

BLACKROCK APEX MUNICIPAL FUND INC  
Form N-Q  
May 28, 2009  
UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

**FORM N-Q**

**QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED  
MANAGEMENT INVESTMENT COMPANY**

Investment Company Act file number 811-05227

Name of Fund: BlackRock Apex Municipal Fund, Inc. (APX)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: Donald C. Burke, Chief Executive Officer, BlackRock Apex Municipal Fund, Inc., 800 Scudders Mill Road, Plainsboro, NJ, 08536. Mailing address: P.O. Box 9011, Princeton, NJ, 08543-9011

Registrant's telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 06/30/2009

Date of reporting period: 03/31/2009

Item 1 – Schedule of Investments

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**BlackRock Apex Municipal Fund, Inc.**

Schedule of Investments March 31, 2009 (Unaudited)

(Percentages shown are based on Net Assets)

State	Municipal Bonds	Par (000)	Value
<b>Alabama - 0.6%</b>	Jefferson County, Alabama, Limited Obligation School Warrants, Series A, 5%, 1/01/10	\$ 475	\$ 387,590
	Tuscaloosa, Alabama, Special Care Facilities Financing Authority, Residential Care Facility Revenue Bonds (Capstone Village, Inc. Project), Series A, 5.875%, 8/01/36 (a)(b)	1,255	538,006
			<u>925,596</u>
<b>Alaska - 1.1%</b>	Alaska Industrial Development and Export Authority Revenue Bonds (Williams Lynxs Alaska Cargoport), AMT, 8%, 5/01/23	2,000	1,618,720
<b>Arizona - 3.8%</b>	Maricopa County, Arizona, IDA, Education Revenue Bonds (Arizona Charter Schools Project 1), Series A, 6.625%, 7/01/20	1,100	822,184
	Maricopa County, Arizona, IDA, M/F Housing Revenue Bonds (Sun King Apartments Project), Series A, 6%, 11/01/10	20	19,625
	Maricopa County, Arizona, IDA, M/F Housing Revenue Bonds (Sun King Apartments Project), Series A, 6.75%, 5/01/31	1,020	706,258
	Phoenix, Arizona, IDA, Airport Facility, Revenue Refunding Bonds (America West Airlines, Inc. Project), AMT, 6.30%, 4/01/23	2,950	1,695,365
	Pima County, Arizona, IDA, Education Revenue Bonds (Arizona Charter Schools Project), Series E, 7.25%, 7/01/31	960	758,698
	Salt Verde Financial Corp., Arizona, Senior Gas Revenue Bonds, 5%, 12/01/32	1,950	1,188,408
	Salt Verde Financial Corp., Arizona, Senior Gas Revenue Bonds, 5%, 12/01/37	230	134,729
	Yavapai County, Arizona, IDA, Hospital Facility Revenue Bonds (Yavapai Regional Medical Center), Series A, 6%, 8/01/33	500	381,370
		<u>5,706,637</u>	
<b>California - 2.5%</b>	Fontana, California, Special Tax, Refunding (Community Facilities District Number 22 - Sierra), 6%, 9/01/34	1,000	737,990
	San Jose, California, Airport Revenue Refunding Bonds, AMT, Series A, 5.50%, 3/01/32 (c)	2,220	1,954,777
	Southern California Public Power Authority, Natural Gas Project Number 1 Revenue Bonds, Series A, 5%, 11/01/29	1,435	976,647
		<u>3,669,414</u>	
<b>Colorado - 4.2%</b>	Colorado Health Facilities Authority, Revenue Refunding Bonds (Christian Living Communities Project), Series A,	450	340,452

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**Portfolio Abbreviations**

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To simplify the listings of portfolio holdings in the Schedule of Investments, the names and descriptions of many of the securities have been abbreviated according to the list below.

<b>AMT</b>	Alternative Minimum Tax (subject to)
<b>CABS</b>	Capital Appreciation Bonds
<b>EDA</b>	Economic Development Authority
<b>GO</b>	General Obligation Bonds
<b>HDA</b>	Housing Development Authority
<b>IDA</b>	Industrial Development Authority
<b>IDR</b>	Industrial Development Revenue Bonds
<b>M/F</b>	Multi-Family
<b>PCR</b>	Pollution Control Revenue Bonds
<b>VRDN</b>	Variable Rate Demand Notes

**BlackRock Apex Municipal Fund, Inc.**

Schedule of Investments March 31, 2009 (Unaudited)

(Percentages shown are based on Net Assets)

State	Municipal Bonds	Par (000)	Value
	Elk Valley, Colorado, Public Improvement Revenue Bonds (Public Improvement Fee), Series A, 7.30%, 9/01/22	\$ 2,800	\$ 2,430,792
	North Range Metropolitan District Number 1, Colorado, GO, 7.25%, 12/15/11 (d)	1,235	1,408,715
	Plaza Metropolitan District Number 1, Colorado, Tax Allocation Revenue Bonds (Public Improvement Fees), 8%, 12/01/25	2,000	1,698,140
	Plaza Metropolitan District Number 1, Colorado, Tax Allocation Revenue Bonds (Public Improvement Fees), 8.125%, 12/01/25	500	412,055
			6,290,154
<b>Connecticut - 0.5%</b>	Connecticut State Development Authority, Airport Facility Revenue Bonds (Learjet, Inc. Project), AMT, 7.95%, 4/01/26	490	419,082
	Mashantucket Western Pequot Tribe, Connecticut, Revenue Refunding Bonds, Sub-Series A, 5.50%, 9/01/36	615	290,624
			709,706
<b>Florida - 10.4%</b>	Capital Region Community Development District, Florida, Special Assessment Revenue Bonds, Series A, 7%, 5/01/39	645	449,210
	Halifax Hospital Medical Center, Florida, Hospital Revenue Refunding Bonds, Series A, 5%, 6/01/38	840	578,609
	Hillsborough County, Florida, IDA, Exempt Facilities Revenue Bonds (National Gypsum Company), AMT, Series A, 7.125%, 4/01/30	2,500	1,176,825
	Hillsborough County, Florida, IDA, Exempt Facilities Revenue Bonds (National Gypsum Company), AMT, Series B, 7.125%, 4/01/30	1,060	498,974
	Jacksonville, Florida, Economic Development Commission, Health Care Facilities, Revenue Refunding Bonds (Florida Proton Therapy Institute), Series A, 6%, 9/01/17	915	773,980
	Jacksonville, Florida, Economic Development Commission, IDR (Gerdau Ameristeel US, Inc.), AMT, 5.30%, 5/01/37	900	400,941
	Lakewood Ranch, Florida, Community Development District Number 5, Special Assessment Revenue Refunding Bonds, Series A, 6.70%, 5/01/11 (d)	725	798,580
	Lee County, Florida, IDA, IDR (Lee Charter Foundation), Series A, 5.375%, 6/15/37	1,810	1,008,315
	Midtown Miami, Florida, Community Development District, Special Assessment Revenue Bonds, Series A, 6%, 5/01/24	1,430	1,008,079
	Midtown Miami, Florida, Community Development District, Special Assessment Revenue Bonds, Series A,	1,350	851,486

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6.25%, 5/01/37

Orlando, Florida, Urban Community Development  
District, Capital Improvement Special Assessment  
Bonds, Series A, 6.95%, 5/01/11 (d)

1,405

1,555,040

Santa Rosa Bay Bridge Authority, Florida, Revenue  
Bonds, 6.25%, 7/01/28

2,140

1,327,677

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**BlackRock Apex Municipal Fund, Inc.**

Schedule of Investments March 31, 2009 (Unaudited)

(Percentages shown are based on Net Assets)

State	Municipal Bonds	Par (000)	Value
	Sarasota County, Florida, Health Facilities Authority, Retirement Facility Revenue Refunding Bonds (Village on the Isle Project), 5.50%, 1/01/27	\$ 590	\$ 398,769
	Sarasota County, Florida, Health Facilities Authority, Retirement Facility Revenue Refunding Bonds (Village on the Isle Project), 5.50%, 1/01/32	550	343,189
	Sumter Landing Community Development District, Florida, Recreational Revenue Bonds, Sub-Series B, 5.70%, 10/01/38	1,645	1,007,085
	Tampa Palms, Florida, Open Space and Transportation Community Development District Revenue Bonds, Capital Improvement (Richmond Place Project), 7.50%, 5/01/18	2,235	2,088,585
	Tolomato Community Development District, Florida, Special Assessment Bonds, 6.65%, 5/01/40	1,850	1,231,508
			15,496,852
<b>Georgia - 2.0%</b>	Atlanta, Georgia, Tax Allocation Bonds (Princeton Lakes Project), 5.50%, 1/01/31	395	258,808
	Clayton County, Georgia, Tax Allocation Bonds (Ellenwood Project), 7.50%, 7/01/33	1,640	1,365,366
	Main Street Natural Gas, Inc., Georgia, Gas Project Revenue Bonds, Series A, 6.375%, 7/15/38 (a)(b)	650	201,500
	Rockdale County, Georgia, Development Authority Revenue Bonds (Visy Paper Project), AMT, Series A, 6.125%, 1/01/34	1,680	1,088,472
			2,914,146
<b>Illinois - 5.2%</b>	Chicago, Illinois, O Hare International Airport, Special Facility Revenue Refunding Bonds (American Airlines, Inc. Project), 5.50%, 12/01/30	2,860	1,037,494
	Illinois State Finance Authority Revenue Bonds (Clare At Water Tower Project), Series A, 6.125%, 5/15/38	2,050	1,004,582
	Illinois State Finance Authority Revenue Bonds (Landing At Plymouth Place Project), Series A, 6%, 5/15/37	430	268,191
	Illinois State Finance Authority Revenue Bonds (Monarch Landing, Inc. Project), Series A, 7%, 12/01/37	575	342,895
	Illinois State Finance Authority Revenue Bonds (Primary Health Care Centers Program), 6.60%, 7/01/24	490	361,042
	Illinois State Finance Authority Revenue Bonds (Rush University Medical Center Obligated Group Project), Series A, 7.25%, 11/01/30	2,000	2,037,100
	Lincolnshire, Illinois, Special Service Area Number 1, Special Tax Bonds (Sedgebrook Project), 6.25%, 3/01/34	755	470,493
	Lombard, Illinois, Public Facilities Corporation, First Tier Revenue Bonds (Conference Center and Hotel), Series A-1, 7.125%, 1/01/36	2,400	1,582,872



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State	Municipal Bonds	Par (000)	Value
	Village of Wheeling, Illinois, Revenue Bonds (North Milwaukee/Lake-Cook Tax Increment Financing (TIF) Redevelopment Project), 6%, 1/01/25	\$ 760	\$ 571,414
			7,676,083
<b>Indiana - 1.8%</b>	Indiana Health and Educational Facilities Financing Authority, Hospital Revenue Bonds (Community Foundation of Northwest Indiana), 5.50%, 3/01/37	1,985	1,490,139
	Vanderburgh County, Indiana, Redevelopment Commission, Redevelopment District Tax Allocation Bonds, 5.25%, 2/01/31	820	632,614
	Vigo County, Indiana, Hospital Authority Revenue Bonds (Union Hospital, Inc.), 5.70%, 9/01/37	440	283,721
	Vigo County, Indiana, Hospital Authority Revenue Bonds (Union Hospital, Inc.), 5.75%, 9/01/42	545	340,222
			2,746,696
<b>Louisiana - 2.5%</b>	Louisiana Local Government Environmental Facilities and Community Development Authority Revenue Bonds (Westlake Chemical Corporation), 6.75%, 11/01/32	2,000	1,291,320
	Louisiana Public Facilities Authority, Hospital Revenue Bonds (Franciscan Missionaries of Our Lady Health System, Inc.), Series A, 5.25%, 8/15/36	1,300	1,066,273
	Saint John Baptist Parish, Louisiana, Revenue Bonds (Marathon Oil Corporation), Series A, 5.125%, 6/01/37	2,050	1,422,967
			3,780,560
<b>Maryland - 1.0%</b>	Baltimore, Maryland, Convention Center Hotel Revenue Bonds, Sub-Series B, 5.875%, 9/01/39	385	210,587
	Maryland State Energy Financing Administration, Limited Obligation Revenue Bonds (Cogeneration-AES Warrior Run), AMT, 7.40%, 9/01/19	1,500	1,122,630
	Maryland State Health and Higher Educational Facilities Authority Revenue Bonds (Washington Christian Academy), 5.50%, 7/01/38	410	208,899
			1,542,116
<b>Massachusetts - 2.9%</b>	Massachusetts State Development Finance Agency, First Mortgage Revenue Bonds (Overlook Communities, Inc.), Series A, 6.25%, 7/01/34	1,845	1,209,268
	Massachusetts State Development Finance Agency, Revenue Refunding Bonds (Eastern Nazarene College), 5.625%, 4/01/19	1,245	1,020,203
	Massachusetts State Health and Educational Facilities Authority Revenue Bonds (Jordan Hospital), Series E, 6.75%, 10/01/33	850	606,076



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Massachusetts State Health and Educational Facilities Authority, Revenue Refunding Bonds (Bay Cove Human Services Issue), Series A, 5.90%, 4/01/28	820	567,661
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State	Municipal Bonds	Par (000)	Value
	Massachusetts State Health and Educational Facilities Authority, Revenue Refunding Bonds (Milton Hospital), Series, 5.50%, 7/01/16	\$ 500	\$ 397,485
	Massachusetts State Industrial Finance Agency Revenue Bonds, Sewer Facility (Resource Control Composting), AMT, 9.25%, 6/01/10	500	502,375
			<u>4,303,068</u>
<b>Michigan - 2.6%</b>	Advanced Technology Academy, Michigan, Revenue Bonds, 6%, 11/01/37	625	431,087
	Monroe County, Michigan, Hospital Financing Authority, Hospital Revenue Refunding Bonds (Mercy Memorial Hospital Corporation), 5.50%, 6/01/35	1,260	720,758
	Royal Oak, Michigan, Hospital Finance Authority, Hospital Revenue Refunding Bonds (William Beaumont Hospital), 8.25%, 9/01/39	2,575	2,741,062
			<u>3,892,907</u>
<b>Missouri - 0.5%</b>	Kansas City, Missouri, IDA, First Mortgage Health Facilities Revenue Bonds (Bishop Spencer Place), Series A, 6.50%, 1/01/35	1,000	682,190
<b>Nevada - 0.6%</b>	Clark County, Nevada, IDR (Nevada Power Company Project), AMT, Series A, 5.60%, 10/01/30	955	647,901
	Clark County, Nevada, Improvement District Number 142, Special Assessment Bonds, 6.375%, 8/01/23	400	288,220
			<u>936,121</u>
<b>New Hampshire - 0.4%</b>	New Hampshire Health and Education Facilities Authority, Hospital Revenue Bonds (Catholic Medical Center), 5%, 7/01/36	835	555,359
<b>New Jersey - 9.3%</b>	Camden County, New Jersey, Pollution Control Financing Authority, Solid Waste Resource Recovery, Revenue Refunding Bonds, AMT, Series A, 7.50%, 12/01/10	6,000	5,948,460
	New Jersey EDA, Cigarette Tax Revenue Bonds, 5.50%, 6/15/24	2,170	1,692,535
	New Jersey EDA, IDR, Refunding (Newark Airport Marriott Hotel), 7%, 10/01/14	1,500	1,342,785
	New Jersey EDA, Special Facility Revenue Bonds (Continental Airlines, Inc. Project), AMT, 6.625%, 9/15/12	3,050	2,547,787
	New Jersey EDA, Special Facility Revenue Bonds (Continental Airlines, Inc. Project), AMT, 6.25%, 9/15/29	1,000	565,420
		1,870	52,734

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New Jersey Health Care Facilities Financing Authority  
Revenue Bonds (Pascack Valley Hospital Association),  
6.625%, 7/01/36 (a)(b)

New Jersey Health Care Facilities Financing Authority,  
Revenue Refunding Bonds (Saint Joseph's Healthcare  
System), 6.625%, 7/01/38

1,680

1,207,416

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**BlackRock Apex Municipal Fund, Inc.**

Schedule of Investments March 31, 2009 (Unaudited)

(Percentages shown are based on Net Assets)

State	Municipal Bonds	Par (000)	Value
	New Jersey State Transportation Trust Fund Authority, Transportation System Revenue Bonds, CABS, Series C, 5.051%, 12/15/35 (b)(e)	\$ 2,760	\$ 506,570
			13,863,707
<b>New Mexico - 3.3%</b>	Farmington, New Mexico, PCR, Refunding (Tucson Electric Power Company - San Juan Project), Series A, 6.95%, 10/01/20	5,000	4,926,350
<b>New York - 4.8%</b>	Dutchess County, New York, IDA, Civic Facility Revenue Bonds (Saint Francis Hospital), Series B, 7.50%, 3/01/29	1,000	881,280
	Metropolitan Transportation Authority, New York, Revenue Bonds, Series C, 6.50%, 11/15/28	2,000	2,139,240
	New York City, New York, City IDA, Civic Facility Revenue Bonds, Series C, 6.80%, 6/01/28	350	333,431
	New York City, New York, City IDA, Civic Facility Revenue Bonds (Special Needs Facility Pooled Program), Series C-1, 6.50%, 7/01/24	830	641,034
	New York City, New York, City IDA, Special Facility Revenue Bonds (American Airlines, Inc. - JFK International Airport), AMT, 8%, 8/01/28	720	509,508
	New York City, New York, City IDA, Special Facility Revenue Bonds (British Airways Plc Project), AMT, 7.625%, 12/01/32	1,730	1,058,916
	New York Liberty Development Corporation Revenue Bonds (National Sports Museum Project), Series A, 6.125%, 2/15/19 (a)(b)	630	630
	New York State Dormitory Authority, Non-State Supported Debt, Revenue Refunding Bonds (New York University Hospital Center), Series A, 5%, 7/01/20	2,040	1,506,173
			7,070,212
<b>North Carolina - 1.7%</b>	North Carolina Medical Care Commission, Health Care Facilities, First Mortgage Revenue Refunding Bonds (Deerfield Episcopal Project), Series A, 6.125%, 11/01/38	3,230	2,511,487
<b>Ohio - 3.0%</b>	Buckeye Tobacco Settlement Financing Authority, Ohio, Tobacco Settlement Asset-Backed Bonds, Series A-2, 5.125%, 6/01/24	4,025	2,873,125
	Buckeye Tobacco Settlement Financing Authority, Ohio, Tobacco Settlement Asset-Backed Bonds, Series A-2, 6.50%, 6/01/47	2,685	1,575,316
			4,448,441
<b>Pennsylvania - 8.0%</b>		1,160	831,360

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Bucks County, Pennsylvania, IDA, Retirement Community Revenue Bonds (Ann's Choice, Inc.), Series A, 6.125%, 1/01/25		
Chester County, Pennsylvania, Health and Education Facilities Authority, Senior Living Revenue Refunding Bonds (Jenners Pond, Inc. Project), 7.625%, 7/01/12 (d)	1,750	2,115,470
Harrisburg, Pennsylvania, Authority, University Revenue Bonds (Harrisburg University of Science), Series B, 6%, 9/01/36	600	438,048
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**BlackRock Apex Municipal Fund, Inc.**

Schedule of Investments March 31, 2009 (Unaudited)

(Percentages shown are based on Net Assets)

State	Municipal Bonds	Par (000)	Value
	Lancaster County, Pennsylvania, Hospital Authority Revenue Bonds (Brethren Village Project), Series A, 6.25%, 7/01/26	\$ 475	\$ 395,551
	Lancaster County, Pennsylvania, Hospital Authority Revenue Bonds (Brethren Village Project), Series A, 6.50%, 7/01/40	410	317,377
	Montgomery County, Pennsylvania, IDA, Revenue Bonds (Whitemarsh Continuing Care Project), 6.25%, 2/01/35	1,700	1,022,159
	Pennsylvania Economic Development Financing Authority, Exempt Facilities Revenue Bonds (Reliant Energy), AMT, Series B, 6.75%, 12/01/36	1,940	1,635,439
	Philadelphia, Pennsylvania, Authority for IDR (Air Cargo), AMT, Series A, 7.50%, 1/01/25	1,600	1,305,696
	Philadelphia, Pennsylvania, Authority for IDR, Commercial Development, 7.75%, 12/01/17	4,460	3,778,824
			<u>11,839,924</u>
<b>Rhode Island - 0.8%</b>	Central Falls, Rhode Island, Detention Facility Corporation, Revenue Refunding Bonds, 7.25%, 7/15/35	1,750	1,183,385
<b>South Carolina - 2.8%</b>	Connector 2000 Association, Inc., South Carolina, Toll Road and Capital Appreciation Revenue Bonds, Senior-Series B, 8.72%, 1/01/14 (e)	1,075	581,596
	South Carolina Housing Finance and Development Authority, Mortgage Revenue Refunding Bonds, AMT, Series A-2, 5.15%, 7/01/37 (c)	4,000	3,554,480
			<u>4,136,076</u>
<b>Tennessee - 1.0%</b>	Shelby County, Tennessee, Health, Educational and Housing Facilities Board Revenue Bonds (Germantown Village), 6.25%, 12/01/34	245	157,155
	Shelby County, Tennessee, Health, Educational and Housing Facilities Board Revenue Bonds (Germantown Village), Series A, 7.25%, 12/01/34	1,800	1,317,672
			<u>1,474,827</u>
<b>Texas - 6.0%</b>	Brazos River Authority, Texas, PCR, Refunding (TXU Energy Company LLC Project), AMT, Series A, 7.70%, 4/01/33	2,530	1,288,428
	Brazos River Authority, Texas, PCR, Refunding (TXU Energy Company LLC Project), AMT, Series C, 5.75%, 5/01/36	1,475	908,275
	Danbury, Texas, Higher Education Authority Revenue Bonds (A.W. Brown-Fellowship Charter School), Series A, 5.125%, 8/15/36 (f)	1,000	686,620
		1,110	1,154,389

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Harris County, Texas, Health Facilities Development Corporation, Hospital Revenue Refunding Bonds (Memorial Hermann Healthcare System), Series B, 7.25%, 12/01/35

Houston, Texas, Airport System, Special Facilities Revenue Bonds (Continental Airlines), AMT, Series E, 6.75%, 7/01/21	1,865	1,258,707
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North Texas Tollway Authority, System Revenue Refunding Bonds, Second Tier, Series F, 6.125%, 1/01/31	2,250	2,162,318
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**BlackRock Apex Municipal Fund, Inc.**

Schedule of Investments March 31, 2009 (Unaudited)

(Percentages shown are based on Net Assets)

State	Municipal Bonds	Par (000)	Value
	Texas State Public Financing Authority, Charter School Financing Corporation, Revenue Refunding Bonds (KIPP, Inc.), Series A, 5%, 2/15/28 (f)	\$ 2,250	\$ 1,409,288
			8,868,025
<b>Utah - 1.5%</b>	Carbon County, Utah, Solid Waste Disposal, Revenue Refunding Bonds (Laidlaw Environmental), AMT, Series A, 7.45%, 7/01/17	2,240	2,228,755
<b>Virginia - 1.6%</b>	Dulles Town Center, Virginia, Community Development Authority, Special Assessment Tax (Dulles Town Center Project), 6.25%, 3/01/26	2,385	1,692,038
	Tobacco Settlement Financing Corporation of Virginia, Revenue Refunding Bonds, Senior Series B-1, 5%, 6/01/47	1,250	633,325
			2,325,363
<b>West Virginia - 0.6%</b>	Princeton, West Virginia, Hospital Revenue Refunding Bonds (Community Hospital Association, Inc. Project), 6.20%, 5/01/13	965	891,506
<b>Wisconsin - 0.7%</b>	Wisconsin State Health and Educational Facilities Authority Revenue Bonds (New Castle Place Project), Series A, 7%, 12/01/31	1,320	978,212
<b>Wyoming - 1.8%</b>	Sweetwater County, Wyoming, Solid Waste Disposal, Revenue Refunding Bonds (FMC Corporation Project), AMT, 5.60%, 12/01/35	2,500	1,827,300
	Wyoming Municipal Power Agency, Power Supply Revenue Bonds, Series A, 5.375%, 1/01/42	1,000	908,120
			2,735,420
<b>Guam - 0.8%</b>	Guam Government Waterworks Authority, Water and Wastewater System, Revenue Refunding Bonds, 5.875%, 7/01/35	1,600	1,255,824
<b>U.S. Virgin Islands - 1.1%</b>	Virgin Islands Government Refinery Facilities, Revenue Refunding Bonds (Hovensa Coker Project), AMT, 6.50%, 7/01/21	2,100	1,628,928
	<b>Total Municipal Bonds - 91.4%</b>		135,812,767
	<b>Municipal Bonds Transferred to Tender Option Bond Trusts (g)</b>		



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<b>District of Columbia - 2.0%</b>	District of Columbia, Water and Sewer Authority, Public Utility Revenue Refunding Bonds, 6%, 10/01/35	2,730	2,888,349
<b>Florida - 3.6%</b>	Miami-Dade County, Florida, Aviation Revenue Refunding Bonds (Miami International Airport), AMT, Series A, 5.25%, 10/01/33 (h)	6,130	5,408,193
<b>Virginia - 3.8%</b>	Virginia State, HDA, Commonwealth Mortgage Revenue Bonds, Series H, Sub-Series H-1, 5.375%, 7/01/36 (i)	5,710	5,609,276
<b>Total Municipal Bonds Transferred to Tender Option Bond Trusts - 9.4%</b>			11,017,469
<b>Total Long-Term Investments (Cost - \$186,867,374) - 100.8%</b>			149,718,585

**BlackRock Apex Municipal Fund, Inc.**

Schedule of Investments March 31, 2009 (Unaudited)

(Percentages shown are based on Net Assets)

	Short-Term Securities	Par (000)	Value
<b>Mississippi - 0.7%</b>	Mississippi Business Finance Corporation, Solid Waste Disposal Revenue Bonds (Waste Management, Inc. Project), VRDN, AMT, 6.875%, 3/01/10 (j)	\$ 1,000	\$ 1,001,010
			<b>Shares</b>
<b>Money Markets - 1.3%</b>	FFI Institutional Tax-Exempt Fund, 0.61% (k)(l)	2,000,000	2,000,000
	<b>Total Short-Term Securities (Cost - \$3,000,000) - 2.0%</b>		3,001,010
	<b>Total Investments (Cost - \$189,867,374*) - 102.8%</b>		152,719,595
	<b>Other Assets Less Liabilities - 2.1%</b>		3,145,871
	<b>Liability for Trust Certificates, Including Interest Expense and Fees Payable - (4.9)%</b>		(7,301,714)
	<b>Net Assets - 100.0%</b>		<b>\$ 148,563,752</b>

\* The cost and unrealized appreciation (depreciation) of investments as of March 31, 2009, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 182,720,828
Gross unrealized appreciation	\$ 1,887,241
Gross unrealized depreciation	(39,173,920)
Net unrealized depreciation	\$ (37,286,679)

- (a) Non-income producing security.
- (b) Issuer filed for bankruptcy and/or is in default of interest payments.
- (c) AMBAC Insured.
- (d) US government securities, held in escrow, are used to pay interest on this security as well as to retire the bond in full at the date indicated, typically at a premium to par.
- (e) Represents a zero-coupon bond. Rate shown reflects the current effective yield as of report date.
- (f) ACA Insured.
- (g) Securities represent underlying bonds transferred to a separate securitization trust established in a tender option bond transaction in which the Fund may have acquired the residual interest certificates. These securities serve as collateral in a financing transaction.

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- (h) Assured Guaranty Insured.
- (i) MBIA Insured.
- (j) Rate shown is as of report date and maturity shown is the final maturity date or the date the principal owed can be recovered through demand.
- (k) Investments in companies considered to be an affiliate of the Fund, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, were as follows:

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<b>Affiliate</b>	<b>Net Activity</b>	<b>Income</b>
FFI Institutional Tax-Exempt Fund	(2,505,074)	\$ 24,606

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- (l) Represents the current yield as of report date.

**BlackRock Apex Municipal Fund, Inc.****Schedule of Investments March 31, 2009 (Unaudited)**

Effective July 1, 2008, the Fund adopted Financial Accounting Standards Board Statement of Financial Accounting Standards No. 157, Fair Value Measurements ( FAS 157 ). FAS 157 clarifies the definition of fair value, establishes a framework for measuring fair values and requires additional disclosures about the use of fair value measurements. Various inputs are used in determining the fair value of investments, which are as follows:

Level 1 - price quotations in active markets/exchanges for identical securities

Level 2 - other observable inputs (including, but not limited to: quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 - unobservable inputs based on the best information available in the circumstance, to the extent observable inputs are not available (including the Fund's own assumption used in determining the fair value of investments)

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. For information about the Fund's policy regarding valuation of investments and other significant accounting policies, please refer to the Fund's most recent financial statements as contained in its semi-annual report.

The following table summarizes the inputs used as of March 31, 2009 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Investments in Securities
	Assets
Level 1	\$ 2,000,000
Level 2	150,719,595
Level 3	
<b>Total</b>	<b>\$ 152,719,595</b>

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Item 2 – Controls and Procedures

- 2(a) – The registrant’s principal executive and principal financial officers or persons performing similar functions have concluded that the registrant’s disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the “1940 Act’)) are effective as of a date within 90 days of the filing of this report based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rule 13(a)-15(b) under the Securities Exchange Act of 1934, as amended.
- 2(b) – There were no changes in the registrant’s internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act) that occurred during the registrant’s last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant’s internal control over financial reporting.

Item 3 – Exhibits

Certifications – Attached hereto

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BlackRock Apex Municipal Fund, Inc.

By: /s/ Donald C. Burke  
Donald C. Burke  
Chief Executive Officer of  
BlackRock Apex Municipal Fund,  
Inc.

Date: May 20, 2009

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ Donald C. Burke  
Donald C. Burke  
Chief Executive Officer (principal  
executive officer) of  
BlackRock Apex Municipal Fund,  
Inc.

Date: May 20, 2009

By: /s/ Neal J. Andrews  
Neal J. Andrews  
Chief Financial Officer (principal  
financial officer) of  
BlackRock Apex Municipal Fund,  
Inc.

Date: May 20, 2009

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