U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

FEB 7 2001

Mr. Chris Corea
Regulatory Compliance Services
950 Taylor Station Road
Suite M
Gahanna, Ohio 43230

Ref. No: 01-0004

Dear Mr. Corea:

This is in response to your January 4, 2001, letter requesting clarification of the small quantity exception in § 173.4 of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You describe two kits containing various amounts of hazardous materials and the packaging method currently used to transport these materials. You ask whether the hazardous materials, in the quantities you describe, in your packaging configuration may be transported under the small quantity exception in § 173.4.

The answer is yes. The quantities of hazardous materials and packaging you describe meet the requirements of § 173.4.

I hope this information is helpful.

Sincerely,

John A. Gale
Transportation Specialist
Office of Hazardous Materials Standards

010004

REGULATORY COMPLIANCE SERVICES

La Valle
§173.4
Small Quantity Exception
01-0004

January 4, 2001

USDOT/RSPA (DHM-10)
400 7th Street South West
Washington, D.C. 20590
Attn: Edward Mazullo - Director of OHMS

RE: Interpretation of the Small Quantities Exception Regulations

Dear Mr. Mazullo,

This letter serves as a request for an interpretation of the small quantities exception regulations as they relate to a particular hazardous materials and its current packaging specifications.

The following are the quantity and packaging specifications for the products in question:

Kit number one contains:

An alcohol swab consisting of a 70% Isopropyl alcohol solution (a PG II with less than 10 ml) being completely absorbed into a gauze pad. The entire contents of this package are hermetically sealed in a foil pouch. According to special provision 47 of the Hazardous Materials Regulations "Small inner packagings consisting of sealed packets containing less than 10 ml of a Class 3 liquid in Packing Group II or III absorbed into a solid material are not subject to this subchapter provided there is no free liquid in the packet."

A solution of 0.75% available Providone Iodine Prep swab stick hermetically sealed in a foil pouch. Depending on the product number in question this packet may contain a single swab or triple swabs all hermetically sealed in one foil packet. For the single swab the amount of Iodine / Ethanol Solution is approximately 2.5 ml. For the triple swabs the amount of Iodine / Ethanol Solution is approximately 7-10 ml.

The hermetically sealed alcohol swab and the hermetically sealed swab stick(s) are both hermetically sealed in one plastic pouch and further overpacked (in quantities of 25) into a cardboard box for dispensing.

Kit number two contains:

An alcohol swab consisting of a 70% Isopropyl alcohol solution (a PG II with less than 10 ml) being completely absorbed into a gauze pad. The entire contents of this package are hermetically sealed in a foil pouch. According to special provision 47 of the Hazardous Materials Regulations "Small inner packagings consisting of sealed packets containing less than 10 ml of a Class 3 liquid in Packing Group II or III

950 TAYLOR STATION ROAD SUITE M GAHANNA, OHIO 43230 PHONE: (614) 888-8825 /FAX: (614) 821-1372

absorbed into a solid material are not subject to this subchapter provided there is no free liquid in the packet."

A solution contained in a glass ampoule which is enclosed in a plastic tube with one closed end and one end packed with cloth. In addition a sleeve is placed around the cloth end of the plastic tube when not in use. The amount of the 47% Ethanol Solution / Iodine solution sealed in the glass ampoule is approximately 0.6 ml.

The hermetically sealed alcohol swab and the hermetically sealed swab stick are both hermetically sealed in one plastic pouch and further overpacked (in quantities of 25) into a cardboard box for dispensing.

Both kits are shipped in cases consisting of eight closed packages (dispensers) which are placed into a corrugated fibreboard box.

Based on the current packaging specifications and the quantity of the hazardous materials, RCS, Inc. strongly believes that these materials may be shipped under the "Small quantity exceptions of 49 CFR 173.4." These packages meet the following requirements of the subchapter per the following:

173.4 Small quantity exceptions

(a) Small quantities of class 3, Division 4.1, Division 4.2 (PG II and III), Division 4.3 (PG II and III), Division 5.1, Division 5.2, Division 6.1, Class 7, Class 8, and Class 9 materials that also meet the definitions of one or more of these hazard classes, are not subject to any other requirements of this subchapter when-

(1) The maximum quantity of material per inner receptacle is limited to:
(i) Thirty (30) ml (1 ounce) for authorized liquids, other than Division 6.1, Packing Group I, materials.

The quantity of the Ethanol Solution (a class 3 PG II) / Iodine combination per each inner receptacle ranges from **0.6 ml** to **10 ml** depending on the product in question.

(2) With the exception of temperature sensing devices, each inner receptacle
(i) Is not liquid-full at 55 °C (131 °F), and
(ii) Is constructed of plastic having a minimum thickness of no less than 0.2 mm (0.008 inch), or earthenware, glass, or metal;

Both requirements are met based on the above description of the current packaging. Each inner receptacle is either hermetically sealed in a foil packet or a glass ampoule. Both the foil packet and the glass ampoule are further hermetically sealed in a plastic pouch, placed into a cardboard dispenser and than placed into a corrugated fibreboard outer packaging.

(3) Each inner receptacle with a removable closure has its closure held securely in place with wire, tape, or other positive means;

Both kits are either hermetically sealed (foil packet) or completely encapsulated in an ampoule. Furthermore, each inner receptacle is hermetically sealed in a plastic pouch.

(4) Unless equivalent cushioning and absorbent material surrounds the inner packaging, each inner receptacle is securely packed in an inside packaging with cushioning and absorbent material that:
  (i) Will not react chemically with the material and
  (ii) Is capable of absorbing the entire contents (if a liquid) of the receptacle

Each hermetically sealed packet (foil pouch) or glass ampoule is placed into a hermetically sealed plastic pouch containing an additional gauze pad that will absorb the entire contents of the inner receptacle in the unlikely event the receptacle is opened or broken.

(5) The inside packaging is securely packed in a strong outside packaging;

Each inner receptacle (hermetically sealed foil packet or glass ampoule) is enclosed in a hermetically sealed plastic pouch. Each pouch is enclosed in a cardboard dispensing case. Each dispensing case is placed into a corrugated fibreboard box.

(6) The completed package, as demonstrated by prototype testing, is capable of sustaining-
  (i) Each of the following free drops made directly onto a solid unyielding surface without breakage or leakage from any inner receptacle and without a substantial reduction in the effectiveness of the package:
    (A) One drop flat on bottom;
    (B) One drop flat on top;
    (C) One drop flat on the long side;
    (D) One drop flat on the short side; and
    (E) One drop on a corner at the junction of the three intersecting edges; and
  (ii) A compressive load as specified in 178.606(c) of this subchapter.

Each outer package has been testing according to the performance oriented packaging standards (178.600-178.606) of a PG II material and contain the following markings:

UN 4G/Y4.4/S/00/USA/+BV0278.

(7) Placement of the material in the package or packing different materials in the package does not result in a violation of 173.21

After thorough review of 173.21 the materials in question are not packaged in violation of this section.

(8) The gross mass of the completed package does not exceed 29 kg (64 pounds).

Both packages are well below the 29 kg (64 pound) maximum weight limit.

(9) The package is not opened or otherwise altered until it is no longer in commerce; and

(10) The shipper certifies conformance with this section by marking the outside of the package with the statement "This package conforms to 49 CFR 173.4" or, alternatively, until October 1, 2001 with the statement "This package conforms to the conditions and limitations specified in 49 CFR 173.4"

Each package is not opened until it is no longer in commerce, however the package is currently being treated as a limited quantity until given the proper authority to be treated as a small quantity.

Please review these current package specifications and the quantities of the hazardous material per kit and provide a written interpretation at your earliest convenience. RCS, Inc. strongly believes that this material meets the definition of a small quantity but will continue to ship as a limited quantity of a flammable liquid until a written interpretation is received from your office.

If you have any other questions or require further clarification, please do not hesitate to contact me at the office at (614) 888-8825 ext. 14. Thank you for your anticipated cooperation.

Very Truly Yours,

Chris Corea
Senior Technical Consultant - RCS, Inc.

cc J. Anthony Garrido - President, CEO - RCS, Inc.