



## AREVA TN

Business Unit Logistics  
Technical Department

Contact: Gregory GALLAIS  
Tel: (33) 1.34.96.53.81  
Fax: (33) 1.34.96.54.56  
E-mail: [gregory.gallais@areva.com](mailto:gregory.gallais@areva.com)

## Department of Transportation PHMSA

1200 New Jersey Ave., S.E.  
East building, 2nd Floor, PHH-23  
Washington, D.C. 20590-0001  
United States of America

For the attention of **Mr. BOYLE**

Montigny-le-Bretonneux, 23<sup>rd</sup> February 2015

O/Ref.: CEX-15-001171104

Subject: **TN-BGC 1 package**

**Application for the revision of certificate USA/0492/B(U)F-96 revision 16.**

### References:

- <1> TN-BGC1 French certificate of approval No. F/313/B(U)F-96 (Jbb)
- <2> Safety Analysis Report CEA DSN/STMR/LEPE/TNBGC1 DSEM 0600 Rev. 02 of October 11<sup>th</sup>, 2012
- <3> U.S. Department of Transportation revalidation certificate USA/0492/B(U)F-96, Rev. 16 of February 5<sup>th</sup> 2014
- <4> Request for additional information for revalidation of French certificate of approval No. F/313/B(U)F-96 (Jbb)

Dear Mr. Boyle,

The TN-BGC 1 package is provided for the transport and storage of fissile material in very varied forms such as ingots of plutonium or metallic uranium, powders consisting of plutonium oxide or highly enriched uranium, and liquids such as uranyl nitrate.

By its decision of February, 5<sup>th</sup> 2014 in reference <3>, the United States Department of Transportation delivered the revalidation of the French certificate of approval <1> expiring on June 30<sup>th</sup> 2018 for the package consisting in the TN-BGC 1 packaging loaded with the following contents of fissile material:

## TN INTERNATIONAL

Établissement Saint-Quentin-en-Yvelines  
(Siège social)  
1, rue des Hérons  
78180 Montigny-le-Bretonneux  
Tél. : +33 (0) 1 34 96 50 00  
Fax : +33 (0) 1 34 96 54 50  
RCS Versailles SIRET 602 039 299 00063

Établissement Nord Ouest  
ZA d'Armanville  
Rue des Entrepreneurs  
50700 Valognes  
Tél. : +33 (0) 2 33 88 69 88  
Fax : +33 (0) 2 33 88 69 99  
RCS Cherbourg SIRET 602 039 299 00105

Établissement Sud-Est  
CD 1388 CODOLET  
BP 64182  
30204 Bagnols-sur-Cèze-cedex  
Tél. : +33 (0) 4 66 90 33 00  
Fax : +33 (0) 4 66 90 32 03  
RCS Nîmes SIRET 602 039 299 00097





- content n°11: Solid non-irradiated uranium bearing materials contained within a TN-90 secondary conditioning container;
- content n°26: Non-irradiated TRIGA fuel elements.

The revalidation was issued with additional special conditions to the French certificate. Among these, special condition 5.b prohibits the transportation of uranium metallic powder under content n°11 as stated below :

“ Uranium metallic powder is prohibited under Content no. 11 ”

From RAI 3 of the material review of <4> and according to our preceding exchanges on this specific subject, we understood that this limitation is due to the pyrophoric risk inherent to metallic powders.

In agreement with what has been discussed during the conference call with TN Inc. which took place on February 17<sup>th</sup> 2015, we hereby apply for the revision of the revalidation certificate <3> in order to modify the special condition 5.b.

We suggest that the special condition 5.b. be revised to the following :

“ *Pyrophoric* uranium metallic powder is prohibited under Content no. 11. *Non pyrophoric* uranium metallic powder is authorized under Content no. 11. ”

The special condition 5.b written as suggested would allow the transport of non-pyrophoric metallic powder from Argonne National Laboratory to France. It is understood that the absence of risk of pyrophoricity will be justified by the shipper through the UN test from the UN Manual of Tests and Criteria as specified in 49CFR173.124.

The next transport of non-pyrophoric powder is tentatively scheduled for July 2015. Therefore we respectfully request the revision 17 of the Competent Authority Certification to be issued no later than June 30<sup>th</sup> 2015 in order to support the transport need from Argonne to France.

Please note that we have also taken actions, with the support of TN Inc., to answer to all the other questions raised in <4>. We would be in a position to deliver these answers to the United States Department of Transportation by the end of May 2015.

Should you need any further information, please do not hesitate to contact us.



Gregory GALLAIS  
Design Manager  
Special Material Engineering Unit