

November 13, 2006

Commander Gustav Wulfkuhle
Enforcement Branch
Ninth Coast Guard District
1240 E. 9th Street
Cleveland, OH 44199

RE: Docket # CGD09-06-123

Dear Commander Wulfkuhle:

Openlands is a 43-year old conservation organization dedicated to protecting and enhancing open space in northeastern Illinois. Openlands and its affiliate, CorLands, have worked closely with the Lake County Forest Preserve District, the Illinois Department of Natural Resources and the Chicago Park District for many years to increase the quality and quantity of the protected lands. In line with our mission, we will also soon acquire and restore approximately one mile of ravine and lakefront property along Fort Sheridan. Openlands appreciates the opportunity to provide comments on the proposed rule to conduct live fire training exercises in 34 target areas throughout the Great Lakes.

Introduction

The Great Lakes are the largest surface fresh water system on earth, containing about 84 percent of the United States' fresh water supply and twenty-one percent for the world. Lake Michigan provides drinking water to millions of people just in the Greater Chicago region, with increasing demand to extend this invaluable resource to areas with rapid population growth.

The lakes support a multitude of economic activities. Businesses such as sport fishing and charter boats are critically dependant upon the beauty and bounty of the water to generate billions of dollars each year. According to the Coast Guard, over 600 commercial vessels and 5 million recreational boats are out on the lakes every year.

In addition to health and economics, the Great Lakes elevates the quality of life for the 30 million people that live near their coastlines. The lakes provide an outlet for recreation and reflection, drawing people from all walks of life to enjoy the water and vast expanse of beaches. The Great Lakes are also home to irreplaceable ecosystems that support rare and endangered species.

Despite the immense size of the lakes, they are sensitive to the effects of a wide range of chemicals and compounds, such as municipal and industrial wastes, agricultural runoff and atmospheric pollutants. These contaminants become more concentrated over time because the lakes are essentially closed systems. Less than one percent of the water in the lakes is renewed annually. The cumulative effect of these contaminants degrades the quality of the lakes and their aquatic habitats.

Since the Great Lakes are an essential part of the region's health, economy and wellbeing, we must carefully scrutinize plans that could alter their quality and nature. The studies that the Coast Guard relies upon are not sufficient to accurately demonstrate the impact of indefinite large scale live fire exercises on the lakes.

Coast Guard Proposal to Conduct Live Fire Exercises on the Great Lakes

The Coast Guard proposes to designate 34 permanent areas called "safety zones" throughout the Great Lakes to conduct approximately 60 live fire exercises each year. The Coast Guard anticipates training 56 units to operate M16 rifles and M-240 machine guns, which will be mounted to their vessels. The M-240 weapon fires approximately 600 rounds per minute. Its 7.62 mm bullets can travel up to 2 miles. The crews will use lead ammunition during exercises, and fire an estimated total of 3,000 bullets from both weapons per training session.

The Coast Guard commissioned CH2MHill of Boston to conduct an environmental study of the potential impact of the live fire exercises on the Great Lakes. The study, "Preliminary Health Risk Assessment for Proposed U.S. Coast Guard Weapons Training Exercises" was released in January 2006. By their conservative estimate, the Coast Guard would fire a maximum of 430,000 rounds into the lakes each year. CH2MHill bases its study on using all larger bullets (instead of a more likely mixture of M-240 and M16 ammunition) and assumes every bullet will break apart when it enters the lakes. According to the results of the study, the live fire exercises could potentially release about 7,000 pounds of lead into the lakes annually. (This is greater than the amount that Michigan and all of its industries emit, and is nearly double the lead that Ohio discharges into its surface waters in a year.) The study concluded there were no "elevated risks" to human health and affected ecosystems from the proposed live-fire exercises.

Environmental Analysis

Openlands recommends that the Coast Guard develop an Environmental Impact Statement (EIS) to adequately address potential contamination from the proposed live fire exercises. The current study performed by CH2MHill found that this step was unnecessary because the levels were beneath threshold limits to trigger EIS requirements. Notably, the numeric "screening quotient" score in the study for lead to be released into the lakes is a 0.96. A score above 1 represents a risk that requires further evaluation.

The decision not to draft an EIS when the environmental study indicates a 0.96 lead screening quotient is troubling for several reasons. The study does not integrate base-line contaminant levels in each area where the Coast Guard proposes to perform live fire exercises. With such a small margin, this alone could increase the lead levels beyond acceptable limits. Especially in areas that have known contamination, the Coast Guard should consider how the introduction of lead and other metals will combine with this baseline to create cumulative effects on human health and the environment. With these new figures, CH2MHill should recalculate the screening quotients.

In light of the fact that the live fire exercises could irreversibly contaminate the water supply for 84 percent of our population, the Coast Guard should more closely scrutinize how the lakes will

be permanently impacted by their program. The environmental study only projects lead contamination levels generated over a 5-year period even though the Coast Guard represented that it intends to conduct live fire exercises indefinitely. Neither the Coast Guard nor CH2MHill could estimate the shelf life of the M-240 or M16 weapons. Since lead that leaches into lakewater and accumulates in sediment will only increase in concentration over time, the study needs to include long term projections at least over a 20-year timespan. This is especially important since the cumulative lead levels are significant in the five-year forecast.

The proposal by the Coast Guard does not require long-term monitoring in areas where it plans to conduct live-fire exercises. The monitoring is necessary to ensure pollutants generated during the exercises do not exceed projected limits and threaten human health and the environment. The Coast Guard should specify how it will conduct this monitoring, and how often it will occur.

The environmental study does not consider how much lead will accumulate in areas where safety zones are situated in highly trafficked commercial fishing locations. Commercial fishermen on Lake Michigan and Lake Erie specifically commented that the zones were located over fishing hot spots. If lead is deposited in areas with highly concentrated fish populations, and the fish are sold for public consumption, it is unclear how the affected public will be at increased risk for lead contamination. Moreover, a condensed population of fish could indicate that a higher concentration of flora and fauna could be impacted by contaminants in that area.

The Coast Guard also failed to analyze the bioaccumulative effect of heavy metals on food chains in the lakes. The environmental study acknowledges that lead will likely “dissolve into the sediment port water or absorb to the surrounding sediment. Plants and animals that exist at the bottom of the food chain might ingest and be directly exposed to the metals in the sediment.” In addition to disproportionately affecting aquatic life that is higher on the food chain, lead is a known neurotoxin and carcinogen. It presents human health risks, including brain and kidney damage, especially to children.

The proposed rule ignores factors such as critical habitats and special-status species. The Coast Guard should evaluate how its live fire exercises will impact this fragile part of the lakes’ ecosystems. The study also does not account for migratory bird patterns or seasons.

Requirement to Complete an Environmental Impact Statement

Openlands encourages the Coast Guard to develop an EIS. The Coast Guard determined that the proposed rule is exempt from environmental review because the live fire proposal qualifies for a category exemption. Projects that qualify for the cat ex list are usually standard actions that are known to have no significant impact. The proposal to implement permanent live fire training throughout the Great Lakes Basin is a new action that has wide spread consequences. Without further study, the Coast Guard cannot accurately predict the effects on the environment and human health.

It is clear from the scope and impact of the proposed rule that the live fire exercises would instead qualify as a major federal action that significantly impacts the human or natural environment. The proposed rule is a major federal action in that it establishes 34 permanent live

fire ranges spanning the Great Lakes to be host to approximately 60 training sessions per year. The lead alone that will be scattered across the floor of the lakes will be almost double the levels released each year by either Michigan or Ohio.

The proposed rule also could significantly impact the human or natural environment. Federal courts have held a politically contentious proposal can in and of itself be a significant impact. The public outcry in response to the proposal is enough to trigger the EIS requirements. In addition, the environmental study presents lead levels that are sufficient cause for concern. The initial assessment by CH2MHill does not include baseline information or long-term projections, and fails to account for bioaccumulative effects and impacts to critical habitat and clustered ecosystems. The study, titled a “preliminary health risk assessment” is not sufficient to ensure that our great lakes are adequately protected. Since the proposed action squarely fits within the scope of an EIS, the Coast Guard needs to follow the associated procedures that are dictated by NEPA.

Environmental Alternatives

The Coast Guard has several opportunities to mitigate environmental impacts. In addition to addressing the above concerns in an EIS, it can minimize the number of safety zones necessary to effectively train its units. The designated areas should be at least 15 miles from shore in areas that are neither fishing hot spots nor home to critical habitats or fragile ecosystems.

The Coast Guard should also consider using “green bullets” as a lead-free alternative in its live fire training exercises. Frangible ammunition utilizes a bonded copper alternative that combines copper and tin. 7.62 mm and 3.08 mm products are already available for M-240 and M16 weapons. According to Sinterfire, a major manufacturer of frangible ammunition, the Navy has used this technology since 2002, and recently submitted a second contract to purchase an additional 20 million frangible 9mm bullets. Law enforcement has used this type of ammunition in training exercises for the last seven years. Major OEM manufacturers are buying about 100 million rounds per year for the last three or four years. In addition to eliminating lead contamination, the bullets also hold velocity for 300 yards. This smaller range would be sufficient for training exercises while greatly reducing the threat of a stray bullet hitting an unintended target.

One concern raised by the Coast Guard is that lead free primers are not as wholly reliable as their leaded counterparts. Even if a lead-based primer was utilized, the amount of airborne contamination would still be significantly less than the projected levels of lead contamination from spent rounds. In fact, the study conducted by CH2MHill only predicts lead levels resulting from rounds entering the water. If lead contamination can be substantially reduced by using frangible ammunition with leaded primers, this compromise would afford greater protection of our drinking water until better lead-free primers are developed.

Public Safety

The Coast Guard should generate studies of traffic patterns and density along well-traveled corridors throughout the Great Lakes Basin. Proposed safety zones should be moved at least 15

miles away from shore to better protect unsuspecting vessels from accidentally crossing into the path of the firing ranges. Training exercises should take place before April 15th and after November 15th each year. The Coast Guard should also use better methods of communication to warn commercial and recreational traffic.

Conclusion

The Coast Guard is the guardian of our waters. They have dedicated their time and experience to improve and enhance our beaches and to prevent oil spills and pollution. This proposed rule runs contrary to that long standing tradition. The Coast Guard should adhere to NEPA requirements by drafting an EIS to best protect our lakes and those that depend upon their waters. It should utilize readily available technology to reduce lead contamination, and conduct its exercises in locations that will be least impacted by this program. Irreparable damage potentially done to 84 percent of our water supply must be carefully balanced against a defined need for the scope and proposed implementation of this program.

Thank you for the opportunity to comment on the proposed rule. Openlands looks forward to seeing innovative solutions to the environmental and safety concerns raised in the public hearing process.

Sincerely,

Lenore Beyer-Clow
Policy Director
Openlands
25 E. Washington St. #1650
Chicago, IL 60602
312 863-6264
lbeyer-clow@openlands.org