Record Nr. UNINA9910798561603321 Operation of nutrient removal facilities / / Water Environment **Titolo** Federation Pubbl/distr/stampa Alexandria, Virginia:,: Water Environment Federation,, 2013 **ISBN** 1-57278-299-4 1-5231-0303-5 Descrizione fisica 1 online resource (xlvi, 591 pages): illustrations Collana WEF manual of practice;; Number 37 628.166 Disciplina Soggetti Sewage - Purification - Nutrient removal Sewage disposal plants - Management Sewage lagoons - Management Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "Prepared by the Operation of Nutrient Removal Facilities Task Force of Note generali the Water Environment Federation."--Title page verso. Wastewater consitutents that affect nutrient removal -- Nitrification --Nota di contenuto Nitrification in biofilm reactors -- Denitrification -- Combined nitrifiying and denitrifying systems -- Enhanced biological phosphorus removal -- Chemical precipitation of phosphorus -- Enhanced biological phosphorus removal systems -- Combined nitrogen and phosphorus removal processes -- Optimization of nutrient removal systems -- Recycle streams management -- Process control using oxidation-reduction potential and dissolved oxygen -- Process control, instrumentation, and automation -- Laboratory analyses -- Case studies-Nitrification and denitrification -- Case studies-Enhanced biological phosphorus removal -- Appendix A: Optimization and troubleshooting guides. Sommario/riassunto This manual is for plant managers, operators, design engineers, and regulators looking to gain a better understanding of fundamental biological and chemical processes that are in use at nutrient removal facilities and the ways that operators may use, monitor, and control these processes to meet their facility's treatment goal.