Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

## NATIONAL WEATHER SERVICE POLICY DIRECTIVE 10-15 JUNE 1, 2021

Administration and Management
VOLCANIC ASH SERVICES PROGRAM

**NOTICE:** This publication is available at:

http://www.nws.noaa.gov/directives/http://www.nws.noaa.gov/directives/.

**OPR:** W/AFS24 (B. Entwistle) **Certified by:** W/AFS (A. Stern)

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**SUMMARY OF REVISIONS:** This directive supersedes NWSPD 10-15, "Volcanic Ash," dated November 7, 2016. This update includes the following changes:

- Updated title of the directive to be consistent with other service programs;
- Updated OPR information;
- Included better wording to describe the partnership with NESDIS/OSPO as the parent office for the Washington VAAC in Section 1;
- Included wording to distinguish NWS responsibilities from that of NESDIS in Section 2.1;
- Clarified roles and responsibilities between the two US VAACs;
- Clarified volcanic ash dispersion and modeling issued by NCO SDM in Section 2.4;
- Included a section on AWC responsibilities in Section 2.4.2;
- Included a section on WFO responsibilities in Section 2.7;
- Added additional coordinating partners;
- Updated Appendix A with newer versions of documentation and inserted hyperlinks where possible.
- 1. The National Weather Service (NWS) Volcanic Ash Services Program (VASP), along with the National Environmental Satellite, Data, and Information Service (NESDIS) Office of Satellite and Product Operations (OSPO), provides timely, accurate, and effective volcanic ash forecasts, advisories, warnings and services to aviation, marine, and public communities for the protection of life and property. This directive governs the NWS provision to provide volcanic ash services to its partners and other users.
- 2. This directive establishes the following authorities and responsibilities:
- 2.1 The Assistant Administrator for Weather Services is responsible for policy, resource

advocacy, and allocation of volcanic ash services within the NWS.

- 2.2 The Washington VAAC, as part of NESDIS/OSPO, operates under policy directives established by <u>NESDIS</u>.
- 2.3 The Analyze, Forecast, and Support Office (AFSO) is responsible for:
  - Preparing policy and procedure directives;
  - Consolidating and analyzing performance and effectiveness indicators;
  - Program and budgetary support to the NWS Volcanic Ash Services Program Manager.
- 2.4 Regional Headquarters Offices will:
  - Ensure field offices are equipped and trained to fulfill VASP obligations;
  - Provide technical assistance to field offices;
  - Oversee regional Interagency Volcanic Ash Response Plans (See <u>Appendix A</u>);
  - Oversee regional volcanic ash services outreach efforts;
  - Evaluate performance and effectiveness of the VASP within their region.
- 2.5 The National Centers for Environmental Prediction (NCEP) Central Operations (NCO) Senior Duty Meteorologist (SDM) responds to requests and makes available volcanic ash dispersion model output. The VASP will ensure volcanic ash services and products are standardized and consistent.
  - The Ocean Prediction Center (OPC) and the National Hurricane Center (NHC) Tropical Analysis and Forecast Branch (TAFB) will:
    - Provide volcanic ash information and services for appropriate marine operations in their area of responsibility;
    - o Prepare and maintain volcanic ash response procedures describing how the center works with other agencies and organizations to protect lives and property in the event of volcanic ashfall over the ocean;
    - Provide and prepare outreach.
  - The Aviation Weather Center (AWC) will:
    - o Issue a Non-Convective Significant Meteorological Information (SIGMET) advisory if volcanic ash is affecting or, in the judgment of the forecaster, expected to affect an area judged to have a significant impact on the safety of aircraft operations (See also <a href="NWS Instruction">NWS Instruction</a> (NWSI) 10-811, Section 6.1.1).
- 2.6 The Volcanic Ash Advisory Centers (VAAC) in Anchorage and Washington, D.C. are two of the nine international VAACs. The Anchorage VAAC is an NWS entity operated by the Alaska Aviation Weather Unit (AAWU) and is part of NWS Alaska Region. The Washington VAAC is a partnership between the NWS and NESDIS Office of Satellite and Product Operations (OSPO) Satellite Analysis Branch (SAB).

- 1. The two U.S. VAACs are responsible for:
  - Coordinating with other state and federal agencies and organizations including but not limited to the International Civil Aviation Organization (ICAO) and International Airways Volcano Watch Operations Group (IAVWO) through the United States, other VAACs, State Volcano Observatories (SVO), and Meteorological Watch Offices (MWO);
  - Providing subject matter experts and members to the Interagency Meteorological Coordination Office (IMCO) which provides support to, and operates under guidance from the Interagency Council for Advancing Meteorological Services (ICAMS)<sup>1</sup> for any volcanic ash teams and services as appropriate;
  - Serving as technical leads for the NOAA Volcanic Ash Working Group as needed.

The Anchorage VAAC is responsible for monitoring and issuing Volcanic Ash Advisories (VAA) and Volcanic Ash Graphics (VAG) for Alaska, the Bering and Chukchi Seas, as well as portions of Eastern Russia and the East Siberian Sea.

The Washington VAAC is responsible for monitoring and issuing VAAs and VAGs for the CONUS, Hawaii, Guam, the Northern Mariana Islands, the Galapagos Islands, the Caribbean, Mexico, Central America, and the northern portion of South America to latitude 10° S.

NOTE: VAAC Wellington, New Zealand is responsible for the issuance of volcanic ash advisories for American Samoa.

- 2.7 Center Weather Service Units (CWSU) will provide meteorological information and services consistent with Federal Aviation Administration (FAA) agreements and NWS aviation services procedural directives referencing volcanic ash (See also <a href="https://www.nwsi.gov/nw
- 2.8 Weather Forecast Offices (WFO) will:
  - Provide aviation, marine, and public volcanic ash forecasts, statements, advisories, and warnings, as appropriate, within the respective County Warning Area (CWA). Examples include but are not limited to:
    - Special Marine Warnings (SMW)
    - o Marine Weather Statements (MWS)
    - Terminal Aerodrome Forecasts (TAF)
    - Volcano Warnings (VOW)
    - o Cooperative (COOP) Station Observations
    - Volcanic Ashfall Advisories and Warnings (NPW)
    - Volcanic Significant Meteorological Information (SIGMET) products AAWU, AWC, and WFO Honolulu Only
- 2.9 Weather Service Office (WSO) Pago Pago, American Samoa will:

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<sup>&</sup>lt;sup>1</sup> As of December 1, 2020, the Office of the Federal Coordinating Meteorologist (OFCM) transitioned to a new IMCO structure under ICAMS.

- Provide volcanic ash information and services for appropriate aviation, marine and public operations in their area of responsibility;
- Prepare and maintain volcanic ash response procedures describing how the office works with other agencies and organizations to protect lives and property in the event of volcanic ashfall;
- Provide and prepare outreach.

NOTE: WFO Honolulu issues all aviation products (e.g., TAFs) for American Samoa.

- 2.10 The three United States MWOs: Aviation Weather Center (AWC); AAWU; and WFO Honolulu, issue volcanic ash SIGMETs within their areas of responsibility, consistent with relevant international and FAA agreements. SIGMET responsibility for American Samoa falls under MWO Wellington, New Zealand.
- 2.11 This policy directive is supported by references and information listed in Appendix A.

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Louis W. Uccellini

Date

Assistant Administrator for Weather Services

## **Appendix A - Procedural Directives and Supporting Information**

## **Procedural Directives**

- NWS Instruction 10-811, International Aviation Products
- NWS Instruction 10-501, WFO Statements, Summaries, Tables Products Specification
- NWS Instruction 10-503, WFO Public Weather Forecast Products Specification
- NWS Instruction 10-515, WFO Non-Precipitation Weather Products Specification
- NWS Instruction 10-310, Coastal Marine Forecast Services
- NWS Instruction 10-311, Offshore, NAVTEX, and High Seas Marine Forecast Services
- NWS Instruction 10-314, Marine Weather Statements

## **Supporting Information**

- ICAO Annex 3 Meteorological Service for International Air Navigation<sup>2</sup>
- <u>Handbook on the International Airways Volcano Watch (IAVW) Operational Procedures</u> and Contact List
- ICAMS National Volcanic Ash Operations Plan for Aviation and Support for of the ICAO International Airways Volcano Watch
- Alaska Interagency Operating Plan for Volcanic Ash Episodes
- <u>Interagency Operating Plan for Volcanic-Ash Hazards to Aviation in the Pacific Region of the Northern Marianas Islands</u>
- NWS Mount Redoubt Service Assessment
- Interagency Operating Plan for Volcanic Ash Events Pacific Northwest

<sup>&</sup>lt;sup>2</sup> ICAO Documents are available online for purchase through the ICAO Store.