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Kathryn Lamond
The Port Authority of NY & NJ
4 World Trade Center
150 Greenwich Street, 18th Floor
New York, NY 10007

Via e-mail: JFKEA@PANYNJ.GOV

Re: JFK North Cargo

Dear Ms. Lamond,

This comment on the Draft Environmental Assessment (“EA”) for the proposed North Cargo Redevelopment project at John F. Kennedy International Airport (JFK) is submitted on behalf of the Sabin Center for Climate Change Law of Columbia Law School.

We recommend that the EA assess the impact that rising sea levels and consequent flooding will have on the physical integrity and functioning of the project and associated infrastructure, and set forth detailed plans to protect against this flooding in the future.

The EA says that this proposed project, which will include the construction of two new cargo processing facilities and rehabilitation of two taxiways, “remains outside the 100-year floodplain of [the Federal Emergency Management Agency’s (“FEMA”) Advisory Base Flood Elevation] maps.”¹ There is no discussion in the EA of sea-level rise and the risks associated with flooding caused by climate change, as well as no proposed mitigation strategies for these risks.

Various reports from outside sources have warned of JFK Airport’s vulnerability to sea level rise caused by climate change, which necessitates decisive action to protect the airport’s taxiways and other structures from extensive flooding damage. The Regional Plan Association (“RPA”), for example, stated in a 2016 report that JFK “will need to be hardened for the more severe future storm surges.”² A 2018 update report from the RPA stated, “While not impacted by three feet of sea level rise and only marginally by six feet, JFK Airport is still vulnerable to flooding from what are expected to be more frequent and higher intensity storms.”³ As such, “investments in storm surge mitigation solutions should be employed as part of the airport’s redevelopment,”⁴ and JFK “will need to be hardened to increase its ability to cope with more

¹ THE PORT AUTHORITY OF NY & NJ, ENVIRONMENTAL ASSESSMENT, NORTH CARGO REDEVELOPMENT, JOHN F. KENNEDY AIRPORT (Nov. 2018) at 4-13.

² Regional Plan Association, *Under Water: How Sea Level Rise Threatens the Tri-State Region* (Dec. 2016), available at <http://library.rpa.org/pdf/RPA-Under-Water-How-Sea-Level-Rise-Threatens-the-Tri-State-Region.pdf>, page 4.

³ Regional Plan Association, *Upgrading to World Class The Future of the Region’s Airports Revisited* (June 2018), available at <http://library.rpa.org/pdf/RPA-Upgrading-to-World-Class-Revisited.pdf>, page 36.

frequent storm surges.”⁵

Climate Central has also reported on JFK’s vulnerability to storm surge, focusing on the economic consequences of this vulnerability. In a 2013 publication, Climate Central highlighted that sea level rise and flooding can lead to “more delays, potentially costing billions of dollars in the years ahead from lost revenue and storm cleanup operations.”⁶ For example, after Hurricane Sandy, JFK did not resume service until three days after the storm, contributing to the more than 20,000 flights cancelled nationwide (roughly half of those occurring in the New York City area).⁷ The report listed JFK among the U.S. airports most vulnerable to sea level rise.

The consulting firm of Michael Baker International made a presentation entitled “Ensuring Continuing Operation of New York City Airports in the Presence of Coastal and Climate Change Hazards” to the Association of State Floodplain Managers Conference in June 2014. Its key conclusions indicated, for JFK Airport, “significant jump in inundation by future year 2055 relative to other airports” and “subsurface backwater flooding issues.”⁸

The U.S. Global Change Research Program (“USGCRP”), a Congressionally-mandated interagency study group, identified JFK in 2014 as one of the U.S. airports most vulnerable to climate change.⁹ More recent federal projections indicate the possibility of even higher levels of sea level rise and storm surge.¹⁰ And just now – on November 23, 2018 – the USGCRP released its Fourth National Climate Assessment, Volume II (Impacts, Risks, and Adaptation in the United States), which stated in Chapter 18, “Along the Mid-Atlantic Coast (from Cape Hatteras, North Carolina, to Cape Cod, Massachusetts), several decades of tide gauge data through 2009 have shown that sea level rise rates were three to four times higher than the global average rate.”

Despite JFK’s clear vulnerability to increased storm surge as sea levels rise, the Port Authority’s EA lacks any substantive discussion of these dangers. The following are some of the shortcomings of the EA:

- 1. No consideration of sea level rise projections:** The EA does not consider any sea-level rise projections. The most definitive projections for these purposes are the

⁴ *Id.*

⁵ *Id.* at 24.

⁶ Andrew Freedman, *U.S. Airports Face Increasing Threat From Rising Seas*, CLIMATE CENTRAL (June 18, 2013), available at <http://www.climatecentral.org/news/coastal-us-airports-face-increasing-threat-from-sea-level-rise-16126>.

⁷ *Id.*

⁸ Available at http://www.floods.org/Files/Conf2014_ppts/A4_Eberbach.pdf.

⁹ Schwartz, H. G., M. Meyer, C. J. Burbank, M. Kuby, C. Oster, J. Posey, E. J. Russo, and A. Rypinski, 2014: Ch. 5: Transportation. Climate Change Impacts in the United States: The Third National Climate Assessment, J. M. Melillo, Terese (T.C.) Richmond, and G. W. Yohe, Eds., U.S. Global Change Research Program, 130-149. doi:10.7930/J06Q1V53, p. 134, available at <https://nca2014.globalchange.gov/report/sectors/transportation>.

¹⁰ William V. Sweet et al., *Global and Regional Sea Level Rise Scenarios for the United States*, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (Jan. 2017), available at https://tidesandcurrents.noaa.gov/publications/techrpt83_Global_and_Regional_SLR_Scenarios_for_the_US_final.pdf. See also *In worst case scenario, Trump’s Mar-a-Lago estate and JFK could be underwater by 2100*, CIRCA NEWS (Apr. 27, 2017), available at <https://www.circa.com/story/2017/04/27/scitech/in-worst-case-scenario-trumps-mar-a-lago-estate-and-jfk-could-be-underwater-by-2100>.

official projections from the New York State Department of Environmental Conservation, 6 N.Y.C.R.R. Part 490. The EA should disclose the elevations of the taxiways out to the year 2100 under each of the scenarios set forth in these projections, and for each of these scenarios, it should discuss not only the static sea levels, but also the possible storm surges, and how far upland the water could travel.

- 2. Lack of findings regarding taxiway status in 2100:** The EA should discuss the viability of JFK's taxiways in the year 2100 in view of the sea level rise projections, including the frequency with which the taxiways would be completely flooded.

The draft EA was prepared pursuant to the National Environmental Policy Act (“NEPA”), because the project will require the approval of the Federal Aviation Administration. Under NEPA, agencies must consider the environmental impacts of sea level rise and associated storm surge, flooding, and erosion risks, as exacerbated by increased frequency and intensity of hurricanes and tropical storms. NEPA’s implementing regulations provide that agencies must consider significant and reasonably foreseeable indirect and cumulative environmental impacts.¹¹ Agencies must define an appropriate baseline for considering projected environmental impacts; such a baseline should incorporate anticipated environmental conditions.¹² Accordingly, the Port Authority must consider sea level rise, the increasing frequency and severity of hurricanes and other extreme weather events, and their combined effects on storm surge as future baseline environmental conditions. Several federal courts have confirmed that NEPA regulations require federal agencies to evaluate the impacts of a changing climate on their actions.¹³ Consideration of climate change impacts has accordingly become an essential part of the NEPA process.¹⁴ Furthermore, the withdrawal of the CEQ guidelines by the Trump administration does not affect judicially upheld obligations as was explicitly noted in the withdrawal notice.¹⁵

¹¹ See 40 C.F.R. §§ 1508.7 (defining “cumulative impact”), 1508.8 (defining “effects” as including direct and reasonably foreseeable indirect effects), 1508.25(c) (providing that EISs must consider direct, indirect, and cumulative impacts); see also CEQ, Considering Cumulative Effects under the National Environmental Policy Act (1997) [hereinafter “Considering Cumulative Effects Under NEPA”], available at <http://1.usa.gov/JLkM2I>.

¹² See Considering Cumulative Effects under NEPA, *supra* note 11, at 41; 40 C.F.R. 1502.15 (defining “affected environment”).

¹³ AquaAlliance, et al., v. U.S. Bureau of Reclamation, No. 1:15-CV-754-LJO-BAM, 2018 WL 903746, at *38-*39 (E.D. Cal. Feb. 15, 2018) (finding that the Bureau failed to adequately account for effects of climate change on water management project); Idaho Rivers United v. United States Army Corps of Engineers, No. C14-1800JLR, 2016 WL 498911, at *17 (W.D. Wash. Feb. 9, 2016) (finding the USACE analysis of the effect of climate change on sediment disposition was adequate); Kunaknana v. U.S. Army Corps of Engineers, No. 3:13-CV-00044-SLG, 2015 WL 3397150, at *10-*12 (D. Alaska May 26, 2015) (finding the USACE reasonably concluded, based on a supplemental information report, that a supplemental EIS was not necessary); Kunaknana v. U.S. Army Corps of Engineers, 23 F. Supp. 3d 1063, 1092-98 (D. Alaska 2014) (determining that USACE should consider whether to prepare supplemental EIS for issuance of § 404 permit in light of new information on climate change).

¹⁴ See e.g., AquaAlliance 2018 WL 903746 at *38-*39 (“Nonetheless, the FEIS/R fails to address or otherwise explain how this information about the potential impacts of climate change can be reconciled with the ultimate conclusion that climate change impacts to the Project will be less than significant: . . . [T]his amounts to a ‘failure to consider an important aspect of the problem’ . . .”) (internal citation omitted).

¹⁵ Withdrawal of Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews, 82 Fed. Reg. 16576 (Apr. 5, 2017), available at <https://www.federalregister.gov/documents/2017/04/05/2017-06770/withdrawal-offinal-guidance-for-federal-departments-and-agencies-on-consideration-of-greenhouse-gas> (“The withdrawal of the guidance does not change any law, regulation, or other legally binding requirement.”).

The New York sea level rise projections noted above were mandated by New York's Community Risk and Resiliency Act, Chapter 355 of the Laws of 2014, which requires consideration of these projections in multiple types of state environmental permitting decisions. We also note that the CEQR Technical Manual, which guides environmental reviews conducted by New York City, calls for consideration of rising sea levels and increases in storm surge and coastal flooding.¹⁶

The EA notes that the Project Site is outside of the 100-year floodplain as mapped by FEMA. These maps are based solely on historic flooding and do not reflect future sea levels. Thus they may not be relied upon with respect to future conditions. That is a major reason New York State has adopted the above-noted projections. The EA does not contain any reference at all to sea level rise, which is a critical deficiency.

On a separate issue, Page 1-4 of the EA states, "Growth in cargo activity may occur in the future to meet demand based on economic conditions. The North Cargo Redevelopment adds efficiency to airport operations and it can be scaled to meet increased demand based on economic conditions, but is not anticipated to automatically increase aircraft operations upon opening. Therefore, the Proposed Action is not expected to cause an increase in aircraft operations at JFK." The expectation that the project will not "automatically increase aircraft operations upon opening" is much more limited than a projection about the project's effects on future aircraft operations, and associated ground movements within, to, and from JFK. The EA should discuss whether the project will make JFK a more attractive location for air cargo operations; how much additional cargo might be handled as a result; where this cargo might otherwise have been handled (other airports, or by other modes, such as sea or rail); and the effects of this additional volume of cargo on aircraft fuel use, emissions of greenhouse gases and conventional air pollutants from aircraft, and the environmental impacts of increased ground traffic. If an analysis of future cargo traffic has been performed (for example, in analyzing the financing, business terms or sizing of the project), that should be disclosed, even if it was prepared outside of the environmental assessment process.

In view of these shortcomings, the EA for the proposed North Cargo Redevelopment project should elaborate on flooding risks related to sea level rise and coastal storm surge and set forth detailed measures to mitigate these risks, and also discuss the possibility and environmental impacts of possible future increased cargo volume.

Sincerely,



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¹⁶ CEQR Technical Manual, Chapter 18, p. 18-7, https://www1.nyc.gov/assets/oec/technical-manual/18_Greenhouse_Gas_Emissions_2014.pdf.