CHESAPEAKE ENERGY CORP
Form PX14A6G
June 03, 2010

240.14a-103 Notice of Exempt Solicitation
U.S. Securities and Exchange Commission, Washington DC 20549

NAME OF REGISTRANT: The Green Century Equity Fund
NAME OF PERSON RELYING ON EXEMPTION: The Green Century Equity Fund
ADDRESS OF PERSON RELYING ON EXEMPTION: 114 State Street, Suite 200, Boston MA 02109

Shareholders encourage a "yes" vote for shareholder proposal number 8 "Shareholder Proposal Related to Hydraulic Fracturing" in the Chesapeake Energy Inc. proxy materials.

The Green Century Equity Fund (the "Proponent") believes that concerns about hydraulic fracturing operations pose substantial business risks salient to investors.

Hydraulic fracturing is a process that injects high volumes of water, chemicals and particles underground to create fractures through which gas can flow for collection. Fracturing operations require significant land use modification, disruptive new roads, the trucking of toxic chemicals through established communities, and heavy water use.1 According to the industry, fracturing has been used in roughly 90 percent of wells in operation today and 60-80 percent of new wells will require fracturing to remain viable.2

The Company's homepage and recent 10-K filed with the SEC show clearly how integral natural gas and unconventional production are to Chesapeake's operations.

- Website:"We're one of the largest producers of natural gas and the most active driller of new wells in the U.S. … the Company's operations are focused on discovering and developing unconventional natural gas and oil fields onshore in the U.S. Chesapeake owns leading positions in the Barnett, Fayetteville, Haynesville, Marcellus and Bossier natural gas shale plays and in the Eagle Ford, Granite Wash and various other unconventional oil plays."3
- 2009 10-K:"We have been developing expertise in horizontal drilling technology since shortly after our inception in 1989 and have focused almost exclusively on developing natural gas properties in the U.S. since 2000. We were one of the first companies to recognize the potential of unconventional natural gas properties, especially shales, in the U.S. during the early part of the prior decade. During the past five years, we have grown from the eighth-largest natural gas producer in the U.S. to the second-largest natural gas producer, in large part as a result of our success in finding and developing unconventional natural gas assets."4

Hydraulic fracturing operations have been linked to environmental risks that could have significant financial implications for the companies involved and are leading to increased regulatory scrutiny. Consequently, Chesapeake may face substantial business risks. While the Company does provide some information on its website, in our opinion it does not provide investors the necessary information on its hydraulic fracturing operations to determine whether it is successfully managing such risks.

Finally, the Proponent is not asking that Chesapeake or other companies stop hydraulic fracturing, but we do want to make sure that this drilling is done in a way that both minimizes its impact on drinking water and surrounding communities while also protecting the Company's bottom line.

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1 Polly Howells, Don't Frack With Our Water," In These Times, October 4, 2009, available at: http://www.inthesetimes.com/article/4909/dont_frack_with_our_water/
2 "Energy and Economic Benefits," Energy In Depth Fact Sheet, Available at: http://www.energyindepth.org/in-depth/frac-in-depth/energy-and-economic-benefits/, Accessed: March 15, 2010.
3 Chesapeake Energy homepage, accessed May 18, 2010, available at: http://www.chk.com/Pages/default.aspx

4 Chesapeake Energy SEC Form 10-K, for the fiscal year ending December 31, 2009, p.1 available at: http://www.sec.gov/Archives/edgar/data/895126/000119312510044784/d10k.htm

Therefore, we urge shareholders to vote "yes" on proposal number 8 to increase transparency and disclosure.

Sincerely,
Kristina Curtis
President
Green Century Equity Fund

This is not a solicitation of authority to vote your proxy. Please DO NOT send us your proxy card; the Green Century Equity Fund is not able to vote your proxies, nor does this communication contemplate such an event. The Proponent urges shareholders to vote YES on question number eight following the instruction provided on management's proxy mailing.

SHAREHOLDER RESPONSE TO THE OPPOSITION STATEMENT OF CHESAPEAKE ENERGY, INC. PROPOSAL # 8 RELATING TO HYDRAULIC FRACTURING

A proposal filed by the Green Century Equity Fund (the Proponent) is centered on two concepts essential to investor confidence: disclosure and the mitigation of risks.
Chesapeake Energy's opposition statement and primary arguments against this proposal are:

- The Company believes it is sufficiently and effectively regulated.
- The Company believes that hydraulic fracturing is safe with only minimal environmental impacts.
- The Company currently provides sufficient transparency and disclosure.

Below, the Proponent will address each of the three points. The Proponent contends that while Chesapeake Energy does present some information on its website, it fails to provide sufficient information for investors to determine if the Company is managing the potential business risks associated with fracturing operations. The Proponent contends the Company leaves out key information as described below:

THE COMPANY FAILS TO ADEQUATELY ADDRESS REGULATORY RISK:

While the Company gives the impression that fracturing operations are sufficiently and effectively regulated, the Proponent contends that hydraulic fracturing operations have been linked to environmental risks that could have significant financial implications for the companies involved and are leading to increased regulatory scrutiny.

While the Proponent does not believe that Chesapeake is providing sufficiently comprehensive transparency of the myriad risks it could face, it is pleased that the company is beginning to recognize the risks posed by potential regulation in its most recent 10-K filing with the SEC.

CHESAPEAKE CLAIM: "The Company's activities are subject to federal, state and local environmental laws and regulations. This includes regulations, by all states in which the Company operates, on well construction practices to ensure the protection of underground drinking water supply. The measures required by state regulatory agencies in the exploration and production of deep shale gas formations have been very effective in protecting drinking water aquifers from contamination through all stages of the drilling process, including hydraulic fracturing."
PROPONENT RESPONSE: If fracturing is so well regulated – why are many local, state and federal policymakers looking to enact new protections? As the use of hydraulic fracturing skyrockets, communities, regulators and investors are growing increasingly concerned about the environmental impacts of this process. Regulation at the state or federal level could have dramatic implications for all companies engaged in hydraulic fracturing by subjecting them to EPA oversight, potentially restricting areas in which hydraulic fracturing may be performed, limiting materials that may be used, or otherwise increasing costs. As a result, investors believe Chesapeake should be planning for increased

regulation and reporting on those steps.

REGULATORY RISK AT THE FEDERAL LEVEL:

- In June 2009, the Fracturing Responsibility and Awareness of Chemicals Act—or FRAC Act—was introduced in Congress to reinstate the EPA's authority—restricted by the 2005 Energy Policy Act-- to regulate hydraulic fracturing under the Safe Drinking Water Act.5 As of early May 2010, there were 56 co-sponsors in the House and 8 in the Senate.
- Industry recognition of Federal regulatory risk: According to the industry trade association, the regulation could have profound implications on the natural gas industry. "Anyone suggesting the FRAC Act will only have a minor impact on shale gas exploration efforts isn't quite shooting you straight…We're talking about the possibility of a significant disruption of shale gas activity across the board," said a spokesperson for Energy In Depth, which reportedly was formed to stave off federal controls over fracturing. 6 Given that the industry trade association acknowledges that the federal regulation on this issue will have a significant impact on operations, the Proponent believes it is critical for companies to transparently recognize this risk and disclose the potential impacts on their business.

REGULATORY RISK AT THE STATE LEVEL:

While federal investigation and intervention are gaining momentum, efforts to restrict or regulate hydraulic fracturing are also accelerating in the states where natural gas drilling and hydraulic fracturing occur.

- PENNSYLVANIA: In January 2010 the Governor of Pennsylvania announced new rules that would strengthen the state's regulation and increase protections on drinking water.7 Pennsylvania has embraced natural gas drilling much more than its neighbor, New York. As a result, these new regulations could result in increased operating costs, limit expansion and result in substantial business risks. Chesapeake has operations in the Pennsylvania portion of the Marcellus Shale; therefore the Company could face risks associated with these proposed regulations.
- NEW YORK: Potential for increased regulation in New York State—particularly the New York City drinking watershed—has emerged as a very contentious issue that has received substantial media coverage. The NY State Department of Environmental Conservation introduced draft guidelines for hydraulic fracturing in the Marcellus Shale that would increase reporting requirements and include a host of new provisions. But the EPA, New York City Mayor Michael Bloomberg, Manhattan Bureau President Scott Stringer and US Representative Maurice Hinchey (D-NY) have been vocal in their support for increased protections.
  - For example, the EPA stated the following in its comments on the New York State draft rules: "[W]e have concerns regarding potential impacts to human health and the environment that we believe warrant further scientific and regulatory analysis. Of particular concern to EPA are issues involving water supply, water quality, wastewater treatment operations, local and regional air quality, management of naturally occurring radioactive materials disturbed during drilling, cumulative environmental impacts, and the New York City watershed."8

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5 Senator Robert Casey, Jr, "Statement for the Record, Introduction of the Fracturing Responsibility and Awareness of Chemicals (FRAC) Act," June 9, 2009, available at: http://casey.senate.gov/newsroom/press/release/?id=3D78271C-E412-4B63-95B8-419E75CE2BB6

6 Mike Soraghan, "U.S. Fracking Regulations Won't Halt 'Shale Gale'—report," E&E News, March 10, 2010.

7 "Pennsylvania Plans More Gas Drilling Regulation," Reuters, January 28, 2010, available at: http://uk.reuters.com/article/idUKN2812147220100128

8 John Filippelli, "Comments on the New York State Department of Environmental Conservation September 2009 draft SGEIS for the Well Permit Issuance for Horizontal Drilling and High-Volume Hydraulic Fracturing to Develop the Marcellus Shale and Other Low-Permeability Gas Reservoirs," Environmental Protection Agency Region 2, available at: http://www.epa.gov/region2/spmm/Marcellus_dSGEIS_Comment_Letter_plus_Enclosure.pdf (emphasis added.)

Furthermore, this controversy has affected Chesapeake directly. In October 2009, in the face of massive public controversy about its plans to engage in hydraulic fracturing near the New York City watershed, Chesapeake announced it would voluntarily refrain from drilling within the boundary. 9 Chesapeake's CEO was quoted in the New York Times in October 2009:

"'We are not going to develop those leases, and we are not taking any more leases, and I don't think anybody else in the industry would dare to acquire leases in the New York City watershed,' Aubrey K. McClendon, the Chief Executive Officer at Chesapeake Energy, said in an interview on Monday in Fort Worth. 'Why go through the brain damage of that, when we have so many other opportunities?" '...How could any one well be so profitable that it would be worth damaging the New York City water system?'"10

The Proponent contends this move illustrates some regions may end up being off limits for development even without regulation.

COMPANY RECOGNITION OF REGULATORY RISK

A striking indication that future regulations have the potential to dramatically influence natural gas development using hydraulic fracturing was contained in the merger agreement between oil giant ExxonMobil and shale gas heavyweight XTO Energy. ExxonMobil protected its right to back out of the deal if state or federal regulations significantly restrict hydraulic fracturing, rendering it illegal or "commercially impracticable".11 This is a clear indication that the industry recognizes there is substantial risk associated with potentially increased regulation. As a result, the Proponent believes the Company should provide a more detailed discussion of such risks to help ensure that it is sufficiently prepared to respond to these regulatory changes.

EPA SCRUTINY

CHESAPEAKE CLAIM: "…in a 2004 study, the EPA concluded that the injection of hydraulic fracturing fluids into coalbed methane wells poses little or no risk to underground sources of drinking water. Coalbed methane wells are generally much shallower than the deep shale formations drilled by the Company… The EPA recently announced an additional study aimed specifically at hydraulic fracturing."

PROPONENT RESPONSE: We are pleased to see the Company recognizes that that the EPA has launched a new study at Congress's request, but contend the Company fails to recognize that this study could have significant business implications for the Company. Furthermore, it fails to address the fact that the findings of EPA's 2004 study have been controversial.

NEW EPA STUDY

In October 2009, a congressional committee report on the FY2009-2010 Interior-Environment Appropriations bill asked EPA to study the impacts of hydraulic fracturing. In March 2010, the EPA announced it will embark on a $1.9 million study to examine how hydraulic fracturing could impact drinking water.12 EPA's Environmental Engineering Committee of its Science Advisory Board held an open meeting in April 2010 to discuss and solicit public comment on the proposed study of hydraulic fracturing and its potential impacts on public health and the environment.13 The Proponent contends these new developments indicate that the EPA will be releasing new findings related to fracturing in the relatively near future which could have business implications for Chesapeake.

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9 Jad Mouawad and Clifford Krauss, "Gas Company Won't Drill in New York Watershed," The New York Times, October 27,2009http://www.nytimes.com/2009/10/28/business/energy-environment/28drill.html?_r=1&scp=4&sq=chesapeake%20and

10 Jad Mouawad and Clifford Krauss, "Gas Company Won't Drill in New York Watershed," The New York Times, October 27, 2009, available

at: http://www.nytimes.com/2009/10/28/business/energy-environment/28drill.html?_r=1&scp=4&sq=chesapeake%20and%20
11 Russell Gold, “Exxon Can Cancel Deal If Drilling Method is Restricted,” The Wall Street Journal, December 16, 2009, available at: http://online.wsj.com/article/SB10001424052748703581204574600111296148326.html?KEYWORDS=hydraulic+fracturing
12 Juliet Eilperin, “EPA to Study Natural-Gas Drilling’s Effect on Water,” Washington Post, March 19, 2010, available at: http://www.washingtonpost.com/wp-dyn/content/article/2010/03/18/AR2010031805091.html
13 Environmental Protection Agency, Notification of a Public Meeting of the Scientific Advisory Board, Federal Register: March 18, 2010 (Volume 75, Number 52), available at: http://edocket.access.gpo.gov/2010/2010-5956.htm

THE 2004 EPA REPORT IS CONTROVERSIAL

In April 2010, EPA Administrator Lisa Jackson described the 2004 report in the following way: “That study is widely cited as saying, 'see, that proves it's safe,' and I don't think that's a fair or accurate summation of that study. I think that's an overbroad reading. We need some data."14

Furthermore, according to EPA employee and whistleblower Weston Wilson, the EPA’s 2004 report was “scientifically unsound.” He continues, “While EPA’s report concludes this practice poses little or no threat to underground sources of drinking water, based on the available science and literature, EPA’s conclusions are unsupportable.”15 Others at the EPA contend the report’s conclusions have been over-applied. According to one of the study’s three main authors, Jeffrey Jollie, “It was never intended to be a broad, sweeping study.”16

For these reasons, the Proponent believes that the Company’s reliance on the 2004 study is misguided.

THE COMPANY DOES NOT PROVIDE SUFFICENT INFORMATION ON THE POTENTIAL ENVIRONMENTAL IMPACTS OF HYDRAULIC FRACTURING OPERATIONS

While the Company asserts that fracturing is safe, investors are troubled about emerging stories of environmental impact and contend Chesapeake may face substantial business risks as a result. As a result of current and future widespread use, the Proponent believes Chesapeake must increase transparency and disclosure to reflect its dependence on hydraulic fracturing.

CHESAPEAKE’S CLAIM: “…hydraulic fracture stimulation, commonly referred to as fracing, is a proven technology that poses no significant risks to the environment as used in the Company’s operations.”
PROPONENT RESPONSE: The term “hydraulic fracturing” can be read to have a narrow technical meaning—the fracturing of shales many thousands of feet below the earth’s surface through the use of fluids containing water, sand, and chemicals. The broader and more realistic term “fracturing operations” encompasses not only the technical definition of hydraulic fracturing deep below the ground but certainly also the movement, storage, and disposal of millions of gallons of water and thousands or tens of thousands of gallons of toxic chemicals (depending on the scale of the operation). These large amounts of material would not require such transport, storage, and disposal, with accompanying hazards to communities but for the use of hydraulic fracturing. As a result, investors contend companies that employ hydraulic fracturing and the attendant operational steps face a myriad of risks in the process.

CHESAPEAKE’S CLAIM: “The result is a highly sophisticated and carefully engineered process that creates a network of fractures that are within the targeted deep shale formation. The deep shale formations into which the Company drills typically lie one mile or more below the surface. This means that there are thousands of feet of rock isolating the targeted shale formation from the underground drinking water supply.”

PROPONENT RESPONSE: While the Company claims drinking water is protected, investors are concerned about the emergence of sources, including a report prepared by consultancy Hazen and Sawyer for the New York City Department of Environmental Protection (NYC DEP) to inform its position regarding New York State’s draft environmental impact statement on hydraulic fracturing, that illustrate both proven and alleged contamination incidents associated with combined drilling and hydraulic fracturing operations that could pose financial risks to the companies involved. According to the report:

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14 Tom Fowler, “EPA Administrator Defends Hydraulic Fracturing Study,” Houston Chronicle Blog post, April 28, 2010, available at: http://blogs.chron.com/newswatchenergy/archives/2010/04/epa_administrat.html

15 Letter from Weston Wilson to Senators Allard and Campbell and Representative DeGette (8 October 2004), available at: http://latimes.image2.trb.com/lanews/media/acrobat/2004-10/14647025.pdf. (Emphasis added.
16 Abrahm Lustgarten, “Drilling Process Causes Water Supply Alarm,” Denver Post, November 11, 2008, available at: http://www.denverpost.com/ci_11001835?source=rss

- "The migration of fracking chemicals and/or poor quality formation water into overlying groundwater, watershed streams, reservoirs and directly into tunnels is a reasonably foreseeable risk. The failures postulated above are not theoretical: they have occurred, at least with respect to impacts on streams and groundwater. A well-documented case occurred in Garfield County, Colorado in 2004 where natural gas was observed bubbling into the stream bed of West Divide Creek. In addition to natural gas, water sample analyses indicated ground water concentrations of benzene exceeded 200 micrograms per liter and surface water concentrations of benzene exceeded 90 micrograms per liter —90 times the NYSDEC Part 703 water quality limit for discharge of benzene to surface waters. Operator errors, in conjunction with the existence of a network of faults and fractures, led to significant quantities of formation fluids migrating vertically nearly 4,000 feet and horizontally over 2,000 feet, surfacing as a seep in West Divide Creek."
- "Groundwater contamination from drilling in the Marcellus shale formation was reported in early 2009 in Dimock, PA, where methane migrated thousands of feet from the production formation, contaminating the fresh-water aquifer and resulting in at least one explosion at the surface. Migrating methane gas has reportedly affected over a dozen water supply wells within a nine square mile area."
- "In addition to these cases, there have been numerous reports of smaller, localized contamination incidents that have resulted in well water being contaminated with brine, unidentified chemicals, toluene, sulfates and hydrocarbons. In most cases the exact cause or pathway of the contamination has not been pinpointed due to the difficulty in mapping complex subsurface features. The accumulating record of contamination events that are reportedly associated with, or in close proximity to hydrofracturing and natural gas well operations, suggest water quality impairments and impacts can be reasonably anticipated."17
- In light of these findings the NYC DEP concluded, "Based on the latest science and available technology, as well as the data and limited analysis presented by the New York State Department of Environmental Conservation (DEC), high-volume hydrofracking and horizontal drilling pose unacceptable threats to the unfiltered fresh water supply of nine million New Yorkers."18

THE COMPANY DOES NOT PROVIDE SUFFICENT DISCLOSURE FOR INVESTORS TO MANAGE RISK

While the Company contends it provides investors and the public with sufficient information, the Proponent believes the Company's existing disclosure, while providing important information in some areas, does not fully address the request of the proposal.

The Proposal requests a report summarizing three topics: 1) environmental impacts, 2) potential policies that the Company could adopt on safer practices and alternatives, above and beyond regulatory requirements to eliminate environmental damage, and 3) long and short-term risks to finances and operations associated with the environmental concerns about hydraulic fracturing. The Company has not substantially implemented any of these three requests, and has certainly not substantially implemented the totality of the request.

Although the Company provides some information on environmental impacts, the Proponent contends that the information provided does not sufficiently address key business risks associated with hydraulic fracturing. The Proponent commends the Company for its efforts to provide information on its website about some environmental issues and strategies, including the quantity of water used in fracturing, and ground water protection and air pollution control measures required by regulators, as well as the industry's efforts to control naturally occurring radiation. But in these disclosures, the Company neglects to report on issues that have emerged as the largest environmental challenges facing the Company and the sector— the fate of wastewater and the management of chemicals associated with hydraulic fracturing operations.

17 Hazen and Sawyer, Final Impact Assessment Report: Impact Assessment of Natural Gas Production in the NYC Water Supply Watershed, December 22, 2009, page 45-46, available at: http://www.nyc.gov/html/dep/pdf/natural_gas_drilling/12_23_2009_final_assessment_report.pdf (emphasis added, internal citations removed.)

18 "Department of Environmental Protection Calls for Prohibition on Drilling in the New York City Watershed," Press release, New York City Department of Environmental Protection, December 23, 2009, available at: http://www.nyc.gov/html/dep/html/press_releases/09-15pr.shtml (emphasis added.)

ENVIRONMENTAL IMPACTS

WATER-RELATED RISKS

Hydraulic fracturing is incredibly water intensive, with each well requiring one to three million gallons of water. Because about 60-80 percent of the water used in fracturing returns to the surface, fracturing produces vast quantities of waste water that must be stored, transported, treated and disposed of.19 This water contains toxic chemicals used in the fracturing process, but also picks up naturally occurring radiation, dissolved solids and heavy metals in the process. As a result, treatment and disposal pose numerous risks. The Proponent contends Chesapeake fails to provide shareholders comprehensive reporting on this key business risk. For example, the Proponent sees the following water-related risks which the Company does not currently report on in a meaningful way.

WATER CONTAMINATION LITIGATION

Litigation alleging impacts to groundwater sources is moving forward at other companies, increasing the risk that similar lawsuits may emerge with increasing frequency.

- Several years ago in Colorado, EnCana reached a reportedly multi-million dollar settlement and was fined $266,000 by regulators for a "failure to protect water bearing formations."20
- In Pennsylvania, a lawsuit has been filed by a landowner who, based on water quality measurements before and after fracturing, alleges his water has been contaminated by hydraulic fracturing. According to Reuters, if the suit is successful, it would be the first in America to prove that hydraulic fracturing causes water contamination.21
- In Dimock, Pennsylvania, more than a dozen families filed a lawsuit against Cabot Oil & Gas Corporation alleging damage to their health and property from drilling operations.22

WASTE WATER CAPACITY LIMITATIONS

Insufficient capacity for wastewater management may pose a sizeable constraint on the roll-out of hydraulic fracturing, especially in the Marcellus Shale, which poses particular risks for Chesapeake given its substantial holdings in the region.

- According to consultants to the City of New York, existing capacity is insufficient to deal with proposed drilling expansion: "Flowback water is not amenable to conventional wastewater treatment…The region currently has insufficient treatment and disposal capacity to handle the expected wastewater volumes."23
- According to media reports, similar analysis—with similar conclusions—has been performed by the New York State Department of Environmental Conservation. The agency is raising concerns regarding wastewater treatment and has said it will not issue drilling permits until the companies demonstrate they are capable of adequately disposing of waste water. 24

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19 Anthony Andrews et al, "Unconventional Gas Shales: Development, Technology and Policy Issues," Congressional Research Service, October 30, 2010, p. 33, available at: http://yosemite.epa.gov/sab/SABPRODUCT.NSF/A8D6431E6DF49503852576EF0047B08A/$File/Background+Doc-Unconv

20Abrahm Lustgarten, "Drilling Process Causes Water Supply Alarm," The Denver Post, November 11, 2008.

21 Jon Hurdle, "Pennsylvania Lawsuit Says Drilling Polluted Water," Reuters, November 9, 2009, available at: http://www.reuters.com/article/idUSTRE5A80PP20091109

22 Michael Rubinkam,"PA Residents Sue Gas Driller Over Polluted Wells, The Associated Press, November 20, 2009, available at: http://www.philly.com/philly/hp/news_update/70617687.html

23 Hazen and Sawyer, "Final Impact Assessment Report: Impact Assessment of Natural Gas Production in the New York City Water Supply Watershed", Prepared for the New York City Department of Environmental Protection, December 2009. ES-1. (emphasis added)

24 Joaquin Sapien and Sabrina Shankman, “Drilling Wastewater Disposal Options in N.Y. Report Have Problems of Their Own,” ProPublica, December 29, 2009, available at: http://www.propublica.org/feature/drill-wastewater-disposal-options-in-ny-report-have-problems-1229 posal-options-in-ny-report-have-problems-1229

- According to the same report, New York Department of Environmental Conservation officials stated, “Ultimately it is the responsibility of the energy companies -- not the regulators -- to solve the wastewater problem.”25 As a result, investors believe it is critically important for companies to transparently disclose plans to address waste water.
- In Pennsylvania, the limitations are similar. According to a report presented to the Society of Petroleum Engineers Eastern Regional Meeting, Pennsylvania is establishing new regulatory limits for industrial discharges of TDS (total dissolved solids). The report declares, “there are currently no facilities in the state that can treat flowback fluids to this level.”26

CHESAPEAKE CLAIM: “[T]he Company recycles the water used in certain of its fracing operations and, in the past year, has made significant progress in its research and development of new methods to advance those recycling efforts. In the Marcellus shale play, the Company recycles nearly all of the produced water generated from these wells.”

PROPONENT RESPONSE: Because water use has emerged as such a central business risk in the Marcellus, the Proponent is please to learn that the Company has made major advancements in this area. However, disclosure of company activities in this area have not kept pace with apparent progress. In our review of the March 2010 fact sheets, including Water Use in Deep Shale Gas Exploration, Marcellus Shale Hydraulic Fracturing, and the Water Use in Marcellus Deep Shale Gas Exploration, the Proponent was unable to find this information on water recycling in the Company’s existing disclosures. Therefore we encourage the company to make this information more easily available.

Furthermore, the Proponent contends other entities have raised concerns over Chesapeake’s existing disclosure regarding its water use. In a new report, “Murky Water: Corporate Water Reporting,” issued by Ceres with UBS Investment and Bloomberg LP on February 11, 2010, Chesapeake’s water reporting receives very low grades. The report assigns Chesapeake the second lowest score among its peers in the oil and gas sector, which itself is one of the most underperforming sectors analyzed. Chesapeake is identified as a laggard in its reporting in this area and received a zero for “water accounting”, which includes data on “water use, wastewater discharge, and supplier water use.” This zero and overall low score demonstrate that the Company’s water reporting is insufficient both in comparison to its sector peers and other companies that provide investors with more information.27

CHEMICALS MANAGEMENT RISKS

Huge amounts of chemicals are necessary for fracturing operations. The lack of full disclosure of these chemicals is one of the most contentious points of the issue and the focus of proposed regulations and legislation. The Proponent contends that while the company does provide some limited disclosure in this area, Chesapeake fails to adequately reflect the business risks associated with the management of the chemicals necessary for the fracturing process.

- These chemicals must be trucked to drill sites, stored on site, pumped into the ground, and disposed of properly, which often requires them to be piped or trucked away. The Company faces the potential for significant financial risks, including the potential for enforcement actions or even litigation if problems occur at any point in this process.

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25 Joaquin Sapien and Sabrina Shankman, “Drilling Wastewater Disposal Options in N.Y. Report Have Problems of Their Own,” ProPublica, December 29, 2009, available at: http://www.propublica.org/feature/drill-wastewater-disposal-options-in-ny-report-have-problems-1229

26 M.E. Blauch, Superior Well Services,Inc.; R.R. Myers, T. R. Moore; B.A. Lipinski, Exco - North Coast Energy, Inc.; N.A. Houston, Superior Well Services, Inc, “Marcellus Shale Post-Frac Flowback Waters - Where is All the Salt Coming from and What are the Implications?,” SPE Eastern Regional Meeting, 23-25 September 2009, Charleston, West Virginia, USA.

27“ Murky Waters? Corporate Reporting on Water Risk,” Ceres with UBS Investment and Bloomberg LP, February 11, 2010, available at: http://www.ceres.org/Document.Doc?id=547

- Huge amounts of chemicals are necessary for fracturing operations, heightening risk and potential business expenses. Hazen and Sawyer noted that well service companies and chemical suppliers providing data for New York State's draft supplemental generic environmental impact statement for natural gas extraction and hydraulic fracturing (dSGEIS) list 197 chemical products and 260 unique chemicals.28 To extrapolate the amount of chemicals produced through the life of a well, Hazen and Sawyer, the consultants to New York City, estimated that a four million gallon fracturing job, containing less than 0.5% chemicals, would be comprised of roughly 82 tons of chemicals. If the percentage of chemicals goes up to 1 or 2% of the mixture, the tonnages increase to 167 tons and 324 tons, respectively. They assumed the development of 6,000 wells in New York over 20 years, with mixtures containing 1% chemicals, and estimated that with these wells in action, 150 to 230 tons of chemicals would be used per day.29 Proper management and disposal of these chemicals can drive up operating costs.
- These toxic fluids have the potential to contaminate groundwater and the surrounding environment. Analysis done by the Environmental Working Group and The Endocrine Disruption Exchange, "found that at least 65 chemicals used by natural gas companies in Colorado are listed as hazardous under 6 major federal laws designed to protect Americans from toxic substances. If any one of these 65 chemicals were emitted or discharged from an industrial facility, reporting to the US EPA would be mandatory, and in most cases permits would require strict pollution limits and companies would be subject to specific cleanup standards. But because these same chemicals are used in natural gas drilling operations they are completely exempt from environmental reporting requirements, and their use is not controlled in any meaningful way."30

Finally, when produced water is filtered, a toxic sludge contaminated with chemicals and radioactive materials is produced and must be disposed of. According to media reports, the sludge produced in New York or Pennsylvania could need to be transported to a landfill that can accept such toxics, and may need to travel as far as Idaho or Washington because such facilities are limited.31

CHESAPEAKE CLAIM: "The fracing website …also provides a list and description of the classes of chemical additives used in the hydraulic fracturing process..."

PROPONENT RESPONSE: The Proponent contends that while the fracing website lists chemicals typically used, this disclosure reveals that some of the constituents may pose substantial health and environmental threats with significant business implications that are not disclosed. For example, the site states glutaraldehyde, a volatile toxic compound, which easily vaporizes and poses serious localized toxic air pollution concerns, is commonly used in fracturing operations. As a result, according to New York State's draft environmental impact statement on fracturing, based on likely concentrations of glutaraldehyde in production water, if a Company were to store its enormous volumes of production water in open impoundments, a fence 765 meters [836 yards] from the impoundment would be required to prevent exposures in excess of state air quality guidance.32 This could dramatically increase the amount of land demanded by fracturing operations and, accordingly, drive costs up substantially. Additional disclosure by the Company would be needed to identify which chemicals are used by Chesapeake Energy, Inc., and how they affect risks associated with the Company's operations.

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28 Hazen and Sawyer, "Final Impact Assessment Report: Impact Assessment of Natural Gas Production in the New York City Water Supply Watershed", Prepared for the New York City Department of Environmental Protection, December 2009, page 36.

29 Hazen and Sawyer, "Final Impact Assessment Report: Impact Assessment of Natural Gas Production in the New York City Water Supply Watershed", Prepared for the New York City Department of Environmental Protection, December 2009, page 34-35.

30 Dusty Horwitt, "Colorado's Chemical Injection," June 2008, available at: http://www.ewg.org/reports/injection

31 Abrahm Lustgarten, "Is New York's Marcellus Shale Too Hot to Handle?" ProPublica, November 9, 2009, available at: http://www.propublica.org/feature/is-the-marcellus-shale-too-hot-to-handle-1109

32 New York State Department of Environmental Conservation, “Draft Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solutions Mining Regulatory Program, “posted on September 30, 2009, available : http://www.dec.ny.gov/energy/58440.html

Furthermore, the site states that chemical additives make up only .5 percent of fracturing fluid. While the statement may be literally accurate, it is also misleading and underplays the associated risks because it fails to convey the enormous volumes of chemicals used to fracture wells. If a fracturing operation uses 3 million gallons of water—and some use much more—to fracture one well one time, that .5 percent means that the Company is using 15,000 gallons of chemicals.33 Often companies will fracture a well more than once.

INSUFFICIENT DISCLOSURE ON EFFORTS TO GO ABOVE AND BEYOND REGULATORY REQUIREMENTS

CHESAPEAKE CLAIM: "[T]he Company consistently observes best practices that are 'above and beyond regulatory requirements.'"

PROPONENT RESPONSE: The Proponent commends the Company for making this disclosure, but this statement fails to address the second request of the Proposal. Furthermore, the existing reporting by the Company fails to discuss potential policies that the Company could adopt above and beyond regulatory requirements to reduce or eliminate hazards to air, water and soil quality from fracturing, as requested by the second component of the Proponents' proposal. The Company's published information includes limited discussion of a few actions it is voluntarily taking, beyond regulatory expectations, with regard to air pollution, reducing the environmental footprint of drilling technologies, and noise control.

INSUFFICIENT DISCLOSURE ON LONG AND SHORT TERM BUSINESS RISKS

With regard to the third request of the Proposal, the Company fails to provide a satisfactory discussion of "other information regarding the scale, likelihood and/or impacts of potential material risks, short or long term, to the Company's finances or operations, due to environmental concerns regarding fracturing." Instead, the Company seems to take the position that the risks and future regulatory restrictions are few and unknown, even though the Company's own recent experiences provide ample evidence that environmental concerns actually could pose a serious impediment to the Company's future expansion and operations.

CONCLUSION:

The Proponent is concerned that its investments may be undermined by Company decision-making and policies that could fall behind public and regulatory expectations for environmental protection. The Proponent's proposal requests increased transparency. In the absence of meaningful disclosure, investors have no way of fully assessing the risks and rewards from investing in various companies in the energy sector, and are concerned about shocks to shareholder value. Shareholders need assurance that companies are candidly disclosing these risks and are adopting best management practices to minimize them.

Corporate policies for the management of environmental issues related to hydraulic fracturing may ultimately play a key role in determining each company's ability to maintain or expand its operations in this promising area of growth. The Proposal seeks information so shareholders can assess how the Company is addressing environmental challenges, and whether the Company is effectively positioned to seize the new market opportunities associated with natural gas development in light of the environmental challenges.

This is not a solicitation of authority to vote your proxy. Please DO NOT send us your proxy card; the Green Century Equity Fund is not able to vote your proxies, nor does this communication contemplate such an event. The Proponent urges shareholders to vote YES on question number eight following the instruction provided on the on the management's proxy mailing.

33 U.S. Geologic Survey, “Water Resources and Natural Gas Production from the Marcellus Shale”, Fact Sheet 2009-3032, May 2009, available at: http://md.water.usgs.gov/publications/fs-2009-3032/fs-2009-3032.pdf