BLACKROCK MUNIHOLDINGS INVESTMENT QUALITY FUND Form N-PX August 25, 2017

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-PX

ANNUAL REPORT OF PROXY VOTING RECORD OF REGISTERED MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number: 811-08349

Name of Fund: BlackRock MuniHoldings Investment Quality Fund (MFL)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John Perlowski, Chief Executive Officer, BlackRock MuniHoldings Investment Quality Fund, 55 East 52nd Street, New York City, NY 10055.

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

Date of fiscal year end: 08/31

Date of reporting period: 07/01/2016 06/30/2017

Item 1 Proxy Voting Record There were no matters relating to a portfolio security considered at any shareholder meeting held during the period ended June 30, 2017 with respect to which the registrant was entitled to vote.

ICA File Number: 811-08349 Reporting Period: 07/01/2016 - 06/30/2017 BlackRock MuniHoldings Investment Quality Fund

There is no proxy voting activity for the fund, as the fund did not hold any votable positions during the reporting period.

Pursuant to the requirements of 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 MuniHoldings Investment Quality Fund

By: /s/ John Perlowski John Perlowski Chief Executive Officer of BlackRock MuniHoldings Investment Quality Fund Date: August 25, 2017