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October 14, 2002

U. S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, Pennsylvania 19406

Attn.: Ms. Kathy Dolce Modes,  
Engineering Manager

RE: Secure Sanitary Landfill  
Cape May County, New Jersey

Dear Ms. Kathy Dolce Modes:

CRAIG TESTING LABORATORIES, INC. is herewith submitting the following information for your use and review:

The Cape May County Municipal Utilities Authority will be constructing a new Secure Sanitary Landfill in 2003.

Soil density testing with a nuclear densometer will be required for a six (6) month time period +/- . The Cape May County Municipal Utilities has one (1) qualified engineer whom is trained and certified to utilize a nuclear densometer.

The Cape May County Municipal Utilities Authority would like to lease a nuclear densometer from our firm.

Craig Testing Laboratories, Inc. has a USNRC License Number 29-18118-01.

If acceptable to the USNRC, Craig Testing Laboratories, Inc. would like to lease a nuclear densometer to the Cape May County Municipal Utilities Authority with the following understandings"

- 1) Craig Testing Laboratories, Inc. would designate the Secure Sanitary Landfill as a "temporary jobsite".
- 2) Craig Testing Laboratories, Inc. would provide the Cape May County Municipal Utilities Authority with the appropriate placards, warning signs, dosimeter badges, leak tests, etc.

Continued on following page . . . .

*U. S. Nuclear Regulatory Commission  
Secure Sanitary Landfill  
Cape May County, New Jersey  
October 14, 2002 Letter*

- 3) Craig Testing Laboratories, Inc. also understands that any misuse of the nuclear densometers, improper storage of any other violations noted by the USNRC would be the responsibility of the license holder, Craig Testing Laboratories, Inc.
- 4) Craig Testing Laboratories, Inc. would also designate the one (1) engineer as authorized users of the nuclear densometers.

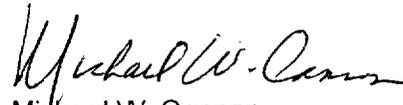
Please review this request and respond at your earliest convenience due to construction starting soon.

We trust this information is sufficient for your use and review.

Should you have any questions or need additional information, please feel free to contact our office.

Respectfully submitted,

CRAIG TESTING LABORATORIES, INC.

  
Michael W. Cannan,  
President

  
Ian G. Craig,  
Radiation Safety Officer

MWC/IC/jjs  
attachments

cc: Cape May County Municipal Utilities Authority, P. O. Box 610, Cape May Court House,  
New Jersey 08210 - Mr. Manley C. Solheim, P.E., Engineering Manager

George Marinakis, Executive Director  
Charles M. Norkis, Deputy Director



George W. Betts, Chairman  
John J. Pantalone, Vice Chairman  
William G. Burns, Jr.  
Patricia A. Callinan  
Beech N. Fox  
Charles A. Gillis  
John Vasser, Jr.

## Cape May County Municipal Utilities Authority

Post Office Box 610, Cape May Court House, New Jersey 08210  
Telephone: 609-465-9026 • Telefax: 609-465-9025  
www.cmcmua.com • email: admin@cmcmua.com

September 12, 2002

Mr. Michael W. Cannan, President  
Craig Testing Laboratories, Inc.  
P.O. Box 427  
5435 Harding Highway  
Mays Landing, New Jersey 08330

RE: Troxler Nuclear Densometer Rental for  
Use at Cape May County Landfill

Dear Mr. Cannan:

Four years ago the Cape May County MUA rented a Troxler meter from Craig Testing when Phase 1D of our landfill was constructed. Next year we will be constructing the next cell-Phase 1E and we would appreciate a proposal for a similar rental in 2003.

This time, the meter would be used by Michael Bowen, a former Camp Dresser and McKee employee with over twenty years of construction experience. Attached is a copy of Mike's Troxler Certification.

It should be noted that the meter will be used less this time as the amount of imported fill is approximately 57,000 cubic yards, as compared with about 150,000 cubic yards imported on the last job.

Also attached is a copy of your proposal for our 1998 project and a copy of letter sent to NRC at that time for your convenience.

If you have any questions, do not hesitate to call.

Very truly yours,

CAPE MAY COUNTY  
MUNICIPAL UTILITIES AUTHORITY

  
Manley C. Solheim, P.E.  
Engineering Manager

MCS:mep  
Attachments

cc: Mr. Charles M. Norkis, P.E.  
Mr. Michael A. Bowen

N:\Letters&Memos\mcs\Ltr.toMWCannan.Landfill TNDrental.8.4.02.doc

# TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

MICHAEL A. BOWEN

of

CAMP DRESSER & MCKEE

HAS SUCCESSFULLY COMPLETED THE TROXLER ELECTRONIC LABORATORIES, INC. TRAINING COURSE FOR THE USE OF NUCLEAR TESTING EQUIPMENT.

SUBJECTS INCLUDED IN THIS COURSE WERE AS FOLLOWS:

### Radiological Safety

- |   |  |
|---|--|
| 1. Principles and practices of radiation protection                               | 5. Radioactivity measurement standardization and monitoring techniques and instrumentation |
| 2. Sampling procedures  | 6. Available calibration procedures  |
| 3. Mathematics and calculations basic to the use and measurement of radioactivity | 7. Procedures for nuclear gauge storage and transportation                                 |
| 4. Biological effects of radiation  | 8. General safety precautions.   |

### Gauge Operation

- |                         |                      |
|-------------------------|----------------------|
| 1. Instrument theory    | 4. Field application |
| 2. Operating procedures | 5. Gauge calibration |

3. Maintenance

*Frank D. Jones*  
FRANK D. JONES

INSTRUCTOR

CERTIFICATE #: 053329

5/12/92

DATE

WILLIAM F. TROXLER

PRESIDENT

George Marinakis, Executive Director  
Charles M. Norkis, Deputy Director

Daniel Riley, Chairman  
George W. Betts, Vice Chairman  
William G. Burns, Jr.  
Beech N. Fox  
John J. Pantalone  
Carol Strickland  
John Vasser, Jr.



## Cape May County Municipal Utilities Authority

Post Office Box 610, Cape May Court House, New Jersey 08210  
609-465-9026

November 19, 1997

Mr. Michael Cannan  
CRAIG TESTING LABORATORIES  
P.O. Box 427  
5435 Harding Highway  
Mays Landing, NJ 08330

RE: Troxler Nuclear Densometer Rental for use at  
the Secure Sanitary Landfill, Cape May County

Dear Mr. Cannan:

When our engineers attended the Troxler training course, George Marshall, of Troxler, questioned whether the CMCMUA would have to also be licensed in order for its employees to be able to use the nuclear density gauge at our site. Charlie Amato, of the NRC in King of Prussia, had originally indicated to me in September that Testwell Craig could be the licensee, and our site could be a temporary job site or temporary field location, and that we would have to have someone authorized to use the instrument (had the Troxler training). Your office apparently confirmed this with Cathleen Dolcy, of the NRC.

Based on Mr. Marshall's questions, Nancy Mauro, of our office, contacted Mr. Amato, who checked with his Supervisor, Ms. Jenny Johansen, the Acting Branch Manager. She indicated that the CMCMUA would have to hold a license (based on Part 30, paragraph 30.3 of the Rules of General Applicability to Domestic Licensing).

We then called Ms. Johansen and discussed the history and questioned why, even under the above-referenced regulation, Testwell's license couldn't cover this project as a temporary field location. She said Testwell would have to designate the site as a temporary field location, indicate the CMCMUA certified employees as authorized users, and that Testwell would have to maintain full responsibility of the equipment at all times. She also indicated a sketch of the facility would be helpful.

Cape May County Municipal Utilities Authority

Mr. Michael Cannan  
November 19, 1997  
Page 2

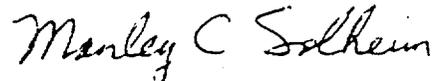
Ms. Johansen said if you sent a letter to the above effect to the Nuclear Regulatory Commission, Licensing Assistance, 475 Allendale Road, King of Prussia, PA 19406, they would advise if this arrangement is acceptable.

The two engineers from the CMCMUA who took the Troxler training were Wayne Johnson and Nancy Mauro. As noted in previous correspondence, once their training certificates are received, they will be forwarded to your office. Enclosed is a sketch of the facility and an excerpt from the regulation cited.

Please follow up, as requested by the NRC, as soon as possible so as we aren't delayed in our use of the instrument. If you have any questions, do not hesitate to call.

Very truly yours,

CAPE MAY COUNTY  
MUNICIPAL UTILITIES AUTHORITY



Manley C. Solheim, P.E.  
Engineering Manager

MCS:emd/mep  
enclosure

cc: Mr. Charles M. Norkis, P.E.  
Ms. Nancy T. Mauro, P.E.  
Mr. Wayne E. Johnson, P.E.

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*It was our understanding we would be complying. The license would be Testwell's.*

§ 30.3 Activities requiring license.

Except for persons exempt as provided in this part and Part 150 of this chapter, no person shall manufacture, produce, transfer, receive, acquire, own, possess, or use byproduct material except as authorized in a specific or general license issued pursuant to the regulations in this chapter.

§ 30.4 Definitions.

"Act" means the Atomic Energy Act of 1954 (68 Stat. 919), including any amendments thereto;

"Agreement State" means any state with which the Atomic Energy Commission or the Nuclear Regulatory Commission has entered into an effective agreement under subsection 274b. of the Act. "Non-agreement State" means any other State;

"Alert" means events may occur, are in progress, or have occurred that could lead to a release of radioactive material but that the release is not expected to require a response by offsite response organizations to protect persons offsite.

"Byproduct material" means any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material;

"Commencement of construction" means any clearing of land, excavation, or other substantial action that would adversely affect the natural environment of a site but does not include changes desirable for the temporary use of the land for public recreational uses, necessary borings to determine site characteristics or other preconstruction monitoring to establish background information related to the suitability of a site or to the protection of environmental values.

"Commission" means the Nuclear Regulatory Commission and its duly authorized representatives;

"Curie" means that amount of radioactive material which disintegrates at the rate of 37 billion atoms per second;

Decommission means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits—

- (1) Release of the property for unrestricted use and termination of the license; or
- (2) Release of the property under restricted conditions and termination of the license.

"Dentist" means an individual licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice dentistry.

"Department" and "Department of Energy" means the Department of Energy established by the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565, 42 U.S.C. 7101 et seq.) to the extent that the Department, or its duly authorized representatives, exercises functions formerly vested in the U.S. Atomic Energy Commission, its Chairman, members, officers and components and transferred to the U.S. Energy Research and Development Administration and to the Administrator thereof pursuant to sections 104 (b), (c) and (d) of the Energy Reorganization Act of 1974 (Pub. L. 93-438, 88 Stat. 1233 at 1237, 42 U.S.C. 5814) and retransferred to the Secretary of Energy pursuant to section 301(a) of the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565 at 577-578, 42 U.S.C. 7151).

"Effective dose equivalent" means the sum of the products of the dose equivalent to the organ or tissue and the weighting factors applicable to each of the body organs or tissues that are irradiated. Weighting factors are: 0.25 for gonads, 0.15 for breast, 0.12 for red bone marrow, 0.12 for lungs, 0.03 for thyroid, 0.03 for bone surface, and 0.06 for each of the other five organs receiving the highest dose equivalent.

"Government agency" means any executive department, commission, independent establishment, corporation, wholly or partly owned by the United States of America which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the Government;

"License", except where otherwise specified means a license for byproduct material issued pursuant to the regulations in this part and Parts 31 through 36 and 39 of this chapter;

Medical use means the intentional internal or external administration of byproduct material or the radiation therefrom to patients or human research subjects under the supervision of an authorized user as defined in 10 CFR Part 35.

"Microcurie" means that amount of radioactive material which disintegrates at the rate of 37 thousand atoms per second;

"Millicurie" means that amount of radioactive material which disintegrates at the rate of 37 million atoms per second;

"Person" means: (1) Any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency other than the Commission or the Department, except that the Department shall be considered a person within the meaning of the regulations in this part to the extent that its facilities and activities are subject to the licensing and related regulatory authority of the Commission pursuant to section 202 of the Energy Reorganization Act of 1974 (88 Stat. 1244), any State or any political subdivision of or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and (2) any legal successor, representative, agent, or agency of the foregoing.

"Physician" means a medical doctor or doctor of osteopathy licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to prescribe drugs in the practice of medicine;

"Podiatrist" means an individual licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice podiatry.

The Department facilities and activities identified in section 202 are:

- (1) Demonstration Liquid Metal Fast Breeder reactors when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.
- (2) Other demonstration nuclear reactors, except those in existence on January 19, 1975, when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.
- (3) Facilities used primarily for the receipt and storage of high-level radioactive wastes resulting from licensed activities.
- (4) Retrievable Surface Storage Facilities and other facilities authorized for the express purpose of subsequent long-term storage of high-level radioactive waste generated by the Department, which are not used for, or are part of, research and development activities.

43 FR 6913

54 FR 14051

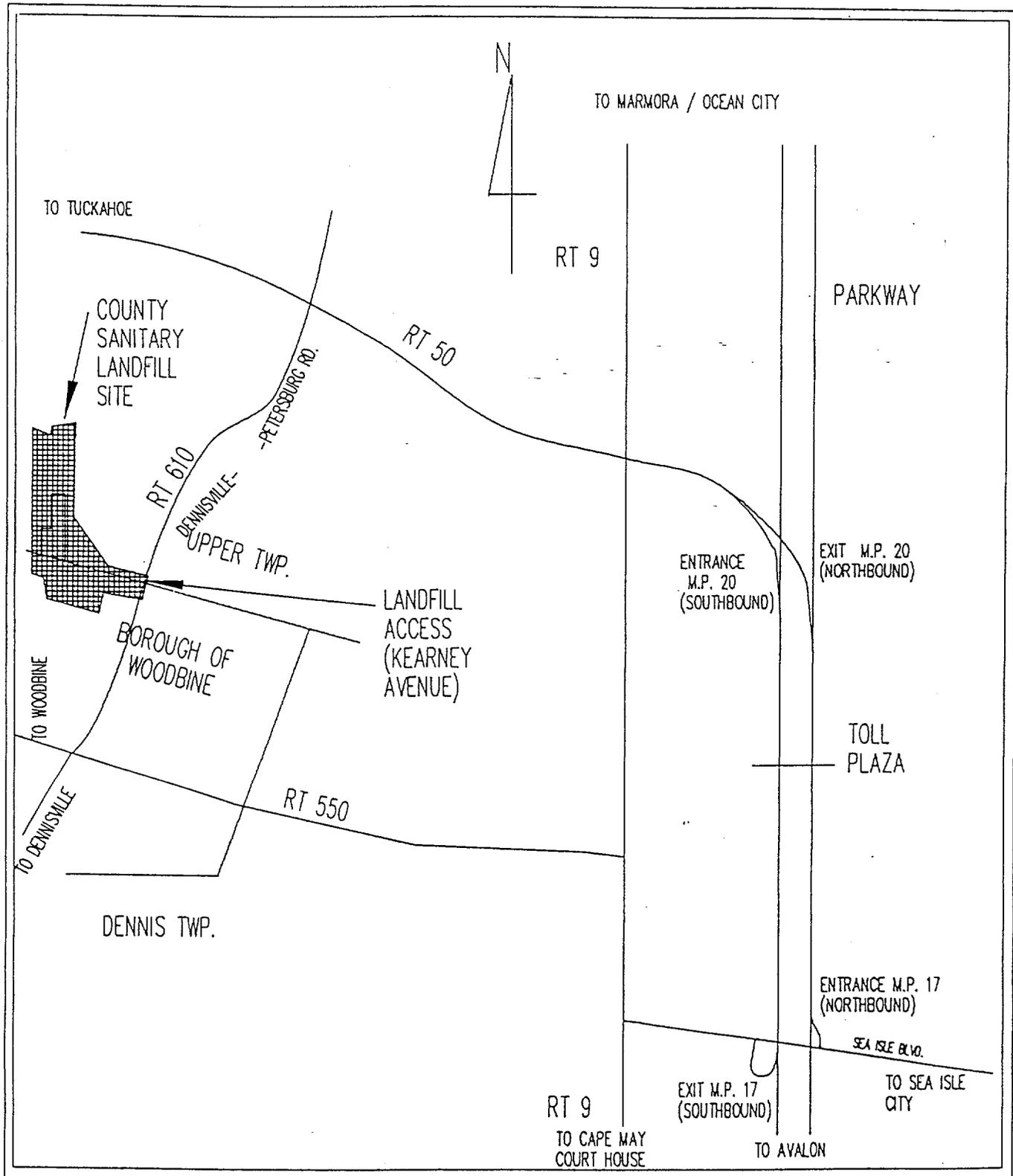
62 FR 39058

54 FR 14051

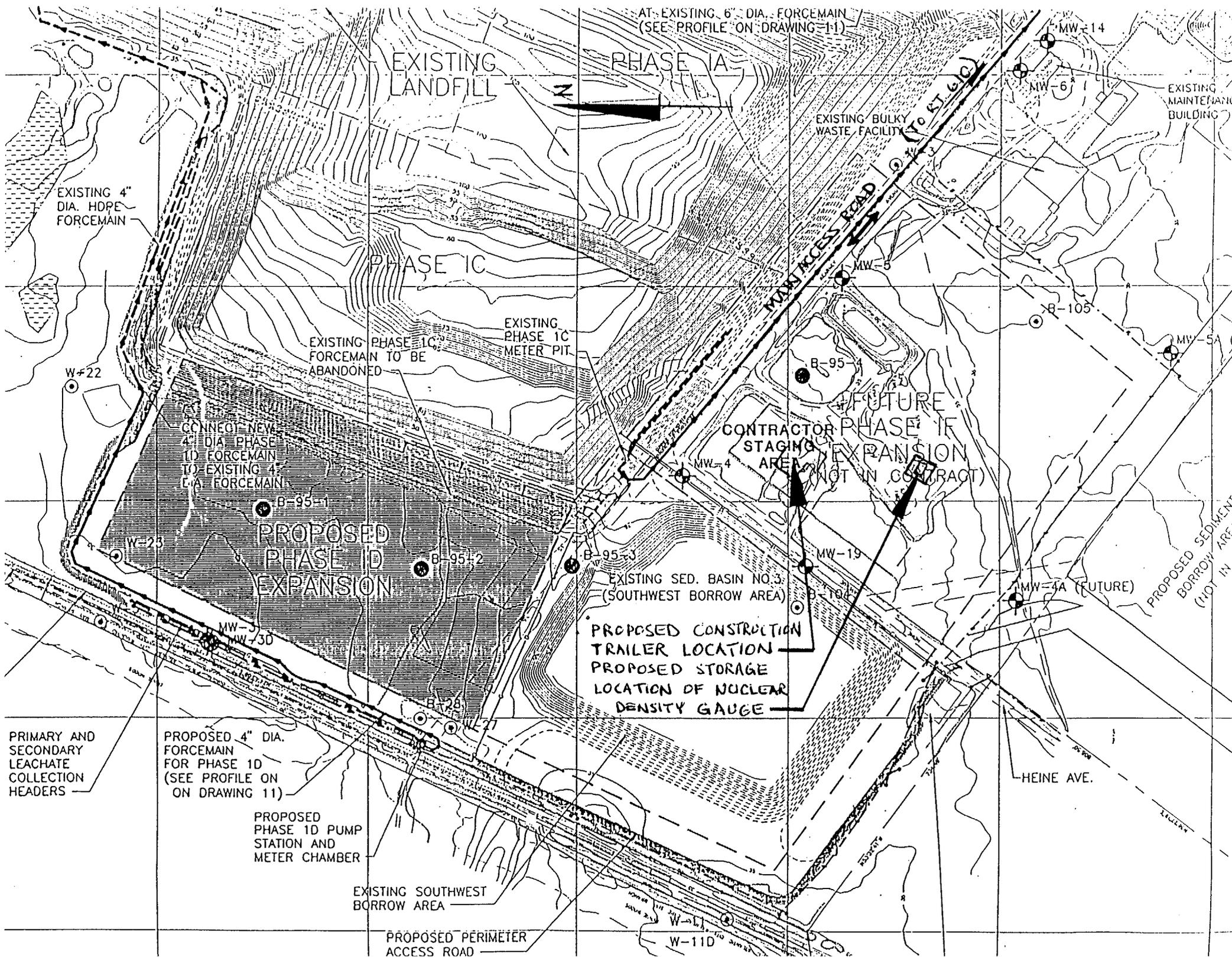
58 FR 7715

59 FR 61767

54 FR 14051



VICINITY MAP  
NOT TO SCALE



AT EXISTING 6" DIA. FORCEMAIN  
(SEE PROFILE ON DRAWING 11)

EXISTING LANDFILL

PHASE IA

PHASE IC

EXISTING 4" DIA. HOPE FORCEMAIN

EXISTING BULKY WASTE FACILITY

EXISTING MAINTENANCE BUILDING

EXISTING PHASE 1C FORCEMAIN TO BE ABANDONED

EXISTING PHASE 1C METER PIT

CONNECT NEW 4" DIA. PHASE 1D FORCEMAIN TO EXISTING 4" DIA. FORCEMAIN

CONTRACTOR STAGING AREA (NOT IN CONTRACT)

FUTURE PHASE 1F EXPANSION AREA (NOT IN CONTRACT)

PROPOSED PHASE 1D EXPANSION

EXISTING SED. BASIN NO. 3 (SOUTHWEST BORROW AREA)

PROPOSED CONSTRUCTION TRAILER LOCATION  
PROPOSED STORAGE LOCATION OF NUCLEAR DENSITY GAUGE

PROPOSED SEDIMENT BORROW AREA (NOT IN CONTRACT)

PRIMARY AND SECONDARY LEACHATE COLLECTION HEADERS

PROPOSED 4" DIA. FORCEMAIN FOR PHASE 1D (SEE PROFILE ON DRAWING 11)

PROPOSED PHASE 1D PUMP STATION AND METER CHAMBER

EXISTING SOUTHWEST BORROW AREA

PROPOSED PERIMETER ACCESS ROAD

HEINE AVE.

W-110