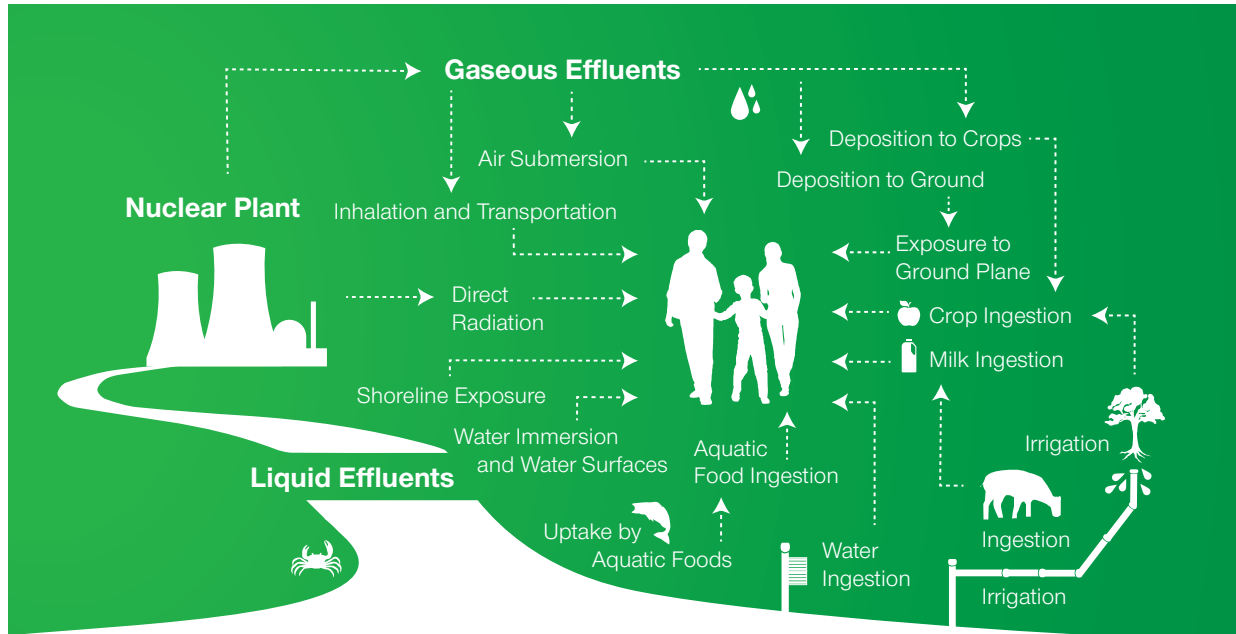


Radiological Effluent and Environmental Monitoring Program Services



An Integrated Approach

Teams of scientists, chemists, health physicists, meteorologists, and radiological, environmental, and nuclear engineers from AREVA and GEL Laboratories have provided services related to Radiological Effluent Technical Specifications (RETS) and Radiological Environmental Monitoring Program (REMP) to many operating plants over the past 30 years. Together, AREVA and GEL can assist customers in meeting the Nuclear Promise by providing dedicated program oversight and management, lowering overall labor costs and allowing customers to focus on day-to-day plant operations and program improvements.

Radiological Effluent Services

AREVA and GEL offer valuable programmatic RETS experience to support utilities in routine monitoring of radioactive effluents, preparation of annual radiological effluent release reports, evaluation and operation of their effluent monitoring program, and Offsite Dose Calculation Manual (ODCM) revisions.

Services Offered

- Analytical methods and equipment for Carbon-14 air monitoring
- Dose assessment for Carbon-14 releases
- Radiological dose analyses, using guidance from Regulatory Guide 1.109
- Analysis of atmospheric dispersion and deposition for normal effluent releases, using guidance provided in Regulatory Guide 1.111, Rev. 1
- Preparation of annual radiological effluent release reports
- Development and revision of Offsite Dose Calculation Manual in accordance with Regulatory Guide 1.21, Rev. 1 or Rev. 2
- Independent evaluation or auditing of radiological dose assessment programs
- Review of daily meteorological data for identification of instrumentation problems and/or suspect data and preparation of status reports documenting data recovery rates
- Generation of annual meteorological joint frequency distribution tables

Radiological Environmental Monitoring Program Expertise

AREVA and GEL are uniquely qualified to offer turn-key solutions to licensees in operation of their environmental operating program. With one of the largest analytical testing laboratories in North America, GEL offers a full suite of laboratory analytical services along with various software tools to help with sample collection and management. AREVA's technical staff offers support to licensees in the operation of their environmental operating program, program audit support, sample management oversight, and preparation of the Annual Radiological Environmental Operating Report (AREOR) including data summaries and interpretation of results, graphical analysis of trends, comparisons with both pre-operational studies and past operation periods, and descriptions of program deviations and laboratory quality assurance results.



Services Offered

- Design/modification of environmental monitoring program to fit plant's current operating status
- GEL Mobile computerized sample scheduling, tracking, and chain of custody
- Field sample management, analytical testing, and data validation
- Preliminary review of environmental data as generated to identify anomalies in the data
- Preparation of Annual Radiological Environmental Operating Reports
- Environmental pathway dose assessment
- ODCM preparation and updates
- Annual dose-based evaluations of the Land Use Census data for determination of optimum sample collection locations and critical dose impact points
- Program and audit support



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