DOW CHEMICAL CO /DE/ Form S-8 POS October 30, 2013

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

POST-EFFECTIVE

AMENDMENT NO. 1

to

Form S-8

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

THE DOW CHEMICAL COMPANY

(a Delaware corporation)

Executive Offices 2030 Dow Center

Midland, Michigan 48674

(Name, state of incorporation and address of principal executive office of registrant)

I.R.S. Employer Identification No. 38-1285128

THE DOW CHEMICAL COMPANY 2003-2013 EMPLOYEES STOCK PURCHASE PLAN

(Full title of the plan)

Charles J. Kalil

Executive Vice President, General Counsel

and Corporate Secretary

THE DOW CHEMICAL COMPANY

2030 Dow Center

Midland, Michigan 48674

(Name and address of agent for service)

Telephone: (989) 636-1000

This Post-Effective Amendment No. 1 is being filed to amend Registration Statement No. 333-177658 on Form S-8 pursuant to which the Registrant registered 12,000,000 shares of its Common Stock, par value \$2.50 per share (the Stock), for sale through the 2012 tranche of The Dow Chemical Company 2003-2013 Employees Stock Purchase Plan (the Plan). After the Registration Statement was filed and became effective, eligible employees purchased 6,540,636 shares of the Stock under the provisions of the Plan. Accordingly, the Registrant hereby deregisters the remaining 5,459,364 shares of the Stock by filing this Post-Effective Amendment No. 1 to amend Registration Statement No. 333-177658.

SIGNATURES

The Registrant. Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this amendment to Registration Statement No. 333-177658 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Midland, State of Michigan, on October 30, 2013.

THE DOW CHEMICAL COMPANY (Registrant)

By: /s/ RONALD C. EDMONDS Ronald C. Edmonds Vice President and Controller