# UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

CENTER FOR BIOLOGICAL DIVERSITY, a nonprofit corporation, 378 N. Main Ave. Tucson, AZ 85701	) ) ) )
Plaintiff,	) Case No.
V.	) )
PENNY PRITZKER, United States Secretary of Commerce 1401 Constitution Ave., NW Washington D.C. 20230	) ) COMPLAINT FOR ) DECLARATORY AND ) OTHER RELIEF )
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, 1401 Constitution Ave., NW Room 5128 Washington D.C. 20230	) ) ) ) )
Defendants.	) )

#### I. INTRODUCTION

- 1. Plaintiff Center for Biological Diversity ("the Center") brings this civil action for declaratory and injunctive relief against Penny Pritzker, Secretary of Commerce, and the United States National Oceanic and Atmospheric Administration ("NOAA") (collectively "Defendants"), regarding NOAA's decision to grant two exploratory licenses for mining in the deep ocean without analyzing the environmental effects of doing so.
- 2. Deep sea mining extracts minerals from the ocean floor, similar to mountaintop removal coal mining. The Clarion Clipperton Zone, the area at issue in the case, contains polymetallic nodules at water depths between four to five kilometers. These nodules contain metals including nickel, cobalt, copper and manganese.
- 3. Because of the novelty of deep seabed mining and the potentially severe environmental effects, diligence in analyzing and processing licenses and permits is especially critical. A close analogy to deep sea mining, strip mining on land, has had many ill effects on wildlife and human health. Similarly, deep seabed mineral mining could disrupt marine communities throughout the ocean.
- 4. To date, no commercial deep sea mining has occurred by any nation or corporation. However, deep sea mining is considered a frontier in natural resource exploitation and is attracting growing interest. Mining companies from all over the world have taken out exploration licenses on over 1.5 million square kilometers of the Pacific Ocean floor.
- 5. Potential environmental impacts are numerous. Mining vehicles can kick up sediment plumes, which can smother seafloor organisms. The tailings released by the vessels can cloud water and reduce photosynthesis and productivity in the affected area. Toxic heavy metals stirred up from the ocean floor can impact entire food chains; as an example,

accumulation of heavy metals in the ocean from other sources has resulted in contamination that lowers reproductive success in aquatic species. Light and noise from ships and vessels can disrupt seabird behavior and result in exhaustion or death, and vessel collisions risk harming whales and other marine mammals.

- 6. On February 29, 2012, NOAA published a notice and request for comments on the potential extension of Lockheed Martin Corporation's USA-1 and USA-4 exploration licenses and amended exploration plan in the Clarion Clipperton Zone of the Pacific Ocean under the Deep Seabed Hard Mineral Resources Act ("Deep Seabed Act"), 30 U.S.C. §§ 1401 *et seq.* The exploration plan covers Lockheed's activities for the next five years, including survey operations and analysis work. Plaintiff, the Center, submitted comments describing environmental concerns about deep sea exploration and mining on April 14, 2012, within the proper time frame.
- 7. On June 1, 2012, NOAA approved an extension of these licenses. In approving the extension of the licenses and amended exploration plan, NOAA did not acknowledge nor respond to the Center's comments that highlighted potential adverse effects to the environment and human health.
- 8. NOAA performed no environmental analysis in granting the license extensions, despite the statute's requirement that the issuance of an exploration license "shall be deemed to be a major Federal action significantly affecting the quality of the human environment for purposes of section 4332 of title 42 [National Environmental Protection Act ("NEPA")]." 30 U.S.C. § 1419(d). The statute also mandates that before the Administrator may approve a license for exploration, he must find in writing that the proposed exploration "cannot reasonably be expected to result in a significant adverse effect on the quality of the

environment, taking into account the analyses and information in any applicable environmental impact statement prepared pursuant to section 1419(c) or 1419(d) of this title." 30 U.S.C. § 1415(a).

- 9. The Center for Biological Diversity challenges NOAA's June 1, 2012, extension of Lockheed's USA-1 and USA-4 exploration licenses. Defendants violated the Deep Seabed Act, 30 U.S.C. §§ 1401 *et seq.*, and the Administrative Procedure Act ("APA"), 5 U.S.C. § 706, by failing to respond to Plaintiff's comments on the licenses, extending the licenses despite significant environmental impacts, and approving the license extensions' amended exploration plan without complying with the statute's requirement to conduct environmental analysis. Defendants violated NEPA, 40 U.S.C. §§ 4321 *et seq.*, and the APA, 5 U.S.C. § 706, by not completing the required environmental impact statement ("EIS"). NOAA's approval of Lockheed's extensions without environmental review, considering the existence of significant new information about the environmental impacts of deep sea mining, and the ecology of benthic ecosystems, is unlawful.
- 10. To remedy these violations of law set forth more fully herein, the Center seeks (1) a declaration that Defendants are violating federal law in all respects set forth herein; (2) an order vacating and setting aside the license extensions; and (3) an order remanding the decision to Defendants for full compliance with the Deep Seabed Act and NEPA.

#### II. JURISDICTION AND VENUE

11. This court has jurisdiction over this action pursuant to 28 U.S.C. § 1331 (federal question); 28 U.S.C. § 1346 (action against the United States); 28 U.S.C. § 1361 (action to compel an officer of the United States to perform his or her duty); 28 U.S.C. §§ 2201-02

(power to issue declaratory judgments in cases of actual controversy); and 5 U.S.C. §§ 702-706 (Administrative Procedure Act).

12. Venue is proper pursuant to 28 U.S.C. § 1391(e)(1) because Defendants reside in this district and a substantial part of the events or omissions giving rise to the claim occurred in this judicial district.

#### III. PARTIES

- 13. Plaintiff CENTER FOR BIOLOGICAL DIVERSITY ("the Center") is a nonprofit corporation that works through science, law, and policy to secure a future for all species, great or small, hovering on the brink of extinction. The Center is dedicated to the preservation, protection, and restoration of biodiversity and ecosystems throughout the world. The Center has over 50,000 members throughout the U.S. Members include people with aesthetic, professional, recreational, spiritual, educational, scientific, moral, and conservation interests in the species and habitats of the Clarion Clipperton Zone, which is located in the Pacific Ocean between Baja California and Hawaii. The Center has long been involved in efforts to protect the species and ecosystems of the Clarion Clipperton Zone to ensure the survival and recovery of imperiled marine mammals, birds, and other species that live, forage, breed, and migrate there.
- 14. Center members, staff, and board members use, enjoy, and benefit from healthy and diverse marine ecosystems in the Clarion Clipperton Zone. The Center has members that travel to the Clarion Clipperton Zone for wildlife observation, research, nature photography, aesthetic enjoyment, recreational, educational, and other activities. Members also have aesthetic, recreational, and educational interests in migratory animals who travel through the Clarion Clipperton Zone en route to Hawaii, California and Mexico. Members intend to visit

and enjoy the species, habitats, and ecosystems of the Clarion Clipperton Zone in the future. To ensure that these species and ecosystems continue to exist, the Center, its members, staff, and board have worked and plan to continue to work to protect and preserve the habitats necessary for survival and recovery of these species and ecosystems. The Center has a longstanding involvement in the conservation of endangered and threatened species in the Clarion Clipperton Zone—including blue, humpback, and fin whales, and hawksbill, leatherback, loggerhead turtles—and their habitats. In sum, the Center's members, staff, and board have strong aesthetic, recreational, moral, professional, conservation, education, and scientific interests in the species and ecosystems of the Clarion Clipperton Zone.

- 15. The ability of the Center's members to pursue these interests hinges not only on the well-being of the animals that live, feed, and breed in the Clarion Clipperton Zone, but also on the environment on which these species depend. Defendants' extension of Lockheed's exploration license harms these interests because deep sea mining exploration and recovery activities can degrade seafloor, surface, and water column ecosystems and disrupt bird, fish, and marine mammal behaviors—injuring and killing organisms from filter-feeding sea floor species to sperm whales. Defendants' failure to comply with federal law and the resulting harm to marine environment, including the harassment, disturbance, injury, and death of marine mammals and listed species that is likely to result from this failure, harms the Center's and its member's interests.
- 16. To protect the Plaintiff's and public's interests, the Center and other organizations submitted detailed comments to NOAA on Lockheed's request for extension of its exploration licenses within the comment period allowed by law, expressing significant concerns about the violations of law and explaining the harmful effects of exploration activities

on the species and habitats in the Clarion Clipperton Zone. Defendants neither acknowledged nor responded to these comments.

- 17. The recreational, aesthetic, conservation, educational, and scientific interests of the Center, its members, and staff in the fish, wildlife, and ecosystems of the Clarion Clipperton Zone will be directly and adversely affected by Defendants' actions and inactions related to the extension of the exploration licenses without full and proper environmental review. If Defendants had carried out an adequate and full environmental review and complied with the Deep Seabed Act and NEPA before approving the exploration licenses, they would likely have either denied the extensions or required measures that better protect the species and ecosystems of the Clarion Clipperton Zone from the adverse impacts of the proposed exploration and subsequent commercial recovery activities. Denying the extensions would make it more likely that the Center and its members would have better opportunities to observe and enjoy the Pacific Ocean's marine life and habitats.
- 18. The Center, its members, staff, and board also suffer procedural and informational injuries flowing from Defendants' failure to comply with the Deep Seabed Act and NEPA. Defendants' failure to respond to Plaintiff's comments violated the Deep Seabed Act and denied Plaintiff a meaningful opportunity to participate in NOAA's decisionmaking. Defendants' failure to prepare an EIS or supplemental EIS ("SEIS") deprived the Center, its members, staff, and board of essential information to which they are statutorily entitled. Because NEPA provides for public participation, including a public comment period and public hearings, Defendants' failure to carry out a NEPA process for the license extensions prevents the Center, its members, staff, and board from participating in the environmental review process in the manner Congress intended. Thus, the potential harmful effects of the exploration

plans and subsequent extraction activities have not been properly disclosed, analyzed, or mitigated, resulting in uninformed and unwise decisionmaking that can have a significant impact on the species and habitats of the Clarion Clipperton Zone.

- 19. Defendant PENNY PRITZKER, United States Secretary of Commerce, is the highest ranking official within the United States Department of Commerce and, in that capacity, has ultimate responsibility for the license extensions that are the subject of this Complaint and for compliance with all other federal laws applicable to the Department of the Interior, including the Deep Seabed Act, NEPA and the APA. She is sued in her official capacity.
- 20. Defendant NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION is an agency of the United States Department of Commerce authorized and required by law to manage and conserve marine ecosystems in the Pacific Ocean. NOAA is required to comply with the Deep Seabed Act, NEPA, and the APA. It is the federal agency that extended Lockheed's USA-1 and USA-4 exploration licenses.

#### IV. STATUTORY BACKGROUND

# A. Deep Seabed Hard Mineral Resources Act

21. Congress enacted the Deep Seabed Act to promote the exploration of hard minerals in the deep seabed in an environmentally responsible manner. 30 U.S.C. § 1401(b). Congress enacted the Deep Seabed Act to "assure that such exploration and recovery activities are conducted in a manner which will encourage the conservation of such resources, protect the quality of the environment, and promote the safety of life and property at sea," and emphasized "the protection of the marine environment from damage caused by exploration or recovery of hard mineral resources of the deep seabed" *Id.* § 1401(a)(14), (b)(4).

- 22. The Deep Seabed Act requires a license for exploration or permit for commercial recovery. *Id.* § 1411(a)(1).
- Applications for a license must include an exploration plan "set[ting] forth the activities proposed to be carried out during the period of the license, describ[ing] the area to be explored, and includ[ing] the intended exploration schedule and methods to be used, ... measures to protect the environment and to monitor the effectiveness of environmental safeguards," and other necessary information. *Id.* § 1413(a)(2)(B); 15 C.F.R. § 970.203(b). The exploration plan "must demonstrate to a reasonable extent that the applicant's efforts, by then end of the 10-year license period, will likely lead to the ability to apply for and obtain a permit for commercial recovery." 15 C.F.R. § 970.203(a). If "commercial recovery activities in the proposed location would result in a significant adverse impact on the quality of the environment which cannot be avoided by the imposition of reasonable restrictions," NOAA may not approve an exploratory license in that area. 30 U.S.C. § 1413(a)(2)(D)(ii).
- 24. Under the Deep Seabed Act, the issuance of individual exploratory licenses or extraction permits "shall be deemed to be a major Federal action significantly affecting the quality of the human environment for purposes of section 4332 of title 42 [NEPA]." *Id.* § 1419(d).
- 25. The initial term for an exploration license is ten years. *Id.* § 1417(a). Upon request, "[NOAA] shall extend the license on terms, conditions, and restrictions consistent with [the Deep Seabed Act] and the regulations issued under [the Deep Seabed Act] for periods of not more than 5 years each." *Id.* A request for an extension must be accompanied by an amended exploration plan. 15 C.F.R. § 970.515(b).

- 26. Upon receipt of an application for an exploration license, NOAA shall publish in the Federal Register notice of the application and give interested parties an opportunity to submit comments. 15 C.F.R. § 970.212(a).
- 27. To enable NOAA to prepare a site-specific EIS, license applications must include "physical, chemical and biological information for the exploration area," and a description of planned activities. 15 C.F.R. § 970.204(a).
- 28. Before issuing such a license or permit, NOAA must consult with interested departments and agencies, "consider[] public comments received with respect to the license or permit," and find, among other requirements, that the exploration or recovery "cannot reasonably be expected to result in a significant adverse effect on the quality of the environment, taking into account the analyses and information in any applicable environmental impact statement prepared pursuant to" the Deep Seabed Act. 30 U.S.C. § 1415(a); 15 C.F.R. § 907.506. All licenses and permits must "contain such terms, conditions, and restrictions . . . to assure protection of the environment." 30 U.S.C. § 1419(b).
- 29. Federal regulations also require NOAA to insure the applicant's activities will have "no potential for significant environmental impact." 15 C.F.R. § 970.701.
- 30. NOAA must publish in the Federal Register notice of each proposal to issue an exploration license and give interested parties and opportunity to comment. *Id.* § 970.501(a).
- 31. NOAA may modify any term, condition, or restriction in a license or permit "if relevant data or other information . . . indicate that modification is required to protect the quality of the environment." 30 U.S.C. § 1415(c)(1)(B). A licensee or permittee can also apply to revise the license, permit, exploration plan, or recovery plan. *Id.* § 1415(c)(2).

# B. National Environmental Policy Act

- 32. NEPA is the United States' "basic national charter for protection of the environment." 40 C.F.R. § 1500.1. The goal of NEPA is to "promote efforts which will prevent or eliminate damage to the environment." 42 U.S.C. § 4321. NEPA demands that "to the fullest extent possible ... the policies, regulations, and public laws of the United States ... be interpreted and administered in accordance with" its principles. *Id.* § 4332(1); 40 C.F.R. § 1500.2. To ensure compliance with these requirements, NEPA requires that agencies take a hard look at the environmental impacts of proposed actions and fully disclose these impacts to the public before proceeding. *See* 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1500.1(b). This process is "intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." 40 C.F.R. § 1500.1(c).
- 33. NEPA and the regulations promulgated by the Council on Environmental Quality require that federal agencies, including NOAA, prepare an EIS for all "major federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). An EIS is an "action-forcing device to insure that the policies and goals defined in [NEPA] are infused into the ongoing programs and actions of the Federal Government." 40 C.F.R. § 1502.1.
- 34. Agencies must prepare an EIS "as close as possible to the time the agency is developing or is presented with a proposal." *Id.* § 1502.5. The statement must "be prepared early enough so that it can serve practically as an important contribution to the decisionmaking process and will not be used to rationalize or justify decisions already made." *Id.*
- 35. An EIS must include: "a detailed statement by the responsible official on -- (i) the environmental impact of the proposed action," "(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented," "(iii) alternatives to the proposed

action," "(iv) the relationship between local short-term uses of a man's environment and the maintenance and enhancement of long-term productivity," and "(v) and irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." 42 U.S.C. § 4332(2)(C).

- 36. Agencies must consider "3 types of actions, 3 types of alternatives, and 3 types of impacts" in an EIS. 40 C.F.R. § 1508.25. Agencies must consider connected actions, cumulative actions, and similar actions; the no action alternative, other reasonable courses of action, and mitigation measures; and direct, indirect, and cumulative impacts. *Id.* Cumulative impacts are "the impact[s] on the environment which result[] from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." *Id.* § 1508.7.
- 37. Throughout the EIS process, agencies are required to "insure the professional integrity, including scientific integrity, of the discussions and analyses." *Id.* § 1502.24.
- 38. Agencies must prepare a a supplement to a draft or final EIS if "(i) [t]he agency makes substantial changes in the proposed action that are relevant to environment concerns" or "(ii) [t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." *Id.* § 1502.9(c)(1).
- 39. If an agency has not yet decided whether to prepare an EIS, it must prepare an environmental assessment ("EA") to determine if the proposed action will have a significant impact on the environment. *Id.* § 1501.4. Significance "requires considerations of both context and intensity." *Id.* § 1508.27. Context "means that the significance of an action must be analyzed in several contexts such as society as a whole . . . the affected region, the affected interests, and the locality." *Id.* § 1508.27(a).

- 40. Intensity "refers to the severity of the impact." *Id.* § 1508.27(b). In evaluating intensity, agencies must consider: "[u]nique characteristics of the geographic area such as ... ecologically critical areas;" "[t]he degree to which the effects on the quality of the human environmental are likely to be highly controversial;" "[t]he degree to which the possible effects on the human environment are highly uncertain of involve unique or unknown risks;" "[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulative impact on the environment;" and "[w]hether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment." *Id.*
- 41. If an agency determines that a project will not have a significant impact on the environment, it must prepare a Finding of No Significant Impact ("FONSI"). 40 C.F.R. § 1508.13. The FONSI must "present[] the reasons why an action, not otherwise excluded, will not have a significant effect on the human environment and for which an environmental impact statement therefore will not be prepared." *Id*.

### E. Administrative Procedure Act

- 42. The APA directs reviewing courts to "compel agency action unlawfully withheld or unreasonably delayed" and to "hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(1)-(2).
- 43. The APA requires any federal agency issuing a license to give interested parties an opportunity to participate through submission of written comments, which the agency must consider. 5 U.S.C. § 553(c).

44. NOAA's extension of Lockheed's USA-1 and USA-4 exploration licenses is an agency action subject to APA review. *See* 5 U.S.C. § 706.

## V. FACTUAL AND PROCEDURAL BACKGROUND

# A. History of Deep Sea Exploration Licensing in the Clarion Clipperton Zone

- 45. The United States retains rights to mine at least two vast areas of the deep seabed in the Clarion Clipperton Zone: USA-1 and USA-4.
- 46. More than 20 years ago, Ocean Minerals Company ("OMCO") applied for, and received, ten-year licenses "to engage in deep seabed mining exploration activities" at site USA-1 and USA-4. NOAA subsequently issued five-year extensions on those licenses.
- 47. All partners but Lockheed Martin Corporation withdrew their interests in OMCO, and USA-1 and USA-4 licenses were conveyed to Lockheed. 77 Fed. Reg. 12,245 (Feb. 29, 2012).
- 48. Lockheed submitted to NOAA its request to extend licenses USA-1 and USA-4 and revisions to its exploration plan on August 2, 2011. OMCO SEABED EXPLORATION LLC, REQUEST FOR EXTENSION OMCO LICENSES USA-1 AND USA-4 (2011); 77 Fed. Reg. at 12,245.
- 49. The renewal of an exploration license pursuant to the Deep Seabed Act is a major federal action that requires environmental analysis under NEPA.
- 50. To the best of Plaintiff's knowledge and belief, no site-specific environmental analysis for USA-1 and USA-4 exploration licenses has been conducted by NOAA.
- 51. NOAA requested comments "pertaining to the request to extend USA-1 and USA-4 including but not limited to whether there has been substantial compliance with the licenses and exploration plans, and whether the revised exploration plans for USA-1 and USA-4

meet the terms, conditions, and restrictions of [the Deep Seabed Act] and the licenses issued thereunder." *Id.* Comments were due by April 15, 2012. *Id*.

- 52. On April 14, 2012, Plaintiff submitted to NOAA comments on the request for extension of the USA-1 and USA-4 licenses. Plaintiff objected to the extension until NOAA had fully complied with applicable environmental laws.
- 53. Specifically, Plaintiff commented that NOAA could not extend the license without violating NEPA and must prepare an EIS, an SEIS, or at least an EA to evaluate the environmental impacts of deep seabed mining exploration.
- 54. There exists new information on benthic ecology and the potential environmental impacts of deep seabed exploration since NOAA last conducted any environmental analysis of deep sea mining impacts.
- 55. On June 1, 2012, NOAA approved a five-year extension of the exploration licenses and amended exploration plans. NOAA stated that "[n]o comments were received objecting to the approval of the extension and amended exploration plan" and that "[c]omments were received only from the Western Pacific Fisheries Management Council (WPFMC) and the United States Department of State."
- 56. NOAA failed to conduct an EA, SEIS, EIS, or any environmental analysis before granting the exploration license extensions.
- 57. Plaintiff spoke with Kerry Kehoe at NOAA by telephone on July 24, 2012. Kehoe acknowledged receipt of Plaintiff's comments and failure to review and respond to them.

# D. Significant Environmental Impacts of Deep Seabed Hard Mineral Exploration and Recovery

58. Deep sea mining poses significant environmental risks of unknown magnitude.

The unique biodiversity of the deep sea floor is particularly vulnerable to deep sea mining. Deep

seabed mining operations impact areas much larger than the individual operations themselves. Biotic seafloor communities recover slowly—it takes decades to millions of years for the biota surrounding manganese nodules to recover from disturbances.

- 59. Deep seabed mining involves extracting metals from the seafloor and a number of methods—all disruptive of the environment—are being used and tested. Lockheed does not specify what techniques it will use to eventually mine hard minerals on the seafloor. All mining methods have negative environmental consequences.
- 60. Deep sea mining scrapes minerals off the seafloor like a bulldozer, which destroys seabed habitat. On the ocean floor, machines gathering polymetallic nodules, also called manganese nodules, disturb soft sediments, compress the seafloor, and deposit sediment next to mining tracks. Excavating the minerals disrupts seabed flora and fauna and causes destroys habitat. Hard sediments will be replaced with soft particles, and mining could alter hydrologic patterns that supply some seabed vent communities with nutrients and warm water.
- 61. Mining causes sediment plumes that ocean currents spread through the water column. Drifting sediment particles can partially or entirely bury seabed organisms and communities, sometimes resulting in death. Increased turbidity could clog the filter-feeding apparatuses of some organisms and smother any immobile or less mobile organisms. Sediment plumes near hydrothermal vents will smother, clog, and contaminate the vents, cutting off food sources and starving vent communities. Sediment plumes may also interfere with some species' bioluminescence, and, as a result, their ability to communicate, catch prey, and defend against predators.
- 62. Sediment plumes do not only affect the seabed. On the surface, sediment plumes interfere with light penetration and reduce photosynthesis in plankton. The entire marine food

web depends on plankton that are at risk from mining sediment which adheres to plankton, causing them to sink. Sediment plumes also introduce nutrient pollution into surface waters, which can increase algal growth and result in harmful algal blooms that deplete oxygen in nearby waters. Reduced oxygen concentrations can injure and kill other organisms, including commercially important species. Toxins from harmful algal blooms have been linked to illness and death of marine mammals and can even lead to paralytic shellfish poisoning of people.

- 63. Sediment plums can also introduce heavy metals into marine food chains. Heavy metals enter ecosystems through sediment ingestion and via gill membranes, and then travel through the food chain. If concentrations are high enough, the toxicity can result in death. Lower concentrations can lead to cell damage and reproductive failure. Organisms higher up in the food chain, such as commercially important fish species, marine mammals, and humans, are most vulnerable to heavy metal poisoning because of their consumption of other contaminated organisms.
- 64. Deep sea mining operations discharge wastewater into the ocean, which can harm marine animals. Wastewater discharge results in thermal pollution of surrounding waters and contaminant pollution from toxic metals. Environmental contaminants are a concern for marine mammals and large fish, like whales and tunas, that accumulate toxins in their bodies. Wastewater with sediment also reduces light penetration and photosynthesis in some organisms, thus impacting primary productivity at the base of the food web.
- 65. Deep sea mining causes noise pollution both above the surface and underwater. Underwater noise from mining tools and machines can impact fish and marine mammal behavior. The ocean is an acoustic environment and many animals use sound for communication,

breeding and foraging. Ocean noise causes displacement and interferes with essential biological functions such as foraging of marine mammals and other animals.

- 66. Artificial lighting from mining operations disorients and harms marine life. Stationary lights from ships and other vessels can affect the behavior of seabirds, whales, dolphins, and sea turtles. Artificial lighting attracts seabirds and disrupts their normal foraging and breeding behavior by causing them to continually circle the lights, ignore their typical behaviors, and suffer from exhaustion and even death.
- 67. Deep sea mining increases vessel traffic to remote high seas areas. This in turn, increases the risks of marine mammal collisions with vessels, which can have a significant effect on marine mammal populations. One of the biggest continuing threats to endangered whales is vessel strikes.
- 68. Another environmental risk is potential spills of fuel or other hazardous substances from accidents, equipment malfunctions, and extreme weather conditions.

#### VI. CLAIMS FOR RELIEF

#### FIRST CLAIM FOR RELIEF

# (Violation of Deep Seabed Hard Mineral Resources Act, 30 U.S.C. §§ 1401 et seq., and Administrative Procedure Act, 5 U.S.C. § 706)

- 69. The Center realleges and incorporates, as is fully set forth herein, each and every allegation in the preceding paragraphs of this Complaint.
- 70. Defendants violated the Deep Seabed Act, 30 U.S.C. §§ 1401 *et seq.* and its implementing regulations, 15 C.F.R. §§ 970.100 *et seq.*, by extending Lockheed's USA-1 and USA-4 exploration licenses for five years. Plaintiff brings this claim pursuant to the judicial review provision of the APA, 5 U.S.C. § 706.

- 71. Defendants violated the Deep Seabed Act and federal regulations in multiple respects through issuance of the challenged license extensions, including but not limited to:
  - a. Failing to respond to Plaintiff's comments on Lockheed's request to extend USA-1
     and USA-4 licenses and amended exploration plan;
  - b. Extending Lockheed's USA-1 and USA-4 exploration licenses even though the exploration and subsequent recovery activities can reasonably be expected to have a significant adverse impact on the environment; and
  - c. Approving Lockheed's USA-1 and USA-4 exploration licenses while failing to comply with NEPA, as required by the Deep Seabed Act.
- 72. Accordingly, Defendants' extensions are arbitrary, capricious, an abuse of discretion, and not in accordance with law, and must be reversed and set aside pursuant to the APA, 5 U.S.C. § 706(2)(A).

### **SECOND CLAIM FOR RELIEF**

# (Violation of National Environmental Policy Act, 42 U.S.C. §§ 4321 et seq., and Administrative Procedure Act, 5 U.S.C. § 706)

- 73. The Center realleges and incorporates, as is fully set forth herein, each and every allegation in the preceding paragraphs of this Complaint.
- 74. Defendants violated NEPA, 42 U.S.C. §§ 4321 *et seq.*, and NEPA's implementing regulations, 40 C.F.R. §§ 1500.1 *et seq.*, by extending Lockheed's USA-1 and USA-4 exploration licenses for five years. Plaintiff brings this claim pursuant to the judicial review provision of the APA, 5 U.S.C. § 706.
- 75. Defendants violated NEPA and federal regulations in multiple respects through issuance of the extensions, including but not limited to:

- a. Extending the licenses without first preparing an EIS addressing the proposed actions, even though the license extensions constitute a major federal actions that will have significant adverse impacts on the human environment;
- b. Extending the licenses without first preparing at least an EA addressing the proposed actions to determine if the impacts would have a significant impact on the environment;
- c. Extending the licenses without first preparing a supplemental EIS, even though there is significant new information since previous environmental analysis regarding the environmental impacts of deep seabed hard mineral mining on the benthic ecosystem;
- 76. Accordingly, Defendants' extensions are arbitrary, capricious, an abuse of discretion, and not in accordance with law, and must be reversed and set aside pursuant to the APA, 5 U.S.C. § 706(2)(A).

## VII. PRAYER FOR RELIEF

For the reasons stated above, Plaintiff respectfully requests that the Court grant the following relief:

- Declare that Defendants are in violation of the Deep Seabed Act, NEPA, and the APA;
- 2. Declare unlawful and set aside the USA-1 and USA-4 exploration license extensions;
- Remand the extensions to Defendants for full compliance with the Deep Seabed Act and NEPA;
- 4. Award Plaintiff its costs of litigation, including reasonable attorneys fees; and
- 5. Grant Plaintiff such other relief as the Court deems just and proper.

DATED: May 13, 2015

# Respectfully submitted,

/s/ Catherine Kilduff

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Application for admission Pro Hac Vice pending

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