



030-04632

INTERSTATE NUCLEAR SERVICES

A SUBSIDIARY OF UNIFIRST CORPORATION

June 8, 1989

Mr. Jack Davis
Nuclear Materials Safety Branch
Nuclear Regulatory Commission, Region I
475 Allendale Rd.
King of Prussia, PA 19406

RE: Amendment to License # 20-03529-01

Dear Mr. Davis:

Recently, we expanded our nuclear laundry area within the Springfield complex to accommodate the large work load we typically experience. We also moved the low level monitoring area from its old location to an area adjacent to the rest of the nuclear laundry facility.

Concurrently, we have hired a new plant manager and assistant plant manager. Our new manager, Paul Manley, was formerly radwaste coordinator for Vermont Yankee Atomic Power Plant. Our new assistant manager, Paul Kistner, was transferred from another INS plant. Paul has been with INS in different capacities for several years.

We request an amendment to our license to reflect these changes. Consequently, please make the following substitutions to our license application to maintain a single, complete document.

1. Change Condition 11 to read:

Licensed material shall be used by, or under the supervision of, Paul Manley, Phillip Rumian, Paul Kistner, George Bakevich, Guy Wilson, C. Renee Echols, or Susan Fanelli.

2. Please replace existing pages 1 through 3 dated 12/8/88 with new pages 1 through 3 dated 6/8/89. Page 1 is the Table of Contents; its change is necessitated by all other changes. Page 2 states our possession limits, and is changed to reflect your more restrictive limits set forth in license conditions. Page 3 lists all authorized users of radioactive material for this facility.

8912050147 891127
PDR FOIA
UNNERST89-493 PDR

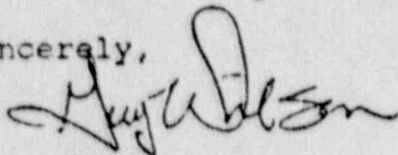
"SECTION COPY"

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3. Please replace pages B2, B3, and B5 with new pages dated 6/8/89. These are new facility drawings and descriptions, including contaminated, potentially contaminated, and clean areas. Please delete page B5 dated 10/1/87. This area no longer exists. Please insert new page B6 dated 6/8/89. This is a drawing of our laboratory area, located in a small part of the area once occupied by the low-level monitoring area. See new page B2, the site drawing, for the exact location of the lab.
4. Please replace page D14 dated 10/1/87 with new page D14 dated 6/8/89. This change reflects minor changes in corporate structure; specifically, the Manager of Corporate Health Physics is now the Manager of Health Physics and Engineering.
5. Please replace page D16 dated 10/1/87 with new page D16 dated 6/8/89. This is an air sampler location map. Please delete page D17.
6. Please replace page D18 dated 10/1/87 with new page D18 dated 6/8/89. This is a new corporate organization chart.
7. Please exchange new pages E1 through E3 dated 6/8/89 for existing pages E1 through E3 dated 10/1/87. This change updates responsibilities and reporting structure. Also, please replace existing pages E5 through E15 for new pages E5 through E11. These pages are brief resumes of our current users of radioactive material at the Springfield facility.

Enclosed is a check for \$170.00 to cover the fee for license amendment. If you have any questions, please call me.

Sincerely,



Guy Wilson
Manager, Health Physics
and Engineering

cc: J. Badey
P. Manley
S. Fanelli
M. Weinstein, AN1
Agency Correspondence File

Date: 6/8/89

License: 20/03529/01

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ITEM 5a, b, and c

<u>a. Radioactive Material</u>	<u>b. Physical Form</u>	<u>c. Possession Limit</u>
5.1 Any radioactive material, Atomic number 1 - 83.	Contaminated garments and other launderable items, equipment, machinery, protective devices, and associated decontamination wastes.	2.5 Curies except as limited by Condition 15.
5.2 Any Source Material	"	10 Kilograms
5.3 Any Special Nuclear Material	"	250 grams as U-235, 20 grams as Plutonium, or any combination where total grams U-235/300 + total grams Pu/200 is less than or equal to one.
5.4 Any Byproduct material with Atomic Numbers 84-102	"	10 millicuries
5.5 Any radioactive material	Miscellaneous Radiation Standards (SRMs) from the National Bureau of Standards or other suppliers	Total activity of all SRM's not to exceed 5 millicuries or 1 millicurie per source.

ITEM 6Purpose for which licensed materials shall be used

- a. The radioactive materials listed in 5.1 through 5.4 are in the form of contaminated garments, plastics, and other launderable reusable items, equipment, machinery, protective devices, and resulting decontamination wastes. Operations include the transportation of contaminated reusable articles, decontamination by laundry, dry cleaning, or other industrial cleaning processes, and testing and monitoring of items.
- b. Radioactive materials listed in 5.5 are to be used for instrument calibration.

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Individuals Responsible
for Radiation Safety Program

See Appendix E for Training and Responsibilities of the individuals listed.

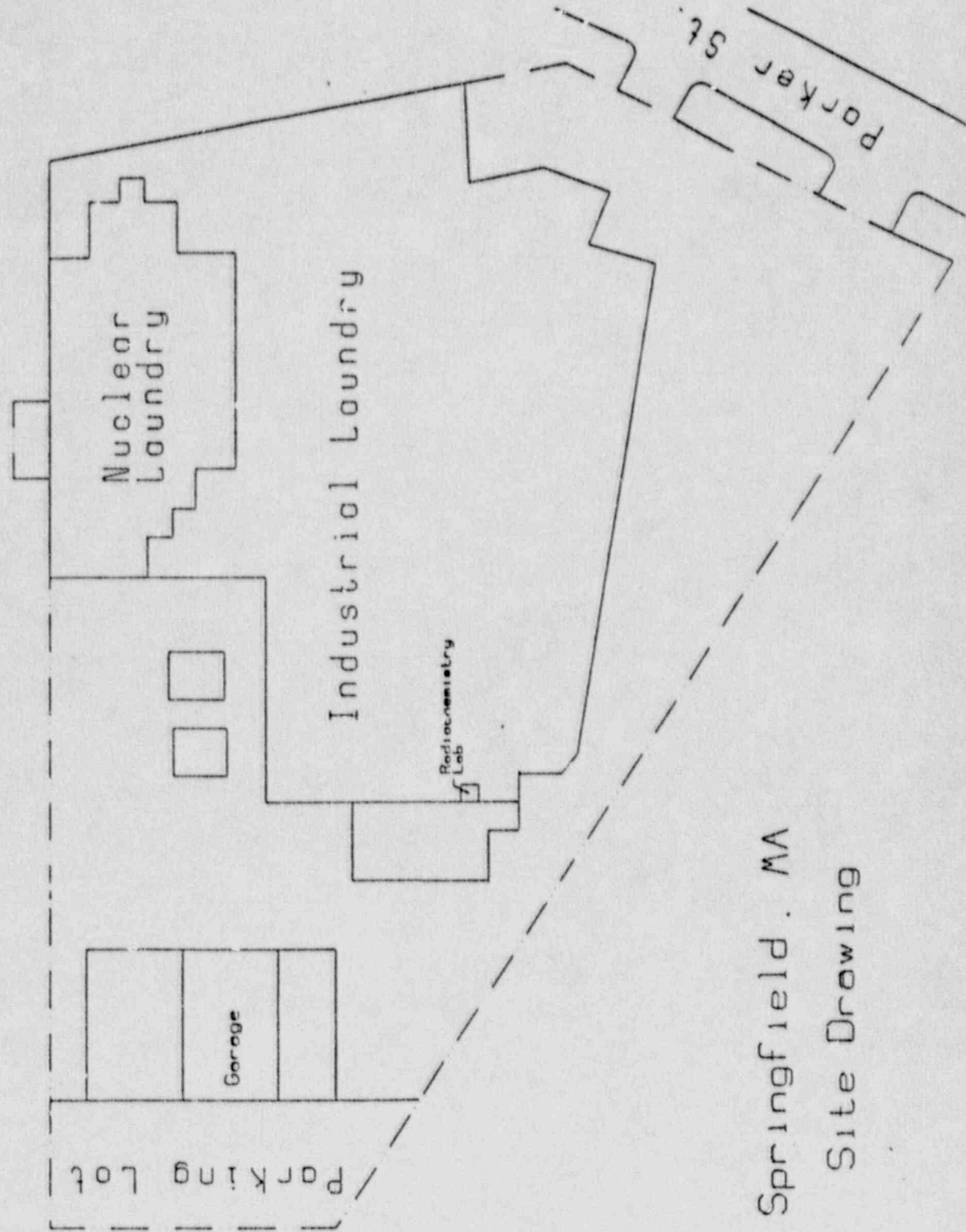
Paul Manley, Plant Manager, RSO
Phillip A. Rumian, Alternate RSO
Paul Kistner, Asst. Plant Manager
George J. Bakevich, General Manager
Guy R. Wilson, Manager, Health Physics and Engineering
C. Renee Echols, Health Physicist
Leslie B. Case, Corporate Engineer
Susan L. Fanelli, Corporate Health Physicist

Users at the plant include any individuals above, when present. Alternate or assistant Plant Managers, or Operations Managers can act as RSO when present.

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Figure B-1



Springfield, MA
Site Drawing

Figure B-2

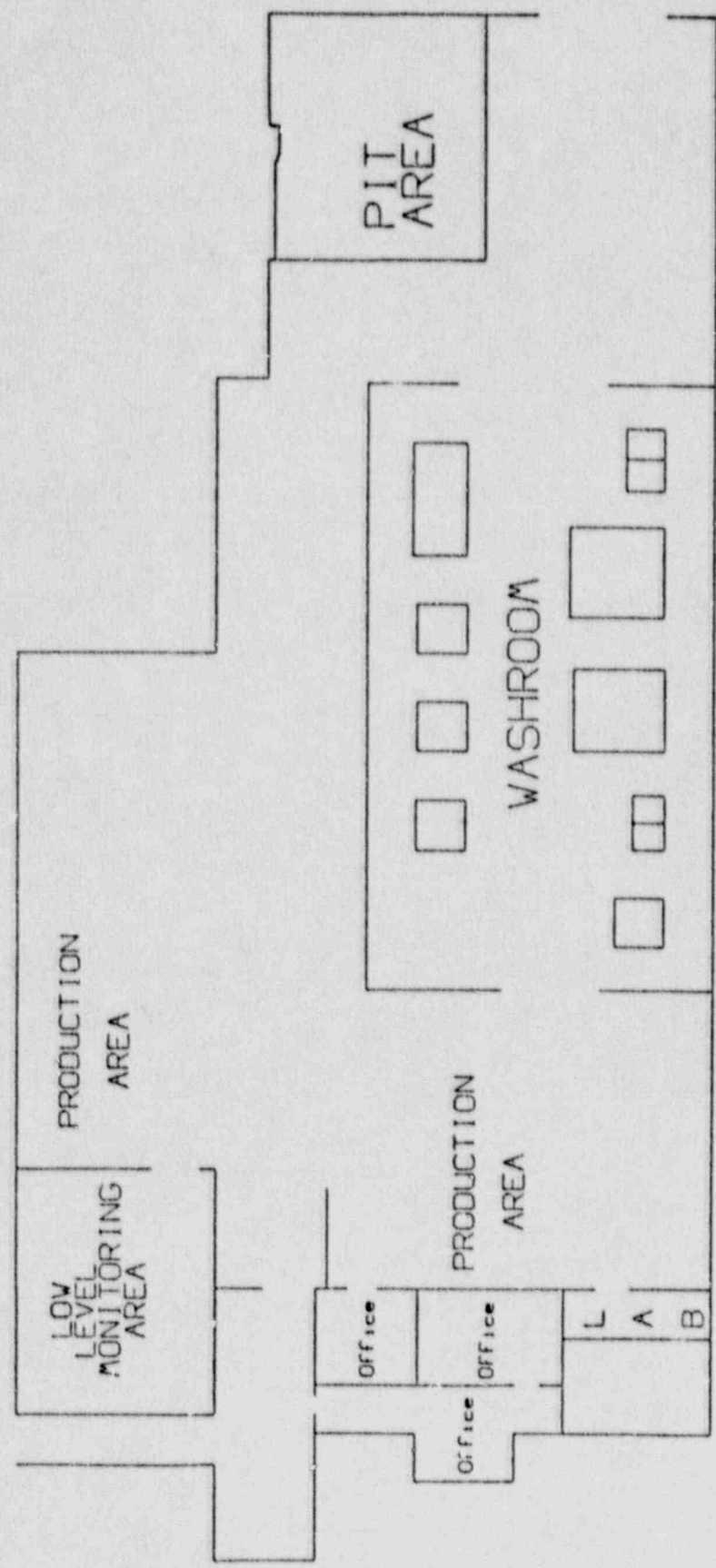
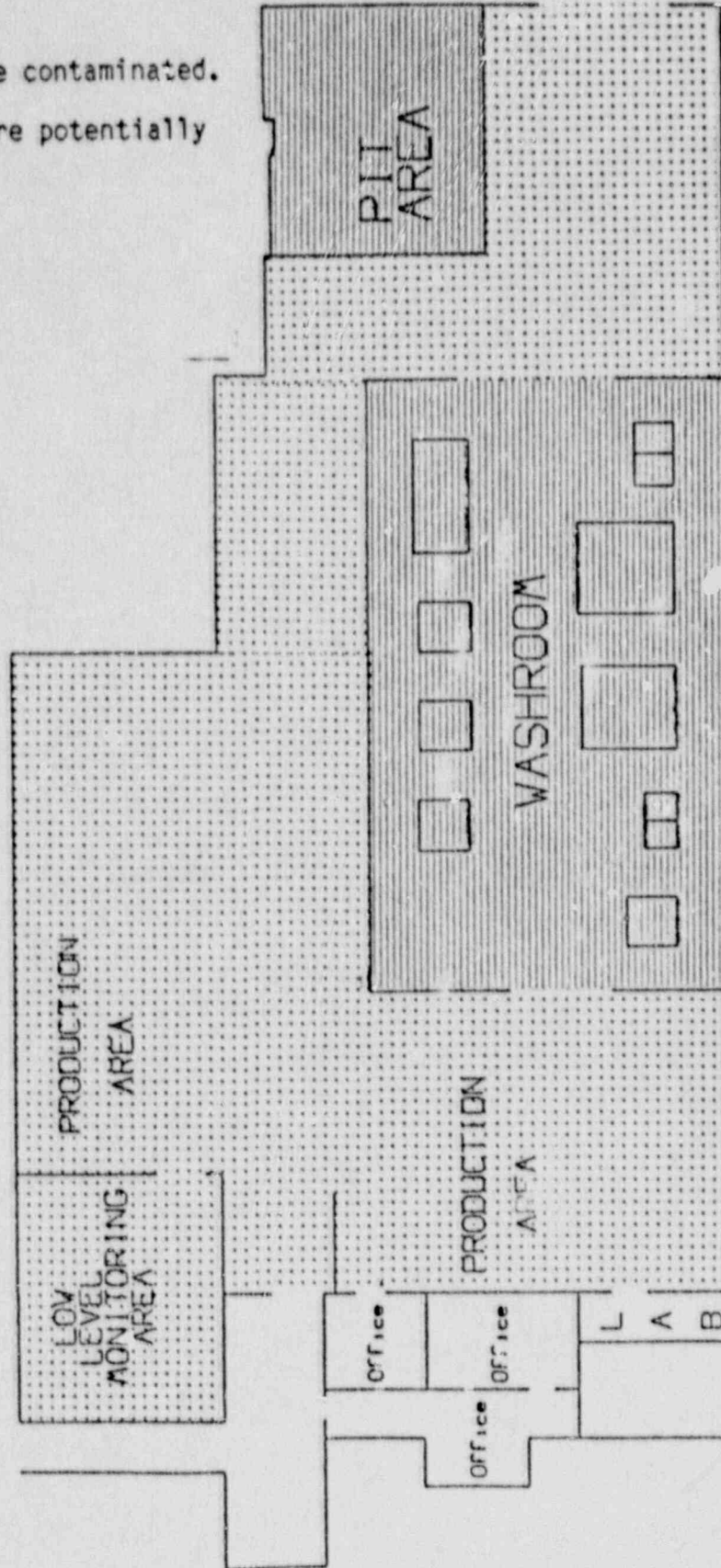


Figure B-3

Lined areas are contaminated.
Dotted areas are potentially contaminated.

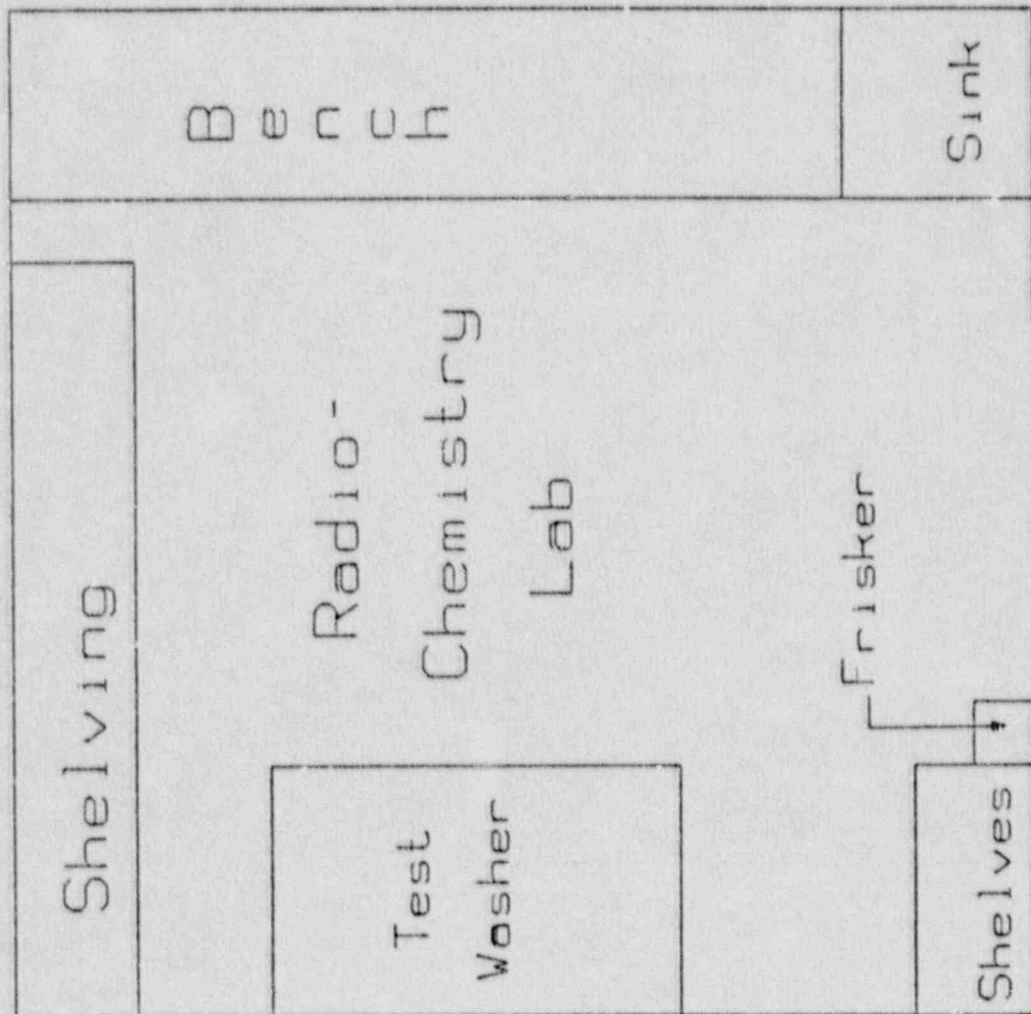


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Figure B-4

Radiochemistry Lab



Date: 6/8/99 License: 20/03529/01

tions, hours of operations and carriers' requirements, and 49 CFR 170-189 with respect to shippers' requirements and the proper packaging and shipping of radioactive materials. Additional requirements may be imposed by affected states, particularly in the shipment of radioactive wastes to licensed burial facilities. All employees associated with the transportation of radioactive materials are given classroom instruction in the regulatory requirements of their duties. In addition to training and experience in handling radioactive materials on site, all drivers who transport hazardous materials shipments are required to complete DOT certification requirements.

K. Corporate Radiation Protection Program

1. Management Organization

The INS Corporate Health Physics staff provides guidance to all INS facilities in the radiation protection area. The Manager, Health Physics and Engineering is independent of Operation and Sales and reports directly to the General Manager, the highest official in INS Corporation. The Manager, Health Physics and Engineering is responsible for reporting and providing direction to the General Manager on all health and safety issues. Figure D-4 schematically depicts the upper management organization of INS Corporation. Resumes of the individuals referenced in this section are all provided in Appendix E of this license.

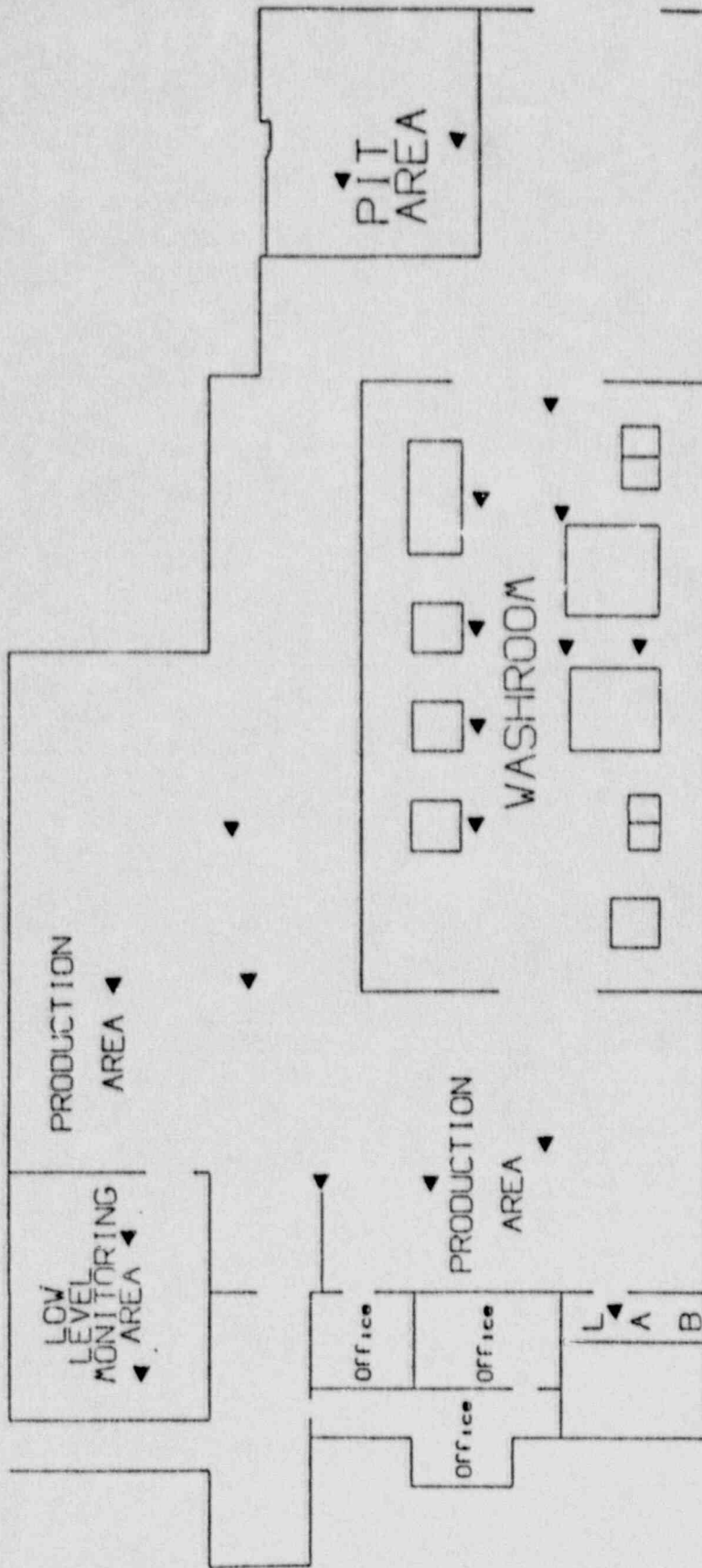
2. Corporate Audits

Corporate audits of INS facilities are performed by the Manager, Health Physics and Engineering, Health Physicist, Radiation Specialist or an independent health physics consultant at least annually. These audits include an evaluation of the radiation protection program for compliance with regulatory, license, and insurer commitments, as well as overall safety conditions at the plant. Any radiation worker is free to communicate directly with Corporate Health Physics personnel at any time and direct interviews are sometimes held during unannounced audits. When audits are provided by health physics consultants, a capable individual is selected to perform the radiation safety program evaluation without regard to format or precedence of INS Corporate auditors. In this manner total independence is insured.

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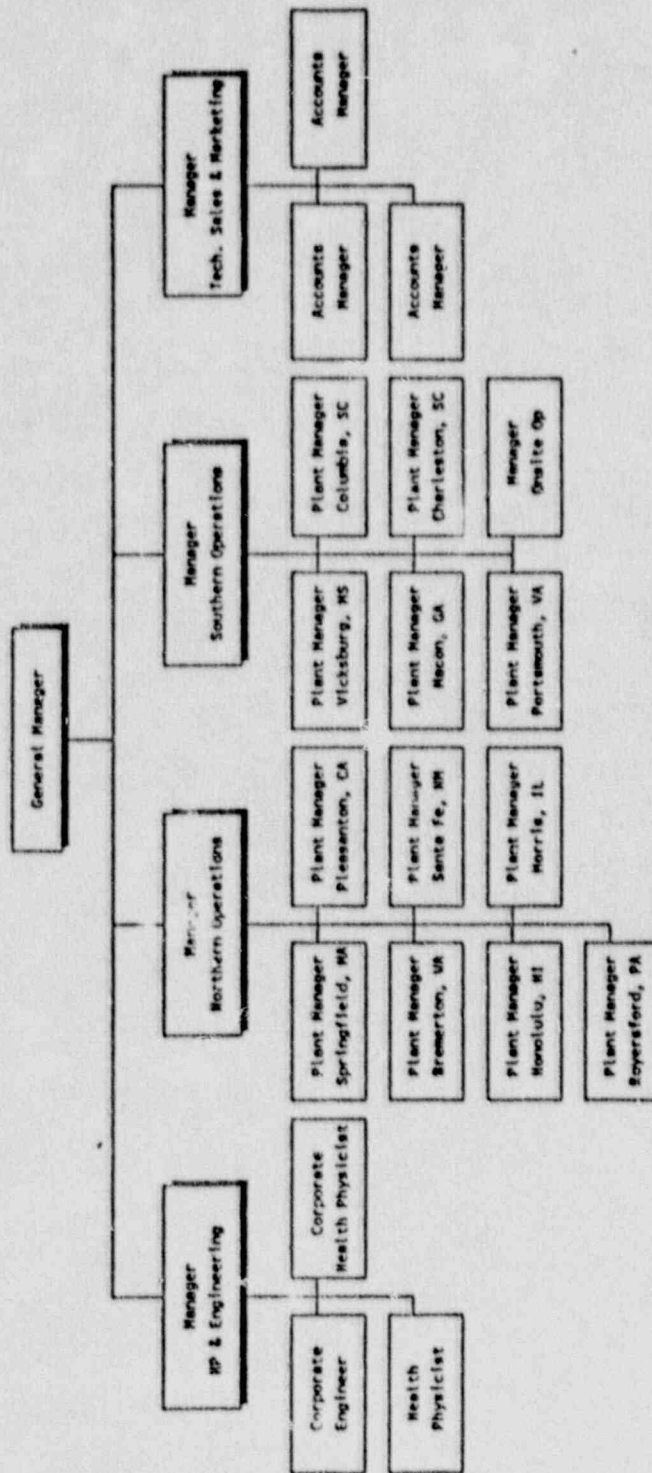
Figure D-2
Typical Air Sampler Locations



Date: 6/9/89

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INTERSTATE NUCLEAR SERVICES Management Organization



Date: 6/8/89

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APPENDIX E

I. Training and Experience for Authorized Users

A. Responsibilities

Radiation safety responsibility is shared by the Manager of Corporate Health Physics, the Plant Manager, the Radiation Safety Officer (may be the same as Plant Manager), and the operating crew. Each individual must strive to keep his own exposure, as well as the exposure of others, as low as possible. Individual responsibilities are outlined as follows:

1. Radiation Safety Officer
 - a. Implement and enforce a radiation safety program for the laundry facility.
 - b. Advise and review health physics procedures and survey results with the Plant Manager.
 - c. Instruct employees in proper and safe techniques and approved health physics and safety practices.
 - d. Set up a schedule of necessary physical examinations, bioassays, etc. for all employees.
 - e. Make certain that proper records are kept on air, water, swipe and radiation surveys, personnel exposures and bioassays.
 - f. Assure that the radiation detection equipment is periodically calibrated to insure accurate performance.
 - g. Assure that the radioactive solid waste is packed in an approved manner for disposal by a licensed commercial waste disposal company.

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2. Plant Manager (may be RSO also)
 - a. Consult with the Radiation Safety Officer on all matters pertaining to radiation and contamination control.
 - b. Inform the Manager, Health Physics and Engineering of any contemplated changes in equipment or procedures.
 - c. Make certain proper radiological surveys and records of air, water and the environs are performed and filed.
 - d. Arrange for the instruction of employees in the proper and safe methods of performing their job.
 - e. Schedule necessary physical examinations, bioassays, etc. for all employees.
3. Health Physics Technician/(may be RSO also)
 - a. Perform radiation and contamination surveys in accordance with the license.
 - b. Perform air and water surveys to assure compliance with applicable Federal and state requirements.
 - c. Record the surveys performed in Items 1 and 2 above on the appropriate forms.
 - d. Assure monitoring equipment is calibrated and operating correctly.
4. Manager, Health Physics and Engineering
 - a. Furnish direction and policy on all aspects of radiation protection and decontamination.
 - b. Suggest methods of decontamination.
 - c. See that a technically sound program of air sampling, smear sampling and radiation monitoring is maintained.

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- d. Evaluate potential radiation and contamination problems and assure follow-up.
 - e. Evaluate the Health Physics Training Program for all employees as required.
 - f. Keep the Plant Manager/RSO advised on all aspects of the decontamination laundry requiring health physics procedures or conformance with regulations.
 - g. Evaluate the radiation protection program at least annually. As an option, INS Corp. may elect to use an outside radiation protection consultant or INS personnel designated by the Manager, Health Physics and Engineering for health physics audits.
5. Operations Crew
- a. Observe all rules regarding the control of radiation and contamination.
 - b. Maintain a clean working area, observing contamination control limits.
 - c. Report all suspected radiation or contamination incidents.
 - d. Observe the rules prohibiting eating and smoking in restricted areas.
 - e. Carry out recommendations of the Plant Manager or the Manager, Health Physics and Engineering for decontamination as well as other control measures.
 - f. Properly package solid contaminated waste in DOT-approved shipping containers, seal, store, and label as prescribed by the Plant Manager.

Springfield PM/RSO

Paul Manley

EDUCATION: BS Business Management (to be completed 12/89), Franklin Pierce College.

Short Courses: Radioactive Waste Packaging, Transportation, and Disposal; Health Physics for Radiation Protection Technicians; Environmental and Occupational Radiation Protection; Wastewater Treatment Plant operation.

EXPERIENCE: INS Corporation (4/89 - present) Plant Manager/RSO, Springfield, MA facility. Responsible for management of employees, daily operations, and personnel safety including radiation safety for the plant. Performs daily health physics measurements as necessary. Completes, maintains, and reviews records. Conducts training classes in radiation safety for employees. Directs maintenance of plant machinery and equipment. Responsible for instrument calibration and repair.

Vermont Yankee Atomic Power Plant (1987 - 4/89), Radwaste Supervisor. Responsible for receiving, shipping, and packaging of radioactive materials.

Vermont Yankee Atomic Power Plant (1985 - 1987) Health Physics Assistant. Supervised technicians working with radioactive material, performing surveys, and sampling for the purpose of detection and control of radiation and contamination at the plant site.

Vermont Yankee Nuclear Power Plant (1980 - 1985) Health Physics and Chemistry technician. performed radiochemical analyses. Operate Liquid Scintillation counter, Ge-Li gamma spectrometer. Performed radiation and contamination surveys. Monitor personnel exposure. Made recommendations for Radiation Work Permits. Responsible for instrument calibration.

Self-Employed (1976 - 1980) Owned and operated three service stations and a fuel oil company.

Town of Brattleboro, VT (1974 - 1975) Wastewater Treatment Plant Operator. Performed all chemical analyses for wastewater treatment.

Assistant PM:

Phillip A. Rumian

EDUCATION:

Navy Nuclear Power School. Specialized training in radiological controls and radiochemistry.

Short Courses: RSO Training Program (15 hrs. under G.A. Johnstone).

EXPERIENCE:

INS Corp. (85-present)-Assistant Plant Manager & Assistant Radiation Safety Officer. Supervises daily health Physics and measurements as necessary. Completes and maintains HP records. Conducts training classes in radiation safety for employees. Direct maintenance of plant machinery and equipment. Responsible for personnel safety during operations.

INS Corp. (83-85)-Plant Manager/RSO. Supervised personnel & daily operations. Performed daily health physics measurements & responsible for personnel safety during operations, including radiation safety. Responsible for HP record generation and maintenance.

US Navy (81-83). Engineering Lab Technician, USS Los Angeles. Responsible for radiological controls associated with propulsion plant.

US Navy (79-81) Engineering Lab Technician, USS Sargo. Responsible for radiological controls. Dealt with governing bodies such as NAVSEA.

Asst. Plant Mgr.

Paul Kistner

EDUCATION: Completed course in electrical trades, (1977)

Short Courses. INS Health Physics Technician training, 30 hours, taught by INS Corporate Health Physics Staff; Operation of aerosol penetrometer, ATI inc.; Radiation worker training courses at several operating nuclear power plants.

EXPERIENCE: INS Corp. (1989-present). Assistant Plant Manager, Springfield, MA plant. Supervises personnel during operations. Performs Health Physics measurements as necessary. Directs maintenance of plant machinery and equipment. Responsible for personnel safety.

INS Corp. (1985-1989). Assistant Plant Manager, Macon, GA plant. Supervises daily Health Physics and measurements as necessary. Completes and maintains HP records. Directs maintenance of plant machinery and equipment. Responsible for personnel safety during operations.

INS Corp. (1983-1985). On-site Unit Manager. Responsible for daily operations and personnel in on-site mobile units at several locations. Performed daily health physics measurements as necessary. Maintained mobile unit's machinery and equipment. Responsible for personnel safety during operations.

Tri-State Laundries (1982-1984). On-site Coordinator. Hired and processed employees for power plant access. Responsible for daily operations and production schedule. Maintained machinery, set up and disassembled mobile units. Responsible for personnel safety.

Utica Dumbak (1978-1982). Truck driver, cutter, packer, shipping and receiving clerk.

General Mgr:

George J. Bakevich

EDUCATION: B.S. Mathematics major, Nuclear Engineering minor.
Worcester Polytechnic Institute
M.S. Nuclear Engineering major, Univ. of Utah. Thesis:
"Neutron Radiography with Californium 252 & a Subcritical Neutron Multiplier" at National Reactor Testing Station in Idaho under AEC Fellowship.

EMPLOYMENT: INS Corp. (80-present) General Manager for 12 nuclear decontamination facilities including P&L responsibility, growth of business, construction & planning of new facilities. Enforces regulatory & HP requirements suggested by the Manager of Health Physics and Engineering.

Combustion Engineering, Inc., (11/79-5/80)
Nuclear Licensing, Safety & Accountability
resp for compliance with NRC, DOT, & C. A. reg.
uranium fuel fab. facility. Responsible for
licensing submittals & management of:
criticality safety, HP, industrial safety, & HP
& accountability, emergency preparedness. Responsible
for audits of CE's oxide conversion facility
Hematite, Missouri & R & D Labs in W. Hartford, CT. Member
of Nuclear Speakers Service.

Nuclear Licensing & Safety Supervisor (2/77-11/79) Resp.
for all aspects of licensing at fuel fab. facility,
including criticality safety analysis. Responsible
for HP monitoring program & Industrial Safety program
to assure compliance with regulations; audit of
manufacturing operations & supervision of HP personnel.

Idaho National Engineering Lab., Idaho Falls, Idaho, -
(74-77) Criticality Safety Engineer/HP. Responsible
for criticality safety evaluations (including computer
analysis with KENO-IV, DOT, etc.) for unirradiated &
spent fuel storage, fuel transport casks, & nuclear
waste burial.

Health Physics experience at several large test
reactors, including monitoring of high radiation fields
& fission product contamination control. Member of
Qualifications Review Committee; Completed ERDA System
Safety Training (Management oversight & Risk Tree).

AEC, (73-74) Assistant Project Engineer. Responsible
for appraisal & direction of construction activities in
areas of HP, Critical Facilities. Completed stages
of the Light Water Breeder Reactor procedure
approval.

Mgr. HP & Engineering: Guy R. Wilson

EDUCATION: B.S. Mathematics major, Louisiana State University
M.S. Environmental Eng. Mississippi State University
Thesis: A Gamma Rad. Dose Model for Comparison of
Normal Risk Between Alt. Routes for Highway Transportation
of Radioactive Materials & Waste.

Graduate studies include env. radioactivity, radwaste
treatment & disposal, surface & groundwater transport;
chemical, physical & biotreatment design, geophysics.

Short Courses: BWR Systems for Engineers (5 weeks),
BWR Systems (4 wks), Nuclear Power Plant Accident
Assessment (1 wk), Rad Emergency Response Ops (2 wks),
Rad materials transportation workshops & several minor
seminars in HP.

EXPERIENCE: INS Corp. (11/86-present)-Manager, Health Physics
and Engineering. Responsible for overall administration
of radiation safety program for over 600 radiation
workers. HP audits, procedure & design generation,
review & approval; licensing of facilities; regulatory
interface & direct supervision of corporate HP staff.
Research and Development.

INS Corp. (2/86-11/86)-Senior Radiological Engineer.
Responsible for ALARA design, construction, management
& operating procedure development for nuclear waste
water processing systems for INS. Responsible for
regulatory compliance & HP audits at a fraction of INS
facilities.

MS. Dept. of Health, Rad Health (rad control/agreement
state agency 7/83-2/86). Environmental Engineer/Branch
Dir., Rad Waste & Transportation. Reviewed proposed
mods of tech specs governing operation of GGNS (BWR-6
design). Developed & instructed an HP course for
department Technical advisor to SE LLW Compact
Commission. Developed new state regs for transporta-
tion of RAM.

MP&L Co. (3/82-4/83). Nuclear Licensing review of
proposed mods to nuclear waste water processing systems
for GGNS. Software design & mods. for Nuclear License
modification computer based tracking system for
regulatory compliance, tech specs, & licensee event
reports. Developed radiation assessment software used
in emergency exercises for GGNS by MP&L.

(73-82) Design calc & survey management as consultant
with several large design groups, specializing in
industrial & municipal wastewater treatment.

Health Physicist

C. Renee Echols

EDUCATION: Graduate Studies in Animal Nutrition, Mississippi State University.

BS Animal Science, Mississippi State University

Additional Courses: Radiological Emergency Response Training, Nevada Test Site; 5-week Radiation Protection course, Oak Ridge Associated Universities; Radiological Accident Assessment, NETC; Instructional Techniques, MEMA; Radiological Train-the-Trainer Course, NETC; Radioactive Waste Packaging, Transportation, and Disposal; Chem Nuclear Systems Workshop.

EXPERIENCE: INS Corporation (July, 1988 - present) Health Physicist. Responsible for regulatory compliance on all radioactive materials transportation and radwaste issues. Performs periodic radiation safety audits. Procedure writing and editing. Assists Manager Health Physics and Engineering in prescription and execution of radiation safety program corporate wide.

Mississippi State Department of Health/Division of Radiological Health (July, 1984 - August, 1988) Senior Health Physicist. Responsible for technical evaluation and advisement to state on radioactive waste issues. Drafted RAM transportation regulations. Instructed FEMA series of radiological training courses as FEMA-certified instructor. Coordinated off-reactor-site state and local emergency planning and exercises, including scenario development and exercise participation to meet NUREG-0654 guidelines.

Corp. Health Physicist: Susan L. Fanelli

EDUCATION: E.S. Chemistry major, Clarkson University.

Short Courses: Internal Radiation Dosimetry, Dr. K.W. Skrable, June, 1984, Respiratory Protection, Central Connecticut State University, October, 1985.

EXPERIENCE: INS Corp. (10/85-present) Corp. Health Physicist. Responsible for maintaining radiation dosimetry programs, computer data bases, and corporate-wide training program. Supervise HP technicians. Generates training material. Procedure writing. Researches and advises Manager of HP and Engineering on internal dosimetry and bioassay.

Southern Space, Inc. (5/82-10/85) Health Physics/QA Manager. Managed HP technicians corporate wide. Maintained compliance with government regulations for handling radioactive material. Designed and implemented new QA programs for all employees. Developed procedures for instrumental analysis of effluent, environmental, and biological samples. Performed internal audits, worked with regulatory agencies and insurance auditors.

Southern Space/INS Corp. (5/84-12/86) Product Manager. Manage technicians in a respirator filter recertification program in compliance with government regulations. Scheduled, maintained production and assured the output of a quality product. Handle technical services and QA audits.

Masonic Medical Research Laboratory (9/81-4/82) Research Assistant. Developed and carried out experiments aimed at determining the causes of aging. Prepared graphic material for publication, performed statistical interpolation, and computer programming.

Indium Corporation of America (2/81-9/81) Analytical Chemist. Analyzed metallic alloys for use in the electronic industry using an Atomic Absorption Spectrophotometer.

Avon Products, Inc. (9/79-6/80) Quality Control Chemist. Responsible for testing raw ingredients for use in the cosmetic industry using instrumental and wet analyses.



INTERSTATE NUCLEAR SERVICES CORP
 A subsidiary of Unifirst Corporation
 58 Linden Road
 Warrington, MA 01887

CHECK NO
037433

BANK OF NEW ENGLAND, N.A.
 BOSTON, MASS

5-1
 116

DATE
4/25/89

PAY THIS AMOUNT
\$170.00

ONE HUNDRED SEVENTY DOLLARS AND 00/100

PAY
 TO THE
 ORDER
 OF

NRC REGION II
 LOC 16

MA

Cynthia [Signature]

ACCOUNTS PAYABLE ACCOUNT

⑈037433⑈ ⑆010001381⑆ 1442007744⑈

CONVERSATION RECORD

TIME

DATE

6/15/89

TYPE

VISIT

CONFERENCE

TELEPHONE

INCOMING

OUTGOING

ROUTING

NAME/SYMBOL INT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

Guy Wilson

ORGANIZATION (Office, dept., bureau, etc.)

INS

TELEPHONE NO.

413-543
6911

SUBJECT

Amendment request dated June 8, 1989
re: Change Authority of use?

SUMMARY

Guy Wilson stated:

- PM is RSO for this business (Hlanley)
- L. Case deleted from LIC 11.
- Equipment, machinery and protective devices found in Items 6 of pg 2 ^{dated 6/15/89} to be replaced refers to equipment in the plant like washing machines. Not to sand blasting equipment or the like.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

Chick Davis

SIGNATURE

DATE

6/15/89

ACTION TAKEN

SIGNATURE

TITLE

DATE