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Bovoni Landfill Vegetation Debris Fire Unified Command Response Efforts Joint Testimony



**PRESENTED BY
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Submitted to

**SENATOR RAY FONSECA, CHAIRMAN
*Senate Committee on Health, Hospitals & Human Services***

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3 Good afternoon, Senator Ray Fonseca, Chairman, Committee on Health, Hospitals
4 & Human Services, other committee members, 35th Legislature Staff, and those in
5 the viewing and listening audience. I am Daryl D. Jaschen, Director of the Virgin
6 Islands Territorial Emergency Management Agency (VITEMA). With me today are
7 representatives from key US Virgin Islands Agencies making up our Unified
8 Command in response to the Territory State of Emergency Signed by Governor
9 Albert Bryan, Jr. on Monday, September 18, 2023, for a vegetation debris fire at the
10 Bovoni Landfill which began on Thursday, September 14, 2023.

11 Members include Virgin Islands Fire and Emergency Medical Services (VIFEMS),
12 Acting Director Antonio Stevens; Virgin Islands Department of Health,
13 Commissioner Justa “Tita” Encarnacion; Department of Planning and Natural
14 Resources, Commissioner Jean-Pierre L. Oriol; and Department of Education,
15 Assistant Commissioner Victor Somme III. Other key agencies making up the
16 Unified Command, but not present here today are Virgin Islands Waste Management
17 Agency, VI Police Department, Virgin Islands National Guard, Department of
18 Human Services, Office of Legal Counsel, and Government House Joint Information
19 Center.

20 Moment of Silence

21 I would like to begin my testimony with a moment of silence for our late Director
22 of the Virgin Islands Fire and Emergency Services, Daryl George. If it had not
23 been for these decisive recommendations by Director George and action by
24 Governor Bryan to sign a State of Emergency, we would still be engaged with at a
25 minimum, the vegetation fire and potentially additional fires from nearby trash,
26 metal, and oil.

27 Bovoni Landfill

28 In general, the Bovoni Landfill contains a host of different types of debris. There is
29 a section with metal, mostly old cars, and trucks, used oil: trash which is hauled in
30 daily by truckers from the bin sites along with small businesses and the private
31 sector, and an area for vegetation debris, commonly known as green waste. A vast
32 portion of the green waste which measures approximately 55,000 cubic yards, is
33 from hurricane Irma, which was brought in by the US Army Corps of Engineers
34 after being reduced from 131,000 cubic yards on St. Thomas and 63,000 cubic
35 yards of debris on St. John. This vegetation debris is what the firefighters and
36 VIWMA contractors with excavators fought for 22 days with underground fires.
37 Thanks to the swift and continuous actions by VIFEMS and VIWMA contractors
38 there was no threat to any other areas of the landfill, including the trash section.

39 Unified Command

40 Upon Governor Bryan's signature on the Territory State of Emergency, VITEMA
41 established a unified command, which consisted of VIFEMS as the lead agency
42 with 16 supporting agencies and essential staff. Up to October 4, the unified
43 command met twice a day, 7:00 am and 4:00 pm, 7-days a week, to review
44 progress with updates from the Incident Commander Director Daryl George and
45 other key support agency leaders and review the objectives for the next 24-hours.
46 Over 1.85 million gallons of water was used to extinguish the fire, with 70%
47 coming from the private water hauler trucks and 30% from VIFEMS refilling from
48 the nearby fire hydrant. For the 22 days of operations virtually no precipitation fell
49 on the Bovoni Landfill. Once Director George announced the vegetation debris fire
50 extinguished, the unified command went to single meetings held at 4:00 pm,
51 Monday – Friday, as there were still clean-up operations and work to be completed
52 by VIWMA for emergency protective measures, to minimize any additional fires
53 beginning from reigniting the vegetation debris area of the landfill. Governor

54 Bryan signed an end to the Territory State of Emergency at 5:00 pm on October
55 17, 2023.

56 VIFEMS

57 Members of the VI Fire and Emergency Medical Services, from St Thomas, St
58 John, and St Croix, rotated into the Bovoni site to fight these underground fires
59 beginning 14 September, and on the 22nd day, 4 October, at 11:00 am, the Incident
60 Commander Director Daryl George, after consultation with his on the ground fire
61 chiefs, announced the vegetation debris fires at the Bovoni Landfill extinguished.
62 VIFEMS Assistant Director Antonio Stevens and I had a chance to visit the Bovoni
63 Landfill for 3 days to see firsthand effects of the firefighters and excavators
64 working together under tremendously trying conditions. With up to 4-execvators at
65 a time and firefighters directing 8-hoses on the wall of smoking vegetation debris
66 and the heated excavation machines, progress was slow, but progress was being
67 made. Daily thermal videos and images from the VIPD drones provided the unified
68 command and firefighters the ability to evaluate progress and re-adjust tactics for a
69 continual attack on the fires. Besides the firefighters and excavators working on the
70 grounds of the vegetation debris, there was very little room for water hauling
71 vehicles, pumper trucks, and other response vehicles to position and coordinate
72 actions onsite. Safety is always a concern at the landfill site and VIWMA
73 continually had individuals onsite directing traffic and watching out for any
74 potential unsafe activities. There were no significant injuries to any of the
75 firefighters or contractors. There were four minor injuries to firefighters, with all
76 being returned to work the next day. An EMS medical aid station with support
77 from the DOH mobile medical van, remained near the site to provide medical
78 assistance if needed.

79 VING

80 The incident commander, Director Daryl George, in abundant concern for the
81 health of the community from the smoke, which usually drifted from East to West,
82 requested the Virgin Islands National Guard, with a Strike Team from the 23rd
83 Civil Support Team, Weapons of Mass Destruction, conduct air monitoring for any
84 contaminants in the air, which is one of the core missions of the 23rd CST. The
85 Strike Team conducted an initial air monitoring for contaminants on Thursday, 21
86 September and another air monitoring the following Thursday, 28 September. Both
87 air monitoring missions resulted in no detected elevated readings of contaminants
88 from the three sites tested, at Bolongo Bay Hotel & Resort, Antilles School, and
89 the Bovoni Landfill. The VING also transported 65,000 gallons of water by ground
90 using its Load Handling System Compatible Water Tank Rack (HIPPO) system
91 under the National Guard 72 hours responsive authority at no cost to the territory.

92 DPNR

93 DPNR Commissioner Oriol met with key members of the unified command and
94 the Environmental Protection Agency (EPA) to discuss assistance if the fire
95 reached sections of the landfill which had potential to release contaminants in the
96 air as well as ensure measures to protect the water run-off from getting into any of
97 the surrounding natural water ways. The EPA indicated that they have extremely
98 limited staffing of individuals to respond as much of their resources will still on
99 site at the Hawaiian Island of Maui from the Lahani fires. EPA offered to provide
100 access to a suite of Purple Air (PA) Particulate Matter (PM) monitors to support
101 continuous, real-time monitoring of the surrounding area's air quality. However,
102 DPNR indicated that the University of the Virgin Islands already had a series of
103 PA sensors in service. PA sensors are used to monitor air quality in real-time and
104 measure PM 2.5 concentrations. They are read in ten-minute intervals. The sensors
105 and the network were designed to help share data related to particulates in the

106 USVI. The university has deployed more than 38 sensors across the territory.
107 There are 17 particulate matter monitors located across the island of St. Thomas.
108 Two main sensors were used to monitor the fire. PA sensors were used to monitor
109 the affected area at the Bovoni Mall, which was directly on the wind line between
110 the landfill and the Bertha Boschulte Middle School. This unit and one other at
111 ECO Tours were actively used in monitoring throughout the entire vegetation
112 debris fire at the landfill were used to determine safety of the air quality for the
113 community at large. The monitors of the system recorded events that resulted from
114 the beginning of the fire. On September 19, 2023 the PM levels for the Bovoni
115 Mall and Eco Tour sensors both indicated that the AQ was healthy and air
116 pollution levels did not pose a threat or risk. Because of the prevailing winds, there
117 were no elevated particulate matter readings detected by the monitors in the 22
118 days that would have affected the BCM MS. This was consistent through the
119 duration of the fire with the university staff monitoring the AQ levels regularly as
120 requested by DPNR and VITEMA. Results of the VING Strike Team air
121 monitoring efforts were provided to the EPA, and they verified the results
122 contained no elevated chemical contaminants during the period.

123 EMAC PRNG

124 For two days, early in the response efforts, the PRNG assisted with water drops
125 from a 660 gallon “bambi” bucket on areas inaccessible to firefighters, to keep the
126 fire from spreading to nearby buildings to the west. A total of 66,000 gallons of
127 water air dropped into the center of the fire. The support from the PRNG was made
128 possible through a Governor-to-Governor Emergency Management Assistance
129 Compact or EMAC, which provided personnel and equipment, with all costs
130 reimbursable to Puerto Rico by the Government of the US Virgin Islands. The
131 initial cost estimate for the use of the equipment and personnel was calculated at

132 \$84,000 dollars total for the 2-days. On November 17, 2023 VITEMA received the
133 actual EMAC costs from PREMB for \$73,909 dollars which the Government of
134 the Virgin Islands is responsible for reimbursement to the Commonwealth of
135 Puerto Rico. The difference in the cost estimate is primarily due to the fuel
136 purchases completed using the VING OTAG fuel card.

137 VIDOH

138 As mentioned earlier, the VIDOH established a mobile health monitoring, air
139 conditioned, site with EMS support staff. During the 22-day event, the average day
140 time temperature was 92 degrees Fahrenheit with a heat index between 108-111
141 degrees Fahrenheit and the evening low temperature averaged 84 degrees
142 Fahrenheit.

143 The Virgin Islands Department of Health (VIDoH) extends its sincere appreciation
144 to the dedicated members of the community who actively supported the "Boots on
145 the Ground" campaign, facilitating the collection of invaluable data regarding the
146 response to the Landfill Fire. The community's unwavering resilience, unity, and
147 proactive engagement have played a pivotal role in addressing emerging health
148 disparities associated with the Bovoni fire and other social determinants of health,
149 which continue to be a central focus of VIDOH's preventive efforts.

150 Recognizing an opportunity to utilize data derived from this incident to enhance
151 future community safety and well-being, VIDOH's Health Disparities Program
152 underscores the agency's commitment to data-driven empowerment and resilience.

153 In the face of challenging circumstances, a dedicated group comprised of
154 community health workers, VIDOH staff, and environmental health experts
155 discerned the crucial role of data in comprehending the impact of the landfill State
156 of Emergency. Qualitative data collected during and after the landfill fire emerged

157 as a critical resource, transcending mere statistics to provide the community with
158 essential information concerning health conditions, safety plans, access to clean
159 water, and evacuation procedures.

160 Additionally, VIDO's Director of Communications supported the Joint
161 Information Center, ensuring the accurate flow of information to keep the
162 community well-informed about health and safety concerns, underscoring the
163 Department's commitment to transparency.

164 Armed with this data, VIDO initiated educational campaigns aimed at increasing
165 awareness of health risks stemming from smoke and pollutants. Residents were
166 encouraged to share coping strategies, and immediate support was made available
167 as needed, thereby empowering individuals to proactively safeguard their health.

168 VIDO played a pivotal role in managing environmental and public health aspects
169 during the landfill fire, including coordination of emergency responses, air quality
170 monitoring, issuance of advisories, and dissemination of information regarding
171 landfill fire risks, proper waste disposal practices, and environmental stewardship.
172 The collaborative efforts with other agencies and effective communication with the
173 public proved essential for a successful response.

174 Looking ahead, VIDO, in collaboration with VIFEMS and VITEMA, is set to
175 host a town hall meeting aimed at delving deeper into data findings. This initiative
176 empowers the community to collectively identify priorities and resolutions,
177 exemplifying a holistic approach to community engagement that reinforces
178 VIDO's influence within local government.

179 VIWMA

180 Director George permitted the Bovoni landfill to open each morning from 5 am for
181 until noon and then closed so the combined activities of water haulers, fire trucks,

182 excavators, and firefighters could focus on battling the vegetation debris fire and
183 moving the extinguished debris to other sections of the landfill.

184 In recent actions by VIWMA regarding the debris still at the Bovoni Landfill. 75
185 loads of green waste (approximately 1,900 cubic yards) have been hauled to the
186 back of the landfill since Sunday October 1. It will require 1,050 trucks loads of fill
187 material (approximately 30,450 cubic yards) to cover the entire green waste area,
188 which should prevent a future fire. This operation should take approximately one
189 month (weather permitting). Normal landfill operations have resumed, however
190 VIWMA is not accepting green waste until further notice. VIWMA's future plan is
191 to use the recent \$6 million dollar EPA/DPNR waste diversion grant to develop
192 Standard Operating Procedure for the handling of green and other waste Territory-
193 Wide. Executive Director Roger Merrit will be working with their consultant and
194 contractor to identify an area that can safely begin accepting green waste going
195 forward.

196 DOE

197 Early discussions with DOE Commissioner Wells-Hedrington and VIFEMS
198 Director George regarding the BC Boschulte school resulted in the school closing
199 for one week and then conducting two weeks of virtual classes. DOE conducted a
200 walkthrough of the school for any cleaning requirements before re-opening. The
201 school resumed in-school classes following the long weekend, on Tuesday, 10
202 October, students, teachers, faculty, and support staff.

203 VITEMA

204 VITEMA is working with all agencies involved with this response to gather the
205 costs of the response efforts and provide them to Governor Bryan through OMB
206 Director Jenifer O'Neal. As this is a local Territorial SOE, all costs remain 100%

207 Territorial. The current cost estimate as of Friday, October 27, 2023, is \$1.07
208 million dollars, not including the actual cost for the Puerto Rico National Guard
209 aviation support.

210 Closing

211 After a few days of initially fighting the vegetation debris underground fire in
212 Bovoini, Director Daryl George and Governor Bryan discussed the options and
213 risks to the community. Director George indicated to Governor Bryan that this was
214 the worst fire he had seen in over 30-years of fighting fires and recommend a State
215 of Emergency with support from the Puerto Rico National Guard Aviation Unit; a
216 rotation schedule for all firefighters including firefighters from the St Croix
217 district; and standing up a Unified Command with VITEMA.

218 Thank you, Committee Chairman Senator Ray Fonseca, for the opportunity to
219 provide testimony on the Bovoni Landfill vegetation debris fire on behalf of our
220 Unified Command. We are prepared to answer any questions you or members of
221 this Committee on Health, Hospitals, and Human Services may have.