# ANOTHER PROJECT DONE BEST SPONGE-JET®

"What a process! It amazes me how Sponge-Jet Silver Sponge Media contains the contaminated particles...it's also compressible for waste management purposes."

Brad Fasel, Process Engineer



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## Removal of Radioactive Oxide Build-up From Reactor Coolant Piping

**Problem:** Nearly 9m<sup>2</sup> (100 ft<sup>2</sup>) of highly radioactive oxide build-up (measuring 8,000 to 12,000 millirem) on stainless steel reactor coolant piping in an eastern U.S. nuclear power plant needed to be removed. Utility representatives request-

ed that no appreciable loss of the stainless steel substrate occur and specified an overall surface profile of less than 60 micron (2.5 mils). **AEA Technology Engineering Services,** an international nuclear services organization, was contracted to remove the oxide layer with minimal substrate damage and safely decontaminate the pipe below 100,000 dpm smearable so other outage maintenance could be conducted.

**Solution:** Using Silver Sponge Media<sup>™</sup> and the Sponge-Jet Sponge Blasting System,<sup>™</sup> AEA Technology Engineering Services successfully removed the oxide layer, reducing radiation contamination levels to less than 100,000 dpm, while leaving less than a 60 micron (2.5 mil) substrate profile – all in one pass. The utility was pleased with the post decontamination levels achieved, the overall cleanliness of the operation, and most of all, how quickly the job was completed. As a result, AEA Technology Engineering Services has successfully conducted similar pipe-end decontamination projects in 8 other nuclear facilities throughout the world.

#### **Goals:**

- Low dust generation
- Clean, dry process
- Low waste generation
- Cost competitive

### Alternatives considered:

- Hand tooling
- Chemical stripping
- CO<sub>2</sub> pellet blasting

#### Contractor's choice:

Sponge-Jet Sponge Blasting System<sup>™</sup> Silver Sponge Media<sup>™</sup>

#### **Contractor:**

AEA Technology Engineering Services

Jim Flaherty *Marketing Manager* Pittsburgh, PA 412-655-1200

#### PRODUCT

#### Sponge-Jet<sup>®</sup> Silver Sponge Media<sup>™</sup> featuring MICROCONTAINMENT<sup>™</sup> technology

APPLICATIONS Mildly aggressive. Used for a wide range of commercial, industrial, marine and military coatings removal projects.

PROFILE	ABRASIVE	CLEANING RATE	AVERAGE RECYCLES	LE TEL
<25 micron (<1mil)	Aluminum Oxide	6-11 m²/hr(1-2ft²/min)	7	Con Sile Con Sile Rowensel

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