
3.1 Air Quality

3.1 AIR QUALITY

3.1.1 AFFECTED ENVIRONMENT

For purposes of this Supplemental Environmental Impact Statement (EIS)/Overseas EIS (Supplemental EIS/OEIS), the Region of Influence (ROI) for air quality remains the same as that identified in the March 2011 Gulf of Alaska (GOA) Navy Training Activities Final EIS/OEIS and includes the Temporary Maritime Activities Area (TMAA) (the Study Area). Areas inland from the coastline, including United States (U.S.) Air Force air ranges and U.S. Army training lands, are addressed in separate environmental documents completed by those services.

3.1.1.1 Existing Conditions

3.1.1.1.1 Climate, Regional Emissions, Existing Air Quality

Climate, regional emissions, and existing air quality in the TMAA were discussed in the 2011 GOA Final EIS/OEIS. The climate and regional emissions within the ROI have not appreciably changed since the publication of the 2011 GOA Final EIS/OEIS (State of Alaska, Division of Air Quality 2011; U.S. Environmental Protection Agency 2013a, b). However, regarding existing air quality:

- Anchorage remains a maintenance area for carbon monoxide (CO)
- Juneau remains a non-attainment area for particulate matter under 10 micrometers (μm) in size (expressed as PM_{10} for particulate matter ranging in size above 2.5 and up to 10 μm)
- Fairbanks remains a maintenance area for CO and has been listed as a non-attainment area for particulate matter under 2.5 μm (expressed as $\text{PM}_{2.5}$ for particulate matter up to 2.5 μm in size)
- Eagle River was a non-attainment area for PM_{10} , but is now listed as a maintenance area for PM_{10}

As stated in the 2011 GOA Final EIS/OEIS, with the exception of Cape Cleare on Montague Island (an island with no permanent population), which is located over 12 nautical miles (nm) from the northern edge of the TMAA, the nearest shoreline (Kenai Peninsula) is located approximately 24 nm north of the TMAA's northern boundary. Air quality regions, as defined, only extend to state waters (3 nm). Additionally, the actions taken in maintenance and non-attainment areas will not interfere with the state's plans to meet national standards for air quality; general conformity will not be impacted either. Therefore, climate, regional emissions, and existing air quality will not be re-analyzed in this Supplemental EIS/OEIS. As such, the information and analysis presented in the 2011 GOA Final EIS/OEIS remains valid.

3.1.1.1.2 Sensitive Receptors

Sensitive receptors within the ROI are mainly crews of vessels and recreational users of the GOA. Following a review of recent literature, it was noted that the number of registered boats (civilian vessel traffic) in Alaska has dropped since the release of the Final EIS/OEIS by approximately 2,100 fewer registered boats in 2012 (Section 3.12.1.1.3, Tourism and Recreation, of this Supplemental EIS/OEIS provides a discussion on the decline of registered boats within the ROI). Despite the fact that sensitive receptors within the Study Area have decreased since the publication of the 2011 GOA Final EIS/OEIS, the general discussion regarding sensitive receptors in the Final EIS/OEIS remains valid.

3.1.1.1.3 Climate Change

Climate change in the TMAA was discussed in the 2011 GOA Final EIS/OEIS. Additional information on climate change, to include global warming and greenhouse gases (GHGs), can be found in Chapter 4

(Cumulative Impacts). In general, though, GHG emissions for a proposed action can be inventoried, based on methods prescribed by state and federal agencies. However, the specific contributions of a particular project to global or regional climate change generally cannot be identified based on existing scientific knowledge, because individual projects typically have a negligible effect. Also, climate processes are understood at only a general level. Furthermore, the U.S. Department of the Navy (Navy) is not proposing any new activities in this Supplemental EIS/OEIS. As such, the information regarding climate change presented in the 2011 GOA Final EIS/OEIS remains valid.

3.1.1.2 Current Requirements and Practices

Current requirements and practices were discussed in the 2011 GOA Final EIS/OEIS. Also, equipment used by military organizations within the Gulf of Alaska, including ships, other marine vessels, aircraft, and other equipment, are properly maintained in accordance with applicable Navy and Marine Corps requirements (e.g., Chief of Naval Operations Instruction [OPNAVINST] 4790.2J, *Naval Aviation Maintenance Program*, and OPNAVINST 4790.8B, *Ship's Maintenance and Material Management Manual*), and meet federal and state emission standards, where applicable. Additionally, the Navy is not proposing any new activities or equipment utilization in this Supplemental EIS/OEIS. However, should new aircraft or vessels eventually be introduced to the fleet, they too will undergo rigorous emissions testing and comply with all applicable maintenance requirements and federal and state emissions standards, where applicable. Additional information regarding current requirements and practices is discussed in detail in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Supplemental EIS/OEIS.

3.1.2 ALTERNATIVES ANALYSIS

All three alternatives (No Action Alternative, Alternative 1, and Alternative 2), as discussed in the 2011 GOA Final EIS/OEIS, remain the same for this Supplemental EIS/OEIS. The Navy conducted a review of existing federal and state regulations and standards relevant to air quality management or protection, as well as a review of new literature, to include laws, regulations, and publications pertaining to air quality. Although additional information relating to existing environmental conditions was found, the new information does not indicate an appreciable change to the existing environmental conditions as described in the 2011 GOA Final EIS/OEIS. Because the existing conditions have not changed appreciably, and no new Navy training activities are being proposed to occur in the TMAA in this Supplemental EIS/OEIS, re-analysis of the alternatives with respect to air quality is not warranted. Subsequently, the conclusions made for the alternatives analyzed in the 2011 GOA Final EIS/OEIS remain unchanged in this Supplemental EIS/OEIS.

3.1.3 CONCLUSIONS

As described above, there is new information on existing environmental conditions with regard to air quality, to include updates on particulate matter and non-attainment area designations and maintenance area designations. However, this new information does not change the affected environment, which forms the environmental baseline of the air quality analysis in the 2011 GOA Final EIS/OEIS. Additionally, no new Navy training activities are being proposed in this Supplemental EIS/OEIS that would affect air quality in the TMAA. Therefore, conclusions for air quality impacts made for the alternatives analyzed in the 2011 GOA Final EIS/OEIS remain unchanged in this Supplemental EIS/OEIS. For a summary of effects of the No Action Alternative, Alternative 1, and Alternative 2 on air quality under both the National Environmental Policy Act and Executive Order 12114, please refer to Table 3.1-6 (Summary of Effects by Alternative) in the 2011 GOA Final EIS/OEIS.

REFERENCES CITED AND CONSIDERED

State of Alaska, Division of Air Quality. (2011). Air Pollution in Alaskan Communities. Available from <http://www.dec.state.ak.us/air/anpms/comm/comm.htm> (05 December 2013).

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U.S. Environmental Protection Agency. (2013b). Alaska SIP—Federally Approved Rules. Available from <http://yosemite.epa.gov/r10/AIRPAGE.NSF/283d45bd5bb068e68825650f0064cdc2/17d7254768b935db88256516006de456?OpenDocument> (05 December 2013).

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