



PETROLIAM NASIONAL BERHAD (20076-K)

Ref. No. PCLTC/09/AB/AL003

Tanjung Offshore Services Sdn Bhd (100697-T)
No. 8-3, Jalan Puncak Setiawangsa 4,
Taman Setiawangsa,
54200 KUALA LUMPUR

ORIGINAL

Date: 19 February 2009

Attention: Encik Mazrin Ramli
Senior Manager,
Materials, Corrosion, Inspection & Maintenance

Dear Sir,

Re : Approval for application of Sponge-Jet abrasive blasting system for surface cleaning and surface preparation.

Refer to your letter dated 13 February 2009 on the above subject and technical proposal reference no. TP001/09/TOS/TP Rev 0 dated 19 Jan 2009.

PETRONAS and the oil and gas industry recognised and accepted Sponge-Jet abrasive blasting as one of many dry abrasive blasting methods for surface cleaning and/or preparation methods. Aluminum oxide the most common abrasive used in the media is classified under ISO standards related to protective paint systems. We approve their use and application in our construction and maintenance activities where it is appropriate and economical. Details of the approved abrasive blasting system are as follows:

Product Name	Sponge-Jet abrasive blasting system
Common Name	Wollastonite sponge blasting media
ISO Classification	ISO 11126 Part 7 (fused aluminium oxide used as abrasive media)
Classification Designation	Abrasive ISO 11126 N/FA/G
Product Standards (fused aluminium oxide as abrasive blast media)	ISO 11126 Part 7: Preparation of steel substrates before application of paints and related products - Specification for non-metallic blast-cleaning abrasives - fused aluminium oxide ISO 11127 Part 1 to 7 : Preparation of steel substrates before application of paints and related products - Test methods for non-metallic blast-cleaning abrasives
Supplier	Tanjung Offshore Services Sdn Bhd (100697-T) No 8-3, Jalan Puncak Setiawangsa 4, Taman Setiawangsa, 54200 KUALA LUMPUR
Manufacturer	Sponge-Jet Inc 235 Heritage Avenue, Suite 2 Portsmouth, NH 03801
Location of Manufacture	United States of America (USA).

Official Sponsor



PETRONAS PCL Technical Committee Approval of Blast-Cleaning Abrasives

Product Name	Sponge-Jet Abrasive Agent	Surface Profile (microns) on mild carbon steel
Silver Areo-Alox 320 Sponge Media	320-grit aluminium oxide	12
Silver 80 Sponge Media	80-grit aluminium oxide	50
Silver 30 Sponge Media	30-grit aluminium oxide	75
Silver 16 Sponge Media	16-grit aluminium oxide	100

Please observe that the gathering and disposal of spent sponge-jet media containing pollutants or scheduled wastes shall be done in accordance with the requirements of the current Environmental Quality Act (EQA) 1974.

This approval has been granted based on the technical information provided in the technical proposal document and field trial conducted. It is subject to our review to ensure product conformance and field performance remains valid. Such review will also be necessary when there is any change in its manufacturing processes, source of supply, chemical and/or mechanical properties of the product .



Johar Juhari
Chairman
PETRONAS Coatings & Linings
Technical Committee (PCLTC)

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Chairman
Protective Coatings and Lining Technical Committee
PETRONAS

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