ARCH CHEMICALS INC Form SC 13D August 05, 2011

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934
Analy Chamicala Inc
Arch Chemicals, Inc. (Name of Issuer)
Common Stock
(Title of Class of Securities)
03937R102
(CUSIP Number)
Peter D. Goldstein
GAMCO Investors, Inc.
One Corporate Center
Rye, New York 10580-1435
(914) 921-5000
Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications
August 4, 2011
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of $\S\S 240.13d-1(e)$, 240.13d-1(f) or 240.13d-1(g), check the following box .

CUSIP No. 03937R102 Names of reporting persons I.R.S. identification nos. of above persons (entities only) Gabelli Funds, LLC I.D. No. 13-4044523 2 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a) (b) 3 Sec use only 4 Source of funds (SEE INSTRUCTIONS) 00-Funds of investment advisory clients 5 Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e) X 6 Citizenship or place of organization New York Number Of : 7 Sole voting power Shares 732,501 (Item 5) Beneficially : 8 Shared voting power Owned None By Each :9 Sole dispositive power Reporting 732,501 (Item 5)

Shared dispositive power

None

Aggregate amount beneficially owned by each reporting person

:10

732,501 (Item 5)

Person

With

- 12 Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS)
- Percent of class represented by amount in row (11)

2.88%

14 Type of reporting person (SEE INSTRUCTIONS)

IA, CO

CUSIP No. 03937R102

Names of reporting persons 1

I.R.S. identification nos. of above persons (entities only)

GAMCO Asset Management, Inc.

I.D. No. 13-4044521

2 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)

(b)

- 3 Sec use only
- 4 Source of funds (SEE INSTRUCTIONS) 00-Funds of investment advisory clients
- 5 Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e)
- 6 Citizenship or place of organization

New York

Number Of : 7 Sole voting power

Shares 352,780 (Item 5)

Beneficially : 8

Shared voting power

Owned None

:9 By Each Sole dispositive power

Reporting 352,780 (Item 5)

Shared dispositive power Person :10

With None

11 Aggregate amount beneficially owned by each reporting person

352,780 (Item 5)

- 12 Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS)
- 13 Percent of class represented by amount in row (11)

1.39%

14 Type of reporting person (SEE INSTRUCTIONS) IA, CO

CUSIP No. 03937R102

1 Names of reporting persons

I.R.S. identification nos. of above persons (entities only)

Gabelli Securities, Inc.

I.D. No. 13-3379374

2 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)

(b)

- 3 Sec use only
- 4 Source of funds (SEE INSTRUCTIONS)

00 – Client funds

- 5 Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e)
- 6 Citizenship or place of organization

Delaware

Number Of : 7 Sole voting power

Shares 85,718 (Item 5)

Beneficially Shared voting power : 8

Owned None

By Each : 9 Sole dispositive power

Reporting 85,718 (Item 5)

:10 Person

Shared dispositive power

With None

11 Aggregate amount beneficially owned by each reporting person

85,718 (Item 5)

- 12 Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS)
- 13 Percent of class represented by amount in row (11)

0.34%

14 Type of reporting person (SEE INSTRUCTIONS) HC, CO, IA

CLICID	N 02027D102					
CUSIP 1						
•		Names of reporting persons I.R.S. identification nos. of above persons (entities only)				
_	MJG Associates, In	MJG Associates, Inc. I.D. No. 06-1304269				
2	Check the appropris	Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)				
	(b)					
3	Sec use only					
4	Source of funds (SEE INSTRUCTIONS) 00-Client Funds					
5	Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e)					
6	6 Citizenship or place of organization Connecticut					
	Number Of	: 7	Sole voting power			
	Shares	: :	5,000 (Item 5)			
	Beneficially	: 8	Shared voting power			
	Owned	:	None			
	By Each	: 9	Sole dispositive power			
	Reporting	: :	5,000 (Item 5)			
	Person	:10	Shared dispositive power			
	With	:	None			
11	Aggregate amount	Aggregate amount beneficially owned by each reporting person				
	5,000 (Item 5)					
12	Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS)					
13	Percent of class represented by amount in row (11)					
	0.02%					

Type of reporting person (SEE INSTRUCTIONS) CO

CUSIP No. 03937R102 1 Names of reporting persons I.R.S. identification nos. of above persons (entities only) Gabelli Foundation, Inc. I.D. No. 94-2975159 2 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a) (b) 3 Sec use only 4 Source of funds (SEE INSTRUCTIONS) WC 5 Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e) 6 Citizenship or place of organization NV Number Of : 7 Sole voting power : Shares 40,000 (Item 5) Beneficially Shared voting power : 8 Owned None :9 By Each Sole dispositive power Reporting 40,000 (Item 5) :10 Shared dispositive power Person With None 11 Aggregate amount beneficially owned by each reporting person 40,000 (Item 5) 12 Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS) 13 Percent of class represented by amount in row (11)

0.16%

00-Private Foundation

Type of reporting person (SEE INSTRUCTIONS)

14

JSIP N	lo. 0393/R102					
1	Names of reporting persons I.R.S. identification nos. of above persons (entities only) MJG-IV Limited Partnership No. 13-3191826 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)					
	(b)					
3	Sec use only					
4	Source of funds (SEE INSTRUCTIONS)					
5	Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e)					
6	Citizenship or place of organization New York					
	Number Of	: 7	Sole voting power			
	Shares	:	25,000 (Item 5)			
	Beneficially	:				
	Owned					
	By Each					
	Reporting					
	Person					
	With					