

**AMENDMENT TO CONTRACT  
ANNUAL REQUIREMENTS FOR DEWATERING AND THICKENING POLYMERS  
BID NO. 11-019  
CITY OF LINCOLN  
Extension**

This Amendment is hereby entered into by and between Polydyne, Inc., 1 Chemical Plant Road, Riceboro, GA 31323, (hereinafter "Contractor") and City of Lincoln (hereinafter "City"), for the purpose of amending the Contract executed under Executive Order No. 83854, dated March 3, 2011, for Annual Requirements for Dewatering and Thickening Polymers, Bid No. 11-019, which is made a part hereof by this reference.

WHEREAS, the original term of the Contract is March 3, 2011 through March 2, 2012, with the option to renew for three (3) additional one (1) year terms; and

WHEREAS, the Contract was amended by Executive Order No. 84712 on January 31, 2012, to renew the Contract for an additional one (1) year period from March 3, 2012 through March 2, 2013; and

WHEREAS, the Contract was amended by Executive Order No. 85824 on February 26, 2013, to renew the Contract for an additional one (1) year period from March 3, 2013 through March 2, 2014; and

WHEREAS, the Contract was amended by Executive Order No. 86858 on February 3, 2014, to renew the Contract for an additional one (1) year period from March 3, 2014 through March 2, 2015; and

WHEREAS, the parties wish to extend the Contract an additional 3 months and twenty-nine days, through June 30, 2015; and

WHEREAS the estimated expenditures for the City for the term of this extension shall not exceed \$120,000.00 without prior approval by the City of Lincoln.

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in the Contract, under Executive Order No. 83854, and stated herein the parties agree as follows:

- 1) The parties wish to extend the Contract an additional 3 months and twenty-nine days, through June 30, 2015.
- 2) The estimated expenditures for the City for the term of this extension shall not exceed \$120,000.00 without prior approval by the City of Lincoln.
- 3) All other terms of the Contract, not in conflict with this Amendment, shall remain in full force and effect.

IN WITNESS WHEREOF, the Parties do hereby execute this Amendment upon completion of signatures on:

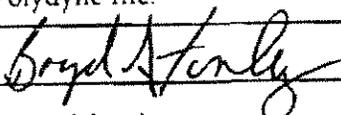
Vendor Signature Page  
City of Lincoln Signature Page

Vendor Signature Page

AMENDMENT TO CONTRACT  
ANNUAL REQUIREMENTS FOR DEWATERING AND THICKENING POLYMERS  
BID NO. 11-019  
CITY OF LINCOLN  
Extension

Please sign, date and return within 10 days of receipt.  
You must return an original copy of the document.

Mail to: City/County Purchasing  
Attn: Lori Irons  
440 So. 8th St., Ste. 200  
Lincoln, NE 68508

Company Name:	Polydyne Inc.
By: (Please Sign)	
By: (Please Print)	Boyd Stanley
Title:	Business Manager
Company Address:	One Chemical Plant Road, Riceboro, GA 31323
Company Phone & Fax:	Ph: 912-880-2035, Fax: 912-880-2078
E-Mail Address:	polybiddpt@snfhc.com
Date:	3/25/15
Contact Person for Orders or Service:	Rosi Tran
Contact Phone Number:	1-800-848-7659

City of Lincoln Signature Page

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**AMENDMENT TO CONTRACT**  
**Annual Requirements for Dewatering and Thickening Polymers**  
**Bid No. 11-019**  
**City of Lincoln**  
**(Extension)**

EXECUTION BY THE CITY OF LINCOLN, NEBRASKA

ATTEST:

CITY OF LINCOLN, NEBRASKA

*Jerry L. Deuba, Deputy*  
City Clerk



*Chris Beutler*  
Chris Beutler, Mayor

Approved by Executive Order No. 088167

dated 4-17-15

86858

**AMENDMENT TO AGREEMENT  
CITY OF LINCOLN  
ANNUAL REQUIREMENTS FOR DEWATERING AND THICKENING POLYMERS  
BID NO. 11-019  
THIRD AND FINAL RENEWAL**

This Amendment is hereby entered into on this 3<sup>rd</sup> day of February, 2014 by and between **Polydyne Inc., 1 Chemical Plant Road Riceboro, GA 31323** (hereinafter "Contractor") and **City of Lincoln** (hereinafter "City"), for the purpose of amending an Agreement dated March 3, 2011, under **E. O. No. 83854**, (the "Agreement"), for **The Annual Requirements for Dewatering and Thickening Polymers, Bid No. 11-019**, which is made a part hereof by this reference.

WHEREAS, the original term of the Agreement is **March 3, 2011 through March 2, 2012**, with the option to renew for three (3) additional **one (1) year terms** upon written mutual consent of both parties; and

WHEREAS, the Agreement was amended by the City to renew the agreement for an additional one year period from **March 3, 2012 through March 2, 2013**,

WHEREAS, the Agreement was amended by the City to renew the agreement for an additional one year period from **March 3, 2013 through March 2, 2014**,

WHEREAS, the parties wish to renew the agreement for an additional one (1) year term beginning **March 3, 2014 through March 2, 2015**; and

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants stated herein the parties agree as follows:

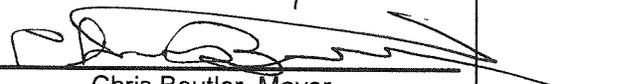
- 1) The term of the Agreement shall be from **March 3, 2014 through March 2, 2015**.
- 2) All other terms of the Agreement, not in conflict with this Amendment, shall remain in full force and effect.

The Parties do hereby agree to all the terms and conditions of this Amendment. This Amendment shall be binding upon the parties, their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

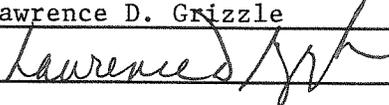
IN WITNESS WHEREOF, the Parties do hereby execute this Amendment.

**Official City Use Only**

Dated this 3<sup>rd</sup> day  
of February 2014

  
Chris Beutler, Mayor

**Supplier, please fill in the date and following information and mail back to our office; a faxed copy is not acceptable.**

<b>Company Name: (PLEASE PRINT)</b>	Polydyne Inc.
<b>By: (PLEASE PRINT)</b>	Lawrence D. Grizzle
<b>By: (PLEASE SIGN)</b>	
<b>Title:</b>	Business Manager
<b>Company Address: (PLEASE PRINT)</b>	One Chemical Plant Road, Riceboro, GA 31323
<b>Company Phone &amp; Fax: (PLEASE PRINT)</b>	912-880-2035, 912-880-2078
<b>E-Mail Address: (PLEASE PRINT)</b>	polybiddpt@snfhc.com
<b>Date: (PLEASE PRINT)</b>	01/17/14

**AMENDMENT TO AGREEMENT  
CITY OF LINCOLN  
Annual Requirements for Dewatering and Thickening Polymers  
Bid No. 11-019  
(SECOND RENEWAL)**

This Amendment is hereby entered into on this \_\_\_\_ day of \_\_\_\_\_, 2013 by and between Polydyne Inc., 1 Chemical Plant Road, Riceboro, GA 31323, (hereinafter "Contractor") and City of Lincoln (hereinafter "City"), for the purpose of amending an Agreement dated March 3, 2011, under E.O. No. 83854, (the "Agreement"), for The Annual Requirements for Dewatering and Thickening Polymers, Bid No. 11-019, which is made a part hereof by this reference.

WHEREAS, the original term of the Agreement is March 3, 2011 thru March 2, 2012, with the option to renew for three (3) additional one (1) year terms upon written mutual consent of both parties; and

WHEREAS, the parties wish to extend the agreement for an additional one (1) year term beginning March 3, 2013 thru March 2, 2014; and

WHEREAS, the parties wish to amend the agreement to reflect addition of line item 2 as listed in Attachment A; and

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants stated herein the parties agree as follows:

- 1) The term of the Agreement shall be from March 3, 2013 thru March 2, 2014.
- 2) The parties agree to the addition of line item 2 as listed in Attachment A.
- 3) All other terms of the Agreement, not in conflict with this Amendment, shall remain in full force and effect.

The Parties do hereby agree to all the terms and conditions of this Amendment. This Amendment shall be binding upon the parties, their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

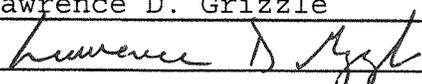
IN WITNESS WHEREOF, the Parties do hereby execute this Amendment.

Official City Use Only

Dated this <u>26<sup>th</sup></u> day of <u>Febr.</u> 2013
 Chris Beutler, Mayor

Supplier, please fill in the date and following information and mail back to our office; a faxed copy is not acceptable.

Executed this 1st day of February, 2013

<b>Company Name: (PLEASE PRINT)</b>	Polydyne Inc.
<b>By: (PLEASE PRINT)</b>	Lawrence D. Grizzle
<b>By: (PLEASE SIGN)</b>	
<b>Title:</b>	Business Manager
<b>Company Address: (PLEASE PRINT)</b>	1 Chemical Plant Road Riceboro, GA 31323
<b>Company Phone &amp; Fax: (PLEASE PRINT)</b>	(912) 880-2035 (912) 880-2078
<b>E-Mail Address: (PLEASE PRINT)</b>	polybiddpt@snfhc.com



Emailed to: [smulder@lincoln.ne.gov](mailto:smulder@lincoln.ne.gov)

January 21, 2013

Ms. Sharon Mulder  
 City of Lincoln  
 440 S. 8th St., Ste. 200  
 Lincoln, NE 68508

Subject: **Extension of Contract, 11-019**

Dear Ms. Mulder,

Polydyne Inc. is pleased to accept an extension of the referenced contract for an additional year. The products and prices will remain unchanged and are as follows:

Product	Price	Package
Clarifloc® CE-1151	\$1.65/Lb.	55Lb. Bags
Clarifloc® CE-1151	\$1.65/Lb.	1500 Lb. Super Sacks
Clarifloc® CE-797	\$1.13/Lb.	2300 Lb. Totes

The new Contract term will be **March 3, 2013 through March 2, 2014.**

All other terms and conditions will remain the same.

It has been a pleasure doing business with City of Lincoln, and we look forward to continuing our valued supply position. Should you have any questions regarding this correspondence, please feel free to contact me at (912) 880-2089.

Best Regards,

Lawrence D. Grizzle  
 Business Manager

84712

**AMENDMENT TO BID NO. 11-019  
FOR THE ANNUAL REQUIREMENTS FOR DEWATERING AND THICKENING  
POLYMERS, FIRST RENEWAL**

This Amendment is hereby entered into on this 31 day of January, 2012 by and between **Polydyne Inc., 1 Chemical Plant Road, Riceboro, GA 31323** (hereinafter "Contractor") and **City of Lincoln** (hereinafter "City"), for the purpose of amending an Agreement dated **March 3, 2011**, under E. O. No. **83854**, (the "Agreement"), for **The Annual Requirements for Dewatering and Thickening Polymers, Bid No. 11-019**, which is made a part hereof by this reference.

WHEREAS, the original term of the Agreement is **March 3, 2011 thru March 2, 2012**, with the option to extend for three (3) additional **one (1) year periods** upon written mutual consent of both parties; and

WHEREAS, the parties wish to extend the agreement for an additional one (1) year term (first renewal) beginning **March 3, 2012 thru March 2, 2013**; and

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants stated herein the parties agree as follows:

- 1) The term of the Agreement shall be from **March 3, 2012 thru March 2, 2013**.
- 2) All other terms of the Agreement, not in conflict with this Amendment, shall remain in full force and effect.

The Parties do hereby agree to all the terms and conditions of this Amendment. This Amendment shall be binding upon the parties, their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

IN WITNESS WHEREOF, the Parties do hereby execute this Amendment.

**Official City Use Only**

Dated this <u>31<sup>st</sup></u> day of <u>January</u> 2012   Chris Beutler, Mayor
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**Supplier, please fill in the date and following information and mail back to our office; a faxed copy is not acceptable.**

Executed this 10th day of January, 2012

<b>Company Name: (PLEASE PRINT)</b>	Polydyne Inc.
<b>By: (PLEASE PRINT)</b>	James R. Carlson
<b>By: (PLEASE SIGN)</b>	
<b>Title:</b>	Vice-President
<b>Company Address: (PLEASE PRINT)</b>	One Chemical Plant Road Riceboro, GA 31323
<b>Company Phone &amp; Fax: (PLEASE PRINT)</b>	PH: (912) 880-2035 FAX: (912) 880-2078
<b>E-Mail Address: (PLEASE PRINT)</b>	polybiddpt@snfhc.com

11010169

**CONTRACT DOCUMENTS**

**CITY OF LINCOLN  
NEBRASKA**

**Annual Requirements for  
Dewatering and Thickening Polymers  
Bid No. 11-019**

**Polydyne Inc.  
1 Chemical Plant Road  
Riceboro, GA 31323  
912-880-2035**

**CITY OF LINCOLN  
CONTRACT AGREEMENT**

THIS CONTRACT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_ 2011, by and between **Polydyne Inc., 1 Chemical Plant Road, Riceboro, GA 31323**, hereinafter called "Contractor", and the City of Lincoln, Nebraska, a municipal corporation, hereinafter called "City".

WHEREAS, the City has caused to be prepared, in accordance with law, Specifications, Plans, and other Contract Documents for the Work herein described, and has approved and adopted said documents and has caused to be published an advertisement for and in connection with said Work, to-wit:

For providing **Annual Requirements for Dewatering and Thickening Polymers,**  
**Bid No. 11-019** and,

WHEREAS, the Contractor, in response to such advertisement, has submitted to the City, in the manner and at the time specified, a sealed Proposal/Supplier Response in accordance with the terms of said advertisement; and,

WHEREAS, the City, in the manner prescribed by law has publicly opened, read aloud, examined, and canvassed the Proposals/Supplier Responses submitted in response to such advertisement, and as a result of such canvass has determined and declared the Contractor to be the lowest responsible bidder for the said Work for the sum or sums named in the Contractor's Proposal/Supplier Responses, excluding items for the work and sums set forth in Line Items # 1 and 3 - 8 of Contractor's Proposal/Response, a copy thereof being attached to and made a part of this Contract;

NOW, THEREFORE, in consideration of the sums to be paid to the Contractor and the mutual covenants herein contained, the Contractor and the City has agreed and hereby agree as follows:

1. The Contractor agrees to (a) furnish all tools, equipment, supplies, superintendence, transportation, and other accessories, services, and facilities; (b) furnish all materials, supplies, and equipment specified to be incorporated into and form a permanent part of the complete work; (c) provide and perform all necessary labor in a substantial and workmanlike manner and in accordance with the provisions of the Contract Documents; and (d) execute and complete all Work included in and covered by the City's award of this Contract to the Contractor, such award being based on the acceptance by the City of the Contractor's Proposal, or part thereof, as follows:

**Agreement to Line Items No. 2 and 9**

2. The City agrees to pay to the Contractor for the performance of the Work embraced in this Contract, the Contractor agrees to accept as full compensation therefore, the following sums and prices for all Work covered by and included in the Contract award and designated above, payment thereof to be made in the manner provided by the City:

**City will pay for products/service, according to the Line Item pricing as listed in Contractors Proposal/Supplier Response, excluding items for the work and sums set forth in Line Items # 1 and 3 - 8 of Contractor's Proposal/Response, a copy thereof being attached to and made a part of this Contract. The City shall order on an as needed basis for the duration of the contract.**

3. Equal Employment Opportunity. In connection with the carrying out of this project, the contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, disability, age or marital status. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, ancestry, disability, age or marital status. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other compensation; and selection for training, including apprenticeship.

4. E-Verify. In accordance with Neb. Rev. Stat. 4-108 through 4-114, the contractor agrees to register with and use a federal immigration verification system, to determine the work eligibility status of new employees performing services within the state of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324 a, otherwise known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of a newly hired employee pursuant to the Immigration Reform and Control Act of 1986. The Contractor shall not discriminate against any employee or applicant for employment to be employed in the performance of this section pursuant to the requirements of state law and 8 U.S.C.A 1324b. The contractor shall require any subcontractor to comply with the provisions of this section.
5. Termination. This Contract may be terminated by the following:
  - 5.1) Termination for Convenience. Either party may terminate this Contract upon thirty (30) days written notice to the other party for any reason without penalty.
  - 5.2) Termination for Cause. The City may terminate the Contract for cause if the Contractor:
    - 5.2.1) Refuses or fails to supply the proper labor, materials and equipment necessary to provide services and/or commodities.
    - 5.2.2) Disregards Federal, State or local laws, ordinances, regulations, resolutions or orders.
    - 5.2.3) Otherwise commits a substantial breach or default of any provision of the Contract Document. In the event of a substantial breach or default the City will provide the Contractor written notice of said breach or default and allow the Contractor ten (10) days from the date of the written notice to cure such breach or default. If said breach or default is not cured within ten (10) days from the date of notice, then the contract shall terminate.
6. Independent Contractor. It is the express intent of the parties that this contract shall not create an employer-employee relationship. Employees of the Contractor shall not be deemed to be employees of the City and employees of the City shall not be deemed to be employees of the Contractor. The Contractor and the City shall be responsible to their respective employees for all salary and benefits. Neither the Contractor's employees nor the City's employees shall be entitled to any salary, wages, or benefits from the other party, including but not limited to overtime, vacation, retirement benefits, workers' compensation, sick leave or injury leave. Contractor shall also be responsible for maintaining workers' compensation insurance, unemployment insurance for its employees, and for payment of all federal, state, local and any other payroll taxes with respect to its employees' compensation.
7. Contract Term. This Contract shall be effective upon execution by both parties. The term of the Contract shall be a one (1) year term with the option to renew for three (3) additional one (1) year periods.
8. The Contract Documents comprise the Contract, and consist of the following:
  1. Instructions to Bidders
  2. Accepted Proposal/Response
  3. Contract Agreement
  4. Specifications
  5. Addendums No. 1 and 2
  6. Sales Tax Exemption Form 13

These Contract Agreements, together with the other Contract Documents herein above mentioned, form this Contract, and they are as fully a part of the Contract as if hereto attached or herein repeated.

The Contractor and the City hereby agree that all the terms and conditions of this Contract shall be binding upon themselves, and their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

IN WITNESS WHEREOF, the Contractor and the City do hereby execute this contract.

**EXECUTION BY THE CITY OF LINCOLN, NEBRASKA**

ATTEST:

Jan E Rose  
City Clerk



CITY OF LINCOLN, NEBRASKA

Chris Brown  
Mayor

Approved by Executive No. 083854

dated Mar. 3, 2011

**EXECUTION BY CONTRACTOR**

IF A CORPORATION:

ATTEST:

Mark Schlag (SEAL)  
Secretary  
Mark Schlag, Assistant Secretary

Polydyne Inc.

Name of Corporation

1 Chemical Plant Rd., Riceboro, GA 31323  
(Address)

By: James R. Carlson  
Duly Authorized Official

James R. Carlson, Vice-President  
Legal Title of Official

IF OTHER TYPE OF ORGANIZATION:

Name of Organization

Type of Organization

(Address)

By: \_\_\_\_\_  
Member

By: \_\_\_\_\_  
Member

IF AN INDIVIDUAL:

Name

Address

Signature

# City of Lincoln/Lancaster County (Lincoln Purchasing) Supplier Response

Bid Information		Contact Information		Ship to Information	
Bid Creator	Sharon R. Mulder Assistant Purchasing Agent	Address	Purchasing 440 S. 8th St. Lincoln, NE 68508	Address	Public Works & Utilities, Wastewater 2400 Theresa St. Lincoln, NE 68521
Email	smulder@lincoln.ne.gov	Contact	Sharon R. Mulder Assistant Purchasing Agent	Contact	
Phone	(402) 441-7410		Purchasing	Department	
Fax	(402) 441-6513		Department Building	Building	
Bid Number	11-019 Addendum 2		Suite 200	Floor/Room	
Title	Dewatering and Thickening Polymers		Floor/Room	Telephone	(402) 441-8735
Bid Type	Bid		Telephone	Fax	
Issue Date	01/07/2011		Fax	Email	
Close Date	1/21/2011 12:00:00 PM CST		Email		purchasing@lincoln.ne.gov
Need by Date					

## Supplier Information

Company	Polydyne Inc	
Address	1 Chemical Plant Road	
	Riceboro, GA 31323	
Contact	Randal Vickery	
Department		
Building		
Floor/Room		
Telephone	1 (880) 2035	<i>912 - 880 - 2035</i>
Fax	1 (880) 2078	<i>912 - 880 - 2078</i>
Email	polybiddpt@snfhc.com	
Submitted	1/20/2011 12:27:42 PM CST	
Total	\$226,700.00	

Signature \_\_\_\_\_

## Supplier Notes

Please note Supplier Phone Number is (912) 880-2035, and Supplier Fax Number is (912) 880-2078.

## Bid Notes

## Bid Messages

Please review the following and respond where necessary

#	Name	Note	Response
1	Instructions to Bidders	I acknowledge reading and understanding the Instructions to Bidders.	Yes

2	Specifications	I acknowledge reading and understanding the specifications.	Yes
3	Contact	Name of person submitting this bid:	Lawrence D. Grizzle, Business Manager
4	Electronic Signature	Please check here for your electronic signature.	Yes
5	Agreement to Addendum No. 1	Respondent hereby certifies that the change set forth in this addendum has been incorporated in their proposal and is part of their bid.  Reason: See Bid Attachments section for Addendum information.	Yes
6	Agreement to Addendum No. 2	Respondent hereby certifies that the change set forth in this addendum has been incorporated in their proposal and is part of their bid.  Reason: See Bid Attachments section for Addendum information.	Yes

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**Line Items**

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#	Qty	UOM	Description	Response
1	110,000	LBS	Dry Cationic Polymer - 1500 lb. Super Sack You MUST bid per pound in Unit Price.  Manufacturer: CIBA    Manufacturer #: Zetag 7587  Item Notes:    Application 1 - Belt Filter Press Dewatering The estimated annual total amount of polymer for Application 1 is 110,000 lbs.  Supplier Notes:	No Bid
2	110,000	LBS.	Dry Cationic Polymer - 1,500 lb. Super Sack You Must bid per pound only.  Manufacturer: Polydyne    Manufacturer #: CE-1151  Item Notes:    Application 1 - Belt Filter Press Dewatering The estimated annual total amount of polymer for Application 1 is 110,000 lbs.  Supplier Notes:	\$1.65
3	110,000	LBS	Dry Cationic Polymer - 1,500 lb. Super Sack You Must bid per pound only.  Manufacturer: Polydyne    Manufacturer #: CP-1010  Item Notes:    Application 1 - Belt Filter Press Dewatering The estimated annual total amount of polymer for Application 1 is 110,000 lbs.  Supplier Notes:	No Bid
4	30,000	LBS	Dry Cationic Polymer - 50 lb. Sacks You Must bid per pound only.  Manufacturer: CIBA    Manufacturer #: Zetag 7587  Item Notes:    Application 2 - Dissolved Air Flotation Thickening The estimated annual total amount of polymer for Application 2 is 40,000 lbs.  Supplier Notes:	No Bid
5	30,000	LBS	Dry Cationic Polymer - 50 lbs. Sacks Please bid per pound.  Manufacturer: Polydyne    Manufacturer #: CP-1919  Item Notes:    Application 2 - Dissolved Air Flotation Thickening The estimated annual total amount of polymer for Application 2 is 30,000.  Supplier Notes:	No Bid

6	30,000	LBS	Dry Cationic Polymer - 1,500 lb. Super Sack You Must bid per pound only.	No Bid
Manufacturer: Polydyne      Manufacturer #: CP-1010				
Item Notes:      Application 2 - Dissolved Air Flootation Thickening The estimated annual total amount of polymer for Application 2 is 30,000.				
Supplier Notes:				
7	40,000	LBS	Liquid Emulsion Polymer - 2,300 lb. Totes Please bid per pound.	No Bid
Manufacturer: CIBA      Manufacturer #: 8848FS				
Item Notes:      Application 3 - Rotary Drum Thickening. The estimated annual total amount of polymer for Application 3 is 40,000 lbs.				
Supplier Notes:				
8	40,000	LBS	Liquid Emulsion Polymer - 2,300 lb. Totes Please bid per pound.	No Bid
Manufacturer: Polydyne      Manufacturer #: CE-1152				
Item Notes:      Application 3 - Rotary Drum Thickening. The estimated annual total amount of polymer for Application 3 is 40,000 lbs.				
Supplier Notes:				
9	40,000	LBS	Liquid Emulsion Polymer - 2,300 lb. Totes Please bid per pound.	\$1.13
Manufacturer: Polydyne      Manufacturer #: CE-797				
Item Notes:      Application 3 - Rotary Drum Thickening. The estimated annual total amount of polymer for Application 3 is 40,000 lbs.				
Supplier Notes:				
Response Total:				\$226,700.00



## WARRANTY

**Polydyne Inc. is dedicated to providing our customers with quality material on a timely basis. If at any time there are questions about Polydyne Inc. products or if technical assistance is required, please contact a Polydyne representative by calling 800-848-7659.**

**Polydyne Inc.**  
**General Information**

SS: 34-1810283

State of Incorporation: Delaware

Date of Incorporation: August 21, 1995

Administrative Offices: P.O. Box 279, 1 Chemical Plant Rd.  
Riceboro, GA 31323

Payment Address: P.O. Box 404642  
Atlanta, GA 30384-4642

**Board of Directors**

<b>James R. Carlson, Peter Nichols, Rene Pich, Phillippe Jeronimo, Rene Hund, Philippe Chaut, Pascal Remy</b>
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**Corporate Officers**

<b>President</b>	<b>Peter Nichols</b>
<b>Vice-President, Secretary, and Treasurer</b>	<b>James R. Carlson</b>
<b>Assistant Secretary, and Controller</b>	<b>Mark Schlag</b>

**\*Authorized Signers-Non Officers**

<b>Lawrence D. Grizzle</b>	<b>Business Manager</b>
<b>Stewart Rea</b>	<b>Controller</b>
<b>Ken Luke</b>	<b>Purchasing Manager</b>
<b>Scott Ramey</b>	<b>Marketing Manager</b>

**Ownership Disclosure**

<b>Corporation</b>	<b>Percent Ownership</b>	<b>Owner</b>
<b>Polydyne Inc.</b>	<b>100</b>	<b>SNF Holding Company</b>
<b>SNF Holding Company</b>	<b>100</b>	<b>SPCM SA</b>
<b>SPCMSA</b>	<b>95</b>	<b>Rene Pich</b>
	<b>5</b>	<b>Other</b>

POLYDYNE, INC.

Written Consent of the Board of Directors

The undersigned, being all of the directors of Polydyne, Inc, a Delaware corporation (the "Corporation"), hereby approve and adopt the following resolutions by written consent.

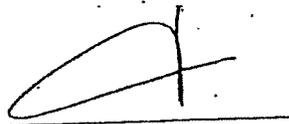
Municipal Contract Authorization

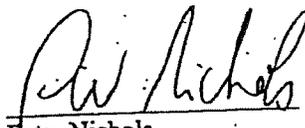
RESOLVED, that Lawrence D. Grizzle, Scott Ramey, Rene Pich, Peter Nichols, James R. Carlson, Mark Schlag, Stewart Rea and Ken Luke be and hereby are authorized, empowered and directed to bid, in the name and on behalf of the Corporation, upon such municipal projects as he (or she) may deem appropriate; and further

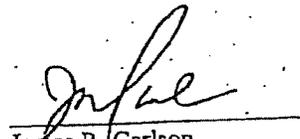
RESOLVED, that Lawrence D. Grizzle, Scott Ramey, Rene Pich, Peter Nichols, James R. Carlson, Mark Schlag, Stewart Rea and Ken Luke be and Hereby are authorized, empowered and authorized to execute and deliver, in the name and on behalf of the Corporation, all documents, instruments, certificates, agreements and papers as he (or she) may deem advisable or necessary or proper to effect the Corporation's municipal bids or the transactions contemplated thereby; and further

RESOLVED, that the Secretary, any Assistant Secretary or Director of the Corporation be and hereby is authorized and empowered, and to the extent necessary or advisable, directed, to attest the execution of any document executed pursuant to these resolutions, and to affix the seal of the Corporation thereto, and to certify under seal to any municipality the adoption of these resolutions.

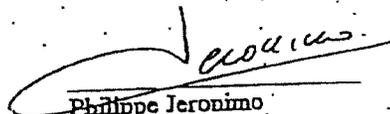
IN WITNESS WHEREOF, the undersigned, constituting all of the directors of the Corporation, have executed this consent this 31<sup>ST</sup> day of December 2003.

  
Rene Pich

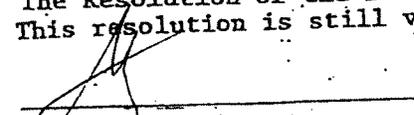
  
Peter Nichols

  
James R. Carlson

  
Rene Pich

  
Philippe Jeronimo

I attest to the authenticity of this copy of  
The Resolution of the Board of Directors.  
This resolution is still valid and in effect as of date signed.

  
Mark Schlag, Assistant-Secretary

01/17/11  
Date

**SNF****POLYDYNE**

# CLARIFLOC® CE-1151 POLYMER

## PRINCIPAL USES

CLARIFLOC CE-1151 is a **high** charge cationic polyacrylamide that is used as a flocculant in a wide variety of municipal and industrial wastewater treatment applications. It has been successfully applied in all liquid/solids separation systems including clarification, thickening, flotation, and dewatering.

## TYPICAL PROPERTIES

Physical Form	White Granular Powder
Cationicity	60 %
pH (0.25% Sol'n)	3-5

## PREPARATION AND FEEDING

CLARIFLOC CE-1151 is water soluble, but certain precautions should be followed to obtain total dissolution with minimum loss of activity. Complete wetting of the individual polymer particles is the single most important factor in the preparation of powdered polymer solutions. One method to achieve good wetting is to use an aspirator type disperser that draws the solid polymer particles into the water stream using a vacuum created by water pressure. A water pressure of 30 psig or greater is required to implement this method. The wetted polymer from the aspirator should be discharged into a vessel equipped with a high speed mixer capable of stirring the entire tank. The polymer solution should be stirred for 15-60 minutes or until dissolution is complete. The suggested make-down concentration for CLARIFLOC CE-1151 is 0.1-0.5% by weight. Completely automated equipment is commercially available.

## MATERIALS OF CONSTRUCTION

Cross-linked polyethylene, fiberglass, stainless steel or lined steel are the preferred materials for dissolution tanks. Unlined mild steel, black iron, galvanized steel, copper or brass should not be used in any part of the feed system. Stainless steel or PVC are recommended for pump heads and feed lines.

## MANUFACTURING SPECIFICATIONS

% Moisture	< 8
UL Viscosity	2.6 - 3.2 cPs
% Insolubles	< 3.5

## HANDLING AND STORAGE

Suggested in-plant storage of CLARIFLOC CE-1151 is one year in unopened bags. Store in a cool, dry area. For spills of dry CLARIFLOC CE-1151, sweep up the material and reuse, if possible. Do not spray water on spilled dry product because the resulting gel is very slippery and difficult to clean up. For spills of CLARIFLOC CE-1151 solutions, sprinkle sawdust or vermiculite over the spill area and sweep into approved chemical disposal containers. Rock salt cuts slipperiness.

## SAFETY INFORMATION

CLARIFLOC CE-1151 can potentially irritate the skin, eyes and lungs, so gloves, goggles and filter type respirator should be worn while handling this product. CLARIFLOC CE-1151 is not readily ignited, but it will support an existing fire. Foam, CO<sub>2</sub> or dry chemical methods should be used because polymer-water mixtures are very slippery. Anyone responsible for the procurement, use or disposal of CLARIFLOC CE-1151 should familiarize themselves with the appropriate safety and handling precautions outlined in the **POLYDYNE** Material Safety Data Sheet. In the event of an emergency with CLARIFLOC CE-1151, contact Chemtrec anytime day or night at (800) 424-9300.

## SHIPPING

CLARIFLOC CE-1151 is shipped in 50 pound poly-lined bags with 30 bags to a pallet.

## ADDITIONAL INFORMATION

To place an order or obtain technical information from anywhere in the continental United States, call toll free:

**(800) 848-7659**

ALL STATEMENTS, INFORMATION AND DATA GIVEN HEREIN ARE BELIEVED TO BE ACCURATE AND RELIABLE, BUT ARE PRESENTED WITHOUT GUARANTEE, WARRANTY OR RESPONSIBILITY OF ANY KIND, EXPRESSED OR IMPLIED STATEMENTS OR SUGGESTIONS CONCERNING POSSIBLE USE OF OUR PRODUCTS ARE MADE WITHOUT REPRESENTATION OR WARRANTY THAT ANY SUCH USE IS FREE OF PATENT INFRINGEMENT, AND ARE NOT RECOMMENDATIONS TO INFRINGE ON ANY PATENT. THE USER SHOULD NOT ASSUME THAT ALL SAFETY MEASURES ARE INDICATED OR THAT OTHER MEASURES MAY NOT BE REQUIRED.

# MATERIAL SAFETY DATA SHEET

PAGE:	1 of 5
REVISION DATE:	11/29/2006
PRINT DATE:	12/17/2007

## 1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

### CLARIFLOC CE-1151 POLYMER

*Supplier :*

**POLYDYNE INC.**

PO Box 279

Riceboro, Georgia 31323

Tel : 800-848-7659 Fax : 912-884-8770

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

*Identification of the preparation :*

Cationic water-soluble polymer.

## 3. HAZARDS IDENTIFICATION

*Aqueous solutions or powders that become wet render surfaces extremely slippery.*

## 4. FIRST AID MEASURES

*Inhalation :* Move to fresh air.

*Skin contact :* Wash with water and soap as a precaution. In case of persistent skin irritation, consult a physician.

*Eye contact :* Rinse thoroughly with plenty of water, also under the eyelids. In case of persistent eye irritation, consult a physician.

*Ingestion :* The product is not considered toxic based on studies on laboratory animals.

## 5. FIRE-FIGHTING MEASURES

*Suitable extinguishing media :* Water, water spray, foam, carbon dioxide (CO<sub>2</sub>), dry powder

*Special fire-fighting precautions :* Aqueous solutions or powders that become wet render surfaces extremely slippery.

*Protective equipment for firefighters :* No special protective equipment required.

## 6. ACCIDENTAL RELEASE MEASURES

*Personal precautions :* No special precautions required.

*Environmental precautions :* Do not contaminate water.

## CLARIFLOC CE-1151 POLYMER

PAGE:	2 of 5
REVISION DATE:	11/29/2006
PRINT DATE:	12/17/2007

**Methods for cleaning up :** Do not flush with water. Clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

### 7. HANDLING AND STORAGE

**Handling :** Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Wash hands before breaks and at the end of workday.

**Storage :** Keep in a dry, cool place (0 - 35°C).

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls :** Use local exhaust if dusting occurs. Natural ventilation is adequate in absence of dusts.

#### Personal protection equipment

- **Respiratory protection :** Dust safety masks are recommended where concentration of total dust is more than 10 mg/m<sup>3</sup>.
  - **Hand protection :** Rubber gloves.
  - **Eye protection :** Safety glasses with side-shields. Do not wear contact lenses.
  - **Skin protection :** Chemical resistant apron or protective suit if splashing or contact with solution is likely.
- Hygiene measures :** Wash hands before breaks and at the end of workday. Handle in accordance with good industrial hygiene and safety practice.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form :** granular solid
- Color :** white
- Odor :** none
- pH :** 2.5 - 4.5 @ 5g/l for product series. See Technical Bulletin for specific value.
- Melting point (°C) :** Not applicable.
- Flash point (°C) :** Not applicable.
- Autoignition temperature (°C) :** Not applicable.
- Vapour pressure (mm Hg) :** Not applicable.
- Bulk density :** See Technical Bulletin
- Water solubility :** See Technical Bulletin

## CLARIFLOC CE-1151 POLYMER

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*Viscosity (mPa s) :* See Technical Bulletin

### 10. STABILITY AND REACTIVITY

- Stability :** Product is stable, No hazardous polymerization will occur..  
Oxidizing agents may cause exothermic reactions.
- Hazardous decomposition products :** Thermal decomposition may produce : hydrogen chloride gas, nitrogen oxides (NO<sub>x</sub>), carbon oxides (CO<sub>x</sub>).

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

- **Oral :** LD50/oral/rat > 5000 mg/kg
- **Dermal :** The results of testing on rabbits showed this material to be non-toxic even at high dose levels.
- **Inhalation :** The product is not expected to be toxic by inhalation.

#### Irritation

- **Skin :** The results of testing on rabbits showed this material to be non-irritating to the skin.
- **Eyes :** Testing conducted according to the Draize technique showed the material produces no corneal or iridial effects and only slight transitory conjunctival effects similar to those which all granular materials have on conjunctivae.

**Sensitization :** The results of testing on guinea pigs showed this material to be non-sensitizing.

**Chronic toxicity :** A two-year feeding study on rats did not reveal adverse health effects. A one-year feeding study on dogs did not reveal adverse health effects

### 12. ECOLOGICAL INFORMATION

#### Ecotoxicity:

The aquatic toxicity is highly mitigated by the presence of dissolved organic carbon in the water. Results obtained using the US EPA "Dirty Water" test show that irreversible adsorption onto suspended matter and dissolved organics (such as humic and other organic acids) present in natural waters, reduces the toxicity to aquatic organisms by a factor of over 10

- **Fish** LC50/Danio rerio/96 hr = 5-10 mg/L (OECD 203)
- **Algae :** Algal inhibition tests are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.

# CLARIFLOC CE-1151 POLYMER

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REVISION DATE:	11/29/2006
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- *Daphnia* : EC50/Daphnia magna/48 hr = 20-50 mg/L (OECD 202)

**Bioaccumulation** : Does not bioaccumulate.

**Persistence / degradability** : Not readily biodegradable.

## 13. DISPOSAL CONSIDERATIONS

**Waste from residues / unused products** : In accordance with federal, state and local regulations.

**Contaminated packaging** : Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local regulations.

## 14. TRANSPORT INFORMATION

Not regulated by DOT / IATA / IMDG.

## 15. REGULATORY INFORMATION

All components of this product are on the TSCA and DSL inventories.  
WHMIS (CANADA): not regulated

**RCRA status** : Not a hazardous waste.

**Hazardous waste number** : Not applicable

**Reportable quantity (40 CFR 302)** : Not applicable

**Threshold planning quantity (40 CFR 355)** : Not applicable

**California Proposition 65 information** : *The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains a chemical(s) known to the State of California to cause cancer : residual Acrylamide*

HMIS & NFPA Ratings	HMIS	NFPA
Health :	1	1
Flammability :	1	1
Reactivity :	0	0
Personal Protection/Special :	B	

## CLARIFLOC CE-1151 POLYMER

PAGE:	5 of 5
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PRINT DATE:	12/17/2007

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### 16. OTHER INFORMATION

*Person to contact :* Regulatory Affairs Manager

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.

# CLARIFLOC® CE-797 POLYMER

## PRINCIPAL USES

CLARIFLOC CE-797 is a high charge cationic polyacrylamide in emulsion form that is used as a flocculant in a wide variety of municipal and industrial wastewater treatment applications. It has been successfully applied in all liquid/solids separation systems including clarification, thickening, and dewatering.

## TYPICAL PROPERTIES

Physical Form	Clear to Milky White Liquid
Cationicity	80 %
Active Polyacrylamide Min.	41.0%
Specific Gravity	1.01 - 1.05
Freezing Point	7 F. (-14 C.)
Flash Point	>200 F. (>93 C.)
Density	8.5 - 8.6 Lb/Gal

## PREPARATION AND FEEDING

CLARIFLOC CE-797 is a single component emulsion polymer that must be pre-diluted in water before use. In most cases, this product should not be applied neat. One method for dilution is adding the neat polymer into the vortex of a mixed tank at a concentration between 0.25-1.0% polymer (0.5% is optimum) by weight. The polymer can also be injected through a number of commercially available systems that provide in-line mechanical mixing. The best feed systems use initial high energy mixing (>1000 rpm) for a short time (<30 sec) to achieve good dispersion followed by low energy mixing (<400 rpm) for a longer time (10-30 min). Polymer solutions should be aged for 15-60 minutes for best results. Solution shelf life is 8-16 hours.

## MATERIALS OF CONSTRUCTION

Cross-linked polyethylene, fiberglass, stainless steel or lined steel are the preferred materials of construction for bulk tanks. Avoid natural rubber and Buna-N gaskets as these materials swell when placed in contact with neat polymer. Unlined mild steel, black iron, galvanized steel, copper or brass are not recommended in any part of the feed system. Stainless steel, Viton or Teflon are the best choices for pump heads. For feed lines, use PVC or reinforced Tygon tubing.

## MANUFACTURING SPECIFICATIONS

Total Solids	48 - 58
Residual AcAm	< 1000 ppm
Neat Viscosity	300-2000 cPs
UL Viscosity	2.6 - 3.6

## HANDLING AND STORAGE

Suggested in-plant storage life is 6 months in unopened drums. For best results, store at 50-80 F. Bulk tanks should be mixed by periodically recirculating the contents bottom to top. Bulk tanks can also be fitted with an agitator type mixer that reaches the bottom 2 feet of the tank. Drums and bins should be mixed very well before first use and weekly after that. Do not allow emulsion polymers to freeze. Should freezing occur, allow the product to thaw thoroughly in a heated area and mix well before attempting to use it. For spills of CLARIFLOC CE-797, sprinkle vermiculite or equivalent absorbant over the spill area and sweep the material into approved chemical disposal containers. Do not spray water onto a spill because the resulting gel is very difficult to clean up.

## SAFETY INFORMATION

CLARIFLOC CE-797 is a mildly acidic product that can irritate the skin and eyes and should be handled accordingly. Gloves, goggles and apron are highly recommended. Anyone responsible for the procurement, use or disposal of this product should familiarize themselves with the appropriate safety and handling precautions involved. Such information is outlined in the POLYDYNE Material Safety Data Sheet. In the event of an emergency with this product, contact Chemtrec anytime day or night at (800) 424-9300.

## SHIPPING

CLARIFLOC CE-797 Polymer is shipped in 55 gallon, lined steel drums containing approximately 450 pounds net or in 275 gallon nonreturnable tote tanks. Bulk quantities are also available.

## ADDITIONAL INFORMATION

To place an order or obtain technical information from anywhere in the continental United States, call toll free:

**(800) 848-7659**

# MATERIAL SAFETY DATA SHEET

PAGE:	1 of 5
REVISION DATE:	09/14/2006
PRINT DATE:	12/18/2007

## 1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

### CLARIFLOC CE-797 POLYMER

*Supplier :*

**POLYDYNE INC.**

PO Box 279

Riceboro, Georgia 31323

Tel : 800-848-7659 Fax : 912-884-8770

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

*Identification of the preparation :*

Cationic water-soluble polymer in emulsion.

## 3. HAZARDS IDENTIFICATION

*Aqueous solutions or powders that become wet render surfaces extremely slippery*

## 4. FIRST AID MEASURES

*Inhalation :* Move to fresh air.

*Skin contact :* Wash off immediately with soap and plenty of water. In case of persistent skin irritation, consult a physician.

*Eye contact :* Rinse thoroughly with plenty of water, also under the eyelids. In case of persistent eye irritation, consult a physician.

*Ingestion :* The product is not considered toxic based on studies on laboratory animals.

## 5. FIRE-FIGHTING MEASURES

*Suitable extinguishing media :* Water, water spray, foam, carbon dioxide (CO<sub>2</sub>), dry powder

*Special fire-fighting precautions :* Spills produce extremely slippery surfaces.

*Protective equipment for firefighters :* No special protective equipment required.

## 6. ACCIDENTAL RELEASE MEASURES

*Personal precautions :* No special precautions required.

*Environmental precautions :* Do not contaminate water.

## CLARIFLOC CE-797 POLYMER

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**Methods for cleaning up :** Do not flush with water. Dam up. Soak up with inert absorbent material. If liquid has been spilled in large quantities clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

### 7. HANDLING AND STORAGE

**Handling :** Avoid contact with skin and eyes. When preparing the working solution ensure there is adequate ventilation. When using do not smoke.

**Storage :** Keep in a dry, cool place (0 - 30°C). Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls :** Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

#### Personal protection equipment

- **Respiratory protection :** In case of insufficient ventilation wear suitable respiratory equipment.
  - **Hand protection :** Rubber gloves.
  - **Eye protection :** Safety glasses with side-shields. Do not wear contact lenses.
  - **Skin protection :** Chemical resistant apron or protective suit if splashing or contact with solution is likely.
- Hygiene measures :** Wash hands before breaks and at the end of workday. Handle in accordance with good industrial hygiene and safety practice.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form :** viscous liquid

**Color :** milky

**Odor :** aliphatic

**pH :** 4 - 9 @ 5 g/l for product series. See Technical Bulletin for specific value.

**Flash point (°C) :** Does not flash

**Autoignition temperature (°C) :** Does not ignite

**Vapour pressure (mm Hg) :** 0.13 @ 20°C

**Bulk density :** See Technical Bulletin

**Water solubility :** See Technical Bulletin

Viscosity (mPa s) : See Technical Bulletin

## 10. STABILITY AND REACTIVITY

**Stability :** Product is stable, No hazardous polymerization will occur.  
Oxidizing agents may cause exothermic reactions.

**Hazardous decomposition products :** Thermal decomposition may produce : hydrogen chloride gas, nitrogen oxides (NOx), carbon oxides (COx).

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

- **Oral :** LD50/oral/rat > 5000 mg/kg
- **Dermal :** The results of testing on rabbits showed this material to be non-toxic even at high dose levels.
- **Inhalation :** The product is not expected to be toxic by inhalation.

### Irritation

- **Skin :** May cause skin irritation with susceptible persons.
- **Eyes :** May cause eye irritation with susceptible persons

**Sensitization :** The results of testing on guinea pigs showed this material to be non-sensitizing.

**Chronic toxicity :** A two-year feeding study on rats did not reveal adverse health effects. A one-year feeding study on dogs did not reveal adverse health effects. Prolonged skin contact may defat the skin and produce dermatitis.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

The product is rapidly eliminated from the aquatic medium through irreversible adsorption onto suspended matter and dissolved organics.

- **Fish** LC50/Danio rerio/96 hr > 10 - 100 mg/L (OECD 203)(Based on the toxicity of the components using the Conventional Method.)
- **Algae :** Algal inhibition tests are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.

## CLARIFLOC CE-797 POLYMER

PAGE:	4 of 5
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- *Daphnia* : EC50/Daphnia magna/48 hr > 50 mg/L (OECD 202)(Based on the toxicity of the components using the Conventional Method.)

### ***Environmental fate:***

The aquatic toxicity is highly mitigated by the presence of dissolved organic carbon in the water. Results obtained using the US EPA "Dirty Water" test show that irreversible adsorption onto suspended matter and dissolved organics (such as humic and other organic acids) present in natural waters, reduces the toxicity to aquatic organisms by a factor of over 10

***Bioaccumulation*** : Does not bioaccumulate.

***Persistence / degradability*** : Not readily biodegradable

## 13. DISPOSAL CONSIDERATIONS

***Waste from residues / unused products*** : In accordance with federal, state and local regulations.

***Contaminated packaging*** : Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local regulations.

## 14. TRANSPORT INFORMATION

Not regulated by DOT. IATA, IMDG.

## 15. REGULATORY INFORMATION

All components of this product are on the TSCA and DSL inventories.

***RCRA status*** : Not a hazardous waste.

***Hazardous waste number*** : Not applicable

***Reportable quantity (40 CFR 302)*** : Not applicable

***Threshold planning quantity (40 CFR 355)*** : Not applicable

***California Proposition 65 information*** : *The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains a chemical(s) known to the State of California to cause cancer : residual Acrylamide*

CLARIFLOC CE-797 POLYMER

PAGE: 5 of 5  
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HMIS & NFPA Ratings	HMIS	NFPA
Health :	1	1
Flammability :	1	1
Reactivity :	0	0
Personal Protection/Special :	B	

16. OTHER INFORMATION

Person to contact : Regulatory Affairs Manager

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.

**Specifications  
for  
Dewatering and Thickening Polymer  
Bid No. 11-019**

**1. BID REQUIREMENTS**

- 1.1 The City of Lincoln is requesting bids to supply Dewatering and Thickening Polymer for the City of Lincoln's Theresa Street Public Owned Treatment Works (POTW) and the NE Wastewater Treatment Center.
- 1.2 The term of the Agreement shall be for a one (1) year, with the option to renew for three (3) additional one (1) year periods.
  - 1.2.1 Contract renewal shall be based on the Contractor's performance during the term of the Contract.
- 1.3 Refer to Instructions To Bidders for additional information.
- 1.4 Pricing must include the cost of shipping to the Theresa Street location for Applications 1 and 2 as outlined in the Specs.
- 1.5 Pricing must include the cost of shipping to the NE Treatment Center location for Application 3 as outlined in the Specs.
- 1.6 Dry cationic polymer for belt filter press dewatering operations shall be supplied and delivered in 1,500 lb super sacks.
- 1.7 Dry cationic polymer for DAF (dissolved air flotation) thickening shall be supplied and delivered in 50 lb bags.

**2. REQUEST FOR INFORMATION**

- 2.1 All inquiries regarding these specifications shall be directed via e-mail or written request to Sharon Mulder, Assistant Purchasing Agent at [smulder@lincoln.ne.gov](mailto:smulder@lincoln.ne.gov).
  - 2.1.1 These inquiries and/or responses shall be distributed to prospective proposers as an addenda.
  - 2.1.2 The Owner shall only reply to written inquiries received within five (5) calendar days of bid opening.
  - 2.1.3 Addenda will be issued electronically via the e-bid system.

**3. AWARD CRITERIA**

- 3.1 Bid will be awarded based on price per pound, pounds of polymer per dry ton and the degree of thickening obtained from the field trials.

**4. APPLICATION NO. 1**

- 4.1 Belt press dewatering activities for anaerobically digested sludge at the Theresa Street Facility consumes approximately 110,000 pounds of dry cationic polymer on an annual basis.

**5. APPLICATION NO. 2**

- 5.1 Dissolved air flotation thickening at Theresa Street consumes approximately 30,000 pounds of dry polymer per year.

**6. APPLICATION NO. 3**

- 6.1 Rotary drum thickening at the Northeast Wastewater Treatment facility consumes approximately 40,000 pounds of liquid polymer solution per year (40% active).
  - 6.1.1 The liquid polymer is packaged within 2,300 lb gallon tote containers.
- 6.2 Due to the variability in effectiveness of polymers, this specification outlines the general methods and procedures by which a qualified bidder's list will be determined.

**7. PROCESS DESCRIPTION**

- 7.1 The Theresa Street and Northeast Wastewater Facilities are municipal wastewater treatment facilities treating domestic, commercial, and industrial wastes.
  - 7.1.1 The Theresa Street and Northeast facilities currently process approximately 19 and 5 million gallons per day of wastewater respectively.
- 7.2 At the Theresa Street facility, solids generated from primary treatment, dissolved air floatation (DAF) thickening of secondary waste activated sludge, and trucked in septic wastes are anaerobically stabilized by three (3) 1.1 million gallon mesophilic digesters with an average detention time of 18-22 days.
  - 7.2.1 The an-aerobically stabilized sludge is dewatered utilizing three (3) two (2) meter belt filter presses, which currently dewater the solids to cake containing approximately 14-22 percent solids.
  - 7.2.2 The belt filter presses are operational for 9-11 hours each per day during a typical dewatering weekly schedule of 4-5 days.
  - 7.2.3 Dry cationic polymer is currently shipped to the Theresa Street Facility in 1,500 pound super sacks for use in the belt filter press dewatering operation, and on pallets containing 30, 50 pound bags for use in the DAF thickening operation.
  - 7.2.4 The super sacks are suspended from the operating floor and dry polymer is fed through a Fox eductor and Rotron blower, which conveys the dry polymer to a Stranco Poly-Blend automated polymer batching and feed system; the dry polymer used in our DAF operation is hand batched.
  - 7.2.5 The Theresa Street Facility currently uses one type of polymer for its dewatering and thickening processes.
- 7.3 At the Northeast facility, primary sludge and thickened waste activated sludge is pumped to two (2) 467,000 gallon anaerobic digesters having an average hydraulic retention time of approximately 30 days.
  - 7.3.1 The waste activated sludge is thickened with two (2) Parkson rotary drum thickeners. Process thickening takes approximately 25 hours per week.
  - 7.3.2 The liquid polymer is currently supplied in 2,300 lb tote containers (275 gallon).

- 7.4 Dewatered solids from Theresa Street are transported from the facility by a contract hauler to area farm land or to a temporary holding facility located at the city's Bluff Road Landfill.
- 7.5 Liquid digested sludge from the anaerobic digesters at Northeast is pumped to a storage lagoon on a dedicated land application injection site owned by the City.
  - 7.5.1 The digested sludge is ultimately sub-surface applied by City personnel to crop land on the injection site.

**8. AVERAGE ANNUAL VOLUMES AND CONCENTRATIONS**

- 8.1 Primary sludge and trucked in wastes – approximately 88,000 GPD – (79,000 GPD Primary Sludge; 9,000 GPD Trucked in Wastes).
- 8.2 Secondary waste activated feed to DAF – approximately 205,000 GPD @ 0.84% solids
- 8.3 Thickened waste activated sludge from the DAF operation – approximately 14,200 dry lbs/day @ 4.74% solids
- 8.4 Total waste feed to the anaerobic digesters – approximately 166,000 GPD @ 4 to 5 % solids
- 8.5 Stabilized sludge feed to Belt Filter Presses – approximately 265,000 gallons per dewatering day @ 2.4 to 2.6% solids operating four (4) to five (5) days per week.
- 8.6 Dewatered sludge yield – approximately 60,000 dry lbs/dewatering day @ 15% solids.

**Addendum #1**  
for  
**Dewatering and Thickening of Polymers**  
**Bid No. 11-019**

Addenda are instruments issued by the City prior to the date for receipt of offers which will modify or interpret the specification document by addition, deletion, clarification, or correction.

Please acknowledge receipt of this addendum in the space provided in the Attribute Section.

Be advised of the following changes and clarifications to the City's specification and bidding documents:

Addition to Section 3: Award Criteria

- 3.1 Due to the length of time since polymer pilot testing was performed (2007), the Owner desires to perform pilot testing on any polymer(s) with the lowest unit price per lb.
  - 3.1.1 This requirement will not apply to Polydyne polymers due to the Owner's experience and historical performance data using Polydyne polymers.
  - 3.1.2 This testing, if necessary, will be performed prior to final award of bid.
  - 3.1.3 The Owner reserves the right to make the final award based on, but not limited to, unit price, polymer cost per dry ton of solids processed, Contractor experience, and past performance of Contractor.

All other terms and conditions shall remain unchanged.

Dated this 10<sup>th</sup> of January, 2011.

Sharon Mulder,  
Assistant Purchasing Agent

**Addendum #2**  
for  
**Dewatering and Thickening of Polymers**  
**Bid No. 11-019**

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Please acknowledge receipt of this addendum in the space provided in the Attribute Section.

Be advised of the following changes and clarifications to the City's specification and bidding documents:

**Q -1) Testing Requirements:**

Your addendum stated Polydyne would be relieved of testing during the trials. Can give me more information about any bench testing and/or subsequent trials? For instance:

**BENCH TESTING:**

Is bench testing performed?  
Who performs the tests?  
Would they be performed at each of the plants?  
When would the tests be allowed?  
What size samples are required?

**TRAILS:**

In the past, how long do your trials run?  
Would they be performed at each of the plants?  
Who would perform the trials? If company representatives, how many allowed?  
How much sample product is required for each trial?  
Approximately date trials to begin and how are the participants determined?

- A -1) If we were to test a new product, we would request that the supplier provide us with enough polymer to prepare a polymer solution. We would track the polymer usage and the percent cake solids of our belt presses using the supplier polymer. Our laboratory would perform the analyses and we would compare those results with the results currently experiencing. We would then factor in the cost of polymer and derive a cost per dry ton of solids dewatered. Testing would probably occur over a one day, possibly two day period utilizing one of our three (3) belt presses. If polymer being evaluated was thickening, we would follow a similar procedure. Supplier would be allowed and encouraged to perform his(her) bench testing prior to running the trial. Potential suppliers are welcome to performing their own bench scale testing prior to the bid date. Coordinate with Lincoln Wastewater System. City staff will perform testing. Supplier is welcome to view the testing. Testing would be after receiving the bids and mutually coordinated with Owner and supplier.

Q -2) What are the current vendor prices per Lb for each application?

A -2) Currently paying \$1.50/lb., dry cationic polymer and \$1.03/lb., liquid polymer in totes.

Q -3) Bonds: Under Instructions to Bidders, Section 2, 2.1.1, Bid Security.. if required.

Please confirm if a bid bond is required and if the amount is determined by the price specified on the bid for all plants. Also, please confirm a Performance bond required as well?

A -3) None of the above are necessary.

All other terms and conditions shall remain unchanged.

Dated this 11<sup>th</sup> of January, 2011.

Sharon Mulder,  
Assistant Purchasing Agent