DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[Docket No. FWS-R7-ES-2022-0141; FXES111607MRG01–234–FF07CAMM00]

Marine Mammals; Incidental Take During Specified Activities; Proposed Incidental Harassment Authorization for the Southern Beaufort Sea Stock of Polar Bears in the Prudhoe Bay Unit of the North Slope of Alaska

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of receipt of application; proposed incidental harassment authorization; notice of availability of draft environmental assessment; request for comments.

SUMMARY: We, the U.S. Fish and Wildlife Service, in response to a request under the Marine Mammal Protection Act of 1972, as amended, from BP America Production Company, propose to authorize nonlethal incidental take by harassment of small numbers of Southern Beaufort Sea (SBS) polar bears (*Ursus maritimus*) between issuance and December 14, 2023. The applicant requested this authorization for take by harassment that may result from activities associated with closure, remediation, and rehabilitation of the Foggy Island Bay State No. 1 gravel pad in the Prudhoe Bay area of the North Slope of Alaska. We estimate that this project may result in the nonlethal incidental take by harassment of up to three SBS polar bears. This proposed authorization, if finalized, will be for up to three takes of polar bears by Level B harassment only. No take by injury or mortality is requested, expected, or proposed to be authorized.

DATES: Comments on this proposed incidental harassment authorization and the accompanying draft environmental assessment must be received by **[INSERT DATE 30 DAYS AFTER THE DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

ADDRESSES: *Document availability:* You may view this proposed incidental harassment authorization, the application package, supporting information, draft environmental assessment, and the list of references cited herein at *https://www.regulations.gov* under Docket No. FWS-R7-

ES-2022-0141 or these documents may be requested from the person listed under **FOR FURTHER INFORMATION CONTACT**.

- *Comment submission:* You may submit comments on the proposed authorization by one of the following methods:
- *U.S. mail:* Public Comments Processing, Attn: Docket No. FWS-R7-ES-2022-0141, U.S. Fish and Wildlife Service, MS: PRB (JAO/3W), 5275 Leesburg Pike, Falls Church, VA 22041–3803.
- *Electronic submission:* Federal eRulemaking Portal at: *https://www.regulations.gov*. Follow the instructions for submitting comments to Docket No. FWS-R7-ES-2022-0141.

We will post all comments at *https://www.regulations.gov*. You may request that we withhold personal identifying information from public review; however, we cannot guarantee that we will be able to do so. See **Request for Public Comments** for more information.

FOR FURTHER INFORMATION CONTACT: Stephanie Burgess, U.S. Fish and Wildlife Service, MS 341, 1011 East Tudor Road, Anchorage, Alaska 99503, by email at *R7mmmregulatory@fws.gov* or by telephone at 1–800–362–5148. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION:

Background

Section 101(a)(5)(D) of the Marine Mammal Protection Act of 1972 (MMPA; 16 U.S.C. 1361, et seq.) authorizes the Secretary of the Interior (Secretary) to allow, upon request, the incidental, but not intentional, taking by harassment of small numbers of marine mammals in response to requests by U.S. citizens (as defined in title 50 of the Code of Federal Regulations

(CFR) in part 18, at 50 CFR 18.27(c)) engaged in a specified activity (other than commercial fishing) in a specified geographic region during a period of not more than 1 year. The Secretary has delegated authority for implementation of the MMPA to the U.S. Fish and Wildlife Service (Service or we). According to the MMPA, the Service shall allow this incidental taking by harassment if we make findings that the total of such taking for the 1-year period:

(1) is of small numbers of marine mammals of a species or stock;

(2) will have a negligible impact on such species or stocks; and

(3) will not have an unmitigable adverse impact on the availability of these species or stocks for taking for subsistence use by Alaska Natives.

If the requisite findings are made, we issue an authorization that sets forth the following, where applicable:

(a) permissible methods of taking;

(b) means of effecting the least practicable adverse impact on the species or stock and its habitat and the availability of the species or stock for subsistence uses; and

(c) requirements for monitoring and reporting of such taking by harassment, including, in certain circumstances, requirements for the independent peer review of proposed monitoring plans or other research proposals.

The term “take” means to harass, hunt, capture, or kill, or to attempt to harass, hunt, capture, or kill any marine mammal. “Harassment” means any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (the MMPA defines this as “Level A harassment”), or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (the MMPA defines this as “Level B harassment”).

The terms “negligible impact” and “unmitigable adverse impact” are defined in 50 CFR 18.27 (i.e., regulations governing small takes of marine mammals incidental to specified

activities) as follows: "Negligible impact" is an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival. "Unmitigable adverse impact" means an impact resulting from the specified activity: (1) that is likely to reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by (i) causing the marine mammals to abandon or avoid hunting areas, (ii) directly displacing subsistence users, or (iii) placing physical barriers between the marine mammals and the subsistence hunters; and (2) that cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met.

The term "small numbers" is also defined in 50 CFR 18.27. However, we do not rely on that definition here as it conflates "small numbers" with "negligible impacts." We recognize "small numbers" and "negligible impacts" as two separate and distinct considerations when reviewing requests for incidental harassment authorizations (IHA) under the MMPA (see *Natural Res. Def. Council, Inc.* v. *Evans*, 232 F. Supp. 2d 1003, 1025 (N.D. Cal. 2003)). Instead, for our small numbers determination, we estimate the likely number of takes of marine mammals and evaluate if that take is small relative to the size of the species or stock.

The term "least practicable adverse impact" is not defined in the MMPA or its enacting regulations. For this IHA, we ensure the least practicable adverse impact by requiring mitigation measures that are effective in reducing the impact of project activities, but not so restrictive as to make project activities unduly burdensome or impossible to undertake and complete.

If the requisite findings are made, we shall issue an IHA, which may set forth the following, where applicable: (i) permissible methods of taking; (ii) other means of effecting the least practicable impact on the species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stock for taking for subsistence uses by coastal-dwelling Alaska Natives (if applicable); and (iii) requirements for monitoring and reporting take by harassment.

Summary of Request

On September 1, 2022, the Service received a request on behalf of BP America Production Company (BPAPC) for authorization to take by nonlethal incidental harassment small numbers of SBS polar bears (*Ursus maritimus*) during closure, remediation, and rehabilitation of the Foggy Island State No. 1 wellpad in the Prudhoe Bay Area of the North Slope of Alaska for a period between issuance and December 14, 2023. Their request also included a proposed Human–Polar Bear Interaction Plan. The applicant discussed operational timelines and mitigation measures with the Service prior to request submittal. On September 21, 2022, the Service requested clarification on several aspects of the request. The BPAPC resubmitted their request, including clarifying information, on September 26, 2022. The Service deemed this request (hereafter referred to as the "Request") adequate and complete on September 27, 2022.

Description of Specified Activities and Specified Geographic Region

The specified activities described in the Request consist of closure, remediation, and rehabilitation of the Foggy Island State No. 1 pad (hereafter referred to as the "pad") in the Prudhoe Bay Area (figure 1). The abandoned pad contains contaminated materials and foam insulation that will be removed and disposed of in accordance with the Foggy Island Bay State No. 1 Revised Corrective Action Plan (ERM Alaska, Inc. 2022a).

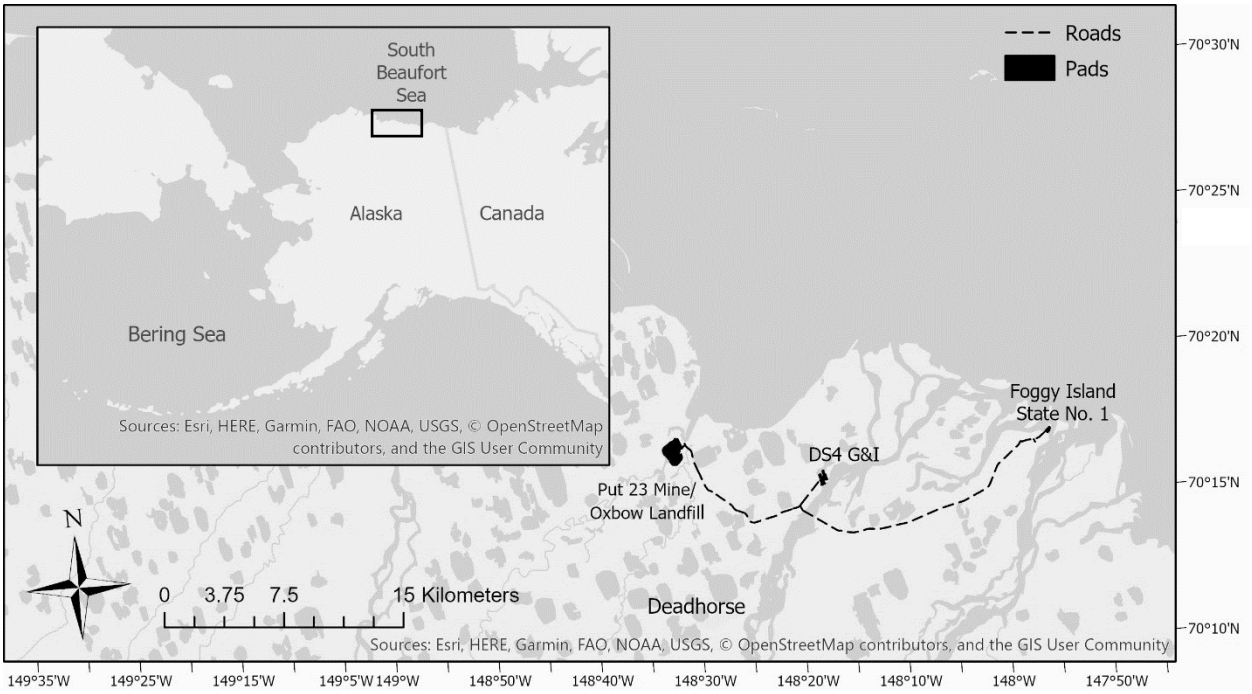

Figure 1—Specific geographic region of the Foggy Island State No. 1 wellpad in the Prudhoe Bay Area of the North Slope of Alaska.

Maternal Den Surveys

BPAPC will utilize two aerial infrared (IR) maternal den surveys to identify any active polar bear dens in the area. The surveyors will use IR cameras on fixed-wing aircrafts with flights flown between 245–457 meters (800–1,500 feet) above ground level at a speed of <185 km/h (<115 mph). These surveys will be concentrated on areas within 1.6 km (1 mi) of project activities that would be suitable for polar bear denning activity such as drainages, banks, bluffs, or other areas of topographic relief.

Ice Road and Ice Pad Construction

There exist no permanent roads that lead to the pad. Therefore, a 1.7-kilometer (km) (1.06-mile [mi]) ice road will be constructed between the Endicott Causeway and the pad for access. Additionally, a small, 0.2-km (0.12-mi) spur ice-road to a nearby lake for procuring ice chips will be required. The BPAPC will also construct an ice pad totaling 7.663 acres (ac) surrounding the gravel pad to stage and maneuver equipment. Ice road and pad construction will

begin with pre-packing, which will take 2 days, followed by road and pad construction. The construction phase is anticipated to last 8 days.

Site Remediation

The pad currently contains an inactive exploratory well, several areas of confirmed soil contamination, and foam board, all of which require remediation. The BPAPC will construct a debris collection fence around the existing gravel pad and clear the area of snow. They will then excavate the well cellar, cut the well casing, and plug the abandoned exploration well. They will use an excavator to extract the soil and foam board, segregate clean from contaminated materials, and transport contaminated materials for disposal off site.

Material Disposal

Contaminated materials will be transported using dump trucks via ice road and then gravel road to the grind and inject facility found at DS4 pad in the Prudhoe Bay area. Foam board will be transported to the Oxbow Landfill. After disposing of the foam board, dump trucks will stop at the nearby Put 23 mine site to pick up clean organic backfill for site rehabilitation.

Site Rehabilitation

Clean, organic backfill from the Put 23 mine will be used to restore the pad to natural grade. During a 5-day period in the summer of 2023, a five-person crew will be transported to the former pad site via airboat to reseed the pad with indigenous vegetation. The location will also be treated with fertilizer at a rate of 200 pounds per acre with 10-20-20 N-P-K to promote seeding success. Fertilizer rates or types may change at the recommendation of the Alaska Plant Materials Center.

Description of Marine Mammals in the Specified Geographic Region

The polar bear is the only species of marine mammal under the Service's jurisdiction likely found within the specified geographic region. Information on range, stocks, biology, and climate impacts on polar bears can be found in the final rule published by the Service on August

5, 2021, implementing the *2021–2026 Beaufort Sea ITR* (86 FR 42982, August 5, 2021) as well as in Appendix A of the supplemental information (available as described above in **ADDRESSES**).

Potential Impacts of the Specified Activities on Marine Mammals

Anthropogenic activities may affect polar bears in numerous ways. SBS polar bears are typically distributed in offshore areas associated with multiyear pack ice from mid-November to mid-July, and they can be found in large numbers and high densities on barrier islands, along the coastline, and in the nearshore waters of the Beaufort Sea from mid-July to mid-November. This distribution leads to a significantly higher number of human–polar bear encounters on land and at offshore structures during the open-water period (mid-July to mid-November) than at other times of the year.

A majority of on-land polar bear observations documented by the Service occur within 2 km (1.2 mi) of the coastline, which overlaps with the location for a portion of these specified activities. Encounters are more likely to occur during the fall at locations on or near the coast. Polar bear interaction plans, training, and monitoring have the potential to reduce human–polar bear encounters and the risks to polar bears and humans when encounters occur. Polar bear interaction plans detail the policies and procedures that the associated facilities and personnel will implement to avoid attracting and interacting with polar bears and to minimize impacts to the polar bears. Interaction plans also detail how to respond to the presence of polar bears, the chain of command and communication, and required training for personnel.

The noises, sights, and smells produced by the proposed project activities could disturb and elicit variable responses from polar bears. Noise disturbance can originate from either stationary or mobile sources. Stationary sources include ice pad construction, well plugging, material removal and dumping, grading, and remediation activities. Mobile sources include vehicle traffic over gravel and ice roads and airboat trips.

The potential behavioral reaction of polar bears to the specified activities can vary by activity type. Noise generated on the ground by well plugging or material removal and grading activity may cause a behavioral (e.g., escape response) or physiologic response (e.g., increased heart rate, hormonal response) (Harms et al. 1997, Tempel and Gutierrez 2003). The available studies of polar bear behavior indicate that the intensity of polar bear reaction to noise disturbance may vary based on previous interactions, sex, age, and maternal status (Dyck and Baydack 2004, Anderson and Aars 2008).

Effects to Denning Polar Bears

The Service monitors known polar bear dens around the North Slope discovered either opportunistically or during planned surveys for tracking marked polar bears and detecting polar bear dens. However, these sites are only a small percentage of the total active polar bear dens for the SBS stock in any given year. To identify any active polar bear dens in the area, BPAPC included in their Request plans to utilize aerial infrared (IR) maternal den surveys as well as handheld and/or vehicle-mounted IR of all areas with snow accumulation surrounding the pad weekly. If a polar bear den is located, activities are required to avoid the den by 1.6 km (1 mi). When a previously unknown den is discovered in proximity to ongoing activities, BPAPC will implement mitigation measures such as the 1.6-km (1-mi) activity exclusion zone around the den and 24-hour monitoring of the site.

The responses of denning polar bears to disturbance and the consequences of these responses can vary throughout the denning process. We divide the denning period into four stages when considering impacts of disturbance: den establishment, early denning, late denning, and post-emergence; definitions and descriptions are located in the *2021–2026 Beaufort Sea ITR* (86 FR 42982, August 5, 2021).

Estimated Take

The applicant requested authorization only for take by Level B harassment, and the Service is proposing to authorize only take by Level B harassment for this IHA. Level B

harassment for nonmilitary readiness activities means any act of pursuit, torment, or annoyance that has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, feeding, or sheltering. Human-caused changes in behavior that disrupt biologically significant behaviors or activities for the affected animal indicate take by Level B harassment under the MMPA. Such reactions include, but are not limited to, the following:

- Fleeing (running or swimming away from a human or a human activity);
- Displaying a stress-related behavior such as jaw or lip-popping, front leg stomping, vocalizations, circling, intense staring, or salivating;
- Abandoning or avoiding preferred movement corridors such as ice floes, leads, polynyas, a segment of coastline, or barrier islands;
- Using a longer or more difficult route of travel instead of the intended path;
- Interrupting breeding, sheltering, or feeding;
- Loss of hunting opportunity due to disturbance of prey; or
- Any interruption in normal denning behavior that does not cause injury, den abandonment, or early departure of the family group from the den site.

This list is not meant to encompass all possible behaviors; other behavioral responses may also be indicative of Level B harassment. Relatively minor changes in behavior such as increased vigilance or a short-term change in direction of travel are not likely to disrupt biologically important behavioral patterns, and the Service does not view such minor changes in behavior as indicative of Level B harassment.

Surface Interactions

Impact Area

To assess the area of potential impact from the project activities, we calculate the area affected by project activities where harassment is possible. We refer to this area as a zone or area of influence. Behavioral response rates of polar bears to disturbances are highly variable, and

data to support the relationship between distance to polar bears and disturbance is limited. Dyck and Baydack (2004) found sex-based differences in the frequencies of vigilance bouts of polar bears in the presence of vehicles on the tundra. However, in their summary of polar bear behavioral response to ice-breaking vessels in the Chukchi Sea, Smultea et al. (2016) found no difference between reactions of males, females with cubs, or females without cubs. During the Service's coastal aerial surveys, 99 percent of polar bears that responded in a way that indicated possible Level B harassment (polar bears that were running when detected or began to run or swim in response to the aircraft) did so within 1.6 km (1 mi), as measured from the ninetieth percentile horizontal detection distance from the flight line. Similarly, Andersen and Aars (2008) found that female polar bears with cubs (the most conservative group observed) began to walk or run away from approaching snowmobiles at a mean distance of 1,534 m (0.95 mi). Thus, while future research into the reaction of polar bears to anthropogenic disturbance may indicate a different zone of potential impact is appropriate, the current literature suggests that the application of a 1.6 km (1.0 mi) disturbance zone will encompass the vast majority of polar bear harassment events.

Estimated Harassment

We estimated Level B harassment using the spatio-temporally specific encounter rates and temporally specific harassment rates derived in the *2021–2026 Beaufort Sea ITR* (86 FR 42982, August 5, 2021) in conjunction with BPAPC's project operations footprint. Table 1 provides the definition for each variable used in the take formulas.

Table 1—Definitions of variables used in take estimates of non-denning polar bears on the coast of the North Slope of Alaska

Variable	Definition
B_{es}	bears encountered in zone of potential impact for the entire season
a_c	coastal exposure area

a_i	inland exposure area
r_o	occupancy rate
e_{ci}	coastal ice season bear-encounter rate in bears/season
e_{ii}	inland ice season bear-encounter rate in bears/season
t_i	ice season harassment rate
B_t	number of estimated Level B harassment events

The variables defined above were used in a series of formulas to ultimately estimate the total harassment from surface-level interactions. Encounter rates were originally calculated as polar bears encountered per square kilometer per season. As a part of their Request, BPAPC provided the Service with digital geospatial files and project dates that were used to determine the maximum expected human occupancy (i.e., rate of occupancy (r_o)) for each season. We assumed 100 percent human occupancy during activities. Using the buffer tool in ArcGIS, we created a spatial file of a 1.6-km (1-mi) buffer around all proposed structures and transit routes. The areas of impact were then clipped by coastal and inland zone shapefiles to determine the coastal areas of impact (a_c) and inland areas of impact (a_i) for each activity category. We then used spatial files of the coastal and inland zones to determine the area in coastal versus inland zones for each season.

Impact areas were multiplied by the appropriate encounter rate to obtain the number of polar bears expected to be encountered in an area of interest per season (B_{es}). The equation below (equation 1) provides an example of the calculation of polar bears encountered in the ice season for an area of interest in the coastal zone.

$$B_{es} = a_c * e_{ci}$$

Equation 1

To generate the number of estimated Level B harassments for each area of interest, we multiplied the number of polar bears in the area of interest per season by the proportion of the season the area is occupied, the rate of occupancy, and the harassment rate (equation 2).

$$B_t = B_{es} * S_p * r_o * t_i$$

Equation 2

Methods for Modeling the Effects of Den Disturbance

Probability for the Possibility of Take

When modeling take associated with den disturbance, we applied probabilities for the possibility of take of denning bears that were established through the analysis of 57 case studies as described in the 2021–2026 Beaufort Sea ITR (86 FR 42982, August 5, 2021). These probabilities were specific to exposure type and denning stage.

Den Simulation

Although the impact area of the BPAPC's activities does not span the entire North Slope of Alaska, we simulated dens across the entire North Slope ranging from the areas identified as denning habitat (Durner et al. 2006, 2013; Blank 2013) contained within the National Petroleum Reserve–Alaska (NPRA) in the west to the Canadian border in the east. By simulating dens across the North Slope and then focusing our analysis as needed to the potential impact area, we ensured the distribution of dens was consistent with the estimated number of dens in three different regions of northern Alaska provided by Atwood et al. (2020). These included the NPRA, the area between the Colville and Canning Rivers (CC), and Arctic National Wildlife Refuge. The mean estimated number of dens in each region during a given winter were as follows: 12 dens (95 percent CI: 3–26) in the NPRA, 26 dens (95 percent CI: 11–48) in the CC region, and 14 dens (95 percent CI: 5–30) in the Arctic National Wildlife Refuge (Atwood et al. 2020). For each iteration of the model (described below), we drew a random sample from a gamma distribution for each of the regions based on the above parameter estimates, which allowed uncertainty in the number of dens in each area to be propagated through the modeling

process. Specifically, we used the method of moments (Hobbs and Hooten 2015) to develop the shape and rate parameters for the gamma distributions as follows: NPRA (122/5.82,12/5.82), CC (262/9.52,26/9.52), and Arctic National Wildlife Refuge (142/6.32,14/6.32).

Because not all areas in northern Alaska are equally used for denning and some areas do not contain the requisite topographic attributes required for sufficient snow accumulation for den excavation, we did not randomly place dens on the landscape. Instead, we followed a similar approach to that used by Wilson and Durner (2020) with some additional modifications to account for differences in denning ecology in the CC region related to a preference to den on barrier islands and a general (but not complete) avoidance of actively used industrial infrastructure. Using the U.S. Geological Survey (USGS_ polar bear den catalogue (Durner et al. 2020), we identified polar bear dens that occurred on land in the CC region and that were identified either by GPS-collared polar bears or through systematic surveys for denning polar bears (Durner et al. 2020). This process resulted in a sample of 37 dens of which 22 (i.e., 60 percent) occurred on barrier islands. For each iteration of the model, we then determined how many of the estimated dens in the CC region occurred on barrier islands versus the mainland.

To make this determination, we first took a random sample from a binomial distribution to determine the expected number of dens from the den catalog (Durner et al. 2020) that should occur on barrier islands in the CC region during that given model iteration; $n_{barrier}$=Binomial(37, 22/37), where 37 represents the total number of dens in the den catalogue (Durner et al. 2020) in the CC region suitable for use (as described above) and 22/37 represents the observed proportion of dens in the CC region that occurred on barrier islands. We then divided $n_{barrier}$ by the total number of dens in the CC region suitable for use (i.e., 37) to determine the proportion of dens in the CC region that should occur on barrier islands (i.e., $p_{barrier}$). We then multiplied $p_{barrier}$ with the simulated number of dens in the CC region (rounded to the nearest whole number) to determine how many dens were simulated to occur on barrier islands in the region.

In the NPRA, the den catalogue (Durner et al. 2020) data indicated that two dens occurred outside of defined denning habitat (Durner et al. 2013), so we took a similar approach as with the barrier islands to estimate how many dens occur in areas of the NPRA with the den habitat layer during each iteration of the model; $n_{habitat}$~Binomial(15, 13/15), where 15 represents the total number of dens in NPRA from the den catalogue (Durner et al. 2020) suitable for use (as described above), and 13/15 represents the observed proportion of dens in NPRA that occurred in the region with den habitat coverage (Durner et al. 2013). We then divided $n_{habitat}$ by the total number of dens in NPRA from the den catalogue (i.e., 15) to determine proportion of dens in the NPRA region that occurred in the region of the den habitat layer ($p_{habitat}$). We then multiplied $p_{habitat}$ with the simulated number of dens in NPRA (rounded to the nearest whole number) to determine the number of dens in NPRA that occurred in the region with the den habitat layer. Because no infrastructure exists and no activities are proposed to occur in the area of NPRA without the den habitat layer, we considered the potential impacts of activity only to those dens simulated to occur in the region with denning habitat identified (Durner et al. 2013).

To account for the potential influence of industrial activities and infrastructure on the distribution of polar bear selection of den sites, we again relied on a subset of dens from the den catalogue (Durner et al. 2020) discussed above. We further restricted the dens to only those occurring on the mainland because no permanent infrastructure occurred on barrier islands with identified denning habitat (Durner et al. 2006). We then determined the minimum distance to permanent infrastructure that was present when the den was identified. From these values, we determined that 15 percent of mainland dens were located within 3 km (1.86 mi) of infrastructure. We again took a similar approach as with the barrier islands to estimate how many dens occur within 3 km (1.86 mi) of infrastructure; given the simulated number of dens on the CC mainland region, $n_{mainland}$, as determined above, we then calculated the number of dens within 3 km (1.86 mi) of infrastructure as $n_{infrastructure}$=Binomial($n_{mainland}$,0.15) for each iteration

of the model, with the remainder of simulated mainland dens placed greater than 3 km (1.86 mi) from infrastructure.

To inform where dens are most likely to occur on the landscape, we developed a kernel density map by using known den locations in northern Alaska identified either by GPS-collared polar bears or through systematic surveys for denning polar bears (Durner et al. 2020). To approximate the distribution of dens, we used an adaptive kernel density estimator (Terrell and Scott 1992) applied to

$$\mathbf{n}$$

observed den locations, which took the form

$$f(s) \propto \theta n \sum_{ni} k(s - s_i h(s)) f\mathbf{s} \propto \theta n \sum_{i} n k\mathbf{s} - \boldsymbol{s}_i h\mathbf{s},$$

where the adaptive bandwidth

$$h(s) = (\beta_0 + \beta_1 I(s_i \in M) I(s \in M)) \beta_2 h\boldsymbol{s} = \beta 0 + \beta 1 I\boldsymbol{s}_i \in \mathcal{M} I\boldsymbol{s} \in \mathcal{M} \beta 2$$

for the location of the *i*th den and each location

$$\mathbf{s}$$

in the study area. The indicator functions allowed the bandwidth to vary abruptly between the mainland

$$\mathcal{M}$$

and barrier islands. The kernel *k* was the Gaussian kernel, and the parameters

$$\theta, \beta_0, \beta_1, \beta_2 \theta, \beta 0, \beta 1, \beta 2$$

were chosen based on visual assessment so that the density estimate approximated the observed density of dens and our understanding of likely den locations in areas with low sampling effort.

As in previous take authorizations, the kernel density map we used for this analysis considers denning habitat in the CC region, where more denning occurs on barrier islands compared to the other two regions. We restricted the distance to infrastructure component to only the CC region because it is the region that contains the vast majority of oil and gas infrastructure and has had some form of permanent industrial infrastructure present for more than 50 years.

To simulate dens on the landscape, we first sampled in which kernel grid cell a den would occur based on the underlying relative probability (figure 2) within a given region using a multinomial distribution. Once a cell was selected, the simulated den was randomly placed on the denning habitat (Durner et al. 2006, 2013; Blank 2013) located within that grid cell. For dens being simulated on mainland in the CC region, an additional step was required. We first assigned a simulated den to be in one of two bins, within 3 km, or greater than 3 km from infrastructure, as described above. Based on the distance to infrastructure bin assigned to a simulated den, we subset the kernel density grid cells that occurred in the same distance bin and then selected a grid cell from that subset based on their underlying probabilities using a multinomial distribution. Then, similar to other locations, a den was randomly placed on denning habitat within that grid cell.

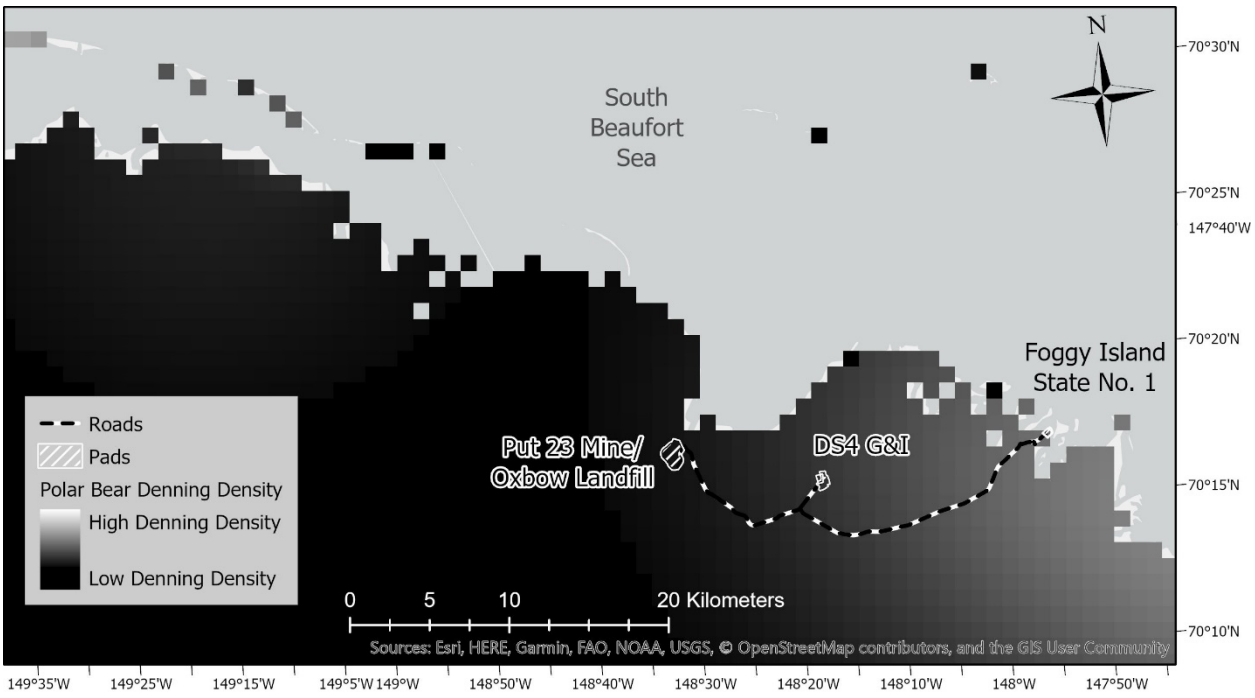

Figure 2—Depiction of the proposed project area on the North Slope of Alaska with the underlying relative density of polar bear dens.

For each simulated den, we assigned dates of key denning events: Den entrance, birth of cubs, when cubs reached 60 days of age, den emergence, and departure from the den site after emergence. These represent the chronology of each den under undisturbed conditions. We

selected the entrance date for each den from a normal distribution parameterized by entrance dates of radio-collared polar bears in the SBS subpopulation that denned on land included in Rode et al. (2018) and published in USGS (2018; n=52, mean=11 November, SD=18 days). These data were restricted to those dens with both an entrance and emergence date identified and where a polar bear was in the den for greater than or equal to 60 days to reduce the chances of including non-maternal polar bears using shelter dens. Sixty days represents the minimum age of cubs before they have a chance of survival outside of the den. Thus, denning periods of less than 60 days in the den have a higher chance of reflecting shelter dens use.

We truncated this distribution to ensure that all simulated dates occurred within the range of observed values (i.e., September 12 to December 22) identified in USGS (2018) to ensure that entrance dates were not simulated during biologically unreasonable periods given that the normal distribution allows some probability (albeit small) of dates being substantially outside a biologically reasonable range. We selected a date of birth for each litter from a normal distribution with the mean set to ordinal date 348 (i.e., December 15) and standard deviation of 10, which allowed the 95 percent CI to approximate the range of birth dates (i.e., December 1 to January 15) identified in the peer-reviewed literature (Messier et al. 1994, Van de Velde et al. 2003). We ensured that simulated birth dates occurred after simulated den entrance dates. We selected the emergence date as a random draw from an asymmetric Laplace distribution with parameters μ=81.0, σ=4.79, and p=0.79 estimated from the empirical emergence dates in Rode et al. (2018) and published in USGS (2018, n=52) of radio-collared polar bears in the SBS stock that denned on land using the mleALD function from package 'ald' (Galarzar and Lachos 2018) in program R (R Core Development Team 2021). We constrained simulated emergence dates to occur within the range of observed emergence dates (January 9 to April 9, again to constrain dates to be biologically realistic) and not to occur until after cubs were 60 days old.

Finally, we assigned the number of days each family group spent at the den site post-emergence based on values reported in three behavioral studies, Smith et al. (2007, 2013) and

Robinson (2014), which monitored dens immediately after emergence (n=25 dens). Specifically, we used the mean (8.0) and SD (5.5) of post-emergence days spent at dens monitored in these studies to parameterize a gamma distribution using the method of moments (Hobbs and Hooten 2015) with a shape parameter equal to 8.02/5.52 and a rate parameter equal to 8.0/5.52; we selected a post-emergence, pre-departure duration for each den from this distribution. We restricted time spent at the den post emergence to occur within the range of times observed in Smith et al. (2007, 2013) and Robinson (2014) (i.e., 2–23 days, again to ensure biologically realistic times spent at the den site were simulated). Additionally, we assigned each den a litter size by drawing the number of cubs from a multinomial distribution with probabilities derived from litter sizes (n=25 litters) reported in Smith et al. (2007, 2013) and Robinson (2014).

Because there is some probability that a female naturally emerges with zero cubs, we also wanted to ensure this scenario was captured. It is difficult to parameterize the probability of litter size equal to zero because it is rarely observed. We, therefore, assumed that dens in the USGS (2018) dataset that had denning durations less than the shortest den duration where a female was later observed with cubs (i.e., 79 days) had a litter size of zero. Only three bears in the USGS (2018) data met this criterion, leading to an assumed probability of a litter size of zero at emergence being 0.07. We, therefore, assigned the probability of 0, 1, 2, or 3 cubs as 0.07, 0.15, 0.71, and 0.07, respectively.

Infrastructure and Human Activities

The model developed by Wilson and Durner (2020) provides a template for estimating the level of potential impact to denning polar bears of specified activities while also considering the natural denning ecology of polar bears in the region. The approach developed by Wilson and Durner (2020) also allows for the incorporation of uncertainty in both the metric associated with denning bears and in the timing and spatial patterns of specified activities when precise information on those activities is unavailable. We used the geospatial files provided with the

Request, which included start and end dates, to estimate the potential for take of denning polar bears due to BPAPC's proposed activities.

Model Implementation

For each iteration of the model, we first determined which dens were exposed to the simulated activities and infrastructure. We assumed that any den within 1.6 km (1 mi) of infrastructure or human activity was exposed and had the potential to be disturbed as numerous studies have suggested a 1.6-km buffer is sufficient to reduce disturbance to denning polar bears (MacGillivray et al. 2003, Larson et al. 2020, Owen et al. 2021). For dens exposed to human activity, we then identified the stage in the denning cycle when the exposure occurred based on the date range of the activities to which the den was exposed. We then determined whether the exposure elicited a response by the denning polar bear based on probabilities derived from the reviewed case studies.

Level B harassment was applicable to both adults and cubs, if present, whereas Level A harassment (i.e., serious injury and non-serious injury) and lethal take were applicable only to cubs. The specified activities had a discountable risk of a direct collision with a den, which may result in a fatal injury to a sow or could reduce her future reproductive potential. For the ice road and ice pad, crews will constantly be on the lookout for signs of denning, use vehicle-based forward-looking infrared cameras and handheld IR to scan for dens, and will largely avoid crossing topographic features (i.e., areas of relief that may sustain long-lasting snow drifts) suitable for denning. Thus, the risk of running over a den was deemed to have a probability so low that it was discountable.

The case studies used to inform the post-emergence period include one where an individual fell into a den and caused the female to abandon her cubs. Due to its unique and non-analogous fact pattern, this case study was excluded from the calculation of disturbance probabilities applied to our analysis, which led to a 0 percent probability of lethal take and a 100 percent probability of non-serious-injury Level A harassment.

If a Level A harassment or lethal take was simulated to occur, a den was not allowed to be disturbed again during the subsequent denning periods because the outcome of that denning event was already determined. As noted above, Level A harassments and lethal takes applied only to cubs because specified activities would not result in those levels of take for adult females. Adult females, however, could still receive Level B harassment during the den establishment period or any time cubs received Level B harassment, Level A harassment (i.e., serious injury and non-serious injury), or lethal take.

We developed the code to run this model in program R (R Core Development Team 2021) and ran 10,000 iterations of the model (i.e., Monte Carlo simulation) to derive the estimated number of animals disturbed and associated levels of take.

Model Results

Estimates for different levels of harassment takes are presented in table 2. The distributions of both non-serious Level A harassment and serious Level A harassment/lethal takes were non-normal and heavily skewed, as indicated by markedly different mean and median values. The heavily skewed nature of these distributions has led to a mean value that is not representative of the most common model result (i.e., the mode), which for both non-serious Level A and serious Level A harassment/lethal takes is 0.0. Due to the low probabilities (0.011 for non-serious Level A harassment and 0.017 for serious Level A harassment/lethal take) of one or more non-serious or serious injury Level A harassment/lethal take for the proposed IHA period, combined with the mode of 0.0 injurious takes, we do not anticipate the specified activities will result in non-serious-injury or serious-injury Level A harassment or lethal take of polar bears and would not authorize Level A harassment with this authorization nor was it requested.

Table 2—Results of the den disturbance model for all proposed activities during the 1-year IHA period

[Estimates are provided for the probability, mean, median, and 95 percent confidence intervals (CI) for take by Level B harassment, non-serious-injury take by Level A harassment, and serious-injury take by Level A

harassment/lethal take for denning bears only. The probabilities represent the probability of ≥1 take by Level B harassment of a denning polar bear occurring during a given winter.]

Level B Harassment	Probability Mean Median 95% CI	0.120 0.145 0.0 0–1
Non-Serious Level A Harassment	Probability Mean Median 95% CI	0.011 0.020 0.0 0–0
Serious Level A Harassment/Lethal	Probability Mean Median 95% CI	0.017 0.033 0.0 0–0

Sum of Take from All Sources

The applicant proposes to conduct closure, remediation, and rehabilitation activities at the Foggy Island State No. 1 pad in the Prudhoe Bay area of the North Slope of Alaska upon issuance of the required IHA and extending through December 14, 2023. A summary of total estimated take via Level B harassment during the project by source is provided in table 3. The potential for lethal take and Level A harassment was explored. Lethal take or Level A harassment would not occur outside of denning polar bears because the level of sound and visual stimuli experienced by polar bear on the surface would not be significant enough to result in injury or death. Denning polar bears, however, may be subject to repeated exposures, significant energy expenditure from den abandonment or departure, or potential impacts to a cub if the den is abandoned or departed prematurely. The probability of greater than or equal to one lethal or serious Level A take of denning polar bears is 0.017.

Table 3—Total estimated takes by Level B harassment of polar bears and source

Source	Number of Estimated Level B Harassment Events
Winter activities—Bears on the surface	1
Winter activities—Denning bears	1
Summer reclamation activities	1
Total	3

Critical Assumptions

In order to conduct this analysis and estimate the potential amount of Level B harassment, we made several critical assumptions.

Level B harassment is equated herein with behavioral responses that indicate harassment or disturbance. Likely a portion of animals respond in ways that indicate some level of disturbance but do not experience significant biological consequences. Our estimates do not account for variable responses by polar bear age and sex; however, sensitivity of denning polar bears was incorporated into the analysis. The available information suggests that polar bears are generally resilient to low levels of disturbance. Females with dependent young and juvenile polar bears are physiologically the most sensitive (Andersen and Aars 2008) and most likely to experience harassment from disturbance. There is not enough information on composition of the SBS polar bear stock in the proposed project area to incorporate individual variability based on age and sex or to predict its influence on harassment estimates. Our estimates are derived from a variety of sample populations with various age and sex structures, and we assume the exposed population will have a similar composition and, therefore, the response rates are applicable.

The estimates of behavioral response presented here do not account for the individual movements of animals away from the project area or habituation of animals to noise or human presence. Our assessment assumes animals remain stationary (i.e., density does not change). There is not enough information about the movement of polar bears in response to specific disturbances to refine this assumption.

Determinations and Findings

In making this finding, we considered the best available scientific information, including: the biological and behavioral characteristics of the species, the most recent information on species distribution and abundance within the area of the specified activities, the current and expected future status of the stock (including existing and foreseeable human and natural

stressors), the potential sources of disturbance caused by the project, and the potential responses of marine mammals to this disturbance. In addition, we reviewed applicant-provided materials, information in our files and datasets, published reference materials, and species experts.

Small Numbers

For our small numbers determination, we consider whether the estimated number of polar bears to be subjected to incidental take is small relative to the population size of the species or stock.

1. We estimate BPAPC's proposed specified activities in the specified geographic region will cause no more than harassment (Level B) to three polar bears during the 1-year period of this proposed IHA (see *Sum of Take from All Sources*). Take of 3 animals is 0.33 percent of the best available estimate of the current SBS stock size of 907 animals (Bromaghin et al. 2015, Atwood et al. 2020) ((3÷907)×100≈0.33 percent) and represents a "small number" of polar bears of that stock.

2. Within the specified geographic region is small relative to the range of the SBS stock of polar bears. SBS polar bears range well beyond the boundaries of the proposed IHA region. As such, the IHA region itself represents only a subset of the potential area in which this species may occur. Thus, the Service concludes that a small portion of the SBS polar bear population may be present in the specified geographic region during the time of the specified activities.

Small Numbers Conclusion

Therefore, we propose a finding that BPAPC's specified activities will take by Level B harassment only small numbers of the SBS polar bear stock because: (1) Only a small proportion of the polar bear stock will overlap with the areas where the specified activities will occur; and (2) the number of SBS polar bears estimated to be subjected to Level B harassment via BPAPC's specified activities—3—represents less than 0.5 percent of the latest stock estimate of 907 polar bears, and is thus a small number relative to the size of the stock.

Negligible Impact

We propose a finding that any incidental take by Level B harassment resulting from the proposed project cannot be reasonably expected to, and is not reasonably likely to, adversely affect the stock through effects on annual rates of recruitment or survival and will, therefore, have no more than a negligible impact on the SBS stock of polar bears.

Polar bears are likely to respond to the specified activities with temporary behavioral modification or displacement if in the area during the project dates. These reactions are unlikely to have consequences for the long-term health, reproduction, or survival of affected animals. Most animals will respond to disturbance by moving away from the source, which may cause temporary interruption of foraging, resting, or other natural behaviors. Affected animals are expected to resume normal behaviors soon after exposure with no lasting consequences. We anticipate up to two polar bears may respond to disturbance with a biologically significant behavioral change during winter activities, and up to one polar bear may respond to disturbance with a biologically significant behavioral change during summer reclamation activities.

The proposed activities will result in disturbances within an industrial area with previously existing and consistent disturbance. While the specified activities include the construction of a short ice road and ice pad during polar bear denning season, there is limited denning habitat near these temporary structures. Further, the denning habitat that is within 1.6 km (1 mi) of the ice road and ice pad is also within the impact area of frequently traveled permanent roads. Thus, no previously undisturbed denning habitat will be impacted by the specified activities. Reclamation activities are planned for a short period (5 days) in the summer; however, BPAPC has committed to conducting these activities prior to mid-July to avoid the increase in polar bears on land that begins in late July.

Our proposed finding of negligible impact applies to incidental take associated with the proposed activities as mitigated by the avoidance and minimization measures identified in BPAPC's mitigation and monitoring plan. These mitigation measures are designed to minimize interactions with and impacts to polar bears. These measures and the monitoring and reporting

procedures are required for the validity of our finding and are a necessary component of the proposed IHA. For these reasons, we propose a finding that the proposed project will have a negligible impact on the SBS stock of polar bears.

Impact on Subsistence Use

Based on past community consultations, locations of hunting areas, no anticipated overlap of hunting areas and Industry projects, and the best scientific information available, including monitoring data from similar activities, we propose a finding that take caused by the proposed closure, reclamation, and remediation activities in the project area will not have an unmitigable adverse impact on the availability of polar bears for taking for subsistence uses during the proposed timeframe.

While polar bears represent a small portion, in terms of the number of animals, of the total subsistence harvest for the Utqiagvik, Nuiqsut, and Kaktovik communities, their harvest is important to Alaska Natives. The project activities are in an established industrial area, with the closest known common polar bear harvest locations greater than 10 miles (16.1 km) away. The BPAPC will be required to notify the Village of Kaktovik and Village of Nuiqsut of the planned activities and document any discussions of potential conflict. The BPAPC must make reasonable efforts to ensure that activities do not interfere with subsistence hunting and that adverse effects on the availability of polar bears are minimized. Should such a concern be voiced, development of Plans of Cooperation (POC), which must identify measures to minimize any adverse effects, will be required. The POC will ensure that project activities will not have an unmitigable adverse impact on the availability of the species or stock for subsistence uses. This POC must provide the procedures addressing how BPAPC will work with the affected Alaska Native communities and what actions will be taken to avoid interference with subsistence hunting of polar bears, as warranted.

The Service has not received any reports and is not aware of information that indicates that polar bears are being or will be deterred from hunting areas or impacted in any way that

diminishes their availability for subsistence use by pad closure, remediation, and reclamation. If there is evidence that these activities are affecting the availability of polar bears for take for subsistence uses, we will reevaluate our findings regarding permissible limits of take and the measures required to ensure continued subsistence hunting opportunities.

Least Practicable Adverse Impact

We evaluated the practicability and effectiveness of mitigation measures based on the nature, scope, and timing of the specified activities, the best available scientific information, and monitoring data during Industry activities in the specified geographic region. We propose a finding that the mitigation measures included within BPAPC's Request will ensure least practicable adverse impacts on polar bears, their habitat, and the subsistence harvest of polar bears (ERM Alaska, Inc. 2022b).

Polar bear den surveys before activities begin during the denning season, the resulting 1.6-km (1-mi) operational exclusion zone around all known polar bear dens, use of handheld and vehicle-mounted IR devices to scan areas of snow accumulation weekly, and restrictions on the timing and types of activities in the vicinity of dens will ensure that impacts to denning female polar bears and their cubs are minimized during this critical time. In early conversations with the Service prior to the submittal of their Request, BPAPC committed to complete summer reclamation activities prior to mid-July to avoid the increase in polar bears along the coast in late July and August. These measures are outlined in a polar bear interaction plan that was developed in coordination with the Service and is part of BPAPC's request for this IHA. Based on the information we currently have regarding den disturbance and temporal constraints, we concluded that the mitigation measures outlined in BPAPC's Request (ASTAC 2021) and incorporated into this authorization will minimize impacts from the specified activities to the extent practicable.

A number of additional mitigation measures were considered but determined to be not practicable. These measures are listed below:

- *Spatial and temporal restrictions on surface activity*—Some spatial and temporal

restrictions of operations were included in BPAPC's Request; however, additional restrictions would not be practicable for the specified activities based on other regulatory and safety requirements.

- *One-mile buffer around all known polar bear denning habitat*—Requiring a 1-mile buffer around all known polar bear denning habitat is not practicable as most of the planned transit routes and existing and temporary infrastructure used by BPAPC occurs within 1 mile of denning habitat, and they would not be able to shut down all operations based on other regulatory and safety requirements.
- *Establishment of corridors for sow and cub transit to the sea ice*—As there is no data to support the existence of natural transit corridors to the sea ice, establishment of corridors in the IHA area would be highly speculative. Therefore, no mitigative benefit would be realized by their establishment.
- *Requirement of third-party neutral marine mammal observers*—Due to the limited size of the specified activities, it is not practicable to hire third-party marine mammal observers. Additional crew may require additional transit vehicles, which could increase disturbance.

Required Determinations

National Environmental Policy Act (NEPA)

We have prepared a draft environmental assessment in accordance with the NEPA (42 U.S.C. 4321 et seq.*).* We have preliminarily concluded that authorizing the nonlethal, incidental, unintentional take by Level B harassment of up to three individuals from the SBS stock of polar bears in the specified geographic region during the specified activities during the regulatory period would not significantly affect the quality of the human environment and, thus, preparation of an environmental impact statement for this incidental harassment authorization is not required

by section 102(2) of NEPA or its implementing regulations. We are accepting comments on the draft environmental assessment as specified above in **DATES** and **ADDRESSES**.

Endangered Species Act

Under the Endangered Species Act (ESA) (16 U.S.C. 1536(a)(2)), all Federal agencies are required to ensure the actions they authorize are not likely to jeopardize the continued existence of any threatened or endangered species or result in destruction or adverse modification of critical habitat. Prior to issuance of a Final IHA, the Service will complete intra-Service consultation under section 7 of the ESA on our proposed issuance of an IHA. These evaluations and findings will be made available on the Service's website at *https://ecos.fws.gov/ecp/report/biological-opinion.*

Government-to-Government Consultation

It is our responsibility to communicate and work directly on a Government-to-Government basis with federally recognized Tribes in developing programs for healthy ecosystems. We are also required to consult with Alaska Native Claims Settlement Act (ANCSA) corporations in certain circumstances. We seek their full and meaningful participation in evaluating and addressing conservation concerns for protected species. It is our goal to remain sensitive to Alaska Native culture, and to make information available to Alaska Natives. Our efforts are guided by the following policies and directives:

(1) The Native American Policy of the Service (January 20, 2016);

(2) The Alaska Native Relations Policy (currently in draft form; see 87 FR 66255, November 3, 2022);

(3) Executive Order 13175 (January 9, 2000);

(4) Department of the Interior Secretarial Orders 3206 (June 5, 1997), 3225 (January 19, 2001), 3317 (December 1, 2011), 3342 (October 21, 2016), and 3403 (November 15, 2021) as well as Director's Order 227 (September 8, 2022);

(5) The Alaska Government-to-Government Policy (a departmental memorandum issued January 18, 2001); and

(6) the Department of the Interior's policies on consultation with Alaska Native Tribes and organizations.

We have evaluated possible effects of the proposed IHA on federally recognized Alaska Native Tribes and ANCSA Corporations. The Service has determined that authorizing the Level B harassment of up to three polar bears from BPAPC's specified activities would not have any Tribal implications or ANCSA Corporation implications and, therefore, Government-to-Government consultation or Government-to-ANCSA Corporation consultation is not necessary. However, we invite continued discussion, either about the project and its impacts or about our coordination and information exchange throughout the IHA/POC public comment process.

Proposed Authorization

We propose to authorize the nonlethal, incidental take by Level B harassment of three individuals from the SBS stock of polar bears. Authorized take will be limited to disruption of behavioral patterns that may be caused by the closure, remediation, and rehabilitation of the Foggy Island State No. 1 pad, and support activities conducted by BP America Production Company (BPAPC) in the Prudhoe Bay Area of the North Slope of Alaska, from finalization of this IHA through December 14, 2023. We do not anticipate or authorize any take by Level A harassment, injury, or death to polar bears resulting from these activities.

A. *General Conditions for the IHA for BPAPC*

1. Activities must be conducted in the manner described in the revised Request dated September 26, 2022, for an IHA and in accordance with all applicable conditions and mitigation measures. The taking of polar bears whenever the required conditions, mitigation, monitoring, and reporting measures are not fully implemented as required by the IHA is prohibited. Failure to

follow the measures specified both in the revised Request and within this proposed authorization may result in the modification, suspension, or revocation of the IHA.

2. If project activities cause unauthorized take (i.e., take of more than three polar bears from the SBS stock, a form of take other than Level B harassment, or take of one or more polar bears through methods not described in the IHA), BPAPC must take the following actions:

i. Cease its activities immediately (or reduce activities to the minimum level necessary to maintain safety);

ii. Report the details of the incident to the Service within 48 hours; and

iii. Suspend further activities until the Service has reviewed the circumstances and determined whether additional mitigation measures are necessary to avoid further unauthorized taking.

3. All operations managers, vehicle operators, and vessel operators must receive a copy of this IHA and maintain access to it for reference at all times during project work. These personnel must understand, be fully aware of, and be capable of implementing the conditions of the IHA at all times during project work.

4. This IHA will apply to activities associated with the proposed project as described in this document and in BPAPC's revised Request. Changes to the proposed project without prior authorization may invalidate the IHA.

5. The BPAPC's revised Request is approved and fully incorporated into this IHA unless exceptions are specifically noted herein. The revised Request includes:

i. The BPAPC's original *Request for an IHA*, dated September 1, 2022, which includes BPAPC's *Polar Bear Interaction Plan and geospatial files*;

ii. The BPAPC's response to request for further information from the Service, dated September 27, 2022; and

iii. The BPAPC's revised *Request for an IHA*, dated September 26, 2022.

6. Operators will allow Service personnel or the Service's designated representative to visit project work sites to monitor for impacts to polar bears and subsistence uses of polar bears at any time throughout project activities so long as it is safe to do so. "Operators" are all personnel operating under BPAPC's authority, including all contractors and subcontractors.

The BPAPC must implement the following policies and procedures to avoid interactions and minimize to the greatest extent practicable any adverse impacts on polar bears, their habitat, and the availability of these marine mammals for subsistence uses.

B. *General avoidance measures.*

1. The BPAPC must cooperate with the Service and other designated Federal, State, and local agencies to monitor and mitigate the impacts of activities on polar bears.

2. Trained and qualified personnel must be designated to monitor at all times for the presence of polar bears, initiate mitigation measures, and monitor, record, and report the effects of the activities on polar bears. The BPAPC must provide all operators with polar bear awareness training prior to their participation in project activities.

3. A Service-approved polar bear safety, awareness, and interaction plan must be on file with the Service Marine Mammals Management office and available onsite. The interaction plan must include:

i. A description of the proposed activity (i.e., a summary of the plan of operations during the proposed activity);

ii. A food, waste, and other attractants management plan;

iii. Personnel training policies, procedures, and materials;

iv. Site-specific polar bear interaction risk evaluation and mitigation measures;

v. Polar bear avoidance and encounter procedures; and

vi. Polar bear observation and reporting procedures.

The BPAPC must contact potentially affected subsistence communities and hunter organizations to discuss potential conflicts caused by the activities and provide the Service documentation of communications as described in D. *Measures To Reduce Impacts to Subsistence Users*.

4. *Mitigation measures for winter activities*. The BPAPC must undertake the following activities to limit disturbance around known polar bear dens:

i. The BPAPC must obtain record of two aerial infrared (AIR) surveys of all denning habitat located within 1.6 km (1 mi) of specified activities in an attempt to identify maternal polar bear dens. The first survey obtained must have occurred between December 1, 2022, and December 25, 2022, and the second survey obtained must have occurred between December 15, 2022, and January 10, 2023, with at least 24 hours occurring between the completion of the first survey and the beginning of the second survey.

ii. Handheld infrared surveys must be performed weekly for dens throughout the duration of the Project along the snow push piles around the Foggy Island Bay State No. 1 pad and snow drifts greater than 4.9 feet (1.5 meters [m]) in height along the ice road.

iii. All observed or suspected polar bear dens must be reported to the Service prior to the initiation of activities.

iv. If a suspected den site is located, BPAPC will immediately consult with the Service to analyze the data and determine if additional surveys or mitigation measures are required. The Service will determine whether the suspected den is to be treated as a putative den for the purposes of this IHA.

v. Operators must observe a 1.6-km (1-mi) operational exclusion zone around all putative polar bear dens during the denning season (November–April, or until the female and cubs leave the areas). Should a suspected den be discovered within 1 mile of activities, work must cease, and the Service contacted for guidance. The Service will evaluate these instances on a case-by-case basis to determine the appropriate action. Potential actions may range from cessation or

modification of work to conducting additional monitoring, and the holder of the authorization must comply with any additional measures specified.

vi. In determining the denning habitat that requires surveys, use the den habitat map developed by the USGS. A map of potential coastal polar bear denning habitat can be found at: *https://www.usgs.gov/centers/asc/science/polar-bear-maternal-denning?qt-science_center_objects=4#qt-science_center_objects*.

5. *Mitigation measures for in-water activities.*

i. Prior to and during airboat use, BPAPC must assess the access route for polar bears. While workers are transiting in the airboat, a designated occupant must be assigned to scan the surrounding area for marine mammals.

ii. Vessels must always maintain the maximum distance possible from polar bears. Vessels should never approach within an 805-m (0.5-mi) radius of polar bears unless it is an emergency.

iii. Vessels should take all practical measures (i.e., reduce speed, change course heading) to avoid polar bears in the water.

C. *Monitoring*

1. Operators must provide onsite observers and implement the Service-approved polar bear avoidance and interaction plan to apply mitigation measures, monitor the project's effects on polar bears and subsistence uses, and evaluate the effectiveness of mitigation measures.

2. All onsite observers shall complete a Service-provided training course designed to familiarize individuals with monitoring and mitigation activities identified in the polar bear avoidance and interaction plan.

3. Onsite observers must be present during all operations and must record all polar bear observations, identify and document potential harassment, and work with personnel to implement appropriate mitigation measures.

4. Operators shall cooperate with the Service and other designated Federal, State, and local agencies to monitor the impacts of project activities on polar bears. Where information is insufficient to evaluate the potential effects of activities on polar bears and the subsistence use of this species, BPAPC may be required to participate in joint monitoring efforts to address these information needs and ensure the least practicable impact to this resource.

5. Operators must allow Service personnel or the Service's designated representative to visit project work sites to monitor impacts to polar bear and subsistence use at any time throughout project activities so long as it is safe to do so.

D. *Measures To Reduce Impacts to Subsistence Users*

BPAPC must conduct its activities in a manner that, to the greatest extent practicable, minimizes adverse impacts on the availability of polar bears for subsistence uses.

1. The BPAPC will be required to develop a Service-approved POC if, through community consultation, concerns are raised regarding impacts to subsistence harvest or Alaska Native Tribes and organizations.

2. If required, BPAPC will implement the Service-approved POC.

3. Prior to conducting the work, BPAPC will take the following steps to reduce potential effects on subsistence harvest of polar bears:

i. Avoid work in areas of known polar bear subsistence harvest;

ii. Notify the Native Village of Kaktovik and the Native Village of Nuiqsit of the proposed project activities;

iii. Work to resolve any concerns of potentially affected Alaska Native Tribal organizations and corporations regarding the project's effects on subsistence hunting of polar bears;

iv. If any unresolved or ongoing concerns of potentially affected Alaska Native Tribal organizations and corporations remain, modify the POC in consultation with the Service and subsistence stakeholders to address these concerns; and

v. Implement Service-required mitigation measures that will reduce impacts to subsistence users and their resources.

E. *Reporting Requirements*

The BPAPC must report the results of monitoring to the Service Marine Mammals Management office via email at: *fw7_mmm_reports@fws.gov*.

1. *In-season monitoring reports.*

2. *Activity progress reports.* The BPAPC must: Notify the Service at least 48 hours prior to the onset of activities;

3. *Polar bear observation reports.* The BPAPC must report, within 48 hours, all observations of polar bears and potential polar bear dens during any project activities. Upon request, monitoring report data must be provided in a common electronic format (to be specified by the Service). Information in the observation report must include, but need not be limited to:

i. Date and time of each observation;

ii. Locations of the observer and polar bears (GPS coordinates if possible);

iii. Number of polar bears;

iv. Sex and age class—adult, subadult, cub (if known);

v. Observer name and contact information;

vi. Weather, visibility, and if at sea, sea state, and sea-ice conditions at the time of observation;

vii. Estimated closest distance of polar bears from personnel and facilities;

viii. Type of work being conducted at time of sighting;

ix. Possible attractants present;

x. Polar bear behavior—initial behavior when first observed (e.g., walking, swimming, resting, etc.);

xi. Potential reaction—behavior of polar bear potentially in response to presence or activity of personnel and equipment;

xii. Description of the encounter;

xiii. Duration of the encounter; and

xiv. Mitigation actions taken.

4. *Human–polar bear interaction reports.* The BPAPC must report all human–polar bear interaction incidents immediately, and not later than 48 hours after the incident. Human–polar bear interactions include:

i. Any situation in which there is a possibility for unauthorized take. For instance, when project activities exceed those included in an IHA, when a mitigation measure was required but not enacted, or when injury or death of a polar bear occurs. Reports must include all information specified for an observation report in paragraphs (3)(i)–(xiv) of this section E, a complete detailed description of the incident, and any other actions taken.

ii. Injured, dead, or distressed polar bears that are clearly not associated with project activities (e.g., animals found outside the project area, previously wounded animals, or carcasses with moderate to advanced decomposition or scavenger damage) must also be reported to the Service immediately, and not later than 48 hours after discovery. Photographs, video, location information, or any other available documentation must be included.

5. *Final report.* The results of monitoring and mitigation efforts identified in the polar bear avoidance and interaction plan must be submitted to the Service for review within 90 days of the expiration of this IHA. Upon request, final report data must be provided in a common electronic format (to be specified by the Service). Information in the final report must include, but need not be limited to:

i. Copies of all observation reports submitted under the IHA;

ii. A summary of the observation reports;

iii. A summary of monitoring and mitigation efforts including areas, total hours, total distances, and distribution;

iv. Analysis of factors affecting the visibility and detectability of polar bears during monitoring;

v. Analysis of the effectiveness of mitigation measures;

vi. A summary and analysis of the distribution, abundance, and behavior of all polar bears observed; and

vii. Estimates of take in relation to the specified activities.

Request for Public Comments

If you wish to comment on this proposed authorization, the associated draft environmental assessment, or both documents, you may submit your comments by either of the methods described in **ADDRESSES**. Please identify if you are commenting on the proposed authorization, draft environmental assessment, or both, make your comments as specific as possible, confine them to issues pertinent to the proposed authorization, and explain the reason for any changes you recommend. Where possible, your comments should reference the specific section or paragraph that you are addressing. The Service will consider all comments that are received before the close of the comment period (see **DATES**). The Service does not anticipate extending the public comment period beyond the 30 days required under section 101(a)(5)(D)(iii) of the MMPA.

Comments, including names and street addresses of respondents, will become part of the administrative record for this proposal. Before including your address, telephone number, email address, or other personal identifying information in your comment, be advised that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comments to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

Peter Fasbender,

Assistant Regional Director for Fisheries and Ecological Services, Alaska Region.

[FR Doc. 2023-03185 Filed: 2/14/2023 8:45 am; Publication Date: 2/15/2023]