



DIVISION OF
CORPORATION FINANCE

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

March 29, 2016

Mail Stop 4631

Via E-Mail

Charles J. Kalil
Corporate Vice President, General Counsel and Secretary
The Dow Chemical Company
2030 Dow Center
Midland, MI 48674

**Re: DowDuPont Inc.
Registration Statement on Form S-4
Filed March 1, 2016
File No. 333-209869
The Dow Chemical Company
Form 10-K for Fiscal Year Ended December 31, 2015
File No. 001-03433**

Dear Mr. Kalil:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

General

1. Please provide us with copies of all materials prepared by the financial advisors and shared with the boards of directors and their representatives. This includes copies of the board books and all transcripts and video presentations.
2. Please note that all exhibits are subject to our review. Accordingly, please file all of your outstanding exhibits, including the tax and legality opinions, with your next amendment or as soon as possible. Please note that we may have comments on these exhibits once

they are filed, as well as the related disclosure in the filing. Please understand that we will need adequate time to review these materials before accelerating effectiveness.

3. Please revise your registration statement to expressly state, if true, that you will not seek shareholder approval for the separation of DowDuPont Inc. into three independent, publicly traded companies after the merger.

Prospectus Cover Page

4. We note the disclosure in Dow's Rule 425 filing on December 15, 2015 that once Dow converts its preferred shares in connection with the merger, its shareholders will own approximately 52% of DowDuPont Inc. Please revise your registration statement to include such disclosure.

Questions and Answers, page iv

Q. Will I still be paid dividends prior to the mergers?, page viii

5. Either here or in a separate question and answer, please address the factors that the DowDuPont board of directors will consider in determining the dividend policy of the combined company following the completion of the mergers, including when you expect the board will make such determination.

Q. What are the U.S. federal income tax consequences of the mergers to U.S. holders of shares of Dow common stock and shares of DuPont common stock?, page ix

6. Please delete the language stating that you "intend" for each of the Dow merger and the DuPont merger to qualify as a reorganization within the meaning of Section 368(a) of the Code, or alternatively, as a transaction qualifying for non-recognition of gain and loss under Section 351 of the Code. Please also remove the assumption regarding receipt and accuracy of the tax opinions to be delivered at closing as a basis for the tax-free nature of the merger. Please provide your conclusion regarding the material federal tax consequences to investors. Please make similar revisions under the heading "U.S. Federal Income Tax Consequences of the Mergers" on page 136.

Equivalent and Comparative Per Share Information, page 26

7. Please provide us your calculations of book value per share for DuPont-Historical and DowDuPont Pro Forma-Combined, including reconciliations of the common shares outstanding used in each denominator.

Cautionary Statement Regarding Forward-Looking Statements, page 27

8. Please note that Section 27A of the Securities Act and 21E of the Securities Exchange Act only apply to statements made by issuers that are subject to the reporting requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act at the time the statements are made. As the prospectus contains the statements of DowDuPont Inc., please revise to remove the references to Section 27A of the Securities Act and Section 21E of the Exchange Act.

Dow Proposal 1 and DuPont Proposal 1: The Adoption of the Merger Agreement, page 56

The Intended Business Separations, page 57

9. We note your disclosure throughout your registration statement that following the consummation of the merger between Dow and DuPont, you intend to separate into three independent, publicly traded companies. We understand that there may be aspects of the transactions that cannot be definitively determined until the completion of the mergers. However, to the extent possible, please revise your registration statement to disclose the mechanism by which you intend to effect the separation, and what the shareholders can expect to receive once the separation is consummated. Please also address your anticipated timing for the separation and what disclosures shareholders will receive in advance of the separation, such as the terms of the transaction, tax consequences of the transaction to shareholders, fairness opinions, and financial statements for each of the three companies.
10. We note that in various filings pursuant to Rule 425 (e.g. Rule 425 disclosure filed on March 3, 2016, Film No. 161479195), Dow and DuPont have provided financial data regarding revenues and cost synergies for each of the three independent companies to be separated from DowDuPont Inc. following consummation of the merger. Please revise your disclosure in this section to include such financial data.

Background of the Merger, page 82

11. Please tell us what role Third Point LLC played in the background of this merger. In this regard, we note the transcript of an interview between Andrew Liveris and David Westin filed on January 26, 2016 by Dow pursuant to Rule 425. Please also tell us the relevance of the standstill agreement between Dow and Third Point to the mergers.
12. Please revise your disclosure to briefly describe what the Dow and DuPont boards discussed at the meetings on November 5, 2014 and December 2, 2014, as referenced on page 61.
13. Please elaborate on the terms of the asset swap transaction discussed at the meeting on May 27, 2015.

14. It appears that Dow introduced the idea of a “merger of equals” transaction to DuPont on June 29, 2015 and discussed the benefits to the companies’ stockholders of a merger of equals transaction. Please disclose the benefits that the parties discussed and any other material considerations of the parties in determining to proceed on a merger of equals basis as they were discussed at this meeting and at later stages of the negotiations. Please also describe the other “various alternative transaction structures” discussed during the June 29, 2015 meeting.
15. We note your reference to the “state of the agricultural sciences industry” on July 9, 2015 in the last paragraph on page 61 as well as on page 60, where you state that most of the agricultural sciences market participants were engaged in discussions about business combinations during 2015. Please briefly explain why this was the case in order to give investors more context for understanding how developments in the industry influenced Dow’s negotiations with DuPont and other parties interested in Dow’s agriculture business.
16. We note your disclosure that at the July 9, 2015 board meeting, Dow management discussed strategic alternatives for its agriculture business, including a business combination with DuPont followed by the separation of the combined company’s agriculture business. Please clarify whether the parties had discussed this prior to the board meeting on July 9, 2015, and describe any discussions in reasonable detail.
17. Please disclose whether the Dow board discussed proposals submitted by Company B and C during the July 9, 2015 meeting.
18. We note your disclosure that Mr. Breen proposed separating the combined company into three independent public companies on October 11, 2015. Please expand your disclosure to provide details regarding the genesis of this proposal.
19. Please revise your disclosure to discuss why, at the October 15, 2015 meeting of the Dow board, it was determined that a merger of equals followed by a post-merger separation “had the potential to create the most value for stockholders.”
20. Revise your disclosure to elaborate on the reasons for the Dow board’s decision, during its meeting on November 5, 2015, that (i) the governance structure post-merger should include Mr. Liveris serving as Executive Chairman and (ii) the exchange ratio should result in a 50/50 ownership of the combined company.
21. We note in your description of the November 13, 2015 telephonic meeting of the DuPont board, your reference to Mr. Breen’s “most recent conversation with Mr. Peltz.” Please describe the extent of Mr. Peltz’s involvement in structuring and negotiating the transaction.

Dow's Reasons for the Mergers; Recommendation of the Dow Board, page 73

22. In the second bullet point under "Strategic Considerations" please clarify whether the cost and growth synergies the Dow board cited as supporting the merger assume that the separations into three independent companies have taken place. If not, please clarify whether the Dow board considered what impact the separations may have on the cost and growth synergies. Please provide the DuPont board's views on this matter as well in the discussion of its strategic considerations in first bullet point on page 78.
23. Please expand your disclosure in the fifth bullet point to discuss why separating the combined company post-merger into three separate companies would provide each such company with "... enhanced global scale and product portfolios ..."
24. Please elaborate on why the current and prospective business climate referenced in the bullet on page 74 supports the Dow board's decision to recommend the merger.
25. Please identify the other "strategic alternatives" and the "potential risks, rewards, and uncertainties" associated with the strategic alternatives that you refer to in the third bullet point on page 74.
26. Please explain how the anticipated customer, supplier, and stakeholder reaction to the merger supports the merger. Assuming the Dow board believes the mergers will impact these relationships favorably, please explain why.
27. Please revise your disclosure to address whether the Dow board considered the fact that, at the time they will vote on the merger, investors will not have complete information about the timing, structure or tax consequences of the separation transactions, or financial information about the individual companies to be separated. Please also address whether the board considered that investors may not have a separate opportunity to vote on the separation transactions. Please also address whether the DuPont board considered these matters in the discussion beginning on page 77 of its reasons for and recommendation of the merger.

DuPont's Reasons for the Mergers; Recommendations of the DuPont Board, page 77

28. Please elaborate on why the current and prospective business, economic and market conditions referenced in the seventh bullet on page 78 support the board's decision to recommend the merger.

Certain Dow Forecasts, page 82

29. We note disclosure on page 83 that none of Dow, DuPont, DowDuPont or their affiliates “assumes any responsibility to stockholders for the accuracy of the information” you have provided. We also note disclosure on page 84 that readers are cautioned “not to rely” on the information. Please note that the information you have provided must have a reasonable basis, and revise to remove the implication that none of the parties have any responsibility to investors for the information. Note that we do not object to cautionary language you have provided on page 83 that the forecasts and estimated synergies should not be regarded as an indication that Dow or its board considers the information to be a reliable predictor of actual future results. Please make revisions to similar disclosures in the section “Certain DuPont Forecasts” beginning on page 85.
30. We note that the Dow and DuPont forecasts and estimated synergies are subject to assumptions as to certain business decisions that are subject to change. Please ensure that you disclose all material assumptions underlying the forecasts and synergies.

Summary of Financial Analyses, page 93

31. We note your reference on page 94 to material financial analyses prepared by M. Klein. We note, however, that you did not provide a summary of any material financial analyses prepared by M. Klein. Please clarify whether M. Klein prepared financial analyses.

Selected Public Value Trading Analysis, page 97

32. We note that the Dow financial advisors selected different groups of companies for this analysis for Dow and for DuPont. Please disclose the basis for the selection of each group. We note that in both cases, you state only that they are publicly traded companies in the chemicals industry.

Discounted Equity Value Analysis, page 101

33. You state that Lazard did not use the foregoing “analyses” for purposes of its fairness opinion. Please clarify, if true, that Lazard did not use the discounted equity value analysis only.

Opinions of DuPont’s Financial Advisors, page 105

34. In the discussion on page 113 of the transaction fee payable to Goldman Sachs, please clarify why \$40 million is only an estimate based on information available as of the date of the announcement of the merger. Please explain how and when the actual fee payable to Goldman Sachs will be determined.

Interests of Dow Directors and Executive Officers in the Mergers, page 123

35. We note news reports stating that Mr. Liveris intends to leave DowDuPont prior to its planned separation into three independent, publicly traded companies. Please revise your disclosure to include a discussion of Mr. Liveris' plans to leave DowDuPont and the potential compensation associated with Mr. Liveris' planned departure.

Merger Related Compensation – Dow, page 126

36. Please update your Item 402(t) disclosure as of a more recent date in your next amendment.

The DowDuPont Board of Directors, page 133

37. Please tell us when you anticipate identifying the individuals who will serve on the board of DowDuPont.

U.S. Federal Income Tax Consequences of the Mergers, page 136

38. Please revise this section to clarify that you discuss the material U.S. federal income tax consequences, rather than a "general summary."
39. Please tell us when you expect to file the opinions of Weil and Skadden as Exhibits 8.1 and 8.2 to the registration statement. Note that if Weil and Skadden intend to provide short form opinions, the disclosure in this section should be revised, and the opinions should state, that the disclosure in the tax consequences section of the prospectus is the opinion of counsel. Refer to Section III.B.2 of Staff Legal Bulletin No. 19 (CF) dated October 14, 2011.

Regulatory Approvals, page 139

Other Regulatory Clearances

40. Please revise this section to elaborate on the status of your foreign approvals.

Treatment of DuPont Preferred Stock, page 143

41. Please include disclosure stating, if true, that the preferred stock will continue to be listed on the NYSE.

Unaudited Pro Forma Condensed Combined Financial Information, page 167

General

42. We note your stated intention to separate the combined company into three independent publicly traded companies following the completion of the mergers. Please explain to us if you believe the intended business separations are probable and, if applicable, address your consideration of reflecting the probable business separations in the pro forma financial statements.

Note 2. Basis of Pro Forma Presentation, page 171

43. Please provide us the analysis you performed that lead to your conclusion that Dow Chemical is the accounting acquirer, including your consideration of the facts and circumstances outlined in ASC 805-10-55-12.
44. In regard to the items you disclose that are not reflected in the pro forma financial statements, please address the following:
- Quantify and disclose the potential range of net operating loss carryforwards that may not be fully realized as a result of the mergers and the range of tax valuation allowances that may be required; and
 - Disclose and discuss the factors that will impact DuPont's decision to reduce the Rabbi trust funding requirements and address how any remaining funding requirements will be met.

Note 3. Reclassifications, page 173

45. There appear to be other balance sheet reclassifications in addition to the items you specifically disclose in your footnote. Please revise your footnote as appropriate.

Note 6. Adjustments to the Pro Forma Balance Sheet, page 175

Note 7. Adjustments to the Pro Forma Income Statement, page 177

46. Refer to footnote 6C and 7C. Based on the amount of the fair value adjustment to net property, please clarify how the related increase in depreciation expense was determined.
47. Refer to footnote 6H and 7F. Please clarify how the blended statutory income tax rate of 25% was determined and is factually supportable.

48. Refer to footnote 6N. Please disclose the material terms of the DowDuPont preferred stock. Please also clarify why the Dow Chemical preferred stock will be exchanged for preferred stock of the combined entity and the DuPont preferred stock will remain outstanding.

Comparison of Rights of DowDuPont Stockholders, Dow Stockholders and DuPont Stockholders, page 186

49. We note the statement in the second paragraph that disclosure is “qualified in its entirety by reference to the DGCL . . .” Please be advised that you may not qualify your disclosure by reference to statutory provisions that are not included in the prospectus or annexes or filed as an exhibit to the registration statement.

The Dow Chemical Company

Form 10-K for the Fiscal Year Ended December 31, 2015

Item 8. Financial Statements and Supplementary Data, page 69

Note 1 – Summary of Significant Accounting Policies
Foreign Currency Translation, page 76

50. In light of your policy disclosure regarding when a foreign subsidiary operates in a hyper-inflationary environment, please tell us the nature and extent of any operations you have in Venezuela and the exchange rate you used to translate any such operations. If material, please provide us, and disclose in future filings, quantitative information, such as summarized balance sheet, income statement, and cash flow data related to your exposure to Venezuela. Also, please tell us the transaction that resulted in you recording an exchange loss due to the Argentine devaluation.

Note 4 – Acquisitions, page 82

51. Please address the following regarding your step acquisition of Univation:
- Explain how you determined the fair value of your equity interest in Univation;
 - Explain how you determined the fair values of the intangible assets you acquired; and
 - Tell us the nature and amounts of the assets and liabilities of Univation that ExxonMobil received in exchange for its equity interest.

Refer to ASC 805-10-50-2g.

Note 5 – Divestitures, page 83

52. For the 2015 divestitures for which you recorded a significant gain, including the transaction disclosed in note 6, please more fully explain to us the factors you considered in determining that the divestitures did not represent a strategic shift and do not qualify as discontinued operations.

Note 15 – Commitments and Contingent Liabilities, page 106

53. Please address the following regarding the “opt-out” cases and two Canadian cases related to the Urethane class action litigation:
- If applicable, tell us the amount of damages being sought in each matter;
 - Explain why you are not able to provide a range of reasonably possible loss for each matter; and
 - Explain if and how your recent settlement of the Urethane class action lawsuit impacts your assessment of these related matters.
54. We note your disclosures regarding monetary damages awarded to Bayer. Please tell us and clarify in future filings the specific legal remedies available to you and how long you anticipate it will take to avail yourself of those remedies and resolve this matter. Please also explain to us why it appears you did not disclose or discuss this pending matter prior to your Form 10-Q for the period ended September 30, 2015.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement, please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and

Charles J. Kalil
DowDuPont Inc.
March 29, 2016
Page 11

- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Dale Welcome (Staff Accountant) at 202-551-3865 or Anne McConnell (Staff Accountant) at 202-551-3709 if you have questions regarding comments on the financial statements and related matters. Please contact Frank Pigott (Staff Attorney) at 202-551-3570 or me at 202-551-3765 with any other questions.

Sincerely,

/s/ Pamela Long

Pamela Long
Assistant Director
Office of Manufacturing and
Construction

cc: Michael J. Aiello
Weil, Gotshal & Manges LLP