MILLENNIUM CELL INC Form SC 13G August 15, 2005

# **UNITED STATES**

## SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# **SCHEDULE 13G**

## **Under the Securities Exchange Act of 1934**

Millennium Cell Inc.	
(Name of Issuer)	
Common Stock	
(Title of Class of Securities)	
60038B105	_
(CUSIP Number)	
August 15, 2005*	

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

" Rule 13d-1(b)			
x Rule 13d-1(c)			
" Rule 13d-1(d)			
_	e remainder of this cover page sha ) or otherwise subject to the liabili		

<sup>\*</sup> The date on which the Reporting Person could acquire beneficial ownership of greater than 5% of the Common Stock of the Issuer is dependent on the achievement of certain milestones described herein. In the event that the next milestone is successfully achieved prior to September 15, 2005, the earliest date on which the Reporting Person could have the right to acquire shares of capital stock of the Issuer that would entitle the Reporting Person to acquire beneficial ownership of greater than 5% of the Common Stock of the Issuer within 60 days is August 15, 2005.

CUSIP No. 60038B105 13G Page 2 of 16

#### 1 NAMES OF REPORTING PERSONS

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

The Dow Chemical Company

I.R.S. Identification Nos. 38-1285128

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) "

(b) "

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER NUMBER OF

**SHARES** 

BENEFICIALLY

As of August 15, 2005, the Reporting Person beneficially owns 1,557,240 shares of Common Stock based on the Reporting Person s ownership as of that date of 155,724 shares of Series A2-0 Convertible Preferred Stock. This assumes the conversion of these shares into shares of Common Stock as of such date.

OWNED BY

**EACH** 

REPORTING

PERSON

WITH

Upon the later of successful achievement of the second milestone under the Joint Development Agreement (as hereinafter defined) or, if such milestone is achieved prior to September 15, 2005, on October 15, 2005, the Reporting Person will have the right to acquire additional shares of Series A2 Convertible Preferred Stock (the Series A2 Convertible Preferred Stock includes the Series A2-0 Convertible Preferred Stock and any other subseries of Series A2 Convertible Preferred Stock) and Series B Convertible Preferred Stock which may be converted, when aggregated with the shares of Series A2-0 Convertible Preferred Stock currently owned by the Reporting Person, into greater than 5% of the issued and outstanding Common Stock of the Issuer. The number of shares of Series A2 Convertible Preferred Stock issuable upon achievement of the second milestone under the Joint Development Agreement is based on a percentage of the issued and outstanding shares of capital stock of the Issuer at that time determined on a fully diluted basis and is not determinable at this time. The Reporting Person disclaims beneficial ownership of all such shares other than those issuable upon conversion of the 155,724 shares of Series A2-0 Convertible Preferred Stock currently owned by the Reporting Person.

<sup>6</sup> SHARED VOTING POWER

0

#### 7 SOLE DISPOSITIVE POWER

As of August 15, 2005, the Reporting Person beneficially owns 1,557,240 shares of Common Stock based on the Reporting Person s ownership as of that date of 155,724 shares of Series A2-0 Convertible Preferred Stock. This assumes the conversion of these shares into shares of Common Stock as of such date.

Upon the later of successful achievement of the second milestone under the Joint Development Agreement (as hereinafter defined) or, if such milestone is achieved prior to September 15, 2005, on October 15, 2005, the Reporting Person will have the right to acquire additional shares of Series A2 Convertible Preferred Stock (the Series A2 Convertible Preferred Stock includes the Series A2-0 Convertible Preferred Stock and any other subseries of Series A2 Convertible Preferred Stock) and Series B Convertible Preferred Stock which may be converted, when aggregated with the shares of Series A2-0 Convertible Preferred Stock currently owned by the Reporting Person, into greater than 5% of the issued and outstanding Common Stock of the Issuer. The number of shares of Series A2 Convertible Preferred Stock issuable upon achievement of the second milestone under the Joint Development Agreement is based on a percentage of the issued and outstanding shares of capital stock of the Issuer at that time determined on a fully diluted basis and is not determinable at this time. The Reporting Person disclaims beneficial ownership of all such shares other than those issuable upon conversion of the 155,724 shares of Series A2-0 Convertible Preferred Stock currently owned by the Reporting Person.

### 8 SHARED DISPOSITIVE POWER

0

#### 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

As of August 15, 2005, the Reporting Person beneficially owns 1,557,240 shares of Common Stock based on the Reporting Person s ownership as of that date of 155,724 shares of Series A2-0 Convertible Preferred Stock. This assumes the conversion of these shares into shares of Common Stock as of such date.

Upon the later of successful achievement of the second milestone under the Joint Development Agreement (as hereinafter defined) or, if such milestone is achieved prior to September 15, 2005, on October 15, 2005, the Reporting Person will have the right to acquire additional shares of Series A2 Convertible Preferred Stock (the Series A2 Convertible Preferred Stock includes the Series A2-0 Convertible Preferred Stock and any other subseries of Series A2 Convertible Preferred Stock) and Series B Convertible Preferred Stock which may be converted, when aggregated with the shares of Series A2-0 Convertible Preferred Stock currently owned by the Reporting Person, into greater than 5% of the issued

and outstanding Common Stock of the Issuer. The number of shares of Series A2 Convertible Preferred Stock issuable upon achievement of the second milestone under the Joint Development Agreement is based on a percentage of the issued and outstanding shares of capital stock of the Issuer at that time determined on a fully diluted basis and is not determinable at this time. The Reporting Person disclaims beneficial ownership of all such shares other than those issuable upon conversion of the 155,724 shares of Series A2-0 Convertible Preferred Stock currently owned by the Reporting Person.

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

As of August 15, 2005, the Reporting Person owns 3%(1) of the Common Stock outstanding on March 31, 2005, based on the Reporting Person s ownership as of August 15, 2005 of 155,724 shares of Series A2-0 Convertible Preferred Stock. This assumes the conversion of these shares into shares of Common Stock as of such date).

Upon the later of successful achievement of the second milestone under the Joint Development Agreement (as hereinafter defined) or, if such milestone is achieved prior to September 15, 2005, on October 15, 2005, the Reporting Person will have the right to acquire additional shares of Series A2 Convertible Preferred Stock and Series B Convertible Preferred Stock which may be converted, when aggregated with the shares of Series A2-0 Convertible Preferred Stock currently owned by the Reporting Person, into greater than 5% of the issued and outstanding Common Stock of the Issuer. The number of shares of Series A2 Convertible Preferred Stock issuable upon achievement of the second milestone under the Joint Development Agreement is based on a percentage of the issued and outstanding shares of capital stock of the Issuer at that time determined on a fully diluted basis and is not determinable at this time. The Reporting Person disclaims beneficial ownership of all such shares other than those issuable upon conversion of the 155,724 shares of Series A2-0 Convertible Preferred Stock currently owned by the Reporting Person.

(1) This percentage is based on 51,835,805 shares of Common Stock outstanding as of April 25, 2005, the date on which the Series A-0 Convertible Preferred Stock that was exchanged for the Series A2-0 Convertible Preferred Stock was issued to the Reporting Person. The number of outstanding shares of Common Stock is the sum of (A) 42,445,487 as reported on the Issuer's Form 10-Q for the quarter ended March 31, 2005, (B) 1,290,323 (conversion of Additional Debentures), (C) 231,218 (ZLP 2002 Warrants), (D) 6,311,537 (based on the Series C2 Convertible Preferred Stock holders ownership as of April 25, 2005 of 10,000 shares of Series C2 Convertible Preferred Stock, assuming the conversion of these shares into shares of Common Stock as of such date) and (E) 1,557,240 (based on the Reporting Person's ownership of 155,724 shares of Series A2-0 Convertible Preferred Stock, assuming the conversion of these shares into shares of Common Stock as of such date). This percentage does not include any shares issuable upon the achievement of the second milestone under the Joint Development Agreement.

12 TYPE OF REPORTING PERSON

CO

CUSIP No. 60038B105	13G	Page 3 of 16
Item 1(a). Name of Issuer:		
Millennium Cell Inc.		
Item 1(b). Address of Issuer s Principal Executiv	ve Offices:	
1 Industrial Way West		
Eatontown, NJ 07724		
Item 2(a). Name of Person Filing:		
The Dow Chemical Company		
Item 2(b). Address of Principal Business Office of	r, if None, Residence:	
2030 Dow Center		
Midland, MI 48674		
Item 2(c). Citizenship:		
Delaware		
Item 2(d). Title of Class of Securities:		
Common Stock		
Item 2(e). CUSIP Number:		

#### 60038B105

### Item 3. If this statement is filed pursuant to § 240.13d-1(b) or § 240.13d-2(b) or (c), check whether the person filing is a:

- (a) "Broker or dealer registered under Section 15 of the Act.
- (b) "Bank as defined in Section 3(a)(6) of the Act.
- (c) "Insurance company as defined in section 3(a)(19) of the Act.
- (d) "Investment company registered under section 8 of the Investment Company Act of 1940.
- (e) "An investment adviser in accordance with § 240.13(d)-1(b)(1)(ii)(E);
- (f) "An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F); (As to Courts Foundation)
- (g) " A parent holding company or control person in accordance with § 240-13d-1(b)(ii)(G).
- (h) " A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940;
- (j) "Group, in accordance with § 240.13d-1(b)(1)(ii)(J).

If this statement is filed pursuant to Rule 13d-1(c), check this box. x

CUSIP No. 60038B105 13G Page 4 of 16

#### Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

On April 25, 2005, The Dow Chemical Company, a Delaware corporation ( Dow ) and Millennium Cell Inc., a Delaware corporation ( Millennium Cell ) completed the first closing (the First Closing ) of the transactions contemplated by the Stock Purchase Agreement entered into between Dow and Millennium Cell on February 27, 2005 (as amended by Dow and Millennium Cell on April 25, 2005) (the Stock Purchase Agreement ). The Stock Purchase Agreement was entered into in connection with the formation of a joint development arrangement between Dow and Millennium Cell. The purpose of the joint development arrangement is to develop portable energy solutions using certain processes currently being developed by Millennium Cell to produce hydrogen gas for use by fuel cells. At the First Closing, Millennium Cell issued to Dow 155,724 shares of Series A-0 Convertible Preferred Stock, par value \$.001 per share (the Series A-0 Preferred ) which were convertible as of that date into 1,557,240 shares of Common Stock of Millennium Cell representing approximately 3% of the issued and outstanding capital stock of Millennium Cell on a fully diluted basis.

On May 31, 2005 Millennium Cell offered to exchange (the Exchange Offer) the shares of Series A-0 Preferred held by Dow for shares of Series A2-0 Convertible Preferred Stock, par value \$.001 per share (the Series A2-0 Preferred). On June 30, 2005, Dow and Millennium Cell consummated the Exchange Offer and, as a result, Dow now owns 155,724 shares of Series A2-0 Preferred which were convertible as of that date into 1,557,240 shares of Common Stock of Millennium Cell. The terms of the Series A2 Preferred Convertible Preferred Stock, par value \$.001 per share (the Series A2 Preferred which includes the Series A2-0 Preferred and any other subseries of Series A2 Preferred) are identical to those of the Series A-0 Preferred, except that the number of votes to which each holder of shares of Series A2 Preferred is entitled (equal to the number of shares of the Common Stock into which such holder s shares of Series A2 Preferred would be convertible on the record date for the applicable vote or consent of stockholders) is not subject to any adjustment based on price-based anti-dilution protections that would otherwise occur prior to such record date.

The Stock Purchase Agreement is attached as Exhibit 10.1 to the Current Report on Form 8-K filed by Millennium Cell with the SEC on February 28, 2005 and Amendment No. 1 to the Stock Purchase Agreement is attached as Exhibit 10.9 to the Current Report on Form 8-K filed by Millennium Cell with the SEC on April 26, 2005 and the terms and conditions of the Stock Purchase Agreement, as amended, are hereby incorporated herein by reference. Forms of each of a Joint Development Agreement, a Cross Licensing and Intellectual Property Agreement, a Patent Assignment Agreement and License, an Investor Rights Agreement, a Registration Rights Agreement, a Warrant, and a Standstill Agreement (the Transaction Agreements ) were included as Exhibits 10.2, 10.3, 10.4, 10.6, 10.7 and 10.8, respectively, to the Current Report on Form 8-K filed by Millennium Cell with the SEC on February 28, 2005. A brief description of the Joint Development Agreement, Stock Purchase Agreement, as amended, and the other Transaction Agreements entered into by Dow and Millennium Cell on April 25, 2005 is set forth below. The description of each of the Stock Purchase Agreement, Joint Development Agreement, and each of the other Transaction Agreements set forth below is qualified in its entirety by the terms and conditions of the Stock Purchase Agreement, the Joint Development Agreement and the other Transaction Agreements.

CUSIP No. 60038B105 13G Page 5 of 16

#### Joint Development Agreement

The Joint Development Agreement describes the terms and conditions under which Dow and Millennium Cell will jointly develop portable energy solutions using certain processes currently being developed by Millennium Cell to produce hydrogen gas for use by fuel cells. The Joint Development Agreement has a three year term. Dow or Millennium Cell may terminate the Joint Development Agreement before the end of its term based on several factors described in the Joint Development Agreement. Dow may terminate the Joint Development Agreement for any reason upon 30 days notice.

The Joint Development Agreement describes a series of five milestones designed to result in a commercially available portable energy solution. The activities to be performed by Millennium Cell for each milestone fall into two separate categories: military objectives and consumer objectives. Each milestone is achieved by Millennium Cell successfully completing either the military objective or consumer objective described in the Joint Development Agreement for the applicable milestone. Dow is obligated to use commercially reasonable efforts to provide Millennium Cell the services of Dow employees for a specified number of hours per week for each milestone. Upon the successful completion of each milestone Dow will become entitled to the compensation described below under the caption *Stock Purchase Agreement*.

The Joint Development Agreement contains representations and warranties by Millennium Cell concerning its business, including its intellectual property (which representations and warranties survive termination of the Joint Development Agreement for specified periods of time). Millennium Cell agrees to indemnify Dow for, among other things, breaches of Millennium Cell s representations and warranties, third party actions, including those related to patent infringement and product liability, and breaches by Millennium Cell of applicable law. Millennium Cell s indemnification obligations are not subject to any maximum dollar limitation.

### **Stock Purchase Agreement**

The Stock Purchase Agreement describes the compensation Dow is entitled to receive after Millennium Cell successfully achieves each of the milestones described in the Joint Development Agreement. Such compensation is summarized as follows:

Millennium Cell achieved the first milestone on April 25, 2005 by entering into the Transaction Agreements. At the First Closing, Dow received 155,724 shares of Series A-0 Preferred, representing approximately 3% of Millennium Cell s outstanding capital stock on a fully diluted basis on the date of issuance. The Series A-0 Preferred was subsequently exchanged for Series A2-0 Preferred in the Exchange Offer.

Upon the successful completion of the second through fifth milestones, Dow has the right to purchase a certain number of shares of Millennium Cell s Series B Convertible Preferred Stock (Series B Preferred); provided, however, that if the second milestone is achieved prior to September 15, 2005, Dow s right to acquire additional shares will not occur until October 15, 2005. The number of shares of Series B Preferred Dow may purchase after the completion of

CUSIP No. 60038B105 13G Page 6 of 16

each of the second through fifth milestones is equal the number of shares of Common Stock that could be purchased for \$1,250,000 (based upon a purchase price equal to the volume weighted average price for the 30-trading day period prior to the date of issuance). In addition, if Dow purchases shares of Series B Preferred, Millennium Cell will grant Dow warrants (Warrants) to purchase the number of shares of Common Stock that equals 25% of the number of shares of Common Stock issuable upon the conversion of the shares of Series B Preferred purchased by Dow. Dow is not required to purchase any shares of Series B Preferred and the closing of any purchase of shares of Series B Preferred is subject to customary closing conditions. The terms and conditions of the Warrants are described below under the caption Warrants.

If Dow purchases shares of Series B Preferred in connection with the successful completion of the second milestone, Millennium Cell will issue to Dow the number of shares of Series A2 Preferred that is convertible, as of the date Millennium Cell issues such shares of Series A2 Preferred to Dow, into the number of shares of Common Stock which equals the greater of (i) 4% of the fully diluted capital of Millennium Cell or (ii) the number of shares of Common Stock that could be purchased for \$1,250,000 (based upon a purchase price equal to the volume weighted average price for the 30-trading day period prior to the date of issuance), in each case minus the number of shares of Common Stock that would be issued upon the conversion of the Series B Preferred and the exercise of the Warrants issued (if any) in connection with the second milestone.

If Dow purchases shares of Series B Preferred in connection with the successful completion of the third milestone, Millennium Cell will issue to Dow the number of shares of Series A2 Preferred that is convertible, as of the date Millennium Cell issues such shares of Series A2 Preferred to Dow, into the number of shares of Common Stock which is the greater of (i) 3% of the fully diluted capital of Millennium Cell or (ii) the number of shares of Common Stock that could be purchased for \$1,250,000 (based upon a purchase price equal to the volume weighted average price for the 30-trading day period prior to the date of issuance), in each case minus the number of shares of Common Stock issuable upon the conversion of the Series B Preferred and the exercise of the Warrants issued (if any) in connection with the third milestone.

If Dow purchases shares of Series B Preferred in connection with the successful completion of the fourth milestone, Millennium Cell will issue to Dow the number of shares of Series A2 Preferred Stock that is convertible, as of the date Millennium Cell issues such shares of Series A2 Preferred to Dow, into the number of shares of Common Stock which is the greater of (i) 5% of the fully diluted capital of Millennium Cell or (ii) the number of shares of Common Stock that could be purchased for \$1,250,000 (based upon a purchase price equal to the volume weighted average price for the 30-trading day period prior to the date of issuance), in each case minus the number of shares of Common Stock that would be issued upon the conversion of the Series B Preferred and the exercise of the Warrants issued (if any) in connection with the fourth milestone.

If Dow purchases shares of Series B Preferred in connection with the successful completion of the fifth milestone, Millennium Cell will issue to Dow the number of shares of Series A2 Preferred Stock that is convertible, as of the date Millennium Cell issues such shares of Series A2 Preferred to Dow, into the number of shares of Common Stock which is the greater of (i) 4.9% of the fully diluted capital of Millennium Cell or (ii) the number of shares of Common Stock that could be purchased for \$1,250,000 (based upon a purchase price equal to the volume weighted average price for the 30-trading day period prior to the date of issuance), in each case

CUSIP No. 60038B105 13G Page 7 of 16

minus the number of shares of Common Stock that would be issued upon the conversion of the Series B Preferred and the exercise of the Warrants issued (if any) in connection with the fifth milestone.

The Stock Purchase Agreement prohibits Dow from acquiring at any single closing shares of Series A2 Preferred, Series B Preferred and Warrants which in the aggregate represent more than 10% of the outstanding Common Stock on a fully diluted basis. If Dow elects not to purchase any shares of Series B Preferred upon the completion of any milestone, Millennium Cell is required to issue to Dow only one-half of the number of shares of Series A2 Preferred described above for the applicable milestone. However, even if Dow elects not to purchase any shares of Series B Preferred, the number of shares of Series A2 Preferred to be issued to Dow upon the successful completion of each of the second through fifth milestones will be at least the lesser of (i) the number of shares of Common Stock equal to \$625,000 divided by the volume weighted average price for the 30-trading day period prior to the issuance thereof, or (ii) 2% of the fully diluted capital stock of Millennium Cell.

For purposes of determining the number of shares of capital stock issuable under the Stock Purchase Agreement, the fully diluted capital stock of Millennium Cell will not include any derivative securities having an exercise, strike or conversion price in excess of the volume weighted average price of the Common Stock for the 30-trading day period immediately preceding such date.

Dow may refuse to accept any shares of the Series A2 Preferred which it is entitled to receive in connection with the successful completion of the milestones. If Dow refuses to accept any shares of Series A2 Preferred, Millennium Cell will hold those shares of Series A2 Preferred in reserve to be issued to Dow any at time during the 12 months following Dow s refusal to accept such shares. If any issuance by Millennium Cell of securities would cause Dow to own more than 19.9% of the fully diluted capital stock of Millennium Cell, Millennium Cell will hold the number of shares that equals the excess over 19.9% of the fully diluted capital stock of Millennium Cell that Dow would otherwise have acquired at such issuance in reserve for future issuance to Dow.

The Stock Purchase Agreement contains representations and warranties (which survive each closing) and indemnification provisions which are similar to the representations, warranties and indemnification provisions described above under the caption *Joint Development Agreement*.

### **Investor Rights Agreement**

The Investor Rights Agreement provides Dow with certain protections with respect to its ownership of Millennium Cell s capital stock.

So long as Dow holds at least 5% of the fully diluted capital stock of Millennium Cell, Dow may require Millennium Cell to purchase all or part of the shares of Millennium Cell s capital stock owned by Dow (the Put Right) if Millennium Cell does any of the following: (i) discontinues development of sub-50 watt power systems; (ii) incurs debt for borrowed money in excess of 50% of its current market capitalization; (iii) acquires assets, business operations or securities of a business not engaged in the delivery of sub-50 watt power systems for a purchase price in excess of its current market capitalization; or (iv) sells, licenses or transfers exclusive rights to any of its intellectual property necessary for its use of sub-50 watt power systems.

CUSIP No. 60038B105 13G Page 8 of 16

If Dow exercises its Put Right, Millennium Cell will pay Dow the greater of (x) the sum of the aggregate initial liquidation value of the issued and outstanding Series A2 Preferred, *plus* the total purchase price paid for the outstanding Series B Preferred (if any), *plus* the Warrant exercise price for the exercised Warrants (if any) and (y) an amount equal to the number of shares of Common Stock (on an as converted basis) that Dow may require Millennium Cell to purchase, *multiplied* by the volume weighted average price of the Common Stock for the 30-trading day period immediately preceding the date Dow required Millennium Cell to purchase any of Millennium Cell s capital stock owned by Dow (the Purchase Price ).

Millennium Cell will pay Dow 25% of the Purchase Price when Millennium Cell receives notice from Dow that it is requiring Millennium Cell to purchase shares of Millennium Cell s capital stock held by Dow (the Put Notice). Millennium Cell will pay Dow 25% of the Purchase Price within 180 days after Millennium Cell receives the Put Notice. Millennium Cell will pay Dow 5% of the Purchase Price on each 90 day anniversary of Millennium Cell s receipt of the Put Notice until Millennium Cell has paid the Purchase Price in full. When Millennium Cell pays Dow the first 25% of the Purchase Price, it will give Dow a promissory note for the remaining 75% of the Purchase Price. The promissory note will bear 12% annual interest and contain default and other provisions.

If Millennium Cell issues additional shares of its capital stock, Dow may purchase additional shares of Millennium Cell s capital stock so that Dow will still own the same percentage of Millennium Cell s capital stock after the issuance of additional shares that it owned before such additional issuance. Dow s right to purchase additional shares of Millennium Cell s capital stock is subject to certain exceptions for certain issuances of capital stock.

If Dow owns at least 5% of the outstanding shares of capital stock of Millennium Cell on a fully diluted basis, Dow may designate one person to serve as an observer to all meetings of Millennium Cell s Board of Directors and its committees. This person will be entitled to receive certain financial statements and budgets from Millennium Cell and to inspect Millennium Cell s facilities.

## **Registration Rights Agreement**

The Registration Rights Agreement applies to all of the Common Stock issuable upon conversion of the Series A2 Preferred and Series B Preferred, and upon the exercise of the Warrants. Before the fifth anniversary of the effective date of the Joint Development Agreement, Dow may demand two registrations, which will remain effective for at least six months each. In addition, as long as a registration statement registering shares of Common Stock issuable upon conversion of Millennium Cell s Series C Convertible Preferred Stock (the Series C Preferred ) is effective, Dow may demand a registration that will remain effective for at least six months or until the registration statement for the Common Stock issuable upon conversion of the Series C Preferred is no longer effective. If Millennium Cell registers securities held by any one other than Dow or the holders of Series C Preferred, then Dow may also demand to be included in any of those registrations. In connection with each registration, Millennium Cell will pay all registration expenses, subject to a \$50,000 cap on legal expenses if Dow is included on a registration statement requested by another holder of Millennium Cell s capital stock. If Dow

CUSIP No. 60038B105 13G Page 9 of 16

owns 5% of the fully diluted capital stock of Millennium Cell, Dow is required to enter into a lock-up agreement in the event of a registration of shares for sale by Millennium Cell, provided that Millennium Cell s officers, directors and 5% stockholders enter into the same lock-up agreement.

Millennium Cell will indemnify Dow, or any valid transferee of Dow s securities issued pursuant to the Stock Purchase Agreement, against any liabilities arising out of material misstatements or omissions set forth in the registration statement or any prospectus, subject to standard exceptions.

#### **Standstill Agreement**

The Standstill Agreement will be effective until the earlier of (i) April 25, 2008 and (ii) the first anniversary of the date Dow terminates the Joint Development Agreement (if any) for any reason other than cause (as defined in the Joint Development Agreement). As long as the Standstill Agreement is effective, Dow will not, directly or indirectly, either by itself or acting together with one or more persons, publicly or privately propose, encourage, solicit or participate in the solicitation of any person to acquire, offer to acquire or agree to acquire, by merger, tender offer, purchase or otherwise, Millennium Cell or more than 50% of the outstanding capital stock or assets of Millennium Cell. Beginning on April 25, 2005 until April 25, 2006, Dow will not, directly or indirectly, either by itself or acting together with one or more persons, make or participate in any solicitation of proxies in opposition to any recommendation of the Board of Directors of Millennium Cell with respect to voting securities of Millennium Cell.

### **Cross Licensing and Intellectual Property Agreement**

The Cross Licensing and Intellectual Property Agreement governs the licensing of certain background rights to each party, and the ownership and licensing of five categories of intellectual property rights which may arise under the Joint Development Agreement. The Cross Licensing and Intellectual Property Agreement, or any one or more licenses described in the Cross Licensing and Intellectual Property Agreement, may be terminated by either party if the other party does not materially comply with any of its obligations under the Cross Licensing and Intellectual Property Agreement, if the other party becomes bankrupt, or with 90 days notice to the other party. The ownership and licensing of intellectual property rights contributed to or arising under the Joint Development Agreement varies based upon whether the intellectual property will be used for fuel cells for energy generation (the Field of Use ) and whether the intellectual property is used in the (A) production of hydrogen gas for use by fuel cells by storing and chemically converting sodium borohydride or other boron hydride-fuel formulations into hydrogen by controlling the contact of an alkaline aqueous boron hydride solution with a contained solid catalyst comprised of a transition metal adhered to a substrate which promotes the chemical reaction between the boron hydride and water to release hydrogen gas, or (B) interconnections and related control strategies for the integration of a fuel cell and hydrogen generator systems for delivery of hydrogen gas produced by one of these means for conversion to power by a fuel cell (the Application ). The five categories of intellectual property rights are:

(i) intellectual property contributed by Dow for use under the Joint Development Agreement Dow will maintain all rights to such intellectual property except that Millennium Cell will receive a non-exclusive license to practice, make, have made and sell such intellectual property in the Field of Use and in connection with the Application;

CUSIP No. 60038B105 13G Page 10 of 16

- (ii) intellectual property contributed by Millennium Cell for use under the Joint Development Agreement Millennium Cell will maintain all rights to such intellectual property except that Dow will have a right of first refusal to practice, make, have made, sell and license such intellectual property as intended by Millennium Cell;
- (iii) intellectual property developed under the Joint Development Agreement with respect to intellectual property which relates to the Field of Use in connection with the Application, Millennium Cell will own, and have the exclusive right to use, all such intellectual property and Dow will have a right of first refusal to obtain an exclusive license to use such intellectual property as intended by Millennium Cell and most-favored nation treatment with respect to such intellectual property. For all intellectual property developed under the Joint Development Agreement which does not relate to the Field of Use in connection with the Application, Millennium Cell will own the intellectual property and Dow will have a non-exclusive, fully paid-up, royalty-free license to use the technology;
- (iv) intellectual property invented by Dow outside the Joint Development Agreement will be owned by Dow, and Millennium Cell will have no rights to such intellectual property; and
- (v) intellectual property invented by Millennium Cell outside of the Joint Development Agreement Millennium Cell will own such intellectual property and Dow will have no rights to such intellectual property.

The Cross Licensing and Intellectual Property Agreement specifies additional terms of Millennium Cell s licenses to Dow, including the right to grant sublicenses, duration and reporting requirements. The Cross Licensing and Intellectual Property Agreement also provides Dow with a right of first refusal in the case of an exclusive license or an exclusive transfer of certain intellectual property.

The Cross Licensing and Intellectual Property Agreement contains representations and warranties and indemnities which are similar to those described above in the caption *Joint Development Agreement*.

#### Patent Assignment Agreement and License

Under the Patent Assignment Agreement and License, Dow assigned ownership of background rights jointly developed with Millennium Cell prior to the date of the Joint Development Agreement to Millennium Cell. Under the Patent Assignment Agreement, Dow represents and warrants that it has the right to convey its interest in the background rights and agrees to assign its entire right, title, and interest in the background rights to Millennium Cell. Millennium Cell agrees to indemnify Dow for any claims arising from practice of the background rights. Millennium Cell agrees to grant Dow a paid up, worldwide, non-exclusive license to certain fields of use. Any license that Millennium Cell grants to Dow within the Field of Use and Application of the Cross Licensing and Intellectual Property Agreement will be on terms and conditions as least as favorable as any similar license granted by Millennium Cell to another party. Also, Millennium Cell s out-licensing of certain other intellectual property to Dow will be on terms and conditions as least as favorable as any similar license granted by Millennium Cell to another party.

CUSIP No. 60038B105 13G Page 11 of 16

#### **Description of Series A2 Preferred Stock**

The shares of Series A2 Preferred are divided into five different subseries. Each share of Series A2 Preferred is convertible into shares of Common Stock at a conversion rate equal to 10 shares of Common Stock for one share of Series A2 Preferred, subject to adjustment.

#### Liquidation

If Millennium Cell, or any of its subsidiaries whose assets constitute all or substantially all of the assets of the business of Millennium Cell, is liquidated, dissolved or wound up, or if Millennium Cell is sold to or merged with another company, each holder of Series A2 Preferred and Series B Preferred outstanding at that time will be entitled to receive, out of the assets of Millennium Cell available for distribution to its stockholders, before any payment will be made to the holders of any other classes of capital stock, an amount equal to, as applicable, either (A) the product of the number of the outstanding shares of each subseries of Series A2 Preferred (if any) held by such holder of Series A2 Preferred multiplied by the initial purchase price of each subseries of the Series A2 Preferred (the Series B Preferred multiplied by the initial purchase price of the outstanding shares of Series B Preferred (if any) held by such holder of Series B Preferred multiplied by the initial purchase price of the Series B Preferred plus any accrued and unpaid dividends on the Series B Preferred (the Series B Liquidation Preference ). After payment of (i) the Series B Liquidation Preference to each holder of Series B Preferred and (ii) the Series A2 Liquidation Preference to each holder of shares of Series A2 Preferred, any remaining assets and property of Millennium Cell available for distribution to stockholders will be distributed pro rata among the holders of Common Stock, other classes of capital stock ranking junior in liquidation to the Series A2 Preferred and the Series B Preferred, Series A2 Preferred and Series B Preferred, based on the number of shares of Common Stock held by each holder. For purposes of this distribution, each share of Series A2 Preferred or Series B Preferred would be convertible on the record date for any such distribution.

## **Adjustments to Conversion Price**

Adjustments to the conversion price and the conversion ratio of the Series A2 Preferred will be in the form of either or both of weighted average adjustment and full ratchet adjustment depending on the milestone for which the shares of Series A2 Preferred were issued. If Millennium Cell issues certain convertible debt or equity securities at a price less than the applicable conversion price these adjustment will be triggered. The following issuances, subject in some cases to quantity limitations, will not trigger any adjustment:

- (i) any securities to be issued to employees, officers or directors of, or consultants or advisors to, Millennium Cell under stock purchase or stock option plans or other arrangements that are approved by Millennium Cell s Board of Directors;
- (ii) any securities of any class or series issued or to be issued pursuant to any options or warrants (but not convertible debentures) outstanding as of the date of the Stock Purchase Agreement;
- (iii) any securities of any class or series issued or to be issued pursuant to the conversion or exercise of any securities issued in connection with the Stock Purchase Agreement;

CUSIP No. 60038B105	13G	Page 12 of 16
(iv) any securities of any class or series issued	d or to be issued pursuant to the Stock Purchase Agreement;	
(v) any securities issued for consideration oth	ner than cash pursuant to a merger, consolidation, acquisition or	r similar business combination;
(vi) any securities issued in connection with a	any stock split, stock dividend, recapitalization or similar transa	action by Millennium Cell;
(vii) any securities issued as consideration, w Millennium Cell;	hether in whole or in part, to any person or entity for providing	services or supplying goods to
	h is or will be, itself or through its subsidiaries or affiliates, and as of Millennium Cell and in which Millennium Cell receives re	
(ix) any securities issued pursuant to any equi	ipment leasing arrangement;	
thereof to acquire shares of Common Stock at	n of any investment banking, finders or similar fee or commissi t a price not less than the market price of the Common Stock or than on account of stock splits and reverse stock splits; and	
(xi) other securities as may be mutually agree	ed in writing prior to their issuance by Dow and Millennium Ce	bl1.
to convert each share of Series A2 Preferred a	onvert their shares of Series A2 Preferred at any time. Dow has after the first anniversary of the achievement of the fifth milestox for the 30-trading day period immediately preceding such electreferred.	one at any time that the volume
number of votes to which each holder of shar which such holder s shares of Series A2 Pref	the right to vote with the Common Stock as a single class on an es of Series A2 Preferred will be entitled (equal to the number ferred would be convertible on the record date for the applicable ce-based anti-dilution protections that would otherwise occur p	of shares of the Common Stock into e vote or consent of stockholders) will
	nber of shares issued to Dow in connection with the Stock Purcave an adverse effect on the Series A2 Preferred, without the co	

majority of the Series A2 Preferred.

CUSIP No. 60038B105 13G Page 13 of 16

For the first six months after Millennium Cell issues Dow any shares of Series A2 Preferred, Dow may not transfer those shares of Series A2 Preferred or any shares of Common Stock issuable upon conversion of those shares of Series A2 Preferred.

#### **Description of Series B Preferred Stock**

The shares of Series B Preferred are divided into four different subseries. Each share of Series B Preferred will be convertible into shares of Common Stock at a conversion rate equal to 10 shares of Common Stock for one share of Series B Preferred, subject to adjustment. Adjustments to the conversion price and the conversion ratio of the Series B Preferred will be identical to that of the Series A2 Preferred described above in Description of Series A2 Preferred Stock. Millennium Cell will pay the holders of Series B Preferred quarterly dividends in cash equal to 6% of the price the holder of Series B Preferred paid for the shares of Series B Preferred Stock. The Series B Liquidation Preference is described above in Description of Series A2 Preferred Stock.

The shares of Series B Preferred will have conversion and voting rights, as well as elective conversion by Millennium Cell and transfer restrictions, that are identical to those granted to the Series A2 Preferred. In addition, at any time that the volume weighted average price of the Common Stock for any five consecutive day trading period is less than \$0.50 per share (as adjusted for certain changes in the capital stock of Millennium Cell), Dow will have the right to put the shares of Series B Preferred to Millennium Cell at a per share price equal to \$0.50 per share for a six month period following such five consecutive day trading period.

#### **Description of Warrants**

The Warrants will be fully vested upon issuance and will have a five year term. The Warrants will be exercisable for shares of Common Stock at a per share purchase price, in cash, equal to 120% of the volume weighted average price of the Common Stock for the 30-trading day period immediately preceding the date of issuance. The Warrants will also be subject to a six-month holding period from the date of grant. Subject to a 30-trading day period with a minimum trading volume equal to at least 15 times the average daily trading volume of the Common Stock during calendar years 2003 and 2004, Millennium Cell will be able to force the exercise of the Warrants at any time that the volume weighted average price of the Common Stock for the 30-trading day period immediately preceding the determination to do so is at least four times the exercise price of such Warrants; provided, that upon such election by Millennium Cell, Dow will have the right to sell or transfer such Warrants (or the Common Stock underlying such Warrants) to a third-party who will be required to exercise the Warrants, subject to applicable law. If, within 10 business days of such election by Millennium Cell, Dow has not exercised, or sold or transferred, such Warrants to a third party or, if so sold or transferred, such third party has not exercised such Warrants, then the Warrants immediately terminate. The Warrants will be subject to standard anti-dilution protection for stock dividends and splits, combinations, mergers, consolidations, etc.

The shares of Common Stock issuable upon the exercise of the Warrants will be subject to Dow s registration rights under the Registration Rights Agreement.

13G

(b) Percent of class: As of August 15, 2005, the Reporting Person owns 3%(1) of the Common Stock outstanding on March 31, 2005, based on the Reporting Person s ownership as of August 15, 2005 of 155,724 shares of Series A2-0 Convertible Preferred Stock. This assumes the conversion of these shares into shares of Common Stock as of such date). Upon the later of successful achievement of the second milestone under the Joint Development Agreement (as hereinafter defined) or, if such milestone is achieved prior to September 15, 2005, on October 15, 2005, the Reporting Person will have the right to acquire additional shares of Series A2 Convertible Preferred Stock and Series B Convertible Preferred Stock which may be converted, when aggregated with the shares of Series A2-0 Convertible Preferred Stock currently owned by the Reporting Person, into greater than 5% of the issued and outstanding Common Stock of the Issuer. The number of shares of Series A2 Convertible Preferred Stock issuable upon achievement of the second milestone under the Joint Development Agreement is based on a percentage of the issued and outstanding shares of capital stock of the Issuer at that time determined on a fully diluted basis and is not determinable at this time. The Reporting Person disclaims beneficial ownership of all such shares other than those issuable upon conversion of the 155,724 shares of Series A2-0 Convertible Preferred Stock currently owned by the Reporting Person. This percentage is based on 51,835,805 shares of Common Stock outstanding as of April 25, 2005, the date on which the Series A-0 Convertible Preferred Stock that was exchanged for the Series A2-0 Convertible Preferred Stock was issued to the Reporting Person. The number of outstanding shares of Common Stock is the sum of (A) 42,445,487 as reported on the Issuer s Form 10-Q for the quarter ended March 31, 2005, (B) 1,290,323 (conversion of Additional Debentures), (C) 231,218 (ZLP 2002 Warrants), (D) 6,311,537 (based on the Series C2 Convertible Preferred Stock holders ownership as of April 25, 2005 of 10,000 shares of Series C2 Convertible Preferred Stock,

assuming the conversion of these shares into shares of Common Stock as of such date) and (E) 1,557,240 (based on the Reporting Person s ownership of 155,724 shares of Series A2-0 Convertible Preferred Stock, assuming the conversion of these shares into shares of Common Stock as of such date). This percentage does not include any shares issuable upon the achievement of the second milestone under the Joint

(c) Number of shares as to which such person has:

(i) Sole power to vote or to Direct the Vote:

Development Agreement.

CUSIP No. 60038B105

As of August 15, 2005, the Reporting Person beneficially owns 1,557,240 shares of Common Stock based on the Reporting Person s ownership as of that date of 155,724 shares of Series A2-0 Convertible Preferred Stock. This assumes the conversion of these shares into shares of Common Stock as of such date.

Upon the later of successful achievement of the second milestone under the Joint Development Agreement (as hereinafter defined) or, if such milestone is achieved prior to September 15, 2005, on October 15, 2005, the Reporting Person will have the right to acquire additional shares of Series A2 Convertible Preferred Stock (the Series A2 Convertible Preferred Stock includes the Series A2-0 and any other subseries of Series A2 Convertible Preferred Stock which may be converted, when aggregated with the shares of Series A2-0 Convertible Preferred Stock currently owned by the Reporting Person, into greater than 5% of the issued and outstanding Common Stock of the Issuer. The number of shares of Series A2 Convertible Preferred Stock issuable upon achievement of the second milestone under the Joint Development Agreement is based on a percentage of the issued and outstanding shares of capital stock of the Issuer at that time determined on a fully diluted basis and is not determinable at this time. The Reporting Person disclaims beneficial ownership of all such shares other than those issuable upon conversion of the 155,724 shares of Series A2-0 Convertible Preferred Stock currently owned by the Reporting Person.

Page 14 of 16

CUSIP No. 60038B105	13G	Page 15 of 16
(ii) Shared power to vote or to Direct the Vote	:: O	
(iii) Sole power to Dispose or to Direct the Dis	sposition:	
	beneficially owns 1,557,240 shares of Common Stock to Convertible Preferred Stock. This assumes the convertible Preferred Stock.	
milestone is achieved prior to September 15, 2 Series A2 Convertible Preferred Stock (the Se other subseries of Series A2 Convertible Prefe with the shares of Series A2-0 Convertible Pre outstanding Common Stock of the Issuer. The second milestone under the Joint Developmen Issuer at that time determined on a fully dilute	the second milestone under the Joint Development Agree 2005, on October 15, 2005, the Reporting Person will be cries A2 Convertible Preferred Stock includes the Series are d Stock) and Series B Convertible Preferred Stock referred Stock currently owned by the Reporting Person anumber of shares of Series A2 Convertible Preferred Stock at Agreement is based on a percentage of the issued and ad basis and is not determinable at this time. The Report on conversion of the 155,724 shares of Series A2-0 Co	have the right to acquire additional shares of as A2-0 Convertible Preferred Stock and any which may be converted, when aggregated and, into greater than 5% of the issued and Stock issuable upon achievement of the dioutstanding shares of capital stock of the rting Person disclaims beneficial ownership
(iv) Shared power to Dispose or to Direct the l	Disposition: 0	
Item 5. Ownership of Five Percent or Less of	of a Class.	
If this statement is being filed to report the fac five percent of the class of securities, check th	et that as of the date hereof the Reporting Person has cone following	eased to be the beneficial owner of more than
Item 6. Ownership of More than Five Perce	ent on Behalf of Another Person.	
such securities, a statement to that effect should class, such person should be identified. A listing	to receive or the power to direct the receipt of dividend be included in response to this item and, if such intended of the shareholders of an investment company regist plan, pension fund or endowment fund is not required.	rest relates to more than five percent of the stered under the Investment Company Act of
N/A		

CUSIP No. 60038B105	13G	Page 16 of 16
Item 7. Identification and Classification of the Company.	e Subsidiary Which Acquired the Security Being Ro	eported on By the Parent Holding
	ule, pursuant to Rule 13-d-1(b)(ii)(G), so indicate underlevant subsidiary. If a parent holding company has fil ion of the relevant subsidiary.	
N/A		
Item 8. Identification and Classification of Mo	ember of the Group.	
	240.13d-1(b)(ii)(J), so indicate under Item 3(h) and atta a group has filed this schedule pursuant to § 240.13d-1	
N/A		
Item 9. Notice of Dissolution of Group.		
	ed as an exhibit stating the date of the dissolution and tiled, if required, by members of the group, in their indi	
N/A		
Item 10. Certifications.		
	wknowledge and belief, the securities referred to above influencing the control of the issuer of the securities arction having that purpose or effect.	

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

August 15, 2005

Date

/s/ Charles J. Kalil

Signature

Name/Title Charles J. Kalil Corporate Vice President, General Counsel and Secretary The Dow Chemical Company