# Kahuku Wind Farm First Wind/Xtreme Power Battery Equipment Storage System Fire

Presented to
Senate Committee on Energy and Environment
December 4, 2012

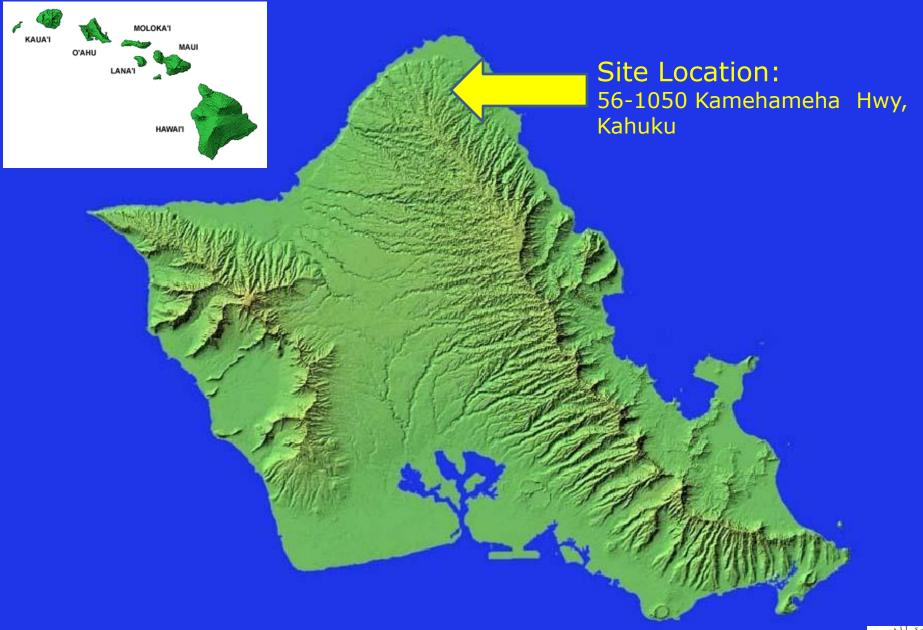
Gary Gill, Deputy Director
Hawaii Department of Health
Environmental Health Administration
Hazard Evaluation and Emergency Response
(HEER) Office



# **State Response Authority**

- Statute: Hawaii Revised Statutes 128D
  - Hawaii Environmental Response Law
- Regulation: Title 11, Chapter 451, Hawaii Administrative Rules
  - State Contingency Plan (SCP)







#### Battery Energy Storage System (BESS) Building – Kahuku, HI

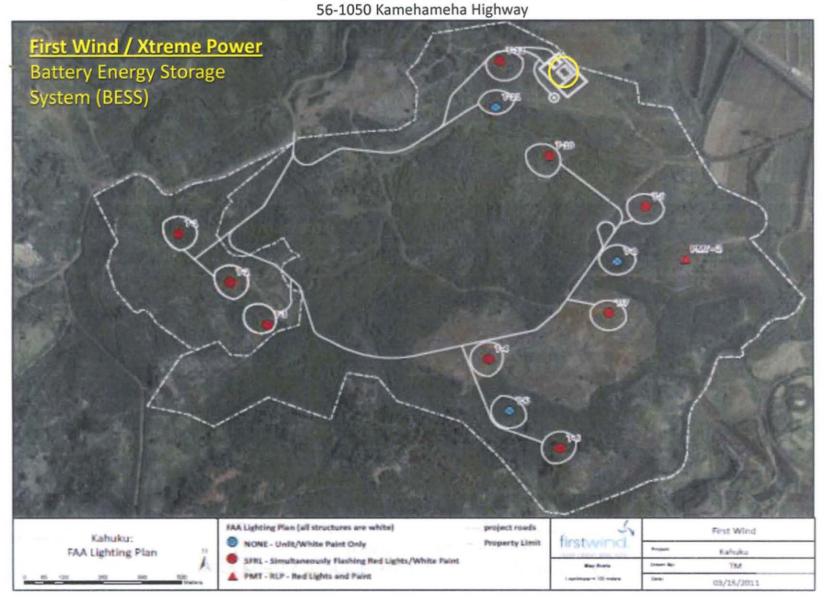


Photo courtesy: First Wind



#### Battery Energy Storage System (BESS) Building – Kahuku, HI

56-1050 Kamehameha Highway



12,000 Batteries In-Racks
420 Spare Batteries on Pallets

12,420 Batteries



Xtreme Power BESS Building Entrance (Looking SE)

**BESS Building In-Rack Battery Storage** 

**BESS Building Inverter** 



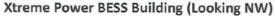




Photo Courtesy: Robert Tamble, Xtreme Power



Aug. 1, 2012

















NEIL ABERCROMBIE

Robert Tamble



LORETTA J. FUDDY, A.C.S.W., M.P.H.

STATE OF HAWAII
DEPARTMENT OF HEALTH

In reply, please refer to: File: EHA/HEER Office

20120801-1356

P.O. Box 3378 HONOLULU, HAWAII 96801-3378

#### NOTICE OF INTEREST IN A RELEASE OR THREATENED RELEASE OF HAZARDOUS SUBSTANCES

| Name: Case No.:  |
|--|
| Address: 1120 Goforth Road Kyle Tryas 78640  |
| Date/Time: 8 3 2012 3"45 p.m   |
| Location (Facility) at or from which the release has occurred or is threatened to occur. First Wind / Xtreme Po<br>Battery Equipment Storage System (BESS) 56-1160 Kameharheha Hwy   |
| You are hereby notified that a release or threat of a release of a hazardous substance, as defined in Section 128D-1, Hawaif Revised Statutes (HRS), has occurred or is threatened to occur at the above described facility of which you are believed to be the owner, operator, transporter or generator and that pursuant to Chapter 128D, HRS, the Director of Health for the State of Hawaii (Director) has an interest in the release or threatened release. This letter notifies you of your potential liability as defined by Section 128D-6 HRS, which you may have incurred with respect to the site. |
| Pursuant to Chapter 128D, HRS, the Director may take several actions that include issuing an order directing you to take appropriate response measures concerning the release. Failure to comply with such an order may subject you to penalties and an obligation to repay the State for any expenditures of its funds if the State conducts the response action.   |
| However, if before such an order is issued you demonstrate to the satisfaction of the Director or his designee a willingness and the ability to undertake appropriate response actions and actually undertake such response actions within a reasonable period of time, the activity of the State may be limited to monitoring the progress of your actions and providing guidance as necessary.   |
| Specific concerns, but not limited to: Rattery Equipment Storage System fre environmental Clean up plan + implementation timeline; measured You are advised that if the Director determines that your response actions, in whole or in part, are unsatisfactory, the Director  |
| may take over response activities.   |
| You are also notified that the Director has designated   |
| Issued at through Hawaii this 3rd day of August 2012   |
| (State On-Scene Coordinator)   |
| Received and Acknowledged:   |
| Name: ROBERT TAMBLE Date: 8/3/12 Time: 3:45 pm  (Please Print) Robert Tamble   |
| Signature Witness Signature  |
| NOTICE OF INTEREST DOH/HEER 04/11  |

"Notice of Interest in a Release (NOI) or Threatened Release of Hazardous Substances"



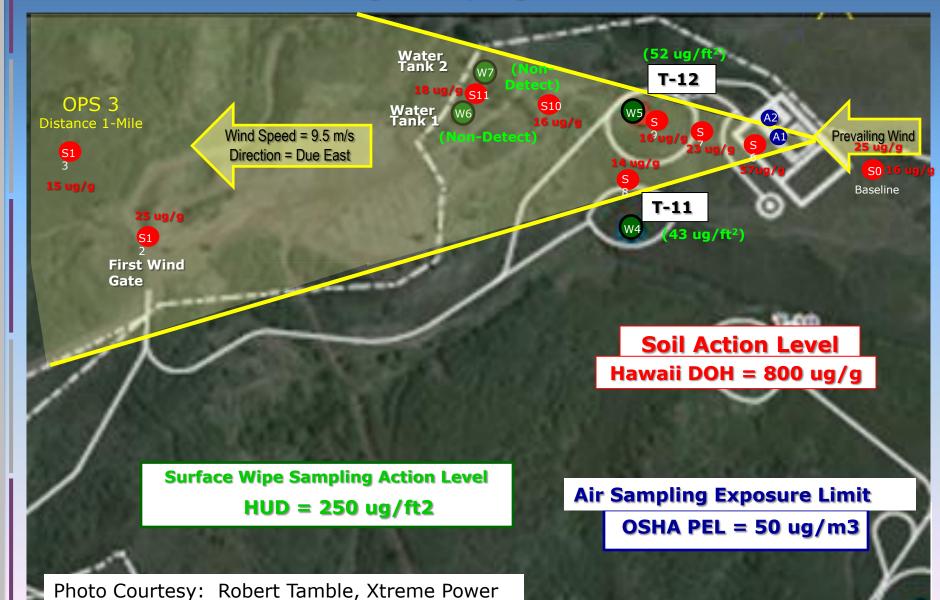
# **Environmental Investigation**

- Sampling Plan developed to identify environmental impact resulting from the fire:
  - Air (Airborne Lead)
  - Soil (Soil Contamination)
  - Surface (Lead Dust)
- •Focus on potential environmental impact downwind from property. Sampling intervals @ 100 yards, ¼-mile, and 1-mile from BESS building in direction of smoke plume.



# BESS Building Fire - Kahuku Environmental Monitoring / Sampling for Lead





## **Initial Investigation Findings & Followup**

- Soil, Air, and Surface Wipe Sampling around BESS building and along smoke plume verified LEAD concentrations:
  - Well-below State and Federal action limits / guidelines
  - Indicative of natural background levels.
- DOH HEER continues to work with Xtreme Power and First Wind until the cleanup and disposal of the waste is complete.

### **Questions?**

Hawaii Department of Health
Hazard Evaluation and Emergency Response
(HEER) Office
(808) 586-4249

