



Quick Decon Solutions

Revolutionizing Radioactive Decontamination

Quick Decon Solutions (QDS™) is the world's safest and most effective solution for radioactive decontamination. Trusted by commercial nuclear power plants, U.S. Department of Energy sites, and radioactive waste facilities, QDS™ has a proven track record of reducing time and dose during decontamination activities. Whether striving to reduce critical path outage schedules or managing routine facility decon activities, QDS™ improves safety, minimizes waste, and streamlines decontamination pocesses.

- Significant reduction in critical path time and dose
- Environmentally friendly and non-toxic
- Cost-effective and simple to use

KEY FEATURES

- Fast, ionic-focused solutions for safe contamination removal
- Effective on 63 different elements, achieving ~80-90% reduction on the first pass
- Non-toxic and environmentally friendly
- Water-based and resin bed friendly
- Cost-effective
- Available in field-ready kits or pre-moistened wipes for emergency response
- 10-year shelf life

SCAN TO WATCH VIDEO

DISTRIBUTED BY
Master-Lee Decon Services, Inc.
MLDS-SALES@masterlee.com
mccormick-r@masterlee.com
1-800-662-4493
masterlee.com

MANUFACTURED BY
RT Technologies, Inc.
contact@quickdeconsolutions.com
(770) 332-0092
quickdeconsolutions.com

DISTRIBUTED BY FRHAM SC
Email: FrhamSalesSC@frhamsafety.com
803-366-5131

FRHAM TN
Email: FrhamSalesTN@frhamsafety.com
615-254-0841







Advanced Decontamination at the Molecular Level

The core technology is called the “Mass Effect” influence. When our proprietary solutions are introduced to a contaminated surface, the radioactive material is lifted from the surface and suspended in the solution, where it can be easily wiped up or rinsed away as radioactive waste.

Our products are currently used in commercial nuclear power plants, nuclear waste facilities, U.S. Department of Energy sites, decommissioning projects, hospitals, nuclear pharmacies, and by first responders. They have a proven track record of significantly reducing both time and radiation dose in critical-path applications such as reactor cavity decontamination, floor and general area decon, waste container decon, and tool decon.

Why It Works Better

- **Wide Range of Effectiveness:** QDS™ Powder is effective for decontaminating transition metals, actinides, and halogen contaminants.
- **Surface Compatibility:** Safe for use on all metals, stainless steel, laminated or painted surfaces, while remaining gentle enough for human skin.
- **Versatile Application:** Can be mixed with non-ionic, commercially available soaps (e.g., Dawn®), industrial decontamination agents, and foams to create skin-safe or specialized solutions.
- **Environmentally Friendly & Non-Toxic:** QDS™ is a neutral pH solution made from non-corrosive, non-toxic, and environmentally safe ingredients.

“For the past 10 years, our plant has used QDS™ for Reactor Cavity Decontamination. Contamination levels are routinely reduced from >1,000,000 DPM to <25K on first pass! It’s the decontamination agent we use for everything at the plant.”

— Jeff • Nuclear Power RP Supervisor

QDS ™ solutions are effective against 63 elements, including:

TRANSITION METALS

- Cobalt
- Cesium
- Strontium
- Thallium
- Chromium
- Manganese
- Iron
- Zinc
- Nickel

ACTINIDES

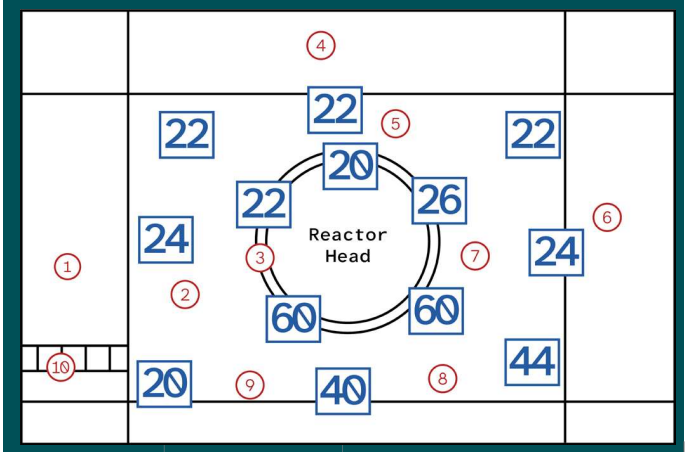
- Uranium
- Plutonium
- Technetium
- Radium
- Americium
- Titanium

SCAN TO SEE A COMPLETE LIST OF ELEMENTS

Reactor Cavity Survey Results Using QDS™

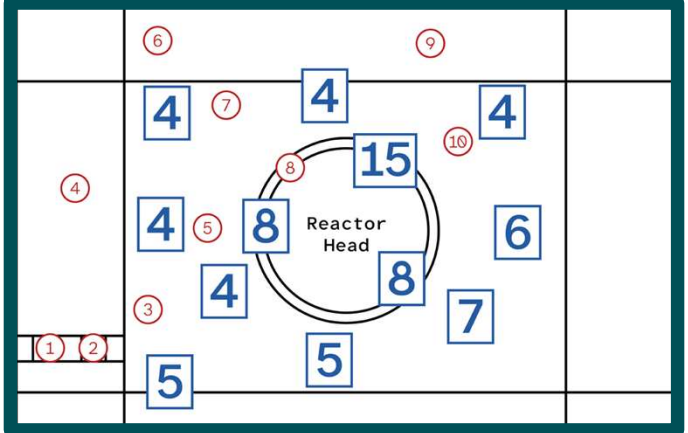
QDS™ delivers unmatched decontamination power, reducing radioactive surface contamination by up to 90%. In this reactor cavity survey results, QDS™ transformed highly contaminated areas—once reading tens of millions of dpm/100 cm²—into safe, low-level zones, dramatically reducing both time and dose in critical-path operations.

BEFORE QDS™



sample point	surface type (location)	reading (dpm/100 cm²)	
1	wall	Ƀ 1,000,000	α 48.9
2	floor	Ƀ 10,000,000	
3	flange	Ƀ 4,000,000	
4	wall	Ƀ 800,000	α 23.47
5	floor	Ƀ 30,000,000	
6	wall	Ƀ 800,000	
7	floor	Ƀ 12,000,000	
8	floor	Ƀ 99,999,999	α 0.0
9	floor	Ƀ 30,000,000	
10	wall	Ƀ 2,000,000	α 50.3

AFTER QDS™



sample point	surface type (location)	reading (dpm/100 cm²)	
1	ladder	Ƀ/γ 5,000	
2	ladder	Ƀ/γ 12,000	
3	floor	Ƀ/γ 60,000	α < 20
4	wall	Ƀ/γ 7,000	
5	floor	Ƀ/γ 15,000	
6	wall	Ƀ/γ 10,000	
7	floor	Ƀ/γ 80,000	α < 20
8	floor	Ƀ/γ 50,000	α < 20
9	wall	Ƀ/γ 20,000	
10	floor	Ƀ/γ 15,000	

The data shows randomised smear samples taken before decontaminations with QDS™ and after decontamination is completed.
Instruments Used: LUDLUM-177 Frisker, LUDLUM-9-3 ION, LUDLUM-2000 Scaler

KEY IMPACT

- Levels dropped significantly, with most areas measuring between 3K - 25K dpm/100 cm², reflecting reductions of 80-99.9% across nearly all measurement points.
- The highest reduction was observed on the floor and flange areas, where levels decreased from tens of millions of dpm/100 cm² to a few thousand.
- Contamination on walls, floors, and reactor surfaces was reduced by more than 99% in critical areas.
- The overall radioactive dose in the environment was substantially lowered, improving both safety and operational conditions.

Complete Decontamination Solutions

From powders to wipes, QDS™ offers the ultimate toolkit for fast, safe, and reliable decontamination.



QDS-Powder Mix

A versatile dry powder with unlimited shelf life. Can be mixed with water and foam agents to create solutions that target actinides, transition metals, and halogen contaminants.

Available in two formulations:
QDS-TM+A for transition metals and actinides
QDS-H for halogen contaminants

- Unlimited shelf life in powder form
- Mix with DI (deionized water (90-day life) or tap water (24 hours)
- Non-toxic, water-based, environmentally safe
- Targets actinides, transition metals, and halogen contaminants
- Compatible with foam agents for enhanced cling on vertical surfaces



QDS-Combo Wipes

Wipes for fast, effective surface decontamination of actinide and transition metal isotopes. Packaged in a convenient 50-wipe canister for field or facility use. Just add DI (deionized) water (50 mL).

- Achieves ~80–90% decontamination on first pass
- Works on both actinides and transition metals
- 50 wipes per canister
- 10+ year shelf life dry; 90+ days after adding DI (deionized) water



QDS-Emergency Rad Decon Kit

A rapid-deployment kit for emergency radiation response. Contains all tools required for quick, safe, and effective surface decontamination in the field.

- Water-based and non-radioactive before use
- Works on both actinides and transition metals
- Simple spray-and-wipe process for fast results
- Kit includes: two one-quart spray bottles containing QDS-TM+A Powder Mix, a spare rinse spray bottle, QDS-M7 wipes, protective gloves, and radioactive waste bags with tags



QDS-M7 Wipes

Dual-sided wipes designed for targeted removal of different isotope types—one side for actinides, the other for transition metals—minimizing cross-contamination risks.

- Two-sided wipe system for actinide and transition metal decontamination
- Box of 40 wipe sets
- Simple to use and ideal for field deployment
- Helps reduce cross-contamination
- Unopened – 10-year shelf life

DISTRIBUTED BY
Master-Lee Decon Services, Inc.
MLDS-SALES@masterlee.com
mccormick-r@masterlee.com
1-800-662-4493
masterlee.com

MANUFACTURED BY
RT Technologies, Inc.
contact@quickdeconsolutions.com
(770) 332-0092
quickdeconsolutions.com

DISTRIBUTED BY FRHAM SC
Email: FrhamSalesSC@frhamsafety.com
803-366-5131

FRHAM TN
Email: FrhamSalesTN@frhamsafety.com
615-254-0841