

# **Contract Concept: Scientific Information Management and Literature-Based Evaluations for NTP**

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- Definitions
- Background
- Proposed contract activity
- Benefits of centralized contract
- Request to BSC





- Scientific information management: collection, organization of, and control over the structure, processing, and delivery of scientific information
  - Entails identifying, acquiring, organizing, securing, and maintaining the information
- Literature-based evaluation: analysis and interpretation of the published literature that includes elements of systematic review and evidence integration
  - Systematic review is the application of transparent, rigorous, objective, and reproducible methodology in a literature-based evaluation to identify, select, assess, and synthesize results of relevant studies



- NTP carries out literature-based evaluations and toxicology research and testing to identify hazards for human health and address other issues of public health concern
  - Office of Health Assessment and Translation (OHAT)
    - Conducts literature-based evaluations to identify noncancerous health hazards and organizes workshops and state-of-the-science evaluations
  - Office of Report on Carcinogens (ORoC)
    - Conducts literature-based cancer hazard evaluations for the *Report on Carcinogens* and organizes workshops, webinars, and symposia
  - Office of Nomination and Selection (ONS)
    - Manages development of comprehensive scientific documents on substances or issues under consideration for testing/research that provide information about breadth of data and potential toxicological data needs
  - Office of Liaison, Policy and Review (OLPR)
    - Oversees and manages activities related to scientific peer review, external advisory groups, workshops, and other programmatic activities



### Sources of previous/current support

- ONS, ORoC, and OHAT (to a lesser extent) have utilized contract mechanisms to obtain scientific, technical, and administrative support for literature-based activities
  - Different processes, procedures, and timelines necessitated separate contracts



### Significance of centralized contract activity

- Changing landscape in methodologies and tools in environmental health sciences for identifying, evaluating, and integrating information in literature-based evaluations
  - NAS committees have endorsed use of systematic review-type practices for addressing environmental health questions
  - OHAT has published a new framework for systematic review and evidence integration (Rooney *et al.*, *Environ Health Perspect.* July 2014. doi: 10.1289/ehp.1307972. Epub. April 2014)
  - ORoC has incorporated new systematic approaches into preparation of Report on Carcinogens monographs for substances under evaluation
- Increasing emphasis on the transparency and reproducibility of evaluations in their conduct and use in decision-making
- ONS, ORoC, OHAT, and OLPR are all located organizationally within Office of DNTP Director—facilitates coordinated approach



## Objective

- Obtain scientific and technical expertise to support NTP activities related to the evaluation of environmental substances and issues of public health concern including
  - Scientific information management
  - Development of literature-based evaluations

## Scope

- Compile, review, and analyze scientific information and data from published literature and other sources
- Provide broad professional and technical expertise in environmental health sciences (e.g., toxicology, epidemiology, chemistry, and exposure assessment)
- Facilitate supporting activities (e.g., meeting support)



## Specific requirements

- Environmental health literature searching and management
- Literature screening to identify relevant scientific information
- Scientific data extraction, management, and visualization
- Study quality assessment, data interpretation, and scientific evidence integration
- Document preparation and publication
- Logistical management for meetings and events
- Provision of scientific and technical consultants





# Benefits of Centralized Contract

- ONS, ORoC, and OHAT will benefit because they are using somewhat similar methodologies and requiring similar scientific and technical expertise
  - Division-wide desire to use somewhat similar systematic-review type methods and information management tools
  - Assessments by these groups will continue to vary in scope and complexity
- Enables NTP to be more responsive to public health needs while maintaining data quality and scientific rigor of evaluations
  - Provides additional personnel, expertise, and flexibility to accommodate unique and changing topics of evaluations
- OLPR will benefit by having continuous, dependable, while still flexible, support in lieu of *ad hoc* sourcing for advisory groups and other activities related to literature-based evaluations



- NTP requires scientific and technical expertise to support information management and development of literature-based evaluations of environmental substances and issues of public health concern
- NTP seeks comment and approval from the NTP Board of Scientific Counselors for the contract concept considering:
  - Overall value and scientific relevance as well as fulfilling the program's goal of protecting public health
  - Whether a contract is an appropriate mechanism for support of these types of activities