# EFFUSIVE ERUPTION AT LA SOUFRIÈRE VOLCANO, ST. VINCENT



## **SITUATION REPORT No. 1**

AS OF 5:00PM ON DECEMBER 30, 2020

# Increased Volcanic Activity at La Soufrière, St. Vincent Raises Alert Level to Orange

#### **LOCATION:**

La Soufrière Volcano, Saint Vincent and The Grenadines

#### PRESENT ACTIVITY:

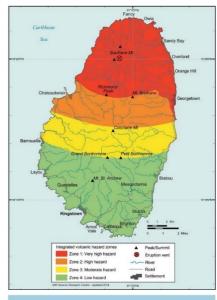
Effusive eruption, ongoing fumarolic activity, formation of a new volcanic dome, evaporation of the crater lake and increased seismic activity

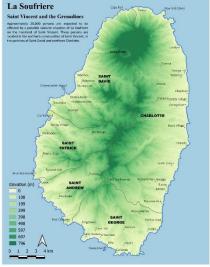
**ALERT LEVEL: ORANGE** 

#### SITUATION OVERVIEW

On 29th December 2020 the alert level for the La Soufrière volcano in St. Vincent and the Grenadines was elevated to **Orange** because of increased activity at the site. The volcano has had an effusive eruption, with visible gas and steam eruption. The small crater lake is virtually gone, and a new volcanic dome has formed. An Aerial reconnaissance conducted today Wednesday, December 30 indicates that there are no significant changes at the La Soufriere Volcano since Tuesday, December 29th, 2020. Magma continues to ooze to the surface and the dome has increased in size.

An Orange Level alert means that there is highly elevated seismicity or fumarolic activity, or both, or other highly unusual symptoms. Eruptions may occur with less than 24 hours notice. Monitoring systems are continuously manned and there is regular visual inspection of potential vent areas as well as continuous ground deformation and hydrothermal monitoring.





No Evacuation Orders have been issued.

#### **SITUATION** cont'd

Beginning 1<sup>st</sup> November 2020, the Seismic Research Centre (SRC) at the University of the West Indies recorded 121 seismic events at La Soufriere,, with one or two earthquakes a day and a maximum of eleven volcanic earthquakes recorded on 16<sup>th</sup> November 2020. Two of the earthquakes recorded to date have been larger than magnitude 2.0, at magnitude 2.3 and 2.5, which occurred on 12<sup>th</sup> and 14<sup>th</sup> December, respectively. The largest so far, at magnitude 3.3, was recorded at 10:29 p.m. on 16th December 2020.

On 28<sup>th</sup> December, routine observations done by NASA, for hotspots across the globe, indicated a hotspot within the crater of La Soufrière. On 29<sup>th</sup> December, additional satellite images indicated an extension of this hotspot. Visual observations provided by a resident of Rose Hall indicated greyish-white emissions being seen above the general area of the crater.

Based on recommendations an SMU team visited the crater on 29th December 2020 and have reported the presence of a satellite dome on the south-east of the existing dome. Strong gas emissions are visible, and the small crater lake is virtually gone. La Soufriere has had an effusive eruption, with visible gas and steam eruption. An Aerial reconnaissance conducted today Wednesday, December 30 indicates that there are no significant changes at the La Soufriere Volcano since Tuesday, December 29th, 2020. Magma continues to ooze to the surface and the dome has increased in size.



A three-person team of scientists from the UWI Seismic Research Centre (SRC) is scheduled to arrive in St. Vincent on 31<sup>st</sup> December 2020. The team will install additional instrumentation to gather more data on the state of the volcano, conduct further analyses and strengthen the current monitoring system.

# **Updates from Impacted CDEMA Participating States**

The Caribbean Disaster Emergency Management Agency (CDEMA) made contact with the National Disaster Coordinator in St. Vincent and the Grenadines and the following was reported:



#### ST. VINCENT AND THE GRENADINES

- The National Emergency Management Organsiation (NEMO) has been in constant communication with the Seismic Research Centre of the University of the West Indies on activities at the La Soufriere volcano.
- 2. The Hon. Prime Minister and the Cabinet have been briefed by NEMO and the Seismic Research Centre on the ongoing eruption.
- 3. The Hon. Prime Minister held a Press Conference at the Cabinet Room on 29<sup>th</sup> December 2020, with the UWI Seismic Research Centre, to brief the media on the ongoing activity.
- 4. The alert level was raised to Orange.
- 5. A meeting of the National Emergency Council was held at 5:00 p.m. on 29<sup>th</sup> December 2020 chaired by the Hon. Prime Minister.
- 6. The National Executive Committee met on 30th December 2020 at 10:00 a.m. at NEMO's Conference Room to activate plans, in the event that the level of seismicity increases and evacuation becomes necessary.
- 7. The National Volcano Emergency Plan has been activated and the National Emergency Operations Centre (NEOC) is partially activated.
- 8. Dissemination of information to the public is ongoing.
- 9. The Hon. Prime Minister has received approval from the Ministry of National Security in Trinidad and Tobago for a three (3) member team from the Seismic Research Centre to be deployed to St. Vincent to increase the monitoring at the La Soufriere volcano.
- 10. Collaboration with CDEMA, and other national disaster offices is ongoing.

### **THREAT LEVELS**

Below is a summary of the threat alert levels for the La Soufriere volcano:

LA SOUFRIERE VOLCANO HAZARD ALERT LEVEL

LA SOUFRIERE VOLCANO HAZARD ALERT LEVEL			
Alert Level	Symptoms	<b>Action Scientist</b>	Action: Civil
			Authorities
Green	Volcano is quiescent (quiet): seismic and fumarolic (steam vent) activities are at or below the historical level at this volcano. No other unusual activity has been observed.	Normal monitoring	Undertake ongoing public awareness campaign and work on volcanic emergency plans.
Yellow	Volcano is restless: seismic or fumarolic activity or both are above the historical level at this volcano or other unusual activity has been observed (this activity will be specified at the same time that the alert level is raised).	Monitoring system will be brought up to full capability. Civil authorities alerted.	Undertake ongoing public awareness campaigns and work on volcanic emergency plans. Advise vulnerable communities of evacuation procedures in the event of an emergency.
Orange	Highly elevated level of seismicity or fumarolic activity or both or other highly unusual symptoms. Eruptions may occur with less than 24 hours notice.	Monitoring system continuously manned. Regular visual inspection of potential vent areas. Continuous ground deformation and hydrothermal monitoring. Daily assessment reports to civil authorities.	Coordinate evacuation (if necessary) based on hazard zones. Entry to the restricted access zone by scientist will be permitted after evacuation on a caseby-case basis. Organize regular radio and television announcements.
Red	Eruption is in progress or may occur without further warning	Measurements as permitted by safety condition. Civil authorities advised continuously.	Coordinate continued evaluation as necessary. Organize regular radio and television announcements.

# Caribbean Disaster Emergency Management Agency (CDEMA) Actions

The CDEMA Coordinating Unit (CU) continues to operate in accordance with the standard operating procedures (SOPs) of the Regional Coordination Plan (RCP) which includes maintaining contact with the threatened states and Regional Response Mechanism (RRM) partners.

- I. The CDEMA Coordinating Unit has undertaken technical consultations with the UWI Seismic Research Centre on the status of La Soufriere volcano.
- II. The Regional Coordination Plan was activated at 6:00 PM December 29, 2020.
- III. The Regional Coordination Centre has been activated at 9:30 AM December 30, 2020.
- IV. The CDEMA Coordinating Unit has also undertaken consultations with the National Disaster Coordinator of the Subregional Focal Point in Barbados which stands ready to provide support.
- V. In accordance with the Volcanic Annex of the RCP, the following Regional Response Mechanism (RRM) Teams have been placed on ALERT:
  - a) CARICOM Disaster Assessment and Coordination (CDAC)
  - b) CARICOM Operational Support Team (COST)
  - c) Rapid Needs Assessment Team (RNAT)
  - d) Caribbean Disaster Relief Unit (CDRU)
- VI. The Secretary General of CARICOM and the Chairman of the Council of Ministers of CDEMA received a brief on the situation on Wednesday, December 29, 2020.
- VII. A meeting of the Caribbean Development Partners Group (CDPG) was convened on Thursday, December 30, 2020 to brief them on the status of La Soufriere.
- VIII. The CDEMA Coordinating Unit will provide initial technical assistance to the National Emergency Management Organization in the following areas:
  - a) Evacuation Planning
  - b) Logistics Planning
- IX. Emergency telecommunications tests between the CDEMA CU and St. Vincent are being undertaken.
- X. The CU will continue to monitor the situation in collaboration with the UWI Seismic Research Centre, the St. Vincent and the Grenadines <u>NEMO</u> and the national disaster management offices of Participating States in close proximity to the volcano and will provide updates to the RRM partners as necessary.

The CDEMA CU urges all Participating States and members of the RRM to monitor the progress of this volcanic event. The public should continue to monitor the releases from their local national disaster management office.

# List of preparatory actions being undertaken by the RRM Partners [as of 5:00 p.m. 30<sup>th</sup> December 2020]



### **LOGISTICS SUPPORT**

- The Regional Security System (RSS) airplane is on standby to transport the SRC team to St. Vincent on 31st December 2020.
- The World Food Programme (WFP) preparedness and response mechanisms are on standby to assist, including logistical equipment, food kits and cash transfers.



# **AGRICULTURE & FOOD SECURITY**

• The UN Food and Agriculture Organisation (FAO) is supporting the Ministry of Agriculture in their plans for evacuation of livestock.

#### GENERAL COORDINATION

- The International Federation of Red Cross and Red Crescent Societies (IFRC) has been in contact with the St. Vincent Red Cross Society and is on standby to provide assistance as requested.
- •UNDP has alerted its national focal points and is closely monitoring the situation.
- •UNFPA has contacted its national focal points and is available to provide support in key areas including the prevention of gender-based violence in emergencies.
- •USAID/DHS Disaster Risk Management Specialists are in contact with the National Disaster Coordinator in St. Vincent. They are also in contact with regional partners and on standby to provide assistance.
- The Caribbean Water And Wastewater Association (CWWA) indicated that its resources are available to provide support as needed.
- •The World Bank (WB) Group has been in contact with the ministry responsible for economic planning and is on standby to provide support as requested.
- •FCO UK has been in contact with NEMO and identified the UK Commission in St. Vincent & the Grenadines as the contact for direct requests for assistance.
- •The Government of Canada (GAC) is closely monitoring the developing situation.

# List preparatory actions being undertaken by the RRM Partners [as of 5:00 p.m. 30<sup>th</sup> December 2020]



#### **SECURITY**

• An RSS Warning Order has been issued to its Member States to standby for deployment if requested by the impacted State.



### **HEALTH & NUTRITION**

No updates.



### **EDUCATION**

• No updates.



#### **RELIEF SUPPORT**

No updates.



#### **FINANCIAL SUPPORT**

• No updates.



#### **EMERGENCY COMMUNICATION**

No updates.