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#### New Jersey Department of Environmental Protection Division of Water Supply & Geoscience Bureau of Water Allocation & Well Permitting

OFFICE USE ONLY
App. Fee
Ch #
Date
Status (App/Rej)
Staff
Prev. Exams

## APPLICATION FOR NEW JERSEY PUMP INSTALLER LICENSING EXAMINATION INSTRUCTION SHEET

Enclosed is an application and study material for the New Jersey Pump Installer Licensing Examination.

- In order to qualify for the New Jersey Pump Installer License you <u>must</u> have at least one year of experience in pump installation work as of the signature date of your application.
- All applicants <u>must</u> circle the appropriate test month.
- Applicants who have been approved to take this license exam within the last year are considered to be Pre-approved. Pre-approved candidates are eligible to sit for up to four consecutive testing dates from the date of the original approval. Pre approved candidates are only required to complete Section A-1.
- New applicants must attach a copy of their high school diploma or GED certificate to the application.
- New applicants: All applications and your two reference questionnaires, Form ADM-166P, <u>must</u> be completely filled out and notarized or your application will be rejected.
- New applications <u>must</u> submit a completed application package and a notarized oath (page 4) or your application will be rejected.
- All applicants must submit a non-refundable \$50.00 check made out to the "Treasurer, State of New Jersey" with this completed application and required attachments to the following address:

Mail Code 401-04Q
NJ DEP
Water Supply & Geoscience
Bureau of Water Allocation & Well Permitting
PO Box 420
Trenton, NJ 08625-0420

Further notice will be sent to you after your application is reviewed and accepted, indicating the date, time and location for your scheduled examination. A location map for the testing center will be included with the notification.

## NOTE: NO EXCEPTIONS FOR LATE APPLICATIONS Applications must be postmarked by the appropriate closing date.

Test month	Application deadline	Were you previously approved to take this exam? (Yes or No)	Month/year of pre- approval
April	March 1		Month:
June	May 15		
October	September 1		Year:
December	November 15		

## APPLICATION FOR NEW JERSEY PUMP INSTALLER LICENSING EXAMINATION

under the provisions of N.J.S.A. 58:4A-4.1 et seq.

Please Type or Print Clearly

## Part A. GENERAL INFORMATION Section A-1 Contact Information:

Name:		Age		
Address				
	wn, State & Zip Code			
Daytime/Work Phone No. ()	*Soc	ial Security No		
Email address:	Current Em	Current Employer:		
*The social security number is required of Act (N.J.S.A. 2A:17-56.44e). Failure to papplication. Social security numbers are	rovide this information will result i			
Applicant is subject to examination before Advisory Board under the provisions of N.		and Pump Installers Examining and		
Section A-2 Education: Did you gradu	ate from high school or do you poss	ess a high school equivalency certificate?		
Circle one: Yes No S <sub>1</sub>	pecify the year you graduated from I	HS or received your GED		
List any colleges, universities, vocational a		·		
NAME & LOCATION OF SCHOOL	MAJOR AREA OF STUDY	DATES ATTENDED		
		From		
		То		
		From		
		То		
Section B. WORK EXPERIENCE Fill in your prior work experience as it rela for each employment date listed.	(Attach additional sheets if ne ites to pump installation. All applica	· · · · · · · · · · · · · · · · · · ·		
NAME, ADDRESS & TELEPHONE	DESCRIBE YOUR DUTIES &			
NO. OF EMPLOYER	RESPONSIBILITIES	DATES EMPLOYED		
		From		
		То		
		From		
		To		

From To

#### **C. VERIFICATION OF WORK EXPERIENCE**

Applicant must provide the names of at least two references who can verify your pump installation work experience listed above in Section B of this application. One of your two references must be either a NJ licensed Master or Journeyman Well Driller, or a NJ licensed Pump Installer. These two references must complete and sign the reference questionnaires, FORM ADM-166P.

NAME	ADDRESS	PHON	NE NUMBER	N.J. WELL DRILLER/ PUMP INSTALLER REGISTRATION NO. (if applicable)
1.		( )		
2.		( )	)	
D. OATH OF APPLICA	<u>ANT</u>			
State of		County of _		
I, the undersigned applicant, c and complete. I am aware tha incomplete information, include	t there are significant o	rivil and criminal penal		
		Signature of Applic	cant	Date
State of		County of		
Sworn to and subscribed before	re me this	day of	20	
			(Official S	Seal)

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> New Jersey Department of Environmental Protection Division of Water Supply & Geoscience Bureau of Water Allocation & Well Permitting

#### **PUMP INSTALLER LICENSING EXAMINATION**

## REFERENCE QUESTIONNAIRE AND VERIFICATION OF EXPERIENCE

Signature of Notary Public

. EXPERIENCE QUESTIONN	<u>AIRE</u>
1. How many years/months ha	we you supervised the applicant in pump installation activities?
FROM: Month	Year
I. NOTARIZED OATH OF REE	FERENCE
I hereby certify that the informa	tion provided in this questionnaire is true to the best of my knowledge ar
	Name of Reference (Please Print)
	Signature of Reference
	Signature of Reference
	Signature of Reference
	N.J. Well Driller's/Pump Installer's
	<u> </u>
	N.J. Well Driller's/Pump Installer's Registration # (if applicable)
Sworn to and subscribed days defore me this days days at \$10.20	N.J. Well Driller's/Pump Installer's Registration # (if applicable)
	N.J. Well Driller's/Pump Installer's Registration # (if applicable)

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#### **PUMP INSTALLER LICENSING EXAMINATION**

## REFERENCE QUESTIONNAIRE AND VERIFICATION OF EXPERIENCE

Signature of Notary Public

I. EXPERIENCE QUESTIONS	AIRE	
1. How many years/months h	ve you supervised the applicant in pump installation activities	s?
FROM: Month	Year	
II. NOTARIZED OATH OF RE	FERENCE	
I hereby certify that the inform	tion provided in this questionnaire is true to the best of my kn	owledge and l
,		C
	N CD C (DI D.	
	Name of Reference (Please Prin	t)
	Signature of Reference	
	•	
	N.J. Well Driller's/Pump Installer's	
	•	
Sworn to and subscribed	N.J. Well Driller's/Pump Installer's Registration # (if applicable)	
Sworn to and subscribed before me this	N.J. Well Driller's/Pump Installer's Registration # (if applicable)	
	N.J. Well Driller's/Pump Installer's Registration # (if applicable)	

#### **REMINDER**

- HAVE YOU INDICATED WHICH TEST MONTH YOU WISH TO TAKE YOUR EXAMINATION?
- HAVE YOU COMPLETED ALL APPROPRIATE SECTIONS OF YOUR APPLICATION?
- HAVE YOU ATTACHED YOUR TWO SIGNED AND NOTARIZED REFERENCE QUESTIONNAIRE FORMS, ADM-166P.
- HAVE YOU SIGNED AND NOTARIZED ALL APPROPRIATE PORTIONS OF YOUR APPLICATION?
- HAVE YOU ATTACHED YOUR NON-REFUNDABLE \$50.00 APPLICATION FEE PAYABLE TO "TREASURER, STATE OF NEW JERSEY"?

Further notice will be sent to you after your application is reviewed and accepted, indicating the date, time and location for your scheduled examination. A location map for the testing center will be included with the notification.

#### **Contact Us If You Have Any Questions:**

Web: nj.gov/dep/watersupply/well.htmPhone: 609-984-6831Email: wellpermitting@dep.state.nj.usFax: 609-633-1231

# NEW JERSEY PUMP INSTALLERS STUDY GUIDE REGULATORY SECTION OF EXAM

Disclaimer: This document is intended as an aide in studying for the exam. Not everything on this sheet will be on the exam, and conversely there may be questions on the exam not covered on the sheet. The complete regulations covered are specified in N.J.A.C. 7:9D-1 through N.J.A.C. 7:9D-4.

SUBCHAPTER 1 GENERAL REQUIREMENTS FOR PERMITTING OF WELLS, AND FOR LICENSING OF WELL DRILLERS AND PUMP INSTALLERS, PROCEDURES AND PRACTICES OF THE STATE WELL DRILLERS AND PUMP INSTALLERS EXAMINING AND ADVISORY BOARD

#### 7:9D-1.1 Scope

Unless otherwise provided by rule or statute, this subchapter shall constitute the rules governing the requirements and standards for the permitting, construction and decommissioning of wells, the standards and requirements for the licensing of all well Drillers of the proper class and pump installers in accordance with N.J.S.A. 58:4A-4.1 et seq., and the activities, duties, procedures and practices of the State Well Drillers and Pump Installers Examining and Advisory Board.

#### 7:9D-1.3 Applicability

(a) This chapter applies to any person, well drilling companies, partnerships, corporations or other entities engaged in pump installation, well or well pump repair, well drilling, well construction and decommissioning of wells and to any person licensed under this chapter, or seeking a license as a well driller or pump installer of the proper class.

#### 7:9D-1.5 Definitions

#### All definitions in 7:9D-1.5 are relevant for this exam. Please refer to regulations.

#### 7:9D-1.6 General provisions

- (a) No person shall drill, construct, install, repair, replace, modify, stimulate or decommission any well or engage in such business without possessing a valid New Jersey well driller's license of the proper class unless that activity is performed under the direct and immediate on-site supervision of a New Jersey licensed well driller of the proper class issued by the Department.
- (b) No person shall drill, construct, install, or replace a well without first having obtained a well permit pursuant to this chapter, except in the case of an emergency under N.J.A.C. 7:9D-1.12.
- (c) No person shall install, repair or replace a well pump or well pumping equipment or engage in such business without being or employing a New Jersey licensed pump installer or a New Jersey licensed well driller of the proper class.
- (d) No person shall conduct any operation involving the drilling, coring, boring, driving, jetting, digging or other construction or repair of any well pursuant to N.J.A.C. 7:9D:-1.11 without the immediate on-site

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supervision of a licensed well driller of the proper class. The name of the well drilling company shall be displayed on the equipment used by such driller.

- 1. There shall be one licensed well driller of the proper class on site for each well drilling rig on site.
- (e) No well driller shall perform any well drilling operation without maintaining the area surrounding the operation in a sanitary condition and providing proper containment of all materials and surface drainage away from the well.
- 7:9D-1.7 General provisions for well driller licenses of the proper class and pump installer licenses
- (b) A pump installer is authorized to:
  - 1. Install or replace well pumping equipment and appurtenances, storage tanks and appurtenances and connecting lines between a well and storage tank;
  - 2. Perform yield and drawdown testing of wells; and
  - 3. Qualify as a candidate for appointment to the Board.
- (c) A licensed well driller of the proper class or a pump installer shall at all times during any operation have in her or his possession the valid license of the proper class.
- 7:9D-1.8 Application and licensing examination procedures and requirements for well driller licenses of the proper class and pump installer licenses
- (f) An applicant for a New Jersey pump installers license shall:
  - 1. Submit a completed application on the form prescribed by the Department pursuant to (k) below and satisfy all experience and other requirements specified by this subchapter and provide evidence of the following:
    - One year of experience in the installation, removal, alteration and repair of well pumping equipment and appurtenances under the supervision of either a master or journeyman well driller or New Jersey licensed pump installer;
    - ii. A high school diploma or G.E.D.; and
    - iii. That he or she has resolved any revocation or suspension of a previously issued license of the proper class or any outstanding violation or fine pursuant to the State Act.
  - 2. Obtain a passing grade of at least 80 percent on each portion of the written examination for the pump installer's license administered; and
  - 3. Satisfy all licensing requirements as set forth in these rules.
- (g) The Department shall review each application upon receipt of all the information required in (k) below and either notify the applicant of any deficiencies or notify the applicant of her or his eligibility to take the appropriate examination.

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- 1. The Department shall grade all examinations and submit the results to the State Well Drillers and Pump Installers Examining and Advisory Board.
- 2. The Board shall review the results of each examination at the next regularly scheduled meeting and certify the findings to the Commissioner or designee.
- (h) The Department shall notify all applicants of the results of their examination.
- (i) The Department shall issue the appropriate license to successful applicants upon full payment of the appropriate initial license fee in N.J.A.C. 7:9D-1.9.
- (j) An unsuccessful applicant may review his or her examination at the Department during normal working hours for a period of 30 days from the date of written receipt of their examination results.
- (k) Applications for a license under this section shall be submitted on a form prescribed by the Department and shall include the following:
  - 1. Name, address, age, and daytime or work telephone number;
  - 2. Social security number;
    - i. Under the New Jersey Child Support Act, N.J.S.A. 2A:4-30 et seq., disclosure of applicant's social security number is mandatory. The social security number shall be used solely for the purpose of an internal unique identifier;
  - Education;
  - 4. Work experience;
  - 5. Verification of work experience; and
  - 6. A signed and notarized Oath of Applicant stating as follows: "I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information, including fines and/or imprisonment." If, at anytime, the Department finds information or evidence that an applicant obtained a license under false pretenses, such findings shall render the license null and void.
- 7:9D-1.9 Licensing examination application fees, licensing fees and renewal requirements for all well driller licenses of the proper class, pump installer licenses, and establishment of special dedicated non-lapsing account
- (a) All classes of well driller licenses and pump installer licenses shall be renewed once every three years on a schedule, which applies to all licensees. Renewals shall be made by submitting the renewal form provided by the Department and the renewal fee prior to June 30.
- (b) A non-refundable \$50.00 application fee is required with all applications made for any licensing examination and shall be made by check or money order payable to "Treasurer, State of New Jersey" and submitted to the Department.
- (c) The initial and renewal fees for all licenses of the proper class and late renewals are as follows:

- 6. Pump installer's license \$150.00
- 7. Late renewal fee \$50.00
- (d) A licensee who fails to renew his or her license prior to the June 30 renewal payment deadline may have his or her license renewed by payment of the appropriate renewal fee and late payment fee within six months following the renewal date of the license.
- (e) A licensee who fails to renew his or her license within six months following the renewal date of the license shall not have the license reinstated until he or she successfully passes the written examination prescribed by the Department for applicants for a new license of the proper class.
- (f) A special dedicated non-lapsing account is established by the Division of Budget and Finance within the Department into which any licensed individual may deposit funds to cover well permit and license renewal fees. Sub-accounts shall be established for each individual licensee or company, if specifically requested. Upon authorization of the licensee, the Department shall withdraw well permit application fees or license renewal application fees from the appropriate subaccount.

#### 7:9D-1.10 State Well Drillers and Pump Installers Examining and Advisory Board

- (a) The nine members of the State Well Drillers and Pump Installers Examining and Advisory Board are appointed by the Commissioner or his or her designee.
- (b) The Board shall be composed of the following:
  - 1. Three master well drillers whose collective experience represents each geologic area of the State and each drilling method allowed under this chapter;
  - 2. One member who is a well driller in any classification established by the Department;
  - 3. One member not employed by the State and who has no pecuniary involvement in well drilling or pump installing;
  - 4. Three representatives of the Department; and
  - 5. One licensed pump installer.
- (c) All Board members shall be appointed for a term of three years with three members appointed or reappointed each year.
  - 1. A Board member may be removed by the Commissioner upon a determination that the Board member exhibited misconduct, incompetence, neglect of duty or for other good cause shown.
- (d) Board members, except for those who are Department employees, shall receive reimbursement for travel expenses in accordance with departmental policies and procedures which the Department determines are necessary and incident to the position.
- (e) At least once each year, the Commissioner shall call for meetings of the Board, having a quorum of five or more members of which at least three shall be licensees.
- (f) The duties of the Board shall include, but not be limited to, the following:

- 1. Examining the qualifications and experience of all persons applying for any well driller license of the proper class or pump installer license;
- 2. Certifying all applicants scheduled for a license examination and certifying the results of any examinations administered pursuant to N.J.A.C. 7:9D-1.8 to the Commissioner;
- 3. Recommending to the Commissioner appropriate new rules or amendments to this chapter;
- 4. Advising the Department regarding any enforcement actions or any complaints against licensed well drillers, licensed pump installers or any person pursuant to this chapter; and
- 5. Periodically reviewing and modifying the contents of the examinations administered pursuant to N.J.A.C. 7:9D-1.8.

#### 7:9D-1.11 Well permits

- (g) As provided by N.J.S.A. 58:4A-14a(2), the following activities may be conducted by a well driller without an individual permit issued by the Department:
  - 1. The repair of any well to include redevelopment or in kind well screen replacements;
  - 2. The installation of pitless well adapters;
    - i. Pitless well adapters may also be installed by licensed pump installers without an individual permit.

#### 7:9D-1.15 Well record requirements

- (a) All well records shall be maintained as follows:
  - 2. Where a well is equipped with a pump having a capacity in excess of 70 gallons per minute (gpm) and the equipment is installed after the well record has been submitted, the well record shall be amended by the licensed well driller or pump installer and resubmitted to the Department within 90 days of installation of the pumping equipment;

## <u>SUBCHAPTER 2</u> <u>REQUIREMENTS AND PROCEDURES FOR THE CONSTRUCTION, INSTALLATION, OPERATION AND MAINTENANCE OF WELLS</u>

#### 7:9D-2.2 General construction requirements for all wells

- (a) The following general construction requirements shall apply to the construction of all categories of wells pursuant to the State Act:
  - 15. Once the well has been installed, the well casing shall be securely capped until the pump is installed and/or the well is placed in service or until the well is properly decommissioned. The cap shall be threaded onto the casing, or be a friction type device which locks onto the outside

- of the casing, or a blank sanitary well seal, or any other equivalent type of cap as may be approved by the Department;
- 16. All flowing wells shall be equipped with a water-tight cap which is threaded, slip-on or welded, and a control valve or necessary appurtenances to protect the integrity of the well construction and/or wellhead.
  - i. There shall be no overflow of water from the well which may become a public nuisance or violate any other New Jersey State law or regulation;
- 19. When permanent well pumping equipment is required for any well, all installation or replacement work shall be performed by a New Jersey licensed pump installer or New Jersey licensed master or journeyman well driller. All such work shall conform with the standards set forth in N.J.A.C. 5:23-3.16 and N.J.A.C. 13.31-1.18(a).

#### 7:9D-2.3 Specific requirements for the construction of Category 1 and Category 2 wells

- (b) In addition to the well permitting requirements in N.J.A.C. 7:9D-1 and the well construction standards in N.J.A.C. 7:9D-2.2, the following requirements shall also apply to all Category 1 and 2 wells:
  - 1. All well casings shall extend a minimum of 12 inches above grade and shall be equipped with pitless adapters or pitless well units. The pitless adapter or pitless well unit requirement does not apply to wells equipped with a turbine pump. Exceptions to this 12 inch requirement are those well casings located in a well pit or pump house where adequate protection from surface drainage or contamination is provided and those located in driveways as flush mount installations provided with a water tight lid;
  - 3. Any repairs made to existing wells or pump systems, where the well head terminates below ground, shall include extending the well casing above the land surface and installing a pitless adapter. Extending the well casing above grade shall be accomplished by either welding additional casing on the existing casing, or the use of a gasketed, water-tight casing adapter which complies with the Pitless Adapter Standard 1997 (PAS-97) Performance Standards document set forth at (a)6ii below;
  - 6. All permanent well pumping equipment, well pump controls, pitless well adapters and pitless well units for Category 1 and 2 wells shall be installed as follows:
    - i. A pitless well installation shall consist of either a pitless well unit or pitless well adapter, and a pitless well cap or a sanitary well seal;
    - ii. Pitless well units, pitless well adapters and pitless well caps shall be manufactured and installed in accordance with the Pitless Adapter Standard 1997 (PAS-97)

      Performance Standards of the Water Systems Council, incorporated herein by reference, as amended and supplemented. The standard may be obtained from the Water Systems Council, 800 Roosevelt Road, Building C, Suite 20, Glen Ellyn, IL 60137:
    - iii. The lateral discharge line from the well shall be covered with a minimum of 3.0 feet of earth. In northern portions of the State (that is, Passaic, Sussex and Warren counties) additional earth cover to prevent freezing may be necessary;

- iv. The hole used to install the lateral discharge line into the well casing shall be made in such a manner as to provide a watertight connection;
- v. The exterior connection between the adapter and the well casing shall be a watertight seal either welded, threaded, or of a clamp-on gasket type. A clamp-on gasketed adapter shall be installed only on a well casing with a smooth, clean surface;
- vi. At the point of attachment to the well casing, a pitless well unit shall be field-welded, threaded, or of the slip-on type with "O-ring" gasket, and shall be of watertight construction;
- vii. If the connection is by means of a field-weld, the pitless well unit shall be of a type specifically designed for a welded connection;
- viii. If the connection is of the slip-on type with "O-ring" gasket, the surface of the well casing shall be smooth and clean;
- ix. The field connection between the pitless well unit and the lateral discharge line shall be either threaded, flanged or a mechanical joint, and shall be constructed and installed so as to be watertight;
- x. Well pumps and appurtenant equipment shall be designed and installed to ensure adequate protection of the water supply and protection against freezing of the water;
- xi. Each well pump shall have a foot-valve or a check valve;
- xii. In a screened well, the well pump setting and suction inlet shall be located so that the pumping level of the water cannot be drawn below the top of the screen;
- xiii. Any well with a yield of less than five gallons per minute (gpm) shall be equipped with a low water level cut-off device;
- xiv. Any well with a pump capacity greater than the yield of the well shall be equipped with a low water level cut-off device;
- xv. Whenever possible, pumping equipment shall be designed and located so as to avoid the need for a pump pit. A pump pit, if used, shall be of watertight construction and shall have a drainage system or sump pump installed to prevent flooding;
- xvi. The pumping equipment shall be located so as to permit convenient access for the removal and repair of the pump and related appurtenances;
- xvii. Each pump shall be mounted so as to minimize vibration and noise and to minimize damage to the pump;
- xviii. A pressure switch and a thermal overload switch shall be included on all pump installations;
- xix. A pressure relief valve is required on all positive displacement pumping systems; and
- xx. Pump controls or accessories shall either be housed in a secured building or be enclosed in a weather-proof, locked cabinet.

SUBCHAPTER 4 CIVIL ADMINISTRATIVE PENALTIES; INJUNCTIVE RELIEF; DENIAL, SUSPENSION AND REVOCATION OF LICENSES; AND REQUESTS FOR ADJUDICATORY HEARINGS

All of subchapter 4 is relevant for this exam. Please refer to regulations.

Applicants should also be familiar with the following New Jersey One Call regulations and damage prevention guidelines:

- Underground Facility Protection Act
   New Jersey Board of Public Utilities Underground Facilities: One-Call Damage Prevention
   System (N.J.S.A. 48:2-73 et seq. and enabling rules N.J.A.C. 14:2)
- Underground Damage Prevention Guidelines
   New Jersey Underground Damage Prevention Program
   A Guide to Safe Excavation Practices in New Jersey

Both documents are available on the New Jersey One Call Website: www.nj1-call.org

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#### **PUMP INSTALLERS' LICENSE**

#### LIST OF SUGGESTED STUDY MATERIAL

#### Regulatory

"New Jersey Subsurface and Percolating Waters Act (N.J.S.A. 58:4A-4.1 et seq) and implementing regulations (N.J.A.C. 7:9D)"

"New Jersey Safe Drinking Water Act (N.J.S.A. 58:12A-1 et seq) and implementing regulations (N.J.A.C. 7:10)"

\*\*An applicant will be responsible for knowing those portions of the laws and regulations which pertain to the specific license category for which they have applied. All above-referenced laws and regulations can be obtained from the following website:

http://nj.gov/dep/watersupply/g reg.html

NJ One-Call Information 1-800-272-1000

Website: www.nj1-call.org

#### **Technical**

"Water Systems Handbook 11th Edition," which is available from:

Water Systems Council National Programs Office 1101 30<sup>th</sup> Street N.W., Suite 500 Washington, DC 20007

Phone: 888-395-1033 Fax: 301-464-8842

Website: www.watersystemscouncil.org

#### The following two publications are available from:

National Ground Water Association 601 Dempsey Road Westerville OH 43081-8978 Telephone 1-800-551-7379

Fax 614-898-7786 Website: www.ngwa.org

1. "Groundwater and Wells", Driscoll Johnson Division

2. "Basic Water Systems: A Pump and Training Manual"