

# EPA'S SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM



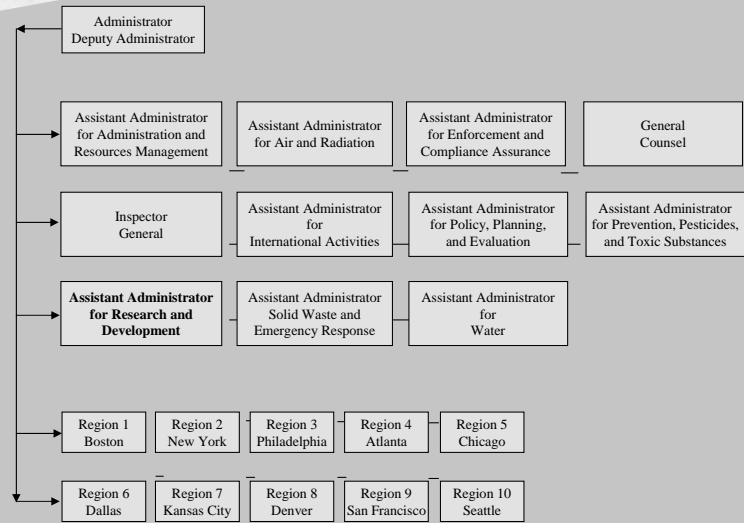
## INNOVATIVE SOLUTIONS FOR ENVIRONMENTAL PROBLEMS

## EPA SBIR PROGRAM

### ALL Phase I Solicitations

- OPEN – March 25, 2004
- CLOSE – May 25, 2004

# EPA ORGANIZATION CHART



## SBIR PROGRAM OBJECTIVES

- Foster Development of New Cutting-Edge Environmental Technologies
- EPA Programs Use SBIR Technologies to Reduce Pollution
  - Reduced Capital and O&M Costs
  - Controls More Efficient and Effective
- Protecting Human Health
- Safeguard the Environment
- Improving American Economy

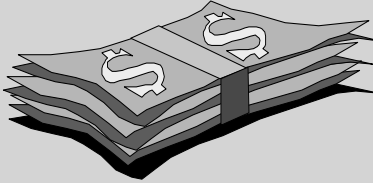
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3All this helps the Agency to achieve its overall mission

\*New jobs, New Companies, New Products

## FY 2004 EPA SBIR BUDGET

**\$ 7 M**



**Phase I Contracts: \$70,00K (6 months)**  
**Phase II Contracts: up to \$320,000 (15 mo)**

## EPA'S SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM

- Congress Passed Initial SBIR Law in 1982
- Ten Federal Agencies with Extramural R&D Budget
- Over \$100 Million
- SBIR Budget in 2000 over \$1.2 Billion
- SBIR is 2.5% Extramural R&D Budget (EPA \$7 Million)

## FEDERAL AGENCIES

- Department of Agriculture (DOAg)
- Department of Commerce (DOC)
- National Institute of Standards & Technology (NIST)
- National Oceanic & Atmospheric Admin. (NOAA)
- Department of Education (DOEd)
- Department of Energy (DOE)
- Department of Transportation (DOT)
- National Aeronautics & Space Admin. (NASA)
- National Institutes of Health (NIH)
- National Science Foundation (NSF)

## FEDERAL AGENCIES

- Department of Defense (DoD)
- Air force
- Army
- Navy
- Ballistic Missile Defense Organization (BMDO)
- Defense Advanced Research Proj. Agency (DARPA)
- Special Operations Command (SOCOM)
- Department of Homeland Security

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## EPA SBIR PHASE I

- Prove Scientific and Technical Feasibility
- Awards up to \$70,000
- Commercialization Assistance \$4,000
- Six Months Duration
- Approx. 1 in 10 Funded

# SBIR PHASE I - SOLICITATION AREAS

- SPECIAL: Pacific Environmental Problems
- SPECIAL: Hazardous Waste Minimization
- SPECIAL: Pollution Prevention
- REGULAR PHASE I SOLICITATION

## SPECIAL: Pacific Environmental Problems

### Solicitation Subtopics

- Urban ENV Management in Arid Climates
- Green Buildings
- Technologies for Rural and Tribal Lands
- Dairy and CAFOs
- Stormwater from Construction and Industry
- Fuel Tank Evaporative Emissions

## SPECIAL: Hazardous Waste Minimization

### Solicitation Subtopics

- Minimizing Priority Chemicals
  - 30 Organics and Metals
- Waste Gasification

## SPECIAL: Pollution Prevention

### Solicitation Subtopics

- Automobile Green Supplier Networks
- Hospitals for a Healthy Environment
- Flame Retardants
- Diisocyanates
- Fragrances
- Industrial Design
- Printed Wiring Boards

# REGULAR SBIR Solicitation

- NanoMaterials
- Air Pollution Monitoring and Control
- Drinking Water and WasteWater Treatment
- Solid and Hazardous Waste Management
- Safe Buildings
- Drinking Water and Wastewater Security

# FY 2004 Regular Solicitation - Research Topic Areas

## NanoMaterials

- New Nanoporous Filters
- Nanofiltration Membranes
- Nanoparticulate Catalysts
- MEMS and Nano Monitors

# FY 2004 Regular Solicitation - Research Topic Areas

## Air Pollution Monitoring and Control

- Heavy Metal Ambient Monitors
- Improved Air Emission Monitors
- Hazardous Air Pollutants
- Low VOC Coatings

# FY 2004 Regular Solicitation - Research Topic Areas

## Drinking Water and WasteWater Treatment

- Inexpensive Small Treatment Systems
- Cryptosporidium, Arsenic, Chemicals
- Clean Disinfection By-Products
- Chemical and Biological Monitors

# FY 2004 Regular Solicitation - Research Topic Areas

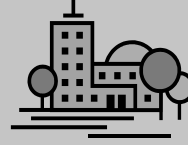
## ● Solid and Hazardous Waste Management

- Hazardous Wastes
- Site Cleanup
- Soil and Sediments
- Ground Water Cleanup
- Solid Waste Recycling



# FY 2004 Regular Solicitation - Research Topic Areas

## ● Safe Buildings



- Building Decontamination
- Better Building Design
- Treatment of Contaminated Materials
- Biological/Chemical Field Kits

# FY 2004 Regular Solicitation - Research Topic Areas

## ● Drinking Water and Wastewater Security

- Water Protection Technologies
- Wastewater Treatment Protection Systems
- Biological/Chemical Monitoring

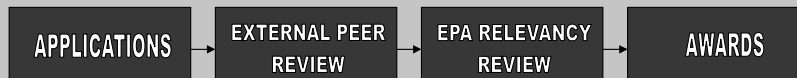


## SBIR PHASE II

- Prototype Developed/Commercialized
- Only Phase I Winners Eligible
- Awards \$225,000 up to \$320,000
- Phase II Options  
(Commercialization/ETV)
- 15 Month Duration
- Approx. 40 Percent Funded

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# SBIR EVALUATION AND SELECTION



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Evaluation and Selection Process

## External Peer Review

● Excellent, Very Good, Good, Fair or Poor  
- Five Criteria (Equal Weight)

- Scientific / Technical Quality and Soundness
- Uniqueness and Originality
- Cost and Environmental Benefit
- Qualifications of Team
- Commercialization Potential

# Relevancy Review



- EPA Internal Program Review
  - Only Review Excellent and Very Good Rated Proposals
  - Three Criteria (Equal Weight)

- Meets EPA Needs and Program Priorities
- Significant Environmental Benefits
- Broad Application and Impact

# How To Win An SBIR Award



- Read the Solicitation
- Review Topic Descriptions
- Search EPA Website for Previous Awards
- Understand the Problem and Build a Team
- Brainstorm, Plan and Select Approach

# How To Win An SBIR Award

## ● Develop a Quality Proposal



- Plan an Outline
- Develop a Realistic Work plan
- Broaden your Capability
- Emphasize your Strengths
- Show the Potential of your Idea
- Show Clear Path to Commercialization
- Use Key Figures and Tables
- Don't Quit – Learn from Losing

# How To Win An SBIR Award



- Third Party Independent Evaluation
- Letters of Support
- Excellent Executive Summary

## Formula For SBIR Success



- Address Agency Priority Needs
- Environmental Benefits
- Strong Competition / Innovative Proposals
- Technical Abstract
- Work Plan
- Technical Evaluation Criteria
- Relationship to Future Research
- Cost Breakdown

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## EPA Website - Information

- [www.epa.gov/ncer/sbir](http://www.epa.gov/ncer/sbir)
- Listing and Abstracts of Phase I and Phase II Awards
- Technology Results
- Other SBIR Agency Environmental Technologies
- EPA SBIR Reports and Publications
- 1-800-490-9194 Telephone Helpline

# Thank You

After viewing the links to additional resources,  
please complete our online feedback form.

Thank You

[Links to Additional Resources](#)

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