To: Sensitech Inc. & FreightWatch International Customers and Distributors  
From: Client Services  
Date: 2 May 2017  
Re: 2017 IATA/ICAO Dangerous Goods Regulations, U.S. Department of Transportation (DOT)  
– Lithium Ion Batteries

PLEASE NOTE

The U.S. Department of Transportation – Pipeline & Hazardous Materials Safety Administration (PHMSA) has accepted the HM-215N Final Rule which aligns the 49 CFR with the 2017 IATA Dangerous Goods Regulations, 58th Edition, the 2016 International Maritime Dangerous Goods regulations (IMDG) and the 2017-2018 ICAO Technical Instructions regarding adopting the new lithium battery handling labeling or “Mark” requirements.

Further in this document is a full review of Sensitech’s data collection devices and instructions for proper labelling.

Additionally, Sensitech has added one new product in the Product Breakdown table, the VizComm™ Prime.

Sensitech and SensiGuard™ Products (Formerly FreightWatch International Products)  
Real-Time Products Containing Lithium Ion Batteries

TempTale® GEO, VizComm™ Geo F4, VizComm™ Geo F5, VizComm™ GEO Tracker,  

Reason for Notification

On March 30, 2017 the US Department of Transportation (DOT) Pipeline and Hazardous Material Safety Administration (PMHSA), which is federal agency responsible for the development and maintenance of the US hazardous materials (dangerous goods) regulations, 49 CFR, reversed its earlier withdrawal from the Federal Register HM-215N Final Rule allowing
for harmonization of 49 CFR with the international regulatory standards. Please note, however, that while the new label the “Mark” is now accepted globally, the old Lithium Battery Handling Label remains applicable until the end of December 2018, per 2017 IATA Dangerous Goods Regulations, 58th Edition. Please check with your carriers for any changes to the effective date requiring the new label, specific to their company policy. Sensitech will continue to communicate any changes that may affect the use of our products to the market as soon as they become available to us.

The Sensitech Inc. products identified above can be shipped via **air, ground, and vessel** in accordance with UN 3481, PI 967, Section II – Lithium Ion Batteries Contained in Equipment, IMDG – Special Provision 188 and U.S. DOT 49 CFR Part 171-180.

All Sensitech products comply with the current documented requirements as follows:

- DOT – Lithium Battery - Hazardous Material Regulations (HMR; 49 CFR Parts 171-180)

Sensitech does not recommend using the above data loggers, except the ILC 2000, in an operating format for tracking air transport shipments unless the cell signal on the device has been turned off prior to loading on the aircraft. Sensitech recommends using the ILC 2000 for air shipments that are Sensitech “airline approved.” If the above devices (except for the ILC 2000) are being shipped via air, they must be shipped in a non-operating mode. Bulk shipments of used devices being consolidated and returned to Sensitech and FreightWatch International for recycling must be in a non-operating mode prior to shipment.

**NOTE:** Sensitech has performed all necessary testing and can provide documentation supporting our compliance at your request.

**Requirements for Packages Containing Lithium Ion Batteries**

- Lithium-ion batteries (sometimes abbreviated Li-ion batteries) are defined as a secondary (rechargeable) battery where the lithium is only present in an ionic form in the electrolyte. Also included within the category of lithium-ion batteries are lithium polymer batteries. (IATA, Lithium Battery Guidance Document, Revised 15 December 2016).

- To summarize the meaningful change from the 57th Edition to 58th Edition “2017 IATA Dangerous Goods Regulations,” **IATA has changed its Lithium Battery Handling Label or “Mark” requirements definition from a package level to a consignment**
level – when consignments exceed two packages. This change in regulation takes effect January 1, 2017.

- **A Consignment** is one or more packages of dangerous goods accepted by an operator (airline) from one shipper at one time and at one address, receipted for in one lot, and moving to one consignee at one destination address.” (IATA, Lithium Battery Guidance Document, Revised 15 December 2016).

- PI 967 (Lithium Ion Batteries Contained in Equipment) Additional Requirements Section II: Applicable air shipments require a label. NOTE: see below Product Breakdown for Sensitech and FreightWatch International specific products that may require a label depending on the number of devices per package for consignments (e.g., with two packages or less or for consignments that contain three or more packages). Air label examples are also shown below.

- Labeled shipments must contain the words “**Lithium ion batteries in compliance with Section II of PI 967**” included on the air waybill, when an air waybill is used. The information should be shown in the “Nature and Quantity of Goods” box of the air waybill. The package must be of such size that there is adequate space to affix the mark on one side of the package without the mark being folded.

- IATA has stated that there will be a two-year grace period from January 1, 2017 to December 31, 2018 to give shippers time to switch from the current Lithium Battery Handling Label to the new UN 3481 label (or “Mark”); however, the consignment-level labeling requirement will go into effect starting January 1, 2017).

- **An IATA Shipper's Declaration for Dangerous Goods** **is not required.**

- Special procedures must be followed in the event the package is damaged, that should include inspection and repacking if necessary.

- No transportation via air services allows for damaged packages or contents.

- At the time of this publication, ground regulatory (49 CFR, ADR and Transport Canada) authorities have all adopted the new Lithium Battery Handling Label (the “Mark”) as presented by the 58th Edition of the IATA Dangerous Goods Regulations.
OLD: air and ground label (Can be used for all shipments, within 2-year IATA grace period until December 31, 2018)

NEW: Lithium battery label effective January 1, 2017 with a 2-year grace period for switching to the new label from the old label by December 31, 2018

<table>
<thead>
<tr>
<th>CAUTION!</th>
<th>UN 3481</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Image of old label]</td>
<td>![Image of new label]</td>
</tr>
</tbody>
</table>

- Minimum dimensions: 120 x 110 mm
- Color: Black with red hatching on a contrasting background
- Red hatching must be 5mm

Please check with your carriers for any changes to the effective date requiring the new label, specific to their company policy.
**Product Breakdown**

<table>
<thead>
<tr>
<th>Sensitech Device</th>
<th>Maximum Number of Devices per Package without IATA Labeling Requirements</th>
<th>Battery Watt Hour Rating Watt Hours (Wh)</th>
<th>Comments Consignment Level Specifications</th>
<th>IATA (Air) Labeling Requirement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TempTale® GEO</td>
<td>2 devices or less per package = No Label Required</td>
<td>Single Battery 9.6 Wh</td>
<td>Labeling requirements do not apply to consignments of 2 packages or less where each package contains no more than 2 devices = <strong>No Label Required</strong></td>
<td>≤ 2 Devices = No Label Required</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&gt; 2 Devices = Label Required</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Consignments with more than two packages where each package contains at least one TempTale® GEO device = Label Required</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SEE: PI967, Section II (additional requirements)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>For more information, call XXX-XXXXXXX</td>
<td></td>
</tr>
</tbody>
</table>

**Consignment:** Is the equivalent to the term "shipment", means one or more pieces of goods accepted by the airline from one shipper at one time and to one address, receipted for in one lot, and moving on one air waybill or one shipment record to one consignee at one destination address.

- (1) Shipper & (1) shipment/consignment to (1) airlines to (1) consignee

**NOTE:** Each individual Sensitech device noted below contains Lithium Ion Batteries.
<table>
<thead>
<tr>
<th>Product</th>
<th>Quantity/Labeling Requirements</th>
<th>Battery Capacity</th>
<th>Labeling Requirements</th>
<th>UN Number</th>
</tr>
</thead>
</table>
| TempTale® GEO (60 Day Model) | 2 devices or less per package = No Label Required  
More than 2 devices per package requires labeling | Dual Battery 19.24 Wh | Labeling requirements do not apply to consignments of 2 packages or less where each package contains no more than 2 devices = No Label Required  
- Consignments with more than two packages where each package contains at least one TempTale® GEO (60 Day Monitor) = Label Required  
- SEE: PI967, Section II (additional requirements) | ≤ 2 Devices = No Label Required  
> 2 Devices = Label Required |
| VizComm™ Geo F4       | 2 devices or less per package = No Label Required  
More than 2 devices per package requires labeling | 14.8 Wh  
37 Wh  
74 Wh | Labeling requirements do not apply to consignments of 2 packages or less where each package contains no more than 2 devices = No Label Required  
- Consignments with more than two packages where each package contains at least one Geo F4 = Label Required  
- SEE: PI967, Section II (additional requirements) | ≤ 2 Devices = No Label Required  
> 2 Devices = Label Required |
<table>
<thead>
<tr>
<th>VizComm™ Geo F5</th>
<th>2 devices or less per package = No Label Required</th>
<th>Labeling requirements do not apply to consignments of 2 packages or less where each package contains no more than 2 devices = <strong>No Label Required</strong></th>
<th>≤ 2 Devices = No Label Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>More than 2 devices per package requires labeling</td>
<td>• Consignments with more than two packages where each package contains at least one Geo F5 = Label Required</td>
<td>&gt; 2 Devices = Label required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• SEE: PI967, Section II (additional requirements)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VizComm™ GEO Tracker</th>
<th>2 devices or less per package = No Label Required</th>
<th>Labeling requirements do not apply to consignments of 2 packages or less where each package contains no more than 2 devices = <strong>No Label Required</strong></th>
<th>≤ 2 Devices = No Label Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>More than 2 devices per package requires labeling</td>
<td>• Consignments with more than two packages where each package contains at least one GEO Tracker = Label Required</td>
<td>&gt; 2 Devices = Label required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SEE: PI967, Section II (additional requirements)</td>
<td></td>
</tr>
</tbody>
</table>
| VizComm™ GEO Single-Use Tracker | 2 devices or less per package = No Label Required | 37 Wh | Labeling requirements do not apply to consignments of 2 packages or less where each package contains no more than 2 devices = **No Label Required**
- Consignments with more than two packages where each package contains at least one GEO Single-Use Tracker = Label Required
SEE: PI967, Section II (additional requirements) | ≤ 2 Devices = No Label Required
> 2 Devices = Label required |

| VizComm™ Prime | 4 devices or less per package = No Label Required | 6.96 Wh | Labeling requirements do not apply to consignments of 2 packages or less where each package contains no more than 2 devices = **No Label Required**
- Consignments with more than two packages where each package contains at least one VizComm™ Prime = Label Required
SEE: PI967, Section II (additional requirements) | ≤ 4 Devices = No Label Required
> 4 Devices = Label required |
<table>
<thead>
<tr>
<th>ILC2000 FlightSmart® Air Cargo Tracker</th>
<th>4 devices or less per package = No Label Required</th>
<th>Lithium-ion Rechargeable Battery (internal)</th>
<th>Labeling requirements do not apply to consignments of 2 packages or less where each package contains no more than 4 devices = No Label Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>More than 4 devices per package requires labeling</td>
<td>6.96 Wh</td>
<td>Consignments with more than two packages where each package contains at least one ILC2000 FlightSmart® Air Cargo Tracker = Label Required</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SEE: PI967, Section II (additional requirements)</td>
</tr>
</tbody>
</table>

**IMPORTANT MESSAGE:**

- The presence of the Lithium Battery Handling Label (Mark) on the package(s) triggers the requirement for the following statement to be included on the Air Waybill
  “Lithium Ion Batteries in compliance with Section II of PI 967”
- For vessel (ocean) shipments, all devices that require labeling above based on 2017 IATA DG Regulations, also require the same lithium Mark UN 3481 when the consignment contains more than two packages per IMDG Special Provision 188.1. (Example: A consignment containing the TempTale® GEO units would require the UN3481 Mark if the consignment contained 3 or more packages with this device. In other words, the labeling requirements outlined in IMDG Special Provision 188.1 regulations mirror 2017 IATA DG Regulations.)
- For ground shipments, all devices that require labeling above based on 2017 IATA DG Regulations, also require the same lithium Mark UN 3481 when the consignment contains more than two packages for W. Europe per ADR Special Provision 188(a) and 188(f)(i); for the United States per 49CFR§173.185(c.); and for Canada per TDG Special Provision 34(1) labeling follows 2017 IATA DG for the number of devices per Package without IATA labeling requirements: (However – for Canada TDG the consignment-level specification does not apply).

**Reference: IATA, Dangerous Goods Regulations, Packing Instruction 967 Section II (Additional Requirements)**

**Note:** Supporting documentation available upon request are Material Safety Datasheets (MSDS) and UN 38.3 compliance from the specific battery manufacturers. Additionally, we can provide upon request, compliance certifications relative to drop and vibration testing, CE testing, IP Code Testing, and RTCA/DO160 G testing.
Customer Support
If you have any questions about this information, please contact your local Client Services Representative at one of our Regional Headquarters listed below.

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