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Nota di contenuto	Cover; Copyright; Acknowledgments; Abstract and Benefits; Table of Contents; List of Tables; List of Figures; List of Acronyms; Executive Summary; Chapter 1.0: Introduction; 1.1 Background; 1.2 Goals and Research Questions; 1.3 Organization of Report; Chapter 2.0: Experimental Methods and Materials; 2.1 Laboratory Methods; 2.1.1 Batch NM Sorption Tests; 2.1.2 Sources and Size Discrimination of Titanium Dioxide NMs in Food and PCPs; 2.1.3 SBRs; 2.1.4 Biosolids

Incineration Tests; 2.1.5 Effect of ENMs on Biological Carbon Conversion in an Arizona Soil Under Dark Conditions; 2.2 Field Sampling

2.2.1 Analysis of Aqueous Samples by sp-ICP-MS 2.2.2 Biosolids Processing Facilities; 2.2.3 Biosolid Management Facility (Texas); 2.3 Analytical Methods; 2.3.1 Chemical Analysis; 2.3.2 Electron Microscopy Analysis; Chapter 3.0: Absorption of ENM to Wastewater Biomass; 3.1 Batch Sorption Experiments; 3.2 Composition and Properties of Food-Grade Titanium Dioxide; 3.3 Titanium Content of Foods; 3.4 Titanium Content in PCPs; 3.5 Titanium Content of Paints and Adhesives; 3.6 Selection of Titanium Dioxide Models for Environmental Studies; 3.7 Sorption of E171/P25 - Titanium Dioxide to Biomass

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5.1.4 The Potential Highest Concentrations of ENMs in Soils 5.1.5 The Presence of Titanium Dioxide Nanoparticles and Micro Particles in TX Soil; 5.2 Effects of ENMs on Basal Respiration in Soils; 5.3 Effects of ENMs on SIR in Soils; 5.4 Summary; Chapter 6.0: Summary, Conclusions, and Recommendations; 6.1 Summary and Conclusions; 6.1.1 Absorption of ENM to Wastewater Biomass; 6.1.2 Occurrence of ENMs in Wastewater Effluent and Biosolids; 6.1.3 Occurrence and Impacts of ENMs in Biosolids Amended Soils; 6.2 Recommendation for Future Research; References
