



DIVISION OF
CORPORATION FINANCE

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

May 4, 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.
Amendment No. 1 to Registration Statement on Form S-4
Filed April 18, 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 amended 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. Unless we note otherwise, our references to prior comments are to comments in our March 29, 2016 letter.

General

1. Please provide updated financial statements and related disclosures as required by Rule 3-12 of Regulation S-X.
2. We note that you have provided forms of the legality and tax opinions for our review in response to comment 2 of our letter dated March 29, 2016. Please file executed opinions before you request acceleration of the effectiveness of your registration statement. See Section III.D.3 of Staff Legal Bulletin No. 19 (October 14, 2011).

The Intended Business Separations, page 58

3. We note the additional disclosures you provided to respond to prior comment 10, including the revenue and annual run-rate cost synergies you anticipate for each of the three independent publicly traded companies you intend to separate into following the merger. In order to provide context for investors, please provide a measure of profitability for each entity.

Change in Control Severance Agreements, page 127

4. We note your disclosure in footnote (1) on page 129 that under Mr. Liveris' CIC agreement, his planned transition from chief executive officer of Dow to executive chairman of DowDuPont would constitute a "good reason" for resignation giving rise to severance benefits under the agreement. We further note your disclosure on page 130 that Mr. Liveris plans to "transition out" of DowDuPont no later than June 30, 2017. Please clarify, if true, that the planned transition out amounts to a resignation under the CIC, such that Mr. Liveris will receive the severance benefits it provides. Please also clearly state the amount of the severance benefits that Mr. Liveris will be entitled to receive upon his transition out of DowDuPont, or include a cross-reference to the golden parachute disclosure on page 129.

The DowDuPont Board of Directors, page 137

5. We note your revised disclosure in response to comment 37 in our letter dated March 29, 2016. Please file consents for any person who has not signed the registration statement and is named as about to become a director. In this regard, we note your disclosure that Mr. Liveris and Mr. Breen will each serve as directors of DowDuPont Inc. See Rule 438 of the Securities Act of 1933.

U.S. Federal Income Tax Consequences of the Mergers to U.S Holders . . . , page 141

6. Please revise your prospectus to clarify that the disclosure in this section reflects the opinion of tax counsel to each of Dow and DuPont.

Unaudited Pro Forma Condensed Combined Financial Information, page 171

7. As noted in your response to prior comment 42, please disclose that you do not currently believe the intended separations are probable and related pro forma adjustments are not factually supportable and explain why.
8. Please provide a tabular summary of all the non-recurring expenses you exclude from the pro forma statement of income, including the one-time costs disclosed on page 60.

Note 6. Adjustments to the Pro Forma Balance Sheet, page 180

Note 7. Adjustments to the Pro Forma Income Statement, page 182

9. We note your response to prior comment 46. Please expand your disclosure in footnote 7C to discuss how the increase in depreciation expense was determined as provided in your response.
10. We note your response to prior comment 47. Please expand footnotes 6H and 7F to disclose the information provided in your response as it relates to your determination of the blended statutory income tax rate.

Exhibit 8.2

11. We note the disclosure on page three of counsel's opinion that "[t]his opinion is furnished to you solely for your benefit in connection with the filing of the Registration Statement and cannot be relied upon by any other person without our express written permission." Investors are entitled to rely on the opinions as expressed. Please have counsel remove the limitation on persons entitled to rely on the opinion. In this regard, please also note that any language stating that the tax opinion is "solely" for the benefit of the company is unacceptable. Please refer to Section III.D.1 of Staff Legal Bulletin No. 19 (October 14, 2011).

Dow Chemical 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

12. We note your response to prior comment 50. We also note your disclosure that the "local currency has been primarily used as the functional currency throughout the world". Please explain to us how you determined it is appropriate to use the U.S. dollar as the functional currency for your subsidiaries in Argentina. Please also revise future filings to identify and explain the circumstances when the local currency is not the functional currency.

Note 4 – Acquisitions, page 82

13. We note your response to our prior comment 51. Please tell us the amount of assets and liabilities of Univation that ExxonMobil received in exchange for their 50% equity interest, including the magnitude of those assets and liabilities relative to Univation's total assets and liabilities. Please also explain to us if and how the assets and liabilities received by ExxonMobil were considered when you determined the pre-redemption enterprise fair value of Univation.

Charles J. Kalil
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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