ENVIRONMENTAL POWER CORP Form SC 13G/A February 16, 2010

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13G/A

INFORMATION STATEMENT PURSUANT TO RULES 13d-1 AND 13d-2 UNDER THE SECURITIES EXCHANGE ACT OF 1934

Amendment No. 2

Common Stock, par value \$0.01 per share (TITLE OF CLASS OF SECURITIES)

29406L201 (CUSIP NUMBER)

December 31,2009 (Date of Event which requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

[] Rule 13d-1(b) [x] Rule 13d-1(c)

[] Rule 13d-1(d)

(Page 1 of 14 Pages)

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 29406L201

13G/A

PAGE 2 of 14 PAGES

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON Ardsley Partners Renewable Energy Fund, L.P. _____ (2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP ** (a) [x] ._____ (3) SEC USE ONLY (4) CITIZENSHIP OR PLACE OF ORGANIZATION Delaware NUMBER OF (5) SOLE VOTING POWER 0 SHARES BENEFICIALLY (6) SHARED VOTING POWER 310,000 OWNED BY EACH (7) SOLE DISPOSITIVE POWER REPORTING ______ PERSON WITH (8) SHARED DISPOSITIVE POWER 310,000 (9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 310,000 (10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES ** (11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 1.97% (12) TYPE OF OF REPORTING PERSON ** PN _____ ** SEE INSTRUCTIONS BEFORE FILLING OUT! CUSIP No. 29406L201 13G/A PAGE 3 of 14 PAGES _____ NAME OF REPORTING PERSON (1)S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON Ardsley Renewable Energy Offshore Fund, Ltd.

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP **

2

(a) [x]

				(b)	[]
(3)	SEC USE	ONLY			
(4)		SHIP OR PLACE OF ORGANIZATION Virgin Islands			
	(5)	SOLE VOTING POWER 0			
SHARES					
BENEFICIALL	Y (6)	SHARED VOTING POWER 140,000			
EACH REPORTING	(7)	SOLE DISPOSITIVE POWER 0			
PERSON WITH	(8)	SHARED DISPOSITIVE POWER 140,000			
(9)		TE AMOUNT BENEFICIALLY OWNED REPORTING PERSON		. — — — -	
(10)		OX IF THE AGGREGATE AMOUNT (9) EXCLUDES CERTAIN SHARES **			[]
(11)		OF CLASS REPRESENTED NT IN ROW (9)			
(12)	TYPE OF	OF REPORTING PERSON **			
	** SEE	INSTRUCTIONS BEFORE FILLING OUT!			
CUSIP No. 2	9406L201	13G/A	PAGE 4	of 14	4 PAGES
(1)	S.S. OR OF ABOVE	REPORTING PERSON I.R.S. IDENTIFICATION NO. E PERSON Advisory Partners			
(2)	CHECK TI	HE APPROPRIATE BOX IF A MEMBER OF A GROUP	**	(a) (b)	[x]
(3)	SEC USE	ONLY			

(4)	CITIZENSHIP Connecticut	OR PLACE OF OF	RGANIZATION				
NUMBER OF	(5) SOLE 0	VOTING POWER					
BENEFICIALI	LY (6) SHAR 450,	RED VOTING POWE	ER				
EACH REPORTING	(7) SOLE 0	DISPOSITIVE F	POWER				
PERSON WITH	H (8) SHAR 450,	RED DISPOSITIVE	E POWER				
(9)		MOUNT BENEFICIA	ALLY OWNED				
(10)		THE AGGREGATE					[]
(11)	PERCENT OF C BY AMOUNT IN 2.86%	CLASS REPRESENT	ſED				
(12)	TYPE OF REPC	RTING PERSON *	* *				
	** SEE INST	RUCTIONS BEFOR	RE FILLING OUT!				
CUSIP No. 2	29406L201		13G/A		PAGE	5 of 1	4 PAGES
(1)			TION NO.				
(2)			IF A MEMBER OF		**	(a) (b)	
(3)	SEC USE ONLY						
(4)		OR PLACE OF OF	RGANIZATION				
NUMBER OF	(5) SOLE	VOTING POWER	·	·			

0 SHARES BENEFICIALLY (6) SHARED VOTING POWER 310,000 OWNED BY ______ EACH (7) SOLE DISPOSITIVE POWER 0 REPORTING PERSON WITH (8) SHARED DISPOSITIVE POWER 310,000 (9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 310,000 (10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES ** [] ______ (11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 1.97% ______ (12) TYPE OF OF REPORTING PERSON ** PN ** SEE INSTRUCTIONS BEFORE FILLING OUT! CUSIP No. 29406L201 13G/A PAGE 6 of 14 PAGES NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON Philip J. Hempleman (2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP ** (a) [x] (b) [] ______ (3) SEC USE ONLY (4) CITIZENSHIP OR PLACE OF ORGANIZATION United States NUMBER OF (5) SOLE VOTING POWER 0 SHARES ______ BENEFICIALLY (6) SHARED VOTING POWER

450,000

OWNED BY

EACH (7) SOLE DISPOSITIVE POWER 0

REPORTING

PERSON WITH (8) SHARED DISPOSITIVE POWER 450,000

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 450,000

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES ** ______

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 2.86%

(12) TYPE OF OF REPORTING PERSON ** IN

** SEE INSTRUCTIONS BEFORE FILLING OUT!

CUSIP No. 29406L201

13G/A

PAGE 7 of 14 PAGES

ITEM 1(a). NAME OF ISSUER:

The name of the issuer is Environmental Power Corporation (the "Company").

ITEM 1(b). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES: 120 White Plains Road, 6th Floor, Tarrytown, NY 10591.

ITEM 2(a). NAME OF PERSON FILING:

This statement is filed by:

- Ardsley Partners Renewable Energy Fund, L.P., a Delaware limited (i) partnership ("Ardsley Energy"), with respect to the shares of Common Stock, par value \$0.01 per share ("Common Stock") directly owned by it;
- Ardsley Renewable Energy Offshore Fund, Ltd., a British Virgin Islands corporation ("Ardsley Energy Offshore"), with respect to the shares of Common Stock directly owned by it;
- (iii) Ardsley Advisory Partners, a New York general partnership ("Ardsley") which serves as Investment Manager of Ardsley Energy Offshore and the Investment Adviser of Ardsley Energy and certain managed accounts, with respect to the shares of Common Stock directly owned by Ardsley Energy Offshore, Ardsley Energy and the managed accounts;

- (iv) Ardsley Partners I, a New York general partnership ("Ardsley Partners") which serves as General Partner of Ardsley Energy; and
- Philip J. Hempleman ("Mr. Hempleman"), the Managing Partner of' (v) Ardsley and Ardsley Partners, with respect to the shares of Common Stock owned by Ardsley Energy, Ardsley Energy Offshore and the managed accounts.

The foregoing persons are hereinafter sometimes collectively referred to as the "Reporting Persons." Any disclosures herein with respect to persons other than the Reporting Persons are made on information and belief after making inquiry to the appropriate party.

ITEM 2(b). ADDRESS OF PRINCIPAL OFFICE OR, IF NONE, RESIDENCE:

The address of the business office of each of the Reporting Persons, with the exception of Ardsley Energy Offshore, is 262 Harbor Drive, Stamford, Connecticut 06902.

The address of the registered office of Ardsley Energy Offshore is Romasco Place, Wickhams Cay 1, Roadtown Tortola, British Virgin Islands.

CUSIP No. 29406L201

13G/A PAGE 8 of 14 PAGES

ITEM 2(c). CITIZENSHIP:

Ardsley Energy is a Delaware limited partnership. Ardsley Energy Offshore is British Virgin Islands corporation. Ardsley and Ardsley Partners are New York general partnerships. Mr. Hempleman is a United States Citizen.

ITEM 2(d). TITLE OF CLASS OF SECURITIES: Class A Common Stock, par value \$0.01 per share

ITEM 2(e). CUSIP NUMBER: 29406L201

ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULES 13d-1(b), OR 13d-2(b), CHECK WHETHER THE PERSON FILING IS A:

- (a) [] Broker or dealer registered under Section 15 of the Act
- (b) [] Bank as defined in Section 3(a)(6) of the Act
- (c) [] Insurance Company as defined in Section 3(a)(19) of the Act
- (d) [] Investment Company registered under Section 8 of the Investment Company Act
- (e) [] Investment Adviser registered under Section 203 of the Investment Advisers Act of 1940
- (f) [] Employee Benefit Plan, Pension Fund which is subject to the provisions of the Employee Retirement Income Security Act of 1974 or Endowment Fund; see Rule 13d-1(b)(1)(ii)(F)
- (g) [] Parent Holding Company, in accordance with Rule 13d-1(b)(ii)(G); see item 7
- (h) () Group, in accordance with Rule 13d-1(b)(1)(ii)(H)

If this statement is filed pursuant to Rule 13d-1(c), check the box. [X]

CUSIP No. 29406L201

13G/A

PAGE 9 of 14 PAGES

ITEM 4. OWNERSHIP.

- A. Ardsley Partners Renewable Energy Fund, L.P.
 - (a) Amount beneficially owned: 310,000
 - (b) Percent of class: 1.97% (The percentages used herein and in the rest of Item 4 are calculated based upon 15,708,591 shares of Common Stock issued and outstanding as of September 30, 2009 as reported in the Company's 10-Q as filed with the Securities and Exchange Commission on November 9, 2009)
 - (c) (i) Sole Power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 310,000
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 310,000
- B. Ardsley Renewable Energy Offshore Fund, Ltd.
 - (a) Amount beneficially owned: 140,000
 - (b) Percent of class: 0.89%
 - c) (i) Sole Power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 140,000
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 140,000
- C. Ardsley Advisory Partners
 - (a) Amount beneficially owned: 450,000
 - (b) Percent of class: 2.86%
 - c) (i) Sole Power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 450,000
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 450,000
- D. Ardsley Partners I
 - (a) Amount beneficially owned: 310,000
 - (b) Percent of class: 1.97%
 - (c) (i) Sole Power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 310,000
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 310,000
- E. Philip J. Hempleman
 - (a) Amount beneficially owned: 450,000
 - (b) Percent of class: 2.86%
 - c) (i) Sole Power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 450,000
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 450,000

CUSIP No. 29406L201 13G/A PAGE 10 of 14 PAGES

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following |X|.

- ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON. Not applicable.
- ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY.

 Not applicable.
- ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP. Not applicable.
- ITEM 9. NOTICE OF DISSOLUTION OF GROUP. Not applicable.

ITEM 10. CERTIFICATION.

Each of the Reporting Persons hereby makes the following certification:

By signing below I certify, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business, were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purposes or effect.

CUSIP No. 29406L201 13G/A PAGE 11 of 14 PAGES

SIGNATURE

After reasonable inquiry and to the best of their knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

DATED: as of February 16, 2010

ARDSLEY PARTNERS RENEWABLE ENERGY FUND, L.P. BY: ARDSLEY PARTNERS I,

GENERAL PARTNER

BY:/s/ Steve Napoli
----Steve Napoli
General Partner

ARDSLEY RENEWABLE ENERGY OFFSHORE FUND, LTD.

BY:/s/ Steve Napoli
----Steve Napoli
Director

ARDSLEY ADVISORY PARTNERS
By: ARDSLEY PARTNERS I
GENERAL PARTNER

BY:/s/ Steve Napoli
----Steve Napoli
General Partner

ARDSLEY PARTNERS I

BY:/s/ Steve Napoli
----Steve Napoli
General Partner

CUSIP No. 29406L201

13G/A

PAGE 12 of 14 PAGES

PHILIP J. HEMPLEMAN, INDIVIDUALLY

BY:/s/ Steve Napoli*
-----Steve Napoli
As attorney in fact for Philip J. Hempleman

* Evidence of Power of Attorney was filed with the Schedule 13G/A filed on February 15, 2006 (Acc-no: 0000902664-06-000895) and is incorporated by reference into this filing.

CUSIP No. 29406L201 13G/A PAGE 13 of 14 PAGES

EXHIBIT 1
JOINT FILING AGREEMENT PURSUANT TO RULE 13d-1(k)(1)

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G/A is filed on behalf of each of the undersigned and that all

subsequent amendments to this statement shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing statements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him, her or it contained herein, but shall not be responsible for the completeness and accuracy of the information concerning the other entities or persons, except to the extent that he, she or it knows or has reason to believe that such information is inaccurate.

Dated as of February 16, 2010

ARDSLEY PARTNERS RENEWABLE ENERGY FUND, L.P. BY: ARDSLEY PARTNERS I, GENERAL PARTNER

BY:/s/ Steve Napoli
----Steve Napoli
General Partner

ARDSLEY RENEWABLE ENERGY OFFSHORE FUND, LTD.

BY:/s/ Steve Napoli
----Steve Napoli
Director

ARDSLEY ADVISORY PARTNERS

By: ARDSLEY PARTNERS I GENERAL PARTNER

BY:/s/ Steve Napoli
----Steve Napoli
General Partner

CUSIP No. 29406L201

13G/A

PAGE 14 of 14 PAGES

ARDSLEY PARTNERS I

BY:/s/ Steve Napoli
----Steve Napoli
General Partner

PHILIP J. HEMPLEMAN, INDIVIDUALLY

BY:/s/ Steve Napoli *

Steve Napoli Attorney-in-fact for Philip J. Hempleman

* Evidence of Power of Attorney was filed with the Schedule 13G/A filed on February 15, 2006 (Acc-no: 0000902664-06-000895) and is incorporated by reference into this filing.