Record Nr. UNINA9910456070003321 **Titolo** Methods for developing spacecraft water exposure guidelines [[electronic resource] /] / Subcommittee on Spacecraft Water Exposure Guidelines, Committee on Toxicology, Board on Environmental Studies and Toxicology, Commission on Life Sciences, National Research Council Washington, D.C., : National Academy Press, c2000 Pubbl/distr/stampa **ISBN** 1-280-18538-4 9786610185382 0-309-56300-3 Descrizione fisica 1 online resource (173 p.) Collana Compass series Disciplina 629.47/7 Soggetti Space vehicles - Water-supply Water reuse Astronauts - Health risk assessment Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references. Nota di bibliografia Nota di contenuto ""Methods for Developing Spacecraft Water Exposure Guidelines"": ""Copyright""; ""OTHER REPORTS OF THE BOARD ON ENVIRONMENTAL STUDIES AND TOXICOLOGY""; ""OTHER REPORTS OF THE COMMITTEE ON TOXICOLOGY""; ""Preface""; ""Contents""; ""Abbreviations""; ""Executive Summary""; ""WATER CONTAMINANT SOURCES""; ""RANKING CONTAMINANTS FOR RISK ASSESSMENT""; ""DATA FOR ESTABLISHING SWEGS""; ""RISK ASSESSMENT""; ""SPECIAL CONSIDERATIONS FOR NASA""; ""EXPOSURE GUIDELINES SET BY OTHER ORGANIZATIONS""; ""1 Introduction""; ""WATER CONTAMINANTS""; ""APPROACH TO THE STUDY""; ""REFERENCES"" ""2 Sources, Treatment, and Monitoring Of Spacecraft Water Contaminants"""OVERVIEW""; ""DESIGN DRIVERS""; ""ISS WATER-QUALITY STANDARDS""; ""SOURCES OF SPACECRAFT WATER CONTAMINATION""; ""HUMAN URINE""; ""Untreated Urine""; ""Chemical Treatment and Distillation By-Products""; ""HUMIDITY CONDENSATE"";

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""Condensate Sample Results""; ""Water Recovery Test""; ""Lunar-Mars
Life Support Test Project""; ""Space Shuttle""; ""Mir Humidity
Condensate"": ""Environmental Contributors to Spacecraft Humidity
Condensate""; ""Hardware Off-Gassing""; ""Animal Wastes"";
""Mechanical Leaks""
""Microbial Metabolites"""Payload Chemicals""; ""Utility Chemicals"";
""WASH WATER AND OTHER WASTE STREAMS"": ""Hygiene Water"";
""Detergents""; ""Chemicals from Personal Hygiene Products""; ""CHeCS
Wastes"": ""CHEMICALS FORMED IN THE WATER TREATMENT SYSTEM"":
""SYSTEM FAILURES AND INCOMPLETE PROCESSING OF INFLUENT"";
""CHEMICALS ADDED TO RETARD BACTERIAL GROWTH""; ""Iodine"";
""Silver""; ""REGENERATED WATER""; ""Inorganic Contaminants"";
""Shuttle Humidity Condensates""; ""Mir Humidity Condensates and Mir
Reclaimed Water""; ""LMLSTP 60-d Product Water""; ""ORGANIC
CONTAMINANTS"
""Humidity Condensate in Mir"""LMLSTP 60-d Product Water""; ""Stage-
10 WRT"; ""MONITORING WATER CONTAMINANTS""; ""SOURCE-WATER
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""CHEMICAL AND PHYSICAL CHARACTERISTICS OF A TOXICANT"";
""HUMAN STUDIES""; ""ANIMAL STUDIES""; ""IN VITRO TOXICITY
STUDIES""; ""ADVANCES IN HEALTH EFFECTS ASSESSMENT"";
""NEUROBEHAVIORAL EFFECTS""; ""REPRODUCTIVE EFFECTS"";
""MUTAGENESIS""; ""MECHANISTIC STUDIES""
""SUMMARY"""REFERENCES""; ""4 Risk Assessment Methods for
Determining Spacecraft Water Exposure Guidelines""; ""HISTORICAL
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""Benchmark-Dose Approach to Setting SWEGs"": ""BMD
CALCULATION""; ""Central Estimate Versus Confidence Limit"";
""Estimating BMDp for Various Toxic Effects""; ""EXPOSURE
CONVERSION""; ""Target Tissue Dose""; ""Differences in Duration"";
""Species Conversions""
""Different Routes""
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