

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

MILLENNIUM CHEMICALS INC
Form S-4
June 13, 2003

AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON JUNE 13, 2003
REGISTRATION NOS. 333-99341
99341-01

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-4
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

MILLENNIUM AMERICA INC.
(EXACT NAME OF CO-REGISTRANT ISSUER AS SPECIFIED IN ITS CHARTER)
MILLENNIUM CHEMICALS INC.
(EXACT NAME OF CO-REGISTRANT GUARANTOR AS SPECIFIED IN ITS CHARTER)

DELAWARE (STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION) 98-004579 (I.R.S. EMPLOYER IDENTIFICATION NO.) MILLENNIUM AMERICA INC. 230 HALF MILE ROAD RED BANK, NEW JERSEY 07701 (732) 933-5000 (ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF CO-REGISTRANTS' PRINCIPAL EXECUTIVE OFFICES)	2816 (PRIMARY STANDARD INDUSTRIAL CLASSIFICATION CODE NUMBERS) 22-3436215 (I.R.S. EMPLOYER IDENTIFICATION NO.) MILLENNIUM CHEMICALS INC. 230 HALF MILE ROAD RED BANK, NEW JERSEY 07701 (732) 933-5000 (ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF CO-REGISTRANTS' PRINCIPAL EXECUTIVE OFFICES)
--	--

C. WILLIAM CARMEAN, ESQ.
SENIOR VICE PRESIDENT -- GENERAL COUNSEL AND SECRETARY
MILLENNIUM CHEMICALS INC.
230 HALF MILE ROAD
RED BANK, NEW JERSEY 07701
(732) 933-5000
(NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE,
OF AGENT FOR SERVICE)

COPY TO:
STEPHEN H. COOPER, ESQ.
WEIL, GOTSHAL & MANGES LLP
767 FIFTH AVENUE
NEW YORK, NEW YORK 10153
(212) 310-8000

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED EXCHANGE OFFER: As soon as practicable after the effective date of this Registration Statement.

If the securities being registered on this form are being offered in

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. []

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. []

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. []

 CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED	PROPOSED MAXIMUM OFFERING PRICE PER NOTE(1)	PROPOSED MAXIMUM AGGREGATE OFFERING P
9 1/4% Senior Notes due 2008.....	\$100,000,000	100%	\$100,000
Guarantee of 9 1/4% Senior Notes due 2008.....	\$100,000,000	(2)	(2)

- (1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(f) under the Securities Act.
 (2) No separate filing fee is required pursuant to Rule 457(n) under the Securities Act.

 THE CO-REGISTRANTS HEREBY AMEND THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE CO-REGISTRANTS SHALL FILE A FURTHER AMENDMENT WHICH SHALL SPECIFICALLY STATE THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933, AS AMENDED, OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

THE INFORMATION IN THIS PRELIMINARY PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SEC IS EFFECTIVE. THIS PRELIMINARY PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

(SUBJECT TO COMPLETION, DATED , 2003)

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

PROSPECTUS

[MILLENNIUM LOGO]

MILLENNIUM AMERICA INC.
\$100,000,000
OFFER TO EXCHANGE ALL OUTSTANDING
UNREGISTERED 9 1/4% SENIOR NOTES DUE 2008
FOR
9 1/4% SENIOR NOTES DUE 2008
WHICH HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933

We are offering to exchange all of our outstanding unregistered 9 1/4% Senior Notes due 2008 for new notes with substantially identical terms which have been registered under the Securities Act of 1933, as amended, and will not bear any legend restricting their transfer. The exchange notes offered hereby will represent the same debt as the outstanding unregistered notes, will be fully and unconditionally guaranteed by our parent Millennium Chemicals Inc., and will be issued under the same indenture as the outstanding unregistered notes.

In this prospectus, the exchange notes offered hereby will be called 'exchange notes,' unless otherwise indicated.

The principal features of the exchange offer are as follows:

Expires 5:00 p.m., New York City time, on _____, 2003, unless extended.

We will exchange all outstanding unregistered notes that are validly tendered and not validly withdrawn prior to the expiration date of the exchange offer.

You may withdraw tendered outstanding unregistered notes at any time prior to the expiration of the exchange offer.

The exchange of outstanding unregistered notes for exchange notes offered hereby pursuant to the exchange offer will be a tax-free event for United States federal income tax purposes.

We will not receive any proceeds from the exchange offer.

We do not intend to apply for listing of the exchange notes on any securities exchange or automated quotation system.

The exchange notes will bear the same CUSIP number, and will be interchangeable with, our outstanding registered 9 1/4% Senior Notes due 2008.

INVESTING IN THE EXCHANGE NOTES INVOLVES RISKS THAT ARE DESCRIBED IN THE 'RISK FACTORS' SECTION BEGINNING ON PAGE 11 OF THIS PROSPECTUS.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

THE DATE OF THIS PROSPECTUS IS _____, 2003.

TABLE OF CONTENTS

	PAGE

Summary.....	2
Risk Factors.....	11
Use of Proceeds.....	23
Selected Financial Data of Millennium Chemicals Inc.....	24
Description of Certain Other Indebtedness.....	27
The Exchange Offer.....	29
Description of the Exchange Notes.....	40
Book-Entry Procedures.....	83
Federal Income Tax Considerations.....	85
Plan of Distribution.....	86
Legal Matters.....	86
Independent Experts.....	86
Where You Can Find More Information.....	86
Incorporation By Reference.....	87
Forward-Looking Statements.....	88

This prospectus incorporates important business and financial information about Millennium Chemicals and Millennium America that is not included or delivered with this prospectus. This information is available without charge to you upon written or oral request. Requests should be made to: Millennium Chemicals Inc., 230 Half Mile Road, Red Bank, New Jersey, 07701, telephone: (732) 933-5000, Attention: Corporate Secretary.

TO OBTAIN TIMELY DELIVERY OF THOSE MATERIALS, YOU MUST REQUEST THE INFORMATION NO LATER THAN _____, 2003, WHICH IS FIVE BUSINESS DAYS BEFORE THE EXPIRATION DATE OF THE EXCHANGE OFFER.

1

SUMMARY

This section highlights some of the information contained or incorporated by reference in this prospectus. Because this is only a summary, it may not include all the information that is important to you. To understand this exchange offer, you should read the entire prospectus, especially Risk Factors, and the documents incorporated by reference before making a decision. Unless the context requires otherwise, in this prospectus the terms 'we,' 'us' and 'our' refer to

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Millennium America together with its consolidated subsidiaries, and the term 'Millennium Chemicals' refers to Millennium Chemicals Inc., the indirect parent of Millennium America and the guarantor of the outstanding registered and unregistered notes and the exchange notes offered hereby, and its consolidated subsidiaries.

MILLENNIUM CHEMICALS INC.

Millennium Chemicals is a major international chemical company, with leading market positions in a broad range of commodity, industrial, performance and specialty chemicals.

Millennium Chemicals has three business segments: Titanium Dioxide and Related Products; Acetyls; and Specialty Chemicals. Millennium Chemicals also owns a 29.5% interest in Equistar Chemicals, LP, a joint venture owned by Millennium Chemicals and Lyondell Chemical Company. Millennium Chemicals accounts for its interest in Equistar as an equity investment.

Millennium Chemicals has leading market positions in the United States and the world:

Through Millennium Chemicals' Titanium Dioxide and Related Products business segment, it is the second-largest producer of titanium dioxide, or TiO_2 , in the world, with manufacturing facilities in the United States, the United Kingdom, France, Brazil and Australia. It is also the largest merchant seller of titanium tetrachloride, or $TiCl_4$, in North America and Europe and a producer of zirconia, silica gel and cadmium-based pigments;

Through Millennium Chemicals' Acetyls business segment, it is the second-largest producer of vinyl acetate monomer, or VAM, and acetic acid in North America and, through our 85% interest in La Porte Methanol Company LP ('La Porte Methanol Company'), a partner in a U.S. producer of methanol;

Through Millennium Chemicals' Specialty Chemicals business segment, it is a leading producer of terpene-based fragrance and flavor chemicals; and

Through Millennium Chemicals' 29.5% interest in Equistar, it is a partner in the second-largest producer of ethylene and the third-largest producer of polyethylene in North America, and a leading producer of performance polymers, oxygenated chemicals, aromatics and specialty petrochemicals.

References to Millennium Chemicals' and Equistar's market positions, with the exception of Millennium Chemicals' market position in the Specialty Chemicals business segment, are based on estimates of their respective production capacities, as compared to the production capacities of other industry participants. The reference to Millennium Chemicals' market position with respect to the Specialty Chemicals business segment is based on sales volumes of the Specialty Chemicals business segment, as compared to the estimated sales volumes of its competitors.

Estimates of the production capacities of Millennium Chemicals and Equistar are based upon engineering assessments by Millennium Chemicals and Equistar, respectively, and estimates of the production capacities (and sales volumes) of other industry participants are based on publicly available information from a variety of industry sources. Actual production may vary depending on a number of factors including feedstocks, product mix, unscheduled maintenance and demand.

Millennium Chemicals' common stock trades on the New York Stock Exchange under the ticker symbol 'MCH'.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Millennium Chemicals is incorporated in Delaware, the address of its principal executive offices is 230 Half Mile Road, Red Bank, New Jersey 07701 and its telephone number at that address is (732) 933-5000.

MILLENNIUM AMERICA INC.

We are an indirect wholly owned subsidiary of Millennium Chemicals. We are a holding company for all of Millennium Chemicals' operating subsidiaries other than its operations in the United Kingdom, France, Brazil and Australia. We are the issuer of the 7% Senior Notes due November 15, 2006, the 7.625% Senior Debentures due November 15, 2026 and the outstanding registered and unregistered 9 1/4% Senior Notes due 2008 and the principal borrower under Millennium Chemicals' bank credit agreement. All of our public indebtedness is fully and unconditionally guaranteed by Millennium Chemicals.

We are incorporated in Delaware, and the address of our principal executive offices is 230 Half Mile Road, Red Bank, New Jersey 07701. Our telephone number at that address is (732) 933-5000.

Broker-dealers receiving exchange notes for their own accounts in the exchange offer must deliver a prospectus in any resale of the exchange notes. By delivering a prospectus, a broker-dealer will not be deemed to admit that it is an 'underwriter' within the meaning of the Securities Act. This prospectus, as it may be amended or supplemented from time to time, may be used by a broker-dealer in connection with the resales of exchange notes received in exchange for outstanding unregistered notes where such outstanding unregistered notes were acquired by such broker-dealer as a result of market-making activities or other trading activities. Millennium America has agreed that, for a period of 180 days after the expiration date, it will make this prospectus available to any broker-dealer for use in connection with any such resale. See 'Plan of Distribution'.

3

THE OFFERING

We previously issued \$375,000,000 aggregate principal amount of 9 1/4% Senior Notes due 2008. On April 25, 2003, we completed the offering of an additional \$100 million aggregate principal amount of 9 1/4% Senior Notes due 2008 under the same indenture in a transaction that was exempt from registration under the Securities Act. We used the gross proceeds of \$109 million from the April 2003 note offering to repay \$85 million of outstanding indebtedness under the revolving credit facility of our bank credit agreement and have allocated the balance for general corporate purposes. The following is a brief summary of the April 2003 offering.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Outstanding unregistered notes..... We sold the outstanding unregistered notes to J.P. Morgan Securities Inc., Banc of America Securities LLC, BNP Paribas Securities Corp., Credit Lyonnais Securities (USA) Inc., Daiwa Securities SMBC Europe Limited and SG Cowen Securities Corporation, the initial purchasers, on April 25, 2003. The initial purchasers subsequently resold those notes to qualified institutional buyers pursuant to Rule 144A under the Securities Act and to non-U.S. persons outside the United States in reliance on Regulation S under the Securities Act.

Registration rights agreement..... In connection with the issuance of the outstanding unregistered notes, we and Millennium Chemicals entered into a registration rights agreement with the initial purchasers of those notes. Under the terms of that agreement we agree to:

file with the SEC on or before July 24, 2003 a registration statement for the exchange offer and the exchange notes;

use our reasonable efforts to cause that registration statement to become effective under the Securities Act on or before October 22, 2003 a registration statement for the exchange offer and the exchange notes; and

complete the exchange offer on or before November 21, 2003.

If we do not meet any of these requirements, we must pay liquidated damages to the holders of the outstanding unregistered notes until we meet the requirement. We have also agreed to keep the registration statement for the exchange offer effective for at least 30 days (or longer, required by applicable law) after the date for which notice of the exchange offer is mailed to holders of notes. The exchange offer is being made pursuant to the registration rights agreement and is intended to satisfy the rights granted under the registration rights agreement, which rights terminate upon completion of the exchange offer.

4

THE EXCHANGE OFFER

The following is a brief summary of the terms of the exchange offer. For a more complete description of the exchange offer, see 'The Exchange Offer' in this prospectus.

Securities offered..... \$100,000,000 aggregate principal amount of 9 1/4% Senior Notes due 2008.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Exchange offer..... We are offering to exchange \$1,000 principal amount of our 9 1/4% Senior Notes due 2008, which have been registered under the Securities Act, for each \$1,000 principal amount of our currently outstanding unregistered 9 1/4% Senior Notes due 2008. We will accept any and all outstanding unregistered notes validly tendered and not withdrawn prior to 5:00 p.m., New York City time on _____, 2003. Holders may tender some or all of their unregistered notes pursuant to the exchange offer. However, unregistered notes may be tendered only in integral multiples of \$1,000. The form and terms of the exchange notes are the same as the form and terms of the unregistered notes except that:

the exchange notes have been registered under the Securities Act and will not bear any legend restricting their transfer;

the exchange notes bear a different CUSIP number from the unregistered notes; and

the holders of the exchange notes will not be entitled to certain rights under the registration rights agreement, including the provisions for liquidated damages on the outstanding unregistered notes in some circumstances relating to the timing of the exchange offer.

Transferability of exchange notes.... We believe, based on an interpretation by the staff of the SEC outlined in a series of no-action letters issued to third parties, that you will be able to freely transfer the exchange notes without registration or any prospectus delivery requirement so long as you may accurately make the representations listed under 'The Exchange Offer -- Transferability of Exchange Notes.' If you are a broker-dealer that acquired outstanding unregistered notes as a result of market-making or other trading activities, you must deliver a prospectus in connection with any resale of the exchange notes. See 'Plan of Distribution.'

Expiration date..... The exchange offer will expire at 5:00 p.m., New York City time, on _____, 2003, unless we, in our sole discretion, extend the exchange offer.

Conditions to the exchange offer..... Notwithstanding any other term of the exchange offer, we shall not be required to accept for exchange, or exchange any exchange notes for, any outstanding unregistered notes and may terminate or amend the exchange offer as provided in this prospectus before the acceptance of outstanding unregistered notes, if certain events occur, including the following:

the exchange notes to be received will not be tradable by the holder without restrictions under the Securities Act or

the Exchange Act and without material restrictions under the blue sky or securities laws of substantially all of the states of the United States;

any action or proceeding is instituted or threatened in any court or by or before any governmental agency with respect to the exchange offer which, in our sole judgment, might materially impair our ability to proceed with the exchange offer or materially impair the contemplated benefits of the exchange offer to us;

any law, statute, rule, regulation or interpretation by the staff of the SEC is proposed, adopted or enacted, which, in our sole judgment, might impair our ability to proceed with the exchange offer or impair the contemplated benefits of the exchange offer to us; or

any governmental approval has not been obtained, which we believe, in our sole discretion, is necessary for the consummation of the exchange offer as outlined in this prospectus.

Procedures for tendering outstanding
unregistered notes.....

If you wish to accept the exchange offer, you must complete and sign and date the letter of transmittal, or a facsimile of the letter of transmittal, in accordance with the instructions contained in this prospectus and in the letter of transmittal. You should then mail or otherwise deliver the letter of transmittal, or facsimile, together with your unregistered notes to be exchanged and any other required documentation, to the exchange agent at the address set forth in this prospectus and in the letter of transmittal.

By executing the letter of transmittal, you will represent to us that, among other things:

you, or the person or entity receiving the exchange notes issued in exchange for your unregistered notes, will be acquiring the exchange notes in the ordinary course of business;

neither you nor any person or entity receiving the exchange notes issued in exchange for your unregistered notes is engaging in or intends to engage in a distribution of the exchange notes within the meaning of the Securities Act;

neither you nor any person or entity receiving the exchange notes issued in exchange for your unregistered notes has an arrangement or understanding with any person or entity to participate in any distribution of the exchange notes;

neither you nor any person or entity receiving the exchange notes issued in exchange for your unregistered notes is an 'affiliate' of Millennium Chemicals or Millennium America, as that term is defined under Rule 405 of the Securities Act; and

you are not acting on behalf of any person or entity who could not truthfully make these statements.

- Effect of not tendering..... Any outstanding unregistered notes that are not tendered or that are tendered but not accepted will remain subject to the restrictions on transfer. Since the outstanding unregistered notes have not been registered under the Securities Act, they bear a legend restricting their transfer absent registration or the availability of a specific exemption from registration. Upon the completion of the exchange offer, we will have no further obligations, except under limited circumstances, to provide for registration of the outstanding unregistered notes under the Securities Act.
- Interest on the exchange notes and the outstanding unregistered notes..... The exchange notes will bear interest from the most recent interest payment date to which interest has been paid on the tendered outstanding unregistered notes or, if no interest has been paid, from April 25, 2003. Interest on the outstanding unregistered notes accepted for exchange will cease to accrue upon the issuance of the exchange notes.
- Withdrawal rights..... Tenders of outstanding unregistered notes may be withdrawn at any time prior to 5:00 p.m., New York City time, on the expiration date.
- Federal tax consequences..... There will be no federal income tax consequences to you if you exchange your outstanding unregistered notes for exchange notes in the exchange offer.
- Regulatory Approvals..... Other than the federal securities laws, there are no federal or state regulatory requirements that we must comply with and there are no approvals that we must obtain in connection with the exchange offer.
- Exchange agent..... The Bank of New York, the trustee under the indenture, is serving as exchange agent in connection with the exchange offer.

TERMS OF THE EXCHANGE NOTES

The following is a brief summary of the terms of the exchange notes offered hereby. The financial terms and covenants of the exchange notes are the same as the terms of the outstanding 9 1/4% Senior Notes due 2008, including the outstanding unregistered notes. The exchange notes will bear the same CUSIP number as outstanding registered notes and are to be interchangeable with the registered notes. For a more complete description of the terms of the exchange notes, see 'Description of Exchange Notes' in this prospectus.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Issuer..... Millennium America Inc.

Notes offered..... \$100,000,000 in aggregate principal amount of 9 1/4% Senior Notes due 2008.

Maturity date..... June 15, 2008.

Interest payment dates..... Payment frequency: every six months on June 15 and December 15.

First interest payment date..... , 2003.

Optional redemption..... We may redeem some or all of the exchange notes at any time at the make-whole redemption price described in the section

7

entitled 'Description of the Exchange Notes -- Optional Redemption.'

In addition, at any time and from time to time prior to June 15, 2004, we may redeem up to 35% of the principal amount of the 9 1/4% Senior Notes due 2008 (calculated after giving effect to any issuance of notes on or subsequent to June 18, 2001) with the net cash proceeds of certain equity offerings at a redemption price equal to 109.25% of the principal amount thereof, plus accrued and unpaid interest and liquidated damages thereon, if any, to the redemption date so long as, after giving effect to any such redemption (1) at least 65% of the principal amount of the 9 1/4% Senior Notes due 2008 (calculated after giving effect to any issuance of notes on or subsequent to June 18, 2001) remain outstanding and (2) any such redemption by us is made within 60 days of such equity offering.

We may also redeem all but not part of the exchange notes if there are specified changes in tax law at a redemption price equal to 100% of the principal amount of the exchange notes plus accrued and unpaid interest and liquidated damages thereon, if any, to the date of redemption.

Sinking fund..... None.

Change of control..... Upon the occurrence of a change of control, you will have the right to require us to repurchase all or a portion of your exchange notes at a purchase price in cash equal to 101% of the principal amount thereof, plus accrued and unpaid interest and liquidated damages thereon, if any, to the date of repurchase.

Note guarantee..... The exchange notes will be irrevocably fully and unconditionally guaranteed (the 'note guarantee') on an unsecured senior basis by Millennium Chemicals. The exchange

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

notes will not be guaranteed by any of Millennium Chemical subsidiaries. As of March 31, 2003, these subsidiaries (other than Millennium America) had approximately \$240 million of trade payables and \$24 million of total indebtedness outstanding (exclusive of unused commitments and \$9 million of undrawn outstanding standby letters of credit) and held approximately 99% of Millennium Chemicals consolidated assets. For the three months ended March 31, 2003 and the year ended December 31, 2002, these subsidiaries generated approximately 100% of Millennium Chemicals' consolidated net sales.

Security and ranking..... The exchange notes:

will be general unsecured, senior obligations of Millennium America;

will rank equally in right of payment with all existing and future senior indebtedness of Millennium America;

will be senior in right of payment to all future subordinated obligations of Millennium America;

will be effectively subordinated to any secured indebtedness of Millennium America and its subsidiaries

8

to the extent of the value of the assets securing such indebtedness; and

will be effectively subordinated to all liabilities (including trade payables) and preferred stock of each subsidiary of Millennium America.

The note guarantee of Millennium Chemicals:

will be a general unsecured, senior obligation of Millennium Chemicals;

will rank equally in right of payment with all existing and future senior indebtedness of Millennium Chemicals;

will be senior in right of payment to all future subordinated obligations of Millennium Chemicals;

will be effectively subordinated to any secured indebtedness of Millennium Chemicals and its subsidiaries to the extent of the value of the assets securing such indebtedness; and

will be effectively subordinated to all liabilities (including trade payables) and preferred stock of each subsidiary of Millennium Chemicals (other than Millennium

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

America).

As of March 31, 2003, on a pro forma basis to give effect to the issuance of the outstanding unregistered notes on April 25, 2003, and the use of proceeds thereof as described in 'The Offering':

Millennium America, excluding its consolidated subsidiaries, would have had approximately \$1,297 million of senior indebtedness (including the outstanding unregistered notes), of which \$48 million would have been secured indebtedness under the bank credit agreement (exclusive of unused commitments under the bank credit agreement, and \$12 million of undrawn outstanding standby letters of credit);

Millennium Chemicals, excluding its consolidated subsidiaries, would have had approximately \$1,249 million of senior indebtedness, consisting of the note guarantee and its guarantee of Millennium America's other notes and debentures, none of which would have been secured indebtedness (in each case, exclusive of guarantees of indebtedness under the bank credit agreement and \$1 million of undrawn outstanding standby letters of credit);

Millennium Chemicals and Millennium America would have had no subordinated obligations; and

the subsidiaries of Millennium Chemicals (other than Millennium America) would have had \$240 million of trade payables and \$24 million of total indebtedness outstanding (exclusive of unused commitments and \$9 million of undrawn outstanding standby letters of credit). In addition, since each of Millennium Chemicals and Millennium America conducts all of its operations through its subsidiaries, the subsidiaries of Millennium Chemicals (other than Millennium America) have substantial operating liabilities

9

Certain covenants..... The indenture, among other things, restricts Millennium Chemicals', Millennium America's and the other restricted subsidiaries' ability to:

- incur additional debt;
- issue redeemable stock and preferred stock;
- pay dividends or make distributions;
- repurchase capital stock;
- make other restricted payments including, without

limitation, investments;

create liens;

redeem debt that is junior in right of payment to the no

sell or otherwise dispose of assets, including capital s
of subsidiaries;

enter into arrangements that restrict dividends from
subsidiaries;

enter into mergers or consolidations;

enter into transactions with affiliates; and

enter into sale/leaseback transactions.

These covenants will be subject to a number of important exceptions and qualifications. In addition, if we achieve certain debt ratings from Standard & Poor's and Moody's Investors Service and meet certain other requirements, certain of these covenants will no longer apply.

No assurance of liquid market for the
exchange notes.....

Although the exchange notes will trade with the currently outstanding registered 9 1/4% Senior Notes due 2008, there can be no assurance as to the liquidity of any market for those notes. The initial purchasers of the outstanding unregistered notes currently make a market in the outstanding registered notes. However, they are not obligated to do so, and may discontinue any market making with respect to those notes at any time without notice. We do not intend to apply for listing of the exchange notes on any securities exchange or to arrange for any quotation system to quote them.

Tax consequences.....

The ownership and disposition of the exchange notes have certain U.S. Federal tax consequences. For more details, see 'Certain Income Tax Considerations.'

Accounting Treatment.....

The exchange notes will be recorded at the same carrying value as the outstanding unregistered notes. The carrying value is the aggregate gross proceeds received from the sale of the unregistered notes as reflected in our accounting records on the date of exchange. Accordingly, we will recognize no gain or loss for accounting purposes. The expenses of the exchange offer will be expensed over the term of the exchange notes.

RISK FACTORS

You should consider carefully all of the information contained in or incorporated by reference into this prospectus and, in particular, should evaluate the specific factors under 'Risk Factors' beginning on page 11 before determining whether to participate in the exchange offer.

RISK FACTORS

You should carefully consider the following factors, together with the other information included or incorporated by reference in this prospectus, before determining whether to participate in the exchange offer. These factors, other than the first factor, are generally applicable to the outstanding unregistered notes as well as the exchange notes.

RISKS RELATING TO THE EXCHANGE NOTES

IF YOU FAIL TO EXCHANGE YOUR OUTSTANDING UNREGISTERED NOTES FOR EXCHANGE NOTES IN THE EXCHANGE OFFER, YOUR OUTSTANDING UNREGISTERED NOTES WILL CONTINUE TO BE SUBJECT TO TRANSFER RESTRICTIONS AND MAY HAVE REDUCED LIQUIDITY.

In the event the exchange offer is completed, holders of outstanding unregistered notes which have not been exchanged who seek liquidity in their investment would have to rely on exemptions to the registration requirements under the securities laws, including the Securities Act, since the outstanding unregistered notes will continue to be subject to restrictions on transfer. Consequently, holders of outstanding unregistered notes who do not participate in the exchange offer could experience significant diminution in the value of their outstanding unregistered notes, compared to the value of the exchange notes. Following the exchange offer, none of the exchange notes will be entitled to the contingent liquidated damages provided for in the event of a failure to complete the exchange offer in accordance with the terms of the registration rights agreement. In addition, we do not intend to register resales of the outstanding unregistered notes under the Securities Act, except as required by the registration rights agreement.

OUR SUBSTANTIAL INDEBTEDNESS CAUSES US TO HAVE SIGNIFICANT DEBT SERVICE OBLIGATIONS, WHICH REDUCES OUR CASH FLOW AVAILABLE TO FUND OPERATIONS.

Millennium Chemicals and its consolidated subsidiaries have substantial indebtedness and, as a result, significant debt service obligations. As of March 31, 2003, their total indebtedness outstanding aggregated approximately \$1,257 million (excluding unused commitments and \$22 million of outstanding undrawn standby letters of credit), representing approximately 76% of their total capitalization. For the three months ended March 31, 2003, on a pro forma basis to give effect for the entire period to the issuance of \$100 million aggregate principal amount of the outstanding unregistered notes in April 2003 and the use of the gross proceeds thereof to repay \$85 million of outstanding indebtedness under the revolving credit facility under our bank credit agreement, Millennium Chemicals' and its consolidated subsidiaries' interest expense would have been \$24 million and the ratio of earnings to fixed charges would have been 1.2x. In addition, Millennium Chemicals' debt instruments permit Millennium Chemicals and its consolidated subsidiaries to incur or guarantee certain additional indebtedness, subject to certain limitations. Our debt service obligations reduce our cash flow available to fund our operations and future business requirements.

OUR SUBSTANTIAL INDEBTEDNESS COULD ADVERSELY AFFECT OUR ABILITY TO OPERATE OUR BUSINESS AND LIMIT OUR ABILITY TO OBTAIN ADDITIONAL FINANCING.

The degree of our leverage could have significant consequences to holders of exchange notes, including:

limiting our ability to obtain additional financing on satisfactory

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

terms to fund our business operations;

increasing our vulnerability to general economic downturns and adverse competitive and industry conditions, which could place us at a competitive disadvantage;

increasing our exposure to interest rate increases because a portion of our borrowings are at variable interest rates;

11

reducing the availability of our cash flow to fund our business operations because we will be required to use a substantial portion of our cash flow to service our debt obligations; and

limiting our flexibility in planning for, or reacting to, changes in our business and the chemical industry.

SERVICING OUR DEBT OBLIGATIONS REQUIRES A SIGNIFICANT AMOUNT OF CASH, AND OUR ABILITY TO GENERATE CASH DEPENDS ON MANY FACTORS BEYOND OUR CONTROL.

Our ability to satisfy our debt service obligations will depend, among other things, upon our future operating performance, the future operating performance of Equistar and our ability to refinance indebtedness when necessary. Each of these factors is to a large extent dependent on economic, financial, competitive and other factors beyond our control. The amount of cash distributions we receive from Equistar will be affected by its results of operations and cash flow and by the agreements under which it operates. We did not receive any cash distributions from Equistar during 2001 or 2002, and it is unlikely that we will receive any distributions during 2003. If, in the future, we cannot generate sufficient cash from our operations and from Equistar to meet our debt service obligations, we may need to reduce or delay capital expenditures or curtail research and development efforts. In addition, we may need to refinance our debt, obtain additional financing or sell assets, which we may not be able to do on commercially reasonable terms, if at all. We cannot assure you that our business or that of Equistar will generate sufficient cash flow, or that we will be able to obtain funding, sufficient to satisfy our debt service obligations.

RESTRICTIONS IMPOSED BY OUR DEBT INSTRUMENTS MAY LIMIT OUR ABILITY TO FINANCE FUTURE OPERATIONS OR CAPITAL NEEDS OR ENGAGE IN OTHER BUSINESS ACTIVITIES THAT MAY BE IN OUR INTEREST. OUR FAILURE TO COMPLY WITH THESE RESTRICTIONS COULD LEAD TO AN ACCELERATION OF OUR INDEBTEDNESS.

Our debt instruments contain numerous financial and operating covenants that, among other things, limit Millennium Chemicals' and its subsidiaries' ability to (1) incur additional indebtedness, (2) repurchase or redeem capital stock, (3) create liens or other encumbrances, (4) redeem debt that is junior in right of payment to the notes, (5) make certain payments and investments, including dividend payments, (6) enter into sale/leaseback transactions, (7) sell or otherwise dispose of assets, (8) merge or consolidate with other entities or (9) engage in certain transactions with subsidiaries and affiliates and otherwise restrict corporate activities. Our bank credit agreement also requires us to meet certain financial ratios and tests. Agreements governing future indebtedness could also contain significant financial and operating restrictions. Our ability to comply with these restrictions may be affected by factors beyond our control. A failure to comply with the obligations contained in our bank credit agreement or our indentures could result in an event of

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

default under our bank credit agreement or the indentures, which could permit acceleration of the related debt and acceleration of debt under other instruments that may contain cross-acceleration or cross-default provisions. We are not certain whether we would have, or be able to obtain, sufficient funds to make these accelerated payments. In that event, the lenders under our bank credit agreement could proceed against our assets that secure their debt.

MILLENNIUM AMERICA AND MILLENNIUM CHEMICALS ARE HOLDING COMPANIES AND DEPEND ON THE RECEIPT OF DIVIDENDS OR OTHER PAYMENTS FROM THEIR SUBSIDIARIES TO PAY THE PRINCIPAL OF AND INTEREST ON THE NOTES.

Each of Millennium America and Millennium Chemicals is a holding company, the primary asset of which is 100% of the outstanding capital stock of an intermediate holding company, which, in turn, is the direct or indirect parent of numerous subsidiaries. Millennium Chemicals will unconditionally guarantee the exchange notes on a senior unsecured basis. Each of Millennium America, in repaying its indebtedness with respect to the exchange notes, and Millennium

12

Chemicals, in satisfying its obligations under its guarantee of the exchange notes, must rely on cash flows from its respective subsidiaries, including dividends or other payments. Millennium America has no ownership interest in a number of subsidiaries of Millennium Chemicals, including those that own the United Kingdom, French, Australian and Brazilian TiO₂ operations.

The ability of Millennium America's and Millennium Chemicals' subsidiaries to make payments to Millennium America and Millennium Chemicals, respectively, is subject to, among other things, applicable corporate laws and other laws and regulations of the applicable state or foreign jurisdiction. State corporate law applicable to Millennium America's principal subsidiaries generally prohibits the payment of dividends by any subsidiary unless the subsidiary has capital surplus or net profits in the current or immediately preceding year.

Although the indenture under which the exchange notes will be issued limits the ability of our subsidiaries to enter into consensual restrictions on their ability to pay dividends and make other payments, these limitations have a number of significant qualifications and exceptions. See 'Description of Exchange Notes -- Certain Covenants -- Limitation on Restrictions on Distributions from Restricted Subsidiaries.'

CLAIMS OF CREDITORS OF SUBSIDIARIES OF MILLENNIUM CHEMICALS AND MILLENNIUM AMERICA AS WELL AS CREDITORS OF EQUICOR MAY HAVE PRIORITY OVER CLAIMS OF NOTEHOLDERS WITH RESPECT TO THE ASSETS AND EARNINGS OF THESE COMPANIES.

The holders of the exchange notes will have no direct claims against Millennium America's subsidiaries or Millennium Chemicals' subsidiaries (other than Millennium America). Generally, creditors of subsidiaries of Millennium America and Millennium Chemicals will have claims to the assets and earnings of these subsidiaries that are superior to claims of creditors of Millennium America and Millennium Chemicals, respectively. Therefore, claims of holders of the indebtedness of Millennium America and Millennium Chemicals, including, with respect to Millennium America, the exchange notes and, with respect to Millennium Chemicals, the guarantee of the exchange notes, against the cash flow and assets of subsidiaries of Millennium America and Millennium Chemicals, respectively, will be effectively subordinated to claims of these subsidiaries' creditors. As of March 31, 2003, subsidiaries of Millennium America had

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

approximately \$111 million of trade payables and no indebtedness outstanding (excluding unused commitments and \$3 million of outstanding undrawn standby letters of credit) and subsidiaries of Millennium Chemicals (other than Millennium America) had approximately \$240 million of trade payables and \$24 million of total indebtedness outstanding (excluding unused commitments and \$9 million of outstanding undrawn standby letters of credit). Since Millennium America and Millennium Chemicals conduct all of their operations through their subsidiaries, their subsidiaries (other than, with respect to Millennium Chemicals, Millennium America) also have substantial operating liabilities. In the event of Millennium America's or Millennium Chemicals' dissolution, bankruptcy, liquidation or reorganization, the holders of the exchange notes may not receive any amounts with respect to the exchange notes until after payment in full of the claims of creditors of subsidiaries of Millennium America and Millennium Chemicals.

Claims of holders of the exchange notes against the cash flow and assets of Equistar and its subsidiaries will be effectively subordinated to claims of creditors of Equistar and its subsidiaries. As of March 31, 2003, Equistar and its subsidiaries had \$480 million of accounts payable and \$2.2 billion of long-term indebtedness outstanding.

THE EXCHANGE NOTES WILL NOT BE SECURED BY ANY OF OUR ASSETS. HOWEVER, OUR BANK CREDIT AGREEMENT IS SECURED AND, THEREFORE, OUR BANK LENDERS WILL HAVE A PRIOR CLAIM ON CERTAIN OF OUR ASSETS.

The exchange notes will not be secured by any of our assets. However, our bank credit agreement is secured by (1) a pledge of 100% of the stock of Millennium Chemicals' existing and future domestic subsidiaries, including Millennium America, and 65% of the stock of Millennium Chemicals' existing and future first-tier foreign subsidiaries, in both cases other than subsidiaries

13

that hold immaterial assets, (2) all the equity interests held by Millennium Chemicals' subsidiaries in Equistar and La Porte Methanol Company (which pledge is limited to the right to receive distributions made by Equistar and La Porte Methanol Company, respectively), and (3) all present and future accounts receivable, intercompany indebtedness and inventory of Millennium America and its domestic subsidiaries other than subsidiaries that hold immaterial assets. If Millennium Chemicals becomes insolvent or is liquidated, or if payment under any of the instruments governing its secured debt is accelerated, the lenders under these instruments will be entitled to exercise the remedies available to a secured lender under applicable law and pursuant to instruments governing such debt. Accordingly, the lenders will have a prior claim on Millennium Chemicals' assets. In that event, because the exchange notes will not be secured by any of Millennium Chemicals' assets, it is possible that Millennium Chemicals' remaining assets might be insufficient to satisfy your claims in full.

WE COULD ENTER INTO VARIOUS TRANSACTIONS, SUCH AS ACQUISITIONS, REFINANCINGS, RECAPITALIZATIONS OR OTHER HIGHLY LEVERAGED TRANSACTIONS, THAT WOULD NOT CONSTITUTE A CHANGE OF CONTROL, BUT WOULD NEVERTHELESS INCREASE THE AMOUNT OF OUR OUTSTANDING DEBT, OR ADVERSELY AFFECT OUR CAPITAL STRUCTURE OR CREDIT RATINGS, OR OTHERWISE ADVERSELY AFFECT HOLDERS OF THE EXCHANGE NOTES.

Under the terms of the notes, a variety of acquisition, refinancing, recapitalization or other highly leveraged transactions are not considered change of control transactions. As a result, we could enter into any such

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

transaction without being required to make an offer to repurchase the notes even though the transaction could increase the total amount of our outstanding indebtedness, adversely affect our capital structure or credit ratings or otherwise adversely affect the holders of the exchange notes.

WE MAY NOT HAVE THE ABILITY TO RAISE THE FUNDS TO PURCHASE THE EXCHANGE NOTES UPON A CHANGE OF CONTROL AS REQUIRED BY THE INDENTURE.

Upon the occurrence of certain change of control events, each holder of exchange notes may require us to repurchase all or a portion of its exchange notes at a purchase price equal to 101% of the principal amount thereof, plus accrued interest and liquidated damages. Our ability to repurchase the exchange notes upon a change of control will be limited by the terms of our other debt agreements. Upon a change of control, we may be required immediately to repay the outstanding principal, any accrued interest and any other amounts owed by us under our bank credit agreement. We cannot assure you that we would be able to repay amounts outstanding under our bank credit agreement or obtain necessary consents under such agreement to repurchase the exchange notes. Any requirement to offer to purchase any exchange notes may result in our having to refinance our outstanding indebtedness, which we may not be able to do. In addition, even if we were able to refinance such indebtedness, such financing may not be on terms favorable to us.

IN THE EVENT OF A SALE OF ALL OR SUBSTANTIALLY ALL OF OUR ASSETS, THERE MAY BE A DEGREE OF UNCERTAINTY AS TO WHETHER A CHANGE OF CONTROL HAS OCCURRED WHICH WILL GIVE RISE TO OUR REPURCHASE OBLIGATIONS UNDER THE INDENTURE.

One of the events that would trigger a change of control is a sale of 'all or substantially all' of our assets. Although there is a limited body of case law interpreting the phrase 'all or substantially all' as used in the definition of 'change of control' set forth in the indenture governing the notes, there is no precise established definition of the phrase under New York law (which is the governing law of the indenture). As a consequence, there may be a degree of uncertainty as to whether a change of control has occurred giving rise to the repurchase obligations under the indenture. It is possible, therefore, that there could be a disagreement between us and some or all holders of the notes over whether one or more specific asset sales would trigger a change of control offer. In addition, if the holders of the notes elected to exercise their rights under the indenture to require us to repurchase all or a portion of their notes and we

14

elected to contest that election, there can be no assurance as to how a court interpreting New York law would interpret the phrase 'all or substantially all.'

WE CANNOT GUARANTEE THAT AN ACTIVE TRADING MARKET WILL DEVELOP FOR THE EXCHANGE NOTES OR THAT YOU WILL BE ABLE TO SELL YOUR EXCHANGE NOTES.

Although the exchange notes will trade with the currently outstanding registered 9 1/4 Senior Notes due 2008, there can be no assurance as to the liquidity of any market for those notes. The liquidity of any market for the notes will depend on the number of holders of the notes, our performance, the market for similar securities, the interest of securities dealers in making a market in the notes and other factors. Each initial purchaser of the outstanding unregistered notes currently makes a market in the outstanding registered notes. However, the initial purchasers are not obligated to do so, and any market

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

making by the initial purchasers may be discontinued at any time without notice. We do not intend to apply for listing of the exchange notes on any securities exchange or for quotation through the National Association of Securities Dealers Automated Quotation System.

UNDER U.S. FEDERAL AND STATE FRAUDULENT TRANSFER OR CONVEYANCE STATUTES, A COURT COULD VOID THE OBLIGATIONS OF MILLENNIUM AMERICA AND MILLENNIUM CHEMICALS OR TAKE OTHER ACTIONS DETRIMENTAL TO HOLDERS OF THE EXCHANGE NOTES OFFERED HEREBY.

Under U.S. federal or state fraudulent transfer or conveyance laws, a court could take actions detrimental to you if it found that, at the time the exchange notes offered hereby or the exchange note guarantee were issued:

(1) Millennium America or Millennium Chemicals issued the exchange notes or the exchange note guarantee with the intent of hindering, delaying or defrauding current or future creditors; or

(2) (a) Millennium America or Millennium Chemicals received less than fair consideration for incurring the debt represented by the exchange notes or the exchange note guarantee; and

(b) Millennium America or Millennium Chemicals:

was insolvent or rendered insolvent by issuing the exchange notes or the exchange note guarantee;

was engaged in a business or transaction for which the assets remaining with Millennium America or Millennium Chemicals would constitute unreasonably small capital; or

incurred debt beyond Millennium America's or Millennium Chemicals' ability to pay.

If a court made such a finding, it could:

void all or part of Millennium America's or Millennium Chemicals' obligations to the holders of the exchange notes and direct the repayment of any amounts thereunder to Millennium America's or Millennium Chemicals' other creditors;

subordinate Millennium America's or Millennium Chemicals' obligations to the holders of the exchange notes to Millennium America's or Millennium Chemicals' other debt; or

take other actions detrimental to the holders of the exchange notes.

If this were to occur, we cannot assure you that Millennium America could pay amounts due on the exchange notes offered hereby.

We cannot predict what standard a court would apply to determine whether either Millennium America or Millennium Chemicals was insolvent as of the date Millennium America or Millennium Chemicals issued the exchange notes or the exchange note guarantee, or that regardless of the method of valuation, a court would determine that Millennium America or Millennium Chemicals

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

was insolvent on that date, or whether a court would determine that the payments constituted fraudulent transfers or conveyances on other grounds.

To the extent a court voids the exchange note guarantee as a fraudulent transfer or conveyance or holds it unenforceable for any other reason, holders of exchange notes offered hereby would cease to have any claim against Millennium Chemicals. If a court were to take this action, we cannot assure you that Millennium America's assets would be sufficient to satisfy the claims of the holders of exchange notes relating to any voided portions of the exchange note guarantee.

RISKS RELATING TO OUR BUSINESS

THE CYCLICALITY AND VOLATILITY OF THE CHEMICAL INDUSTRY MAY ADVERSELY AFFECT OUR INCOME AND CASH FLOW LEVELS, AND MAY CAUSE FLUCTUATIONS IN OUR RESULTS OF OPERATIONS.

Our income and cash flow levels reflect the cyclical nature of the chemical industries in which we operate. Certain of these industries are mature and sensitive to cyclical supply and demand balances. In particular, the markets for ethylene and polyethylene, in which we participate through our interest in Equistar, are highly cyclical, resulting in volatile profits and cash flow over the business cycle. Further, the global markets for TiO₂, VAM, acetic acid and our fragrance and flavor chemicals are cyclical, although to a lesser degree. The balance of supply and demand in the markets in which we and Equistar do business, as well as the level of inventories held by downstream customers, has a direct effect on the sales volumes and prices of our products as well as Equistar's. For example, if supply exceeds demand, producers are often pressured to maintain sales volumes with customers and, consequently, pressure to reduce prices may result. This is especially true in periods of economic decline or uncertainty, when demand may be limited and the economic conditions create caution on the part of customers to build inventory. Reaction by producers, including us and Equistar, is dependent on the particular circumstances in effect at the time, but could include meeting competitive price reductions, short-term curtailment of production, and longer-term temporary or permanent plant shutdowns.

Demand for TiO₂ is influenced by changes in the gross domestic product of various regions of the world and has fluctuated from year to year. The industry is also sensitive to changes in its customers' marketplaces, which are primarily the paint and coatings, plastics and paper industries. In recent history, consolidations and negative business conditions within certain of those industries have put pressure on TiO₂ prices as companies compete to keep volumes placed.

Demand for ethylene, its derivatives and acetyls has fluctuated from year to year. These industry segments are particularly sensitive to capacity additions. Producers have historically experienced alternating periods of inadequate capacity, resulting in increased selling prices and operating margins, followed by periods of large capacity additions, resulting in declining capacity utilization rates, selling prices and operating margins. Profitability is further influenced by fluctuations in the price of feedstocks for ethylene, which generally follow price trends for crude oil or natural gas.

Currently, there is overcapacity in the petrochemical and polymer industries, as a number of Equistar's competitors in various segments of the petrochemical and polymer industries have added capacity. There can be no assurance that future growth in product demand will be sufficient to utilize current or any additional capacity. Excess petrochemical and polymer industry capacity has depressed, and may continue to depress, Equistar's volumes and margins. For example, in 2002, U.S. ethylene demand was estimated to be 2.8% higher than for 2001. Nonetheless, the 2002 demand growth was insufficient to

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

absorb excess worldwide ethylene industry capacity and to fully offset the effects of a contraction in U.S. ethylene demand in 2001 compared to 2000. The global economic and political environment continues to be uncertain, contributing to low petrochemical and polymer industry operating rates, adding to the volatility of raw material and energy costs, and forestalling the industry's recovery from tough conditions, all of which is placing, and may continue to place, pressure on Equistar's results of operations. As a result of excess petrochemical and polymer industry capacity and weak demand for products, as

16

well as rising energy costs and raw material prices, Equistar's operating income has declined and may remain volatile.

Different facilities may have differing operating rates from period-to-period depending on supply and demand for the product produced at the facility during that period, which may be affected by many factors, such as energy costs, feedstock costs and transportation costs. As a result, individual facilities may be operated below or above rated capacities, may be idled or may be shut down and restarted in any period. It is possible that lower demand in the future will cause us to reduce operating rates.

OUR BUSINESS AND EQUISTAR'S BUSINESS ARE SUBJECT TO MATERIAL FLUCTUATIONS DUE TO EXTERNAL FACTORS WHICH MAY NEGATIVELY AFFECT OUR AND EQUISTAR'S FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

External factors beyond our control, such as general economic conditions, weather, competitor actions, international events and governmental regulation in the United States and abroad, can cause fluctuations in demand for our products, fluctuations in prices and margins and volatility in the price of raw materials that we purchase. In particular, demand within the primary end-markets for our and Equistar's products is generally a function of regional economic conditions in geographic areas in which sales are generated. In addition, our business depends on the free flow of products and services through the channels of commerce. In response to terrorists' activities and threats aimed at the United States, transportation, mail, financial and other services have been slowed. Further delays or stoppages in transportation, mail, financial and other services could have a material adverse effect on our business, results of operations and financial condition. Furthermore, we may experience an increase in operating costs, such as costs for transportation, insurance and security as a result of these activities and threats. To the extent the U.S. economy is adversely affected by terrorist activities and potential activities and events in the Middle East, any economic downturn could adversely impact our results of operations, impair our ability to raise capital or otherwise adversely affect our business. These external factors can magnify the impact of industry cycles. For example, first quarter 2003 TiO₂ sales volume was lower than first quarter 2002 sales volume, partially due to uncertain economic conditions and generally poorer weather that held back demand and delayed the traditional March start of the North American and European coatings season. As a result, our income and cash flow are subject to material fluctuations. The cash distributions we expect to receive from Equistar may be affected by the same or similar external factors.

OUR PARTICIPATION IN THE EQUISTAR JOINT VENTURE EXPOSES US TO RISKS OF SHARED CONTROL AND FUTURE CAPITAL COMMITMENTS WHICH, AMONG OTHER THINGS, MAY ADVERSELY AFFECT EQUISTAR'S BUSINESS OR OUR RESULTS OF OPERATIONS.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

We rely, in part, on cash distributions from Equistar. We did not receive any cash distributions from Equistar during 2001 or 2002, and it is unlikely that we will receive any distributions during 2003. Our cash flow could be adversely affected by actions taken by Equistar or Lyondell, our partner in Equistar, or by conditions that affect Equistar or its business. In particular, if Lyondell does not fulfill its obligations under the Equistar partnership agreement, Equistar may not be able to operate according to its business plan. If this were to occur, our results of operations could be adversely affected. In addition, although unanimous consent of both us and Lyondell is required for aggregate partner contributions not contemplated by an approved strategic plan that exceed \$100 million in any given year or \$300 million in a five-year period, we may be required, without our consent, to contribute amounts up to our pro rata portion of such amounts or an unlimited amount to allow Equistar to achieve or maintain compliance with certain health, safety and environmental laws. If we fail to contribute these amounts, we may have to sell our interest in Equistar to Lyondell at a price or on terms which may be unfavorable to us.

17

RISING COSTS OF ENERGY AND OTHER RAW MATERIALS MAY RESULT IN INCREASED OPERATING EXPENSES AND REDUCED RESULTS OF OPERATIONS.

We and Equistar purchase large amounts of raw materials for our respective businesses. The cost of these materials, in the aggregate, represents a substantial portion of our operating expenses. The prices and availability of these raw materials vary with market conditions and may be highly volatile. In addition, we and Equistar use large amounts of energy in our respective operations. The benchmark prices of crude oil and natural gas increased significantly during the second half of 2002 and the first quarter of 2003. As these costs rise, operating expenses increase and could have a particularly negative impact on Equistar and our Acetyls business segment. From time to time, we and Equistar may enter into transactions to manage the volatility of such costs, but we cannot assure you that these actions will have a favorable impact on our results of operations nor can we assure you that we will continue to enter into such transactions in the future. Energy costs remain volatile.

There have been in the past, and will likely be in the future, periods of time when we are unable to pass raw material price increases on to our customers in whole or in part. Customer consolidation in our TiO₂ business has made it more difficult to pass costs along to customers, so that increased raw material prices may negatively affect our operating margins.

In our Titanium Dioxide and Related Products business segment, titanium-bearing ores are our primary raw materials, but we also purchase large quantities of chlorine, sulfuric acid, caustic soda, petroleum products and metallurgical coke, aluminum, sodium silicate, oxygen and nitrogen. In our Acetyls business segment, our primary raw materials are natural gas, carbon monoxide, methanol and ethylene, and in our Specialty Chemicals business segment, our primary raw materials are crude sulfate turpentine, or CST, and gum turpentine or their derivatives. In addition, Equistar purchases petroleum liquids, including naptha, condensates and gas oils and natural gas liquids, including ethane, propane and butane.

We use natural gas as a feedstock and as a source of energy. Fluctuations in the price of natural gas affect our operating expenses which, in turn, affect our results of operations. During the fourth quarter of 2002 and first quarter

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

of 2003, our results of operations were affected by the rising costs of natural gas. Our Acetyls business segment has the largest exposure to natural gas costs of our majority-owned businesses. Our Titanium Dioxide and Related Products and Specialty Chemicals business segments are impacted to a lesser extent.

The costs of raw materials and energy used in Equistar's business represent a substantial portion of Equistar's operating expenses. These costs generally follow the prices for natural gas and crude oil. Due to the commodity nature of most of Equistar's products, Equistar is generally not able to protect its market position by product differentiation and may not be able to pass on all cost increases to its customers. Accordingly, increases in raw material and other costs may not necessarily correlate with changes in product prices, either in the direction of the price change or in magnitude. In addition, higher natural gas prices could adversely affect the international competitiveness of many U.S. chemical producers. As a result, changes in the prices of commodities and raw materials and other costs will affect Equistar's income and cash flow which will, in turn, affect our financial condition and results of operations.

WE HAVE A LIMITED NUMBER OF SUPPLIERS FOR SOME OF OUR RAW MATERIALS, AND IF ONE OF THESE SUPPLIERS WERE UNABLE TO MEET ITS OBLIGATIONS, WE COULD INCUR SUPPLY SHORTAGES OR PRICE INCREASES FOR OUR RAW MATERIALS.

Millennium Chemicals has a limited number of suppliers for some of its raw materials, and the number of sources for and availability of raw materials is specific to the particular geographic region in which a facility is located. In 2002, Millennium Chemicals and its consolidated subsidiaries purchased 76% of their titanium-bearing ores from two suppliers, Rio Tinto Iron & Titanium Inc. (through its affiliates Richards Bay Iron & Titanium (Proprietary) Limited and QIT-Fer et Titane Inc.) and Iluka Resources Limited under multiple year contractual commitments. In addition, they obtain chlorine and caustic soda exclusively from one supplier for their Australian

18

operations under a long-term supply agreement. For their other TiO₂ manufacturing plants, there are multiple suppliers for these raw materials and they are generally purchased through short-term contracts. They also purchase all of their ethylene requirements from Equistar under a supply contract based on market prices. In addition, they purchase all of their carbon monoxide from Linde AG pursuant to a long-term contract based primarily on the cost of production. Each of the chloride TiO₂ manufacturing plants has long-term supply agreements for oxygen and nitrogen through either 'over the fence' suppliers dedicated to the site or through a direct pipeline arrangement. Each of these contracts is an exclusive supply contract.

Accordingly, if one of these suppliers were unable to meet its obligations under present supply arrangements, we could suffer reduced supplies or be forced to incur increased prices for our raw materials.

Equistar purchases the majority of its natural gas and petroleum liquids requirements through contractual arrangements from a variety of third-party domestic and foreign sources, as well as on the spot market from third-party domestic and foreign sources.

OPERATING PROBLEMS IN OUR OR EQUISTAR'S BUSINESS MAY MATERIALLY ADVERSELY AFFECT OUR PRODUCTIVITY AND PROFITABILITY.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

The occurrence of material operating problems at our or Equistar's facilities, including, but not limited to, the events described below, may have a material adverse effect on the productivity and profitability of a particular manufacturing facility, or on our or Equistar's operations as a whole, during and after the period of such operational difficulties. Our income is dependent on the continued operation of our and Equistar's various production facilities and the ability to complete construction projects on schedule. Our and Equistar's manufacturing operations are subject to the usual hazards associated with chemical manufacturing and the related storage and transportation of raw materials, products and wastes, including pipeline leaks and ruptures, explosions, fires, inclement weather and natural disasters, mechanical failure, unscheduled downtime, labor difficulties, transportation interruptions and environmental hazards, such as chemical spills, discharges or releases of toxic or hazardous substances or gases, storage tank leaks and matters relating to remedial activities. These hazards can cause personal injury and loss of life, severe damage to or destruction of property and equipment and environmental contamination and other environmental damage, and may result in suspension of operations and the imposition of civil or criminal penalties. Furthermore, we and Equistar are also subject to present and future claims with respect to workplace exposure, workers' compensation and other matters.

BECAUSE MILLENNIUM CHEMICALS' OPERATIONS ARE CONDUCTED WORLDWIDE, THEY ARE AFFECTED BY RISKS OF DOING BUSINESS ABROAD, INCLUDING CURRENCY RISK.

Millennium Chemicals and its consolidated subsidiaries generate revenue from export sales, or sales outside the United States by their domestic operations, as well as from their operations conducted outside the United States. They sell their products to more than 90 countries. Sales outside the United States by their domestic operations amounted to approximately 14%, 13% and 11% of total revenues in 2002, 2001 and 2000, respectively. Revenue from non-United States operations amounted to approximately 45%, 41% and 40% of total revenues in 2002, 2001 and 2000 respectively, principally reflecting the operations of the Titanium Dioxide and Related Products business segment in Europe, Brazil and Australia. Identifiable assets of the non-United States operations represented 35% and 28%, of total identifiable assets at December 31, 2002 and December 31, 2001, principally reflecting the assets of these operations. In addition, they obtain a portion of their principal raw materials from sources outside the United States. Ores used in the production of TiO_2 are obtained from suppliers in South Africa, Australia, Canada and the Ukraine, along with that from Millennium Chemicals' own mining operations in Brazil, and a portion of their requirements of CST and gum turpentine and its derivatives is obtained from suppliers in South America, and in the past they have fulfilled a portion of these requirements from Indonesia and other Asian countries as well as Europe.

19

Millennium Chemicals' international operations are subject to the risks of doing business abroad, including fluctuations in currency exchange rates, transportation delays and interruptions, political and economic instability and disruptions, restrictions on the transfer of funds, the imposition of duties and tariffs, import and export controls, changes in governmental policies, labor unrest and current and changing regulatory environments. These events could have an adverse effect on their international operations in the future by reducing the demand for their products, decreasing the prices at which they can sell their products or otherwise having an adverse effect on their business, financial condition or results of operations. We cannot assure you that they

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

will continue to be found to be operating in compliance with applicable customs, currency exchange control regulations, transfer pricing regulations or any other laws or regulations to which they may be subject.

The functional currency of each of Millennium Chemicals' non-United States operations (principally, the operations of its Titanium Dioxide and Related Products business segment in the United Kingdom, France, Brazil and Australia) is the local currency. Exchange rates between these currencies and U.S. dollars in recent years have fluctuated significantly and may do so in the future. As a result of translating the functional currency financial statements of all foreign subsidiaries into United States dollars, consolidated shareholders' equity increased approximately \$27 million during 2002 and decreased approximately \$19 million in 2001. Future events, which may significantly increase or decrease the risk of future movement in foreign currencies in which they conduct their business, cannot be predicted.

In addition, Millennium Chemicals and its consolidated subsidiaries generate revenue from export sales and operations conducted outside the United States that may be denominated in currencies other than the relevant functional currency. Millennium Chemicals and its consolidated subsidiaries hedge certain revenues and costs to minimize the impact of changes in the exchange rates of those currencies compared to the respective functional currencies. They do not use derivative financial instruments for trading or speculative purposes. Net foreign currency transactions aggregated gains of \$3 million in 2002 and losses of \$7 million in 2001 and \$4 million in 2000. It is possible that fluctuations in foreign exchange rates will have a negative effect on their results of operations.

WE SELL OUR PRODUCTS IN MATURE AND HIGHLY COMPETITIVE INDUSTRIES AND FACE PRICE PRESSURE IN THE MARKETS IN WHICH WE OPERATE.

The global markets in which our chemical businesses and the businesses of Equistar operate are highly competitive. Competition is based on a number of factors, such as price, product quality and service. Some of our competitors may be able to drive down prices for our products because they have costs that are lower than ours. In addition, some of our competitors may have greater financial, technological and other resources than ours, and may be better able to withstand changes in market conditions. Our competitors may be able to respond more quickly to new or emerging technologies and changes in customer requirements than we can. Further, consolidation of our competitors or customers in any of the industries in which we compete may have an adverse effect on us. The occurrence of any of these events could adversely affect our financial condition and results of operations.

WE AND EQUISTAR ARE SUBJECT TO EXTENSIVE ENVIRONMENTAL REGULATIONS AND ENVIRONMENTAL LIABILITIES THAT COULD REQUIRE US TO EXPEND MATERIAL AMOUNTS IN COMPLIANCE, REMEDIATION, LITIGATION AND SETTLEMENT COSTS OR JUDGMENTS.

Both our operations and those of Equistar are subject to extensive requirements concerning the protection of the environment, including those governing discharges of pollutants in the air and water, the generation, management and disposal of hazardous substances and wastes and other materials and the remediation of contamination and contaminated sites. Those operations include chemical manufacturing plants and the distribution of chemical products and involve the handling and use of hazardous substances. We and Equistar could incur material liabilities, including clean-up costs, fines and civil and criminal sanctions and claims by third parties for

property damage and personal injury, as a result of violations of or liabilities under environmental laws with respect to our operations and those of Equistar. In addition, potentially significant expenditures could be required in connection with any investigation and remediation of threatened or actual pollution, increases in production that trigger more significant requirements under existing environmental laws or requirements under future environmental laws.

Equistar's principal executive offices and many of its plants are located in and around Houston, Texas. The eight-county Houston/Galveston region has been designated a severe non-attainment area for ozone by the United States Environmental Protection Agency, or EPA. In December 2000, the Texas Commission on Environmental Quality, or TCEQ, has submitted a plan to the EPA to demonstrate compliance with the ozone standard by the year 2007. Compliance with this plan will result in increased capital investment by Equistar, which could be between \$200 million and \$260 million before the 2007 deadline, as well as higher annual operating costs for Equistar and could potentially affect cash distributions from Equistar to us. In addition, under the partnership agreement relating to Equistar, Equistar can require unlimited capital contributions from each partner on a pro rata basis for certain environmental compliance costs, such as these. In December 2002, TCEQ proposed revisions to the above requirements which require the approval of the EPA, but which would decrease Equistar's capital costs for compliance with the plan to between \$165 million and \$200 million. Those revisions, however, also include new requirements that would result in additional costs, which are currently still being assessed by Equistar. In addition, the timing and amount of these expenditures are subject to regulatory and other uncertainties, as well as obtaining the necessary permits and approvals. At this time, we cannot estimate the ultimate capital or operating costs of implementing any final plan by the 2007 deadline.

We and certain of our subsidiaries have been named as defendants, potentially responsible parties, or both, in a number of cleanup proceedings with respect to various sites, including offsite waste disposal sites and facilities currently or formerly owned or operated by our current or former subsidiaries or their predecessors. In the most significant of these proceedings, one of our subsidiaries is named as one of four potentially responsible parties at the Kalamazoo River Superfund Site in Michigan at which the EPA is considering selection of a remedial alternative to address polychlorinated biphenyls contamination of river sediments. In October 2000, the Kalamazoo River Study Group (of which our subsidiary is a member) submitted to the State of Michigan a Draft Remedial Investigation and Draft Feasibility Study, which evaluated a number of remedial options and recommended a remedy involving the stabilization of several miles of river bank and the long-term monitoring of river sediments at a total cost of approximately \$73 million. Other possible remedial alternatives previously identified by the State of Michigan range from no action at no further cost to the complete dredging of contaminated river sediments at a total cost for all parties of approximately \$2.5 billion. Based on current information, including the levels of known contaminants, we believe that the selection of the remedial alternative involving complete dredging of river sediments is remote. Our liability at the site will depend on many factors, including the ultimate remedy selected by the EPA, which has assumed lead agency status from the State of Michigan, a determination of final allocation, the number and financial viability of the other members of the study group as well as other potential PRPs and the remediation methods and technologies available.

While we believe that our businesses and the businesses of Equistar generally operate in compliance with applicable environmental requirements and that we maintain adequate reserves with respect to our remediation obligations

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

and the environmental proceedings in which we, our subsidiaries or Equistar have been named as defendants or potentially responsible parties, there can be no assurance that actual costs and liabilities for environmental matters will not exceed the forecasted amounts or that estimates made with respect to indemnification obligations will be accurate. It is also possible that costs will be incurred with respect to sites or indemnification obligations that currently are unknown, or as to which it is currently not possible to make an estimate.

21

PROCEEDINGS RELATING TO THE ALLEGED EXPOSURE TO LEAD-BASED PAINTS AND LEAD PIGMENTS COULD REQUIRE US TO EXPEND MATERIAL AMOUNTS IN LITIGATION AND SETTLEMENT COSTS AND JUDGMENTS.

Together with other alleged past manufacturers of lead-based paint and lead pigments for use in paint, we have been named as defendants in various legal proceedings alleging that we and other manufacturers are responsible for personal injury, property damage, and remediation costs allegedly associated with the use of these products. The plaintiffs in these legal proceedings include municipalities, counties, school districts, individuals and the State of Rhode Island, and seek recovery under a variety of theories, including negligence, failure to warn, breach of warranty, conspiracy, market share liability, fraud, misrepresentation and nuisance. Most of these legal proceedings. In addition, in October 2002, the judge in the Rhode Island case declared a mistrial after the jury declared itself deadlocked in the first phase of the proposed multi-phase trial. In March 2003, the court denied motions for judgment as a matter of law filed by both sides. The first phase is expected to be retried during the first half of 2004.

While we believe that we have valid defenses to all the lead-based paint and lead pigment proceedings and are vigorously defending them, litigation is inherently subject to many uncertainties. Additional lead-based paint and lead pigment litigation may be filed against us in the future asserting similar or different legal theories and seeking similar or different types of damages and relief and any liability we incur with respect to these matters could be material. Adverse court rulings or determinations of liability, among other factors, could affect this litigation by encouraging an increase in the number of future claims and proceedings. In addition, from time to time, legislation and administrative regulations have been enacted or proposed to impose obligations on present and former manufacturers of lead-based paint and lead pigment respecting asserted health concerns associated with such products or to overturn successful court decisions.

Due to the uncertainties involved, we are unable to predict the outcome of lead-based paint and lead pigment litigation, the number or nature of possible future claims and proceedings, or the effect that any legislation and/or administrative regulations may have on the litigation against us. In addition, management cannot reasonably estimate the scope or amount of the costs and potential liabilities related to such litigation, or any such legislation and regulations. As indicated above, we have not accrued any amounts for such litigation.

OTHER PROCEEDINGS AND CLAIMS COULD REQUIRE US TO EXPEND MATERIAL AMOUNTS IN LITIGATION AND SETTLEMENT COSTS AND JUDGMENTS.

In addition to the environmental matters and lead-based paint and lead

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

pigment litigation referred to above, Millennium Chemicals and certain of its subsidiaries are defendants in a number of pending legal proceedings relating to their present and former operations. Several of these legal proceedings allege injurious exposure of the plaintiffs to various chemicals and other materials, including asbestos, on the premises of, or manufactured by, Millennium Chemicals' current and former subsidiaries. For example, Millennium Petrochemicals is one of a number of defendants in approximately 50 active, premises-based asbestos cases (i.e., where the alleged exposure to asbestos-containing materials was to employees of third-party contractors or subcontractors on the premises of certain facilities, and did not relate to any products manufactured or sold by us or any of our predecessors). These cases typically involve multiple plaintiffs. Millennium Chemicals is responsible for these cases under its agreements with Equistar, which require Millennium Petrochemicals to assume responsibility and indemnify Equistar for them. However, under these agreements, Equistar will be required to assume responsibility and indemnify Millennium Petrochemicals for any cases filed on or after December 1, 2004 arising out of assets contributed to Equistar. In addition, Millennium Chemicals is one of a number of defendants in approximately 50 asbestos cases in connection with the operations of one of its subsidiaries and certain alleged predecessors at other facilities which also typically involve multiple plaintiffs. Additional cases may be filed in the future for which Millennium Chemicals may be responsible. We cannot assure you that any liability we incur with respect to any present or future asbestos cases against us will not be material to us (including taking into account insurance, which will not be available for most of these cases).

22

On January 16, 2002, Slidell Inc. filed a lawsuit against Millennium Inorganic Chemicals alleging breach of contract and other related causes of action arising out of a contract between the two parties for the supply of packaging equipment. We believe we have substantial defenses to these allegations and have filed a counterclaim against Slidell. In addition, Millennium Chemicals may be subject to potential unknown liabilities associated with its present and former operations, including tax liabilities and environmental liabilities, arising from the operations of its predecessors and prior owners or operators of its sites or operations for which it may be responsible.

Although, based upon information currently available, we do not believe that the outcome of the proceedings described above, either individually or in the aggregate, will have a material adverse effect on our consolidated financial position, results of operations or cash flows, litigation is subject to many uncertainties and we cannot guarantee any particular result.

USE OF PROCEEDS

We will not receive any proceeds from the exchange offer.

23

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

SELECTED FINANCIAL DATA OF MILLENNIUM CHEMICALS INC.

The following table sets forth Millennium Chemicals' selected historical consolidated financial data for each of the fiscal years ended December 31, 2002, 2001, 2000, 1999, and 1998 and at December 31, 2002, 2001, 2000, 1999, and 1998, which is derived from its audited consolidated financial statements which (for the years 2002, 2001 and 2000) are incorporated by reference in this prospectus, and for the three months ended March 31, 2003 and 2002 and as of March 31, 2003, which is derived from its unaudited consolidated financial statements which are incorporated by reference in this prospectus. In the opinion of management, the unaudited interim financial data includes all adjustments, consisting of only normal recurring adjustments, considered necessary for a fair presentation of this information. The results of operations for interim periods are not necessarily indicative of the results that may be expected for the entire year. The following data should be read in conjunction with Millennium Chemicals' consolidated financial statements and related notes, 'Management's Discussion and Analysis of Financial Condition and Result of Operations' and other financial information which is incorporated by reference in this prospectus.

For certain historical financial data with respect to Millennium America, see the condensed consolidating balance sheets as of March 31, 2003 and December 31, 2002 and 2001 and condensed consolidating statements of operations and cash flows for each of the three years in the period ended December 31, 2002 and for the three months ended March 31, 2003 and 2002 which are incorporated by reference in this prospectus. We account for Equistar as an equity investment. For certain historical financial data with respect to Equistar, we refer you to Equistar's public filings.

	THREE MONTHS ENDED MARCH 31,			YEAR ENDED DE	
	2003 (1)	2002 (2) (3)	2002 (2) (3) (4)	2001 (2) (5)	20
	(DOLLARS IN MILLIONS)				
INCOME STATEMENT DATA:					
Net sales.....	\$415	\$ 351	\$1,554	\$1,590	\$
Operating costs and expenses:					
Cost of products sold.....	330	293	1,233	1,259	
Depreciation and amortization.....	27	25	102	110	
Selling, development and administrative expense.....	29	23	126	146	
Restructuring and other charges.....	--	--	--	36	
	-----	-----	-----	-----	
Operating income.....	29	10	93	39	
Interest expense.....	(23)	(22)	(90)	(85)	
Interest income.....	1	1	4	3	
(Loss) earnings on Equistar investment....	(45)	(39)	(80)	(90)	
Other (expense) income, net.....	--	(1)	(1)	1	
Loss in value of Equistar investment.....	--	--	--	--	
	-----	-----	-----	-----	
(Loss) income from continuing operations before income taxes, minority interest and cumulative effect of accounting change.....	(38)	(51)	(74)	(132)	
(Provision for) benefit from income taxes.....	(9)	20	101	89	

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

(Loss) income from continuing operations before minority interest and cumulative effect of accounting change.....	(47)	(31)	27	(43)
Minority Interest.....	(3)	(1)	(6)	(4)
(Loss) income from continuing operations before cumulative effect of accounting change.....	(50)	(32)	21	(47)
Income from discontinued operations (net of income taxes of \$10 and \$1 for the years ended December 31, 1999 and 1998, respectively).....	--	--	--	--
(Loss) income before cumulative effect of accounting change.....	(50)	(32)	21	(47)
Cumulative effect of accounting change....	(1)	(305)	(305)	--
Net (loss) income.....	\$ (51)	\$ (337)	\$ (284)	\$ (47)

24

	AT MARCH 31, 2003	AT DECEMBER 31,			
		2002	2001	2000	1999
(DOLLARS IN MILLIONS)					
BALANCE SHEET DATA:					
Cash and cash equivalents.....	\$ 125	\$ 125	\$ 114	\$ 107	\$ 110
Investment in Equistar.....	520	563	677	760	800
Total assets.....	2,420	2,467	2,990	3,255	3,282
Total debt (7).....	1,257	1,228	1,187	1,197	1,102
Total shareholders' equity.....	389	439	897	1,006	1,036
THREE MONTHS ENDED MARCH 31,					
YEAR ENDED DECEMBER 31					
	2003	2002	2002	2001	2000
(DOLLARS IN MILLIONS)					
OTHER FINANCIAL DATA:					
Capital expenditures.....	\$ 8	\$ 13	\$ 71	\$ 97	\$ 110
Depreciation and amortization.....	27	25	102	110	113
Cash distributions from Equistar.....	--	--	--	--	83

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Ratio of earnings to fixed charges(8).....	1.3x	0.5x	1.1x	0.5x	3.8x
Pro Forma ratio of earnings to fixed charges(8) (9).....	1.2x	0.5x	1.0x		

-
- (1) On January 1, 2003, the Company adopted Statement of Financial Accounting Standards ('SFAS') No. 143, 'Accounting for Asset Retirement Obligations' ('SFAS No. 143'). SFAS No. 143 applies to legal obligations associated with the retirement of long-lived assets. This standard requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which it is incurred and the associated asset retirement costs be capitalized as part of the carrying amount of the long-lived asset. Accretion expense and depreciation expense related to the liability and capitalized asset retirement costs, respectively, are recorded in subsequent periods. The Company reported an after-tax transition charge of \$1 million as the cumulative effect of this accounting change. The impact of adoption was insignificant to the Company's reported assets and liabilities. The ongoing annual expense resulting from the initial adoption of SFAS No. 143 is not expected to be significant.
 - (2) During the fourth quarter of 2002, the Company changed from the last-in first-out ('LIFO') method to the first-in first-out ('FIFO') method of accounting for certain of its United States inventories in the Titanium Dioxide and Related Products business segment. The method was changed in part to achieve a better matching of revenues and expenses. The FIFO method, or methods that approximate FIFO, are now used to determine cost for all inventories of the Company. Information presented above has been restated for all periods presented to reflect the change from the LIFO to FIFO method. The restatement of the Company's results to reflect the accounting change from LIFO to FIFO had the following impact on net income (loss) for each of the periods presented above: decrease of \$1 million for the three months ended March 31, 2002; increase of less than \$1 million in 2002; decrease of \$4 million in 2001; increase of \$2 million in 2000; decrease of \$6 million in 1999; and increase of \$7 million in 1998.
 - (3) On January 1, 2002, the Company adopted SFAS No. 142, 'Goodwill and Other Inrtangible Assets' ('SFAS No. 142'). Under this new standard, all goodwill, including goodwill acquired before initial application of the standard, is not amortized but must be tested for impairment at least annually at the reporting unit level, as defined in the standard. Accordingly, the Company reported a charge for the cumulative effect of this accounting change of \$275 million in the first quarter of 2002 to write off certain of its goodwill related to its Acetyls business based upon the Company's estimate of fair value for this business using various valuation methods considering expected future profitability and cash flows. Also in accordance with SFAS No. 142, Equistar reported an impairment of its goodwill in the first quarter of

(footnotes continued on next page)

(footnotes continued from previous page)

2002. The write-off at Equistar required an adjustment of \$30 million to reduce the carrying value of the Company's investment in Equistar to its approximate proportional share of Equistar's Partners' capital. The Company reported this adjustment as a charge for the cumulative effect of a change in accounting principle. These charges reduced the carrying value of Millennium Chemicals' interest in Equistar by \$30 million and its total shareholders' equity by \$305 million. Under this new standard, goodwill is not amortized.

- (4) The results for the year ended December 31, 2002 were increased by a \$6 million (\$4 million after tax) adjustment of reserves for favorable resolution of environmental claims related to predecessor businesses reserved for in prior years and a benefit from a reduction in Millennium Chemicals' income tax accruals by \$58 million due to favorable developments related to matters reserved for in prior years.
- (5) Results for 2001 include a benefit from a reduction in Millennium Chemicals' income tax accruals by \$42 million due to favorable developments related to matters reserved for in prior years; \$36 million in reorganization and plant closure charges (\$24 million after-tax); and \$6 million (\$4 million after-tax) representing Millennium Chemicals' share of costs related to the shutdown of Equistar's Port Arthur, Texas plant.
- (6) The results for 1999 include a loss in value of Millennium Chemicals' Equistar interest of \$639 million (\$400 million after tax), to reduce the carrying value to estimated fair value.
- (7) Total debt does not include the indemnity by Millennium America with respect to up to \$750 million of Equistar's outstanding indebtedness, which indemnity terminated in August 2002 upon the closing of the purchase by Lyondell Chemical Company of Occidental Petroleum Corporation's interest in Equistar.
- (8) For purposes of calculating the ratio of earnings to fixed charges, 'earnings' represent income from continuing operations before income taxes, minority interest and (loss) earnings on Equistar investment, plus fixed charges and cash distributions from Equistar. 'Fixed charges' consist of interest expense, including amortization of debt issuance costs and that portion of rental expenses which Millennium Chemicals considers to be a reasonable approximation of interest. The less than one-to-one coverage ratio for the year ended December 31, 2001 and the year ended December 31, 1999 results from the impact on (loss) income from continuing operations before income taxes and minority interest of a \$36 million charge for reorganization and

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

plant closures and a \$639 million charge to write down the value of Millennium Chemicals' investment in Equistar, respectively. Excluding these charges, the 2001 ratio of earnings to fixed charges would have been .9x and the 1999 ratio of earnings to fixed charges would have been 3.6x. Additional earnings of \$6 million would have been required to achieve a one-to-one ratio for 2001, excluding reorganization and plant closure charges. Additional earnings of \$12 million would have been required to achieve a one-to-one coverage ratio for the three months ended March 31, 2002.

- (9) The pro forma ratio of earnings to fixed charges gives effect to the issuance of \$100 million aggregate principal amount of outstanding unregistered 9 1/4% Senior Notes due 2008 and the use of the gross proceeds from that offering to repay \$85 million of outstanding indebtedness under the revolving credit facility under our bank credit agreement, as if this event had occurred on January 1, 2002.

26

DESCRIPTION OF CERTAIN OTHER INDEBTEDNESS

BANK CREDIT AGREEMENT

We entered into a five-year Credit Agreement, dated as of June 18, 2001, as amended on December 14, 2001, June 19, 2002 and April 25, 2003 (the 'Credit Agreement'), among Millennium America, as a borrower, Millennium Inorganic Chemicals Limited, as a borrower, certain borrowing subsidiaries of Millennium Chemicals from time to time party thereto, Millennium Chemicals, as guarantor, the lenders from time to time party thereto, the issuing banks from time to time party thereto, JP Morgan Chase Bank (formerly known as The Chase Manhattan Bank), as administrative agent and collateral agent ('JPM'), and Bank of America, N.A., as syndication agent. The terms of the Credit Agreement provide for: (a) a commitment to provide a secured revolving credit facility in an aggregate principal amount of \$175 million (the 'Revolving Loans'), and (b) a secured term loan facility, of which \$48 million was outstanding as of March 31, 2003 (the 'Term Loans').

The senior bank loans bear interest at either the Alternate Base Rate ('ABR') rate plus the spread (the 'ABR loans'), the LIBO rate plus the spread (the 'LIBOR loans'), or the NIBO rate plus the spread (the 'NIBOR loans'). The ABR rate is the highest of (i) the rate of interest publicly announced by JPM as its prime rate in effect and (ii) the federal funds effective rate from time to time plus 1/2 of 1.0%. The LIBO rate, with respect to any borrowing comprised of LIBOR loans for any interest period, is an interest rate per annum equal to the rate at which deposits in the currency of such borrowing approximately equal in principal amount to the LIBOR loan of the administrative agent for which such LIBO rate is being determined and for a maturity comparable to the applicable interest period are offered in immediately available funds to the administrative agent in the London interbank market. The NIBO rate, with respect to any borrowing consisting of NIBOR loans for any interest period, is an interest rate

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

per annum equal to the interest rate at which U.S. dollar deposits approximately equal in principal amount to the NIBOR loan of the administrative agent for which the NIBO rate is being determined and for a maturity equal to the applicable interest period are offered in immediately available funds to the administrative agent at the eurodollar lending offices where its committed foreign currency and exchange operations and eurodollar funding operations are customarily conducted in the international interbank market. The spread refers to the applicable per annum rate based upon the leverage ratio as set forth in the pricing grid in the Credit Agreement. Interest on all borrowings is calculated on the basis of the actual number of days elapsed over a 360-day year (or a 365 or 366-day year, as applicable, for ABR borrowings accruing interest based on the prime rate).

Interest on the senior bank loans is payable on the last day of each March, June, September, and December in the case of ABR loans, on the last day of the applicable one, two or three month interest period in the case of one, two or three month LIBOR loans and NIBOR loans, and in the case of LIBOR loans and NIBOR loans having an interest period in excess of three months, on each successive date three months after the first day of such interest period.

REVOLVING LOANS

The Revolving Loans are available in U.S. dollars, pounds sterling, euros and any other freely tradable currencies in the London market, which have been approved by all the lenders participating in the revolving credit facility. The Revolving Loans may be borrowed, repaid and reborrowed from time to time. A letter of credit subfacility in an amount equal to \$50 million is available under the revolving credit facility. A swingline facility, in the amount of \$25 million, is also available under the revolving credit facility. The total amount of the Revolving Loans and swingline loans that may be borrowed is not permitted to exceed \$175 million (less the face amount of any letter of credit). The Revolving Loans mature in June 2006.

27

TERM LOANS

The term loan facility amortizes in quarterly amounts in each year commencing in 2002, with the substantial majority of the repayments being due in 2005 and 2006. Unless we meet a leverage ratio of less than 3.75 to 1.00, the Term Loans are subject to mandatory prepayment upon the occurrence of certain asset sales. We are permitted to voluntarily prepay the Term Loans in whole or in part at any time subject to specified break funding costs that may be applicable. We are not permitted to reborrow any amounts under the Term Loans that we repay. The Term Loans mature in June 2006. As of March 31, 2003, there were \$48 million in Term Loans outstanding.

COVENANTS

The Credit Agreement contains negative covenants, subject to specified baskets, limiting the ability of Millennium Chemicals and/or certain subsidiaries of Millennium Chemicals to, among other things:

incur debt and issue preferred stock;

create liens;

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

engage in sale and leaseback transactions;

declare or pay dividends on, and redeem, Millennium Chemicals' stock;

make certain restricted payments;

engage in certain transactions with affiliates;

sell all or substantially all of the assets of Millennium Chemicals and its subsidiaries taken as a whole;

engage in mergers or acquisitions;

engage in domestic account receivable securitization transactions; and

enter into certain restrictive agreements.

The Credit Agreement requires us to comply with certain financial tests and to maintain certain financial ratios relating to maximum consolidated leverage and minimum consolidated interest coverage, the most significant of which are set forth below. Failure to satisfy either of these financial covenants constitutes a default under the Credit Agreement.

The Credit Agreement also includes customary representations and warranties, affirmative covenants and events of default, including (a) a cross-event of default involving other material indebtedness, (b) failure of Millennium America to remain a direct or indirect wholly owned subsidiary of Millennium Chemicals, (c) a change of control of Millennium Chemicals and (d) other provisions customary for this type of financing.

Millennium Chemicals and Millennium America guarantee the obligations under the Credit Agreement. The obligations are secured by: (1) a pledge of 100% of the stock of Millennium Chemicals' existing and future domestic subsidiaries, including Millennium America, and 65% of the stock of Millennium Chemicals' existing and future first-tier foreign subsidiaries, in both cases other than subsidiaries that hold immaterial assets, (2) all the equity interests held by Millennium Chemicals' subsidiaries in Equistar and La Porte Methanol Company (which pledge is limited to the right to receive distributions made by Equistar and La Porte Methanol Company, respectively), and (3) all present and future accounts receivable, intercompany indebtedness, and inventory of Millennium Chemicals and its domestic subsidiaries other than subsidiaries that hold immaterial assets.

In April 2003, we obtained an amendment to our leverage and interest coverage ratios that (1) requires that the leverage ratio (the ratio of Total Indebtedness to EBITDA, each as defined, for the most recently ended period of four fiscal quarters for which financial statements have been filed with the SEC by Millennium Chemicals on Forms 10-K or 10-Q) of Millennium Chemicals

and its consolidated subsidiaries on the last day of any fiscal quarter ending during any period set forth below shall not be in excess of the ratio set forth opposite that period:

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

PERIOD -----	RATIO -----
January 1, 2003 through June 30, 2003.....	5.75 to 1.00
July 1, 2003 through September 30, 2003.....	5.50 to 1.00
October 1, 2003 through December 31, 2003.....	5.25 to 1.00
January 1, 2004 through June 30, 2004.....	5.00 to 1.00
July 1, 2004 through December 31, 2004.....	4.75 to 1.00

and (2) requires that the interest coverage ratio (the ratio of EBITDA to Net Interest Expense, each as defined) of Millennium Chemicals and its consolidated subsidiaries for any period of four consecutive fiscal quarters ending during a period set forth below shall not be less than the ratio set forth opposite that period:

PERIOD -----	RATIO -----
January 1, 2003 through December 31, 2003.....	2.25 to 1.00
January 1, 2004 through December 31, 2004.....	2.50 to 1.00

For periods ending after January 1, 2005, the leverage ratio may not exceed 4.00 to 1.00 and the interest coverage ratio may not be less than 3.00 to 1.00 which is a return to levels originally set forth in the Credit Agreement.

SENIOR NOTES AND SENIOR DEBENTURES

Millennium America has outstanding a \$500,000,000 aggregate principal amount of 7% senior notes due 2006 and \$250,000,000 aggregate principal amount of 7.625% senior debentures due 2026. These notes and debentures are guaranteed by Millennium Chemicals. The indenture under which these notes and debentures were issued contains certain covenants that limit, among other things, the ability of (1) Millennium America and its restricted subsidiaries (as defined in the indenture) to grant liens or enter into sale-and-leaseback transactions, (2) the restricted subsidiaries to incur additional indebtedness in excess of 15% of the Consolidated Net Tangible Assets, as defined in the indenture, of Millennium America. In addition, such indenture contains a covenant that limits the ability of Millennium America and Millennium Chemicals to merge, consolidate or transfer substantially all of their respective assets.

Millennium America has outstanding \$475,000,000 aggregate principal amount of 9 1/4% Senior Notes due 2008, guaranteed by Millennium Chemicals, including the outstanding unregistered notes. These notes were issued, and the exchange notes offered hereby will be issued, under the same indenture and are subject to the same financial covenants.

THE EXCHANGE OFFER

PURPOSE OF THE EXCHANGE OFFER

We sold the outstanding unregistered notes to the initial purchasers on April 25, 2003. The initial purchasers subsequently resold those notes to qualified institutional buyers pursuant to Rule 144A under the Securities Act and to non-U.S. persons outside the United States in reliance on Regulation S under the Securities Act. In connection with the issuance of the outstanding unregistered notes, we and Millennium Chemicals entered into a registration

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

rights agreement with the initial purchasers of the outstanding unregistered notes. The registration rights agreement requires us to register the exchange notes under the Securities Act and offer to exchange the exchange notes for the outstanding unregistered notes. The exchange notes will be issued without a restrictive legend and generally may be resold without registration under the federal securities laws. We are effecting the exchange offer to comply with the registration rights agreement.

29

The registration rights agreement requires us to

file with the SEC on or before July 24, 2003 a registration statement for the exchange offer and the exchange notes;

use our reasonable efforts to cause the registration statement filed for the exchange offer and the exchange notes to be declared effective by the SEC on or before October 22, 2003;

complete the exchange offer on or before November 21, 2003.

These requirements under the registration rights agreement will be satisfied when we complete the exchange offer. However, if we fail to meet any of these requirements, we must pay liquidated damages to the holders of the outstanding unregistered notes at the rate of \$0.192 per week per \$1,000 principal amount until the applicable requirement has been met. We have also agreed to keep the registration statement for the exchange offer effective for at least 30 days (or longer, if required by applicable law) after the date on which notice of the exchange offer is mailed to holders.

Under the registration rights agreement, our obligations to register the exchange notes will terminate upon the completion of the exchange offer. However, we will be required to file a 'shelf' registration statement for a continuous offering by the holders of the outstanding unregistered notes if:

because of any change in law or applicable interpretations thereof by the staff of the SEC, Millennium America is not permitted to effect the exchange offer as contemplated by the registration rights agreement;

any outstanding unregistered notes validly tendered pursuant to the exchange offer are not exchanged for exchange notes by November 21, 2003;

any initial purchaser of the outstanding unregistered notes so requests with respect to outstanding unregistered notes not eligible to be exchanged for exchange notes in the exchange offer;

any applicable law or interpretations do not permit any holder of outstanding unregistered notes to participate in the exchange offer;

any holder of outstanding unregistered notes that participates in the exchange offer does not receive freely transferable exchange notes in exchange for tendered notes; or

we so elect.

If we are required to file a shelf registration statement, we will be required to use our reasonable efforts to keep the registration statement

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

effective for two years, subject to some exceptions. Additionally, we will have the ability to issue a notice that the shelf registration statement is unusable pending a material announcement and may issue any notice suspending use of the shelf registration statement without accruing liquidated damages so long as the aggregate number of days in any consecutive twelve-month period for which all notices are issued and effective does not exceed 60 days in total. Other than as described above, no holder will have the right to require us to file a shelf registration statement or otherwise register such holder's notes under the federal securities laws.

The registration rights agreement also provides that we and Millennium Chemicals

shall make available for a period of 180 days after the consummation of the exchange offer a prospectus meeting the requirements of the Securities Act to any broker-dealer for use in connection with any resale of any exchange notes; and

shall pay all expenses incident to the exchange offer (including the expense of one counsel to the holders of the exchange notes) and will indemnify certain holders of the exchange notes (including any broker-dealer) against certain liabilities, including liabilities under the Securities Act. A broker-dealer which delivers a prospectus to purchasers in connection with such resales will be subject to certain of the civil liability provisions under the Securities Act

30

and will be bound by the provisions of the registration rights agreement, including certain indemnification rights and obligations.

Each broker-dealer that receives exchange notes for its own account in exchange for outstanding unregistered notes, where such outstanding unregistered notes were acquired by such broker-dealer as a result of market-making activities or other trading activities, must acknowledge that it will deliver a prospectus in connection with any resale of such exchange notes. Any broker-dealer who acquired outstanding unregistered notes directly from us may not rely on the interpretations of the SEC and must comply with the registration and prospectus delivery requirements of the Securities Act. See 'Plan of Distribution.'

A holder who sells notes pursuant to a shelf registration statement will generally be required to provide us with specific information, be named as a selling security holder in the related prospectus and deliver a prospectus to purchasers, will be subject to certain of the civil liability provisions under the Securities Act in connection with such sales and will be bound by the provisions of the registration rights agreement which are applicable to such a holder, including certain indemnification obligations.

This summary includes only the material terms of the registration rights agreement. For a full description, you should refer to the complete copy of the registration rights agreement, which has been filed as an exhibit to the registration statement for the exchange offer and the exchange notes of which this prospectus is a part. See 'Where You Can Find More Information.'

TRANSFERABILITY OF THE EXCHANGE NOTES

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Based on an interpretation of the Securities Act by the staff of the SEC in several no-action letters issued to third parties, we believe that the holders of the exchange notes, may offer for resale, resell or otherwise transfer the exchange notes without further compliance with the registration and prospectus delivery provisions of the Securities Act, if

you, or the person or entity receiving such notes, are acquiring the exchange notes in the ordinary course of business;

neither you nor any such person or entity is engaging in or intends to engage in a distribution of the exchange notes within the meaning of the Securities Act;

neither you nor any such person or entity has an arrangement or understanding with any person or entity to participate in any distribution of the exchange notes;

neither you nor any such person or entity is an 'affiliate' of Millennium Chemicals, as such term is defined under Rule 405 under the Securities Act; and

you are not acting on behalf of any person or entity who could not truthfully make these statements.

To participate in the exchange offer, you must represent as the holder of outstanding unregistered notes that each of these statements is true.

Any holder of the outstanding unregistered notes who is an affiliate of Millennium Chemicals or who intends to participate in the exchange offer for the purpose of distributing the exchange notes

will not be able to rely on the interpretation by the staff of the SEC set forth in the no-action letters described above;

will not be able to tender outstanding unregistered notes in the exchange offer; and

must comply with the registration and prospectus delivery requirements of the Securities Act in connection with any sale or transfer of the notes, unless the sale or transfer is made pursuant to an exemption from those requirements.

Broker-dealers receiving exchange notes in exchange for outstanding unregistered notes acquired for their own account through market-making or other trading activities may not rely on this interpretation by the SEC. Such broker-dealers may be deemed to be 'underwriters' within

the meaning of the Securities Act and must therefore acknowledge, by signing the letter of transmittal, that they will deliver a prospectus meeting the requirements of the Securities Act in connection with resale of the exchange notes. The letter of transmittal states that by acknowledging that it will deliver, and by delivering, a prospectus, a broker-dealer will not be deemed to admit that it is an 'underwriter' within the meaning of the Securities Act. The SEC has taken the position that participating broker-dealers may fulfill their prospectus delivery requirements with respect to the exchange notes, other than

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

a resale of an unsold allotment from the original sale of the outstanding unregistered notes, with the prospectus contained in the exchange offer registration statement. As described above, under the registration rights agreement, we have agreed to allow participating broker-dealers and other persons, if any, subject to similar prospectus delivery requirements to use the prospectus contained in the exchange offer registration statement in connection with the resale of the exchange notes. Any broker-dealer who acquired outstanding unregistered notes directly from us may not rely on the interpretations of the SEC and must comply with the registration and prospectus delivery requirements of the Securities Act. See 'Plan of Distribution.'

TERMS OF THE EXCHANGE OFFER; ACCEPTANCE OF TENDERED NOTES

Upon the terms and subject to the conditions in this prospectus and in the letter of transmittal, we will accept any and all outstanding unregistered notes validly tendered and not withdrawn prior to 5:00 p.m., New York City time, on _____, 2003. We will issue \$1,000 principal amount of exchange notes in exchange for each \$1,000 principal amount of outstanding unregistered notes accepted in the exchange offer. Holders may tender some or all of their notes pursuant to the exchange offer. However, outstanding unregistered notes may be tendered only in integral multiples of \$1,000.

The form and terms of the exchange notes are the same as the form and terms of the outstanding unregistered notes except that

the exchange notes have been registered under the Securities Act and will not bear any legend restricting their transfer;

the exchange notes bear a different CUSIP number from the outstanding unregistered notes; and

the holders of the exchange notes will not be entitled to certain rights under the registration rights agreement, including the provisions for liquidated damages on the outstanding unregistered notes in some circumstances relating to the timing of the exchange offer.

The exchange notes will evidence the same debt as the outstanding unregistered notes. Holders of exchange notes will be entitled to the benefits of the indenture.

As of the date of this prospectus, \$100 million aggregate principal amount of unregistered notes was outstanding. There will be no fixed record date for determining the holders of outstanding unregistered notes entitled to participate in this exchange offer. We intend to conduct the exchange offer in accordance with the applicable requirements of the Securities Exchange Act of 1934 and the rules and regulations of the SEC under the Exchange Act.

We shall be deemed to have accepted validly tendered notes when, as, and if we have given oral or written notice to the exchange agent of our acceptance. The exchange agent will act as agent for the tendering holders for the purpose of receiving the exchange notes from us. If any tendered notes are not accepted for exchange because of an invalid tender, the occurrence of other events in this prospectus or otherwise, we will return the certificates for any unaccepted notes to the tendering holder as promptly as practicable after the expiration of the exchange offer.

Holders who tender exchange notes in the exchange offer will not be required to pay brokerage commissions or fees with respect to the exchange of notes. Tendering holders will also not be required to pay transfer taxes in the exchange offer. We will pay all charges and expenses in connection with the exchange offer as described under the subheading ' -- Solicitation of Tenders; Fees and Expenses.' However, we will not pay any taxes incurred in connection

with

32

a holder's request to have exchange notes or non-exchanged notes issued in the name of a person other than the registered holder. See ' -- Transfer Taxes' in this section below.

EXPIRATION DATE; EXTENSIONS; AMENDMENT

The exchange offer will expire at 5:00 p.m., New York City time, on _____, 2003, unless we, in our sole discretion, extend the exchange offer. To extend the exchange offer, we will notify the exchange agent and each registered holder of any extension before 9:00 a.m., New York City time, on the next business day after the previously scheduled expiration date. We reserve the right to extend the exchange offer, delay accepting any tendered notes or, if any of the conditions described below under the heading ' -- Conditions to the Exchange Offer' have not been satisfied, to terminate the exchange offer. We also reserve the right to amend the terms of the exchange offer in any manner. We will give oral or written notice of such delay, extension, termination or amendment to the exchange agent.

Without limiting the manner in which we may choose to make public announcements of any delay in acceptance, extension, termination or amendment of the exchange offer, we will have no obligation to publish, advertise or otherwise communicate any such public announcement, other than by making a timely release to a financial news service.

INTEREST ON THE EXCHANGE NOTES

The exchange notes will bear interest from the most recent interest payment date to which interest has been paid on the tendered outstanding unregistered notes or, if no interest has been paid, from April 25, 2003. Interest on the outstanding unregistered notes accepted for exchange will cease to accrue upon the issuance of the exchange notes.

Interest on the notes is payable semi-annually on each June 15 and December 15, commencing on _____, 2003.

PROCEDURES FOR TENDERING OUTSTANDING UNREGISTERED NOTES

Only a holder of outstanding unregistered notes may tender notes in the exchange offer. To tender in the exchange offer, you must

complete, sign and date the letter of transmittal, or a facsimile of the letter of transmittal;

have the signatures guaranteed if required by the letter of transmittal; and

mail or otherwise deliver the letter of transmittal or such facsimile, together with the outstanding unregistered notes and any other required documents, to the exchange agent prior to 5:00 p.m., New York City time, on the expiration date.

To tender outstanding unregistered notes effectively, you must complete the letter of transmittal and other required documents and the exchange agent must

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

receive all the documents prior to 5:00 p.m., New York City time, on the expiration date. Delivery of the outstanding unregistered notes may be made by book-entry transfer in accordance with the procedures described below. The exchange agent must receive confirmation of book-entry transfer prior to the expiration date.

By executing the letter of transmittal you will make to us the representations set forth in the first paragraph under the heading ' -- Transferability of the Exchange Notes.'

All tenders not withdrawn before the expiration date and the acceptance of the tender by us will constitute agreement between you and us under the terms and subject to the conditions in this prospectus and in the letter of transmittal including an agreement to deliver good and marketable title to all tendered notes prior to the expiration date free and clear of all liens, charges, claims, encumbrances, adverse claims and rights and restrictions of any kind.

THE METHOD OF DELIVERY OF OUTSTANDING UNREGISTERED NOTES AND THE LETTER OF TRANSMITTAL AND ALL OTHER REQUIRED DOCUMENTS TO THE EXCHANGE AGENT IS AT THE ELECTION AND SOLE RISK OF THE HOLDER. INSTEAD OF DELIVERY BY MAIL, YOU SHOULD USE AN OVERNIGHT OR HAND DELIVERY SERVICE. IN ALL CASES, YOU SHOULD ALLOW FOR SUFFICIENT TIME TO ENSURE DELIVERY TO

33

THE EXCHANGE AGENT BEFORE THE EXPIRATION OF THE EXCHANGE OFFER. YOU MAY REQUEST YOUR BROKER, DEALER, COMMERCIAL BANK, TRUST COMPANY OR NOMINEE TO EFFECT THESE TRANSACTIONS FOR YOU. YOU SHOULD NOT SEND ANY NOTE, LETTER OF TRANSMITTAL OR OTHER REQUIRED DOCUMENT TO US.

If your notes are registered in the name of a broker, dealer, commercial bank, trust company or other nominee and you desire to tender, you should contact the registered holder promptly and instruct the registered holder to tender on your behalf. If you wish to tender on your own behalf, you must, before completing and executing the letter of transmittal and delivering your outstanding unregistered notes, either

make appropriate arrangements to register ownership of the outstanding unregistered notes in your name, or

obtain a properly completed bond power from the registered holder of the outstanding unregistered notes.

See 'Instruction to Registered Holder and/or Book-Entry Transfer Facility Participant from Beneficial Owner' included with the letter of transmittal.

The exchange of notes will be made only after timely receipt by the exchange agent of certificates for outstanding unregistered notes, a letter of transmittal and all other required documents, or timely completion of a book-entry transfer. If any tendered notes are not accepted for any reason or if outstanding unregistered notes are submitted for a greater principal amount than the holder desires to exchange, the exchange agent will return such unaccepted or non-exchanged unregistered notes to the tendering holder promptly after the expiration or termination of the exchange offer. In the case of outstanding unregistered notes tendered by book-entry transfer, the exchange agent will credit the non-exchanged notes to an account maintained with The Depository

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Trust Company.

Each broker-dealer that receives exchange notes for its own account in exchange for outstanding unregistered notes, where such outstanding unregistered notes were acquired by such broker-dealer as a result of market-making activities or other trading activities, must acknowledge that it will deliver a prospectus in connection with any resale of such exchange notes. See 'Plan of Distribution'.

GUARANTEE OF SIGNATURES

Holders must obtain a guarantee of all signatures on a letter of transmittal or a notice of withdrawal unless the outstanding unregistered notes are tendered

by a registered holder who has not completed the box entitled 'Special Issuance Instructions' or 'Special Delivery Instructions' on the letter of transmittal; or

for the account of an 'eligible guarantor institution.'

Signature guarantees must be made by a member of or participant in the Securities Transfer Agents Medallion Program, the New York Stock Exchange Medallion Signature Program, the Stock Exchange Medallion Program, or by an 'eligible guarantor institution' within the meaning of Rule 17Ad-15 promulgated under the Exchange Act (namely, banks; brokers and dealers; credit unions; national securities exchanges; registered securities associations; learning agencies; and savings associations).

SIGNATURE ON THE LETTER OF TRANSMITTAL; BOND POWERS AND ENDORSEMENTS

If the letter of transmittal is signed by a person other than the registered holder of the outstanding unregistered notes listed in the letter of transmittal, the registered holder must endorse the outstanding unregistered notes or provide a properly completed bond power. Any such endorsement or bond power must be signed by the registered holder as that registered holder's name appears on the outstanding unregistered notes. Signatures on such outstanding unregistered notes and bond powers must be guaranteed by an 'eligible guarantor institution.'

34

If you sign the letter of transmittal or any outstanding unregistered notes or bond power as a trustee, executor, administrator, guardian, attorney-in-fact, officer of a corporation, fiduciary or in any other representative capacity, you must so indicate when signing. Unless we waive this condition, you must submit satisfactory evidence to the exchange agent of your authority to act in such capacity.

BOOK-ENTRY TRANSFER

We understand that the exchange agent will make a request promptly after the date of this prospectus to establish accounts with respect to the outstanding unregistered notes at the book-entry transfer facility, The Depository Trust Company, for the purpose of facilitating the exchange offer. Subject to the establishment of the accounts, any financial institution that is a participant in DTC's system may make book-entry delivery of outstanding unregistered notes by causing DTC to transfer the notes into the exchange agent's account in

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

accordance with DTC's procedures for such transfer. However, although delivery of outstanding unregistered notes may be effected through book-entry transfer into the exchange agent's account at DTC, the letter of transmittal (or a manually signed facsimile of the letter of transmittal) with any required signature guarantees, or an 'agent's message' in connection with a book-entry transfer, and any other required documents, must, in any case, be transmitted to and received by the exchange agent, or the guaranteed delivery procedures set forth below must be complied with, in each case, prior to the expiration date. Delivery of documents to DTC does not constitute delivery to the exchange agent.

The exchange agent and DTC have confirmed that the exchange offer is eligible for the DTC Automated Tender Offer Program. Accordingly, DTC participants may electronically transmit their acceptance of the exchange offer by causing DTC to transfer outstanding unregistered notes to the exchange agent in accordance with DTC's Automated Tender Offer Program procedures for transfer. Upon receipt of such holder's acceptance through the Automated Tender Offer Program, DTC will edit and verify the acceptance and send an 'agent's message' to the exchange agent for its acceptance. Delivery of tendered notes must be made to the exchange agent pursuant to the book-entry delivery procedures set forth above, or the tendering DTC participant must comply with the guaranteed delivery procedures set forth below.

The term 'agent's message' means a message transmitted by DTC, and received by the exchange agent and forming part of the confirmation of a book-entry transfer, which states that

DTC has received an express acknowledgment from the participant in DTC tendering notes subject to the book-entry confirmation;

the participant has received and agrees to be bound by the terms of the letter of transmittal or, in the case of an agent's message relating to guaranteed delivery, that the participant has received and agrees to be bound to the applicable notice of guaranteed delivery; and

we may enforce such agreement against such participant.

DETERMINATION OF VALID TENDERS; OUR RIGHTS UNDER THE EXCHANGE OFFER

All questions as to the validity, form, eligibility, time of receipt, acceptance and withdrawal of tendered notes will be determined by us in our sole discretion, which determination will be final and binding on all parties. We expressly reserve the absolute right, in our sole discretion, to reject any or all outstanding unregistered notes not properly tendered or any outstanding unregistered notes the acceptance of which would, in the opinion of our counsel, be unlawful. We also reserve the absolute right in our sole discretion to waive or amend any conditions of the exchange offer or to waive any defects or irregularities of tender for any particular note, whether or not similar defects or irregularities are waived in the case of other notes. Our interpretation of the terms and conditions of the exchange offer will be final and binding on all parties. No alternative, conditional or contingent tenders will be accepted. Unless waived, any defects or irregularities in connection with tenders of outstanding unregistered notes must be cured by the tendering holder within such time as we determine.

Although we intend to notify holders of defects or irregularities in tenders

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

of outstanding unregistered notes, neither we, the exchange agent or any other person shall be under any duty to give notification of defects or irregularities in such tenders or will incur any liability to holders for failure to give such notification. Holders will be deemed to have tendered outstanding unregistered notes only when such defects or irregularities have been cured or waived. The exchange agent will return to the tendering holder, after the expiration of the exchange offer, any outstanding unregistered notes that are not properly tendered and as to which the defects have not been cured or waived.

GUARANTEED DELIVERY PROCEDURES

If you desire to tender outstanding unregistered notes pursuant to the exchange offer and (1) certificates representing such outstanding unregistered notes are not immediately available, (2) time will not permit your letter of transmittal, certificates representing such outstanding unregistered notes and all other required documents to reach the exchange agent on or prior to the expiration date, or (3) the procedures for book-entry transfer (including delivery of an agent's message) cannot be completed on or prior to the expiration date, you may nevertheless tender such notes with the effect that such tender will be deemed to have been received on or prior to the expiration date if all the following conditions are satisfied

you must effect your tender through an 'eligible guarantor institution,' which is defined above under the heading ' -- Guarantee of Signatures';

a properly completed and duly executed notice of guaranteed delivery, or an agent's message with respect to guaranteed delivery that is accepted by us, is received by the exchange agent on or prior to the expiration date as provided below; and

the certificates for the tendered notes, in proper form for transfer (or a book-entry confirmation of the transfer of such notes into the exchange agent's account at DTC as described above), together with a letter of transmittal (or manually signed facsimile of the letter of transmittal) properly completed and duly executed, with any signature guarantees and any other documents required by the letter of transmittal or a properly transmitted agent's message, are received by the exchange agent within three New York Stock Exchange, Inc. trading days after the date of execution of the notice of guaranteed delivery.

The notice of guaranteed delivery may be sent by hand delivery, facsimile transmission or mail to the exchange agent and must include a guarantee by an eligible guarantor institution in the form set forth in the notice of guaranteed delivery.

Upon request to the exchange agent, a notice of guaranteed delivery will be sent to holders who wish to tender their outstanding unregistered notes according to the guaranteed delivery procedures outlined above.

WITHDRAWAL RIGHTS

Except as otherwise provided in this prospectus, you may withdraw tendered outstanding unregistered notes at any time before 5:00 p.m., New York City time, on _____, 2003. For a withdrawal of tendered outstanding unregistered notes to be effective, a written or facsimile transmission notice of withdrawal must be received by the exchange agent on or prior to the expiration of the exchange offer. For DTC participants, a written notice of withdrawal may be made by electronic transmission through DTC's Automated Tender Offer Program. Any notice of withdrawal must

specify the name of the person having tendered the outstanding unregistered notes to be withdrawn;

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

identify the outstanding unregistered notes to be withdrawn, including the certificate number(s) and principal amount of the outstanding unregistered notes, or, in the case of outstanding unregistered notes transferred by book-entry transfer, the name and number of the account at DTC;

36

be signed by the holder in the same manner as the original signature on the letter of transmittal by which such outstanding unregistered notes were tendered, with any required signature guarantees, or be accompanied by documents of transfer sufficient to have the trustee with respect to the outstanding unregistered notes register the transfer of such outstanding unregistered notes into the name of the person withdrawing the tender and a properly completed irrevocable proxy authorizing such person to effect such withdrawal on behalf of such holder; and

specify the name in which the outstanding unregistered notes to be withdrawn are to be registered, if different from that of the registered holder.

If certificates for outstanding unregistered notes have been delivered or otherwise identified to the exchange agent, then, before the release of those certificates, the withdrawing holder must also submit

the serial numbers of the particular certificates to be withdrawn; and

a signed notice of withdrawal with signatures guaranteed by an eligible institution unless the holder is an eligible institution.

Any permitted withdrawal of outstanding unregistered notes may not be rescinded. Any outstanding unregistered notes properly withdrawn will thereafter be deemed not to have been validly tendered for purposes of the exchange offer. The exchange agent will return any withdrawn outstanding unregistered notes without cost to the holder promptly after withdrawal of the outstanding unregistered notes. Holders may retender properly withdrawn outstanding unregistered notes at any time before the expiration of the exchange offer by following one of the procedures described above under the heading ' -- Procedures for Tendering Outstanding Unregistered Notes.'

CONDITIONS TO THE EXCHANGE OFFER

Notwithstanding any other term of the exchange offer, we shall not be required to accept for exchange, or exchange any exchange notes for, any outstanding unregistered notes, and may terminate or amend the exchange offer as provided in this prospectus before the expiration of the exchange offer, if certain events occur, including the following:

the exchange notes to be received will not be tradable by the holder without restrictions under the Securities Act or the Exchange Act and without material restrictions under the blue sky or securities laws of substantially all the states of the United States;

any action or proceeding is instituted or threatened in any court or by or before any governmental agency with respect to the exchange offer which, in our reasonable judgment, might materially impair our ability to proceed with the exchange offer or materially impair the contemplated benefits of

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

the exchange offer to us;

any law, statute, rule, regulation or interpretation by the staff of the SEC is proposed, adopted or enacted, which, in our reasonable judgment, might impair our ability to proceed with the exchange offer or impair the contemplated benefits of the exchange offer to us; or

any governmental approval has not been obtained, which we believe, in our reasonable judgment, is necessary for the consummation of the exchange offer as outlined in this prospectus.

If we determine in our sole discretion that any of the conditions are not satisfied, we may

refuse to accept any outstanding unregistered notes and return all tendered outstanding unregistered notes to the tendering holders;

extend the exchange offer and retain all outstanding unregistered notes tendered prior to the expiration of the exchange offer, subject, however, to the rights of holders to withdraw their outstanding unregistered notes; or

waive such unsatisfied conditions of the exchange offer and accept all properly tendered outstanding unregistered notes which have not been withdrawn.

37

These conditions are for the sole benefit of us and Millennium Chemicals and may be asserted or waived by us at any time in our sole discretion. Our failure to exercise any of these rights at any time will not be deemed a waiver of such rights. These rights will be ongoing and may be asserted by us at any time.

In addition, we will not complete the exchange offer if any stop order is threatened or issued with respect to the registration statement for the exchange offer and the exchange notes. In any such event, we must make every reasonable effort to obtain the withdrawal of any stop order at the earliest possible moment.

EFFECT OF NOT TENDERING

To the extent outstanding unregistered notes are tendered and accepted in the exchange offer, the principal amount of outstanding unregistered notes will be reduced by the amount so tendered and a holder's ability to sell untendered outstanding unregistered notes could be adversely affected. In addition, after the completion of the exchange offer, the outstanding unregistered notes will remain subject to restrictions on transfer. Since the outstanding unregistered notes have not been registered under the Securities Act, they bear a legend restricting their transfer absent registration or the availability of a specific exemption from registration. The holders of outstanding unregistered notes not tendered will have no further registration rights, except for the limited registration rights described above under the heading ' -- Purpose of the Exchange Offer.'

Accordingly, the outstanding unregistered notes not tendered may be resold only

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

to us or our subsidiaries;

pursuant to a registration statement which has been declared effective under the Securities Act;

for so long as the outstanding unregistered notes are eligible for resale pursuant to Rule 144A under the Securities Act to a person the seller reasonably believes is a qualified institutional buyer that purchases for its own account or for the account of a qualified institutional buyer to whom notice is given that the transfer is being made in reliance on Rule 144A; or

pursuant to any other available exemption from the registration requirements of the Securities Act (in which case we and the trustee shall have the right to require the delivery of an opinion of counsel, certifications and/or other information satisfactory to us and the trustee), subject in each of the foregoing cases to any requirements of law that the disposition of the seller's property or the property of such investor account or accounts be at all times within its or their control and to compliance with any applicable state securities laws.

Upon completion of the exchange offer, due to the restrictions on transfer of the outstanding unregistered notes and the absence of such restrictions applicable to the exchange notes, it is likely that the market, if any, for outstanding unregistered notes will be relatively less liquid than the market for exchange notes. Consequently, holders of outstanding unregistered notes who do not participate in the exchange offer could experience significant diminution in the value of their outstanding unregistered notes, compared to the value of the exchange notes.

REGULATORY APPROVALS

Other than the federal securities laws, there are no federal or state regulatory requirements that we must comply with and there are no approvals that we must obtain in connection with the exchange offer.

SOLICITATION OF TENDERS; FEES AND EXPENSES

We will bear the expenses of soliciting tenders. We are mailing the principal solicitation. However, our officers and regular employees and those of our affiliates may make additional solicitations by telegraph, telecopy, telephone or in person.

38

We have not retained any dealer-manager in connection with the exchange offer. We will not make any payments to brokers, dealers, or others soliciting acceptances of the exchange offer. However, we will pay the exchange agent reasonable and customary fees for its services and will reimburse it for its reasonable out-of-pocket expenses.

We will pay the cash expenses incurred in connection with the exchange offer. These expenses include the SEC registration fee, fees and expenses of the exchange agent and trustee, accounting and legal fees and printing costs, among others.

ACCOUNTING TREATMENT

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

The exchange notes will be recorded at the same carrying value as the outstanding unregistered notes. The carrying value is the aggregate gross proceeds received from the sale of the unregistered notes as reflected in our accounting records on the date of exchange. Accordingly, we will recognize no gain or loss for accounting purposes. The expenses of the exchange offer will be expensed over the term of the exchange notes.

TRANSFER TAXES

We will pay all transfer taxes, if any, required to be paid in connection with the exchange of the outstanding unregistered notes for the exchange notes. However, holders who instruct us to register exchange notes in the name of, or request that outstanding unregistered notes not tendered or not accepted for exchange be returned to, a person other than the registered holder will be responsible for the payment of any transfer tax arising from such transfer.

If you do not submit satisfactory evidence of payment of those taxes with the letter of transmittal, the amount of those transfer taxes will be billed to the tendering holder.

THE EXCHANGE AGENT

The Bank of New York, the trustee under the indenture, is serving as the exchange agent for the exchange offer. ALL EXECUTED LETTERS OF TRANSMITTAL SHOULD BE SENT TO THE EXCHANGE AGENT AT THE ADDRESS LISTED BELOW. Questions, requests for assistance and requests for additional copies of this prospectus or the letter of transmittal should be directed to the exchange agent at the address or telephone number listed below.

The Bank of New York
101 Barclay Street -- 7 East
New York, New York 10286
Attn: Bernard Arsenek, Reorganization Department
By Facsimile: (212) 298-1915
Attn: Reorganization Department
Confirm by Telephone: (212) 815-5098

Originals of all documents sent by facsimile should be promptly sent to the exchange agent by registered or certified mail, by hand, or by overnight delivery service.

Delivery to an address other than as set forth above will not constitute a valid delivery.

DESCRIPTION OF THE EXCHANGE NOTES

Definitions of certain terms used in this Description of the Exchange Notes may be found under the heading 'Certain Definitions.' For purposes of this section unless the context otherwise requires, (i) the terms 'Issuer' and 'we' refers only to Millennium America Inc. and not to any of its subsidiaries, (ii) the term 'Company' refers only to Millennium Chemicals Inc., the indirect

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

parent company of the Issuer, and not to any of its subsidiaries, (iii) the term 'Exchange Notes' means the notes offered hereby together with the outstanding 9 1/4% Senior Notes due 2008 which have been registered under the Securities Act (the 'Registered Notes') and (iv) the term 'Notes' means the Exchange Notes together with the outstanding 9 1/4% Senior Notes due 2008 which have not been registered under the Securities Act (the 'Unregistered Notes'). The Company will guarantee the Exchange Notes and therefore will be subject to many of the provisions contained in this Description of the Exchange Notes. The Company's guarantee is termed the 'Note Guarantee.'

On April 25, 2003 we issued \$100 million aggregate principal amount of Unregistered Notes under an indenture, dated June 18, 2001 (the 'Indenture'), among the Issuer, the Company and The Bank of New York, as Trustee (the 'Trustee'), a copy of which is incorporated by reference as an exhibit to the registration statement of which this prospectus is a part and is available upon request to the Company. The Exchange Notes offered hereby will be issued under the Indenture, which is qualified under the U.S. Trust Indenture Act of 1939, as amended. The Indenture contains provisions which define your rights under the Exchange Notes. In addition, the Indenture governs the obligations of the Issuer and the Company under the Exchange Notes. The terms of the Exchange Notes include those stated in the Indenture and those made part of the Indenture by reference to the TIA and are the same in all material respects as those of the Unregistered Notes, except that the Exchange Notes will be registered under the Securities Act and, therefore, will not bear legends restricting transfer.

The Exchange Notes offered hereby will constitute 'Additional Securities' under the Indenture. The Exchange Notes offered hereby, the outstanding Unregistered Notes and Registered Notes, and any Additional Securities issued in the future, will constitute the same series of securities and will vote together as one series on all matters with respect to the Notes, including with respect to the provisions of the Indenture described below under 'Defaults' and 'Amendments and Waivers.'

The following description is meant to be only a summary of certain provisions of the Indenture. It does not restate the terms of the Indenture in their entirety. We urge that you carefully read the Indenture as it, and not this description, governs your rights as Holders.

OVERVIEW OF THE EXCHANGE NOTES AND THE NOTE GUARANTEE

The Exchange Notes offered hereby:

will be general unsecured, senior obligations of the Issuer;

will rank equally in right of payment with all existing and future Senior Indebtedness of the Issuer;

will be senior in right of payment to all future Subordinated Obligations of the Issuer;

will be effectively subordinated to any secured Indebtedness of the Issuer and its Subsidiaries to the extent of the value of the assets securing such Indebtedness;

will be effectively subordinated to all liabilities (including Trade Payables) and Preferred Stock of each Subsidiary of the Issuer; and

will be guaranteed by the Company.

The Note Guarantee of the Company:

will be a general unsecured, senior obligation of the Company;

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

will rank equally in right of payment with all existing and future Senior Indebtedness of the Company;

40

will be senior in right of payment to all future Subordinated Obligations of the Company;

will be effectively subordinated to any secured Indebtedness of the Company and its Subsidiaries to the extent of the value of the assets securing such Indebtedness; and

will be effectively subordinated to all liabilities (including Trade Payables) and Preferred Stock of each Subsidiary of the Company (other than the Issuer).

The Exchange Notes will not be guaranteed by any of the Company's subsidiaries. As of March 31, 2003, these subsidiaries (other than the Issuer) had approximately \$24 million of total indebtedness outstanding (exclusive of unused commitments and \$9 million of undrawn outstanding standby letters of credit), had approximately \$240 million of trade payables outstanding, and held approximately 99% of the Company's consolidated assets. For the year ended December 31, 2002, these subsidiaries generated approximately 100% of the Company's consolidated net sales.

PRINCIPAL, MATURITY AND INTEREST

Up to an aggregate principal amount of \$100 million of Exchange Notes will be issued in the exchange offer. Additional notes in an unlimited amount may be issued under the Indenture from time to time, subject to the covenants under the Indenture and our other debt instruments in effect from time to time. The outstanding Unregistered Notes, the Exchange Notes, and any additional Notes subsequently issued (sometimes collectively referred to as the 'Notes') will be treated as a single class for all purposes under the Indenture.

The outstanding Unregistered Notes and Exchange Notes will mature on June 15, 2008. We will issue the Exchange Notes in fully registered form, without coupons, in denominations of \$1,000 and any integral multiple of \$1,000.

Each Exchange Note we issue pursuant to the exchange offer will bear interest at a rate of 9 1/4% per annum from the most recent interest payment date to which interest has been paid on the tendered outstanding unregistered notes, or if no interest has been paid, from April 25, 2003. We will pay interest semiannually to Holders of record at the close of business on the June 1 or December 1 immediately preceding the interest payment date on and of each year. We will begin paying interest to Holders of the Exchange Notes offered hereby on June 15, 2003. We will pay interest on overdue principal at 1% per annum in excess of such rate, and we will pay interest on overdue installments of interest at such higher rate to the extent lawful.

We will also pay liquidated damages to Holders of the outstanding Unregistered Notes, but not the Exchange Notes, if certain conditions are not satisfied. These liquidated damage provisions are more fully explained under the heading 'The Exchange Offer' above.

PAYMENTS ON THE EXCHANGE NOTES

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

We will pay the principal of, premium, if any, interest and liquidated damages, if any, on the Exchange Notes, and the Exchange Notes may be exchanged or transferred, at any office of ours or any agency designated by us which is located in the Borough of Manhattan, the City of New York. We have initially designated the corporate trust office of the Trustee to act as the agent of the Issuer in such matters. The location of the corporate trust office of the Trustee is 101 Barclay Street, New York, New York 10286. We, however, reserve the right to pay interest to Holders by check mailed directly to Holders at their registered addresses. No service charge will be made for any registration of transfer or exchange of Exchange Notes. We, however, may require Holders to pay any transfer tax or other similar governmental charge payable in connection with any such transfer or exchange.

TRANSFER AND EXCHANGE

A Holder will be able to transfer or exchange Exchange Notes in accordance with the Indenture. Upon any transfer or exchange, the registrar and the Trustee may require a Holder, among other things, to furnish appropriate endorsements and transfer documents and the Issuer

41

may require a Holder to pay any taxes and fees required by law or permitted by the Indenture. The Issuer will not be required to transfer or exchange any Exchange Note selected for redemption or to transfer or exchange any Exchange Note for a period of 15 days prior to a selection of Exchange Notes to be redeemed. The Exchange Notes will be issued in registered form and the registered Holder will be treated as the owner of such Exchange Note for all purposes.

PAYING AGENT AND REGISTRAR

The Trustee will initially act as paying agent and registrar. We may change the paying agent or registrar without prior notice to the Holder of the Exchange Notes, and the Company or any of its Subsidiaries may act as paying agent or registrar.

OPTIONAL REDEMPTION

The Exchange Notes may be redeemed, in whole at any time or in part from time to time, at the option of the Issuer, upon not less than 30 nor more than 60 days' prior notice mailed by first-class mail to each Holder's registered address, at a redemption price equal to the greater of (i) 100% of the principal amount thereof plus accrued and unpaid interest and liquidated damages thereon, if any, to the redemption date (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date) and (ii) the sum of (x) the present values of the remaining scheduled payments of principal and interest thereon from the redemption date to the maturity date (except for currently accrued but unpaid interest) discounted to the redemption date on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate plus 50 basis points and (y) accrued and unpaid interest, if any, to the redemption date.

In addition, prior to June 15, 2004, we may, on one or more occasions, redeem up to a maximum of 35% of the aggregate principal amount of the Exchange Notes (calculated after giving effect to any issuance of additional Notes) with

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

the Net Cash Proceeds of one or more Equity Offerings by the Company to the extent the Net Cash Proceeds thereof are contributed to the Issuer or used to purchase Capital Stock (other than Disqualified Stock) of the Issuer from the Issuer, at a redemption price equal to 109.25% of the principal amount thereof, plus accrued and unpaid interest and liquidated damages thereon, if any, to the redemption date (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date); provided, however, that after giving effect to any such redemption:

(1) at least 65% of the aggregate principal amount of the Exchange Notes (calculated after giving effect to any issuance of additional Notes) remains outstanding; and

(2) any such redemption by the Company must be made within 60 days of such Equity Offering and must be made in accordance with certain procedures set forth in the Indenture.

Except as set forth above, or under the caption 'Redemption for Changes in Withholding Taxes,' we may not redeem the Notes.

SELECTION

If we partially redeem Exchange Notes, the Trustee will select the Exchange Notes to be redeemed in compliance with the requirements of the principal national securities exchanges, if any, on which the Exchange Notes are listed, on a pro rata basis, by lot or by such other method as the Trustee in its sole discretion shall deem to be fair and reasonable, although no Exchange Note of \$1,000 in original principal amount or less will be redeemed in part. If we redeem any Exchange Note in part only, the notice of redemption relating to such Exchange Note shall state the portion of the principal amount thereof to be redeemed. A new Exchange Note in principal amount equal to the unredeemed portion thereof will be issued in the name of the Holder thereof upon cancelation of the original Exchange Note. On and after the redemption date, interest will cease to accrue on Exchange Notes or portions thereof called for redemption so long

42

as we have deposited with the paying agent funds sufficient to pay the principal of, plus accrued and unpaid interest and liquidated damages thereon, if any, the Exchange Notes to be redeemed.

MANDATORY REDEMPTION

The Issuer is not required to make mandatory redemption payments or sinking fund payments with respect to the Exchange Notes.

ADDITIONAL AMOUNTS

The Issuer or the Company is required to make all payments under or with respect to the Exchange Notes and the Note Guarantee free and clear of and without withholding or deduction for or on account of any present or future tax, duty, levy, impost, assessment or other governmental charge (including penalties, interest and other liabilities related thereto) ('Taxes') imposed or levied by or on behalf of the government of the United Kingdom or any political subdivision or any authority or agency therein or thereof having power to tax, or within any other jurisdiction in which we are organized or are otherwise

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

resident for tax purposes or any jurisdiction from or through which payment is made (in each case, other than the United States or any political subdivision or taxing authority thereof) (each a 'Relevant Taxing Jurisdiction'), unless the Issuer or the Company is required to withhold or deduct Taxes by law or by the interpretation or administration thereof.

If the Issuer or the Company is so required to withhold or deduct any amount for or on account of Taxes imposed by a Relevant Taxing Jurisdiction from any payment made under or with respect to the Exchange Notes or the Note Guarantee, the Issuer or the Company will be required to pay such additional amounts ('Additional Amounts') as may be necessary so that the net amount received by you (including Additional Amounts) after such withholding or deduction will not be less than the amount you would have received if such Taxes had not been withheld or deducted; provided, however, that the foregoing obligation to pay Additional Amounts does not apply to (1) any Taxes that would not have been so imposed but for the existence of any present or former connection between the relevant Holder (or between a fiduciary, settlor, beneficiary, member or shareholder of, or possessor of power over the relevant holder, if the relevant holder is an estate, nominee, trust or corporation) and the Relevant Taxing Jurisdiction (other than the mere receipt of such payment or the ownership or holding outside of the Relevant Taxing Jurisdiction of such Exchange Note); or (2) any estate, inheritance, gift, sales, excise, transfer, personal property tax or similar tax, assessment or governmental charge; nor will the Issuer or the Company pay Additional Amounts (a) if the payment could have been made without such deduction or withholding if the beneficiary of the payment had presented the Exchange Note for payment within 30 days after the date on which such payment or such Exchange Note became due and payable or the date on which payment thereof is duly provided for, whichever is later (except to the extent that the holder would have been entitled to Additional Amounts had the Exchange Note been presented on the last day of such 30 day period), or (b) with respect to any payment of principal of (or premium, if any, on) or interest on such Exchange Note to any holder who is a fiduciary or partnership or any person other than the sole beneficial owner of such payment, to the extent that a beneficiary or settlor with respect to such fiduciary, a member of such a partnership or the beneficial owner of such payment would not have been entitled to the Additional Amounts had such beneficiary, settlor, member or beneficial owner been the actual holder of such Exchange Note.

Upon request, the Issuer or the Company will provide the Trustee with official receipts or other documentation satisfactory to the Trustee evidencing the payment of the Taxes with respect to which Additional Amounts are paid.

Whenever in the Indenture there is mentioned, in any context:

- (1) the payment of principal;
- (2) purchase prices in connection with a purchase of Exchange Notes;

43

- (3) interest; or

- (4) any other amount payable on or with respect to any of the Exchange Notes,

such reference shall be deemed to include payment of Additional Amounts as described under this heading to the extent that, in such context, Additional

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Amounts are, were or would be payable in respect thereof.

The Issuer or the Company will pay any present or future stamp, court or documentary taxes or any other excise or property taxes, charges or similar levies that arise in any jurisdiction from the execution, delivery, enforcement or registration of the Exchange Notes, the Note Guarantee, the Indenture or any other document or instrument in relation thereof, or the receipt of any payments with respect to the Exchange Notes or the Note Guarantee, excluding such taxes, charges or similar levies imposed by any jurisdiction outside of the United Kingdom, the jurisdiction of incorporation of any successor of the Company or any jurisdiction in which a paying agent is located, and we will agree to indemnify the Holders for any such taxes paid by such Holders.

The obligations described under this heading will survive any termination, defeasance or discharge of the Indenture and will apply mutatis mutandis to any jurisdiction in which any successor Person to the Company is organized or any political subdivision or taxing authority or agency thereof or therein (other than the United States or any political subdivision or taxing authority thereof).

REDEMPTION FOR CHANGES IN WITHHOLDING TAXES

We are entitled to redeem the Exchange Notes, at our option, at any time as a whole but not in part, upon not less than 30 nor more than 60 days' notice, at 100% of the principal amount thereof, plus accrued and unpaid interest (if any) and liquidated damages to the date of redemption (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date), in the event we have become or would become obligated to pay, on the next date on which any amount would be payable with respect to the Exchange Notes or the Note Guarantee, any Additional Amounts as a result of:

(1) a change in or an amendment to the laws (including any regulations promulgated thereunder) of any Relevant Taxing Jurisdiction; or

(2) any change in or amendment to any official position regarding the application or interpretation of such laws or regulations, which change or amendment is announced or becomes effective on or after the date of this offering memorandum

and we cannot avoid such obligation by taking reasonable measures available to us.

Before we publish or mail notice of redemption of the Exchange Notes as described above, we will deliver to the Trustee an officers' certificate to the effect that we cannot avoid our obligation to pay Additional Amounts by taking reasonable measures available to us. We will also deliver an opinion of independent legal counsel of recognized standing stating that we would be obligated to pay Additional Amounts as a result of a change in tax laws or regulations or the application or interpretation of such laws or regulations.

RANKING

The Exchange Notes will be general unsecured Senior Indebtedness of the Issuer, will rank equally in right of payment with all existing and future Senior Indebtedness of the Issuer and will be senior in right of payment to all future Subordinated Obligations of the Issuer. The Exchange Notes also will be effectively subordinated to any secured Indebtedness of the Issuer and its Subsidiaries to the extent of the value of the assets securing such secured Indebtedness.

The Note Guarantee will be general unsecured Senior Indebtedness of the

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Company, will rank equally in right of payment with all existing and future Senior Indebtedness of the Company and will be senior in right of payment to all future Subordinated Obligations of the Company. The

44

Note Guarantee will be effectively subordinated to any secured Indebtedness of the Company and its Subsidiaries to the extent of the value of the assets securing such secured Indebtedness.

The Company, the indirect parent company of the Issuer, currently conducts all of its operations through its Subsidiaries, and the Issuer currently conducts all of its operations through its Subsidiaries. Creditors of such Subsidiaries, including trade creditors, and preferred stockholders (if any) of such Subsidiaries generally will have priority with respect to the assets and earnings of such Subsidiaries over the claims of the creditors of the Company and the Issuer, including Holders. The Exchange Notes, therefore, will be effectively subordinated to the claims of creditors, including trade creditors, and preferred stockholders (if any) of the Company's Subsidiaries (other than the Issuer). Although the Indenture will limit the Incurrence of Indebtedness by and the issuance of preferred stock of certain of our Subsidiaries, such limitation is subject to a number of significant qualifications.

As of March 31, 2003, on a pro forma basis, there would have been outstanding:

(1) \$1,297 million of senior indebtedness of the Issuer (including the Notes), of which \$48 million would have been secured indebtedness (exclusive of unused commitments under the Credit Agreement and \$12 million of undrawn outstanding standby letters of credit);

(2) \$1,249 million of senior indebtedness of the Company (exclusive of guarantees of indebtedness under the Credit Agreement and \$1 million of undrawn outstanding standby letters of credit), of which none would have been secured indebtedness;

(3) no subordinated obligations of the Company or the Issuer; and

(4) \$240 million of trade payables and \$24 million of total indebtedness outstanding (exclusive of unused commitments under the Credit Agreement and \$9 million of undrawn outstanding standby letters of credit) of subsidiaries of the Company, other than the Issuer. In addition, since each of the Company and the Issuer conducts all of its operations through its subsidiaries, subsidiaries of the Company (other than the Issuer) had substantial operating liabilities.

Although the Indenture will limit the Incurrence of Indebtedness by the Company and the Restricted Subsidiaries (including the Issuer) and the issuance of Preferred Stock by the Restricted Subsidiaries, such limitation is subject to a number of significant qualifications. The Company and its Subsidiaries may be able to incur substantial amounts of Indebtedness in certain circumstances. Such Indebtedness may be Senior Indebtedness.

THE NOTE GUARANTEE

The Company, as primary obligor and not merely as surety, will irrevocably and unconditionally Guarantee on an unsecured senior basis the performance and

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

full and punctual payment when due, whether at Stated Maturity, by acceleration or otherwise, of all obligations of the Issuer under the Indenture (including obligations to the Trustee) and the Exchange Notes, whether for payment of principal of or interest on or liquidated damages in respect of the Exchange Notes, expenses, indemnification or otherwise (all such obligations guaranteed by the Company being herein called the 'Guaranteed Obligations'). The Company will agree to pay, in addition to the amount stated above, any and all costs and expenses (including reasonable counsel fees and expenses) incurred by the Trustee or the Holders in enforcing any rights under the Note Guarantee. The Note Guarantee will be limited in amount to an amount not to exceed the maximum amount that can be Guaranteed by the Company without rendering the Note Guarantee voidable under applicable law relating to fraudulent conveyance or fraudulent transfer or similar laws affecting the rights of creditors generally.

The Note Guarantee is a continuing guarantee and shall (a) remain in full force and effect until payment in full of all the Guaranteed Obligations, (b) be binding upon the Company and its successors and (c) inure to the benefit of, and be enforceable by, the Trustee, the Holders and their successors, transferees and assigns.

45

CHANGE OF CONTROL

Upon the occurrence of any of the following events (each a 'Change of Control'), each Holder of Exchange Notes will have the right to require the Issuer to purchase all or any part (equal to \$1,000 or an integral multiple thereof) of such Holder's Exchange Notes at a purchase price in cash equal to 101% of the principal amount thereof plus accrued and unpaid interest and liquidated damages, if any, to the date of purchase (subject to the right of Holders of record on the relevant record date to receive interest and liquidated damages, if any, due on the relevant interest payment date):

(1) any 'person' (as such term is used in Sections 13(d) and 14(d) of the Exchange Act), other than the Company or a Subsidiary of the Company, is or becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 under the Exchange Act, except that for purposes of this clause (1) such person shall be deemed to have 'beneficial ownership' of all shares that any such person has the right to acquire, whether such right is exercisable immediately or only after the passage of time), directly or indirectly, of more than 50% of the total voting power of the Voting Stock of the Issuer or the Company (for the purposes of this clause (1), such person shall be deemed to beneficially own any Voting Stock of an entity held by any other entity (the 'parent entity'), if such person is the beneficial owner (as defined in this clause (1)), directly or indirectly, of more than 50% of the voting power of the Voting Stock of such parent entity); or

(2) during any period of two consecutive years, individuals who at the beginning of such period constituted the board of directors of the Issuer or the Company, as the case may be (together with any new directors whose election by such board of directors of the Issuer or the Company, as the case may be, or whose nomination for election by the shareholders of the Issuer or the Company, as the case may be, was approved by a vote of 66 2/3% of the directors of the Issuer or the Company, as the case may be, then still in office who were either directors at the beginning of such period or whose election or nomination for election was previously so approved) cease for any reason to constitute a majority of the board of directors of the

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Issuer or the Company, as the case may be, then in office; or

(3) the adoption of a plan relating to the liquidation or dissolution of the Issuer or the Company; or

(4) the merger or consolidation of the Issuer or the Company with or into another Person or the merger of another Person with or into the Issuer or the Company, or the sale of all or substantially all the assets of the Issuer or the Company to another Person, unless, in the case of any such merger or consolidation, the securities of the Issuer or the Company, as the case may be, that are outstanding immediately prior to such transaction and which represent 100% of the aggregate voting power of the Voting Stock of the Issuer or the Company, as the case may be, constitute or are changed into or exchanged for securities that constitute, in addition to any other consideration, securities of the surviving Person that represent immediately after such transaction at least a majority of the aggregate voting power of the Voting Stock of the surviving Person or transferee. For purposes of this clause (4), (i) the sale by the Company or the Issuer of the equity interests in Millennium Petrochemicals Inc., the equity interests in the limited liability companies which directly or indirectly own the Company's equity interests in Equistar, and/or the Company's equity interests in Equistar will be deemed not to constitute a sale of all or substantially all of the assets of the Issuer or the Company if any such sale consists of Net Tangible Assets constituting 33 1/3% or less of the Consolidated Net Tangible Assets of the Company as of the date of the most recent publicly available consolidated balance sheet of the Company and its Subsidiaries and (ii) it shall not be a Change of Control if the Issuer or the Company merges into the other or into a Restricted Subsidiary, or consolidates with or into the other or a Restricted Subsidiary, or sells all or substantially all of its assets to the other or a Restricted Subsidiary for internal restructuring purposes or in combination with another transaction which does not constitute a Change of Control.

46

In the event that at the time of such Change of Control the terms of the Bank Indebtedness restrict or prohibit the repurchase of Exchange Notes pursuant to this covenant, then prior to the mailing of the notice to Holders provided for in the immediately following paragraph but in any event within 30 days following any Change of Control, the Issuer shall:

(1) repay in full all Bank Indebtedness or, if doing so will allow the purchase of Exchange Notes, offer to repay in full all Bank Indebtedness and repay the Bank Indebtedness of each lender who has accepted such offer; or

(2) obtain the requisite consent under the agreements governing the Bank Indebtedness to permit the repurchase of the Exchange Notes as provided for in the immediately following paragraph.

Within 30 days following any Change of Control, the Issuer shall mail a notice to each Holder with a copy to the Trustee (the 'Change of Control Offer') stating:

(1) that a Change of Control has occurred and that such Holder has the right to require the Issuer to purchase all or a portion of such Holder's Exchange Notes at a purchase price in cash equal to 101% of the principal amount thereof, plus accrued and unpaid interest and liquidated damages, if

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

any, to the date of purchase (subject to the right of Holders of record on the relevant record date to receive interest and liquidated damages, if any, on the relevant interest payment date);

(2) the circumstances and relevant facts and financial information regarding such Change of Control;

(3) the purchase date (which shall be no earlier than 30 days nor later than 60 days from the date such notice is mailed); and

(4) the instructions determined by the Issuer, consistent with the Indenture, that a Holder must follow in order to have its Notes purchased.

The Issuer will not be required to make a Change of Control Offer upon a Change of Control if a third party makes the Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set forth in the Indenture applicable to a Change of Control Offer made by the Issuer and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer.

The Issuer will comply, to the extent applicable, with the requirements of Section 14(e) of the Exchange Act and any other securities laws or regulations in connection with the purchase of Exchange Notes pursuant to the Indenture. To the extent that the provisions of any securities laws or regulations conflict with provisions of the Indenture, the Issuer will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under the Indenture by virtue thereof.

The Change of Control purchase feature is a result of negotiations between the Issuer, the Company and the initial purchasers in the offering of the 9 1/4% Senior Notes due 2008 in June 2001. Neither management of the Issuer nor the Company has a present intention to engage in a transaction involving a Change of Control, although it is possible that the Issuer or the Company would decide to do so in the future. Subject to the limitations discussed below, we could, in the future, enter into certain transactions, including acquisitions, refinancings or recapitalizations, that would not constitute a Change of Control under the Indenture, but that could increase the amount of indebtedness outstanding at such time or otherwise affect our capital structure or credit ratings. Restrictions on our ability to Incur additional Indebtedness are contained in the covenants described under 'Certain Covenants -- Limitation on Indebtedness,' ' -- Limitation on Liens' and ' -- Limitation on Sale/Leaseback Transactions.' Such restrictions can only be waived with the consent of the Holders of a majority in principal amount of the Notes then outstanding. Except for the limitations contained in such covenants, however, the Indenture does not contain any covenants or provisions that may afford Holders protection in the event of a highly leveraged transaction.

The occurrence of certain of the events which would constitute a Change of Control would constitute a default under the Credit Agreement. Future Indebtedness of the Company and its Subsidiaries may contain prohibitions of certain events which would constitute a Change of Control or require such Indebtedness to be repurchased or repaid upon a Change of Control. Moreover, the exercise by the Holders of their right to require the Issuer to purchase the Exchange Notes could cause a default under such Indebtedness, even if the Change of Control itself does not, due to the financial effect of such repurchase on

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

the Company and its Subsidiaries. Finally, the Issuer's ability to pay cash to the Holders upon a purchase may be limited by the Issuer's then existing financial resources. There can be no assurance that sufficient funds will be available when necessary to make any required purchases. The provisions under the Indenture relative to the Issuer's obligation to make an offer to purchase the Exchange Notes as a result of a Change of Control may be waived or modified with the written consent of the Holders of a majority in principal amount of the Notes then outstanding.

The definition of 'Change of Control' includes a disposition of all or substantially all of the assets of the Company or the Issuer to any Person. Although there is a limited body of case law interpreting the phrase 'substantially all,' there is no precise established definition of the phrase under New York law (which is the governing law of the Indenture). Accordingly, in certain circumstances there may be a degree of uncertainty as to whether a particular transaction would involve a disposition of 'all or substantially all' of the assets of a Person. As a result, it may be unclear as to whether a Change of Control has occurred and whether a holder of Exchange Notes may require the Issuer to make an offer to repurchase the Exchange Notes as described above.

CERTAIN COVENANTS

The Indenture contains covenants including, among others, the following:

Limitation on Indebtedness. (a) Subsequent to June 18, 2001, the Company will not, and will not permit any Restricted Subsidiary to, Incur, directly or indirectly, any Indebtedness; provided, however, that the Issuer or the Company may Incur Indebtedness if on the date of such Incurrence and after giving effect thereto the Consolidated Coverage Ratio would be greater than 2.00:1 if such Indebtedness is Incurred on or prior to June 15, 2003 and 2.25:1 if such Indebtedness is Incurred thereafter.

(b) Notwithstanding the foregoing paragraph (a), the Company and its Restricted Subsidiaries may Incur the following Indebtedness:

(1) Bank Indebtedness (and Guarantees thereof) in an aggregate principal amount incurred since June 18, 2001 not to exceed the greater of: (A) \$300 million less the aggregate amount of all repayments of principal of such Indebtedness pursuant to the covenant described under ' -- Limitation on Sales of Assets and Subsidiary Stock', and (B) the sum of 85% of the book value of accounts receivable and 50% of the book value of inventory of the Company and its Restricted Subsidiaries, calculated on a consolidated basis and in accordance with GAAP as of the date of the most recent publicly available consolidated balance sheet of the Company;

(2) Indebtedness of the Company owed to and held by any Restricted Subsidiary or Indebtedness of a Restricted Subsidiary owed to and held by the Company or any Restricted Subsidiary; provided, however, that (A) any subsequent issuance or transfer of any Capital Stock or any other event that results in any such Restricted Subsidiary ceasing to be a Restricted Subsidiary or any subsequent transfer of any such Indebtedness (except to the Company or a Restricted Subsidiary) shall be deemed, in each case, to constitute the Incurrence of such Indebtedness by the issuer thereof, (B) if the Issuer is the obligor on such Indebtedness, such Indebtedness is expressly subordinated to the prior payment in full in cash of all obligations with respect to the Exchange Notes and (C) if the Company is the obligor on such Indebtedness, such Indebtedness is expressly subordinated to the prior payment in full in cash of all obligations of the Company with respect to its Note Guarantee;

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

(3) Indebtedness (A) represented by the Notes (not including any Notes issued subsequent to June 18, 2001) and the Note Guarantee, (B) outstanding on June 18, 2001 (other than the Indebtedness described in clauses (1) and (2) above), (C) consisting of Refinancing Indebtedness Incurred in respect of any Indebtedness described in this clause (3) (including Indebtedness that is Refinancing Indebtedness) or the foregoing paragraph (a) and (D) consisting of Guarantees of any Indebtedness permitted under clauses (1) and (2) of this paragraph (b);

(4) (A) Indebtedness of a Restricted Subsidiary Incurred and outstanding on or prior to the date on which such Restricted Subsidiary was acquired by the Company (other than Indebtedness Incurred in contemplation of, in connection with, as consideration in, or to provide all or any portion of the funds or credit support utilized to consummate, the transaction or series of related transactions pursuant to which such Restricted Subsidiary became a Subsidiary of or was otherwise acquired by the Company); provided, however, that on the date that such Restricted Subsidiary is acquired by the Company, the Company would have been able to Incur \$1.00 of additional Indebtedness pursuant to the foregoing paragraph (a) after giving effect to the Incurrence of such Indebtedness pursuant to this clause (4) and (B) Refinancing Indebtedness Incurred by a Restricted Subsidiary in respect of Indebtedness Incurred by such Restricted Subsidiary pursuant to this clause (4);

(5) Indebtedness in respect of workers' compensation claims, self-insurance obligations, completion guarantees, performance bonds, bankers' acceptances, letters of credit and performance, indemnity, surety or appeal bonds and similar items provided or Incurred by the Company and the Restricted Subsidiaries in the ordinary course of their business;

(6) Purchase Money Indebtedness and Capitalized Lease Obligations in an aggregate principal amount incurred since June 18, 2001 not in excess of \$50 million at any time outstanding;

(7) Indebtedness Incurred by a Receivables Entity since June 18, 2001 in a Qualified Receivables Transaction with respect to accounts receivable of a Domestic Subsidiary that is not recourse to the Company or any other Restricted Subsidiary of the Company (except for Standard Securitization Undertakings) in an aggregate principal amount not to exceed \$100 million at any time outstanding;

(8) Indebtedness arising from agreements of the Company or a Restricted Subsidiary providing for indemnification, contribution, earnout, adjustment of purchase price or similar obligations, in each case, incurred or assumed in connection with the disposition of any business, assets or Capital Stock of a Restricted Subsidiary;

(9) Indebtedness arising from the honoring by a bank or other financial institution of a check, draft or similar instrument (except in the case of daylight overdrafts) drawn against insufficient funds in the ordinary course of business, provided, however, that such Indebtedness is extinguished within five business days of Incurrence;

(10) Indebtedness of any Foreign Subsidiary (including any Indebtedness Incurred by a Receivables Entity in a Qualified Receivables Transaction with respect to accounts receivable of a Foreign Subsidiary that is not recourse to the Company or any other Restricted Subsidiary of the Company (except for

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Standard Securitization Undertakings)) incurred since June 18, 2001 in an aggregate principal amount on the date of Incurrence that, when added to all other Indebtedness Incurred pursuant to this clause (10) and then outstanding, will not exceed \$100 million; provided that immediately after giving effect to such Incurrence of Indebtedness, the Company would be able to Incur at least \$1.00 of additional Indebtedness under paragraph (a) of this covenant above;

(11) Guarantees by the Company, the Issuer or a Restricted Subsidiary of Indebtedness permitted to be Incurred by Restricted Subsidiaries (other than Guarantees by a Restricted Subsidiary of Indebtedness of the Issuer) pursuant to this 'Limitation on Indebtedness' covenant; or

49

(12) Indebtedness (other than Indebtedness permitted to be Incurred pursuant to the foregoing paragraph (a) or any other clause of this paragraph (b)) in an aggregate principal amount on the date of Incurrence that, when added to all other Indebtedness Incurred pursuant to this clause (12) since June 18, 2001 and then outstanding, will not exceed \$50 million.

(c) Notwithstanding the foregoing, the Company and its Restricted Subsidiaries may not Incur any Indebtedness pursuant to paragraph (b) above if the proceeds thereof are used, directly or indirectly, to repay, prepay, redeem, defease, retire, refund or refinance any Subordinated Obligations of the Company or the Issuer unless such Indebtedness will be subordinated to the Exchange Notes or the Note Guarantee, as applicable, to at least the same extent as such Subordinated Obligations.

(d) Notwithstanding any other provision of this covenant, the maximum amount of Indebtedness that the Company or any Restricted Subsidiary may Incur pursuant to this covenant shall not be deemed to be exceeded solely as a result of fluctuations in the exchange rates of currencies. For purposes of determining the outstanding principal amount of any particular Indebtedness Incurred pursuant to this covenant:

(1) Indebtedness Incurred pursuant to the Credit Agreement on or prior to June 18, 2001 shall be treated as Incurred pursuant to clause (1) of paragraph (b) above,

(2) Indebtedness permitted by this covenant need not be permitted solely by reference to one provision permitting such Indebtedness but may be permitted in part by one such provision and in part by one or more other provisions of this covenant permitting such Indebtedness, and

(3) in the event that Indebtedness meets the criteria of more than one of the types of Indebtedness described in this covenant, the Issuer, in its sole discretion, shall classify such Indebtedness and only be required to include the amount of such Indebtedness in one of such clauses.

(e) Notwithstanding the foregoing, subsequent to June 18, 2001, the Company shall not permit any Restricted Subsidiary to Incur any Funded Debt, except for:

(i) Funded Debt Incurred pursuant to clause (b) (3) (B) or (C) of this covenant,

(ii) Funded Debt Incurred pursuant to clause (b) (4) of this covenant

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

(without giving effect to the proviso thereto after the Fall-Away Date),

(iii) Funded Debt consisting of Purchase Money Indebtedness and Refinancing Indebtedness Incurred in respect of such Purchase Money Indebtedness Incurred pursuant to clause (b) (6) of this covenant (without giving effect to the cap therein after the Fall-Away Date),

(iv) Funded Debt consisting of Indebtedness Incurred pursuant to clause (b) (2) or (b) (7) of this covenant, and

(v) Funded Debt in an aggregate principal amount which, together with (without duplication) (a) the aggregate principal amount of all other Funded Debt of the Restricted Subsidiaries (other than Funded Debt permitted to be Incurred under clauses (i) through (iv) above), (b) the aggregate principal amount of all Secured Debt of the Company and the Restricted Subsidiaries (other than Indebtedness permitted to be secured under clauses (1) through (9) of paragraph (a) of the covenant described under 'Limitation on Liens'), and (c) the aggregate Value of Sale/Leaseback Transactions of the Company and its Restricted Subsidiaries (other than Sale/Leaseback Transactions permitted under paragraph (a) of the covenant described under 'Limitation on Sale/Leaseback Transactions') does not at such time exceed 15% of Consolidated Net Tangible Assets of the Issuer.

50

Limitation on Restricted Payments. (a) Subsequent to June 18, 2001, the Company will not, and will not permit any Restricted Subsidiary, directly or indirectly, to:

(1) declare or pay any dividend, make any distribution on or in respect of its Capital Stock or make any similar payment (including any payment in connection with any merger or consolidation involving the Company or any Subsidiary of the Company) to the direct or indirect holders of its Capital Stock, except (x) dividends or distributions payable solely in Capital Stock of the Company or its Restricted Subsidiaries (other than Disqualified Stock or Preferred Stock) and (y) dividends or distributions payable to the Company or a Restricted Subsidiary (and, if such Restricted Subsidiary has shareholders other than the Company or other Restricted Subsidiaries, to its other shareholders on a pro rata basis),

(2) purchase, repurchase, redeem, retire or otherwise acquire for value any Capital Stock of the Company or any Restricted Subsidiary held by Persons other than the Company or a Restricted Subsidiary,

(3) purchase, repurchase, redeem, retire, defease or otherwise acquire for value, prior to scheduled maturity, scheduled repayment or scheduled sinking fund payment any Subordinated Obligations (other than the purchase, repurchase, redemption, retirement, defeasance or other acquisition for value of Subordinated Obligations acquired in anticipation of satisfying a sinking fund obligation, principal installment or final maturity, in each case due within one year of the date of acquisition or Subordinated Obligations held by the Company or any Restricted Subsidiary), or

(4) make any Investment (other than a Permitted Investment) in any Person (any such dividend, distribution, payment, purchase, redemption, repurchase, defeasance, retirement, or other acquisition or Investment being herein referred to as a 'Restricted Payment'),

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

if at the time the Company or such Restricted Subsidiary makes such Restricted Payment:

(A) a Default will have occurred and be continuing (or would result therefrom);

(B) the Company could not Incur at least \$1.00 of additional Indebtedness under paragraph (a) of the covenant described under ' -- Limitation on Indebtedness'; or

(C) the aggregate amount of such Restricted Payment and all other Restricted Payments (the amount so expended, if other than in cash, to be determined in good faith by the Board of Directors of the Company, whose determination will be conclusive and evidenced by a resolution of the Board of Directors of the Company) declared or made subsequent to June 18, 2001 would exceed the sum, without duplication, of:

(i) 50% of the Consolidated Net Income accrued during the period (treated as one accounting period) from July 1, 2001 to the end of the most recent fiscal quarter for which consolidated financial statements of the Company are publicly available prior to the date of such Restricted Payment (or, in case such Consolidated Net Income will be a deficit, minus 100% of such deficit);

(ii) the aggregate Net Cash Proceeds received by the Company from the issue or sale of its Capital Stock (other than Disqualified Stock) subsequent to June 18, 2001 (other than an issuance or sale to (x) a Subsidiary of the Company or (y) an employee stock ownership plan or other trust established by the Company or any of its Subsidiaries);

(iii) the amount by which Indebtedness of the Company or its Restricted Subsidiaries is reduced on the Company's balance sheet upon the conversion or exchange (other than by a Subsidiary of the Company) subsequent to June 18, 2001 of any Indebtedness of the Company or its Restricted Subsidiaries issued after the Closing Date which is convertible or exchangeable for Capital Stock (other than Disqualified Stock) of the Company (less the amount of any cash or the Fair Market Value of other property distributed by the Company or any Restricted Subsidiary upon such conversion or exchange);

51

(iv) the amount equal to the net reduction in Investments in Unrestricted Subsidiaries resulting from (x) payments of dividends, repayments of the principal of loans or advances or other transfers of assets to the Company or any Restricted Subsidiary from Unrestricted Subsidiaries or (y) the redesignation of Unrestricted Subsidiaries as Restricted Subsidiaries (valued in each case as provided in the definition of 'Investment') not to exceed, in the case of any Unrestricted Subsidiary, the amount of Investments previously made by the Company or any Restricted Subsidiary in such Unrestricted Subsidiary, which amount was included in the calculation of the amount of Restricted Payments;

(v) an amount equal to 50% of the cash distributions received by

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

the Company or any of its Restricted Subsidiaries from Equistar during the period (treated as one accounting period) from April 1, 2001 to the end of the most recent fiscal quarter for which consolidated financial statements of the Company are publicly available prior to the date of such Restricted Payment; and

(vi) \$40 million.

(b) The provisions of the foregoing paragraph (a) will not prohibit any Permitted Investment or:

(1) any purchase, repurchase, redemption, retirement or other acquisition for value of Capital Stock of the Company made by exchange for, or out of the proceeds of the sale within 30 days of, Capital Stock of the Company (other than Disqualified Stock and other than Capital Stock issued or sold to a Subsidiary of the Company or an employee stock ownership plan or other trust established by the Company or any of its Subsidiaries); provided, however, that:

(A) such purchase, repurchase, redemption, retirement or other acquisition for value will be excluded in the calculation of the amount of Restricted Payments, and

(B) the Net Cash Proceeds from such sale applied in the manner set forth in this clause (1) will be excluded from the calculation of amounts under clause (C)(ii) of paragraph (a) above;

(2) any prepayment, repayment, purchase, repurchase, redemption, retirement, defeasance or other acquisition for value of Subordinated Obligations of the Company or the Issuer made by exchange for, or out of the proceeds of the sale within 30 days of, Indebtedness of the Company or the Issuer that is permitted to be Incurred pursuant to paragraph (b) of the covenant described under ' -- Limitation on Indebtedness'; provided, however, that such prepayment, repayment, purchase, repurchase, redemption, retirement, defeasance or other acquisition for value will be excluded in the calculation of the amount of Restricted Payments;

(3) any prepayment, repayment, purchase, repurchase, redemption, retirement, defeasance or other acquisition for value of Subordinated Obligations of the Company or the Issuer from Net Available Cash to the extent permitted by the covenant described under ' -- Limitation on Sales of Assets and Subsidiary Stock'; provided, however, that such prepayment, repayment, purchase, repurchase, redemption, retirement, defeasance or other acquisition for value will be excluded in the calculation of the amount of Restricted Payments;

(4) dividends paid within 90 days after the date of declaration thereof if at such date of declaration such dividends would have complied with this covenant; provided, however, that such dividends will be included in the calculation of the amount of Restricted Payments;

(5) any purchase, repurchase, redemption, retirement or other acquisition for value of shares of, or options to purchase shares of, common stock of the Company or any of its Subsidiaries from employees, former employees, directors or former directors of the Company or any of its Subsidiaries (or permitted transferees of such employees, former employees, directors or former directors), pursuant to the terms of agreements (including employment agreements) or plans (or amendments thereto) approved by the Board of Directors of the

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Company under which such individuals purchase or sell or are granted the option to purchase or sell, shares of such common stock; provided, however, that the aggregate amount of such purchases, repurchases, redemptions, retirements and other acquisitions for value permitted under this clause (5) will not exceed \$5 million in any calendar year; provided further, however, that such amount permitted under this clause (5) in any calendar year may be increased by up to \$5 million of cash proceeds received by the Company or any of its Restricted Subsidiaries in such calendar year from the sale of Capital Stock of the Company (other than Disqualified Stock) to employees or directors of the Company or its Subsidiaries (or trusts for the benefit of such persons), provided that such cash proceeds so applied will be excluded from the calculation of amounts under clause (C) (ii) of paragraph (a) above; provided further, however, that such purchases, repurchases, redemptions, retirements and other acquisitions for value will be included in the calculation of the amount of Restricted Payments;

(6) the declaration and payment of dividends to holders of any class or series of Disqualified Stock of the Company issued in accordance with the terms of the Indenture; provided that the payment of such dividends will be excluded from the calculation of Restricted Payments;

(7) repurchases of Capital Stock (or warrants or options convertible into or exchangeable for such Capital Stock) deemed to occur upon the exercise of warrants or stock options if such Capital Stock (or warrants or options convertible into or exchangeable for such Capital Stock) represents a portion of the exercise price thereof; provided, however, that such repurchases will be excluded from the calculation of the amount of Restricted Payments;

(8) Investments in Equistar that the Company is required to make pursuant to the Equistar Partnership Agreement on terms no less favorable to the Company than those in effect on June 18, 2001 in an amount not to exceed \$30 million in any calendar year and \$100 million over any five calendar year period; provided, however, that in the event that Investments in Equistar by the Company or any of its Restricted Subsidiaries are required without the consent of the Company in accordance with the Equistar Partnership Agreement as in effect on June 18, 2001 (or on terms no less favorable to the Company than as in effect on June 18, 2001) to achieve or maintain compliance with any HSE Law (as defined in the Asset Contribution Agreement as in effect on June 18, 2001) and such Investments, if made, would exceed the annual cap set forth in this clause (8) above in the calendar year in which they are required to be made, then such annual cap (but not the five year cap set forth in this clause (8) above) may be exceeded; provided that if such Investment, taken together with all other Investments made at any time pursuant to this clause (8), exceeds \$30 million, at the time of making such Investment the Company would be able to Incur at least \$1.00 of additional Indebtedness under paragraph (a) of the covenant described under ' -- Limitation on Indebtedness'; provided, further that such Investments will be included in the calculation of Restricted Payments; and

(9) other Restricted Payments in an aggregate amount since June 18, 2001 not to exceed \$20 million; provided, however, that such Restricted Payments shall be excluded from the calculation of Restricted Payments.

Limitation on Restrictions on Distributions from Restricted Subsidiaries.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Subsequent to June 18, 2001, the Company will not, and will not permit any Restricted Subsidiary to, create or otherwise cause or permit to exist or become effective any consensual encumbrance or restriction on the ability of any Restricted Subsidiary to:

- (1) pay dividends or make any other distributions on its Capital Stock or pay any Indebtedness or other obligations owed to the Company or the Issuer;
- (2) make any loans or advances to the Company or the Issuer; or
- (3) transfer any of its property or assets to the Company or the Issuer.

53

The preceding provisions will not prohibit:

(A) any encumbrance or restriction pursuant to applicable law or an agreement in effect at or entered into on June 18, 2001 (including, without limitation, the Indenture and the Credit Agreement);

(B) any encumbrance or restriction with respect to a Restricted Subsidiary existing prior to the date on which such Restricted Subsidiary was acquired by the Company (other than any encumbrance or restriction with respect to any obligation or Indebtedness Incurred as consideration in, in contemplation of, or to provide all or any portion of the funds or credit support utilized to consummate the transaction or series of related transactions pursuant to which such Restricted Subsidiary became a Restricted Subsidiary or was otherwise acquired by the Company) and outstanding on such date;

(C) any encumbrance or restriction pursuant to an agreement effecting a Refinancing of Indebtedness Incurred pursuant to an agreement referred to in clause (A) or (B) of this covenant or this clause (C) or contained in any amendment to an agreement referred to in clause (A) or (B) of this covenant or this clause (C); provided, however, that the encumbrances and restrictions contained in any such Refinancing agreement or amendment are no less favorable in any material respect to the Holders than the encumbrances and restrictions contained in such predecessor agreements;

(D) in the case of clause (3), any encumbrance or restriction

(i) that restricts in a customary manner the subletting, assignment or transfer of any property or asset that is subject to a lease, license or similar contract, or (ii) contained in any mortgage, pledge or security agreements securing Indebtedness of a Restricted Subsidiary to the extent such encumbrance or restriction restricts the transfer of the property subject to such security agreements; and (iii) pursuant to customary provisions restricting dispositions of real property interests set forth in any reciprocal easement agreements of the Company or any Restricted Subsidiary;

(E) with respect to a Restricted Subsidiary, any restriction imposed pursuant to an agreement entered into for the sale or disposition of assets of, or all or substantially all the Capital Stock of, such Restricted Subsidiary pending the closing of such sale or disposition;

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

(F) any encumbrance or restriction existing under or by reason of Indebtedness or other contractual requirements of a Receivables Entity in connection with a Qualified Receivables Transaction; provided that such restrictions apply only to such Receivables Entity;

(G) in the case of clause (3), Purchase Money Indebtedness, Capital Lease Obligations, industrial revenue or similar bonds, or operating leases or similar transactions Incurred in compliance with the Indenture that impose encumbrances or restrictions on the property so acquired or covered thereby;

(H) encumbrances or restrictions arising or existing by reason of applicable law or any applicable rule, regulation or order of any foreign or domestic government agency or court;

(I) encumbrances existing under the Indenture and the Notes;

(J) any encumbrance or restriction on cash or other deposits or net worth imposed by customers under contracts entered into in the ordinary course of business;

(K) encumbrances or restrictions existing under or by reason of provisions with respect to the disposition or distribution of assets or property in joint venture agreements and other similar agreements entered into in the ordinary course of business, so long as such encumbrances or restrictions are not applicable to any Person (or its property or assets) other than such joint venture or a Subsidiary thereof;

54

(L) in the case of clause (3), any Lien Incurred in compliance with the covenant described under ' -- Limitation on Liens'; and

(M) customary restrictions imposed on the transfer of intellectual property in the ordinary course of business.

Limitation on Sales of Assets and Subsidiary Stock. (a) Subsequent to June 18, 2001, the Company will not, and will not permit any Restricted Subsidiary to, make any Asset Disposition unless:

(1) the Company or such Restricted Subsidiary receives consideration (including by way of relief from, or by any other Person assuming sole responsibility for, any liabilities, contingent or otherwise) at the time of such Asset Disposition at least equal to the Fair Market Value (determined either at the date of such Asset Disposition or at the date of the agreement providing for such Asset Disposition) of the shares and assets subject to such Asset Disposition,

(2) at least 75% of the consideration thereof received by the Company or such Restricted Subsidiary is in the form of cash, and

(3) an amount equal to 100% of the Net Available Cash from such Asset Disposition is applied by the Company (or such Restricted Subsidiary, as the case may be)

(A) first, to the extent the Company elects (or is required by the terms of any Indebtedness), to prepay, repay, purchase, repurchase,

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

redeem, retire, defease or otherwise acquire for value Bank Indebtedness of the Company or the Issuer or Indebtedness (other than obligations in respect of Preferred Stock) of a Wholly Owned Subsidiary other than the Issuer (in each case other than Indebtedness owed to the Company or an Affiliate of the Company and other than obligations in respect of Disqualified Stock) within 360 days after the later of the date of such Asset Disposition or the receipt of such Net Available Cash;

(B) second, to the extent of the balance of Net Available Cash after application in accordance with clause (A), to the extent the Company or such Restricted Subsidiary elects, to reinvest in Additional Assets (including by means of an Investment in Additional Assets by a Restricted Subsidiary with Net Available Cash received by the Company or another Restricted Subsidiary) within 360 days from the later of such Asset Disposition or the receipt of such Net Available Cash;

(C) third, to the extent of the balance of such Net Available Cash after application in accordance with clauses (A) and (B), to make an Offer (as defined in paragraph (b) of this covenant below) to purchase Notes pursuant to and subject to the conditions set forth in paragraph (b) of this covenant; provided, however, that if the Issuer elects (or is required by the terms of any other Senior Indebtedness), such Offer may be made ratably to purchase the Notes and other Senior Indebtedness of the Company or the Issuer, and

(D) fourth, to the extent of the balance of such Net Available Cash after application in accordance with clauses (A), (B) and (C), for any general corporate purpose permitted by the terms of the Indenture;

provided, however, that in connection with any prepayment, repayment, purchase, repurchase, redemption, retirement, defeasance or other acquisition for value of Indebtedness pursuant to clause (A), (C) or (D) above, the Company or such Restricted Subsidiary will retire such Indebtedness and will cause the related loan commitment (if any) to be permanently reduced in an amount equal to the principal amount so prepaid, repaid, purchased, repurchased, redeemed, retired, defeased or otherwise acquired for value.

Notwithstanding the foregoing provisions of this covenant, the Company and the Restricted Subsidiaries will not be required to apply any Net Available Cash in accordance with this covenant except to the extent that the aggregate Net Available Cash from all Asset Dispositions that is not applied in accordance with this covenant exceeds \$5 million.

55

For the purposes of this covenant, the following are deemed to be cash:

the assumption of Indebtedness of (i) the Issuer (other than obligations in respect of Disqualified Stock of the Issuer) or (ii) the Company or any Restricted Subsidiary other than the Issuer (other than obligations in respect of Disqualified Stock and Preferred Stock of the Company) and the release of the Issuer, the Company or such Restricted Subsidiary from all liability on such Indebtedness in connection with such Asset Disposition (it being understood that the assumption of the Issuer's Guarantee of Indebtedness of Equistar in effect on June 18, 2001 shall be valued as \$0 for the purposes of complying with clause (a)(2) of this covenant above) and

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

securities received by the Company or any Restricted Subsidiary from the transferee that are converted, sold or exchanged within 30 days of receipt by the Company or such Restricted Subsidiary into cash to the extent of the cash received.

(b) In the event of an Asset Disposition that requires the purchase of Notes pursuant to clause (a) (3) (C) of this covenant, the Issuer will be required

(i) to purchase Notes tendered pursuant to an offer by the Issuer for the Notes (the 'Offer') at a purchase price of 100% of their principal amount plus accrued and unpaid interest and liquidated damages thereon, if any, to the date of purchase (subject to the right of Holders of record on the relevant date to receive interest due on the relevant interest payment date) in accordance with the procedures (including prorating in the event of oversubscription) set forth in the Indenture; and

(ii) to purchase other Senior Indebtedness of the Issuer or the Company on the terms and to the extent contemplated thereby (provided that in no event shall the Issuer offer to purchase such other Senior Indebtedness of the Issuer or the Company at a purchase price in excess of 100% of its principal amount (without premium), plus accrued and unpaid interest thereon.

If the aggregate purchase price of Notes (and other Senior Indebtedness) tendered pursuant to the Offer is less than the Net Available Cash allotted to the purchase of the Notes (and other Senior Indebtedness), the Issuer will apply the remaining Net Available Cash in accordance with clause (a) (3) (D) of this covenant. The Issuer will not be required to make an Offer for Notes (and other Senior Indebtedness) pursuant to this covenant if the Net Available Cash available therefor (after application of the proceeds as provided in clauses (a) (3) (A) and (B)) is less than \$5 million for any particular Asset Disposition (which lesser amount will be carried forward for purposes of determining whether an Offer is required with respect to the Net Available Cash from any subsequent Asset Disposition).

(c) The Issuer will comply, to the extent applicable, with the requirements of Section 14(e) of the Exchange Act and any other securities laws or regulations in connection with the repurchase of Notes pursuant to this covenant. To the extent that the provisions of any securities laws or regulations conflict with provisions of this covenant, the Issuer will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under this covenant by virtue thereof.

Limitation on Transactions with Affiliates. (a) Subsequent to June 18, 2001, the Company will not, and will not permit any Restricted Subsidiary to, directly or indirectly, enter into or conduct any transaction or series of related transactions (including the purchase, sale, lease or exchange of any property or the rendering of any service) with any Affiliate of the Company (an 'Affiliate Transaction') unless such transaction is on terms:

(1) that are not materially less favorable to the Company or such Restricted Subsidiary, as the case may be, than those that could be obtained at the time of such transaction in arm's-length dealings with a Person who is not such an Affiliate,

(2) that, in the event such Affiliate Transaction involves an aggregate amount in excess of \$10 million,

(A) are set forth in writing, and

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

(B) have been approved by a majority of the members of the Board of Directors of the Company having no personal stake in such Affiliate Transaction and,

(3) that, in the event such Affiliate Transaction involves an amount in excess of \$25 million, have been determined by a nationally recognized appraisal or investment banking firm to be fair, from a financial standpoint, to the Company and its Restricted Subsidiaries.

(b) The provisions of the foregoing paragraph (a) will not prohibit or apply to:

(1) any Restricted Payment permitted to be paid pursuant to the covenant described under 'Limitation on Restricted Payments,'

(2) any issuance of securities, or other payments, awards or grants in cash, securities or otherwise pursuant to, or the funding of, employment arrangements, stock options, stock ownership and other incentive compensation plans approved by the Board of Directors of the Company,

(3) the payment of reasonable fees to, and indemnity provided on behalf of, directors, officers and employees of the Company and its Subsidiaries,

(4) any transaction between the Company and a Restricted Subsidiary or between Restricted Subsidiaries,

(5) transactions by the Company or any Restricted Subsidiary with Equistar or any Subsidiary thereof pursuant to any agreement as in effect as of June 18, 2001 or any amendment thereto or any similar agreement entered into after June 18, 2001; provided, however, that any future amendment to such existing agreement or any such similar agreement shall not be permitted by this clause (5) to the extent that the terms of any such amendment or similar agreement are materially less favorable to the Company, any of its Restricted Subsidiaries or the Holders of the Exchange Notes in any material respect,

(6) any transaction by the Company or any Restricted Subsidiary with Equistar or any Subsidiary thereof that, taken as a whole with any other transactions by the Company or any Restricted Subsidiary with Equistar or any of its Subsidiaries that is entered into prior to or substantially concurrently with such transaction, is on terms that are not materially less favorable to the Company or such Restricted Subsidiary than those that could be obtained at the time of such transactions in arm's-length dealings with a Person which is not an Affiliate of the Company, or

(7) any transaction effected as part of a Qualified Receivables Transaction.

Limitation on the Sale or Issuance of Capital Stock of Restricted Subsidiaries. Subsequent to June 18, 2001, the Company will not sell or otherwise dispose of any shares of Capital Stock of a Restricted Subsidiary (other than shares of Capital Stock constituting up to 5% of the outstanding shares of Capital Stock of La Porte Methanol Company), and will not permit any Restricted Subsidiary, directly or indirectly, to issue or sell or otherwise dispose of any shares of its Capital Stock except:

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

- (1) to the Company or a Restricted Subsidiary;
- (2) if, immediately after giving effect to such issuance, sale or other disposition, neither the Company nor any of its Subsidiaries own any Capital Stock of such Restricted Subsidiary;
- (3) if, immediately after giving effect to such issuance, sale or other disposition, such Restricted Subsidiary would no longer constitute a Restricted Subsidiary and any Investment in such Person remaining after giving effect thereto would have been permitted to be made under the covenant described under 'Limitation on Restricted Payments' if made on the date of such issuance, sale or other disposition (and such Investment shall be deemed to be an Investment for the purposes of such covenant); or
- (4) if, immediately after giving effect to such issuance, sale or other disposition, such Restricted Subsidiary would continue to constitute a Restricted Subsidiary.

57

The proceeds of any sale of such Capital Stock permitted hereby (other than pursuant to clause (1)) will be treated as Net Available Cash from an Asset Disposition and must be applied in accordance with the terms of the covenant described under 'Limitation on Sales of Assets and Subsidiary Stock.'

Limitation on Liens. (a) Subsequent to June 18, 2001, the Company will not, and will not permit any Restricted Subsidiary to, Incur Indebtedness secured by a Lien upon any Restricted Property ('Secured Debt') without effectively and concurrently providing that the Exchange Notes (and, if the Company or the Issuer shall so determine, any other Indebtedness that is not subordinate in right of payment to the Exchange Notes) shall be secured equally and ratably with (or prior to) such Indebtedness so long as such Indebtedness shall be so secured. This restriction will not apply to:

- (1) Liens existing on or prior to June 18, 2001 (other than Liens securing the Bank Indebtedness);
- (2) Liens affecting property of a Person existing at the time it becomes a Restricted Subsidiary or at the time it is merged into or consolidated with the Company or a Restricted Subsidiary or at the time of a sale, lease or other disposition of the properties of such Person as an entirety or substantially as an entirety to the Company or a Restricted Subsidiary;
- (3) Liens securing Indebtedness Incurred pursuant to clause (b) (6) or (e) (iii) of the covenant described under 'Limitation on Indebtedness';
- (4) Liens securing Indebtedness of the Company or any Restricted Subsidiary owing to the Company or to a Restricted Subsidiary;
- (5) Liens required by any contract or statute in order to permit the Company or its Restricted Subsidiaries to perform any contract or subcontract made by it with or at the request of the United States, any State of the United States, another country or any department, agency or instrumentality of the foregoing;
- (6) Liens to secure bids, tenders, contracts (other than contracts for the repayment of borrowed money), leases, statutory obligations, surety and

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

appeal bonds, performance or return-of-money bonds, progress payments, customs duties and other obligations of like nature arising in the ordinary course of business;

(7) Liens on accounts receivable and related assets of the type specified in the definition of 'Qualified Receivables Transaction' Incurred in connection with a Qualified Receivables Transaction;

(8) Liens securing Indebtedness of any Foreign Subsidiary Incurred pursuant to clause (b)(10) of the covenant described under 'Limitation on Indebtedness'; and

(9) Any extension, renewal, refinancing, refunding or replacement (or successive extensions, renewals, refinancings, refundings or replacements) of any Lien or Indebtedness secured by any Lien, in whole or in part, that is referred to in the foregoing clauses (1) through (8); provided, however, that the principal amount of Indebtedness so secured pursuant to this clause (9) shall not exceed the principal amount of Indebtedness so secured (plus the aggregate amount of premiums, other payments, costs, and expenses required to be paid or Incurred in connection with such extension, renewal, refinancing, refunding or replacement) at the time of such extension, renewal, refinancing, refunding or replacement, and that such extension, renewal, refinancing, refunding or replacement shall be limited to all or the part of the property (including improvements, alterations and repairs on such property) subject to the encumbrance so extended, renewed, refinanced, refunded or replaced (plus improvements, alterations and repairs on such property).

(b) In addition, the Company and any Restricted Subsidiary may, without securing the Exchange Notes, Incur Secured Debt in an aggregate principal amount which, together with (without duplication) (1) the aggregate principal amount of all other Secured Debt of the Company and the Restricted Subsidiaries (other than Indebtedness permitted to be secured under

58

paragraph (a) of this covenant), (2) the aggregate Value of Sale/Leaseback Transactions of the Company and the Restricted Subsidiaries (other than Sale/Leaseback Transactions permitted under paragraph (a) of the covenant described under 'Limitation on Sale/Leaseback Transactions'), and (3) the aggregate principal amount of all Funded Debt of the Restricted Subsidiaries (other than Funded Debt permitted to be Incurred under clauses (i) through (iv) of paragraph (e) of the covenant described under 'Limitation on Indebtedness'), does not at any one time exceed 15% of Consolidated Net Tangible Assets of the Issuer.

SEC Reports. Subsequent to June 18, 2001, the Company and the Issuer will file with the SEC and provide the Trustee and Holders and prospective Holders (upon request) within 15 days after it files them with the SEC, copies of its annual report and the information, documents and other reports that are specified in Sections 13 and 15(d) of the Exchange Act. The Company and the Issuer also will comply with the other provisions of Section 314(a) of the TIA.

Limitation on Lines of Business. Subsequent to June 18, 2001, the Company will not, and will not permit any Restricted Subsidiary to, engage in any business, other than a Permitted Business; provided, however, that the Company or any of its Restricted Subsidiaries may acquire any Person or business which

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

is primarily engaged in a Permitted Business notwithstanding that such Person or business also engages in a business which is not a Permitted Business.

Limitation on Sale/Leaseback Transactions. (a) Subsequent to June 18, 2001, the Company will not, and will not permit any Restricted Subsidiary to, enter into any arrangement with any Person (other than the Company or a Restricted Subsidiary), providing for the leasing to the Company or a Restricted Subsidiary for a period of more than three years of any Restricted Property which has been or is to be sold or transferred by the Company or such Restricted Subsidiary to such Person or to any other Person (other than the Company or a Restricted Subsidiary), to which funds have been or are to be advanced by such Person on the security of the leased property (each such arrangement, a 'Sale/Leaseback Transaction') unless:

(1) the Company or such Restricted Subsidiary applies or commits to apply an amount equal to the Value of such Sale/Leaseback Transaction to the repayment, redemption or retirement (other than any mandatory repayment, redemption or retirement or by way of payment at maturity) within 185 days of the effective date of such Sale/Leaseback Transaction of Indebtedness of the Company or any Restricted Subsidiary which by its terms (A) matures at (or is extendible or renewable, at the sole option of the obligor without the consent of the obligee, to) a date more than 12 months after the date of creation of such Indebtedness, and (B) is not subordinated to the Exchange Notes or the Note Guarantee; or

(2) the Company or such Restricted Subsidiary applies the net proceeds of the sale to investment in another Restricted Property within 185 days prior or subsequent to such sale.

(b) In addition, the Company and any Restricted Subsidiary may enter into a Sale/Leaseback Transaction with a Value which, together with (without duplication) (1) the aggregate Value of all other Sale/Leaseback Transactions of the Company and the Restricted Subsidiaries (other than Sale/Leaseback Transactions permitted under paragraph (a) above), (2) the aggregate principal amount of all Secured Debt of the Company and the Restricted Subsidiaries (other than Indebtedness permitted to be secured under clauses (1) through (9) of paragraph (a) of the covenant described under 'Limitation on Liens'), and (3) the aggregate principal amount of all Funded Debt of the Restricted Subsidiaries (other than Funded Debt permitted to be Incurred under clauses (i) through (iv) of paragraph (e) of the covenant described under 'Limitation on Indebtedness'), does not at the time of entering into exceed 15% of Consolidated Net Tangible Assets of the Issuer.

Corporate Existence. Subject to the covenant described under 'Merger and Consolidation,' subsequent to June 18, 2001, the Company shall do or cause to be done all things necessary to preserve and keep in full force and effect the corporate existence and related rights and franchises (charter and statutory) of the Company and its Restricted Subsidiaries; provided, however, that the Company and its Restricted Subsidiaries shall not be required to preserve any such right or franchise or the corporate existence of any such Restricted Subsidiary (other than

the Issuer) if the Board of Directors of the Company shall determine that the preservation thereof is no longer necessary or desirable in the conduct of the business of the Company and its Restricted Subsidiaries taken as a whole and

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

that the loss thereof would not reasonably be expected to have a material adverse effect on the ability of the Issuer or the Company to perform its obligations under the Exchange Notes or the Indenture.

Payment of Taxes and Other Claims. Subsequent to June 18, 2001, the Company shall pay or discharge or cause to be paid or discharged, on or before the date the same shall become due and payable, (a) all taxes, assessments and governmental charges levied or imposed upon the Company or any of its Restricted Subsidiaries shown to be due on any return of the Company or any of its Restricted Subsidiaries or otherwise assessed or upon the income, profits or property of the Company or any of its Restricted Subsidiaries if failure to pay or discharge the same could reasonably be expected to have a material adverse effect on the ability of the Issuer or the Company to perform its obligations under the Exchange Notes or the Indenture and (b) all lawful claims for labor, materials and supplies, which, if unpaid, would by law become a Lien upon the property of the Company or any of its Restricted Subsidiaries, except for any Lien permitted to be Incurred under the covenant described under ' -- Limitation on Liens,' if failure to pay or discharge the same could reasonably be expected to have a material adverse effect on the ability of the Issuer or the Company to perform its obligations under the Exchange Notes or the Indenture; provided, however, that the Company or any of the Restricted Subsidiaries shall not be required to pay or discharge or cause to be paid or discharged any such tax, assessment, charge or claim whose amount, applicability or validity is being contested in good faith by appropriate proceedings properly instituted and diligently conducted and in respect of which appropriate reserves (in the good faith judgment of management of the Company) are being maintained in accordance with GAAP.

Maintenance of Properties. Subsequent to June 18, 2001, the Company shall cause all material properties owned by the Company or any of its Restricted Subsidiaries or used or held for use in the conduct of their respective businesses to be maintained and kept in good condition, repair and working order (ordinary wear and tear excepted) and supplied with all necessary equipment and will cause to be made all necessary repairs, renewals, replacements, betterments and improvements thereof, all as in the reasonable judgment of the Company may be consistent with sound business practice and necessary so that the business carried on in connection therewith may be properly conducted at all times; provided, however, that nothing in this covenant shall prevent the Company from discontinuing the maintenance of any of such properties if such discontinuance is, in the reasonable judgment of the Company, desirable in the conduct of the business of the Company and its Restricted Subsidiaries, taken as a whole, and not reasonably expected to have a material adverse effect on the ability of the Issuer or the Company to perform its obligations under the Exchange Notes or the Indenture.

Fall-Away of Covenants. After the date (such date, the 'Fall-Away Date') on which (a) the Exchange Notes have received ratings from both S&P and Moody's of not lower than BBB- and Baa3, respectively, (b) no Default or Event of Default has occurred and is continuing under the Indenture and (c) the Issuer has delivered an Officers' Certificate to the Trustee certifying that the conditions set forth in clauses (a) and (b) above are satisfied, the Company and the Restricted Subsidiaries will no longer be subject to the following provisions of the Indenture (notwithstanding that the Exchange Notes may later cease to have such ratings):

' -- Limitation on Indebtedness' (other than paragraph (e) thereof and the clauses of paragraph (b) thereof referred to in paragraph (e) thereof),

' -- Limitation on Restricted Payments,'

' -- Limitation on Restrictions on Distributions from Restricted

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Subsidiaries,'

' -- Limitation on Sales of Assets and Subsidiary Stock,'

' -- Limitation on the Sale or Issuance of Capital Stock of Restricted Subsidiaries,'

' -- Limitation on Transactions with Affiliates,'

60

' -- Limitation on Lines of Business' and

' -- Merger and Consolidation' (only as to clause (3) in respect of each of the Company and the Issuer).

MERGER AND CONSOLIDATION

Subsequent to June 18, 2001, the Issuer will not consolidate with or merge with or into, or convey, transfer or lease all or substantially all its assets to, any Person, unless:

(1) the resulting, surviving or transferee Person (the 'Successor Company') will be a corporation organized and existing under the laws of the United States of America, any State thereof or the District of Columbia and the Successor Company (if not the Issuer) will expressly assume, by a supplemental indenture, executed and delivered to the Trustee, in form satisfactory to the Trustee, all the obligations of the Issuer under the Exchange Notes and the Indenture;

(2) immediately after giving effect to such transaction (and treating any Indebtedness which becomes an obligation of the Successor Company, the Company or any Restricted Subsidiary as a result of such transaction as having been Incurred by the Successor Company, the Company or such Restricted Subsidiary at the time of such transaction), no Default shall have occurred and be continuing;

(3) immediately after giving effect to such transaction, the Successor Company would be able to Incur an additional \$1.00 of Indebtedness under paragraph (a) of the covenant described under 'Limitation on Indebtedness'; and

(4) the Issuer shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that such consolidation, merger or transfer and such supplemental indenture (if any) comply with the Indenture.

The Successor Company will succeed to, and be substituted for, and may exercise every right and power of, the Issuer under the Indenture, and the predecessor Issuer shall be released from all of its obligations thereunder, except in the case of a lease of all or substantially all its assets in which case it will not be released from the obligation to pay the principal of and interest on the Exchange Notes.

In addition, subsequent to June 18, 2001, the Company will not consolidate with or merge with or into, or convey, transfer or lease all or substantially all of its assets to any Person unless:

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

(1) the resulting, surviving or transferee Person (the 'Successor Guarantor') will be a corporation organized and existing under the laws of the United States of America, any State thereof or the District of Columbia, and such Person (if not the Company) will expressly assume, by a supplemental indenture, executed and delivered to the Trustee, in form satisfactory to the Trustee, all the obligations of the Company under the Note Guarantee, the Exchange Notes and the Indenture;

(2) immediately after giving effect to such transaction (and treating any Indebtedness which becomes an obligation of the Successor Guarantor or any Restricted Subsidiary as a result of such transaction as having been Incurred by the Successor Guarantor or such Restricted Subsidiary at the time of such transaction), no Default shall have occurred and be continuing;

(3) immediately after giving effect to such transaction, the Successor Guarantor would be able to Incur an additional \$1.00 of Indebtedness under paragraph (a) of the covenant described under 'Limitation on Indebtedness'; and

(4) the Issuer will have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that such consolidation, merger or transfer and such supplemental indenture (if any) comply with the Indenture.

The Successor Guarantor will succeed to, and be substituted for, and may exercise every right and power of, the Company under the Indenture, and the predecessor Company shall be

61

released from all of its obligations thereunder, except in the case of a lease of all or substantially all its assets in which case it will not be released from the obligation to pay the principal of and interest on the Exchange Notes.

Notwithstanding anything in the Indenture:

(A) any Restricted Subsidiary may consolidate with, merge into or convey, lease, sell, assign, transfer or otherwise dispose of all or part of its properties and assets to the Company or a Restricted Subsidiary;

(B) the Issuer or the Company may merge with an Affiliate incorporated solely for the purpose of reincorporating the Issuer or the Company in another jurisdiction to realize tax or other benefits; and

(C) for purposes of this covenant, the sale by the Company or the Issuer of the equity interests in Millennium Petrochemicals Inc., the equity interests in the limited liability companies which directly or indirectly own the Company's equity interests in Equistar, and/or the Company's equity interests in Equistar will be deemed not to constitute the conveyance, transfer or lease of all or substantially all the assets of the Issuer or the Company if any such sale consists of Net Tangible Assets constituting 33 1/3% or less of the Consolidated Net Tangible Assets of the Company as of the date of the most recent publicly available consolidated balance sheet of the Company and its Subsidiaries.

DEFAULTS

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Each of the following is an Event of Default:

(1) a default in any payment of interest or any Additional Amounts on any Note when due and payable or in any payment of liquidated damages continued for 30 days;

(2) a default in the payment of principal of any Note when due and payable at its Stated Maturity, upon required redemption or required repurchase, upon declaration or otherwise;

(3) the failure by the Company or the Issuer to comply with its obligations described under 'Merger and Consolidation' above;

(4) the failure by the Company or any Restricted Subsidiary to comply for 30 days after notice with any of its obligations under the covenants described under 'Change of Control' or 'Certain Covenants' above (in each case, other than a failure to purchase Notes, which will constitute an Event of Default under clause (2) above and other than a failure to comply with the obligations described under 'Merger and Consolidation,' which will constitute an Event of Default under clause (3) above);

(5) the failure by the Company or any Restricted Subsidiary to comply for 60 days after notice with its other agreements contained in the Notes or the Indenture;

(6) the failure by the Company or any Restricted Subsidiary to pay any Indebtedness within any applicable grace period after final maturity or the acceleration of any such Indebtedness by the holders thereof because of a default if the total amount of such Indebtedness unpaid or accelerated exceeds \$30 million or its foreign currency equivalent (the 'cross acceleration provision');

(7) certain events of bankruptcy, insolvency or reorganization of the Company or a Significant Subsidiary (the 'bankruptcy provisions');

(8) the rendering of any judgment or decree for the payment of money (other than judgments which are covered by enforceable insurance policies issued by reputable and creditworthy insurance companies for which coverage has been acknowledged in writing) in excess of \$30 million or its foreign currency equivalent against the Company or a Restricted Subsidiary if such judgment or decree remains outstanding for a period of 60 days following such judgment and is not paid, discharged, waived or stayed and an enforcement proceeding thereon is commenced by any creditor (the 'judgment default provision'); or

62

(9) the Note Guarantee ceases to be in full force and effect (except as contemplated by the Indenture) or the Company or any Person acting on behalf of the Company denies or disaffirms the Company's obligations under the Indenture or Note Guarantee and such Default continues for 10 days after receipt of the notice specified in the Indenture.

The foregoing will constitute Events of Default whatever the reason for any such Event of Default and whether it is voluntary or involuntary or is effected by operation of law or pursuant to any judgment, decree or order of any court or

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

any order, rule or regulation of any administrative or governmental body.

However, a default under clauses (4), (5) or (9) will not constitute an Event of Default until the Trustee notifies the Issuer or the Holders of at least 25% in principal amount of the Notes then outstanding notify the Issuer and the Trustee of the default and the Issuer or the Company, as applicable, does not cure such default within the time specified in clauses (4), (5) or (9) hereof after receipt of such notice.

If an Event of Default (other than an Event of Default relating to certain events of bankruptcy, insolvency or reorganization of the Company or the Issuer) occurs and is continuing, the Trustee or the Holders of at least 25% in principal amount of the Notes then outstanding by notice to the Issuer may declare the principal of and accrued but unpaid interest on all the Notes then outstanding to be due and payable. Upon such a declaration, such principal and interest will be due and payable immediately. If an Event of Default relating to certain events of bankruptcy, insolvency or reorganization of the Company or the Issuer occurs, the principal of and interest on all the Notes then outstanding will become immediately due and payable without any declaration or other act on the part of the Trustee or any Holders. Under certain circumstances, the Holders of a majority in principal amount of the Notes then outstanding may rescind any such acceleration with respect to the Notes then outstanding and its consequences.

Subject to the provisions of the Indenture relating to the duties of the Trustee, in case an Event of Default occurs and is continuing, the Trustee will be under no obligation to exercise any of the rights or powers under the Indenture at the request or direction of any of the Holders unless such Holders have offered to the Trustee reasonable indemnity or security against any loss, liability or expense. Except to enforce the right to receive payment of principal, premium (if any) or interest when due, no Holder may pursue any remedy with respect to the Indenture or the Notes unless:

- (1) such Holder gives to the Trustee notice that an Event of Default is continuing,
- (2) Holders of at least 25% in principal amount of the Notes then outstanding have requested the Trustee in writing to pursue the remedy,
- (3) such Holders have offered the Trustee reasonable security or indemnity against any loss, liability or expense,
- (4) the Trustee has not complied with such request within 60 days after the receipt of the request and the offer of security or indemnity, and
- (5) the Holders of a majority in principal amount of the Notes then outstanding have not given the Trustee a direction inconsistent with such request within such 60-day period.

Subject to certain restrictions, the Holders of a majority in principal amount of the Notes then outstanding will be given the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or of exercising any trust or power conferred on the Trustee. The Trustee, however, may refuse to follow any direction that conflicts with law or the Indenture or that the Trustee determines is unduly prejudicial to the rights of any other Holder or that would involve the Trustee in personal liability. Prior to taking any action under the Indenture, the Trustee will be entitled to indemnification satisfactory to it in its sole discretion against all losses and expenses caused by taking or not taking such action.

If a Default occurs and is continuing and is known to the Trustee, the Trustee must mail to each Holder notice of the Default within the earlier of 90

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

days after it occurs or 30 days after it is known to a Trust Officer or written notice of it is received by the Trustee. Except in the case of a

63

Default in the payment of principal of, premium (if any) or interest on any Note (including required payments, if any, pursuant to the redemption provisions of such Note), the Trustee may withhold notice if and so long as a committee of its Trust Officers in good faith determines that withholding notice is in the interests of the Holders. In addition, the Issuer will be required to deliver to the Trustee, within 120 days after the end of each fiscal year of the Issuer, a certificate indicating whether the signers thereof know of any Default that occurred during that fiscal year. The Issuer will also be required to deliver to the Trustee, within 30 days after the occurrence thereof, written notice of any event which would constitute certain Events of Default, their status and what action the Issuer is taking or proposes to take in respect thereof.

AMENDMENTS AND WAIVERS

Subject to certain exceptions, the Indenture or the Notes may be amended with the written consent of the Holders of a majority in principal amount of the Notes then outstanding (including, without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, Notes) and, subject to certain exceptions, any past default or compliance with any provisions may be waived with the consent of the Holders of a majority in principal amount of the Notes then outstanding (including, without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, Notes). However, without the consent of each Holder of an outstanding Note affected, no amendment may, among other things:

- (1) reduce the amount of Notes whose Holders must consent to an amendment,
- (2) reduce the stated rate of or extend the stated time for payment of interest or any liquidated damages on any Note,
- (3) reduce the principal of or extend the Stated Maturity of any Note,
- (4) reduce the premium payable upon the redemption of any Note or change the time at which any Note may be redeemed as described under 'Optional Redemption' above,
- (5) make any Note payable in money other than that stated in the Note,
- (6) impair the right of any Holder to receive payment of principal of, and interest or any liquidated damages on, such Holder's Notes on or after the due dates therefor or to institute suit for the enforcement of any payment on or with respect to such Holder's Notes,
- (7) make any change in the amendment provisions which require each Holder's consent or in the waiver provisions or
- (8) modify the Note Guarantee in any manner adverse to the Holders.

Without the consent of any Holder, the Issuer, the Company and the Trustee may amend the Indenture to, among other things:

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

cure any ambiguity, omission, defect or inconsistency,

provide for the assumption by a successor corporation of the obligations of the Issuer or the Company under the Indenture,

provide for uncertificated Notes in addition to or in place of certificated Notes (provided, however, that the uncertificated Notes are issued in registered form for purposes of Section 163(f) of the Code, or in a manner such that the uncertificated Notes are described in Section 163(f) (2) (B) of the Code),

add additional Guarantees with respect to the Notes,

secure the Notes,

add to the covenants of the Company and its Subsidiaries for the benefit of the Holders or to surrender any right or power conferred upon the Company or the Issuer,

make any change that does not adversely affect the rights of any Holder, subject to the provisions of the Indenture,

provide for the issuance of the Exchange Notes,

64

to evidence and provide the acceptance of the appointment of a successor Trustee under the Indenture, or

comply with any requirement of the SEC in connection with the qualification of the Indenture under the TIA.

The consent of the Holders will not be necessary to approve the particular form of any proposed amendment. It will be sufficient if such consent approves the substance of the proposed amendment.

After an amendment becomes effective, the Issuer is required to mail to Holders a notice briefly describing such amendment. However, the failure to give such notice to all Holders, or any defect in the notice, will not impair or affect the validity of the amendment.

DEFEASANCE

The Company and the Issuer may at any time terminate all their obligations under the Notes and the Indenture ('legal defeasance'), except for certain obligations, including those respecting the defeasance trust and obligations to register the transfer or exchange of the Notes, to replace mutilated, destroyed, lost or stolen Notes and to maintain a registrar and paying agent in respect of the Notes.

In addition, the Company and the Issuer may at any time terminate:

(1) their obligations under the covenants described under 'Certain Covenants,' and

(2) the operation of the cross-acceleration provision, the bankruptcy provisions with respect to Significant Subsidiaries and the judgment default

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

provision described under 'Defaults' above and the limitations contained in clause (3) under the first paragraph of 'Merger and Consolidation' above ('covenant defeasance').

In the event that the Company and the Issuer exercise their legal defeasance option or their covenant defeasance option, the Company will be released from all of its obligations with respect to the Note Guarantee.

The Company and the Issuer may exercise their legal defeasance option notwithstanding their prior exercise of the covenant defeasance option. If the Company and the Issuer exercise their legal defeasance option, payment of the Notes may not be accelerated because of an Event of Default with respect thereto. If the Company and the Issuer exercise their covenant defeasance option, payment of the Notes may not be accelerated because of an Event of Default specified in clause (4), (6), (7) (with respect only to Significant Subsidiaries) or (8) (with respect only to Significant Subsidiaries) under 'Defaults' above or because of the failure of the Issuer to comply with clause (3) under the first paragraph of 'Merger and Consolidation' above.

In order to exercise either defeasance option, the Issuer must irrevocably deposit in trust (the 'defeasance trust') with the Trustee money in an amount sufficient to purchase U.S. Government Obligations, the principal of and interest on which will be sufficient, or a combination thereof sufficient, to pay the principal, premium (if any) and interest on, and liquidated damages, if any, in respect of the Notes to redemption or maturity, as the case may be, and must comply with certain other conditions, including delivery to the Trustee of an Opinion of Counsel to the effect that Holders will not recognize income, gain or loss for Federal income tax purposes as a result of such deposit and defeasance and will be subject to Federal income tax on the same amounts and in the same manner and at the same times as would have been the case if such deposit and defeasance had not occurred (and, in the case of legal defeasance only, such Opinion of Counsel must be based on a ruling of the Internal Revenue Service or other change in applicable Federal income tax law).

NO PERSONAL LIABILITY OF DIRECTORS, OFFICERS, EMPLOYEES AND STOCKHOLDERS

No director, officer, employee, incorporator or stockholder of the Issuer or the Company, as such, shall have any liability for any obligations of the Issuer or the Company under the

65

Exchange Notes or the Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder by accepting an Exchange Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Exchange Notes. Such waiver may not be effective to waive liabilities under the federal securities laws and it is the view of the SEC that such a waiver is against public policy.

CONCERNING THE TRUSTEE

The Bank of New York is the Trustee under the Indenture and has been appointed by the Issuer as registrar and paying agent with regard to the Notes. The Bank of New York is a lender under our bank credit agreement and the trustee under the 7% Senior Notes due November 15, 2006 and the 7 5/8% Senior Debentures due November 15, 2026 of the Issuer, guaranteed by the Company.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

GOVERNING LAW

The Indenture is, and the Exchange Notes will be, governed by, and construed in accordance with, the laws of the State of New York without giving effect to applicable principles of conflicts of law to the extent that the application of the law of another jurisdiction would be required thereby.

CERTAIN DEFINITIONS

'Additional Assets' means:

(1) any property or assets (other than Indebtedness and Capital Stock) to be used by the Company or a Restricted Subsidiary in a Permitted Business;

(2) the Capital Stock of a Person that becomes a Restricted Subsidiary as a result of the acquisition of such Capital Stock by the Company or another Restricted Subsidiary; or

(3) Capital Stock constituting a minority interest in any Person that at such time is a Restricted Subsidiary;

provided, however, that any such Restricted Subsidiary described in clauses (2) or (3) above is primarily engaged in a Permitted Business.

'Affiliate' of any specified Person means any other Person, directly or indirectly, controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, 'control' when used with respect to any Person means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms 'controlling' and 'controlled' have meanings correlative to the foregoing. For purposes of the provisions described under ' -- Certain Covenants -- Limitation on Transactions with Affiliates' and ' -- Certain Covenants -- Limitation on Sales of Assets and Subsidiary Stock' only, 'Affiliate' shall also mean any beneficial owner of shares representing 10% or more of the total voting power of the Voting Stock (on a fully diluted basis) of the Company or the Issuer or of rights or warrants to purchase such Voting Stock (whether or not currently exercisable) and any Person who would be an Affiliate of any such beneficial owner pursuant to the first sentence hereof.

'Asset Contribution Agreement' means the asset contribution agreement dated as of December 1, 1997, between Millennium Petrochemicals Inc., Millennium Petrochemicals LP LLC and Equistar Chemicals, LP., as amended to June 18, 2001.

'Asset Disposition' means any sale, lease, transfer or other disposition (or series of related sales, leases, transfers or dispositions) by the Company or any Restricted Subsidiary, including any disposition by means of a merger, consolidation, or similar transaction (each referred to for the purposes of this definition as a 'disposition'), of:

(1) any shares of Capital Stock of a Restricted Subsidiary (other than directors' qualifying shares or shares required by applicable law to be held by a Person other than the Company or a Restricted Subsidiary),

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

(2) all or substantially all the assets of any division or line of business of the Company or any Restricted Subsidiary, or

(3) any other assets of the Company or any Restricted Subsidiary outside of the ordinary course of business of the Company or such Restricted Subsidiary,

other than, in the case of (1), (2) and (3) above,

(A) a disposition by a Restricted Subsidiary to the Company or by the Company or a Restricted Subsidiary to a Restricted Subsidiary,

(B) for purposes of the provisions described under 'Certain Covenants -- Limitation on Sales of Assets and Subsidiary Stock' only, a disposition subject to the covenant described under 'Certain Covenants -- Limitation on Restricted Payments,'

(C) a disposition of assets with a Fair Market Value of less than \$100,000,

(D) a disposition of assets in connection with a Sale/Leaseback Transaction subject to the covenant described under 'Certain Covenants -- Limitation on Sale/Leaseback Transactions,'

(E) a sale, assignment or other transfer of accounts receivables and related assets of the type specified in the definition of 'Qualified Receivables Transaction' to a Receivables Entity,

(F) a sale, assignment or other transfer of accounts receivables and related assets of the type specified in the definition of 'Qualified Receivables Transaction' (or a fractional undivided interest therein) by a Receivables Entity in a Qualified Receivables Transaction,

(G) a disposition of obsolete or worn out equipment or assets that are no longer useful in the conduct of the business of the Company and its Restricted Subsidiaries,

(H) the disposition of all or substantially all of the assets of the Issuer or the Company in a manner permitted pursuant to the provisions described under 'Merger and Consolidation,' and

(I) an issuance of Capital Stock by a Restricted Subsidiary to the Company or to another Restricted Subsidiary.

'Average Life' means, as of the date of determination, with respect to any Indebtedness or Preferred Stock, the quotient obtained by dividing:

(1) the sum of the products of the numbers of years from the date of determination to the dates of each successive scheduled principal payment of such Indebtedness or scheduled redemption or similar payment with respect to such Preferred Stock multiplied by the amount of such payment by

(2) the sum of all such payments.

'Bank Indebtedness' means any and all Indebtedness payable under or in respect of the Credit Agreement and any refinancings (and successive refinancings) with respect thereto, each as amended from time to time, including principal, premium (if any), reimbursement obligations and guarantees in respect thereof. It is understood and agreed that a refinancing (and successive refinancings) in respect of the Credit Agreement may be Incurred from time to time after termination of the Credit Agreement.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

'Capital Stock' of any Person means any and all shares, interests, rights to purchase, warrants, options, participations or other equivalents (however designated) of corporate stock or other equity participations including Preferred Stock and partnership or membership interests, whether general or limited of such Person, but excluding any debt securities convertible into such equity.

'Capitalized Lease Obligations' means an obligation that is required to be classified and accounted for as a capitalized lease for financial reporting purposes in accordance with GAAP, and the amount of Indebtedness represented by such obligation shall be the capitalized amount

67

of such obligation determined in accordance with GAAP; and the Stated Maturity thereof shall be the date of the last payment of rent or any other amount due under such lease prior to the first date upon which such lease may be prepaid by the lessee without payment of a penalty.

'Code' means the Internal Revenue Code of 1986, as amended.

'Commodity Agreement' means, with respect to any Person, any agreement for the protection against fluctuations in commodity prices or other similar agreement or arrangement to which such Person is a party or of which it is a beneficiary.

'Consolidated Coverage Ratio' as of any date of determination means the ratio of:

(1) the aggregate amount of EBITDA for the period of the most recent four consecutive fiscal quarters for which financial statements are publicly available to

(2) Consolidated Interest Expense for such four fiscal quarters;

provided, however, that:

(A) if the Company or any Restricted Subsidiary has Incurred any Indebtedness since the beginning of such period that remains outstanding on such date of determination or if the transaction giving rise to the need to calculate the Consolidated Coverage Ratio is an Incurrence of Indebtedness, EBITDA and Consolidated Interest Expense for such period shall be calculated after giving effect on a pro forma basis to such Indebtedness as if such Indebtedness had been Incurred on the first day of such period and the discharge of any other Indebtedness repaid, repurchased, defeased or otherwise discharged with the proceeds of such new Indebtedness as if such discharge had occurred on the first day of such period,

(B) if the Company or any Restricted Subsidiary has repaid, repurchased, defeased or otherwise discharged any Indebtedness since the beginning of such period or if any Indebtedness is to be repaid, repurchased, defeased or otherwise discharged (in each case other than Indebtedness Incurred under any revolving credit facility unless such Indebtedness has been permanently repaid and has not been replaced) on the date of the transaction giving rise to the need to calculate the Consolidated Coverage Ratio, EBITDA and Consolidated Interest Expense for

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

such period shall be calculated on a pro forma basis as if such discharge had occurred on the first day of such period and as if the Company or such Restricted Subsidiary has not earned the interest income actually earned during such period in respect of cash or Temporary Cash Investments used to repay, repurchase, defease or otherwise discharge such Indebtedness,

(C) if since the beginning of such period the Company or any Restricted Subsidiary shall have made any Asset Disposition, the EBITDA for such period shall be reduced by an amount equal to the EBITDA (if positive) directly attributable to the assets that are the subject of such Asset Disposition for such period or increased by an amount equal to the EBITDA (if negative) directly attributable thereto for such period and Consolidated Interest Expense for such period shall be reduced by an amount equal to the Consolidated Interest Expense directly attributable to any Indebtedness of the Company or any Restricted Subsidiary repaid, repurchased, defeased or otherwise discharged with respect to the Company and its continuing Restricted Subsidiaries in connection with such Asset Disposition for such period (or, if the Capital Stock of any Restricted Subsidiary is sold, the Consolidated Interest Expense for such period directly attributable to the Indebtedness of such Restricted Subsidiary to the extent the Company and its continuing Restricted Subsidiaries are no longer liable for such Indebtedness after such sale),

(D) if since the beginning of such period the Company or any Restricted Subsidiary (by merger or otherwise) shall have made an Investment in any Restricted Subsidiary (or any Person that becomes a Restricted Subsidiary) or an acquisition of assets, including any acquisition of assets occurring in connection with a transaction causing a calculation to be made hereunder, which constitutes all or substantially all of an operating unit of a

68

business, EBITDA and Consolidated Interest Expense for such period shall be calculated after giving pro forma effect thereto (including the Incurrence of any Indebtedness) as if such Investment or acquisition occurred on the first day of such period, and

(E) if since the beginning of such period any Person (that subsequently became a Restricted Subsidiary or was merged with or into the Company or any Restricted Subsidiary since the beginning of such period) shall have made any Asset Disposition or any Investment or acquisition of assets that would have required an adjustment pursuant to clause (C) or (D) above if made by the Company or a Restricted Subsidiary during such period, EBITDA and Consolidated Interest Expense for such period shall be calculated after giving pro forma effect thereto as if such Asset Disposition, Investment or acquisition of assets occurred on the first day of such period.

For purposes of this definition, whenever pro forma effect is to be given to an acquisition of assets or other Investment, the amount of income or earnings relating thereto and the amount of Consolidated Interest Expense associated with any Indebtedness Incurred in connection therewith, the pro forma calculations shall be determined in good faith by a responsible financial or accounting Officer of the Company and shall comply with the requirements of Rule 11-02 of Regulation S-X promulgated by the SEC.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

If any Indebtedness bears a floating rate of interest and is being given pro forma effect, the interest expense on such Indebtedness shall be calculated as if the rate in effect on the date of determination had been the applicable rate for the entire period (taking into account any Interest Rate Agreement applicable to such Indebtedness if such Interest Rate Agreement has a remaining term as at the date of determination in excess of 12 months).

'Consolidated Current Liabilities' as of the date of determination means the aggregate amount of liabilities of the Company and its consolidated Restricted Subsidiaries which may properly be classified as current liabilities (including taxes accrued as estimated), on a consolidated basis, after eliminating:

- (1) all intercompany items between the Company and any Restricted Subsidiary and
- (2) all current maturities of long-term Indebtedness, all as determined in accordance with GAAP consistently applied.

'Consolidated Interest Expense' means, for any period, the total interest expense of the Company and its consolidated Restricted Subsidiaries, plus, to the extent Incurred by the Company and its consolidated Restricted Subsidiaries in such period but not included in such interest expense, without duplication:

- (1) interest expense attributable to Capitalized Lease Obligations,
- (2) amortization of debt discount and debt issuance costs,
- (3) capitalized interest,
- (4) noncash interest expense,
- (5) commissions, discounts and other fees and charges attributable to letters of credit and bankers' acceptance financing,
- (6) interest accruing on any Indebtedness of any other Person to the extent such Indebtedness is Guaranteed by the Company or any Restricted Subsidiary (other than any interest in respect of Indebtedness of Equistar in an aggregate principal amount of \$750 million that is Guaranteed on a limited basis by the Issuer on June 18, 2001 (or any Guarantee on no less favorable terms that replaces such Guarantee) for so long as Equistar is not a Subsidiary of the Company),
- (7) net costs associated with Interest Rate Agreements (including amortization of fees),
- (8) dividends in respect of all Disqualified Stock of the Company and all Preferred Stock of any of the Restricted Subsidiaries of the Company, to the extent held by Persons other than the Company or a Wholly Owned Subsidiary,

- (9) interest Incurred in connection with investments in discontinued operations and
- (10) the cash contributions to any employee stock ownership plan or

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

similar trust to the extent such contributions are used by such plan or trust to pay interest or fees to any Person (other than the Company) in connection with Indebtedness Incurred by such plan or trust.

For purposes of the foregoing, Consolidated Interest Expense will be determined after giving effect to any net payments made or received by the Company and its Restricted Subsidiaries with respect to Interest Rate Agreements.

'Consolidated Net Income' means, for any period, the net income (loss) of the Company and its consolidated Subsidiaries for such period; provided, however, that there shall not be included in such Consolidated Net Income:

(1) any net income (loss) of any Person (other than the Company) if such Person is not a Restricted Subsidiary, except that:

(A) subject to the limitations contained in clauses (4) and (7) below, the Company's equity in the net income of any such Person for such period shall be included in such Consolidated Net Income up to the aggregate amount of cash actually distributed by such Person during such period to the Company or a Restricted Subsidiary as a dividend or other distribution (subject, in the case of a dividend or other distribution made to a Restricted Subsidiary, to the limitations contained in clause (3) below) and

(B) (i) the Company's equity in a net loss of any such Person for such period and (ii) the aggregate amount of cash actually distributed by such Person during such period to the Company or a Restricted Subsidiary as a dividend or other distribution (subject, in the case of a dividend or other distribution made to a Restricted Subsidiary, to the limitations contained in clause (3) below), shall be included in determining such Consolidated Net Income;

(2) any net income (or loss) of any Person acquired by the Company or a Subsidiary of the Company in a pooling of interests transaction for any period prior to the date of such acquisition;

(3) any net income (or loss) of any Restricted Subsidiary if such Restricted Subsidiary is subject to restrictions, directly or indirectly, on the payment of dividends or the making of distributions by such Restricted Subsidiary, directly or indirectly, to the Company, except that:

(A) subject to the limitations contained in clause (4) below, the Company's equity in the net income of any such Restricted Subsidiary for such period shall be included in such Consolidated Net Income up to the aggregate amount of cash actually distributed by such Restricted Subsidiary during such period to the Company or another Restricted Subsidiary as a dividend or other distribution (subject, in the case of a dividend or other distribution made to another Restricted Subsidiary, to the limitation contained in this clause) and

(B) the Company's equity in a net loss of any such Restricted Subsidiary for such period shall be included in determining such Consolidated Net Income;

(4) any gain (loss) realized upon the sale or other disposition of any asset of the Company or its Consolidated Subsidiaries (including pursuant to any Sale/Leaseback Transaction) that is not sold or otherwise disposed of in the ordinary course of business and any gain (loss) realized upon the sale or other disposition of any Capital Stock of any Person;

(5) any extraordinary gain or loss;

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

(6) the cumulative effect of a change in accounting principles; and

(7) the Company's equity in the net income (or loss) of Equistar, net of tax, for so long as Equistar is not a Restricted Subsidiary of the Company.

70

Notwithstanding the foregoing, for the purpose of the covenant described under 'Certain Covenants -- Limitation on Restricted Payments' only, there shall be excluded from Consolidated Net Income any dividends, repayments of loans or advances or other transfers of assets from Unrestricted Subsidiaries to the Company or a Restricted Subsidiary to the extent such dividends, repayments or transfers increase the amount of Restricted Payments permitted under such covenant pursuant to clause (a) (4) (C) (iv) thereof.

'Consolidated Net Tangible Assets' of the Issuer means, at any date of determination, the total amount of assets (less applicable reserves and other properly deductible items) after deducting therefrom

(1) all current liabilities (excluding any thereof which are by their terms extendible or renewable at the option of the obligor thereon to a time more than 12 months after the time as of which the amount thereof is being computed and excluding current maturities of long term debt), and

(2) the value (net of any applicable reserves) of all goodwill, trade names, trademarks, purchased technology, patents, unamortized debt discount and other like intangible assets, all as set forth on the most recent balance sheet of the Issuer and its consolidated Subsidiaries, computed in accordance with GAAP, and prior to the Fall-Away Date shall exclude the 'net tangible assets' of all of its Subsidiaries which are not Restricted Subsidiaries.

'Consolidated Net Tangible Assets' of the Company shall include the Company and its consolidated Subsidiaries, and prior to the Fall-Away Date shall exclude the 'net tangible assets' of all of its Subsidiaries which are not Restricted Subsidiaries, and shall have a correlative meaning.

For purposes of the covenants described under 'Change of Control' and 'Merger and Consolidation,' 'Net Tangible Assets' means, at any date of determination, the 'net tangible assets' of any Persons being sold, plus the book value of the investment in Equistar to the extent it is being sold, each as set forth on the most recent balance sheet of such Persons, computed in accordance with GAAP.

As used in the definition of each of Consolidated Net Tangible Assets and Net Tangible Assets, the term 'net tangible assets' of any Person means, at any date of determination, the total amount of assets (less applicable reserves and other properly deductible items) after deducting therefrom

(1) all current liabilities (excluding any thereof which are by their terms extendible or renewable at the option of the obligor thereon to a time more than 12 months after the time as of which the amount thereof is being computed and excluding current maturities of long term debt), and

(2) the value (net of any applicable reserves) of all goodwill, trade names, trademarks, purchased technology, patents, unamortized debt discount

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

and other like intangible assets, all as set forth on the most recent balance sheet of such Person computed in accordance with GAAP.

'Credit Agreement' means the credit agreement dated as of June 18, 2001, among the Issuer, Millennium Inorganic Chemicals Limited, the other subsidiaries of the Company party thereto, the Company, the lenders party thereto, the issuing banks party thereto, Bank of America, N.A., as syndication agent, and The Chase Manhattan Bank, as administrative agent and collateral agent, as amended, restated, supplemented, waived, replaced, renewed, extended, increased, substituted (whether or not upon termination, and whether with the original lenders or otherwise), refinanced, restructured or otherwise modified from time to time (except to the extent that any such amendment, restatement, supplement, waiver, replacement, renewal, extension, increase, substitution, resubstitution, refinancing, restructuring or other modification thereto would be prohibited by the terms of the Indenture, unless otherwise agreed to by the Holders of at least a majority in aggregate principal amount of Notes at the time outstanding).

71

'Currency Agreement' means with respect to any Person any foreign exchange contract, currency swap agreements or other similar agreement or arrangement to which such Person is a party or of which it is a beneficiary.

'Default' means any event which is, or after notice or passage of time or both would be, an Event of Default.

'Disqualified Stock' means, with respect to any Person, any Capital Stock which by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable or exercisable) or upon the happening of any event:

(1) matures or is mandatorily redeemable pursuant to a sinking fund obligation or otherwise,

(2) is convertible or exchangeable for Indebtedness or Disqualified Stock (excluding Capital Stock convertible or exchangeable solely at the option of the Company or a Restricted Subsidiary; provided, however, that any such conversion or exchange shall be deemed an Incurrence of Indebtedness or Disqualified Stock, as applicable) or

(3) is redeemable at the option of the holder thereof, in whole or in part, in the case of each of clauses (1), (2) and (3), on or prior to the date which is 91 days after the Stated Maturity of the Notes; provided, however, that any Capital Stock that would not constitute Disqualified Stock but for provisions thereof giving holders thereof the right to require such Person to repurchase or redeem such Capital Stock upon the occurrence of an 'asset sale' or 'change of control' occurring prior to the date which is 91 days after the Stated Maturity of the Notes shall not constitute Disqualified Stock if the 'asset sale' or 'change of control' provisions applicable to such Capital Stock are not more favorable to the holders of such Capital Stock than the provisions of the covenants described under 'Change of Control' and 'Limitation on Sale of Assets and Subsidiary Stock.'

'Domestic Subsidiary' means any Restricted Subsidiary of the Company other than a Foreign Subsidiary.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

'EBITDA' for any period means the Consolidated Net Income for such period, plus, without duplication, the following to the extent deducted in calculating such Consolidated Net Income:

- (1) income tax expense of the Company and its consolidated Restricted Subsidiaries,
- (2) Consolidated Interest Expense,
- (3) depreciation expense of the Company and its consolidated Restricted Subsidiaries,
- (4) amortization expense of the Company and its consolidated Restricted Subsidiaries (excluding amortization expense attributable to a prepaid cash item that was paid in a prior period) and
- (5) all other noncash charges (including, without limitation, noncash charges resulting from any unrealized foreign currency transaction gains or losses in respect of Indebtedness denominated in currencies other than the U.S. dollar and noncash charges related to discontinued operations) of the Company and its consolidated Restricted Subsidiaries (excluding any such noncash charge to the extent it represents an accrual of or reserve for cash expenditures in any future period) less all non-cash items of income of the Company and its Restricted Subsidiaries,

in each case for such period; minus, without duplication, any cash or non-cash items of income (loss) attributable to the Company's investment in Equistar for such period for so long as Equistar is not a Restricted Subsidiary of the Company, to the extent included in Consolidated Net Income.

Notwithstanding the foregoing, the provision for taxes based on the income or profits of, and the depreciation and amortization and noncash charges of, a Restricted Subsidiary of the Company shall be added to Consolidated Net Income to compute EBITDA only to the extent (and in the same proportion) that the net income of such Restricted Subsidiary was included in calculating Consolidated Net Income and only if a corresponding amount would be permitted at

72

the date of determination to be dividended to the Company by such Restricted Subsidiary without prior approval (that has not been obtained), pursuant to the terms of its charter and all agreements, instruments, judgments, decrees, orders, statutes, rules and governmental regulations applicable to such Restricted Subsidiary or its stockholders.

'Equistar Partnership Agreement' means the Amended and Restated Limited Partnership Agreement of Equistar Chemicals, LP dated as of May 15, 1998, as in effect on June 18, 2001, entered into by and among Lyondell Petrochemical G.P. Inc., Lyondell Petrochemical L.P. Inc., Millennium Petrochemicals GP LLC, Millennium Petrochemicals LP LLC, PDG Chemical Inc., Occidental Petrochem Partner 1, Inc. and Occidental Petrochem Partner 2, Inc.

'Equity Offering' means a public or private sale for cash of Capital Stock (other than Disqualified Stock or Preferred Stock) of the Company.

'Fair Market Value' means, with respect to any asset or property, the price which could be negotiated in an arm's-length, free market transaction, for cash,

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

between a willing seller and a willing and able buyer, neither of whom is under undue pressure or compulsion to complete the transaction. The Fair Market Value of property or assets other than cash which involves (1) an aggregate amount in excess of \$10 million, shall be as set forth in a resolution approved by at least a majority of the Board of Directors of the Company and (2) an aggregate amount in excess of \$25 million, shall have been determined in writing by a nationally recognized appraisal or investment banking firm.

'Foreign Subsidiary' means any Restricted Subsidiary of the Company that is not organized under the laws of the United States of America or any State thereof or the District of Columbia.

'Funded Debt' means Indebtedness that by its terms (i) matures more than one year from the date of original issuance or creation or (ii) matures within one year from such date, but is renewable or extendible at the option of the obligor to a date more than one year from such date.

'GAAP' means generally accepted accounting principles in the United States of America as in effect as of June 18, 2001, including those set forth in:

- (1) the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants,
- (2) statements and pronouncements of the Financial Accounting Standards Board,
- (3) such other statements by such other entities as approved by a significant segment of the accounting profession, and
- (4) the rules and regulations of the SEC governing the inclusion of financial statements (including pro forma financial statements) in periodic reports required to be filed pursuant to Section 13 of the Exchange Act, including opinions and pronouncements in staff accounting bulletins and similar written statements from the accounting staff of the SEC.

All ratios and computations based on GAAP contained in the Indenture shall be computed in conformity with GAAP.

'Guarantee' means any obligation, contingent or otherwise, of any Person directly or indirectly guaranteeing any Indebtedness of any other Person and any obligation, direct or indirect, contingent or otherwise, of such Person:

- (1) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness of such other Person (whether arising by virtue of partnership arrangements, or by agreement to keep-well, to purchase assets, goods, securities or services, to take-or-pay, or to maintain financial statement conditions or otherwise) or
- (2) entered into for purposes of assuring in any other manner the obligee of such Indebtedness of the payment thereof or to protect such obligee against loss in respect thereof (in whole or in part);

provided, however, that the term 'Guarantee' shall not include endorsements for collection or deposit in the ordinary course of business. The term 'Guarantee' used as a verb has a

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

corresponding meaning. The term 'Guarantor' shall mean any Person Guaranteeing any obligation.

'Hedging Agreement' means any Currency Agreement, any Interest Rate Agreement and any Commodity Agreement.

'Hedging Obligations' of any Person means the obligations of such Person pursuant to any Hedging Agreement.

'Incur' means issue, assume, Guarantee, incur or otherwise become liable for; provided, however, that any Indebtedness or Capital Stock of a Person existing at the time such Person becomes a Subsidiary (whether by merger, consolidation, acquisition or otherwise) shall be deemed to be Incurred by such Person at the time it becomes a Subsidiary. The accretion of principal of a non-interest bearing or other discount security shall not be deemed the Incurrence of Indebtedness.

'Indebtedness' means, with respect to any Person on any date of determination, without duplication:

(1) the principal of and premium (if any) in respect of indebtedness of such Person for borrowed money;

(2) the principal of and premium (if any) in respect of obligations of such Person evidenced by bonds, debentures, notes or other similar instruments;

(3) all obligations of such Person in respect of letters of credit or other similar instruments (including reimbursement obligations with respect thereto) (it being understood that obligations with respect to letters of credit securing obligations (other than obligations described in clauses (1), (2) or (5) of this definition of 'Indebtedness') entered into in the ordinary course of business of such Person to the extent such letters of credit are not drawn upon and Guarantees thereof shall not be considered 'Indebtedness' unless and until they are drawn upon and such amounts are outstanding for 5 days);

(4) all obligations of such Person to pay the deferred and unpaid purchase price of property or services (except Trade Payables), which purchase price is due more than one year after the date of placing such property in service or taking delivery and title thereto or the completion of such services;

(5) all Capitalized Lease Obligations of such Person;

(6) the amount of all obligations of such Person with respect to the redemption, repayment or other repurchase of any Disqualified Stock or, with respect to any Subsidiary of such Person, any Preferred Stock (but excluding, in each case, any accrued dividends);

(7) all Indebtedness of other Persons secured by a Lien on any asset of such Person, whether or not such Indebtedness is assumed by such Person; provided, however, that the amount of Indebtedness of such Person shall be the lesser of:

(A) the Fair Market Value of such asset at such date of determination and

(B) the amount of such Indebtedness of such other Persons;

(8) Hedging Obligations of such Person other than pursuant to Hedging

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Agreements entered into for bona fide hedging purposes in the ordinary course of business; provided, however, that such Hedging Agreements do not increase the Indebtedness of such Person outstanding at any time other than as a result of fluctuations in interest rates, exchange rates, commodity rates or by reason of fees, indemnities and compensation payable thereunder;

(9) prior to the Fall-Away Date only (and not thereafter), the amount advanced with respect to accounts receivable of such Person sold, assigned or otherwise transferred by such Person in a receivables financing; and

(10) all obligations of the type referred to in clauses (1) through (9) of other Persons and all dividends of other Persons for the payment of which, in either case, such Person is

74

responsible or liable, directly or indirectly, as obligor, guarantor or otherwise, including by means of any Guarantee.

The amount of Indebtedness of any Person at any date shall be (1) the outstanding balance at such date of all unconditional obligations as described above and (2) after the occurrence of the contingency giving rise to an obligation, the maximum liability of such contingent obligation at such date.

'Interest Rate Agreement' means with respect to any Person any interest rate protection agreement, interest rate future agreement, interest rate option agreement, interest rate swap agreement, interest rate cap agreement, interest rate collar agreement, interest rate hedge agreement or other similar agreement or arrangement to which such Person is party or of which it is a beneficiary.

'Investment' in any Person means any direct or indirect advance, loan (other than advances to customers in the ordinary course of business that are recorded as accounts receivable on the balance sheet of the lender) or other extension of credit (including by way of guarantee or similar arrangement) or capital contribution to (by means of any transfer of cash or other property to others or any payment for property or services for the account or use of others), or any purchase or acquisition of Capital Stock, Indebtedness or other similar instruments issued by such Person. For purposes of the definition of 'Unrestricted Subsidiary' and the covenant described under 'Certain Covenants -- Limitation on Restricted Payments':

(1) 'Investment' shall include the portion (proportionate to the Company's equity interest in such Subsidiary) of the Fair Market Value of the net assets of any Subsidiary of the Company at the time that such Subsidiary is designated an Unrestricted Subsidiary; provided, however, that upon a redesignation of such Subsidiary as a Restricted Subsidiary, the Company shall be deemed to continue to have a permanent 'Investment' in an Unrestricted Subsidiary in an amount (if positive) equal to:

(A) the Company's 'Investment' in such Subsidiary at the time of such redesignation less

(B) the portion (proportionate to the Company's equity interest in such Subsidiary) of the Fair Market Value of the net assets of such Subsidiary at the time of such redesignation; and

(2) any property transferred to or from an Unrestricted Subsidiary shall

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

be valued at its Fair Market Value at the time of such transfer.

'Lien' means, with respect to any property or assets, any mortgage or deed of trust, pledge, hypothecation, assignment, deposit arrangement, security interest, lien, charge, easement (other than any easement not materially impairing usefulness or marketability), encumbrance, preference, priority or other security agreement or preferential arrangement of any kind or nature whatsoever on or with respect to such property or assets (including, without limitation, any conditional sale or other title retention agreement having substantially the same economic effect as any of the foregoing).

'Net Available Cash' from an Asset Disposition means cash payments received (including any cash payments received by way of deferred payment of principal pursuant to a note or installment receivable or otherwise and proceeds from the sale or other disposition of any securities received as consideration, but only as and when received, but excluding any other consideration received in the form of assumption by the acquiring Person of Indebtedness or other obligations relating to the properties or assets that are the subject of such Asset Disposition or received in any other noncash form) therefrom, in each case net of:

(1) all legal, title and recording tax expenses, commissions and other fees and expenses (including investment banking and financial advisory fees) incurred, and all Federal, state, provincial, foreign and local taxes required to be paid or accrued as a liability under GAAP, as a consequence of such Asset Disposition,

75

(2) all payments made on any Indebtedness which is secured by any assets subject to such Asset Disposition, in accordance with the terms of any Lien upon or other security agreement of any kind with respect to such assets, or which must by its terms, or in order to obtain a necessary consent to such Asset Disposition, or by applicable law be repaid out of the proceeds from such Asset Disposition,

(3) all distributions and other payments required to be made to minority interest holders in Subsidiaries or joint ventures as a result of such Asset Disposition and

(4) appropriate amounts to be provided by the seller as a reserve, in accordance with GAAP, against any liabilities associated with the property or other assets disposed of in such Asset Disposition and retained by the Company or any Restricted Subsidiary after such Asset Disposition.

'Net Cash Proceeds,' with respect to any issuance or sale of Capital Stock, means the cash proceeds of such issuance or sale net of attorneys' fees, accountants' fees, underwriters' or placement agents' fees, discounts or commissions and brokerage and sales commissions or fees, consultant and other fees (including investment banking and financial advisory fees) actually incurred in connection with such issuance or sale and net of taxes paid or payable as a result thereof.

'Permitted Business' means any business engaged in by the Company or any Restricted Subsidiary on June 18, 2001 and any Related Business.

'Permitted Investment' means an Investment by the Company or any Restricted

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Subsidiary in:

(1) the Company, a Restricted Subsidiary or a Person that will, upon the making of such Investment, become a Restricted Subsidiary; provided, however, that the primary business of such Restricted Subsidiary is a Permitted Business;

(2) another Person if as a result of such Investment such other Person is merged or consolidated with or into, or transfers or conveys all or substantially all its assets to, the Company or a Restricted Subsidiary; provided, however, that such Person's primary business is a Permitted Business;

(3) Temporary Cash Investments;

(4) receivables owing to the Company or any Restricted Subsidiary if created or acquired in the ordinary course of business and payable or dischargeable in accordance with customary trade terms; provided, however, that such trade terms may include such concessionary trade terms as the Company or any such Restricted Subsidiary deems reasonable under the circumstances;

(5) payroll, travel and similar advances to cover matters that are expected at the time of such advances ultimately to be treated as expenses for accounting purposes and that are made in the ordinary course of business;

(6) loans or advances to employees, directors and officers made in the ordinary course of business consistent with past practices of the Company or such Restricted Subsidiary and not exceeding \$10 million in the aggregate outstanding at any one time;

(7) stock, obligations or securities received in settlement of debts created in the ordinary course of business and owing to the Company or any Restricted Subsidiary or in satisfaction of judgments or pursuant to any plan of reorganization or similar arrangement upon the bankruptcy or insolvency of a debtor;

(8) any Person to the extent such Investment represents the noncash portion of the consideration received for an Asset Disposition that was made pursuant to and in compliance with the covenant described under 'Certain Covenants -- Limitation on Sale of Assets and Subsidiary Stock';

(9) a Receivables Entity or any Investment by a Receivables Entity in any other Person in connection with a Qualified Receivables Transaction, including Investments of funds held in

76

accounts permitted or required by the arrangements governing such Qualified Receivables Transaction or any related Indebtedness; provided that any Investment in a Receivables Entity is in the form of a Purchase Money Note, contribution of additional receivables or an equity interest;

(10) Hedging Obligations Incurred in compliance with the covenant described under 'Certain Covenants -- Limitation on Indebtedness';

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

(11) any Person consisting of Guarantees Incurred in accordance with the covenant described under 'Certain Covenants -- Limitation on Indebtedness';

(12) any Person provided that the payment for such Investment consists solely of Capital Stock (other than Disqualified Stock or Preferred Stock) of the Company or any Restricted Subsidiary;

(13) Investments in prepaid expenses, negotiable instruments held for collection or lease, workers' compensation, performance and other similar deposits provided to third parties in the ordinary course of business;

(14) any Person to the extent such Investment represents the noncash portion of the consideration received for an Asset Disposition that was made pursuant to and in compliance with the covenant described under 'Certain Covenants -- Limitation on Sales of Assets and Subsidiary Stock'; and

(15) Guarantees of Indebtedness of Equistar in an aggregate principal amount not to exceed \$750 million on terms no less favorable (other than an extension thereof) to the Company than those contained in the Issuer's limited Guarantee of Indebtedness of Equistar existing on June 18, 2001.

'Person' means any individual, corporation, partnership, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization, government or any agency or political subdivision thereof or any other entity.

'principal' of an Exchange Note means the principal of the Exchange Note plus the premium, if any, payable on the Exchange Note which is due or overdue or is to become due at the relevant time.

'Purchase Money Indebtedness' means Indebtedness:

(1) consisting of the deferred purchase price of an asset, conditional sale obligations, obligations under any title retention agreement and other purchase money obligations, in each case where the maturity of such Indebtedness does not exceed the anticipated useful life of the asset being financed, and

(2) Incurred to finance the acquisition by the Company or a Restricted Subsidiary of such asset, including additions and improvements;

provided, however, that such Indebtedness is incurred no later than 180 days after the acquisition by the Company or such Restricted Subsidiary of such asset.

'Purchase Money Note' means a promissory note of a Receivables Entity evidencing a line of credit, which may be irrevocable, from the Company or any Subsidiary of the Company to a Receivables Entity in connection with a Qualified Receivables Transaction, which note

(a) shall be repaid from cash available to the Receivables Entity, other than

(1) amounts required to be established as reserves,

(2) amounts paid to investors in respect of interest or yield,

(3) principal, fees and other amounts owing to such investors and

(4) amounts paid in connection with the purchase of newly generated receivables and

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

(b) may be subordinated to the payments described in clause (a).

77

'Qualified Receivables Transaction' means any transaction or series of transactions that may be entered into by the Company or any Subsidiary of the Company pursuant to which the Company or any of its Subsidiaries may sell, convey or otherwise transfer to:

(a) a Receivables Entity (in the case of a transfer by the Company or any of its Subsidiaries) or

(b) any other Person (in the case of a transfer by a Receivables Entity),

or may grant a security interest in, any accounts receivable (whether now existing or arising in the future) of the Company or any of its Subsidiaries, and any assets related thereto including, without limitation, all collateral securing such accounts receivable, all contracts and all Guarantees or other obligations in respect of such accounts receivable, proceeds of such accounts receivable and other assets which are customarily transferred or in respect of which security interests are customarily granted in connection with asset securitization transactions involving accounts receivable; provided that:

(1) the Board of Directors of the Company shall have determined in good faith that such Qualified Receivables Transaction is economically fair and reasonable to the Company and the Receivables Entity, and

(2) the financing terms, covenants, termination events and other provisions thereof shall be market terms (as determined in good faith by the Board of Directors of the Company).

The grant of a security interest in any accounts receivable of the Company or any of its Restricted Subsidiaries to secure Bank Indebtedness shall not be deemed a Qualified Receivables Transaction.

'Receivables Entity' means a Wholly Owned Subsidiary of the Company (or another Person formed for the purposes of engaging in a Qualified Receivables Transaction with the Company or one of its Subsidiaries in which the Company or any of its Subsidiaries makes an Investment and to which the Company or any of its Subsidiaries transfers accounts receivable and related assets) which engages in no activities other than in connection with the purchase, sale or financing of accounts receivable of the Company or one of its Subsidiaries, all proceeds thereof and all rights (contractual or other), collateral and other assets relating thereto, and any business or activities incidental or related to such business, and which is designated by the Board of Directors (as provided below) as a Receivables Entity and

(a) no portion of the Indebtedness or any other obligations (contingent or otherwise) of which

(1) is Guaranteed by the Company or any Subsidiary of the Company (excluding Guarantees of obligations (other than the principal of, and interest on, Indebtedness) pursuant to Standard Securitization Undertakings),

(2) is recourse to or obligates the Company or any Subsidiary of the

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Company in any way other than pursuant to Standard Securitization Undertakings or

(3) subjects any property or asset of the Company or any Subsidiary of the Company, directly or indirectly, contingently or otherwise, to the satisfaction thereof, other than pursuant to Standard Securitization Undertakings;

(b) with which neither the Company nor any Subsidiary of the Company has any material contract, agreement, arrangement or understanding other than on terms which the Company reasonably believes to be no less favorable to the Company or such Subsidiary than those that might be obtained at the time from Persons that are not Affiliates of the Company and

(c) to which neither the Company nor any Subsidiary of the Company has any obligation to maintain or preserve such entity's financial condition or cause such entity to achieve certain levels of operating results.

Any such designation by the Board of Directors of the Company shall be evidenced to the Trustee by filing with the Trustee a certified copy of the resolution of the Board of Directors of

78

the Company giving effect to such designation and an Officers' Certificate certifying that such designation complied with the foregoing conditions.

'Refinance' means, in respect of any Indebtedness, to refinance, extend, renew, refund, repay, prepay, redeem, defease or retire, or to issue other Indebtedness in exchange or replacement for, such Indebtedness. 'Refinanced' and 'Refinancing' shall have correlative meanings.

'Refinancing Indebtedness' means Indebtedness that is Incurred to refund, refinance, replace, renew, repay, amend or extend (including pursuant to any defeasance or discharge mechanism) any Indebtedness of the Company or any Restricted Subsidiary existing on June 18, 2001 or Incurred in compliance with the Indenture (including Indebtedness that Refinances Refinancing Indebtedness); provided, however, that:

(1) the Refinancing Indebtedness has a Stated Maturity no earlier than the Stated Maturity of the Indebtedness being Refinanced,

(2) the Refinancing Indebtedness has an Average Life at the time such Refinancing Indebtedness is Incurred that is equal to or greater than the Average Life of the Indebtedness being refinanced,

(3) such Refinancing Indebtedness is Incurred in an aggregate principal amount (or if issued with original issue discount, an aggregate issue price) that is equal to or less than the aggregate principal amount (or if issued with original issue discount, the aggregate accreted value) then outstanding of the Indebtedness being Refinanced and

(4) if the Indebtedness being Refinanced is subordinated in right of payment to the Notes, such Refinancing Indebtedness is subordinated in right of payment to the Notes at least to the same extent as the Indebtedness being Refinanced;

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

provided further, however, that Refinancing Indebtedness shall not include:

(A) Indebtedness of a Restricted Subsidiary that Refinances Indebtedness of the Company or

(B) Indebtedness of the Company or a Restricted Subsidiary that Refinances Indebtedness of an Unrestricted Subsidiary.

'Related Business' means any business related, ancillary or complementary to the businesses of the Company and the Restricted Subsidiaries on June 18, 2001.

'Restricted Property' means (i) any land, land improvements, buildings and fixtures (to the extent they constitute real property interests, including any leasehold interest therein) constituting a principal corporate office or a manufacturing, distribution or warehouse facility (other than such as are determined in good faith by the Board of Directors of the Company to be immaterial to the total business conducted by the Company and the Restricted Subsidiaries as a whole) and (ii) any shares of Capital Stock or Indebtedness of a Restricted Subsidiary.

'Restricted Subsidiary' means any Subsidiary of the Company other than an Unrestricted Subsidiary, except (i) for purposes of the definition of Consolidated Net Tangible Assets of the Issuer, Restricted Subsidiary means any Subsidiary of the Issuer other than an Unrestricted Subsidiary and (ii) for purposes of paragraph (e) of the covenant described under 'Limitation on Indebtedness' (other than the term Consolidated Net Tangible Assets of the Issuer, and clauses (v)(b) and (v)(c) thereof), clause (b)(3) of the covenant described under ' -- Limitation on Liens,' clause (b)(3) of the covenant described under ' -- Limitation on Sale/Leaseback Transactions' and for all purposes following the Fall-Away Date, 'Restricted Subsidiary' means any Subsidiary of the Issuer which owns Restricted Property and is organized under the laws of a jurisdiction in the United States.

'Senior Indebtedness' of the Issuer or the Company means the principal of, premium (if any) and accrued and unpaid interest on (including interest accruing on or after the filing of any petition in bankruptcy or for reorganization of the Issuer or the Company, regardless of whether or not a claim for post-filing interest is allowed in such proceedings), and fees and other amounts

79

owing in respect of, Bank Indebtedness and all other Indebtedness of the Issuer or the Company, as applicable, whether outstanding on June 18, 2001 or thereafter Incurred, unless in the instrument creating or evidencing the same or pursuant to which the same is outstanding it is provided that such obligations are subordinated in right of payment to the Notes or the Company's Note Guarantee, as applicable; provided, however, that Senior Indebtedness of the Issuer or the Company shall not include:

(1) any obligation of the Issuer to the Company or any other Subsidiary of the Company or Equistar or any obligation of the Company to any Subsidiary of the Company or Equistar;

(2) any liability for federal, state, local or other taxes owed or owing by the Issuer or the Company, as applicable;

(3) any accounts payable or other liability to trade creditors arising

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

in the ordinary course of business (including Guarantees thereof or instruments evidencing such liabilities);

(4) any Indebtedness or obligation of the Issuer or the Company, as applicable (and any accrued and unpaid interest in respect thereof) that by its terms is subordinate or junior in any respect to any other Indebtedness or obligation of the Issuer or the Company, as applicable, including any Subordinated Obligations of the Issuer or the Company, as applicable;

(5) any obligations with respect to any Capital Stock; or

(6) any Indebtedness Incurred in violation of the Indenture.

'Significant Subsidiary' means any Restricted Subsidiary that would be a 'Significant Subsidiary' of the Company within the meaning of Rule 1-02 under Regulation S-X promulgated by the SEC.

'Standard Securitization Undertakings' means representations, warranties, covenants, repurchase obligations and indemnities entered into by the Company or any Subsidiary of the Company which are customary in an accounts receivable securitization transaction.

'Stated Maturity' means, with respect to any security, the date specified in such security as the fixed date on which the final payment of principal of such security is due and payable, including pursuant to any mandatory redemption provision (but excluding any provision providing for the repurchase of such security at the option of the holder thereof upon the happening of any contingency beyond the control of the issuer unless such contingency has occurred).

'Subordinated Obligation' means any Indebtedness of the Issuer (whether outstanding on June 18, 2001 or thereafter Incurred) that is subordinate or junior in right of payment to the Notes pursuant to a written agreement. 'Subordinated Obligation' of the Company has a correlative meaning.

'Subsidiary' of any Person means any corporation, association, partnership, limited liability company, or other business entity of which more than 50% of the total voting power of shares of Capital Stock or other interests (including partnership interests) entitled to vote in the election of directors, managers or trustees thereof is at the time owned or controlled, directly or indirectly, by:

(1) such Person,

(2) such Person and one or more Subsidiaries of such Person or

(3) one or more Subsidiaries of such Person.

'Temporary Cash Investments' means any of the following:

(1) any investment in direct obligations of the United States of America or any agency thereof or obligations Guaranteed by the United States of America or any agency thereof,

(2) investments in time deposit accounts, certificates of deposit and money market deposits maturing within 180 days of the date of acquisition thereof issued by a bank or trust company that is organized under the laws of the United States of America, any state thereof or any foreign country recognized by the United States of America having capital, surplus and

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

undivided profits aggregating in excess of \$250,000,000 (or the foreign currency equivalent thereof) and whose long-term debt is rated 'A' (or such similar equivalent rating) or higher by at least one nationally recognized statistical rating organization (as defined in Rule 436 under the Securities Act),

(3) repurchase obligations with a term of not more than 30 days for underlying securities of the types described in clause (1) above entered into with a bank meeting the qualifications described in clause (2) above,

(4) investments in commercial paper, maturing not more than 90 days after the date of acquisition, issued by a corporation (other than an Affiliate of the Company) organized and in existence under the laws of the United States of America or any foreign country recognized by the United States of America with a rating at the time as of which any investment therein is made of 'P-1' (or higher) according to Moody's Investors Service, Inc. or 'A-1' (or higher) according to Standard and Poor's Ratings Service, a division of The McGraw-Hill Companies, Inc. ('S&P'), and

(5) investments in securities with maturities of six months or less from the date of acquisition issued or fully guaranteed by any state, commonwealth or territory of the United States of America, or by any political subdivision or taxing authority thereof, and rated at least 'A' by S&P or 'A' by Moody's Investors Service, Inc.

'Trade Payables' means, with respect to any Person, any accounts payable or any indebtedness or monetary obligation to trade creditors created, assumed or Guaranteed by such Person arising in the ordinary course of business in connection with the acquisition of goods or services.

'Treasury Rate' means the yield to maturity at the time of computation of United States Treasury securities with a constant maturity (as compiled by, and published in, the most recent Federal Reserve Statistical Release H.15(519) which has become publicly available at least two Business Days prior to the date fixed for redemption of the Exchange Notes (or, if such Statistical Release is no longer published, any publicly available source of similar market data)) most nearly equal to the period from the redemption date to the maturity date of the Exchange Notes; provided, however, that if the period from the redemption date to the maturity date of the Exchange Notes is not equal to the constant maturity of a United States Treasury security for which a weekly average yield is given, the Treasury Rate shall be obtained by linear interpolation (calculated to the nearest one-twelfth of a year) from the weekly average yields of United States Treasury securities for which such yields are given, except that if the period from the redemption date to the maturity date of the Notes is less than one year, the weekly average yield on actually traded United States Treasury securities adjusted to a constant maturity of one year shall be used.

'Unrestricted Subsidiary' means:

(1) any Subsidiary of the Company that at the time of determination shall be designated an Unrestricted Subsidiary by the Board of Directors of the Company in the manner provided below and

(2) any Subsidiary of an Unrestricted Subsidiary.

The Board of Directors of the Company may designate any Subsidiary of the Company (including any Subsidiary of the Company acquired or formed after the

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

date of the Indenture, but excluding the Issuer) to be an Unrestricted Subsidiary unless such Subsidiary or any of its Subsidiaries owns any Capital Stock or Indebtedness of, or owns or holds any Lien on any property of, the Company or any other Subsidiary of the Company that is not a Subsidiary of the Subsidiary to be so designated; provided, however, that either:

(A) the Subsidiary to be so designated has total consolidated assets of \$1,000 or less or

(B) if such Subsidiary has consolidated assets greater than \$1,000, then such designation would be permitted under the covenant entitled 'Limitation on Restricted Payments.'

81

The Board of Directors of the Company may designate any Unrestricted Subsidiary to be a Restricted Subsidiary; provided, however, that immediately after giving effect to such designation:

(x) the Company could Incur \$1.00 of additional Indebtedness under paragraph (a) of the covenant described under ' -- Certain Covenants -- Limitation on Indebtedness' and

(y) no Default shall have occurred and be continuing.

Any such designation of a Subsidiary as a Restricted Subsidiary or Unrestricted Subsidiary by the Board of Directors of the Company shall be evidenced to the Trustee by promptly filing with the Trustee a copy of the resolution of the Board of Directors of the Company giving effect to such designation and an Officers' Certificate certifying that such designation complied with the foregoing provisions.

'U.S. Government Obligations' means direct obligations (or certificates representing an ownership interest in such obligations) of the United States of America (including any agency or instrumentality thereof) for the payment of which the full faith and credit of the United States of America is pledged and which are not callable or redeemable at the issuer's option.

'Value' means, with respect to a Sale/Leaseback Transaction, at the time of determination, the amount equal to the greater of (i) the net proceeds of the sale or transfer of the property leased pursuant to such Sale/Leaseback Transaction and (ii) the Fair Market Value of such property at the time of entering into such Sale/Leaseback Transaction.

82

BOOK-ENTRY PROCEDURES

Upon issuance, all book-entry exchange notes will be represented by one or

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

more fully registered global notes, without coupons. Each global note will be deposited with, or on behalf of, DTC, and will be registered in the name of DTC or a nominee of DTC.

DTC has advised Millennium America that it is (i) a limited purpose trust company organized under the laws of the State of New York, (ii) a 'banking organization' within the meaning of the New York Banking Law, (iii) a member of the Federal Reserve System, (iv) a 'clearing corporation' within the meaning of the Uniform Commercial Code, as amended, and (v) a 'clearing agency' registered pursuant to Section 17A of the Exchange Act. DTC was created to hold securities for its participants and facilitates the clearance and settlement of securities transactions between participants through electronic book-entry changes to the accounts of its participants, thereby eliminating the need for physical transfer and delivery of certificates. DTC's participants include securities brokers and dealers (including the initial purchasers), banks and trust companies, clearing corporations and certain other organizations. Indirect access to DTC's system is also available to other entities such as banks, brokers, dealers and trust companies, or indirect participants that clear through or maintain a custodial relationship with a participant, either directly or indirectly. Investors who are not participants may beneficially own securities held by or on behalf of DTC only through participants or indirect participants. The ownership interest and transfer of ownership interest of each actual purchaser of each security held by or on behalf of DTC are recorded on the records of the participants and the indirect participants.

We expect that pursuant to procedures established by DTC

(1) upon deposit of the global notes, DTC or its custodian will credit on its internal system portions of the global notes which shall be comprised of the corresponding respective amount of the global notes to the respective accounts of persons who have accounts with such depository and

(2) ownership of the exchange notes will be shown on, and the transfer of ownership of the exchange notes will be effected only through, records maintained by DTC or its nominee (with respect to interests of participants) and the records of participants and the indirect participants (with respect to interests of persons other than participants).

Noteholders may hold their interests in a global note directly through DTC if they are participants in such system, or indirectly through organizations which are participants in such system.

The laws of some jurisdictions may require that certain purchasers of securities take physical delivery of such securities in definitive form. Accordingly, the ability to transfer interests in the notes represented by a global note to such persons may be limited. In addition, because DTC can act only on behalf of its participants, who in turn act on behalf of persons who hold interests through participants, the ability of a person having an interest in exchange notes represented by a global note to pledge or transfer such interest to persons or entities that do not participate in DTC's system, or to otherwise take actions in respect of such interest, may be affected by the lack of a physical definitive security in respect of such interest.

So long as DTC or its nominee is the registered owner or holder of any of the exchange notes, DTC or such nominee will be considered the sole owner or holder of such exchange notes represented by such global notes for all purposes under the indenture and under the exchange notes represented thereby. No beneficial owner of an interest in the global notes will be able to transfer such interest except in accordance with the applicable procedures of DTC in addition to those provided for under the indenture.

Payments of the principal, premium, if any, and interest on the exchange

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

notes represented by the global notes will be made to DTC or its nominee, as the case may be, as the registered owner of the exchange notes represented by the global notes. Neither we or the trustee will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in the global notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interest.

83

We expect that DTC or its nominee, upon receipt of any payment of the principal, premium or interest on the exchange notes represented by the global notes, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the global notes as shown on the records of DTC or its nominee. We also expect that payments by participants to owners of beneficial interests in the global notes held through such participants will be governed by standing instructions and customary practice as is now the case with securities held for the accounts of customers registered in the names of nominees for such customers. Such payment will be the responsibility of such participants. Transfers between participants in DTC will be effected in accordance with DTC rules and procedures and will be settled in same-day funds.

DTC has advised us that it will take any action permitted to be taken by a holder of exchange notes (including the presentation of exchange notes for exchange as described below) only at the direction of one or more participants to whose account the DTC interests in the global notes are credited and only in respect of the aggregate principal amount of as to which such participant or participants has or have given such direction.

Although DTC is expected to follow the foregoing procedures in order to facilitate transfers of interests in the global notes among participants of DTC, DTC is under no obligation to perform such procedures, and such procedures may be discontinued at any time. Neither we or the trustee will have any responsibility for the performance by DTC or its direct or indirect participants of their respective obligations under the rules and procedures governing their operations.

Interests in the global notes will be exchanged for physical delivery of certificates only if

(1) DTC is at any time unwilling or unable to continue as depository for the global notes, or DTC ceases to be registered as a clearing agency under the Exchange Act and a successor depository is not appointed by us within 90 days; or

(2) an event of default with respect to the exchange notes will have occurred and be continuing; or

(3) Millennium America, at its option, notifies the trustee in writing that it elects to cause the issuance of exchange notes in definitive form under the indenture.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that we believe to be reliable, but we do not take responsibility for the accuracy of that information.

FEDERAL INCOME TAX CONSIDERATIONS

The following is a summary of the material U.S. federal income tax considerations relating to the exchange of unregistered notes for exchange notes in the exchange offer. It does not contain a complete analysis of all the potential tax considerations relating to the exchange. This summary is limited to holders of unregistered notes who hold the unregistered notes as 'capital assets' (in general, assets held for investment). Special situations, such as the following are not addressed:

tax consequences to holders who may be subject to special tax treatment, such as tax-exempt entities, dealers in securities or currencies, financial institutions, insurance companies, regulated investment companies, traders in securities that elect to use a mark-to-market method of accounting for their securities holdings or corporations that accumulate earnings to avoid U.S. federal income tax;

tax consequences to persons holding notes as part of a hedging, integrated, constructive sale or conversion transaction or a straddle or other risk reduction transaction;

tax consequences to holders whose 'functional currency' is not the U.S. dollar;

tax consequences to persons who hold notes through a partnership or similar pass-through entity;

alternative minimum tax consequences, if any; or

any state, local or foreign tax consequences.

The discussion below is based upon the provisions of the Internal Revenue Code of 1986, existing and proposed Treasury regulations promulgated thereunder, and rulings, judicial decisions and administrative interpretations thereunder, as of the date hereof. Those authorities may be changed, perhaps retroactively, so as to result in U.S. federal income tax consequences different from those discussed below.

CONSEQUENCES OF TENDERING UNREGISTERED NOTES

The exchange of your unregistered notes for exchange notes in the exchange offer will have no federal income tax consequences to you. For example, there would be no change in your tax basis, and your holding period would carry over to the exchange notes. In addition, the federal income tax consequences of holding and disposing of your exchange notes would also be the same as those applicable to your unregistered notes.

THE PRECEDING DISCUSSION OF CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY AND IS NOT TAX ADVICE. ACCORDINGLY, EACH INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR AS TO PARTICULAR TAX CONSEQUENCES TO IT OF EXCHANGING UNREGISTERED NOTES FOR EXCHANGE NOTES, INCLUDING THE APPLICABILITY AND EFFECT OF ANY STATE, LOCAL OR FOREIGN TAX LAWS, AND OF ANY PROPOSED CHANGES IN APPLICABLE LAWS.

PLAN OF DISTRIBUTION

Each broker-dealer that receives exchange notes for its own account pursuant to the exchange offer must acknowledge that it will deliver a prospectus in connection with any resale of such exchange notes. This prospectus, as it may be amended or supplemented from time to time, may be used by a broker-dealer in connection with resales of exchange notes received in exchange for outstanding unregistered notes where such outstanding unregistered notes were acquired as a result of market-making activities or other trading activities. We have agreed that, for a period of 180 days after the expiration date, we will make this prospectus, as amended or supplemented, available to any broker-dealer for use in connection with any such resale. In addition, until 40 days after the later of the commencement of the offering and the issue date, all dealers effecting transactions in the exchange notes may be required to deliver a prospectus.

We will not receive any proceeds from any sale of exchange notes by broker-dealers. Exchange notes received by broker-dealers for their own account pursuant to the exchange offer may be sold from time to time in one or more transactions in the over-the-counter market, in negotiated transactions, through the writing of options on the exchange notes or a combination of such methods of resale, at market prices prevailing at the time of resale, at prices related to such prevailing market prices or at negotiated prices. Any such resale may be made directly to purchasers or to or through brokers or dealers who may receive compensation in the form of commissions or concessions from any such broker-dealer or the purchasers of any such exchange notes. Any broker-dealer that resells exchange notes that were received by it for its own account pursuant to the exchange offer and any broker or dealer that participates in a distribution of such exchange notes may be deemed to be an 'underwriter' within the meaning of the Securities Act and any profit on any such resale of exchange notes and any commission or concessions received by any such persons may be deemed to be underwriting compensation under the Securities Act. The letter of transmittal states that, by acknowledging that it will deliver and by delivering a prospectus, a broker-dealer will not be deemed to admit that it is an 'underwriter' within the meaning of the Securities Act.

For a period of 180 days after the expiration date we will promptly send additional copies of this prospectus and any amendment or supplement to this prospectus to any broker-dealer that requests such documents in the letter of transmittal. We and Millennium Chemicals have agreed to pay all expenses incident to the exchange offer (including the expenses of one counsel for the holders of the outstanding unregistered notes) other than commissions or concessions of any broker-dealers and will indemnify the holders of the outstanding unregistered notes (including any broker-dealers) against certain liabilities, including liabilities under the Securities Act.

LEGAL MATTERS

The validity and enforceability of the exchange notes and the note guarantee of Millennium Chemicals will be passed upon for us by C. William Carmean, attorney-at-law. Mr. Carmean is the Senior Vice President, General Counsel and Secretary of Millennium America and Millennium Chemicals and is a director of Millennium America.

EXPERTS

The consolidated financial statements of Millennium Chemicals and Equistar

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

incorporated in this prospectus by reference to the Millennium Chemicals Inc. Annual Report on Form 10-K for the year ended December 31, 2002, have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

Millennium Chemicals files annual, quarterly and special reports, proxy statements and other information with the SEC under the Exchange Act. The SEC allows us to incorporate by reference the information Millennium Chemicals files with them, which means that we can disclose

86

important business and financial information to you that is not included in or delivered with this prospectus by referring you to those publicly filed documents containing the information. We provide a list of all documents we incorporate by reference in this prospectus under 'Incorporation by Reference' below.

You may read and copy the information that we incorporate in this prospectus by reference as well as other reports, proxy statements and other information that Millennium Chemicals files with the SEC at the public reference facilities maintained by the SEC at 450 Fifth Street, N.W., Washington, D.C. 20549. You may obtain copies from the public reference room by calling the SEC at (800) 732-0330. In addition, Millennium Chemicals is required to file electronic versions of those materials with the SEC through the SEC's EDGAR system. The SEC maintains a web site at <http://www.sec.gov> that contains reports, proxy statements and other information regarding registrants that file electronically with the SEC. You may also review reports and other information concerning Millennium Chemicals at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005.

Each person to whom a prospectus is delivered may also request a copy of those materials, free of cost, by writing or telephoning Millennium Chemicals at the following address:

Millennium Chemicals Inc.
230 Half Mile Road
Red Bank, New Jersey 07701
(732) 933-5000
Attention: Corporate Secretary

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with different information. If you receive any other information, you should not rely on it. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front cover of this prospectus or, with respect to information incorporated by reference from reports or documents filed with the SEC, as of the date such report or document was filed. We are not making an offer to sell these securities in any state where the offer is not permitted.

In this prospectus (including the documents incorporated by reference), we make reference to information regarding Equistar. Equistar is subject to the informational requirements of the Exchange Act and, under the Exchange Act,

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

files reports and other information with the SEC. The reports and other information filed with the SEC may be inspected and copied at the public reference facilities maintained by the SEC, as described above. The information concerning Equistar set forth or incorporated by reference in this prospectus is based entirely on information Equistar has made publicly available.

INCORPORATION BY REFERENCE

We incorporate by reference in this prospectus the information contained in the following documents:

Annual Report on Form 10-K for the fiscal year ended December 31, 2002 of Millennium Chemicals, filed with the SEC on March 25, 2003;

Quarterly Report on Form 10-Q for the quarter ended March 31, 2002 of Millennium Chemicals, filed with the SEC on May 12, 2003;

Current Report on Form 8-K filed with the SEC on April 1, 2003; and

all documents that Millennium Chemicals files with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until we complete the exchange offer.

You may obtain copies of those documents from us, free of cost, by contacting us at the address or telephone number provided in 'Where You Can Find More Information.'

Information that Millennium Chemicals files with the SEC after the date of this prospectus and that is incorporated by reference in this prospectus will automatically update and supersede

87

information contained in this prospectus. You will be deemed to have notice of all information incorporated by reference in this prospectus as if that information were included in this prospectus.

FORWARD-LOOKING STATEMENTS

The statements contained in this offering prospectus that are not historical facts are or may be deemed to be 'forward-looking statements' as defined in the Private Securities Litigation Reform Act of 1995. Some of these statements can be identified by the use of forward-looking terminology such as 'prospects,' 'outlook,' 'believes,' 'estimates,' 'intends,' 'may,' 'will,' 'should,' 'anticipates,' 'expects' or 'plans,' or the negative or other variation of these or similar words, or by discussion of trends and conditions, strategy or risks and uncertainties. In addition, from time to time we or our representatives have made or may make forward-looking statements orally or in writing. Furthermore, such forward-looking statements may be included in various filings that we make with the SEC or press releases or oral statements made by or with the approval of one of our authorized executive officers.

These statements are only present expectations and assumptions about future events. Actual events or results may differ materially. Factors that could cause such a difference include:

the cyclical and volatility of the chemical industries in which we and

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

Equistar operate, particularly fluctuations in the demand for ethylene, its derivatives and acetyls and the sensitivity of these industries to capacity additions;

general economic conditions in the geographic regions where we and Equistar generate sales, and the impact of government regulation and other external factors, in particular, the events in the Middle East;

the ability of Equistar to distribute cash to its partners and uncertainties arising from our shared control of Equistar and our contractual commitments regarding possible future capital contributions to Equistar;

changes in the cost of energy and raw materials, particularly natural gas and ethylene, and our and Equistar's ability to pass on cost increases to our respective customers;

the ability of raw material suppliers to fulfill their commitments;

our and Equistar's ability to achieve their productivity improvement, cost reduction and working capital targets, and the occurrence of operating problems at our or Equistar's manufacturing facilities;

risks of doing business outside the United States, including currency fluctuations;

the cost of compliance with the extensive environmental regulations affecting the chemical industry and exposure to liabilities for environmental remediation and other environmental matters relating to our and Equistar's current and former operations;

pricing and other competitive pressures;

legal proceedings relating to present and former operations (including proceedings based on alleged exposure to lead-based paints and lead pigments, asbestos and other materials), ongoing or future tax audits and other claims;

our substantial indebtedness and its impact on our cash flow, business operations and ability to obtain additional financing.

We undertake no obligation to update any forward-looking statement, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained in this offering memorandum.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 20. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Generally, Section 145 of the General Corporation Law of the State of Delaware (the 'GCL'), permits a corporation to indemnify certain persons made a party to an action by reason of the fact that such person is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or enterprise. To the extent that person has been successful in any such matter, that person shall be indemnified against expenses actually and reasonably incurred by him. In the case of an action by or in the right of the corporation, no indemnification may be made in respect of any matter as to which that person was adjudged liable unless and only to the extent that the Delaware Court of Chancery or the court in which the action was brought determines that, despite the adjudication of liability, that person is fairly and reasonably entitled to indemnity for proper expenses.

The by-laws of each of the Registrants provide for indemnification of the Registrants' respective officers and directors to the fullest extent permitted by law.

Section 102(b)(7) of the GCL enables a Delaware corporation to include a provision in its certificate of incorporation limiting a director's liability to the corporation or its stockholders for monetary damages for breaches of fiduciary duty as a director. Each of the Registrants have adopted provisions in their respective certificates of incorporation that provide for such limitation to the fullest extent permitted under Delaware law.

The directors and officers of each of the Registrants are covered by insurance policies indemnifying against certain liabilities, including certain liabilities arising under the Securities Act of 1933, which might be incurred by them in such capacities and against which they may not be indemnified by the Registrants.

ITEM 21. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(A) EXHIBITS

The following is a complete list of all the exhibits filed as part of and with this Registration Statement, which are incorporated herein.

NUMBER	DESCRIPTION
-----	-----
4.1	Indenture, dated as of June 18, 2001, among Millennium America Inc., as Issuer, Millennium Chemicals Inc., as Guarantor, and The Bank of New York, as Trustee (including the form of 9 1/4% Senior Notes due 2008 and the Note Guarantee).**

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

- 4.2 Exchange and Registration Rights Agreement, dated as of April 25, 2003, among Millennium America Inc. and the Initial Purchasers.*****
- 5.1 Opinion of C. William Carmean.*
- 10.1 Credit Agreement, dated June 18, 2001, among Millennium America Inc., as borrower, Millennium Inorganic Chemicals Limited, as borrower, certain borrowing subsidiaries of Millennium Chemicals Inc., from time to time party thereto, Millennium Chemicals Inc., as guarantor, the lenders from time to time party thereto, Bank of America, N.A., as syndication agent and The Chase Manhattan Bank as administrative agent and collateral agent.**
- 10.2 First Amendment to the Credit Agreement, dated as of December 14, 2001, among Millennium America Inc., as borrower, Millennium Inorganic Chemicals Limited, as borrower, certain borrowing subsidiaries of Millennium Chemicals Inc., from time to time party thereto, Millennium Chemicals Inc., as guarantor, the lenders from time to time party thereto, Bank of America, N.A., as syndication agent and JPMorgan Chase Bank as administrative agent and collateral agent.***

II-1

NUMBER -----	DESCRIPTION -----
10.3	Second Amendment to the Credit Agreement, dated as of June 19, 2002, among Millennium America Inc., as borrower, Millennium Inorganic Chemicals Limited, as borrower, certain borrowing subsidiaries of Millennium Chemicals Inc., from time to time party thereto, Millennium Chemicals Inc., as guarantor, the lenders from time to time party thereto, Bank of America, N.A., as syndication agent and JPMorgan Chase as administrative agent and collateral agent.****
10.4	Third Amendment to the Credit Agreement, dated as of April 25, 2003, among Millennium America Inc. as borrower, Millennium Inorganic Chemicals Limited, as borrower, certain borrowing subsidiaries of Millennium Chemicals Inc., from time to time party thereto, Millennium Chemicals Inc., as guarantor, the lenders from time to time party thereto, Bank of America, N.A., as syndication agent and JP Morgan Chase as administrative agent and collateral agent.*****
12.1	Computation of ratio of earnings to fixed charges.*
23.1	Consent of C. William Carmean (included in Exhibit 5.1).*

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

- 23.2 Consent of PricewaterhouseCoopers LLP.*
- 23.3 Consent of PricewaterhouseCoopers LLP.*
- 24.1 Power of Attorney (included in the signature pages to the Registration Statement).
- 25.1 Statement of Eligibility of Trustee on Form T-1.**
- 99.1 Form of Letter of Transmittal.*
- 99.2 Form of Notice of Guaranteed Delivery.*

* Filed herewith.

** Incorporated by reference to the Registration Statement on Form S-4 of Millennium Chemicals Inc. and Millennium America Inc. (Nos. 333-65650 and 65650-01)

*** Incorporated by reference to the Millennium Chemicals Inc. Current Report on Form 8-K dated December 19, 2001.

**** Incorporated by reference to the Millennium Chemicals Inc. Quarterly Report on Form 10-Q for the quarter ended June 30, 2002 dated August 14, 2002.

***** Incorporated by reference to the Millennium Chemicals Inc. Quarterly Report on Form 10-Q for the quarter ended March 31, 2003, dated May 12, 2003.

(B) FINANCIAL STATEMENT SCHEDULES

All schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission have been omitted because they are not required, are inapplicable or the required information has already been provided elsewhere or incorporated by reference in this registration statement.

ITEM 22. UNDERTAKINGS

(a) The undersigned Registrants hereby undertake to respond to requests for information that is incorporated by reference into the prospectus pursuant to Items 4, 10(b), 11 or 13 of this form, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the Registration Statement through the date of responding to the request.

(b) The undersigned Registrants hereby undertake to supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the registration statement when it became effective.

(c) The undersigned Registrants hereby undertake that, for purposes of determining any liability under the Securities Act, each filing of the Registrants' respective annual report pursuant to Section 13(a) or

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(d) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrants pursuant to the foregoing provisions, or otherwise, the Registrants have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrants of expenses incurred or paid by a director, officer or controlling person of the Registrants in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrants will, unless in the opinion of their counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether indemnification by them is against public policy as expressed in the Securities Act and will be governed by the final adjudication of that issue.

(e) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with Commission pursuant to Rule-424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the 'Calculation of Registration Fee' table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in registration statement or any material change to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

termination of the offering.

II-3

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, each of the registrants has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on .

MILLENNIUM AMERICA INC.

By: /S/ WILLIAM M. LANDUYT
.....
NAME: WILLIAM M. LANDUYT
TITLE: PRESIDENT AND CHIEF EXECUTIVE OFFICER

MILLENNIUM CHEMICALS INC.

By: /S/ WILLIAM M. LANDUYT
.....
NAME: WILLIAM M. LANDUYT
TITLE: CHAIRMAN OF THE BOARD, PRESIDENT AND CHIEF EXECUTIVE OFFICER

POWER OF ATTORNEY

Each person whose signature appears below appoints any of William M. Landuyt, John E. Lushefski and C. William Carmean as his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and anything appropriate or necessary to be done about the premises, as fully and for all intents and purposes as he might or could do in person, hereby ratifying and confirming that any such attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons for Millennium Chemicals Inc. on June 12, 2003 in the capacities indicated.

SIGNATURE

CAPACITY

/S/ WILLIAM M. LANDUYT Chairman of the Board, President, Chief Executive Officer and a Director (principal executive officer)

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

(WILLIAM M. LANDUYT)	
/S/ JOHN E. LUSHEFSKI (JOHN E. LUSHEFSKI)	Senior Vice President and Chief Financial Officer (principal financial and accounting officer)
/S/ ROBERT E. LEE (ROBERT E. LEE)	Executive Vice President -- Growth and Development and Director
/S/ THE RT. HON. LORD BAKER (THE RT. HON. LORD BAKER)	Director
/S/ MARY K. BUSH (MARY K. BUSH)	Director
/S/ WORLEY H. CLARK, JR. (WORLEY H. CLARK, JR.)	Director
/S/ IRVIN F. DIAMOND (IRVIN F. DIAMOND)	Director
/S/ THE RT. HON. LORD GLENARTHUR (THE RT. HON. LORD GLENARTHUR)	Director
/S/ DAVID J.P. MEACHIN (DAVID J.P. MEACHIN)	Director
/S/ DANIEL S. VAN RIPER (DANIEL S. VAN RIPER)	Director

II-4

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons for Millennium America Inc. on June 12, 2003, in the capacities indicated.

SIGNATURE -----	CAPACITY -----
/S/ WILLIAM M. LANDUYT (WILLIAM M. LANDUYT)	President, Chief Executive Officer and a Director (principal executive officer)
/S/ JOHN E. LUSHEFSKI (JOHN E. LUSHEFSKI)	Senior Vice President, Chief Financial Officer and a Director (principal financial and accounting officer)

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

/S/ C. WILLIAM CARMEAN Senior Vice President -- General Counsel, Secretary a
..... a Director
(C. WILLIAM CARMEAN)

II-5

EXHIBIT INDEX

NUMBER	DESCRIPTION
-----	-----
4.1	Indenture, dated as of June 18, 2001, among Millennium America Inc., as Issuer, Millennium Chemicals Inc., as Guarantor, and The Bank of New York, as Trustee (including the form of 9 1/4% Senior Notes due 2008 and the Note Guarantee)**
4.2	Exchange and Registration Rights Agreement, dated as of April 25, 2003, among Millennium America Inc. and the Initial Purchasers*****
5.1	Opinion of C. William Carmean*
10.1	Credit Agreement, dated June 18, 2001, among Millennium America Inc., as borrower, Millennium Inorganic Chemicals Limited, as borrower, certain borrowing subsidiaries of Millennium Chemicals Inc., from time to time party thereto, Millennium Chemicals Inc., as guarantor, the lenders from time to time party thereto, Bank of America, N.A., as syndication agent and The Chase Manhattan Bank as administrative agent and collateral agent**
10.2	First Amendment to the Credit Agreement, dated as of December 14, 2001, among Millennium America Inc., as borrower, Millennium Inorganic Chemicals Limited, as borrower, certain borrowing subsidiaries of Millennium Chemicals Inc., from time to time party thereto, Millennium Chemicals Inc., as guarantor, the lenders from time to time party thereto, Bank of America, N.A., as syndication agent and JP Morgan Chase as administrative agent and collateral agent.***
10.3	Second Amendment to the Credit Agreement dated as of June 19, 2002, among Millennium America Inc., as borrower, Millennium Inorganic Chemicals Limited, as borrower, certain borrowing subsidiaries of Millennium Chemicals Inc., from time to time party thereto, Millennium Chemicals Inc., as guarantor, the lenders from time to time party thereto, Bank of America, N.A., as syndication agent and JP Morgan Chase as administrative agent and collateral agent.****

Edgar Filing: MILLENNIUM CHEMICALS INC - Form S-4

- 10.4 Third Amendment to the Credit Agreement, dated as of April 25, 2003, among Millennium America Inc. as borrower, Millennium Inorganic Chemicals Limited, as borrower, certain borrowing subsidiaries of Millennium Chemicals Inc., from time to time party thereto, Millennium Chemicals Inc., as guarantor, the lenders from time to time party thereto, Bank of America, N.A., as syndication agent and JP Morgan Chase as administrative agent and collateral agent.*****
- 12.1 Computation of ratio of earnings to fixed charges*
- 23.1 Consent of C. William Carmean (included in Exhibit 5.1)*
- 23.2 Consent of PricewaterhouseCoopers LLP.*
- 23.3 Consent of PricewaterhouseCoopers LLP.*
- 24.1 Power of Attorney (included in the signature pages to the Registration Statement)
- 25.1 Statement of Eligibility of Trustee on Form T-1.**
- 99.1 Form of Letter of Transmittal.*
- 99.2 Form of Notice of Guaranteed Delivery.*

* Filed herewith.

** Incorporated by reference to the Registration Statement on Form S-4 of Millennium Chemicals Inc. and Millennium America Inc. (Nos. 333-65650 and 65650-01)

*** Incorporated by reference to the Millennium Chemicals Inc. Current Report on Form 8-K dated December 19, 2001.

**** Incorporated by reference to the Millennium Chemicals Inc. Quarterly Report on Form 10-Q for the quarter ended June 30, 2002 dated August 14, 2002.

***** Incorporated by reference to the Millennium Chemicals Inc. Quarterly Report on Form 10-Q for the quarter ended March 31, 2003, dated May 12, 2003.

STATEMENT OF DIFFERENCES

Characters normally expressed as subscript shall be preceded by..... [u]