

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3870593

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	MERGER
<b>EFFECTIVE DATE:</b>	05/04/2016
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ECO SERVICES OPERATIONS LLC	05/04/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	PQ CORPORATION
<b>Street Address:</b>	P. O. BOX 840
<b>City:</b>	VALLEY FORGE
<b>State/Country:</b>	PENNSYLVANIA
<b>Postal Code:</b>	19482
<b>PROPERTY NUMBERS Total: 5</b>	
<b>Property Type</b>	<b>Number</b>
Patent Number:	6818799
Patent Number:	7034193
Patent Number:	6315975
Patent Number:	6197837
Patent Number:	6245216
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(412)562-1041
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	412-562-1637
<b>Email:</b>	vicki.cremonese@bipc.com
<b>Correspondent Name:</b>	MICHAEL L. DEVER
<b>Address Line 1:</b>	301 GRANT STREET
<b>Address Line 2:</b>	20TH FLOOR
<b>Address Line 4:</b>	PITTSBURGH, PENNSYLVANIA 15219
<b>ATTORNEY DOCKET NUMBER:</b>	0068905-000550
<b>NAME OF SUBMITTER:</b>	MICHAEL L. DEVER
<b>SIGNATURE:</b>	/Michael L. Dever/
<b>DATE SIGNED:</b>	05/12/2016

**Total Attachments: 8**

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# Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF  
DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT  
COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"ECO SERVICES OPERATIONS LLC", A DELAWARE LIMITED LIABILITY  
COMPANY,

WITH AND INTO "PQ CORPORATION" UNDER THE NAME OF "PQ  
CORPORATION", A CORPORATION ORGANIZED AND EXISTING UNDER THE  
LAWS OF THE STATE OF PENNSYLVANIA, AS RECEIVED AND FILED IN THIS  
OFFICE ON THE FOURTH DAY OF MAY, A.D. 2016, AT 10:20 O`CLOCK  
A.M.

  
Jeffrey W. Bullock, Secretary of State

6033136 8100M  
SR# 20162811207

You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

Authentication: 202257667  
Date: 05-04-16

**PATENT**  
**REEL: 038566 FRAME: 0860**

**CERTIFICATE OF MERGER  
OF  
ECO SERVICES OPERATIONS LLC  
WITH AND INTO  
PQ CORPORATION**

(Under Section 18-209 of the Delaware Limited Liability Company Act)

May 4, 2016

Pursuant to Section 18-209 of the Delaware Limited Liability Company Act, PQ Corporation, a Pennsylvania corporation (the "Company"), in connection with the merger of Eco Services Operations LLC, a Delaware limited liability company, with and into the Company (the "Merger"), hereby certifies as follows:

FIRST: The name, jurisdiction of domicile, formation or organization, and type of entity of each of the constituent entities (the "Constituent Entities") are:

<u>Name</u>	<u>Jurisdiction of Domicile, Formation or Organization</u>	<u>Type of Entity</u>
PQ Corporation	Pennsylvania	Corporation
Eco Services Operations LLC	Delaware	Limited Liability Company

SECOND: An Amended and Restated Reorganization and Transaction Agreement, dated as of May 3, 2016, by and among the Company, Eco Services Operations LLC, and the other parties thereto, as may be amended, restated, or otherwise modified from time to time (the "Transaction Agreement"), setting forth the terms and conditions of the Merger, has been approved, adopted, certified, executed and acknowledged by each of the Constituent Entities.

THIRD: The Company shall be the surviving corporation of the Merger. The name of the surviving corporation is "PQ Corporation" (the "Surviving Corporation").

FOURTH: The Certificate of Incorporation of the Surviving Corporation, as amended, in effect immediately prior to the Merger shall be the Certificate of Incorporation of the Surviving Corporation.

FIFTH: The Merger shall become effective immediately upon the filing of this Certificate of Merger with the Secretary of State of the State of Delaware.

SIXTH: The surviving foreign Corporation agrees that it may be served with process in the State of Delaware in any action, suit or proceeding for the enforcement of any obligation of any domestic limited liability company which is to merge or consolidate, and irrevocably appoints the Secretary of State as its agent to accept service of process in any such action, suit or proceeding. The address to which a copy of such process shall be mailed to by the Secretary of State is: 300 Lindenwood Drive, Valleybrooke Corporate Center, Malvern, PA 19355-1740.

SEVENTH: An executed copy of the Transaction Agreement is on file at the office of the Surviving Corporation located at 300 Lindenwood Drive, Valleybrooke Corporate Center, Malvern, PA 19355-1740. A copy of the Transaction Agreement will be furnished by the Surviving Corporation, on request and without cost, to any member or stockholder of either of the Constituent Entities.

*[The remainder of this page is intentionally left blank.]*

IN WITNESS WHEREOF, this Certificate of Merger has been executed as of the date first written above.

**PQ CORPORATION**

By: /s/ Joseph Koscinski

Name: Joseph Koscinski

Title: Vice President and Secretary

**ECO SERVICES OPERATIONS LLC**

By: /s/ Larry Lockwood

Name: Larry Lockwood

Title: Chief Financial Officer

PENNSYLVANIA DEPARTMENT OF STATE  
BUREAU OF CORPORATIONS AND CHARITABLE ORGANIZATIONS

Return document by mail to: <u>999059650 PA 3</u>		Statement of Merger DSCB:15-335 (7/1/2015)	
Name	<u>cls-ctharrisburgfulfillment</u>		
Address	<u>@womersduwer.com</u>		
City	State	Zip Code	
<input checked="" type="checkbox"/> Return document by email to:			



TCO160504UZ0365

Read all instructions prior

Fee: \$70 plus \$40 for *each* association that is a party to the merger  
The minimum amount to be submitted with this filing is \$150

In compliance with the requirements of the applicable provisions of 15 Pa.C.S. § 335 (relating to Statement of merger), the undersigned, desiring to effect a merger, hereby states that:

A. For the surviving association:

1. The name of the surviving association is: PQ Corporation
2. The jurisdiction of formation of the surviving association: Pennsylvania
3. The type of association of the surviving association is (check only one):
  - ☒ Business Corporation
  - ☐ Nonprofit Corporation
  - ☐ Limited Liability Company
  - ☐ Limited Partnership
  - ☐ Limited Liability (General) Partnership
  - ☐ Limited Liability Limited Partnership
  - ☐ Business Trust
  - ☐ Professional Association
  - ☐ Other \_\_\_\_\_

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COMM OF PA  
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REEL: 038566 FRAME: 0863

4. The surviving association is a (check only one box, provide address and follow instructions for attachments):

- ☒ Domestic (Pennsylvania) filing entity already in existence on Department of State records  
*If applicable, attach to this Statement any amendment to its public organic record approved as part of the plan of merger.*
- ☐ NEW domestic (Pennsylvania) filing entity (includes limited liability limited partnership)  
*Attach to this Statement the public organic record of the new entity.*
- ☐ Foreign filing association or foreign limited liability partnership already registered with the Department.  
*If applicable, attach to this Statement any amendment to or transfer of its foreign registration approved as part of the plan of merger.*
- ☐ Foreign filing association or foreign limited liability partnership simultaneously seeking registration with the Department of State  
*Attach to this Statement a completed form DSCB:15-412 (Foreign Registration Statement) with applicable fee and attachments.*

Its current registered office address. Complete part (a) **OR** (b) – not both:

(a) \_\_\_\_\_  
 Number and street City State Zip County

(b) c/o: National Corporate Research, LTD. Dauphin  
 Name of Commercial Registered Office Provider County

- ☐ NEW domestic (Pennsylvania) limited liability partnership or electing partnership  
*Attach completed DSCB:15-8201 (Statement of Registration) or DSCB:15-8701A (Statement of Election)*
- ☐ Domestic association that is not a domestic filing association  
*Attach to this Statement tax clearance certificates.*

The address, including street and number, if any, of its principal office:

\_\_\_\_\_  
 Number and street City State Zip County

- ☐ Foreign association that is not, and will not, be registered with the Department of State  
*Attach to this Statement tax clearance certificates.*

The address, including street and number, if any, of its registered or similar office, if any, required to be maintained by the law of its jurisdiction of formation; or if it is not required to maintain a registered or similar office, its principal office:

\_\_\_\_\_  
 Number and street City State Zip

**B. For the merging association(s) that are not surviving the merger:**

1. The name of the merging association is: Eco Services Operations LLC
2. The jurisdiction of formation of the merging association: Delaware
3. The type of association is (check only one):
- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Business Corporation                 | <input type="checkbox"/> Limited Partnership                     | <input type="checkbox"/> Business Trust           |
| <input type="checkbox"/> Nonprofit Corporation                | <input type="checkbox"/> Limited Liability (General) Partnership | <input type="checkbox"/> Professional Association |
| <input checked="" type="checkbox"/> Limited Liability Company | <input type="checkbox"/> Limited Liability Limited Partnership   | <input type="checkbox"/> Other _____              |
4. Check and complete one of the following addresses.

<input checked="" type="checkbox"/>	<p><b>If the merging association is a domestic filing association, domestic limited liability partnership or registered foreign association, the current registered office address as on file with the Department of State.</b>  <i>Complete part (a) OR (b) – not both:</i></p>				
	<p>(a) _____  Number and street City State Zip County</p> <p>(b) c/o: Corporation Service Company Dauphin  Name of Commercial Registered Office Provider County</p>				
<input type="checkbox"/>	<p><b>If the merging association is a domestic association that is <i>not</i> a domestic filing association or limited liability partnership, the address, including street and number, if any, of its principal office:</b></p> <p>_____  Number and street City State Zip County</p>				
<input type="checkbox"/>	<p><b>If the merging association is a nonregistered foreign association, the address, including street and number, if any, of its registered or similar office, if any, required to be maintained by the law of its jurisdiction of formation; or if it is not required to maintain a registered or similar office, its principal office address:</b></p> <p>_____  Number and street City State Zip</p>				

**Use Statement of Merger – Addendum (DSCB:15-335AD)  
for additional merging parties that are not surviving the merger.**



**C. Effective date of statement of merger** (check, and if appropriate complete, one of the following):


- ☒ This Statement of Merger shall be effective upon filing in the Department of State.  
☐ This Statement of Merger shall be effective on: \_\_\_\_\_ at \_\_\_\_\_  
Date (MM/DD/YYYY) Hour (if any)

**D. Approval of merger by merging associations (check all applicable statement(s)):**

- ☒ For domestic entities – The merger was approved in accordance with 15 Pa.C.S. Chapter 3, Subchapter C (relating to merger).
- ☒ For foreign associations – The merger was approved in accordance with the laws of the jurisdiction of formation.
- ☐ For domestic associations that are not domestic entities – The merger was approved by the interest holders of the merging association in the manner required by its organic law.

**E. Attachments** (see Instructions for required and optional attachments).

IN TESTIMONY WHEREOF, the undersigned merging associations have caused this Statement of Merger to be signed by duly authorized officers thereof this 4th day of May, 20 16.

Eco Services Operations LLC  
Name of Merging Association  
  
Signature  
Chief Financial Officer  
Title

PQ Corporation  
Name of Merging Association

Signature

Vice President, Secretary and General Counsel

Title

**C. Effective date of statement of merger** (check, and if appropriate complete, one of the following):

- ☒ This Statement of Merger shall be effective upon filing in the Department of State.  
☐ This Statement of Merger shall be effective on: \_\_\_\_\_ at \_\_\_\_\_.  
Date (MM/DD/YYYY) Hour (if any)

**D. Approval of merger by merging associations** (check all applicable statement(s)):

- ☒ For domestic entities – The merger was approved in accordance with 15 Pa.C.S. Chapter 3, Subchapter C (relating to merger).  
☒ For foreign associations – The merger was approved in accordance with the laws of the jurisdiction of formation.  
☐ For domestic associations that are not domestic entities – The merger was approved by the interest holders of the merging association in the manner required by its organic law.

**E. Attachments** (see Instructions for required and optional attachments).

IN TESTIMONY WHEREOF, the undersigned merging associations have caused this Statement of Merger to be signed by duly authorized officers thereof this \_\_\_\_\_ 4th \_\_\_\_\_ day of \_\_\_\_\_ May \_\_\_\_\_, 20 16 \_\_\_\_\_.

Eco Services Operations LLC  
Name of Merging Association

\_\_\_\_\_  
Signature

Chief Financial Officer  
Title

PQ Corporation  
Name of Merging Association

  
Signature

Vice President, Secretary and General Counsel  
Title