

EPA'S SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM



PHASE I CONTRACTOR WORKSHOP
LIVE ON THE INTERNET
12:30 – 2:00 EDT
April 10, 2003

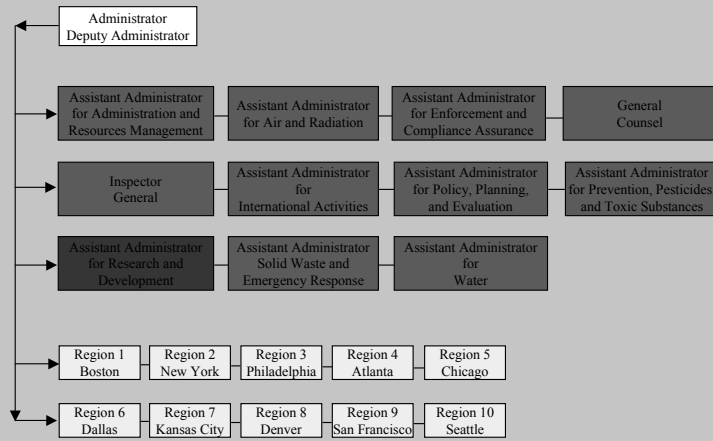


EPA SBIR PROGRAM

- Next Phase I Solicitation
 - OPEN – March 27, 2003
 - CLOSE – May 23, 2003

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EPA ORGANIZATION CHART



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 \$8 Million)

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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)

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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)

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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

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

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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

SBIR PHASE I SOLICITATIONS

- SPECIAL: Monitoring of Air Pollution
- SPECIAL: Western USA Environmental Problems
- SPECIAL: Safe Buildings and Water Security
- REGULAR PHASE I SOLICITATION

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SPECIAL: Monitoring of Air Pollution

- Continuous Ambient Monitors for Particulate Matter (Coarse PM and Fine PM)
- Volatile Organic Compounds (VOC) Monitors
- Special Air Emission Source Monitors (Metals, Mercury & Optical PM Sensors)
- New Sampling & Analytical Equipment

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SPECIAL: Western USA Environmental Problems

- Coal Bed Methane
- Animal Environmental Management
Chronic Wasting Disease
- Mining Waste and Acid Mine Drainage
- Emission Controls for Off-Road Engines

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SPECIAL: Safe Buildings and Water Security

- Improved Detection Technologies
Biological and Chemical agents
Portable Detectors
- Early Warning Security Systems
- Treatment for Contaminated Water
Clean-Up of Contaminated Systems
- Building Decontamination Systems

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FY 2003 Regular Solicitation Topics

- A. Nanomaterials and Clean Technology
- B. Treatment and Monitoring of Drinking Water
- C. Municipal and Industrial Wastewater Treatment
- D. Hazardous Waste Management and Site Remediation
- E. Recycling of Municipal and Industrial Solid Waste

FY 2003 Research Topics

- Nanomaterials and Clean Technology

- Nanotechnology
- Pollution Prevention
- Green Chemistry
- Priority Industries

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FY 2003 Research Topics

- Treatment and Monitoring of Drinking Water

- Drinking Water Treatment
- Small, Inexpensive Systems
- Cryptosporidium, Arsenic, Chemicals
- Monitoring of Drinking Water Quality

FY 2003 Research Topics

- Wastewater Treatment

- Municipal Wastewater

- Industrial Wastewater

- Stormwater and CSOs

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FY 2003 Research Topics

- Hazardous Waste Management and Site Remediation

- Hazardous Wastes

- Site Cleanup

- Soil, Sediments and Ground Water

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FY 2003 Research Topics

- Recycling of Municipal and Industrial Solid Waste

- Municipal Solid Waste

- Industrial Solid Waste

- Electronics Recycling



Proposal Preparation Requirements

- 25 Page Limit for Phase I Proposals
- Original +9 Copies to EPA / RTP by Deadline
- Abstracts: Complete and Provide Good Project Summary
- Technical Content of Proposal

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Phase I Proposals (25 Pages)

- Proposal Cover Sheet
- Abstract
- Technical Content
- Cost Breakdown and Proposal Budget
- Quality Assurance Narrative

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Technical Content Of Proposal

- Significance of Problem and Environmental Benefits
- Phase I Technical Objectives
- Phase I Work Plan

Phase I Work Plan

- Should be Major Part of Proposal, Maybe 10+ Pages
- What Will be Done, Where and How
- Details to Allow Thorough Scientific and Technical Review
- Include Work Schedule and Timeline

Technical Content Of Proposal (Continued)

- Phase I Work Plan
- Related R&D (Show Awareness of Recent Research)
- Key Personnel, Consultants and Facilities
- Future Research (Phase II Expectations)
- Commercialization Plan

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Commercialization Plan

- Abbreviated 2-3 Page Roadmap for Commercialization
- We Provide Help During Phase I
- Commercial Applications
- Competitive Advantages
- Markets and Business Approach

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Technical Content of Proposal (Continued)

- Commercialization Plan
- Similar Awards
- Duplicate Awards
- Prior SBIR Awards

Other Considerations

- Cost Sharing
- Fee or Profit
- Joint Ventures / Limited Partnerships

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SBIR EVALUATION AND SELECTION

APPLICATIONS

EXTERNAL PEER
REVIEW

EPA RELEVANCY
REVIEW

AWARDS

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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

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Relevancy Review

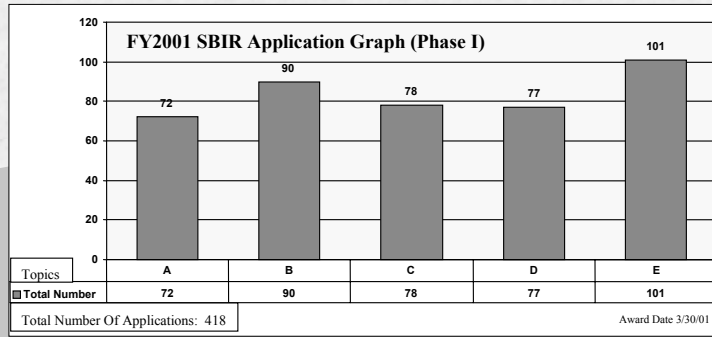
- EPA Internal Program Review
Only Review Excellent and Very Good Rated Proposals
Three Criteria (Equal Weight)

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

EPA SBIR Performance

- FY 1983 – 2000 Awards
 - 6000 Total Phase I Proposals
 - \$65 Million Awarded
 - Typical Awards Per Year
 - 30 Phase I Awards
 - 14 Phase II Awards

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- A. Nanomaterials and Clean Technology
- B. Clean Air
- C. Clean Water
- D. Waste Management and Site Remediation
- E. Monitoring and Measurement Technologies

EPA SBIR AWARDS

<u>Number of Companies</u>	<u>Number of Phase I Awards Received</u>
1	16
3	6 - 15
4	5
4	4
3	3
19	2
119	1

In 2002, about half of the Phase I Contracts were
Awarded to Newcomers

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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

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How To Win An SBIR Award

- Develop a Quality Proposal
 - Plan an Outline
 - 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

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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

- 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

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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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