R51

FISCAL YEAR 1998 YEAR-END REPORT

For the November 1997 to October 1998 Period

LARGE-SCALE DEMONSTRATION AND DEPLOYMENT PROJECT—TECHNOLOGY INFORMATION SYSTEM (LSDDP-TIS)

Principal Investigator:

M.A. Ebadian, Ph.D.

Florida International University Collaborators:

E. Stan Vallidum, Leonel Lagos, and Mabel Acosta

Prepared for:

U.S. Department of Energy
Office of Environmental Management
Office of Science and Technology

HEMISPHERIC CENTER FOR ENVIRONMENTAL TECHNOLOGY (HCET)
Florida International University, Center for Engineering & Applied Sciences
10555 West Flagler Street, EAS-2100, Miami, Florida 33174
305-348-4238 • FAX: (305) 348-1852 • World Wide Web Site: http://www.hcet.fiu.edu

DISCLAIMER

LARGE-SCALE DEMONSTRATION AND DEPLOYMENT PROJECT— TECHNOLOGY INFORMATION SYSTEM (LSDDP-TIS)

Principal Investigator

M.A. Ebadian, Ph.D.
Hemispheric Center for Environmental Technology
Florida International University
Miami, FL 33174

Florida International University Collaborators

E. Stan Vallidum,
Leonel Lagos, and Mabel Acosta
Hemispheric Center for Environmental Technology
Florida International University
Miami, FL 33174

January 1999

Prepared for

U.S. Department of Energy
Office of Environmental Management
Office of Science and Technology

Under Grant No.: DE-FG-21-95EW55094

ACKNOWLEDGMENTS

This report is based on work supported by the U.S. Department of Energy, Office of Environmental Management, Office of Science and Technology's Deactivation and Decommissioning Focus Area, Federal Energy Technology Center. The Principal Investigator, FIU Collaborators, and students at Florida International University would like to thank Dr. Paul Hart and Steve Bossart for providing us the opportunity to work on this project.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS AND ABBREVIATIONS

D&D	Deactivation and Decommissioning
DOE	U.S. Department of Energy
DOE-EM	U.S. Department of Energy – Environmental Management
DOE-OST	U.S. Department of Energy – Office of Science and Technology
FIU	Florida International University
FIU-HCET	Florida International University's Hemispheric Center for Environmental Technology
FY98	Fiscal Year 1998
FY99	Fiscal Year 1999
GUI	Graphical User Interface
HCET	Hemispheric Center for Environmental Technology
PC	Personal Computer

EXECUTIVE SUMMARY

In recent years, an increasing demand for remediation technologies has fueled rapid growth in the D&D technologies. The D&D project managers are now faced with the task of selecting from among the many commercially available and innovative technologies, the most appropriate technology, or combination of technologies, that will address their specific D&D needs. The DOE's Office of Science and Technology (OST) sponsored the Large-Scale Demonstration and Deployment Projects (LSDDP) to demonstrate improved and innovative technologies that are potentially beneficial to DOE's environmental project. To date, three LSDDPs have been conducted at DOE's nuclear production and research facilities at the Fernald Environmental Management Project – Plant-1 (FEMP), Chicago Pile-5 Research Reactor (CP-5), and Hanford Production Reactor 105-C. Now four new LSDDPs have been launched at the Los Alamos National Laboratory (LANL), Idaho National Engineering and Environmental Laboratory (INEEL), Savannah River Site (SRS), and Mound Environmental Management Project (MEMP).

In the LSDDPs, an extensive search is first conducted to identify candidate technologies that can potentially address the identified problems. The candidate technologies then go through a screening process to select those technologies with the best potential for addressing remediation problems at the LSDDP site as well as project sites across the DOE complex. This selection process can be overwhelming and time-consuming. The result is that D&D project managers for the new LSDDPs are challenged to avoid duplication of demonstrated technologies.

LSDDP-TECHNOLOGY INFORMATION SYSTEM

Florida International University's Hemispheric Center for Environmental Technology (FIU-HCET) developed LSDDP-TIS as an aid to LSDDPs decision-makers. LSDDP-TIS is a searchable database that helps in identifying candidate technologies for the new LSDDPs or for addressing specific problems. This system will radically reduce time, effort, and uncertainty previously associated with selecting technologies already demonstrated.

RELEASE OF THE UPGRADED LSDDP-TIS

The release of the upgraded LSDDP-TIS was scheduled for October 30, 1998. In this release, the database will contain screened information provided by the first three LSDDPs. This information base is expected to grow rapidly as the four new LSDDPs screen more technologies.

This report provides an overview of the tasks involved in the development of LSDDP-TIS and an account of the activities completed during the fiscal year 1998 (FY98). It also provides a project completion schedule and describes the activities planned for fiscal year 1999 (FY99).

1.0 INTRODUCTION

The principal objective of Large-Scale Demonstration and Deployment Projects (LSDDP) is to demonstrate improved and innovative technologies that are potentially beneficial to DOE's environmental project. At present, the project managers must research, screen, and evaluate candidate technologies that address their specific problems and objectives associated with each remediation project. Undoubtedly, this process is time-consuming and costly. Now, the new LSDDP project managers are posed with the challenge of avoiding duplication of demonstrated technologies.

1.1 PURPOSE OF THIS INVESTIGATION

The principal objective for designing LSDDP-TIS is to aid DOE-EM's decision-makers to keep informed about technologies evaluated in other LSDDPs and to identify candidate technologies for demonstration in the new LSDDPs or for addressing specific problems. LSDDP-TIS will help improve the quality, consistency, and efficacy of their technology selection decisions.

1.2 OVERVIEW OF LSDDP-TIS

Figure 1 illustrates the main processes involved in the development of LSDDP-TIS.

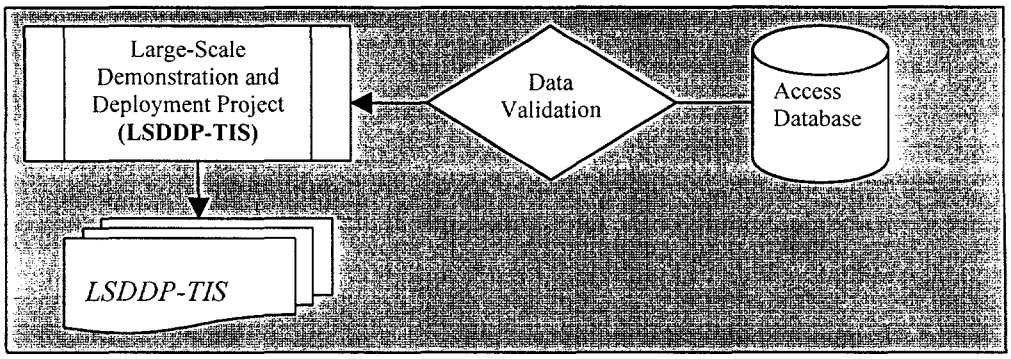


Figure 1. Process flowchart for LSDDP-TIS system.

1.2.1 Microsoft Access Database

A database support system is only as useful as the quality and comprehensiveness of the information that it contains. The Microsoft Access database was designed for data-entry, editing, and data validation of LSDDP screened information. Upon entering the database, the data-entry person is prompted for user name and password. Consequently, a menu is displayed with 5 options: to add a new record, to edit an existing record, to search for specific information, to perform statistical analysis on the data, and validation. Figures A.1 and A.2 in Appendix A illustrate the screens for the data-entry person to add or edit records. In browse mode, the data-

entry person will also be able to search for specific information about the screened technologies and general LSDDP information is displayed. Another feature of the database is data validation. In this section, the project manager will check that all the information entered is correct, including misspelled and missing information. If all the information is correct, the technology information is ready for import into the LSDDP-TIS website. If any error is found, then the technology information is rejected and ready for the data-entry person to correct the errors. This validation process is a constant transfer of information between the project manager and the data-entry person until all the information is correct.

1.2.1.1 Database Statistics

Table 1 summarizes the access database current count of technology pre-screened forms in each LSDDP site. At present, forms are still missing from the three LSDDP sites. For example, CP-5 has 14 pre-screening forms missing and the pre-screening forms for the demonstrated technologies.

Table 1.
Total number of technologies assessed by each LSDDP site

LSDDP Site	Total Number of Technologies Assessed
CP-5	116
Plant-1	173
C-Reactor	40

1.2.2 The LSDDP-TIS Website

The search engine is called TechSearch. The design goal was to make the site user-friendly. The first version of the site had two password screens, each with a unique username and password. To simplify the process, login has been done away with. A one-time registration procedure is all that is required.

The search criteria with the first version were restrictive. Only one technology category or evaluation status could be selected at a time. To get around this, users were asking for an Any option. To find a vendor or record, you had to know the exact spelling as it appeared in the record you were looking for. Now multiple items can be chosen in all categories. A pick list of vendor names and technology names is regenerated depending on the structure of the query.

Both of these changes have been made to speed the selection process and make the query process more intuitive.

1.2.3 LSDDP-TIS Website Graphical User Interface

Graphical user interfaces (GUIs) are simply computer screens that a website uses to request data from users, as well as to feed back information to the users. Appendix B illustrates some of the GUIs that are used by LSDDP-TIS.

2.0 PROJECT DESCRIPTION

Table 2 summarizes the tasks that were identified for completion in FY98 in connection with the development of the LSDDP-TIS. Also shown is the status of each task as of the end of FIU-HCET's fiscal year on October 31, 1998.

Table 2.
Status of project technical plan

Task	Status as of October 31, 1998
3.1 Integrate Technology Evaluation	Ongoing

This subtask was delineated in the FY98 Project Technical Plan (PTP) and was designed to plan and manage the work activities for the year ending October 31, 1998. The goal for FY98 was to incorporate the new LSDDPs technology evaluations into the LSDDP-TIS on a monthly basis. This goal is ongoing, primarily due to the LSDDPs not submitting their screened forms. Despite the delay, system enhancements and maintenance were completed in FY98. Section 3 of this report provides details of the status of the above tasks.

3.0 ACCOMPLISHMENTS DURING FY98

Each of the tasks outlined in the FY98 PTP "Large-Scale Demonstration Project-Technology Information System (LSDDP-TIS)" is summarized in the following paragraphs. The task as found in the FY98 PTP is shown in italics. The result of this task follows the statement.

3.1 INTEGRATE TECHNOLOGY EVALUATIONS OF NEWLY AWARDED LSDDPS

Task: Incorporate new LSDDPs technology evaluation data into the LSDDP-TIS on a monthly basis and maintain the website.

Status: Ongoing. The integration of the technology evaluation data depended on the progress of the newly awarded LSDDPs and their submittal of the datasheets.

3.2 USER MANUAL

A user manual was developed for the use of this system. Appendix B describes in detail how a person can use this user-friendly system.

4.0 LESSONS LEARNED

During the database development phase, the technology screening forms from the three different LSDDPs had to be analyzed to capture which data is common and essential to report. Since the three LSDDPs created their own screening forms, data that was important to one LSDDP site was not considered as important by another LSDDP site. For example, all LSDDP sites collected vendor information, but some LSDDP sites considered the phone number sufficient information while other LSDDP sites collected vendor address and vendor phone numbers. As a result, the database has missing information. The database is only as good as the quality and comprehensiveness of the information it contains. Figure C.1 in Appendix C illustrates a form that contains what information must be collected from the new LSDDP sites.

5.0 PLANNED ACTIVITIES FOR FY99

During the first quarter of FY99, beta testing of the LSDDP-TIS will be conducted, results of the beta test will be implemented, and screened data from the new LSDDPs will be incorporated into the LSDDP-TIS. Work will continue to upgrade the LSDDP-TIS into an expanded Technology Information System (TIS). The expanded TIS will include information from DOE's baseline technology information, FIU-HCET's technology assessment program, and data from other sources. FIU-HCET will also provide links from the TIS to other technology information resources and implement security/user access and privileges. Table 3 summarizes the completion schedule for tasks to be undertaken during FY99.

Table 3.
Completion schedule for expanded TIS

TASK	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Task 1. Conduct beta testing of the TIS.	X									
Task 2. Implement results of beta test.	X	X								
Task 3. Implement security/user access and privileges.		X								
Task 4. Incorporate technology screening data from new LSDDPs.	X	X	X	X						
Task 5. Incorporate DOE's baseline technology information.			X	X						
Task 6. Incorporate information from FIU-HCET's Technology Assessment Program.			X							
Task 7. Investigate feasibility of incorporating technology data from other sources.				X						
Task 8. Incorporate technology data from other sources.				X	X					
Task 9. Provide links from the TIS to other technology. information resources.						X				

Expanding the TIS is beneficial for the following reasons:

- Having a single, comprehensive source of information on baseline, commercially available, and innovative technologies that are potentially beneficial to the U.S. DOE and its customers.
- Time and cost savings realized by sharing information across the DOE complex, rather than repeating technology-screening efforts at each site. This will also expedite the technology selection process for future LSDDPs and for remediation projects.
- Exposure for new and innovative technologies in DOE market.

6.0 CONCLUSIONS

The U.S. Department of Energy (DOE) endeavors to keep its decision-makers and customers apprised of the latest information and lessons learned with regard to technologies considered for use within the DOE complex.

LSDDP-TIS will allow project managers to make informed decisions when selecting technologies for their remediation projects and avoid duplicating efforts already undertaken by their counterparts within the DOE. The most critical feature of any information system is the comprehensiveness, accuracy, and reliability of the information it provides. Therefore, the data collected in the LSDDP sites must be good, accurate, and complete.

Participants in the testing of the new TIS that have used the old TIS remark at its improvement, from its ease of use to the quality of its data. The system promises, and will deliver, significant savings in time and effort in selecting D&D technologies for remediation projects. FIU-HCET sees DOE and commercial sites both using this product to meet their future technology selection needs.

APPENDIX A

MICROSOFT ACCESS DATABASE

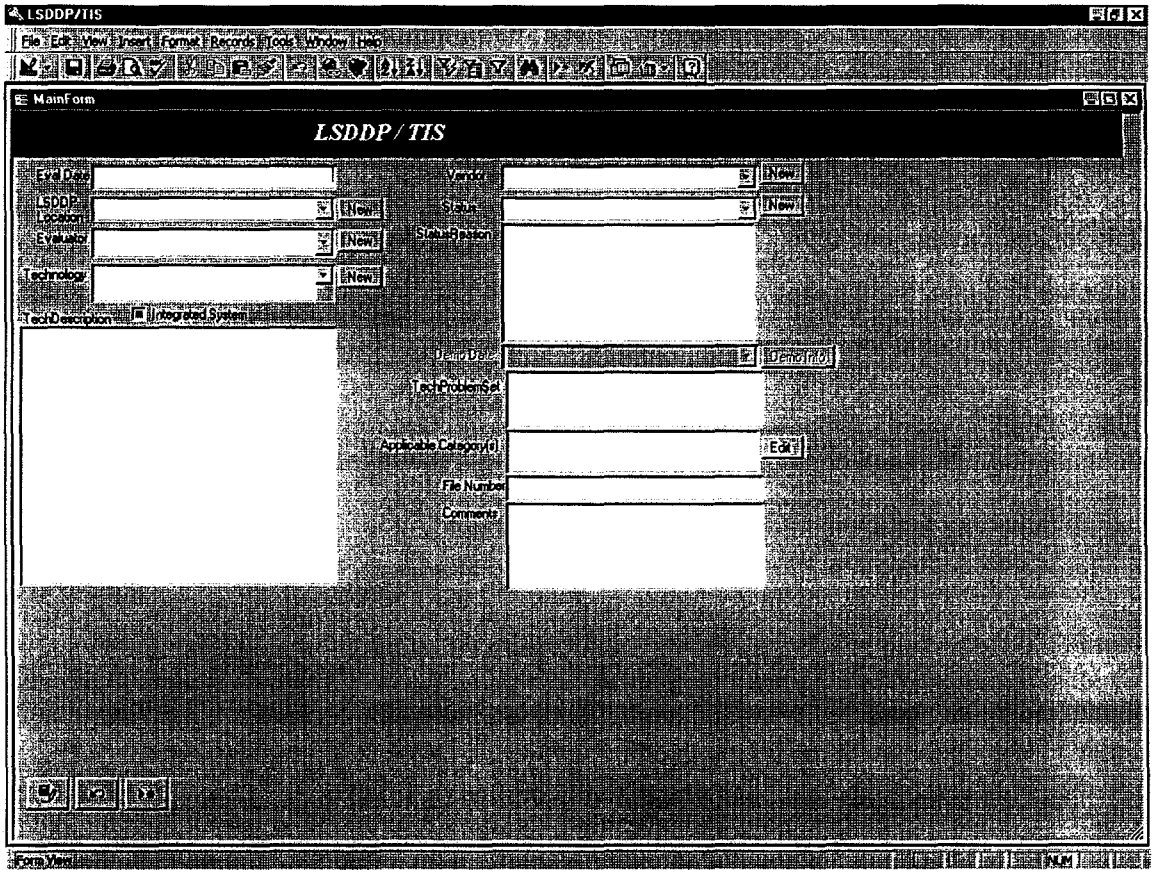


Figure A-1. Data Entry Screen.

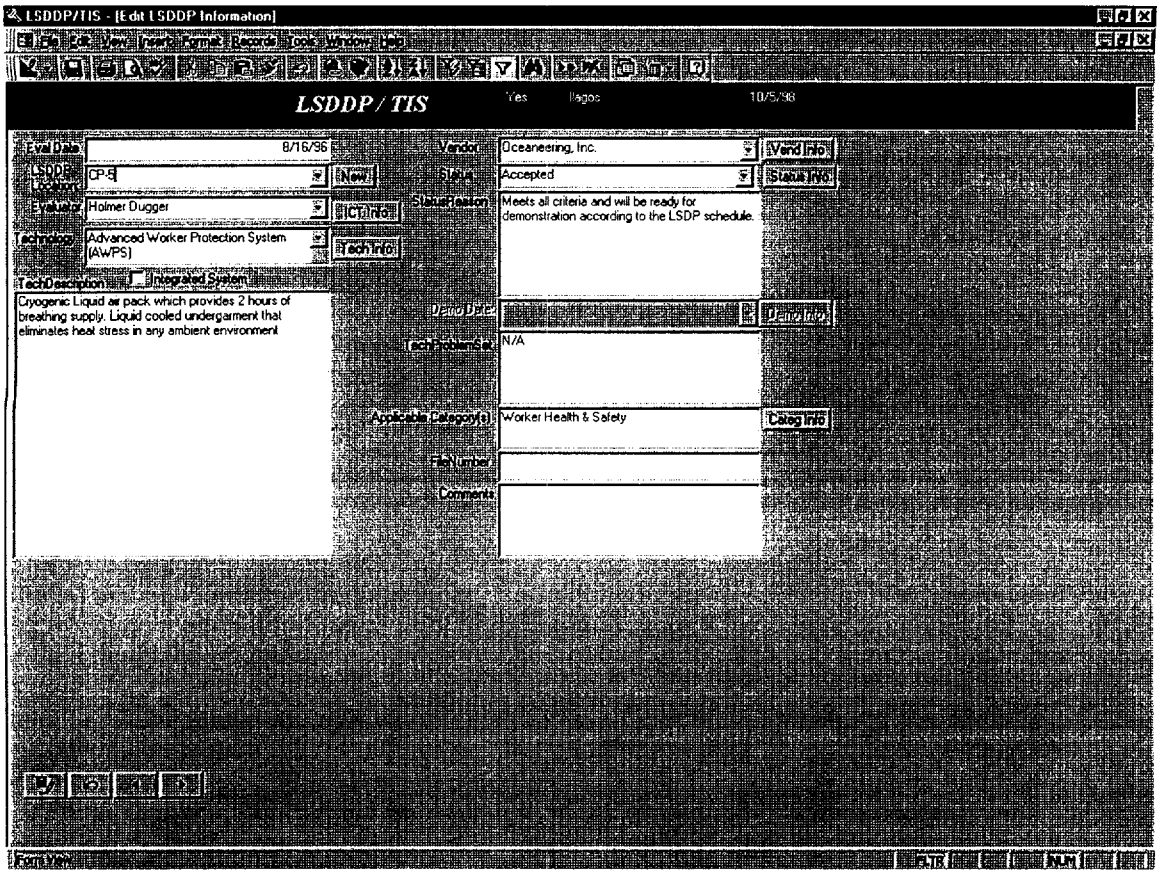


Figure A-2. Edit Data Entry Screen.

VendorName

3M Company
ABB Abrasive Blasting-Vacublast
ABB-CE Nuclear Power
Advanced Recycle Media Systems
AEA O'Donnell
AEA Technology, UK
Aerojet
Aerojet Tennesee Enviromental Services
Aerospatiale
AIL Systems Inc.
Alaron Corporation
Alliance, Inc.
Allied Signal (Technology Transfer Center)
Alpheus Cleaning
AMES Laboratory
Applied Computer Solutions (ACS)
Applied Radiological Controls
Aquablast, Ltd. UK
Arctech Inc.
Arctic Blast
Argonne National Laboratory/ Lumonics Corporation
Armex (Church & Dwight Co.)
Artisan Industries, Inc.
Asbestos Recycling, Inc.
B & W NESI
B&W Nuclear Environmental Services
Bartlett Nuclear Inc.
Bartlett Services Inc.
Bio-Imaging Research Inc
BNFL
Brokk
Brookhaven National Laboratory (BNL)
Brooks Vision and Innovation
Butterworth Jetting Systems, Inc.
Canberra
Cannon Sline
Carnegie Mellon University
Carter Technologies
Chamberlains-Vacublast
Champion Speedway Hydraulics Inc.
Chemdahl Corporation
ChemRad
Church & Dwight
Cold Jet
Coleman Research Corporation
Concrete Cleaning, Inc.
Constellation Technology Corporation
Container Products Corp.
Corpex Technology
Corrosion Specialities
CTS Power Services, Inc.
DDH Nuclear, Inc.
Decon International, Inc.
Decon Systems, Inc.
Delphi Research Inc.
Delphinos Engineering / Bechtel Hanford
DeVoe Marine
E.D. Bullard Company
EAI
Eastern Environmental Engineers
Eastern Technologies Incorporated(ETI)
Eberline
Ecology and Environment, Inc. (E&E)
EDCO
EET, Inc.
EG & G
EIC laborotries
Electro-Pyrolysis, Inc.
Electro-Sonic Systems, Inc.
Entropic Systems, Inc.
Environmental Alternatives
ETEC/ Rockwell Industries
Euro Agua Drilling
Exothermal Technology Corporation

VendorName

F2 Associates
FIU-HCET
Framatome Technologies Inc.
Frametome USA
FRHAM-TEX Safety Products, Inc.
G/O Corporation
General Electric research and Development
Geomet Technologies, INC.
Global Encasement, Inc.
Henningan Engineering Services
Hydr'am (France)
Hydro GeoPhysics
Ice Blast
ICE SOLV
Idaho National Engineering Laboratory (INEL)
Integrated Automation System
Interstate Nuclear Services
Inuktun (Canada)
Iowa State Universiity
IPI
Isotron
James Howden and Company (Lamberton Robotics)
Janell, Inc.
Jordan Engineering UK Ltd.
KEMA Nederland B.V.
Kernkraftwerke Gundremmingen
Kinetic Sciences Inc.
KKC Corrosion Control
Kleiber and Schulz, Inc
Koehler Alba
LITCO
Lockheed Martin Energy Systems (LMES) - Y-12 Plant
Los Alamos National Labs
LSP Technologies
LTC Americas
LTC-Vacublast
Manufacturing Sciences Corporation
Martin Mareitta Energy-Portsmouth Systems
Master-Lee Decon Services, Inc.
Maxwell Ind.
McDonnell-Douglas
Mearl
Mechanical Technology Incorporated (MTI)
MEIER Associates
Membrane Technology and Research, Inc.
Mitsui Engineering and Shipbuilding Company
Molten Metal Technology
Monarflex, Inc.
MPR & Associates
N/A
National Liquid Blasters (NLB)
Nelco Manufacturing Corp.
Newtek
NIS Ltd. UK
Non-Destructive Cleaning
NSS Numaco, Inc.
Nuclear Decommisioning Limited
Nuclear Sheilding Supplies & Services Inc.
O-Brien and Gere Technical Services
Oak Ridge Center for Manufacturing Technology
Oak Ridge National Laboratory (ORNL)
Oceaneering Space Systems
Oceaneering Technologies
Oceaneering, Inc.
P N Services
P.W. Stephens Environmental Co.
Pacific International Grout
Par Systems Inc.
Pegasus International Inc.
Pentek, Inc.
PermaCharge Corp.
Permanent Concrete Solutions
Petrogen Co.
Physical Sciences, Inc

VendorName

Plant Technical Services
Polygon Industries
Power Products & Services, Inc.
Power Systems Energy Systems, Inc.
PPG
Promatec
Quest Integrated
Rad Elec., Inc.
Radial Research
Radian Corp.
Radiological Services, Inc.
RAI Technologies, Inc.
Real Time Field Screening-2
Redzone Robotics Inc.
REMOTEC
Retech, Inc.
RHH Foam Systems, Inc.
Riso National Laboratory
Robotics Technology Development Program (ORNL)
Rockwell Aerospace Energy Technology
Rust
Sandia National Laboratory
Sato Kogyo co., LTD. Tokyo, Japan
Savannah River
Schlink-Urenco (Germany)
Schmidt Mfg.
Schupack Suarez Engineers, Inc.
Science and Engineering Associates
Science and Technology Inc. (STI)
Scientific Ecology Group, Inc.
Sealed Air Corp.
Shonka Research Associates, Inc.
South Carolina Universities Research and
Spar Space Systems
Special Technologies Laboratory
Stepan Chemical Co.
STI Optronics
Super Tex
Technicatome (France)
Textron Systems Division, Inc.
TLG Services, Inc.
TOMCO
Transco Products, Inc.
Tri-Rinse, Inc.
TTI Engineering
U.S. Ecology
UNI-Chem
Vacu-Blast, Ltd. UK
Vector Super Products
Vector Technologies, Inc.
Vectra Technologies
Visual Inspection Technology
Vortec Corporation
Vulcan Painter, Inc.
Westinghouse Electric Corp.
Westinghouse Hanford Company
Wheelabrator HPD, Inc.
WOMA Corporation

APPENDIX B

LARGE-SCALE DEMONSTRATION AND DEPLOYMENT PROJECT TECHNOLOGY INFORMATION SYSTEM (LSDDP-TIS) USER MANUAL

HEMISPHERIC CENTER FOR ENVIRONMENTAL TECHNOLOGY

Large-Scale Demonstration and Deployment Project Technology Information System (LSDDP-TIS) User Manual

E. Stan Vallidum
FIU-HCET D&D Project Manager

November 1998

1. INTRODUCTION

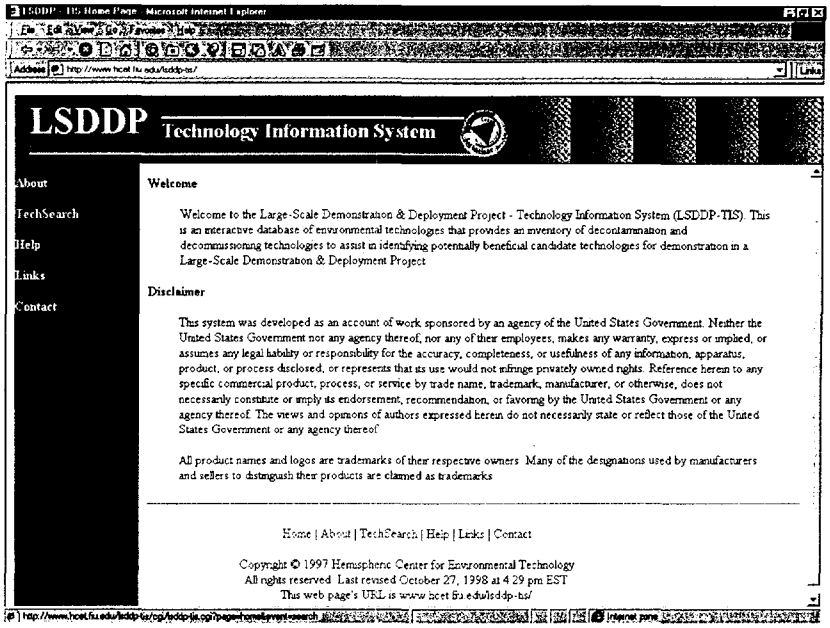
The key to successful deployment of innovative technologies is the demonstration of these technologies at a large-scale facility under actual field conditions. The Deactivation and Decommissioning Focus Area (DDFA) is implementing the "Large-Scale Demonstration and Deployment Project" (LSDDP) to facilitate the demonstration and future deployment of better, safer, faster, and cheaper technologies. The Large-Scale Demonstration and Deployment Project consists of seven individual projects. Three have been completed at Argonne Chicago Pile 5 Reactor, Fernald Plant 1, and Hanford 105-C Reactor. Implementation of these projects generated a large amount of technology screening information.

The purpose of this project is to develop and maintain a Large-Scale Demonstration and Deployment Project - Technology Information System (LSDDP-TIS) to facilitate technology screening performed by subsequent LSDDPs. Presently, there are LSDDPs at the Savannah River Site (SRS), Idaho National Environmental Engineering Laboratory (INEEL), Los Alamos National Laboratory (LANL), and the Mound Environmental Management Project (MEMP). Data will be collected and maintained at FIU-HCET and will be accessed by these Integrating Contractor Teams and the Deactivation and Decommissioning Focus Area through the Internet.

2. LOG-ON PROCEDURE

The home page of the Large-Scale Demonstration and Deployment Project - Technology Information System (LSDDP-TIS) is www.hcet.fiu.edu/lsddp-tis/ or access through the main web page www.hcet.fiu.edu/. If you are a first-time user, you will be presented with a user registration page. You will be asked your name, affiliation, and contact information. This is a one-time event and will allow FIU-HCET to track site usage and identify those areas that are being underutilized. To facilitate the storage of registration information, your browser asks you to accept a cookie file. This file is used to log you in automatically on subsequent visits to the site. Please accept it. If you do not accept this file or delete it, then you will be asked to register again before you can continue.

Screenshot 1 shows the layout of the home page. There are two sets of control bars. On the left of the screen is the menu bar; this tool is used to change pages. At the bottom center is the action bar; use the action bar to access and perform a function with the search engine. On the home page and other non-search engine pages, the action bar is the same as the menu bar. Once you have started your search by clicking on TechSearch from the menu or action bar, the menu and action bars change.



Screenshot 1. LSDDP-TIS Home Page

3. QUERY PROCEDURE

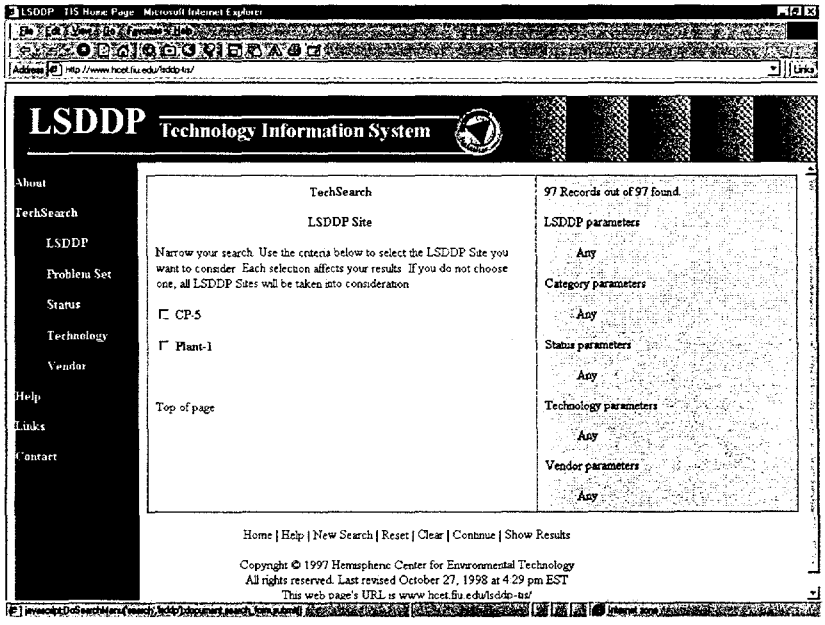
The search engine is called TechSearch. By selecting TechSearch from either of the tool bars, you open the TechSearch page. Screenshot 2 shows that the menu and action bars have changed. The menu bar has expanded to show the five search category pages. Each page contains a list of available search criteria for that category. If no criteria are selected for a category, then it is treated as a request to match any record. For example, if you selected CP-5 as the LSDDP and Demonstrated as the Status, then any record regardless of the Problem Set, Technology Name, or Vendor Name would be matched. On the right side of the page is the result box. Once you have made criteria selection and chosen the Continue action, the results box displays the number of records matching your selection and your search criteria by category. When the number of matching records or the degree of criteria is to your satisfaction, you may choose Show Results to display the reports of those records.

The five search categories in the menu bar are as follow:

- LSDDP: A site or facility that has hosted an LSDDP
- Problem Set: The problem addressed by the technology
- Status: The evaluation recommendation with regard to deployment of the technology
- Technology: List of technologies by brand name that meet the criteria of the first three categories
- Vendor: List of vendor names that meet the criteria of the first three categories.

The action bar has changed and now shows five new options:

- New Search: Clears all criteria and returns you to the TechSearch starting page.
- Reset: Clears all selections made for that category session.
- Clear: Clears all selections made for that category.
- Continue: Adds your criteria to the query and updates the result box.
- Show Results: Displays reports for those records matching your search criteria.



Screenshot 2. TechSearch Starting Page

4. GENERAL INFORMATION

Right now the LSDDP-TIS website resides on a Silicon Graphics machine that is running Netscape Enterprise Server version 2.0a software. See Appendix B for the full specification of the web server. TechSearch employs the same search engine common gateway interface (cgi) techniques used by Compaq's AltaVista and Yahoo search engines.

The Access database for LSDDP-TIS will eventually hold over 600 records from the first three LSDDPs: 173 from Fernald Plant-1, 116 from Argonne's CP-5 facility, and 40 from the Hanford C-Reactor have been verified and entered into the active website. Data from the additional five LSDDPs are expected to total 500 records. The maximum an MS Access file size can be is 1 gigabytes or 1,048,576 kilobytes. The present size is 616 kilobytes. This means that the present configuration is capable of accommodating expected growth with little or no modification.

On the user side or client side, FIU-HCET recommends Microsoft's Internet Explorer 4 (IE4) or better. Netscape's Communicator or Navigator 4 (NC4) or better can also be used to access this page.

5. WEB SERVER SPECIFICATION

Silicon Graphics Inc.
Challenge S R5000

1 180 MHZ IP22 Processor
CPU: MIPS R5000 Processor Chip Revision: 2.1
FPU: MIPS R5000 Floating Point Coprocessor Revision: 1.0
Data cache size: 32 Kbytes
Instruction cache size: 32 Kbytes
Secondary unified instruction/data cache size: 512 Kbytes on Processor 0
Main memory size: 128 Mbytes
Integral SCSI controller 5: Version WD33C95A, differential, revision 0
Integral SCSI controller 4: Version WD33C95A, differential, revision 0
Integral SCSI controller 0: Version WD33C93B, revision D

Integral Ethernet: ec0, version 1; transfer rate 10mbit/s

Disk drive: 4.3 gigabyte SCSI for web pages
Disk drive: 2.1 gigabyte drive for system partition

Operating System: IRIX 6.2

Netscape Enterprise Server version 2.0a

APPENDIX C

DATA REPORT FORM

Table C-1.
Data Report Form

Large - Scale Demonstration and Deployment Project (LSDDP) **Sponsoring Organization**	
Integrating Contractor Team **Contact name and Affiliation**	
Technology Name	
Technology Description	
Vendor Name	
Address	**Phone** **Email**
Contact Name	
Problem Set	
❑ Decontamination ❑ Characterization ❑ Waste Management	❑ Dismantlement ❑ Worker Health & Safety ❑ Other
Problem Identification	
Status	
❑ Demonstrated ❑ Later Consideration	❑ Accepted ❑ Not Accepted
Reason for Status	
Date of Demonstration	
Demonstration Results	
Demonstration Documentation **Fact-sheet** **Detailed Technology Report** **ITSR** **Technology Management System**	