained herein or therein, shall be valid or binding. Neither this Agreement nor any uncertainty or ambiguity herein shall be construed or resolved against the Bank or the Borrower, whether under any role of construction or otherwise. On the contrary, this Agreement has been reviewed by each of the parties and its counsel and shall be construed and interpreted according to the ordinary meaning of the words used so as to accomplish the purposes and intentions of all parties hereto fairly.

8.13 No Partnership; Control; Third Parties. This Agreement contemplates the extension of credit by the Bank, in its capacity as a lender, to the Borrower, in its capacity as a borrower, and for the payment of interest and repayment of principal by the Borrower to the Bank. The relationship between the Bank and the Borrower is limited to that of creditor/secured party, and debtor. The provisions herein for compliance with financial covenants, delivery of financial statements, and other covenants are intended solely for the benefit of the Bank to protect its interests as lender in assuring payments of interest and repayment of principal, and nothing contained in this Agreement shall be construed as permitting or obligating the Bank to act as financial or business advisor or consultant to the Borrower, as permitting or obligating the Bank to control the Borrower, or to conduct the Borrower's operations, as creating any fiduciary obligation on the part of the Bank to the Borrower, as creating any joint venture, agency, or other relationship between the parties other than as explicitly and specifically stated in this Agreement. The Borrower acknowledges that it has had the opportunity to obtain the advice of experienced counsel of its own choosing in connection with the negotiation and execution of this Agreement and to obtain the advice of such counsel with respect to all matters contained herein, including, without limitation, the provision herein relative to the waiver of trial by jury. The Borrower further acknowledges that it is experienced with respect to financial and credit matters and has made its own independent decision to apply to the Bank for credit and to execute and deliver this Agreement. The terms and provisions of the Note and the Loan Documents are for the benefit of the Borrower and the Bank, their respective successors, assigns, endorsees and transferees and all persons claiming under or through them and no other person shall have any right or cause of action or account thereof.

8.14 Electronic Transmission of Data. The Bank, the Borrower and the Guarantor agree that certain data related to the Loan (including confidential information, documents, applications and reports) may be transmitted electronically, including transmission over the Internet. This data may be transmitted to, received from or circulated among agents and representatives of the Borrower, the Guarantor and/or the Bank and their affiliates and other

persons involved with the subject matter of this Agreement. The Borrower and the Guarantor acknowledge and agree that (a) there are risks associated with the use of electronic transmission and that the Bank does not control the method of transmittal or service providers, (b) the Bank has no obligation or responsibility whatsoever and assumes no duty or obligation for the security, receipt or third party interception of any such transmission, and (c) the Borrower and the Guarantor will release, hold harmless and indemnify the Bank from any claim, damage or loss, including that arising in whole or part from the Bank's strict liability or sole, comparative or contributory negligence, which is related to the electronic transmission of data.

8.15 Gender etc. Whenever used herein, the singular shall include the plural, the plural shall include the singular, and the use of the masculine, feminine or neuter gender shall include all genders.

8.16 Authority to File Financing Statements and Amendments. The Borrower hereby authorizes the Bank to file Uniform Commercial Code Financing Statements describing the Collateral without the Borrower's signature thereon. After notice to the Borrower, the Bank is authorized to file amendments without the Borrower's signature thereon to any financing statements naming the Bank as a secured party in order to add collateral or a debtor. The Borrower is not authorized to file correction statements to financing statements.

8.17 Heading. The section and subsection headings of this Agreement are for convenience only, and shall not limit or otherwise affect any of the terms hereof.

8.18 Counterparts. To facilitate execution, this Agreement may be executed in any number of counterparts as may be required; and it shall not be necessary that the signatures of, or on behalf of, each party, or that the signatures of all persons required to bind any party, appear on each counterpart; but it shall be sufficient that the signature of, or on behalf of, each party, or that the signatures of the persons required to bind any party, appear on one or more counterparts. All counterparts shall collectively constitute a single agreement. It shall not be necessary in making proof of this Agreement to produce or account for more than a number of counterparts containing the respective signatures of, or on behalf of, all of the parties hereto.

8.19 Termination of Prior Agreement. Borrower has previously executed and delivered to Bank that certain Loan Agreement dated August 25, 2006 (the "Original Loan Agreement"). In connection with the execution and delivery of this Agreement, the Original Loan Agreement shall be hereby terminated and replaced with this Agreement.

(Signature Page Follows)



**BORROWER:**

ATTEST: EMERGENT BIODEFENSE OPERATIONS  
LANSING INC., a Michigan corporation

Jay Reilly

By: /s/Daniel Abdun-Nabi  
Name: Daniel Abdun-Nabi  
Title: Secretary

**GUARANTOR:**

ATTEST: EMERGENT BIOSOLUTIONS INC.,  
a Delaware corporation

Jay Reilly

By: /s/Daniel Abdun-Nabi  
Name: Daniel Abdun-Nabi  
Title: President

**BANK:**

HSBC REALTY CREDIT CORPORATION (USA),  
a Delaware corporation

By: /s/Thomas M. Neal  
Name: Thomas M. Neal  
Title: Senior Vice President

PROMISSORY NOTE

\$30,000,000.00

June 29, 2007

FOR VALUE RECEIVED, **EMERGENT BIODEFENSE OPERATIONS LANSING INC.**, formerly known as BioPort Corporation, a Michigan corporation (the "**Borrower**") promises to pay to the order of **HSBC REALTY CREDIT CORPORATION (USA)**, a Delaware corporation (hereinafter referred to as the "**Bank**") at its office at 1130 Connecticut Avenue, N.W., 12<sup>th</sup> Floor, Washington, D. C. 20036, or at such other place as the Bank may from time to time direct, the sum of THIRTY MILLION AND NO/100 DOLLARS (\$30,000,000.00), with interest computed daily on the unpaid principal balance at the Interest Rate (as such term is hereinafter defined), and payable according to the repayment terms set forth herein (the "**Loan**"). The Loan is made pursuant to a Loan Agreement of even date herewith (the "**Loan Agreement**") among the Borrower, the Bank and Emergent BioSolutions Inc. (the "**Guarantor**"). The Loan is guaranteed by a Guaranty of even date herewith from the Guarantor to the Bank (the "**Guaranty**"). The Loan is secured by, among other things, a Mortgage dated as of August 25, 2006, as amended by First Amendment to Mortgage of even date herewith from the Borrower to the Bank (the "**Mortgage**") and a Security Agreement of even date herewith from the Borrower to the Bank (the "**Security Agreement**"). This Note, the Loan Agreement, the Guaranty, the Mortgage, the Security Agreement and any other documents entered into in connection with the Loan are referred to as the "**Loan Documents**").

Interest Rate and Payment Terms

This Note shall bear interest at a rate per annum (the "**Interest Rate**") equal to LIBOR plus two and 75/100 percent (2.75%). "**LIBOR**" means the daily fluctuating rate of interest (rounded upwards, if necessary to the nearest 1/100 of 1%) appearing on Reuters Screen LIBOR01 Page, Telerate Successor Page 3750 (or any successor page) as the 30-day London interbank offered rate for deposits in United States Dollars at approximately 11:00 a.m. (London time) on the second preceding Business Day, as adjusted from time to time in the Bank's sole discretion for then-applicable reserve requirements, deposit insurance assessment rates and other regulatory costs (the "**Index**"). Any change in the rate will take effect on the date of such change in the Index as indicated on Reuters Screen LIBOR01 Page, Telerate Successor Page 3750. Interest will accrue on any non-banking day at the rate in effect on the immediately preceding banking day.

This Note shall be payable on the 1<sup>st</sup> day of each month in monthly installments of principal in the amount of \$250,000, plus accrued interest, being the amount required to amortize the Loan over a period of 10 years, beginning August 1, 2007. All accrued interest and outstanding principal on the Loan shall be due and payable in a final balloon payment on June 29, 2012.

The Interest Rate on this Note: (a) will not exceed applicable legal limits, and in the event a payment is made by the Borrower or received by the Bank in excess of the applicable legal limits, such excess payment shall be credited as a payment of principal; and (b) shall be

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computed on the basis of 360-day year and charged for the actual number of days elapsed in each interest calculation period.

In the event that the Bank shall determine that by reason of circumstances affecting the interbank Eurodollar market, adequate and reasonable means do not exist for determining LIBOR, or Eurodollar deposits in the relevant amount and for the relevant maturity are not available to the Bank in the interbank Eurodollar market, the Bank shall give the Borrower prompt notice of such determination. If such notice is given, and until such notice is withdrawn, the Interest Rate on this Note shall be a rate per annum equal to the Prime Rate plus 0.25%. "**Prime Rate**" means the rate per annum from time to time established by the Bank as the Prime Rate and made available by the Bank at its main office or, in the discretion of the Bank, the base, reference or other rate then designated by the Bank for general commercial loan reference purposes, it being understood that such rate is a reference rate, not necessarily the lowest, established from time to time, which serves as the basis upon which effective interest rates are calculated for loans making reference thereto. If, after the date of this Note, any applicable law, treaty, regulation or directive, or any change therein or in the interpretation or application thereof, shall make it unlawful for the Bank to make or maintain any LIBOR loan, the Interest Rate on this Note shall be a rate per annum equal to the Prime Rate plus 0.25%, for so long as such illegality exists.

#### Prepayment

Upon five (5) business days' written notice from the Borrower to the Bank, the Borrower may prepay, without penalty or premium (except as described below), the outstanding principal balance of this Note, in whole or in part, subject to the following terms and conditions:

- (a) any prepayment must be made on an interest payment date or scheduled principal and interest payment date;
- (b) must include payment of all interest accrued and unpaid on the amount so prepaid as of the date of such prepayment;
- (c) partial prepayment shall not postpone the due date of any subsequent payment, nor shall it change the amount of any monthly payment otherwise required to be made under this Note, unless the Bank otherwise agrees in writing and in advance of receipt of such partial prepayment; and
- (d) if the Interest Rate at the time of prepayment has been converted to a fixed rate pursuant to an ISDA Master Agreement or other interest rate protection agreement or product provided by the Bank to fix the interest rate ("Master Agreement"), the Borrower shall pay any breakage fees, make whole provisions or other costs and expenses related to such Master Agreement.

#### Fixing Interest Rate

At any time, the Borrower may enter into a Master Agreement with the Bank to convert the Interest Rate to a fixed rate for a period of up to, but no longer than, the final maturity date on this Note, on such terms as may be agreed to be by the Bank and the Borrower.

#### Late Charge

In the event the Borrower fails to make a payment of principal and/or interest in fully collected funds within fifteen (15) days after such payment is due, the Borrower shall pay a late charge to the Bank in an amount equal to five percent (5%) of the overdue installment.

#### Default Interest

Upon an Event of Default (as such term is hereinafter defined) and until such Event of Default is cured or this Note is paid in full, this Note shall bear interest at a rate equal to three percent (3%) per annum above the Interest Rate in effect on the date of such Event of Default.

#### Events of Default and Remedies

Subject to any applicable notice and cure periods contained in the Loan Documents, each of the following shall constitute a default ("**Event of Default**") under this Note:

- (a) A failure to make a payment of any sum within ten (10) days of when due under this Note.
- (b) A failure to perform or observe any of the covenants, conditions or terms of this Note or any other Loan Document within 30 days of written notice of such failure.

(c) Subject to 7.01 of Loan Agreement, and upon the occurrence of an Event of Default or failure to pay the balance hereof when otherwise due, and notwithstanding the payment of any late charges: (i) all remaining payments under this Note shall become due and payable together with interest accrued to the date of payment without notice, at the option of the Bank; (ii) the Borrower shall reimburse the Bank for any reasonable expenses, costs and attorneys' fees which the Bank may incur in connection with the collection of any monies due under this Note or in connection with the enforcement of any right under this Note or under any of the Loan Documents; and (iii) the Bank may exercise any or all of the other rights, powers and remedies provided for in any of the Loan Documents, or now or hereafter existing at law or in equity or by statute or otherwise.

#### Miscellaneous

The Borrower hereby waives demand, presentment for payment, protest, and notice of dishonor, and agrees that at any time and from time to time and with or without consideration, the Bank may, without notice to or further consent of the Borrower and without in any manner releasing, lessening or affecting the obligations of the Borrower: (a) release, surrender, waive, substitute, settle, exchange, compromise, modify, extend or grant indulgences with respect to: (i) this Note; and (ii) all or any part of any collateral or security for this Note; or (b) grant any extension or other postponements of the time of payment hereof.

Each right, power and remedy of the Bank as provided for in this Note, or now or hereafter existing at law or in equity or by statute or otherwise, shall be cumulative and concurrent and shall be in addition to every other right, power or remedy, and the exercise or beginning of the exercise by the Bank of any one or more of such rights, powers or remedies

shall not preclude the simultaneous or later exercise by the Bank of any or all of such other rights, powers or remedies.

No failure or delay by the Bank to insist upon the strict performance of any term, condition or covenant of this Note, or to exercise any right, power or remedy upon a breach hereof, shall constitute a waiver of any such term, condition or covenant or of any such breach, nor shall it preclude the Bank from exercising any such right, power or remedy at any later time or times, unless such waiver is in writing signed by an authorized representative of the Bank. If the Bank accepts any payment after its due date, this does not constitute a waiver of the Bank's right to receive timely payment of all other subsequent amounts or to declare a default for the failure to make any other subsequent payment when due.

Any payment on this Note coming due on a day on which the Bank is not open to conduct full banking business shall be due on the next succeeding business day. Each payment hereunder may be applied to pay interest, principal, late fees or costs as the Bank, in its sole discretion, may determine.

All notices under this Note shall be given as provided in the Loan Agreement.

The Borrower authorizes the Bank to disburse funds represented by this Note to the Borrower and agrees that such disbursement shall be deemed to be full and absolute consideration for the undertaking to make payment hereunder. The Borrower hereby authorizes the Bank to disclose to any subsidiary or affiliate of the Bank, to any fiduciary institution or to any banking institution, credit union or savings and loan association organized under the laws of any State, and hereby authorizes all subsidiaries and affiliates of the Bank, to disclose to the Bank, the financial records of the Borrower.

**THE BORROWER AND THE BANK HEREBY VOLUNTARILY AND KNOWINGLY WAIVE ANY RIGHT THEY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY ACTION, PROCEEDING, OR COUNTERCLAIM BROUGHT BY EITHER PARTY AGAINST THE OTHER ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS NOTE AND THE TRANSACTIONS CONTEMPLATED HEREIN. THE BORROWER ACKNOWLEDGES THAT IT HAS BEEN INFORMED BY THE BANK THAT THE PROVISIONS OF THIS PARAGRAPH CONSTITUTE A MATERIAL INDUCEMENT UPON WHICH THE BANK HAS RELIED, IS RELYING AND WILL RELY IN MAKING THE LOAN. THE BORROWER HEREBY CERTIFIES THAT NO REPRESENTATIVE OR AGENT OF THE BANK (INCLUDING ITS COUNSEL) HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT THE BANK WOULD NOT, IN THE EVENT OF LITIGATION, ENFORCE THIS WAIVER OF RIGHT TO JURY TRIAL. THE BORROWER ACKNOWLEDGES THAT IT HAS CONSULTED WITH AN ATTORNEY AND FULLY UNDERSTANDS THE LEGAL EFFECT OF THE PROVISIONS OF THIS PARAGRAPH.**

This Note shall be governed by and construed under and in accordance with the laws of the State of New York (but not including the choice of law rules thereof). The Borrower hereby submits to the non-exclusive jurisdiction of any State of New York court or Federal court sitting in the State of New York in any action or proceeding arising out of or relating to this Note, and

hereby waives any objection it may have to the laying of venue of any such action or proceeding in any of said courts and any claim that it may have that any such action or proceeding has been brought in an inconvenient forum. A final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

Whenever used herein, the word "Borrower" or "Bank" shall be deemed to include, as appropriate, its/his/her respective heirs, personal representatives, successors and assigns. All words used herein shall be deemed to refer to the singular, plural, masculine, feminine or neuter as the identity of the person or entity or the context may require.

Borrower has previously executed and delivered to Bank that certain Promissory Note dated August 25, 2006 in the original principal amount of \$15,000,000.00 (the "Original Note"). In connection with the execution and delivery of this Note, the Original Note shall be hereby terminated and replaced with this Note evidencing a total loan amount of \$30,000,000.00.

(Signature Page Follows)

IN WITNESS WHEREOF, the Borrower has duly executed this Note under seal as of the date and year first hereinabove set forth.

EMERGENT BIODEFENSE OPERATIONS  
LANSING INC., a Michigan corporation

By: /s/Daniel J. Abdun-Nabi  
Name: Daniel J. Abdun-Nabi  
Title: Secretary

**CONSENT OF THE GUARANTOR**

The undersigned Guarantor hereby consents to the terms of this Note and acknowledges it has guaranteed this Note pursuant to the terms of that certain Guaranty executed by the undersigned of even date herewith.

EMERGENT BIOSOLUTIONS INC.,  
a Delaware corporation

By: /s/Daniel J. Abdun-Nabi  
Name: Daniel J. Abdun-Nabi  
Title: Secretary



## LOAN AGREEMENT

**THIS LOAN AGREEMENT** is made as of June 8, 2007 by and between **EMERGENT BIODEFENSE OPERATIONS LANSING INC.** (formerly Bioport Corporation), a Michigan corporation, of Lansing, Michigan ("**Borrower**"), and **FIFTH THIRD BANK**, a Michigan banking corporation, of Grand Rapids, Michigan ("**Lender**").

Borrower has requested Lender to extend to it a revolving line of credit of up to Fifteen Million Dollars (\$15,000,000). Lender is willing to extend the line of credit on the terms and subject to the conditions set forth in this Agreement.

Lender and Borrower agree as follows:

**SECTION 1. DEFINITIONS.**

In this Agreement:

**"Affiliate of a Person"** means any Person that now or in the future controls, is controlled by, or is under common control with, the Person.

**"Agreement"** means this Loan Agreement, as amended, including the schedules attached to this Loan Agreement.

**"Capitalized Lease Obligation"** means any obligation of Borrower to pay future rentals under a lease that, in accordance with GAAP, is required to be shown as a liability on Borrower's balance sheet.

**"Collateral"** means any properties or assets of Borrower in or upon which Lender at any time holds a security interest, mortgage or other lien to secure any Lender Indebtedness.

**"Collateral Document"** means each security agreement, mortgage, pledge agreement, assignment, guaranty and every other agreement and document that has been or in the future is, or is required to be, given by Borrower or any third party to secure any Lender Indebtedness.

**"Contamination"** or **"Contaminated"** means, when used with reference to any real or personal property, that a Hazardous Substance is present on or in the property in an amount or level that exceeds any legal limit specified in any Environmental Law. "Contamination" or "Contaminated" shall not include latent, unexposed asbestos in any building located on any of the real property unless and until exposure that exceeds the foregoing legal limit occurs due to renovation or otherwise.

A Person “**controls**” another Person if the Person has, directly or indirectly, the power to direct or cause the direction of the management or policies of the other Person.

“**Default**” means an event, condition or circumstance that, with the lapse of time or giving of notice (absent any permitted cure), would be an Event of Default.

“**EBI**” means Emergent BioSolutions Inc., a Delaware corporation.

“**Eligible Account**” has the meaning specified in **Schedule C**.

“**Environmental Law**” means at any time any applicable federal, state, local or foreign law (including common law), ordinance, rule, regulation, permit, order or other requirement that then (1) regulates the quality of air, water, soil or other environmental media, (2) regulates the generation, management, transportation, treatment, storage, recycling or disposal of any waste, (3) protects public health, occupational safety and health, natural resources or the environment or (4) establishes liability for the investigation, removal or remediation of, or harm caused by, Contamination.

“**ERISA**” means the Employee Retirement Income Security Act of 1974, as now and in the future amended, together with all regulations issued under it.

“**Event of Default**” has the meaning specified in *Section 9* of this Agreement.

“**GAAP**” means generally accepted accounting principles consistently applied.

“**Government Contracts**” has the meaning specified on **Schedule D**.

“**Hazardous Substance**” means at any time any substance or waste that is then regulated by or subject to any Environmental Law.

“**Indebtedness**” means indebtedness for borrowed money, indebtedness representing the deferred purchase price of property (excluding indebtedness under normal trade credit for property or services purchased in the normal course of operations), any obligation under a note payable or draft accepted representing an extension of credit, indebtedness (whether or not assumed) secured by a mortgage, security interest or other lien on property, and any Capitalized Lease Obligation.

“**Intercreditor Agreement**” means the Intercreditor Agreement, dated as of August 25, 2006, by and between HSBC Credit Realty Corporation (USA) and Lender, and acknowledged and consented to by Borrower and Emergent BioSolutions Inc.

“**Lender Indebtedness**” means any indebtedness, obligation or liability, of whatever type or nature, that Borrower now or in the future owes to Lender, including, without

limitation, all indebtedness and obligations under this Agreement and all Rate Management Obligations.

**“Liabilities”** means all liabilities that GAAP requires to be classified as liabilities on a balance sheet of Borrower.

**“Loan”** means any loan that Lender makes to Borrower under this Agreement.

**“Loan Document”** means this Agreement, each Revolving Credit Note and other promissory note that Borrower has given or in the future gives to Lender, each renewal, extension, and replacement of the note, each Collateral Document, each Rate Management Agreement and every other agreement, instrument and document that has been or in the future is signed or delivered in connection with this Agreement or in connection with any Lender Indebtedness.

**“Material Adverse Effect”** means any material adverse effect upon (1) the validity, performance or enforceability of any Loan Document, (2) any Government Contract, (3) the business operations of Borrower, (4) the ability of Borrower or any guarantor of any Lender Indebtedness to fulfill any obligation under any Loan Document or (5) the ability of Lender to take possession of, collect or otherwise realize upon any Collateral or other security for the Lender Indebtedness.

**“Maturity”** of an indebtedness or obligation means the time when that indebtedness or obligation has become due and payable, for whatever reason.

**“Note”** means the Revolving Credit Note, the Term Note and any other promissory note that Borrower has signed or in the future signs and that now or in the future evidences any Lender Indebtedness, including any renewals, extensions or modifications.

**“Permitted Lien”** means (1) a security interest, mortgage or other lien in favor of Lender (2) an existing security interest or lien described on **Schedule A** attached to this Agreement (3) a lien for taxes that are not delinquent or, in a jurisdiction where payment of taxes is abated during the period of any contest, being contested in good faith by appropriate proceedings, if adequate reserves for it have been set aside on its books (4) an inchoate material men’s, mechanics’, workmen’s, repairmen’s or other like lien arising in the ordinary course of business, if the obligation secured is not delinquent or is being contested in good faith by appropriate proceedings, if adequate reserves for it have been set aside upon Borrower’s books in accordance with GAAP and if the lien does not jeopardize any Collateral and does not have a Material Adverse Effect, and (5) the HSBC Liens (as defined in the Intercreditor Agreement).

**“Person”** means an individual and a corporation, partnership, limited liability company, trust, association and any other entity.

“**Plan**” means an “employee pension benefit plan” with respect to which Borrower or any Affiliate is an “employer” or “party in interest,” as ERISA defines those terms.

“**Rate Management Agreement**” means any agreement, device or arrangement that provides for payments that are related to fluctuations of interest rates, exchange rates, forward rates or equity prices, including, but not limited to, dollar-denominated or cross-currency interest rate exchange agreements, forward currency exchange agreements, interest rate cap or collar protection agreements, forward rate currency or interest rate options, puts and warrants and any agreement pertaining to equity derivative transactions (e.g., equity or equity index swaps, options, caps, floors, collars and forwards), including without limitation any ISDA Master Agreement, between Borrower and Lender or any affiliate of Fifth Third Bancorp, and any schedules, confirmations and documents and other confirming evidence between the parties that confirm transactions under any such agreement, device or agreement, all whether now existing or arising in the future, and in each case as amended, modified or supplemented from time to time.

“**Rate Management Obligation**” means any obligation of Borrower to Lender or any affiliate of Fifth Third Bancorp, whether absolute, contingent or otherwise and whether the obligation now exists or is created or arises or is acquired or evidenced in the future and however it has been or is created, evidenced or acquired and however it has arisen or arises in the future, under or in connection with (1) any Rate Management Agreement or (2) any cancellation, buy-back, reversal, termination or assignment of any Rate Management Agreement, including any renewal, extension, modification or substitution of any such obligation.

“**Revolving Credit Commitment**” means at any given time an amount equal to the lesser of (1) \$15,000,000 or (2) 75 percent of Borrower’s Eligible Accounts at that time.

“**Revolving Credit Loans**” has the meaning specified in *Section 3.1* of this Agreement.

“**Revolving Credit Note**” has the meaning specified in *Section 3.3* of this Agreement.

“**Schedule**” means a schedule attached to this Agreement.

“**Subsidiary**” of a Person means a corporation, limited liability company, limited partnership or other business entity that the Person controls.

“**Term Loan**” has the meaning specified in *Section 4.1* of this Agreement.

“**Term Loan Note**” has the meaning specified in *Section 4.2* of this Agreement.

## SECTION 2. WARRANTIES AND REPRESENTATIONS.

Borrower represents and warrants to Lender, and agrees, as follows:

2.1 Borrower is a corporation duly organized, validly existing and in good standing under the laws of the state of Michigan. Borrower is duly qualified and authorized to do business, and is in good standing as a foreign corporation, in each jurisdiction in which the failure to be so qualified or authorized to do business could have a Material Adverse Effect.

2.2 Borrower has all requisite corporate power and authority and all necessary licenses and permits to own and operate its properties and to carry on its business as it now conducts it and as it contemplates that it will conduct it in the future. Borrower is in compliance with all laws, rules and regulations that apply to Borrower, its operations or its properties, non-compliance with which could reasonably be expected to have a Material Adverse Effect.

2.3 The balance sheets of Borrower as of December 31, 2004, December 31, 2005, and December 31, 2006 and the related statements of income, of retained earnings and of changes in financial position for the periods then ended, copies of all of which have been delivered to Lender, have been prepared in accordance with GAAP and present fairly the financial position of Borrower as of those dates and the results of its operations for those periods. Since the date of the most recent of those financial statements, there has not been any change in Borrower's financial condition or operations that could have a Material Adverse Effect and that Borrower has not disclosed to Lender in writing.

2.4 Neither this Agreement nor any financial statement that *Section 2.3* above refers to nor any other written statement that Borrower has furnished to Lender in connection with the negotiation of any Loan, contains any untrue statement of a material fact or omits a material fact necessary to make the statements contained in this Agreement, the financial statement or other written statement not misleading. There is not any fact that Borrower has not disclosed to Lender in writing that has, or, to the best of the knowledge of the officers and directors of Borrower, in the future could have, a Material Adverse Effect.

2.5 Except as disclosed to Lender in writing, there is not any proceeding pending, or to the knowledge of the officers and directors of Borrower threatened, before any court, governmental authority or arbitration board or tribunal, against Borrower, that, if determined adversely to Borrower, could reasonably be expected to have a Material Adverse Effect. Borrower is not in default with respect to any order, judgment or decree of any court, governmental authority or arbitration board or tribunal.

2.6 Borrower has good and marketable title to all of the assets that it purports to own, including the assets that the financial statements referred to in *Section 2.3* of this

Agreement describe, free and clear from all liens, encumbrances, security interests, claims, charges and restrictions, except Permitted Liens.

2.7 Borrower owns or controls all of the patents, trademarks, service marks, trade names, copyrights, licenses and rights that are necessary for the conduct of its business, without any conflict with the right of any other Person.

2.8 Borrower has full power and authority to sign, deliver and perform the Loan Documents; the signing, delivery and performance of the Loan Documents that Borrower has given or is required to give to Lender (1) have been duly authorized by appropriate action of Borrower, (2) will not violate the provisions of Borrower's articles of incorporation or bylaws or other governing agreement or document or of any law, rule, judgment, order, agreement or instrument to which Borrower is a party or by which it is bound and (3) do not require any approval or consent of any public authority or other third party; and the parties to the Loan Documents have properly signed and delivered them, and the Loan Documents are the valid and binding obligations of the parties to them and are enforceable in accordance with their terms, subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors and the rules of law governing specific performance, injunctive relief and other equitable remedies.

2.9 Borrower has filed each tax return that it is required to file (after taking account of any properly filed, valid and effective extension) in any jurisdiction, and Borrower has paid each tax, assessment, fee and other governmental charge upon it or upon its assets, income or franchises before the time when its nonpayment could give rise to a lien or could have a Material Adverse Effect. Borrower does not know of any proposed additional tax assessment against it.

2.10 Borrower does not intend to carry or purchase any "margin security" within the meaning of Regulation U of the Board of Governors of the Federal Reserve System, 12 C.F.R. Chapter II.

2.11 No Plan has been terminated since the effective date of ERISA. No Plan is a "multi-employer plan" within the meaning of Section 3(37)(A) of ERISA. An "accumulated deficiency" (within the meaning of Section 412 of the Internal Revenue Code, as amended) or a "reportable event" (as defined in Title IV of ERISA) has not occurred with respect to any Plan. Neither Borrower nor any Affiliate has incurred any material liability to the Pension Benefit Guaranty Corporation ("**PBGC**") or otherwise under ERISA. The PBGC has not started or threatened to start a proceeding against Borrower or any Affiliate under ERISA.

2.12 Borrower is not, and no person, firm or corporation that has "control" of Borrower is, an "executive officer," "director" or "person who directly or indirectly, or in concert with one or more persons owns, controls or has the power to vote more than 10 percent of any class of voting securities" (within the meaning of 12 U.S.C. § 375(b) and

regulations issued under that section), of Lender, Fifth Third Bancorp (“**Bancorp**”) or any subsidiary of Bancorp.

2.13 All of Borrower’s real and personal property, and all operations and activities on it, are in compliance with all Environmental Laws, except for any noncompliance that could not reasonably be expected to have a Material Adverse Effect; and none of Borrower’s real or personal property is or will be (1) Contaminated or the site of the disposal or release of any Hazardous Substance (2) the source of any Contamination of any adjacent property or of any groundwater or surface water or (3) the source of any air emissions in excess of any legal limit or standard that is now or in the future in effect, to the extent that any of the foregoing could reasonably be expected to have a Material Adverse Effect.

2.14 Borrower has furnished to Lender a complete and correct copy of each Government Contract, including all amendments.

2.15 Borrower is not a party to a contract with an agency of the United States government other than the Government Contracts.

### SECTION 3. REVOLVING LINE OF CREDIT.

3.1 Subject to satisfaction of the conditions precedent set forth in *Section 10* of this Agreement, and as long as there shall not have occurred any Default or Event of Default, Lender shall extend to Borrower from time to time loans (“**Revolving Credit Loans**”) in amounts that shall not at any time in the aggregate exceed the Revolving Credit Commitment.

3.2 If the aggregate principal amount of the Revolving Credit Loans outstanding at any time exceeds the Revolving Credit Commitment, then Borrower shall immediately repay the amount of the Loans that is required to eliminate the excess.

3.3 All Revolving Credit Loans shall be evidenced by and payable with interest in accordance with the terms of the promissory note in the form of **Schedule B (“Revolving Credit Note”)**, which Borrower shall sign and deliver to Lender.

3.4 Each Revolving Credit Loan that meets the requirements of this Section 3 and the other provisions of this Agreement shall be made upon Borrower’s request.

3.5 Borrower shall have the right to prepay all Revolving Credit Loans, in whole or in part, at any time without penalty. Borrower may reborrow amounts that it prepays, subject to the other provisions of this Agreement.

3.6 Unless it is sooner terminated under *Section 9* of this Agreement or Lender extends it in writing, Lender’s obligation to make or to renew Revolving Credit Loans shall

expire on May 15, 2008. If Lender extends it, then Lender's obligation to make or to renew Revolving Credit Loans shall expire on the date stated in the extension. If Lender's obligation to make or to renew Revolving Credit Loans expires, then the aggregate unpaid principal balance of all outstanding Revolving Credit Loans, together with all interest accrued on them, shall be payable in full on the expiration date.

#### **SECTION 4. TERM LOAN.**

4.1 On August 10, 2004, Lender made a term loan to Borrower in the principal amount of \$2,400,000 ("**Term Loan**").

4.2 The Term Loan is evidenced by and payable in accordance with a Term Note dated August 10, 2004, payable to Lender, that Borrower executed and delivered to Lender ("**Term Loan Note**").

4.3 Nothing in this Agreement amends or modifies the Term Loan or the Term Loan Note.

#### **SECTION 5. SECURITY.**

To secure payment and performance of all Lender Indebtedness:

5.1 Borrower shall sign and deliver to Lender security agreements, in form and substance satisfactory to Lender, granting to Lender a valid first security interest in Borrower's assets and properties described in **Schedule D**.

5.2 Borrower shall sign and deliver to Lender all financing statements, assignments and other documents, agreements and instruments, in connection with the perfection or priority of Lender's security interest in the Collateral, and shall take all further actions, that Lender reasonably requests in connection with the perfection or priority of that security interest.

#### **SECTION 6. AFFIRMATIVE COVENANTS.**

From the date of this Agreement and until all Lender Indebtedness is fully paid and Lender does not have any obligation to extend loans or other credit facilities to Borrower, Borrower shall:

6.1 Furnish to Lender, within 120 days after the end of each of Borrower's fiscal years, beginning with its fiscal year ended December 31, 2006 an audited, consolidated financial report for EBI, prepared in accordance with GAAP by independent certified public



accountants that are satisfactory to Lender, containing (1) EBI's consolidated balance sheet as of the end of that year, its related consolidated profit and loss statement for that year and its statement of cash flows for that year, (2) any management letters that those certified public accountants prepare, (3) all comments and financial details that are customarily included in reports of that type and (4) the unqualified opinion of the certified public accountants as to the fairness of the statements contained in the report.

6.2 Furnish to Lender within 45 days after the end of each fiscal quarter (other than the last quarter of Borrower's fiscal year), beginning with the quarter ending June 30, 2007, a financial report, the accuracy of which is certified to by the President or the chief financial officer of Borrower, prepared in accordance with GAAP, containing Borrower's balance sheet as of the end of the quarter and its income statement showing the results of its operations for the portion of its fiscal year then elapsed.

6.3 Within two Business Days after Borrower issues an invoice to a government agency pursuant to a contract with that agency, transmit to Lender, by telecopy or by electronic mail, a copy of the invoice.

6.4 (1) Promptly inform Lender of any occurrence that is a Default or an Event of Default and of any other occurrence that has had, or could reasonably be expected to have, a Material Adverse Effect; (2) grant to Lender or its representatives the right to examine its books and records at any reasonable time or times; (3) maintain complete and accurate books and records of its transactions in accordance with good accounting practices; and (4) furnish to Lender any information that it reasonably requests concerning Borrower's financial affairs within 10 days after Lender makes the request.

6.5 (1) Maintain insurance, including, but not limited to, fire and extended coverage insurance, workers' compensation insurance and commercial and general liability insurance with responsible insurance companies on its properties and against the risks and in the amounts and in the manner consistent with Borrower's current practice and (2) furnish to Lender upon its request the details with respect to that insurance and satisfactory evidence of that insurance coverage. Each insurance policy that this Section requires shall be written or endorsed in a manner that makes losses, if any, payable to Borrower and Lender as their respective interests appear and shall include, where appropriate, a lender's loss payable endorsement in favor of Lender, to the extent its interest appears, in form and substance reasonably satisfactory to Lender.

6.6 Pay and discharge, as often as they are due and payable, all taxes and assessments of whatever nature that are levied or assessed against it or any of its properties, unless and to the extent only that (1) in a jurisdiction where payment of taxes and assessments is abated during the period of any contest, those taxes or assessments are being contested in good faith by appropriate proceedings and (2) Borrower shall have set aside on its books adequate reserves with respect to those taxes and assessments.

6.7 Maintain its existence as a corporation in good standing in the State of Michigan and its qualification in good standing in every other jurisdiction in which the failure to be qualified or authorized to do business could have a Material Adverse Effect; continue to conduct and operate its business substantially as it presently conducts and operates it; and comply with all governmental laws, rules, regulations and orders that apply to it, the failure to comply with which could reasonably be expected to have a Material Adverse Effect.

6.8 Act prudently and in accordance with customary industry standards in managing and operating its assets, properties, business and investments and keep in good working order and condition, ordinary wear and tear excepted, all of its assets and properties that are necessary to the conduct of its business.

6.9 Maintain its principal commercial deposit accounts with Lender.

6.10 (1) Comply in all material respects with the applicable requirements of ERISA and the Internal Revenue Code with respect to each Plan, including, without limitation, all provisions regarding minimum funding requirements and requirements as to plan termination insurance; (2) within 30 days after it is filed, furnish to Lender a copy of each annual report and annual return, with all schedules and attachments, that ERISA requires Borrower to file with the Department of Labor or the Internal Revenue Service pursuant to ERISA in connection with each Plan for each Plan year; (3) notify Lender immediately of any fact or circumstance, including, but not limited to, any "reportable event" (as defined in Title IV of ERISA), that might be grounds for termination of a Plan by the Pension Benefit Guaranty Corporation or for the appointment by the appropriate United States District Court of a trustee to administer the Plan, together with a statement, if Lender requests it, as to the reason the fact or circumstance has occurred and the action, if any, that Borrower proposes to take to avoid termination of the Plan; and furnish to Lender, upon its request, any additional information concerning any Plan that Lender reasonably requests.

6.11 Notify Lender in writing within 10 days after Borrower receives any notice of the beginning of (1) any proceeding or investigation by a federal or state environmental agency against Borrower regarding Borrower's compliance with Environmental Laws or (2) any other judicial or administrative proceeding or litigation by or against Borrower.

#### **SECTION 7. NEGATIVE COVENANTS.**

From the date of this Agreement and until all Lender Indebtedness is fully paid and Lender does not have any obligation to extend loans or other credit facilities to Borrower, Borrower shall not, without the prior written consent of Lender:

- 7.1 Create or permit to exist any lien, security interest, mortgage, pledge, attachment, garnishment, execution or other legal process or encumbrance on any of the Collateral, other than Permitted Liens.
- 7.2 Sell, lease or otherwise dispose of any Collateral.
- 7.3 Make loans or advances to any Person, except loans and advances to wholly-owned Subsidiaries of Borrower and wholly-owned Subsidiaries of EBI.
- 7.4 Guarantee, endorse, assume or otherwise incur or suffer to exist any contingent liability in respect of any obligation of any other Person, except by the endorsement of negotiable instruments for deposit or collection in the ordinary course of business and except for the guaranty of Lender Indebtedness.
- 7.5 Enter into any merger, consolidation, reorganization or recapitalization, or purchase or otherwise acquire all, or substantially all, of the assets, obligations or capital stock of or any other interest in any Person if either (1) a Default or an Event of Default shall have occurred and is then continuing or (2) the merger, consolidation, reorganization, recapitalization, purchase or acquisition would result in or cause a Default or an Event of Default.
- 7.6 Subordinate any indebtedness that any Person owes to Borrower to indebtedness that that Person owes to any other Person.
- 7.7 Engage in any transaction with any Affiliate, other than EBI, a wholly-owned Subsidiary of Borrower or a wholly-owned Subsidiary of EBI, on terms that are less favorable to Borrower than Borrower could obtain at the time in a comparable transaction in an arm's-length dealing with a person other than an Affiliate.
- 7.8 Engage, directly or indirectly, in any line of business other than a line of business in which Borrower is presently engaged or a line of business related to it.
- 7.9 Issue, incur, assume or permit to remain outstanding any Indebtedness that is not Subordinated Indebtedness, other than (1) Lender Indebtedness, (2) the HSBC Indebtedness (as defined in the Intercreditor Agreement) and (3) other Indebtedness that does not exceed \$500,000 in the aggregate at any time outstanding.
- 7.10 Become a contributing employer with respect to a multiemployer employee benefit plan within the meaning of Section 3(37)(A) of ERISA (29 U.S.C. 1002), as amended by Section 302 of the Multi-Employer Pension Plan Amendments Act of 1980; or establish for any of its employees any employee benefit plan that has, or may in the future incur, any unfunded past service liability.

7.11 Change its name, fiscal year or method of accounting, except as GAAP requires, and except that Borrower may change its name if Borrower gives Lender 60 days' prior written notice of the name change and takes any action that Lender considers necessary to continue the perfection of the security interests and liens that the Collateral Documents grant to Lender.

7.12 Enter into any amendment to or modification of, or terminate all or any part of, any Government Contract without Lender's prior written consent, to the extent that the amendment, modification or termination would have the effect of amending, modifying or terminating all or part of an Eligible Account.

#### **SECTION 8. APPLICATION OF PROCEEDS.**

Borrower shall use the proceeds of the Revolving Credit Loans for working capital and other purposes.

#### **SECTION 9. EVENTS OF DEFAULT AND REMEDIES.**

9.1 Each of the following is an **"Event of Default"** under this Agreement:

A. If Borrower defaults in the payment of the principal or interest of any Loan or if Borrower defaults in the payment of principal or interest of any other Lender Indebtedness, when and as it is due and payable, whether by acceleration or otherwise, and if the default is not cured within ten days.

B. If Borrower fails to perform any of its other obligations under, or to comply with any of the terms, conditions and covenants that are contained in, this Agreement or any other Loan Document or other agreement, document or instrument that Borrower or any third party has given or in the future gives to Lender to secure any Lender Indebtedness and if the failure continues for twenty days after Lender gives Borrower 20 days notice of it or if there occurs any other event of default as defined in any Loan Document or in any such other agreement, instrument or document.

C. If Borrower defaults in the payment of any other Indebtedness and does not cure the default within sixty (60) days, if the default results in a right of the holder of the Indebtedness to accelerate the maturity of such Indebtedness in an amount in excess of \$250,000.

D. If any warranty or representation that Borrower makes in this Agreement or any statement, warranty or representation that Borrower or any

third party has made or in the future makes in any other Loan Document, certificate, report or other document, instrument or agreement that is delivered under this Agreement or in connection with any Lender Indebtedness is false or inaccurate in any material respect when made.

E. If any guaranty that now or in the future secures payment of all or any part of the Lender Indebtedness is, other than by its terms, terminated or limited for any reason without the written consent of Lender.

F. If Borrower fails in any material respect to perform any of its obligations under any Government Contract or if a Government Contract is terminated for any reason other than by expiration in accordance with its terms.

G. If, as a result of any order, judgment or other action of the federal Food and Drug Administration, a court or any other governmental agency or entity, Borrower is required to stop selling all or any of the anthrax vaccine that it has agreed to sell under a Government Contract.

H. If Borrower (1) applies for or consents to the appointment of, or the taking of possession by, a receiver, custodian, trustee or liquidator of itself or of all or a substantial part of its property, (2) is generally unable to pay its debts as they become due, (3) makes a general assignment for the benefit of its creditors, (4) starts a voluntary case under the federal Bankruptcy Code (as now or in the future in effect), (5) files a petition that seeks to take advantage of any other law that provides for the relief of debtors, (6) fails to controvert in a timely or appropriate manner, or acquiesces in writing to, any petition that is filed against Borrower in any involuntary case under the Bankruptcy Code or (7) takes any action for the purpose of effecting any of the foregoing.

I. If a proceeding or case is started in any court of competent jurisdiction and is not dismissed within 60 days, seeking (1) the liquidation, reorganization, dissolution, winding up or composition or readjustment of Borrower or its assets or the appointment of a trustee, receiver, custodian, liquidator or the like of Borrower or of all or any substantial part of the assets of Borrower or (2) similar relief in respect of Borrower under any law that provides for the relief of debtors; or if an order for relief against Borrower is entered in an involuntary case under the Bankruptcy Code.

9.2 If an Event of Default that is described in *subsections 9.1A* through *9.1G* above occurs, then, at the option of Lender, Lender's obligation to make or renew Revolving Credit Loans shall terminate, and all or any part of the unpaid principal balance of and accrued interest on all Lender Indebtedness shall become immediately due and payable, without presentment, demand or notice of any kind, all of which Borrower waives.

9.3 If an Event of Default that is described in *subsection 9.1H* or *9.1I* above occurs, then Lender's obligation to make or renew Revolving Credit Loans shall immediately terminate, and the entire unpaid principal balance of and accrued interest on all outstanding Lender Indebtedness shall automatically become due and payable without presentment, demand or notice of any kind, all of which Borrower waives.

**SECTION 10. CONDITIONS PRECEDENT.**

The obligation of Lender to make the initial Revolving Credit Loan is subject to the following conditions precedent:

10.1 Lender shall have received copies of resolutions of the Board of Directors of Borrower, certified by the Secretary of Borrower as being in full force and effect on the date of making the loans, authorizing Borrower's signing, delivery and performance of this Agreement and all other Loan Documents.

10.2 Lender shall have received all reports, certificates and opinions of attorneys and accountants that Lender shall have reasonably requested in connection with the Loan Documents, and all legal matters incident to them shall be satisfactory to Lender's attorneys.

10.3 Lender shall have received a copy of Borrower's bylaws, including all amendments to them, certified by the Secretary of Borrower as being in full force and effect on the date of making the Loans.

10.4 Lender shall have received copies of the articles of incorporation of Borrower, including all amendments to them, certified by the Michigan Department of Labor and Economic Growth not more than 30 days before the initial extension of loans under this Agreement.

10.5 Lender shall have received a good standing certificate with respect to Borrower from the Michigan Department of Labor and Economic Growth dated not more than 30 days before the initial extension of loans under this Agreement.

10.6 Borrower and all necessary third parties shall have signed and delivered to Lender all Loan Documents.

10.7 Borrower shall have delivered to Lender evidence satisfactory to Lender that Borrower has obtained the insurance policies that this Agreement and any Collateral Documents requires.

10.8 There shall not have occurred and be continuing any Default or Event of Default.

**SECTION 11. MISCELLANEOUS.**

11.1 Borrower shall pay, or reimburse Lender for, all out-of-pocket expenses that Lender incurs (including, but not limited to, recording and filing fees and taxes, search fees, title insurance premiums and fees and expenses of legal counsel, other professional advisers, consultants and experts) in connection with (1) the negotiation, preparation and signing of the Loan Documents, any amendments to, or waivers of any provisions of, the Loan Documents and any refinancing or restructuring of any Lender Indebtedness, (2) the administration of this Agreement and the other Loan Documents, including, without limitation, making filings and recordings in public offices to perfect or give notice of liens in favor of Lender, obtaining policies of title insurance, title searches, financing statement searches, tax lien searches, appraisals and environmental inspections, audits and assessments, (3) obtaining advice of counsel or other professional advisers, consultants and experts regarding any aspect of the Loan Documents or any Lender Indebtedness, (4) the enforcement of any of the provisions of the Loan Documents, (5) the collection of any Lender Indebtedness and (6) the foreclosure of any security interests, mortgages, or other liens that at any time secure any Lender Indebtedness.

11.2 Upon signing of this Agreement, Borrower shall pay to Lender a nonrefundable loan processing fee in the amount of \$1,000.

11.3 Borrower acknowledges that Lender has and shall have the right to set off any indebtedness that Lender from time to time owes to Borrower, including, without limitation, any indebtedness that is represented by any deposit account that Borrower maintains with Lender, against any indebtedness that is at any time due and payable by Borrower to Lender.

11.4 Each right and remedy that this Agreement or any other Loan Document grants to Lender or that the law allows to Lender shall be cumulative, and Lender may exercise it from time to time. Lender's failure to exercise, and Lender's delay in exercising, any right or remedy shall not be a waiver of that right or remedy or a waiver of any other right or remedy. This Agreement is the complete agreement between Lender and Borrower concerning the subject matter of this Agreement and supersedes any prior promises, commitments and agreements. This Agreement may not be amended and a provision of it may not be waived except by a writing that Lender signs.

11.5 The relationship between Borrower and Lender under this Agreement and the other Loan Documents is solely that of debtor and creditor. Lender does not have any fiduciary responsibilities to Borrower. Lender does not and shall not have any responsibility to review, or to inform Borrower of any matter in connection with, any aspect of Borrower's business, operations or properties. Borrower shall rely entirely upon its own judgment with respect to its business and properties. Any review, appraisal, audit, survey, inspection, report or other information that Lender obtains, whether or not Borrower pays for it or Lender furnishes it to Borrower ("**Lender Information**"), is solely for the benefit of Lender. Neither Borrower nor any third party is entitled to rely on any Lender Information. Lender

does not have any duty to Borrower with respect to any Lender Information, including, without limitation, any duty to assure that any review, audit, survey, inspection or appraisal is performed properly or any duty to disclose to Borrower any facts, information, opinions, conclusions or statements that any review, audit, survey, inspection, appraisal or other Lender Information contain.

11.6 Borrower authorizes Lender to furnish to any Affiliate of Lender and to any prospective transferee of, or participant in, any Loan or Loans any or all information about Borrower, including, without limitation, financial statements and information regarding the operations, assets and properties, finances, strategies, plans, activities, transactions, owners, directors, officers, employees and customers of Borrower and its Affiliates, if the recipient of the information is bound by an obligation of confidentiality.

11.7 The Amended and Restated Loan Agreement and the Amended and Restated Security Agreement, each dated as of July 29, 2005, and each entered into by and between Borrower and Lender are terminated.

11.8 This Agreement and the rights and obligations of the parties under it shall be governed by and interpreted in accordance with the laws of the State of Michigan.

11.9 Any notice or other communication that this Agreement requires or permits shall be in writing and shall be served either personally or by certified United States mail with postage fully prepaid, or by a nationally-recognized, overnight courier service, addressed to Borrower as:

**EMERGENT BIODEFENSE OPERATIONS LANSING, INC.**

3500 Martin Luther King Jr. Boulevard  
Lansing, Michigan 48906

Attention: Robert Kramer, President

With a copy to:

Denise Esposito, General Counsel  
Suite 400  
2273 Research Blvd.  
Rockville, Maryland 20850

and to Lender as:

**FIFTH THIRD BANK**

111 Lyon Street, N.W.  
Grand Rapids, Michigan 49503

Attention: Corporate Lending Department



or to any other place that either party designates by written notice to the other party.

11.10 This Agreement shall be binding upon and shall inure to the benefit of Borrower and Lender and their respective successors and assigns. No Person is a third party beneficiary of this Agreement.

11.11 Lender provides the following notice to Borrower as required by Section 326 of the USA Patriot Act of 2001 (31 USC Section 5318):

**IMPORTANT INFORMATION ABOUT PROCEDURES FOR OPENING A NEW ACCOUNT.** To help the government fight the funding of terrorism and money laundering activities, Federal law requires all financial institutions to obtain, verify, and record information that identifies each person who opens an account. This means that when Borrower opens an account, Lender will ask for Borrower's name, address and other information that will allow Lender to identify Borrower. Lender may also ask to see Borrower's organizational documents or other identifying documents.

*[Remainder of this page intentionally left blank.]*

LENDER AND BORROWER EACH IRREVOCABLY AND UNCONDITIONALLY WAIVES ITS RIGHT TO A TRIAL BY JURY IN ANY ACTION, INCLUDING ANY CLAIM, COUNTERCLAIM, CROSS-CLAIM OR THIRD-PARTY CLAIM ("CLAIM"), THAT IS BASED UPON, ARISES OUT OF OR RELATES TO THIS LOAN AGREEMENT OR THE LENDER INDEBTEDNESS, INCLUDING, WITHOUT LIMITATION, ANY CLAIM THAT IS BASED UPON, ARISES OUT OF OR RELATES TO ANY ACTION OR INACTION OF LENDER IN CONNECTION WITH ANY ACCELERATION OF THE INDEBTEDNESS OR ANY ENFORCEMENT OF ANY SECURITY THAT LENDER AT ANY TIME HOLDS FOR ANY LENDER INDEBTEDNESS.

Borrower and Lender have signed this Agreement as of the date stated on the first page of this Agreement.

ATTEST:

**EMERGENT BIODEFENSE  
OPERATIONS LANSING INC.**

/s/Daniel J. Abdun-Nabi

By: /s/R. Don Elsey

Its Secretary

Its Treasurer

**FIFTH THIRD BANK**

By: /s/Mark Conn

Its Vice President

**SCHEDULE A**

**PERMITTED LIENS AND  
EXISTING INDEBTEDNESS**

<i><b>Creditor</b></i>	<i><b>Description of Indebtedness</b></i>	<i><b>Unpaid Principal and Interest</b></i>	<i><b>Collateral</b></i>
HSBC Credit Realty Corporation (USA)	Term Loan	\$9,749,998	All assets other than those described on <b>Schedule D</b>
HSBC Credit Realty Corporation (USA)	Revolving Line of Credit of up to \$5,000,000	\$5,000,000	All assets other than those described on <b>Schedule D</b>
HSBC Credit Realty Corporation (USA)	Term Loan	\$8,312,259	All assets other than those described on <b>Schedule D</b>
Mercantile Potomac	Term Loan	\$6,837,639	Certificate of Deposit numbered 5018577 dated October 14, 2004 issued in the name of Borrower by Mercantile Potomac Bank, and real property and improvements owned by Borrower and located at 7114 Geoffrey Way, Building 1, Unit 1, Frederick, Maryland 21703
Mercantile Potomac Bank	Letter of credit facility of up to \$1,250,000 – reimbursement obligation	\$0	Same as above
Maryland Department of Business and Economic Development	Term Loan	\$2,500,000	Real property and improvements owned by Borrower and located at 7114 Geoffrey Way, Building 1, Unit 1, Frederick, Maryland 21703

SCHEDULE B

REVOLVING CREDIT NOTE

Lansing, Michigan  
June 8, 2007

\$15,000,000

**FOR VALUE RECEIVED**, the undersigned **EMERGENT BIODEFENSE OPERATIONS LANSING INC.**, a Michigan corporation, of Lansing, Michigan ("**Borrower**"), promises to pay to the order of **FIFTH THIRD BANK**, a Michigan banking corporation, ("**Lender**"), at its office in Grand Rapids, Michigan, or at any other place that the holder of this Note designates in writing, the sum of Fifteen Million Dollars (\$15,000,000) or any lesser amount that Lender shall have loaned to Borrower under *Section 3* of a certain Loan Agreement dated June 8, 2007, between Borrower and Lender ("**Loan Agreement**"), together with interest (computed on the basis of a three hundred sixty (360) day year for the actual number of days elapsed) on the unpaid balance at an annual rate equal to the Index Rate minus 3/8% (37.5 basis points) until maturity and after maturity at an annual rate equal to the Index Rate plus 2% (200 basis points). Any change in the interest rate on this Note that is occasioned by a change in the Index Rate shall be effective on the day of the change in the Index Rate.

"**Index Rate**" means the interest rate that Lender announces from time to time as its "prime" interest rate. Borrower acknowledges that the rate that Lender announces as its "prime" interest rate at any given time is not the lowest rate of interest that is available to Lender's commercial customers at that time.

The interest on this Note shall be payable monthly beginning July 1, 2007, and continuing on the first day of each succeeding month until the principal is paid in full. The principal of this Note shall be payable as provided in *Section 3* of the Loan Agreement.

Borrower authorizes Lender to debit deposit account No. 7165124210, which Borrower maintains with Lender, for interest payments that are due to Lender under this Note. If Borrower does not make a payment of interest within ten days after it is due, then Borrower shall immediately pay to Lender a late charge in an amount equal to the greater of Fifty Dollars (\$50) or five percent (5%) of the amount of the late payment. This is in addition to Lender's other rights and remedies for default in payment of interest when due.

This Note evidences Borrower's indebtedness to Lender by reason of loans made and to be made from time to time under *Section 3* of the Loan Agreement ("**Loans**"). Lender's records shall be prima facie evidence of all loans and prepayments and of the indebtedness outstanding under this Note at any time. The holder of this Note shall have all

of the rights and powers set forth in the Loan Agreement as though they were fully set forth in this Note.

Reference is made to the Loan Agreement for a statement of the conditions under which the principal of this Note and accrued interest may become immediately due and payable without demand.

In this Note, "**maturity**" means the time when the entire remaining unpaid principal balance of this Note is or becomes immediately due and payable.

Except as otherwise provided in the Loan Agreement, the undersigned waives protest, presentment, demand and notice of nonpayment.

ATTEST:

**EMERGENT BIODEFENSE OPERATIONS  
LANSING INC.**

/s/Daniel J. Abdun-Nabi

By: /s/ R. Don Elsey

Its Secretary

Its Treasurer

1350459-8

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DEFINITION OF ELIGIBLE ACCOUNT

“Eligible Account” means an account receivable of Borrower:

- (a) that is not more than 90 days old from the earlier of the original invoice date or the date of shipment of the goods that gave rise to the account receivable;
- (b) that arises from Borrower’s sale and shipment of goods in the ordinary course of Borrower’s business;
- (c) that is the valid, binding and enforceable obligation of the account debtor and is not subject to any offset, counterclaim or defense;
- (d) that is evidenced by an invoice that is dated not later than the date of shipment of the goods and is payable in full no more than 90 days after the invoice date and that is not evidenced by an instrument or chattel paper;
- (e) that is owned by Borrower and is not subject to any security interest, lien, encumbrance, assignment or trust, except in favor of Lender;
- (f) in which Lender holds a valid, perfected and first-priority security interest;
- (g) that is payable in United States dollars and is owing by an agency of the government of the United States, under a contract between Borrower and the agency the payments under which have been assigned to Lender by Borrower by forms of assignment satisfactory to Lender;
- (h) that does not arise from a sale of goods on consignment or on a sale-or-return basis;
- (i) that is owing by an account debtor to whom Borrower does not have any maintenance obligation with respect to the goods the sale of which gave rise to the account receivable; and
- (j) that is not subject to retainage.

**SCHEDULE D**

**COLLATERAL**

All of Debtor's right, title and interest in, to and under (a) all Government Contracts and all amounts at any time owing to Debtor under a Government Contract, (b) the Enterprise Resource Planning System, together with all documents related to the installation and operation of it and (c) all proceeds of the foregoing and all books, records (including computer software) and documents that at any time evidence or relate to any of the foregoing or any proceeds of the foregoing. "**Government Contracts**" means (1) Contract No. W9113M-04-D-0002, dated January 3, 2004, between U.S. Army Space and Missile Defense Command ("**DOD**") and Debtor, which provides for Debtor to sell to DOD, and for DOD to purchase from Debtor, anthrax vaccine, as it has been and in the future is amended, (2) Contract No. 200-2005-11811 (amended to be designated Contract No. HHSO100200600019C), dated May 5, 2005, between Department of Health and Human Services ("**HHS**") and Debtor, which provides for Debtor to sell to HHS, and for HHS to purchase from Debtor, anthrax vaccine, as that Contract has been and is in the future amended and (3) each other contract that Debtor at any time enters into with DOD or HHS or any other state or federal government agency or department and that provides for Debtor to sell goods and/or services to a government agency or department. "**Enterprise Resource Planning System**" means a software system that integrates departments and functions across the organization and automates tasks involved in performing business processes. The System was licensed from SAP and is supported with, and includes, specific hardware primarily purchased from Dell.

## REVOLVING CREDIT NOTE

\$15,000,000

Lansing, Michigan  
June 8, 2007

**FOR VALUE RECEIVED**, the undersigned **EMERGENT BIODEFENSE OPERATIONS LANSING INC.**, a Michigan corporation, of Lansing, Michigan ("**Borrower**"), promises to pay to the order of **FIFTH THIRD BANK**, a Michigan banking corporation, ("**Lender**"), at its office in Grand Rapids, Michigan, or at any other place that the holder of this Note designates in writing, the sum of Fifteen Million Dollars (\$15,000,000) or any lesser amount that Lender shall have loaned to Borrower under *Section 3* of a certain Loan Agreement dated June 8, 2007, between Borrower and Lender ("**Loan Agreement**"), together with interest (computed on the basis of a three hundred sixty (360) day year for the actual number of days elapsed) on the unpaid balance at an annual rate equal to the Index Rate minus 3/8% (37.5 basis points) until maturity and after maturity at an annual rate equal to the Index Rate plus 2% (200 basis points). Any change in the interest rate on this Note that is occasioned by a change in the Index Rate shall be effective on the day of the change in the Index Rate.

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Reference is made to the Loan Agreement for a statement of the conditions under which the principal of this Note and accrued interest may become immediately due and payable without demand.

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ATTEST:

**EMERGENT BIODEFENSE OPERATIONS  
LANSING INC.**

/s/**Daniel J. Abdun-Nabi**

By /s/ **R. Don Eelsey**

Its Secretary

Its Treasurer

DATED

10 May 2007

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SLOUGH ESTATES (WINNERSH) LIMITED

- to -

EMERGENT PRODUCT DEVELOPMENT UK LIMITED

- with -

EMERGENT BIOSOLUTIONS INCORPORATED

LEASE

Premises known as Winnersh 530/535 Winnersh Triangle Wokingham Berkshire

NABARRO

Lacon House  
84 Theobald's Road  
London WC1X 8RW

Tel: +44 (0)20 7524 6000

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## CONTENTS

<b>Clause</b>	<b>Subject matter</b>	<b>Page</b>
1	DEFINITIONS	1
2	INTERPRETATION	4
3	DEMISE	4
	Rent	5
	Service Charge for the Estate	5
	Winnersh 500 facilities	5
	Additional Access	5
	Insurance	5
4	TENANT'S COVENANTS	5
	Payment of rents	5
	Interest on late payments	6
	Payment of rates	6
	Exterior maintenance	6
	Interior painting	6
	Repair	6
	Yielding Up	7
	Reinstatement	7
	Landlord's access	7
	Default remedies of the Landlord	7
	Signs and aerials	8
	Use	8
	Refuse and rubbish	8
	Nuisance	8
	Estate Regulations	9
	Estate Roads and Accessways etc.	9
	Acts prejudicial to insurance	9
	Safeguarding the Premises	9
	Planning Applications	10
	Alterations	10
	Statutory obligations	10
	Alienation	10
	Registration of dealings	12
	Reletting and sale boards	13
	Costs of licences and notices as to breach of covenant	13
	Indemnity	13
	VAT	13
	Defects	13
	Costs of party items	14
	Documents affecting title	14
5	LANDLORD'S COVENANTS	14
	Quiet enjoyment	14
	Insurance	14
	Estate Roads and Parking etc.	15
	Insurance details	15
6	CONDITIONS	15
	Repossession on Tenant's default	15
	Benefit of insurance and abatement of rent	16
	Notices	16
	Repair of Estate Roads etc.	17

	Closure of facilities	17
	Contracts (Rights of Third Parties) Act 1999	17
7	RENT REVIEW	17
8	SURETY	19
9	Applicable Law and Jurisdiction	20
FIRST SCHEDULE		21
SECOND SCHEDULE	Part 1 The Rights	28
	Part 2 The Exceptions and Reservations	28
THIRD SCHEDULE	Obligations of the Surety	30
FOURTH SCHEDULE	Rent Review Memorandum	32
FIFTH SCHEDULE	Documents and matters affecting title	33
SIXTH SCHEDULE	Part 1 Service Charge for the Estate	34
	Part A Heads of Expenditure	34
	Part B Calculation of the Service Charge	35
	Part 2 Costs of Winnersh 500 facilities	36
	Part 3 Costs of Additional Access	37

**LR1. Date of lease**

10 May 2007

**LR2. Title number(s)**

**LR2.1 Landlord's title number(s)**

8K167503

**LR2.2 Other title numbers**

**LR3. Parties to this lease**

**Landlord**

Slough Properties (Winnersh) Limited (incorporated and registered in England and Wales under company number 03270465), the registered office of which is at 234 Bath Road Slough SL1 4EE

**Tenant**

Emergent Product Development UK Limited (incorporated and registered in England and Wales under company number ), the registered office of which is at 545 Eskdale Road Winnersh Triangle Wokingham Berks RG41 5TU

**Other parties**

Emergent Biosolutions Incorporated (incorporated and registered in England and Wales under company number 373-6090), the registered office of which is at Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington, DE19808 Tenant's Guarantor

**LR4. Property**

Building Winnersh 530/535 Winnersh Triangle Wokingham Berkshire and more particularly described in the First Schedule to the Lease.

In the case of a conflict between this clause and the remainder of this lease then, for the purposes of registration, this clause shall prevail.

**LR5. Prescribed Statements etc.**

None.

**LR6. Term for which the Property is leased**

From and including 2007  
To and including 24 November 2016

**LR7. Premium**

None.

**LR8. Prohibitions or restrictions on disposing of this lease**

This lease contains a provision that prohibits or restricts dispositions.

**LR9. Rights of acquisition etc.**

**LR9.1 Tenant's contractual rights to renew this lease, to acquire the reversion or another lease of the Property, or to acquire an interest in other land**

None

**LR9.2 Tenant's covenant to (or offer to) surrender this lease**

None.

**LR9.3 Landlord's contractual rights to acquire this lease**

None.

**LR10 Restrictive covenants given in this lease by the Landlord in respect of land other than the Property**

None.

**LR11. Easements**

**LR11.1 Easements granted by this lease for the benefit of the Property**

The easements granted for the benefit of the Property as specified in this lease at Part 1 of the Second Schedule.

**LR11.2 Easements granted or reserved by this lease over the Property for the benefit of other property**

The easements granted or reserved by this lease over the Property as specified in this lease at Part 2 of the Second Schedule

**LR12. Estate rentcharge burdening the Property**

None.

**INITIAL RENT:**

One hundred and sixty three thousand pounds (£163,000) together with twenty eight thousand five hundred and twenty five pounds (£28,525) VAT

**RENT COMMENCEMENT DATE:**

November 2007

**RENT REVIEW DATES:**

10 May 2012

THIS LEASE IS A NEW TENANCY FOR THE PURPOSES OF THE LANDLORD AND TENANT (COVENANTS) ACT 1995.

PARTICULARS

1. DATE OF THIS DEED 10 May 2007
2. LANDLORD SLOUGH ESTATES (WINNERSH) LIMITED  
Registered office 234 Bath Road Slough SL1 4EE  
Company registration number 5472073
3. TENANT EMERGENT PRODUCT DEVELOPMENT UK LIMITED  
Address 545 Eskdale Road Winnersh Triangle Wokingham Berks RG41 5TU  
Registered office  
Company registration number 03270465
4. SURETY EMERGENT BIOSOLUTIONS INCORPORATED  
Address Corporation Service Company 2711 Centerville Road Suite 400 Wilmington DE 19808  
Registered office  
Company registration number 373-6090 (Delaware)
5. ESTATE the area from time to time comprising the Landlord's estate at Winnersh Triangle Wokingham of which the Premises form part the present such area being shown for identification only edged red on the Estate Plan
6. LAND the land off Eskdale Road on the Estate shown edged red on the Lease Plan
7. BUILDING the building (presently known as Winnersh 530/535) on the Land which (with the Fixtures and any car parking and landscaping facilities) is described in the First **Schedule**
8. COMMENCEMENT DATE 10 May 2007
9. TERM A term commencing on the date hereof and expiring on 24 November 2016 together with the period of any continuation or extension of the tenancy granted by this Lease
10. RENT COMMENCEMENT DATE 10 November 2007
11. RENT £163,000 per annum subject to review as provided in this Lease
12. REVIEW DATES 10 May 2012

13. PERMITTED USE

Laboratories with ancillary offices or use for any purpose within Classes B1 and B8 of the Schedule to the Town and Country Planning (Use Classes) Order 1987 (as amended or replaced from time to time)



Date 10 May 2007

**PARTIES**

- (1) SLOUGH ESTATES (WINNERSH) LIMITED (company registration number 5472073) whose registered office is at 234 Bath Road Slough SL1 4EE (the "Landlord")
- (2) EMERGENT PRODUCT DEVELOPMENT UK LIMITED (company registration number 3270465) whose registered office is at 545 Eskdale Road Winnersh Triangle Wokingham Berks RG41 5TU (the "Tenant")and
- (3) EMERGENT BIOSOLUTIONS INCORPORATED (company registration number 373-6090 (Delaware)) whose registered office is at Corporation Service Company 2711 Centerville Road Suite 400 Wilmington DE19808 (the "Surety")

**WITNESSES AS FOLLOWS:**

**1. DEFINITIONS**

In this Lease the following expressions have the meanings indicated:

**"Accessways"**

the roads and ways shown for the purpose of identification only hatched brown on the Lease Plan

**the "Act"**

means the Landlord and Tenant (Covenants) Act 1995

**"Additional Access"**

the areas shown for the purpose of identification only [in part] hatched brown and cross hatched black and in part hatched purple on the Lease Plan

**"Authorised Guarantee Agreement"**

has the meaning defined in and for the purposes of Section 16 of the Act and the form of such Agreement shall be as reasonably required by the Landlord

**"Common Areas"**

the Estate other than the Premises and other areas let or intended by the Landlord to be let but including the whole of the Estate Roads

**“Conducting Media”**

all sewers drains pipes wires watercourses subways cables apparatus conduits and any other media or works for the conduct or transmission of any service matter or material (including any media and works in respect of the sprinkler system at the Estate)

**“Estate Plan”**

the plan marked Estate Plan attached to this Lease

**“Estate Roads”**

- (a) the roads pavements and paths shown for the purpose of identification only hatched brown on the Estate Plan (or any road pavement or path at any time replacing any of them) and
- (b) such other roads pavements and paths at Winnersh Triangle (whether or not on or forming part of the Estate) as may from time to time serve or be available for use generally by the tenants and occupiers in connection with premises on the Estate but excluding any that may be or become any public highway or footpath

**“First Schedule”**

the schedule referred to in the First **Schedule** including any amended or substituted schedule describing any other building (and its fixtures equipment and other items) erected on the Land by the Landlord pursuant to this Lease

**“Fixtures”**

the Landlord’s fixtures from time to time on or forming part of the Land including the fixtures equipment and items which with the Building are described in the First **Schedule**

**“Full Reinstatement Value”**

the costs (including demolition professional fees and any value added tax payable) which would be likely to be incurred in carrying out repair or reinstatement in accordance with the requirements of this Lease at the time when such repair or reinstatement is likely to take place having regard to current building techniques and materials

**“Insured Risks”**

fire lightning earthquake subsidence heave landslip explosion terrorism aircraft riot storm tempest flood burst pipes malicious damage and impact damage and such other insurable risks and on such terms as the Landlord may from time to time reasonably consider necessary but excluding any risks which the Landlord acting reasonably shall decide from time to time not to include in any policy but so that the Landlord shall give at least fourteen days’ prior notice in writing to the Tenant of any risk ceasing to be covered by any policy

**“Landscaped Areas”**

those parts of the Land as are hatched green on the Lease Plan

**“Lease Plan”**

the plan marked “Lease Plan” attached to this Lease

**“Loss of Rent”**

the loss of the rent first reserved by **clause 3** for such period (being not less than three years) as may reasonably be required by the Landlord from time to time having regard to the likely period required for reinstatement in the event of both partial and total destruction and in an amount which would take into account potential increases of rent in accordance with **clause 7**

**“Parking Area”**

such area or areas within the Land as are designated for parking and shown on the Lease Plan as demised car parking

**“Permitted Part”**

is the whole of either Unit 530 or Unit 535 Winnersh Triangle Wokingham Berkshire

**“Planning Acts”**

includes the Town and Country Planning Act 1990 the Planning (Listed Buildings and Conservation Areas) Act 1990 the Planning (Hazardous Substances) Act 1990 and the Planning (Consequential Provisions) Act 1990

**“Premises”**

the Land together with the Building (or any other building erected by the Landlord in its place) and all additions and the Fixtures and a reference to the “Premises” includes a reference to any part

**“Prescribed Rate”**

three per centum above the Base Rate of National Westminster Bank PLC from time to time (or such other clearing bank as the Landlord shall nominate) or (if such rate shall cease to be published) such other reasonable or comparable rate as the Landlord shall from time to time designate

**“Service Charge”**

the aggregate of the costs and liabilities referred to in **Part 1** of the Sixth **Schedule**

**“Service Charge Period”**

the period in respect of which the Service Charge is calculated as determined from time to time by the Landlord and notified to the Tenant and initially is each consecutive period of twelve months ending on 31 December

**“Sign Display”**

the panel or panels installed by the Landlord on the Building for the display of name and logo signs

**“Tenant’s Proportion of the Service Charge”**

the part of the Service Charge for which the Tenant is liable which shall be such fair and proper proportion as the Landlord’s surveyor shall from time to time determine acting as expert

**“Winnersh 500”**

that part of the Estate (of which the Premises form part) shown edged blue on the Lease Plan

**2. INTERPRETATION**

- 2.1 The expressions the **“Landlord”** and the **“Tenant”** shall wherever the context so admits include their respective successors in title
- 2.2 Where the Tenant or the Surety (if any) for the time being are two or more persons the terms the **“Tenant”** and the **“Surety”** (if any) include the plural number and obligations expressed or implied to be made by such party are deemed to be made by such persons jointly and each of them severally
- 2.3 Words importing one gender include all other genders and words importing the singular include the plural and vice versa
- 2.4 References in this Lease to any statute or legislation (whether specific or general) include any other statute or legislation replacing amending or supplementing the same and any orders regulations bye-laws notices permissions approvals or consents thereunder
- 2.5 References in the Sixth **Schedule** to **“gross external areas”** mean such areas from time to time
- 2.6 The Particulars and the details and expressions therein appearing shall be included in and form part of this Lease

**3. DEMISE**

The Landlord demises to the Tenant the Premises together with the Rights referred to in **Part 1** of the Second **Schedule** but subject to the Exceptions and Reservations referred to in **Part 2** of the Second **Schedule** and to any documents and matters referred to in the Fifth **Schedule** to hold to the Tenant for the Term starting on the Commencement Date yielding and paying therefor during the Term:

3.1 **Rent**

Yearly the Rent and all increases arising from any review pursuant to the provisions in this Lease for the review of rent to be paid without any deduction or set off by equal quarterly payments in advance on the Twenty-fifth day of March the Twenty-fourth day of June the Twenty-ninth day of September and the Twenty-fifth day of December in every year the first payment for the period from and including the Rent Commencement Date up to and including the day immediately preceding the quarter day next after the date of this Lease to be made on the date of this Lease

3.2 **Service Charge for the Estate**

As additional rent the Tenant's Proportion of the Service Charge in respect of the Estate in accordance with **Part 1** of the Sixth **Schedule**

3.3 **Winnersh 500 facilities**

As additional rent the sums payable by the Tenant in respect of Winnersh 500 pursuant to and in accordance with **Part 2** of the Sixth **Schedule**

3.4 **Additional Access**

As additional rent the sums payable by the Tenant in respect of the Additional Access pursuant to and in accordance with **Part 3** of the Sixth **Schedule**

3.5 **Insurance**

As additional rent from time to time a sum or sums of money equal to the expense incurred by the Landlord in effecting or maintaining insurance in accordance with **clause 5.2** (including any increased premium payable in respect of the Premises or any neighbouring property by reason of any act or omission by (or permitted by) the Tenant or an undertenant) as the Landlord shall from time to time effect such insurance for the Landlord's benefit in the Full Reinstatement Value against the Insured Risks and the Loss of Rent such sum or sums to be paid on demand

**4. TENANT'S COVENANTS**

The Tenant covenants with the Landlord as follows:

4.1 **Payment of rents**

To pay the respective rents and sums of money reserved and made payable at the times and in the manner in which the same are set out or referred to in **clause 3** without any deduction or set off and to make all such payments to the Landlord on the due date through the Tenant's bankers by the direct debit system

4.2 **Interest on late payments**

If the Tenant shall fail to pay any rents or any other sum payable under this Lease when the same is due (whether formally demanded or not) to pay to the Landlord as additional rent

(but without prejudice to any other rights of the Landlord including those under **clause 6**) interest on all such rents or other sums from the due date for payment until the date actually paid at the Prescribed Rate current at such due date and any such interest shall be recoverable by the Landlord as rent in arrear

4.3 **Payment of rates**

4.3.1 To pay and indemnify the Landlord against all existing and future rates or other outgoings whatsoever imposed or charged upon the Premises or upon the owner or occupier in respect of the Premises

4.3.2 To pay and be responsible for all electricity gas and other services to the Premises

4.4 **Exterior maintenance**

In every third year and in the last year of the Term to prepare and paint the outside of the Building where usually or previously so painted in a good and workmanlike manner and otherwise properly to clean treat or decorate other parts of the outside of the Building as the same ought to be cleaned treated and decorated (such painting and decorating to be carried out in colours and patterns first approved in writing by the Landlord) and whenever necessary to renew or replace all seals and mastics

4.5 **Interior painting**

In every fifth year and in the last year of the Term to prepare and paint all the interior of the Building where usually or previously so painted in a good and workmanlike manner (all such painting in the last year of the Term to be carried out in colours and patterns first approved in writing by the Landlord)

4.6 **Repair**

4.6.1 Well and substantially to repair and maintain the Premises and the walls fences roads and Conducting Media in on or under the Premises (damage by any of the Insured Risks excepted unless the insurance moneys are withheld in whole or in part or the policy avoided by reason of any act or omission on the part of the Tenant or any undertenant or any employee contractor or invitee of either of them) and at all times to keep the same in good and substantial repair and condition and so repaired cleaned painted and maintained and further to keep all parts of the Premises clean and tidy and free from rubbish and waste materials

4.6.2 To keep the Parking Area for and suitable for the parking of vehicles only

4.6.3 Subject to **clause 4.6.4** to keep the Landscaped Areas as landscaped areas maintained and planted as laid out and planted by the Landlord and in accordance with any general scheme for the Estate from time to time specified by the Landlord and to replace with equivalent specimens any plants that may die or need replacement and regularly to cut the grass and generally to tend nurture and maintain the Landscaped Areas

4.6.4 If the Landlord so requires at any time or from time to time not to do the things referred to in **clause 4.6.3** (or such of them as may be notified to the Tenant) but instead to pay to the Landlord on demand the reasonable costs incurred by the Landlord in doing so or

(where the Landlord incurs costs in relation to such Areas and all or any of the other areas shown hatched green on the Lease Plan) a proper proportion of the costs so incurred by the Landlord

4.6.5 Not in any event to harm or damage any of the Landscaped Areas or the landscaping or plants on them nor to alter such Areas or the scheme of landscaping and plants

4.7 **Yielding Up**

At the expiration or sooner determination of the Term to yield up the Premises in good and substantial repair and consistent with the full and due compliance by the Tenant with its obligations under this Lease and to remove such tenant's trade fixtures and fittings and any signs erected by or at the instance of the Tenant making good any damage caused by such removal

4.8 **Reinstatement**

4.8.1 Three months before the expiry or sooner determination of the Term (unless or to the extent otherwise required in writing by the Landlord) to carry out such works as shall be necessary or desirable in order to ensure that the Premises or such part or parts of them as may be required by the Landlord conform with the description in the First **Schedule**

4.8.2 All such works shall be carried out to the reasonable satisfaction of the Landlord and the Tenant shall apply for any necessary planning permission or approval which may be required under the Planning Acts or other legislation

4.9 **Landlord's access**

To permit the Landlord or its agents at all times during the Term during reasonable hours in the day (or at any time in the case of emergency) with or without workmen and others to enter the Premises for the purpose of ascertaining that the covenants and conditions of this Lease have been performed and observed by the Tenant and examining (including opening up floors walls and ceilings where necessary to examine) the state of repair and condition of the Premises or for the purpose of taking inventories of the Landlord's fixtures or of carrying out works on the adjoining property of the Landlord and of exercising any of the Exceptions and Reservations referred to in **Part 2** of the Second **Schedule** Provided That the Landlord shall make good any damage caused by such entry and the exercise of such rights

4.10 **Default remedies of the Landlord**

If within two months after service of a notice from the Landlord requiring the Tenant to remedy any breach of covenant relating to the state of repair or condition of the Premises or otherwise to the carrying out of any works or actions (or earlier in case of emergency) the Tenant shall not have commenced and thereafter diligently proceeded with such works or actions then to permit the Landlord to enter upon the Premises and execute all or any such works or actions and the Landlord's reasonable and proper costs and expenses (including the Landlord's surveyors' and other reasonable and proper professional fees in connection therewith) together with interest thereon at the Prescribed Rate current at the date one month after service of such notice for the period from that date to the date of payment shall be a debt due from the Tenant to the Landlord and be forthwith recoverable as rent in arrear

4.11 **Signs and aerals**

Not to erect any pole mast or aerial or erect or display any sign noticeboard or advertisement on any part of the Premises but the Tenant shall install and maintain in the Sign Display an appropriate sign (to the prior written approval of the Landlord not to be unreasonably withheld) showing the name of the Tenant and (if applicable) its logo but showing no other information

4.12 **Use**

- 4.12.1 Not to use the Premises or any part thereof otherwise than for the Permitted Use and not at any time to store anything on any part of the Premises outside the Building
- 4.12.2 To use only for the parking of vehicles the Parking Area (but not to park any trailers on such Area) and to require employees to use only such Area for the parking of their vehicles and to enforce such requirement by all reasonable means available to the Tenant as an employer

4.13 **Refuse and rubbish**

- 4.13.1 To ensure that all refuse rubbish and waste material is put in secure and closed containers designed for that purpose and to take all appropriate measures to prevent escape of refuse rubbish or waste materials from such containers
- 4.13.2 To make and maintain satisfactory arrangements for the regular removal of all refuse rubbish and waste materials from the Premises so often as is necessary
- 4.13.3 If the Tenant fails to take immediately such steps as may be necessary to comply with **clause** 4.13.1 or 4.13.2 after notice from the Landlord requiring it to do so to permit the Landlord or others authorised by it (if the Landlord decides to do so) to enter the Premises to carry out removal of refuse rubbish or waste materials (whether or not on a regular basis) and to pay to the Landlord on demand all costs and expenses incurred by the Landlord in connection with any removal arrangements which it makes

4.14 **Nuisance**

- 4.14.1 Not to use the Premises or any part of them for any illegal purpose nor to carry out on or from the Premises any noisy noxious dangerous or offensive act activity or business nor anything which may be or become a nuisance damage annoyance or inconvenience to the Landlord or any of its tenants or the occupiers of any premises in the neighbourhood and in particular not to do or permit to be done anything which might cause electronic or radio interference with any adjoining or neighbouring premises
- 4.14.2 Not to do anything which would or might lead to any contamination of the Premises or pollution of the environment or lead to the pollution obstruction damaging or overloading of the Conducting Media and to carry out (or at the Landlord's election to pay to the Landlord the proper costs and fees of carrying out) all works necessary to remedy the contamination or pollution or to remove the source of the contamination or pollution
- 4.14.3 Where the Tenant has failed to observe any of the obligations in this **clause** 4.14 to pay to the Landlord the costs incurred by it in obtaining such reports as the Landlord may reasonably require to establish what damage or harm may have been caused to the



- Premises or other property of the Landlord and the remedial cleaning or other works necessary
- 4.14.4 Not to discharge or allow to enter into any underground or other waters any poisonous noxious or harmful effluent liquid or substance
- 4.15 **Estate Regulations**
- To observe such reasonable regulations as may from time to time be made by the Landlord for the purposes of good estate management
- 4.16 **Estate Roads and Accessways etc**
- 4.16.1 To take all necessary precautions to prevent damage or excessive wear and tear to or any avoidable obstruction of any of the Estate Roads the Accessways or the Additional Access and to pay to the Landlord on demand all costs and expenses of making good any damage (other than normal wear and tear) caused to any of them by the Tenant or any undertenant or any of their respective employees contractors or visitors
- 4.16.2 In particular not to impede or interfere with the reasonable use of the Additional Access by the occupiers of any other unit on Winnersh 500 entitled to use it
- 4.16.3 Not to park or permit the parking by the employees or contractors of or visitors to the Tenant of vehicles on any of the Estate Roads or Accessways or the Additional Access or elsewhere on the Estate other than in accordance with **clause 4.12.2**
- 4.17 **Acts prejudicial to insurance**
- 4.17.1 Not to do anything as a result of which any policy of insurance against damage to the Premises or to any neighbouring premises may be prejudiced or payment of the policy moneys may be withheld in whole or in part or whereby the rate of premium in respect of any such insurance may be increased and to give notice to the Landlord forthwith upon the happening of any event which might affect any insurance policy relating to the Premises
- 4.17.2 In relation to the insurance effected by the Landlord in respect of the Premises to pay to the Landlord any excess required by the insurers or by the Landlord on demand by the Landlord following any damage or destruction by any Insured Risks where such excess would be applicable to any claim in respect of such damage or destruction
- 4.18 **Safeguarding the Premises**
- 4.18.1 With respect to fire precautions and safeguarding the Premises against damage by any of the Insured Risks or otherwise to comply with all requirements and recommendations of the insurers of the Premises or the relevant insurance brokers or of the fire brigade or local authority
- 4.18.2 Not to store or bring on to or allow to remain on the Premises any article substance or liquid of a specially combustible inflammable or explosive nature or which may be a source of contamination
- 4.18.3 To give written notice to the Landlord upon becoming aware of the occurrence of any contamination of the Premises and also upon becoming aware of the occurrence of any

pollution of the environment in breach of any legislative provision caused by any use of or action or activity on the Premises

4.19 **Planning Applications**

Not without the prior written consent of the Landlord to make any application for any consent under the Planning Acts but if such application is for consent to do anything which the Tenant is permitted to do under this Lease (or where the approval of the Landlord is first required and the Landlord has approved the doing of such thing) such consent shall not be unreasonably withheld

4.20 **Alterations**

Not to erect or place any new building or structure whatsoever on the Premises (including any temporary or moveable building or structure) or make any alteration whether structural or otherwise or any addition to the Premises or to the Building or to any buildings which may be erected on the Premises Provided That the Tenant may with the written consent of the Landlord (such consent not to be unreasonably withheld) carry out internal non-structural alterations including the erection installation or alteration of internal demountable partitions not affecting the structure of the Building

4.21 **Statutory obligations**

4.21.1 At the Tenant's expense to comply in all respects with the provisions of all statutes and legislation (whether now or subsequently in force) affecting or applicable to the Premises or their use and forthwith to give notice to the Landlord of any notice direction or order made by any local or competent authority

4.21.2 The Tenant shall maintain a health and safety file for any works carried out to the Premises and shall comply with the Construction (Design and Management) Regulations 1994 in respect thereof and provide to the Landlord upon reasonable request a copy of such file

4.21.3 Upon any assignment or underlease permitted by this Lease to supply to the assignee or sub-tenant any health and safety files and/or operating manuals

4.22 **Alienation**

4.22.1 Not to charge or mortgage either the whole or any part of the Premises nor to assign share or part with the possession or occupation of any part of the Premises nor to permit any such dealing under a permitted underlease

4.22.2 Not to hold or occupy the Premises or any part as nominee trustee or agent or otherwise for the benefit of any other person

4.22.3 Not to assign or underlet the whole of the Premises or to underlet any Permitted Part of the Premises without the prior consent in writing of the Landlord (such consent not to be unreasonably withheld where the provisions hereinafter contained are satisfied)

4.22.4 On any assignment:

(a) the Tenant will if reasonably required enter into an Authorised Guarantee Agreement which will be in such form as the Landlord may reasonably request and

be prepared by or on behalf of the Landlord and at the cost of the Tenant and under which the assignor will agree (inter alia) with the Landlord

- (i) that it is liable as sole or principal debtor in respect of all obligations to be owed by the assignee under the Tenant Covenants (as defined in Section 28 of the Act) in this Lease
  - (ii) to be liable as guarantor in respect of the assignee's performance of the Tenant Covenants (as above defined) in this Lease (provided that such liability shall be no more onerous than the liability to which the assignor would be subject in the event of his being liable as sole or principal debtor in respect of the obligations owed by the assignee under the said Tenant Covenants)
  - (iii) in the event of this Lease being disclaimed to enter into a new lease of the Premises the term of which shall expire simultaneously with the date upon which (but for any such disclaimer) this Lease would have expired by effluxion of time (and not by any other means) and the Tenant Covenants shall be identical to (mutatis mutandis but in any event no more onerous than) the Tenant Covenants in this Lease
- (b) if the Landlord reasonably so requires the Tenant shall obtain acceptable guarantors for any person to whom this Lease is to be assigned who will covenant with the Landlord on the terms (mutatis mutandis) set out in the Third **Schedule**
  - (c) if the Landlord reasonably so requires the proposed assignee will prior to the assignment enter into such reasonable rent deposit arrangement and/or provide such additional security for performance by the proposed assignee of its obligations under this Lease as the Landlord may reasonably require
  - (d) the proposed assignee shall enter into a covenant with the Landlord to pay the rents reserved by and perform and observe the covenants on the part of the Tenant contained in this Lease

4.22.5 **Clause** 4.22.4 shall operate without prejudice to the right of the Landlord to impose any further conditions upon a grant of consent where such imposition is reasonable

- 4.22.6 (a) Not to underlet the whole or a Permitted Part of the Premises without the prior consent in writing of the Landlord otherwise than at a rent which is not less than the open market rental value of the Premises or the Permitted Part without a fine or premium and with provision for upwards only rent reviews coinciding with the reviews under this Lease and in other respects with materially the same covenants and conditions as are contained in this Lease
- (b) Not to vary the terms of any underlease permitted under this **clause** 4.22 without the Landlord's written consent and throughout the term of any underlease to require the undertenant at all times to perform and observe the Tenant's covenants (except as to the payment of rent) and the conditions contained in this Lease

4.22.7 The Landlord may as a condition for giving its consent for any permitted underletting require the proposed underlessee to enter into a direct covenant with the Landlord to perform and observe the Tenant's covenants and the conditions contained in this Lease (save as to payment of rent)

- 4.22.8 Upon the Landlord consenting to an underletting of the Premises or a Permitted Part procure that the underlessee covenants with the Landlord:
- (a) not to assign (or agree to do so) any part of the Premises or the Permitted Part (as distinct from the whole) and not to charge or underlet or share or (save by way of an assignment of the whole) part with possession of or permit any person to occupy the whole or any part of the Premises or the Permitted Part
  - (b) not to assign (or agree to do so) the whole of the Premises or the Permitted Part without the prior consent in writing of the Landlord (such consent not to be unreasonably withheld)
- 4.22.9 To notify the Landlord in writing with relevant details within fourteen days of any rent payable under an underlease being reviewed
- 4.22.10 In the event that any circumstances or conditions specified in **clause** 4.22.4 above are framed by reference to any matter falling to be determined by the Landlord (or by any other person) if the Tenant disputes such determination then either the Landlord or the Tenant shall be entitled to require the matter or matters in question to be referred to an independent expert who in the absence of agreement between the parties shall be appointed on the application of either party by the President of the Royal Institution of Chartered Surveyors and the determination of such independent expert shall be conclusive as to the matter or matters in question and shall be final and binding on the parties and his costs shall be met by the parties in such proportions as the independent expert shall determine
- 4.23 **Registration of dealings**
- 4.23.1 Within one month after the execution of any assignment or underlease permitted under this Lease or any assignment of such underlease or after any devolution by will or otherwise of the Term or after any other dealing with this Lease to supply a certified copy of the deed or instrument effecting the same to the Landlord and to pay such reasonable fee as the Landlord may require for registration
- 4.23.2 If this Lease and/or rights granted or reserved by this Lease are or should be registered at the Land Registry under the Land Registration Act 2002 then the Tenant shall:
- (a) register this Lease and any transfer or other registrable disposition of this Lease at the Land Registry within one month of the date of the grant of this Lease or the date of the instrument of transfer or other disposition requiring registration (as the case may be)
  - (b) procure that all rights granted or prepared by this Lease are properly noted against the affected titles and
  - (c) within one week of notification of the registration of the grant transfer other registrable disposition of this Lease or notice against the affected titles (as the case may be) deliver to the Landlord official copies of the registered titles

4.24 **Reletting and sale boards**

To permit the Landlord or its agents within the last six months of the Term to enter upon the Premises and to affix upon any suitable part a notice board for reletting or selling the same and not to remove or obscure the same and to permit all persons authorised in writing by the Landlord or its agents to view the Premises during business hours in the daytime

4.25 **Costs of licences and notices as to breach of covenant**

To pay on demand and indemnify the Landlord against all costs charges and expenses (including professional fees) incurred by the Landlord arising out of or incidental to any application made by the Tenant for any consent or approval of the Landlord or any breach of the Tenant's covenants or the preparation and service of a schedule or interim schedule of dilapidations or any notice which the Landlord may serve on the Tenant whether served before or after the determination of this Lease (including a notice under Section 146 of the Law of Property Act 1925) requiring the Tenant to remedy any breach of any of its covenants or arising out of or in connection with any proceedings referred to in Sections 146 or 147 of that Act notwithstanding that forfeiture may be avoided otherwise than by relief granted by the Court

4.26 **Indemnity**

To be responsible for and to indemnify the Landlord against:

4.26.1 all damage loss or injury occasioned to the Premises or any adjoining premises or to the Accessways the Additional Access the Landscaped Areas or any Conducting Media or to any person or chattel (whether or not upon the Premises) caused by any act default or negligence of the Tenant or any undertenant or the servants agents licensees or invitees of either of them or by reason of any defect in the Premises and

4.26.2 all losses damages costs expenses claims and proceedings incurred by or made against the Landlord arising out of any breach by the Tenant of any of its obligations arising by virtue of this Lease

4.27 **VAT**

To pay to the Landlord upon demand any value added tax chargeable upon:

4.27.1 any supply made by the Landlord to the Tenant pursuant to this Lease so that all consideration for any such supply is exclusive of value added tax

4.27.2 any supply (whether made to the Landlord or to a third person) where pursuant to this Lease the Tenant is required to pay to the Landlord any sum in respect of any costs fees expenses or other expenditure or liability (of whatever nature) in connection with that supply except to the extent that any such value added tax may be recoverable by the Landlord from HM Revenue & Customs

4.28 **Defects**

To inform the Landlord immediately in writing upon becoming aware of any defect in the Premises which might give rise to a duty imposed by common law or statute on the Landlord

and to indemnify the Landlord against all actions costs claims and liabilities suffered or incurred by or made against the Landlord in respect of the Premises under the Defective Premises Act 1972

4.29 **Costs of party items**

In so far as the Tenant is not obliged to contribute to the costs of the same under any other provision of this Lease to pay a fair and proper proportion of the expense (including any professional fees) of repairing rebuilding painting maintaining cleaning and lighting all party structures and all roofs conducting media boundary structures forecourts yards roads ways entrances passages staircases balconies and other amenities or things the use or benefit of which is common to the Premises and any adjoining or neighbouring premises such proportion to be determined by the Landlord's surveyor whose determination shall be final and binding on the Tenant

4.30 **Documents affecting title**

To perform and observe the provisions of the documents and the other matters referred to in the Fifth **Schedule** so far as they affect or relate to the Premises

5. **LANDLORD'S COVENANTS**

The Landlord covenants with the Tenant (but so that no liability shall attach to the Landlord in respect of any breach by the Landlord of its obligations under this Lease after the reversion immediately expectant on the determination of the Term has ceased to be vested in the Landlord):

5.1 **Quiet enjoyment**

That the Tenant performing and observing the covenants conditions and agreements contained in this Lease shall and may peaceably and quietly hold and enjoy the Premises during the Term without any lawful interruption or disturbance by the Landlord or any person rightfully claiming through or under it

5.2 **Insurance**

At all times during the Term to keep the Premises insured for the Landlord's benefit in the Full Reinstatement Value against the Insured Risks and if the Premises are damaged or destroyed by any of the Insured Risks the Landlord will with all convenient and practicable speed repair or reinstate the Premises using such materials as are then appropriate subject to all necessary consents and licences being obtained

Provided that:

5.2.1 the Landlord's obligations under this covenant shall cease if the insurance shall be rendered void or voidable or the policy moneys withheld in whole or in part by reason of any act or default of the Tenant or any undertenant or any of their respective employees contractors licensees or invitees

5.2.2 if the Premises are destroyed or so seriously damaged by any Insured Risk as to require (in the reasonable opinion of the Landlord's surveyor whose decision shall be final and binding upon the Parties) substantial reconstruction then the Landlord may at any time within six months' give notice in writing to determine this Lease and immediately upon the expiry of that notice this demise shall determine but without prejudice to the rights and remedies of any party against any other in respect of any antecedent claim or breach of covenant and all insurance money shall be the absolute property of the Landlord

5.2.3 If the provisions of **clause 5.2.1** shall operate and the Premises shall not be reinstated and made fit for occupation or use in accordance with **clause 5.2** by the expiration of the period in respect of which Loss of Rent is insured then either party shall have the right to determine this Lease by notice in writing to that effect served on the other party (for which purpose time shall not be of the essence) in which event on the date of service of such notice this Lease shall determine but without prejudice to the rights and liabilities of the parties in respect of any antecedent breach of any of the provisions of this Lease

### 5.3 **Estate Roads and Parking etc**

Subject to payment by the Tenant of the Tenant's Proportion of the Service Charge in accordance with **Part 1** of the Sixth **Schedule** and any sums payable in accordance with **Part 2** of the Sixth **Schedule** the Landlord shall:

5.3.1 maintain and repair such of the Estate Roads as are within the Estate and use all reasonable endeavours to do so (or to procure that it be done) in respect of the remainder of the Estate Roads until (in each case) adoption by the highway authority and

5.3.2 maintain and repair the Accessways and the Additional Access

### 5.4 **Insurance details**

To provide upon written request from the Tenant but not more than once in any twelve month period details of the policy under which the Premises are insured

## 6. **CONDITIONS**

Provided always and it is hereby agreed and declared as follows:

### 6.1 **Repossession on Tenant's default**

If at any time during the Term:

6.1.1 the rents reserved by this Lease or any of them or any part of them shall be in arrear for fourteen days after the same shall have become due (whether legally demanded or not) or

6.1.2 the Tenant shall at any time fail or neglect to perform or observe any of the covenants conditions or agreements on its part to be performed and observed contained in this Lease or in any licence approval or consent given by the Landlord to the Tenant in relation to the Premises or in any other deed supplemental to this Lease or by which this Lease may be varied or

6.1.3 the Tenant either shall (being a corporation) have an application made for an administration order (whether or not at its instance) or enter into liquidation whether compulsory or voluntary (not being a voluntary liquidation for the purpose of reconstruction only) or (being an individual) become bankrupt or

6.1.4 the Tenant shall make any arrangement or composition with creditors or suffer any distress or execution to be levied on property of the Tenant or have an encumbrancer take possession or a receiver appointed in respect of the same

then and in any such case it shall be lawful for the Landlord (or any person or persons duly authorised by it in that behalf) to re-enter into or upon the Premises and thereupon the Term shall absolutely cease and determine but without prejudice to the rights and remedies of the Landlord in respect of any antecedent breach of any of the covenants conditions or agreements contained in this Lease

## 6.2 **Benefit of insurance and abatement of rent**

6.2.1 The benefit of all insurance effected by the Landlord under this Lease or otherwise in respect of the Premises or the Estate shall belong solely to the Landlord but if the Premises or any part of them shall at any time be destroyed or damaged by any of the Insured Risks so as to be unfit for occupation or use then and in every such case (unless the Landlord's policy of insurance in relation to the Premises shall have been rendered void or voidable or the policy moneys withheld in whole or in part by reason of the act default or omission of the Tenant or any undertenant or any of their respective employees contractors licensees or invitees) the rent first reserved by this Lease or a fair and just proportion thereof according to the nature and extent of the damage sustained shall be suspended and cease to be payable until the Building shall have been repaired or reinstated and made fit for occupation or use in accordance with **clause** 5.2 or until the expiration of three years (or such longer period as may be provided for in the policy of insurance for Loss of Rent) from the destruction or damage whichever first occurs

6.2.2 No account shall be taken of damage in relation to any alteration or improvement to the Premises carried out otherwise than by the Landlord unless such alteration or improvement has in fact been taken into account in effecting both the insurance of the Premises and the insurance in respect of the Loss of Rent

6.2.3 Any dispute between the Landlord and the Tenant concerning the proportion or duration of the suspension or cesser shall be determined by an arbitrator appointed in default of agreement between the Landlord and the Tenant on the application of either of them by the President of the Royal Institution of Chartered Surveyors and any such reference shall be a submission to arbitration within the Arbitration Act 1996

## 6.3 **Notices**

The provisions of Section 196 Law of Property Act 1925 (as amended) shall apply to the giving and service of all notices and documents under or in connection with this Lease



6.4 **Repair of Estate Roads etc**

The Landlord shall have no liability to the Tenant:

- 6.4.1 in relation to any failure to maintain and repair the Estate Roads the Accessways or the Additional Access unless the Tenant has given written notice to the Landlord of the relevant aspect of non maintenance or disrepair or
- 6.4.2 on the grounds of disrepair of the Estate Roads caused by traffic using the Estate Roads for the purposes of the development of other parts of the Estate or the carrying out of works on the Estate but so that the disrepair shall be made good within a reasonable period after the Estate Roads have ceased to be so used

6.5 **Closure of facilities**

The Landlord may temporarily close or withdraw from use any of the Estate Roads the Accessways or the Additional Access to permit the carrying out of any repairs maintenance or works by it or any person authorised by it and in such circumstances the Tenant shall have no claim against the Landlord in connection with any such closure or withdrawal the person carrying out such works endeavouring to keep such closure or withdrawal to the minimum reasonably required

6.6 **Contracts (Rights of Third Parties) Act 1999**

Unless expressly stated nothing in this Lease will create any rights in favour of any person pursuant to the Contracts (Rights of Third Parties) Act 1999

7. **RENT REVIEW**

7.1 In this clause:

**“Assumptions”**

means the assumptions that:

- (a) the Premises are in good and substantial repair and condition
- (b) the Landlord the Tenant and any sub-tenant have complied with all their respective covenants and obligations imposed by this Lease on each of them
- (c) all parts of the Premises are fit and ready for use for the Permitted Use
- (d) that the rent at which the Premises could reasonably be expected to be let is that which would be payable after the expiry of any rent free period or after the receipt of such other rent concession or inducement (in each case by way of allowance in respect of the fitting out of the Premises) as may be negotiated in the open market between a landlord and a tenant upon a letting of the Premises
- (e) no work has been carried out on the Premises during the Term which has diminished the rental value of the Premises and
- (f) any damage to or destruction of the Premises or any means of access to them has been fully reinstated

**“Current Rent”**

means the yearly rent reserved by this Lease (disregarding any suspension of rent under any other provision of this Lease) as varied from time to time pursuant to this clause

**“Matters to be Disregarded”**

means each of the following matters so far as they may affect rental value:

- (a) the fact that the Tenant or any sub-tenant has previously been in occupation of the Premises
- (b) any goodwill attaching to the Premises by reason of the carrying on of the business of the Tenant or any sub-tenant at the Premises and
- (c) any improvement to the Premises carried out during the Term by the Tenant or any sub-tenant other than improvements effected at the expense of the Landlord or pursuant to any obligation to the Landlord whether under the provisions of this Lease or any other deed or document

**“New Rent”**

as at any Review Date means the higher of:

- (a) the Current Rent immediately before that Review Date and
- (b) the Rental Value as at that Review Date

**“President”**

means the President for the time being of the Royal Institution of Chartered Surveyors any other body reasonably specified by the Landlord

**“Rental Value”**

as at any Review Date means the open market rental value of the Premises at that Review Date

- (a) as agreed by the Landlord and the Tenant or
- (b) as determined by a Valuer pursuant to the provisions of this clause

**“Valuer”**

means a chartered surveyor who has experience of practice in property of the nature and type of the Premises and who is acquainted with the market in the area in which the Premises are located

7.2 The New Rent shall be payable from and including each Review Date

7.3 If the Landlord and the Tenant do not agree upon the amount of the Rental Value by a date being three months before the relevant Review Date either the Landlord or the Tenant may require the Rental Value to be determined by a Valuer

7.4 Both the Landlord and the Tenant may require the Rental Value to be determined by a Valuer even if no attempt has been made to agree the Rental Value

- 7.5 Where the Rental Value is to be determined by a Valuer and the Landlord and the Tenant do not agree as to his appointment within seven days of either of them putting forward a nomination to the other such Valuer shall be appointed at the request of either party by the President.
- 7.6.1 The Valuer shall act as an expert and not as an arbitrator and his decision (including any decision as to the costs of such determination) shall be final and binding on the parties. The costs of appointment and fees of the Valuer shall be paid in such proportion as the Valuer directs or if no direction is made then equally by the Landlord and the Tenant
- 7.6.2 The Valuer shall upon appointment either by the parties or the President be required upon his determination to provide a reasoned award to the Landlord and the Tenant
- 7.7 Notwithstanding that the Valuer shall act as an expert the Landlord and the Tenant shall each be entitled to make representations and counter-representations to such Valuer a copy of which shall be supplied by the Valuer to the other of them and in making an award as to costs the Valuer shall have regard to the representations and counter-representations made to him
- 7.8 The Valuer shall determine the Rental Value as the yearly open market rack rental value at which the Premises might reasonably be expected to be let with vacant possession in the open market by a willing lessor to a willing lessee for a term of years equal in length to the balance unexpired of the Term as at the relevant Review Date and on the terms and conditions of a lease which are otherwise the same as this Lease except as to the actual amount of the Current Rent and the date on which the term commences and making the Assumptions but taking no account of the Matters to be Disregarded
- 7.9 If by the relevant Review Date the New Rent has not been ascertained (whether or not negotiations have commenced) the Tenant shall continue to pay the Current Rent on each day appointed by this Lease for payment of Rent until the New Rent has been ascertained and upon such ascertainment of the New Rent the Tenant will pay to the Landlord as arrears of rent an amount equal to the difference between the New Rent and the Current Rent actually paid for the period since the relevant Review Date together with interest on the difference at three per centum below the Prescribed Rate
- 7.10 In no event shall the yearly rent payable by the Tenant to the Landlord after the relevant Review Date be less than the yearly rent payable by the Tenant to the Landlord immediately before such relevant Review Date
- 7.11 A memorandum in the form set out in the Fourth **Schedule** of any increased rent determined pursuant to this **clause** 7 shall as soon as may be after such determination be prepared in duplicate and signed by or on behalf of the Landlord and Tenant

## **8. SURETY**

In consideration of this demise being made at the Surety's request the Surety covenants with the Landlord in the terms set out in the Third **Schedule**

**9. APPLICABLE LAW AND JURISDICTION**

For the avoidance of doubt and notwithstanding the domicile or place of business for any party from time to time having an interest in this Lease the same shall be governed by and construed in all respects in accordance with the laws of England and Wales and proceedings in connection therewith shall be subject (and the parties hereby submit) to the non-exclusive jurisdiction of the English and Welsh courts and for the purposes of Order 10 Rule 3 of the Rules of the Supreme Court of England and any other relevant Rules thereof the Tenant and the Surety hereby irrevocably agree that any process may be served upon them by leaving a copy addressed to them at their address as stated above or at such other address for service within England and Wales as may be notified in writing from time to time to the Landlord

IN WITNESS of which this Lease has been executed and is delivered as a deed on the date appearing as the date of this Lease

## FIRST SCHEDULE

Two semi-detached, production buildings, each with 2-storey offices to front and each measuring approximately, 18.10m (59'4") by 25.96m (85'2"), the whole providing gross external areas of:

Production Area:	565.52 m <sup>2</sup> (6,087 sq. ft)
First Floor Office:	324.22m <sup>2</sup> (3,490 sq. ft)
Ground Floor Office:	324.22m <sup>2</sup> (3,490 sq. ft)
Total:	1,213.96m <sup>2</sup> (13,067 sq. ft)

### FRAME

Steel frame of columns and beams all to structural engineer's design and specification. Fire protected as necessary with fire board, brick/block encasement or intumescent paint.

### ROOF

Roof comprises profiled galvanised steel sheeting with light grey coloured plastisol finish on galvanised steel zed spacers on internal roof lining of galvanised steel white PVF2 coated profiled lining sheets, cavity between containing 80mm layer of mineral wool insulation. Sheeting with all laps sealed. All over galvanised mild steel purlins.

Rainwater is conducted away via insulated, galvanised presses steel gutters discharging into internal uPVC rainwater downpipes connected to the below ground surface water drainage system.

### EXTERNAL WALLS

Cavity wall construction of 103mm facing bricks and internal skin of 100mm blockwork finished fair faced and emulsion painted within the production area with a partially filled cavity containing 65mm mineral wool insulation held against inner skin. Internal faces of the external walls to offices finished with plasterboard drylining with an emulsion paint finish.

South (front) elevation comprises facing brick piers surmounted by facing brick parapet with PVF2 colour coated, galvanised steel copings and contains 8 No. full height panels of curtain walling and 2 No. recessed full height entrance screens.

The curtain walling/window system has a self-draining thermally broken and pressure equalised aluminium frame with an external coating of black powder coating with silver grey Anolok 541 anodised cappings. The internal coatings being matt white polyester powder coat.

Double glazing within the curtain walling and windows consists of 6mm grey anti-sun outer pane, 12mm cavity and 6mm clear inner pane. Insulated look-a-like panels provided where vision not required.

Curtain walling panels each have eight top hung opening lights. The curtain walling and entrance canopies are set within recesses and are provided with PVF2 coated galvanised steel birse solier over the ground floor windows.

The full height entrance screens each contain two opening lights, nine fixed glazed panes, a matching three panel door complete with polished stainless steel furniture, mortice lock and concealed bolts at head and foot. Each entrance screen also contains a PVF2 coated letter plate inset within the glazing units. A stainless steel, tubular framed feature panel is provided over each main entrance between brick piers and left ready to receive tenant's signage.

East elevation contains three full height panels of curtain walling. One painted steel Henderson Defender door set including butt hinges and push bar panic latch, one electrically operated insulated sectional up and over loading door approximately 5m x 3.85m.

West elevation contains three full height panels of curtain walling. One painted steel Henderson Defender door set including butt hinges and push bar panic latch, one electrically operated insulated sectional up and over loading door approximately 5m x 3.85m.

North elevation comprises cavity brickwork as previously described with feature brick walling.

#### EXTERNAL AREAS

- South:
- Car parking in concrete block paving for ten cars
  - Landscaping incorporating shrubs and semi mature trees
  - Block paving footpaths
- East:
- 2.4m high x 200mm diameter painted mild steel tubular bollards with cranked tops to loading door reveals
  - Two retractable anti ram bollards to loading bay door
  - Remote landscaping incorporating shrubs and semi mature trees with five car parking spaces in block paving
  - Car parking in concrete block paving for seven cars
- West:
- 2.4m high x 200mm diameter painted mild steel tubular bollards with cranked tops to loading door reveals
  - Two retractable anti ram bollards to loading bay door
  - Remote landscaping incorporating shrubs and semi mature trees with eight car parking spaces in block paving
  - Car parking in concrete block paving for four cars

South side of eastern service road with 3 no. car park spaces in concrete block paving.

INTERNAL

WALLS

In each unit:

Internal blockwork walls form at ground floor level, division between office/production areas and staircase, disabled, male and female toilet accommodation and tea room and at first floor level, staircase, male and female toilet accommodation and plant area.

Dividing wall between production and office areas is of two skins of 100mm blockwork, remaining walls generally of 100mm blockwork.

General office areas and staircases are plasterboard drylined with emulsion paint finish. Toilet accommodation and tea rooms plasterboard drylined with ceramic tile finish. First floor cleaners' cupboard and plant room finished fair faced blockwork. All drylined walls provided with varnished ash skirtings. External windows provided with Durapal laminate faced window boards.

Internal walls contain at ground floor level six and first floor level four flush faced ash veneered semi solid core doors incorporating glazed vision panels to circulation areas. Fire doors glazed with Georgian wired polished plated glass.

Ground and first floor staircase entrances incorporate staircase screen in sold ash with Georgian wired polished plate glass. Doors complete with polished stainless steel door furniture, mortice latches or locks, kicking plates, door signage and door closers as appropriate all set in sold ash frames and architraves with clear varnish finish.

Toilet Accommodation

Ground Floor:	2 No. WC suites
Male	2 No. Hand basins
	2 No. Urinals
Ground Floor:	2 No. WC suites
Female	2 No. Hand basins
Tea Room:	1 No. Stainless steel single bowl, single drainer sink set in post formed laminate worktop with base units under
Ground Floor:	1 No. WC suite
Disabled:	1 No. Hand basin
Toilet:	3 No. Fixed grab rails
	1 No. Retractable grab rail
First Floor:	1 No. WC suite

Male Toilet	1 No. Hand basin
	1 No. Urinal
First Floor:	1 No. WC suite
Female Toilet	1 No. Hand basin

All sanitaryware is of white vitreous china (commercial standard) except stainless steel sink and provided with all taps, plugs, chains and wastes. Sanitaryware connected to hot and cold water supplied and below ground foul drainage system. Mirrors provided over hand basins.

### FLOORS

Ground floors to production areas comprise powerfloated reinforced concrete floors to BRE medium load classification incorporating proprietary anti-dust sealant.

Ground floors offices of reinforced concrete floor designed for a uniformly distributed load of 6 KN per m<sup>2</sup> with a raised access floor to PSA medium grade providing 150mm clear void. Raised access floor finished with Esco Pallas Excel or similar carpet tiles.

First floors comprise pre-cast pre-stressed concrete planks designed for a superimposed load excluding self weight of 3.5 KN per m<sup>2</sup>. Office areas complete with PSA medium grade raised access floor with 150mm clear void. Raised access floor finished with Esco Pallas Excel or similar carpet tiles.

Toilet areas to ground and first floors finished with Polyflor Finesse vinyl floor covering.

Staircase and associated lobbies finished with carpet tiles to match general office areas.

Matwell and Jaymart grimestopper mat inset provided to the main entrance lobby areas.

### CEILINGS

Ceiling to production areas as described under roof. With area under first floor offices comprising soffit of floor planks.

Ceiling throughout offices, staircase and toilet accommodation comprises of 600mm x 600mm white faced ceiling tiles, Rachter Systems Rafa Co-ordinate 9 Plain or similar, laid in white acrylic finished metal micro look exposed tee suspended grid.

### STAIRCASES

Staircases of pre-cast reinforced concrete complete with polished stainless steel handrails. The stairs are fitted with solid ash strings and skirtings with clear varnish finish to match remainder of accommodation and incorporate non-slip safety nosings.



## ELECTRICAL INSTALLATION

Lighting is provided in each unit as follows:

Ground Floor Office:	17 No. Recessed fluorescent luminaries (1200mm x 600mm)
Ground Floor Toilets:	5 No. Recessed compact fluorescent downlighters Concealed fluorescent batten luminaries above mirrors and WC's
Kitchenette & Lobby:	2 No. Circular recessed fluorescent fittings with prism louvres
Production Area:	10 No. Sodium boxed downlighters
Disabled Toilets:	1 No. Shallow dome, wall mounted fluorescent fitting
Staircase	4 No. Recessed, compact, fluorescent downlighters
Associated Lobbies:	4 No. Wall mounted, feature, fluorescent fittings 2 No. Recessed, circular, fluorescent luminaries
First Floor Toilets:	3 No. Compact fluorescent downlighters 2 No. Concealed fluorescent batten luminaries above WC's
First Floor Office:	19 No. 1200mm x 600mm recessed fluorescent luminaries with V cross blade low brightness louvres
External:	3 No. Compact fluorescent downlighters to canopy over entrance 1 No. Tungsten floodlight over rear loading bay door

Emergency lighting comprising self contained units installed to meet fire officers requirements for an open plan office and production area. Small power is provided in each unit as follows:

Ground Floor Office:	3 No. 13A switched socket outlets
Ground Floor Toilet Lobby:	1 No. 13A switched socket outlet
Kitchenette:	1 No. 13A twin switched socket outlet
Production Area:	1 No. Surface mounted 13A twin switched socket outlet
Staircase and Associated Lobbies	2 No. 13A switched socket outlets

First Floor Office:	3 No. 13A switched socket outlets
Plant Room:	1 No. Surface mounted 13A switched socket outlet

A 200 kva electricity supply to meter position with main control and protection provided in each unit by:

- 1 No. 400A load switch (main incomer)
- 1 No. Dorman Smith switchgear load bank distribution board provided with two 100A switches, a 32A switch for external lighting, two 35A switches for fire alarm supply and heating and ventilation control equipment
- 1 No. Distribution board for offices
- 1 No. Distribution board for production area
- 1 No. External lighting DB stop and control panel
- 1 No. Lighting contractors panel

#### HEATING

In each unit, heating is provided to the offices, toilets, tea room, staircase and circulation areas by a low pressure hot water system serving pressed metal radiators each complete with thermostatic radiator controls.

A gas fired low pressure hot water boiler complete with twin wall insulated flue and all necessary pumps, valves, thermostats and controls being located in the first floor plant area of each unit.

#### GAS INSTALLATION

An incoming metered and valved gas supply is provided serving boiler installations.

#### TELECOMMUNICATIONS

Incoming telephone ducts are provided within the ground floor offices to receive tenant's installation.

#### VENTILATION

Toilet areas are ventilated to provide six air changes per hour.

Thermostatically controlled roof mounted extract fans installed to exhaust air from the first floor office ceiling voids to reduce void temperature build up at times of high solar gain through the roof.

#### WATER INSTALLATIONS

Incoming water mains to supply Authority's meters. From the Authority's meters the supplies are distributed within the units to serve drinking water points direct and sanitary appliances, from a storage tank.

Hot water is provided to all sanitary accommodation via a wall mounted Heatrae Sadia instantaneous electric water heaters. A further Heatrae Sadia 'Handy' water heater is provided within each disabled toilet.

#### FIRE ALARM INSTALLATION

A multi zone electronic fire alarm system incorporating break glass points at all exit doors and electronic sounders installed to meet the Fire Officer's requirements for an open plan office and production area is provided in each unit.

## SECOND SCHEDULE

### Part 1

#### The Rights

1. The right in common with the Landlord and all other persons now or at any time after the date of this Lease similarly entitled to pass at all times and for all purposes connected with the proper use of the Premises in accordance with this Lease:
  - 1.1 with or without vehicles over and along the Estate Roads and the Accessways and (except for that part hatched purple on the Lease Plan) the Additional Access until in each case adoption by the highway authority and
  - 1.2 on foot only over and along that part of the Additional Access shown hatched purple on the Lease Plan
2. The right in common with the Landlord and all other persons now or at any subsequent time entitled to a similar right to the free passage and running of water soil gas electricity and other services from and to the Premises through the Conducting Media in the Estate other than those adopted by the relevant statutory undertaker
3. The right of support and protection for the Premises from the remainder of Winnersh 500

### Part 2

#### The Exceptions and Reservations

1. To the Landlord and all others authorised by it the free and uninterrupted passage and running of water soil gas electricity and telephone or any other service or supply from the other buildings and land of the Landlord and its tenants adjoining or near the Premises and from the land and premises of others so authorised as aforesaid through the Conducting Media which are now or may hereafter be in through under or over the Premises
2. To the Landlord and all others authorised by it the right at all times to enter the Premises with all necessary equipment for the purposes of:
  - 2.1 carrying any repairs maintenance or works to or in relation to the Accessways and (where **clause 4.6.4** applies) the Landscaped Areas including the right to use and take water from any external water supply at the Premises for the purposes of maintenance of planting and landscaping at Winnersh 500
  - 2.2 laying constructing installing replacing repairing maintaining or altering any Conducting Media now or hereafter in through under or over the Premises or any adjoining property or making connections to any such Conducting Media
  - 2.3 carrying out inspections of or tests to any such Conducting Media
  - 2.4 doing such other things in relation to any Conducting Media which directly or indirectly serve or are connected to other premises as the Landlord considers proper to ensure that such Conducting Media are in good working order and condition and

2.5 exercising any of the rights of the Landlord contained in this Lease

the Landlord making good any damage caused by the exercise of this right

3. To the Landlord full right and liberty at any time hereafter or from time to time to execute works and erections upon or to alter or rebuild any of the buildings erected on any part of the Estate and to use its Estate and each part of it in such manner as the Landlord may think fit notwithstanding that the access of light and air to the Premises may thereby be interfered with
4. To the Landlord and other the tenants and occupiers of other parts of Winnersh 500 the right of support and protection from the Premises
5. To the Landlord the right to install and retain on the Land columns for the provision of lighting security or other services for Winnersh 500 and the right to enter the Premises with all necessary equipment for such purposes or for maintaining altering or replacing such column

THIRD SCHEDULE

Obligations of the Surety

1. If at any time during the Term the Tenant shall not pay any of the rents or other sums payable under this Lease or perform and observe any of the covenants conditions or other terms of the Lease the Surety shall pay such rents or other sums or observe or perform such covenants conditions or other terms
2. By way of separate and additional liability and notwithstanding that the guarantee in **paragraph 1** may be unenforceable or invalid for any reason the Surety indemnifies the Landlord against all losses damages costs and expenses suffered or incurred by the Landlord arising out of or in connection with any failure by the Tenant to pay any of the rents and sums or to perform and observe any of the covenants conditions or other terms referred to in **paragraph 1**
3. If:
  - 3.1 the Tenant shall be wound up or (being an individual) become bankrupt and its liquidator or trustee in bankruptcy shall disclaim this Lease or
  - 3.2 the Tenant shall cease to exist or shall die or
  - 3.3 this Lease shall be forfeited(the date on which such event occurs being called the **"Relevant Date"**) the Landlord may within three months after the Relevant Date by notice in writing require the Surety to accept a lease of the Premises for a term commencing on the Relevant Date and continuing for the residue then remaining of the Term at the same rents and with the same covenants and conditions as are reserved by and are contained in this Lease and in such case the Surety shall take such lease accordingly and execute a counterpart of it and pay all costs and duties in relation to it
4. The Surety undertakes with the Landlord that:
  - 4.1 its obligations to the Landlord are primary obligations and it is jointly and severally liable with the Tenant (both before or after any disclaimer by a liquidator or trustee in bankruptcy) for the fulfilment of all the Tenant's covenants and obligations
  - 4.2 the Surety shall not claim in any liquidation bankruptcy administration receivership composition or arrangement of the Tenant in competition with the Landlord and that the Surety shall remit to the Landlord the proceeds of all judgments and all distributions which the Surety may receive from any liquidator trustee in bankruptcy administrator administrative receiver receiver or supervisor of the Tenant and shall hold for the benefit of the Landlord all security and rights the Surety may have over assets of the Tenant while any liabilities of the Tenant or the Surety to the Landlord remain outstanding and
  - 4.3 if the Landlord shall not require the Surety to take a new lease of the Premises the Surety shall nevertheless upon demand pay to the Landlord a sum equal to the rent first reserved under this Lease and all other sums that would have been payable under this Lease in respect of the period from and including the Relevant Date until the expiry of twelve months after such Date or

until the Landlord shall have granted a lease of the Premises to a third party (whichever shall first occur) in addition and without prejudice to the Surety's other obligations to the Landlord

5. The Surety waives any right to require the Landlord to proceed against the Tenant or to pursue any other remedy of any kind which may be available to the Landlord before proceeding against the Surety
6. The liabilities of the Surety under this Schedule shall not be affected by:
  - 6.1 the granting of time or any other indulgence or concession to the Tenant or any compromise or compounding of the Landlord's rights
  - 6.2 the Tenant being in liquidation or (as the case may be) declared bankrupt
  - 6.3 any variation in the terms and conditions of this Lease
  - 6.4 any delay in exercising or failure to exercise or other exercise (including re-entry under **clause 6.1**) of any of the Landlord's rights against the Tenant
  - 6.5 any refusal by the Landlord to accept rent tendered by or on behalf of the Tenant following a breach by the Tenant of its obligations under this Lease
  - 6.6 any legal limitation or any immunity disability or incapacity of the Tenant (whether or not known to the Landlord) or the fact that any dealings with the Landlord by the Tenant (including the acceptance by the Tenant of this Lease) may be outside or in excess of the powers of the Tenant or
  - 6.7 any other thing (including the expiration or sooner determination of the Term or any such disclaimer or the death of the Surety (or any of the persons comprising the Surety) or (in relation to one or more of such persons) the discharge of the other person or persons) whereby (but for this provision) the Surety or any of them would be exonerated either wholly or in part from any of the Surety obligations hereunder

**FOURTH SCHEDULE**

Rent Review Memorandum

Winnersh [500] Winnersh Triangle Wokingham Berkshire

Lease dated [ ] between Slough Estates (Winnersh) Limited (1) and [ ] (2)

Pursuant to the above Lease [ ] as Landlord and [ ] as Tenant record that the yearly rent has been increased to the sum of £[ ] with effect from [relevant Review Date]

Dated:

Signed:

[Landlord][Tenant]



**FIFTH SCHEDULE**

Documents and matters affecting title

1. The covenants matters and stipulations set out or referred to in or contained or referred to in the documents referred to in the Property and Charges Registers of the Landlord's title number BK 167503 so far as the same affect or relate to the Premises
2. A lease between Slough Properties Limited (1) and Southern Electric plc (2) relating to an electricity substation to the south-east of the Premises

## SIXTH SCHEDULE

### Part 1

#### Service Charge for the Estate

### Part A

#### Heads of Expenditure

The costs and liabilities which the Landlord (which in this Schedule shall where the context admits include any other company which is a member of the same group of companies as the Landlord) incurs or becomes liable to pay or discharge in connection with the Estate or occupiers thereon including the costs of:

1. repairing maintaining cleaning renewing and resurfacing the Estate Roads (including the renewal of the line markings on the Roads)
2. repairing maintaining replacing and operating the lighting of the Estate Roads (including the cost of electricity)
3. repairing maintaining decorating and replacing any estate office for the Estate including:
  - 3.1 the cost of services (including electricity gas and telephone) supplied to any such office
  - 3.2 rates payable in respect of any such office
  - 3.3 the cost of equipment and materials in or for such office to the extent that they are intended to be provided for the purposes of such office
4. repairing maintaining and renewing any Conducting Media in or for any part of the Estate to the extent that they are not the responsibility of any tenant of the Landlord on the Estate or of a statutory undertaker and do not exclusively serve premises occupied by such a tenant
5. repairing maintaining cleaning and keeping tidy the Common Areas including the tending care and replacement of plants and trees and the maintenance and upkeep of landscaped areas including nature strips in roads or on roundabouts at or at the approaches to Winnersh Triangle
6. repair maintenance and replacement of tanks pumps pipes and other equipment (excluding any that form part of the Premises) forming part of the sprinkler system at the Estate including the costs of inspection and maintenance contracts
7. repair maintenance decoration operation lighting and cleaning of any structures fences walls signs footpaths amenities and things on the Common Areas and benefiting the Estate or part of it including any entrance feature from time to time for the Estate and any equipment associated with it
8. employing staff for the benefit of the Estate or the provision of any services on or for the Estate (including for the purposes of operating an estate office) including the costs of statutory and other insurance health pension welfare and other payments contributions and premiums and the costs

incidental to the performance of the duties of any such staff but where engaged also to perform duties not connected with the Estate only a proportion of each of such costs

9. rates taxes assessments duties charges burdens impositions and outgoings imposed or charged upon the Common Areas or any part of them (including any estate office) or upon the owner or occupier thereof
10. insurance in such sum and against such risks as the Landlord shall consider appropriate in respect of damage to any part of the Common Areas (including the Estate Roads) and the structures buildings walls fences and other things thereon
11. public liability insurance in respect of any liability of the Landlord in relation to the Estate and the Estate Roads
12. calculating the Service Charge and the Tenant's liability under this Lease including preparation of accounts and certification
13. providing such security service for the benefit of the Estate as the Landlord may from time to time consider appropriate
14. the management of the Estate including the fees and disbursements of:
  - 14.1 any managing agents for or in connection with such management the collection of rent and other sums payable by tenants of the Estate to the Landlord and the performance of any other duties or services in or about the Estate
  - 14.2 the Landlord's surveyor for or in connection with the performance of any function for the purposes of this Lease
  - 14.3 any other individual firm or company engaged to perform services for the Estate or any part of it
  - 14.4 the Landlord where it carries out any service or function in such management (but excluding a fee charged by the Landlord for the collection of rent)
  - 14.5 any other facility service amenity or thing provided on or for the Estate and intended to benefit the Estate or occupiers thereon
  - 14.6 any value added tax payable on any of the costs referred to in this Part

#### Part B

##### Calculation of the Service Charge

- 1.1 The Landlord shall as soon as practicable after the end of each Service Charge Period:
  - 1.1.1 prepare an account giving particulars of the Service Charge for that Service Charge Period and showing the Tenant's Proportion of the Service Charge and
  - 1.1.2 supply to the Tenant a copy of such account
- 1.2 Upon such account being certified by the Landlord's surveyor it shall be conclusive evidence for the purposes of this Lease of all matters of fact referred to in it

- 1.3 Advance payments on account of the Tenant's Proportion of the Service Charge in respect of a Service Charge Period shall be paid to the Landlord by the Tenant according to the reasonable estimate made by the Landlord's surveyor acting as expert of the amount of the Service Charge for that Service Charge Period
- 1.4 Written notice of such estimate shall be promptly given to the Tenant
- 1.5 Such payments shall be made by equal instalments on each of the quarter days occurring during the relevant Service Charge Period or (if the estimate is notified to the Tenant after such a quarter day) on such of them as occur after such notification.
- 1.6 The first advance payment shall be:
  - 1.6.1 in respect of the period from the Commencement Date until the next quarter day after the date of this Lease
  - 1.6.2 paid by the Tenant on the date of this Lease and
  - 1.6.3 calculated according to an estimate of the Service Charge made in accordance with **paragraph 2.1** and notified in writing to the Tenant
2. If the Tenant's Proportion of the Service Charge for a Service Charge Period:
  - 2.1 exceeds any amounts paid by the Tenant to the Landlord as advance payments on account thereof the amount of the excess (or the whole Proportion if no advance payments have been made) shall (notwithstanding the expiration or sooner determination of the Term) be paid by the Tenant to the Landlord within twenty-one days of the supply to the Tenant of the account pursuant to **paragraph 1** or
  - 2.2 is less than such amounts so paid the amount of the difference shall be credited to the Tenant against the next payments of rents due or (in the final year of the Term) reimbursed to the Tenant
3. In respect of each of the Service Charge Periods in which occur the Commencement Date and the date of the expiration or sooner determination of the Term the Tenant shall only be obliged to pay the Tenant's Proportion of the Service Charge in respect of that part of the Service Charge for that Period as bears to the whole of that Service Charge the same proportion that the number of days of the Term occurring in the relevant Service Charge Period bears to 365

Part 2

Costs of Winnersh 500 facilities

Accessways and landscaping

- 1.1 The Tenant shall pay to the Landlord on written demand the proper proportion of the costs liabilities fees and expenses which the Landlord incurs or becomes liable to pay in connection with:

- 1.1.1 the Accessways and any signs or direction notices on or for them including all sums incurred pursuant to **clause** 5.3 or otherwise in the maintenance repair cleaning lighting renewal and resurfacing of them and
- 1.1.2 the maintenance of landscaping at Winnersh 500 so far as not demised to any tenant
- 1.2 In this **paragraph 1** the “**proper proportion**” means a fair proportion (which may take into account the extent and nature of use) to be certified by the Landlord’s surveyor whose decision shall be final and binding on the parties in the absence of manifest error

Other facilities

- 2.1 The Tenant shall pay to the Landlord on written demand the proper proportion of the costs liabilities fees and expenses which the Landlord incurs or becomes liable to pay in connection with the provision and maintenance of any other facility service amenity or thing for the benefit or use of the tenants or occupiers of and in Winnersh 500
- 2.2 In this **paragraph 2** the proper proportion means the proportion which the gross external area of the Building bears to the aggregate of that area and the gross external area of the other buildings at Winnersh 500 (or any buildings replacing such buildings)

Part 3

Costs of Additional Access

- 1. The Tenant shall pay to the Landlord on written demand the proper proportion of the costs liabilities fees and expenses which the Landlord incurs or becomes liable to pay in connection with:
  - 1.1 repairing maintaining cleaning renewing and resurfacing the Additional Access or
  - 1.2 repairing maintaining replacing and operating any lighting of the Additional Access
- 2. In this **Part 3** the proper proportion means the proportion which the gross external area of the Building bears to the aggregate of that area and the gross external area of building 1219.96 m<sup>2</sup>

Signed as a deed by SLOUGH ESTATES  
(WINNERSH) LIMITED acting by a director  
and its secretary two directors

/s/J. Hcawoor  
N. Luyrul  
Secretary  
Director

On counterpart

Signed as a deed by EMERGENT  
PRODUCT DEVELOPMENT UK LIMITED  
acting by a director and its secretary/two  
directors

/s/S.N. Chatfield  
/s/CJ Crivi  
Director  
Director

Signed as a deed by EMERGENT BIOSOLUTIONS  
INCORPORATED acting by a director and its secretary/  
two directors

/s/Y.F.El-Hibri  
/s/Daniel J. Abdun-Nabi  
Secretary  
Director

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**AMENDMENT No. 5  
To  
FILLING SERVICES AGREEMENT**

This Amendment No. 5 to the Filling Services Agreement dated March 18, 2002 is made and entered into this 14<sup>th</sup> day of May, 2007, by and between Emergent BioDefense Operations Lansing, Inc. ("Emergent BioDefense") (formerly BioPort Corporation), a Michigan corporation having its principal place of business at 3500 North Martin Luther King Jr. Blvd., Lansing, Michigan 48906, and Hollister-Stier Laboratories LLC (Hollister-Stier), a Delaware limited liability corporation having its principal place of business at 3525 North Regal Street, Spokane, Washington 99207.

**RECITALS**

Emergent BioDefense and Hollister-Stier deem it desirable and to be in the best interests of the parties to amend the Agreement as hereinafter described and, therefore, the parties agree as follows:

A. Amendment

Pursuant to Section 10.0 Ten and Termination – It is the desire of Emergent BioDefense and Hollister-Stier to extend the term of this agreement from December 31, 2007 to December 31, 2010.

B. Remaining Agreement

Except as set forth in Section A. hereof, all other terms, provisions and conditions of the Agreement remain in full force and effect as of the date hereof.

In WITNESS WHEREOF, the parties have executed this Amendment No. 5 as of the date hereinabove stated, to be effective as of the date hereinabove stated.

HOLLISTER-STIER LABORATORIES LLC

EMERGENT BIODEFENSE OPERATIONS LANSING INC

By: /S/Anthony B. Bonanzino

By: /S/Robert G. Kramer

Name: Anthony D. Bonanzino, Ph.D.

Name: Robert G. Kramer

Title: President and CEO

Title: President and CEO

Date: 05-14-07

Date: 6-13-07

## CERTIFICATION

I, Fuad El-Hibri, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Emergent BioSolutions 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 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)) 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) [Not applicable];
  - (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 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 7, 2007

/S/Fuad El-Hibri  
Fuad El-Hibri  
Chief Executive Officer



## CERTIFICATION

I, R. Don Elsey, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Emergent BioSolutions 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 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)) 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) [Not applicable];
  - (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 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 7, 2007

/S/ R. Don Elsey.

R. Don Elsey

Senior Vice President Finance, Chief Financial Officer and Treasurer

**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 Emergent BioSolutions Inc. (the "Company") for the three months ended June 30, 2007 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Fuad El-Hibri, Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 7, 2007

/s/Fuad El-Hibri  
Fuad El-Hibri  
Chief Executive Officer  
**(Principal Executive Officer)**

**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 Emergent BioSolutions Inc. (the "Company") for the three months ended June 30, 2007 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, R. Don Elsey, Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 7, 2007

/s/R. Don Elsey

R. Don Elsey

Senior Vice President Finance, Chief Financial Officer and Treasurer

**(Principal Financial Officer)**