LEGISLATIVE RESEARCH COMMISSION

UNDERGROUND STORAGE TANKS AND GROUNDWATER HAZARDS



REPORT TO THE

1987 GENERAL ASSEMBLY

OF NORTH CAROLINA

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STATE OF NORTH CAROLINA LEGISLATIVE RESEARCH COMMISSION

STATE LEGISLATIVE BUILDING RALEIGH 27611



December 15, 1986

TO THE MEMBERS OF THE 1987 GENERAL ASSEMBLY:

The Legislative Research Commission herewith reports to the 1987 General Assembly on the matter of Underground Storage Tanks and Groundwater Hazards. The report is made pursuant to Chapter 790 of the 1985 Session Laws.

This report was prepared by the Legislative Research Commission's Committee on Underground Storage Tanks and Groundwater Hazards and is transmitted by the Legislative Research Commission for your consideration.

Respectfully submitted,

Cochairmen

Legislative Research Commission



The Legislative Research Commission, authorized by Article
6B of Chapter 120 of the General Statutes, is a general purpose
study group. The Commission is co-chaired by the Speaker of the
House and the President Pro Tempore of the Senate and has five
additional members appointed from each house of the General Assembly.
The Commission's membership is listed in Appendix A. Among the
Commission's duties is that of making or causing to be made, upon
the direction of the General Assembly, "such studies of and investigation into governmental agencies and institutions and matters
of public policy as will aid the General Assembly in performing
its duties in the most efficient and effective manner"
[G.S. 120-30.17(1)].

At the direction of the 1985 General Assembly, the Legislative Research Commission has undertaken studies of numerous subjects. These studies were grouped into broad categories and each member of the Commission was given responsibility for one category of study. The co-chairmen of the Legislative Research Commission, under the authority of General Statute 120-30.10(b) and (c), appointed committees consisting of members of the General Assembly and the public to conduct the studies. Co-Chairmen, one from each house of the General Assembly, were designated for each committee.

Pursuant to Section 1 (2) and (15) of Chapter 790 of the 1985 Session Laws, the Legislative Research Commission appointed a committee and authorized it to continue a previous study of water pollution control programs and to study underground storage tank hazards and other groundwater hazards. The committee focused on

the topic of groundwater contamination from underground storage tank leakages, for which Section 1 of 1985 H.B. 1281 specified the authorized scope of study: "The study may consider whether such a problem exists, what guidelines have governed underground storage tanks until the present time, damage to groundwater by leakages from underground storage tanks, how dependent the State is on this groundwater, where major problems have occurred due to leakages, and the necessity for legislation in this area for the clean-up of existing contamination, the avoidance of future contamination and who should bear the cost thereof." Appendix B contains copies of Chapter 790 and H. B. 1281.

The Legislative Research Commission grouped this study in its environment area under the direction of Representative Bruce Ethridge. The committee was chaired by Representative Wendell H. Murphy and Senator Thomas F. Taft. The full membership of the committee is listed in Appendix C.

BACKGROUND

An estimated 25%-35% of the more than 100,000 underground storage tanks in North Carolina, containing petroleum products and other chemicals, may be contaminating the groundwater, according to the Department of Natural Resources and Community Development's Division of Environmental Management. Approximately 55% of North Carolina's citizens depend on groundwater for residential use. Eighty-five percent of the rural population relies on groundwater. The Environmental Management Division is currently investigating 140 separate incidents of underground storage tank leakages that have contaminated 150 water supply wells. Based on information from the American Petroleum Institute, clean-up costs for each incident can range from several thousand dollars to several million dollars, depending on the severity of the contamination.

Nationwide, there are between two and three million underground storage tanks. Approximately 100,000 of these are currently leaking substances ranging from gasoline to pesticides to industrial solvents. Within the next five years, another 350,000 tanks are expected to begin leaking.

In 1984, Congress created a new comprehensive federal program to regulate underground storage tanks (42 U.S.C. 6991). Under these new provisions, states may administer their own programs on underground storage tanks if state standards are at least as stringent as federal regulations. In November 1985, the Environmental Protection Agency (E.P.A.) adopted regulations requiring

owners of underground tanks to notify designated state agencies of the age, size, type, locations, and uses of their tanks. Additional federal regulations, upon which the E.P.A. would base its determination of whether a state may implement its own underground storage tank program, will be proposed early in 1987 but will likely not be finalized until at least nine months later.

Congress, in October 1986, amended the federal "Superfund Law" (by Public Law 99-499, Section 205) by authorizing the E.P.A. to require that owners of underground storage tanks maintain sufficient funds or insurance to cover at least part of the damages in case of accidental releases from such tanks. This legislation also established the Leaking Underground Storage Tank Trust Fund, financed by an additional 0.1 cent per gallon tax on motor fuel, for use by the E.P.A. to take corrective action on its own if the owner or operator cannot be found or cannot perform the action or if the situation requires a prompt response.

In July 1985, the North Carolina General Assembly authorized (in Chapter 551 of the 1985 Session Laws; see Apprendix D) the Department of Natural Resources and Community Development to adopt rules to implement a program meeting E.P A. approval under the 1984 federal legislation on underground storage tanks. The Department will propose its final draft of the rules in January 1986. The 1985 General Assembly also authorized this Legislative Research Commission study of the problems and issues emanating from leaking underground storage tanks.

COMMITTEE PROCEEDINGS

The Legislative Research Commission's Study Committee on Underground Storage Tanks and Groundwater Hazards met three times: November 14, November 24, and December 4, 1986. The committee minutes are contained in the committee's records on file in the Legislative Library.

During these meetings, the committee heard presentations from Mr. Mike Williams, Underground Storage Tank Coordinator for E.P.A.
Region IV; Mr. Perry Nelson, Groundwater Section Chief, Department of Natural Resources and Community Development; and Dr. Ron Levine,
State Health Director, Department of Human Resources. Mr. Williams outlined the federal laws regarding underground storage tanks; and Mr. Nelson and Dr. Levine discussed the nature and extent of groundwater contamination by underground storage tank leakages in N.C. and responded to many questions from committee members on State rules to implement a comprehensive underground storage tank program, current government regulation, and preceived needs to respond promptly and adequately to groundwater contamination. Mr. Jim Parker, Underground Storage Tank Group Manager, Department of Natural Resources and Community Development, provided committee members with information on tank regulation in 18 other states.

The committee also heard comments from representatives of the North Carolina Association of Citizens for Business and Industry, the North Carolina Petroleum Council, the North Carolina Clean Water Fund, the North Carolina Conservation Council, the Sierra Club, the North Carolina Association of Convenience
Stores, the North Carolina Petroleum Marketers Association, the
Health Departments of Edgecombe, Scotland, and Alamance counties,
the Winston-Salem Regional Office of the State Department of Natural
Resources and Community Development, and the North Carolina Farm
Bureau Federation.

Among the issues the committee members discussed were the following:

- . Whether local regulation of underground storage tanks should be preempted by comprehensive State regulations.
- . Assuming a preemptive State regulatory approach, whether local government should administer and enforce the regulations.
- . Whether the State should adopt a certification program for tank installers, including sanctions for improper installation.
- . Whether initial and annual fees should be charged per tank installed.
- . Whether State agency approval should be required prior to the installation of tanks in environmentally sensitive areas.
- . Whether financial responsibility should be required of underground storage tank owners to cover at least part of the damages resulting from accidental releases.
- . Whether a State clean-up fund should be established to finance State remedial action necessitated by underground storage tank leakages.
- . The proper role of government in providing safe drinking water to people whose private wells have been contaminated.

. The need to enhance prompt and effective water quality testing and service at both the local and State levels.

At the final meeting, committee members discussed possible recommendations, based on its examination of the issues and its study of information presented to the committee, and formally adopted its report to the 1987 North Carolina General Assembly.



RECOMMENDATIONS

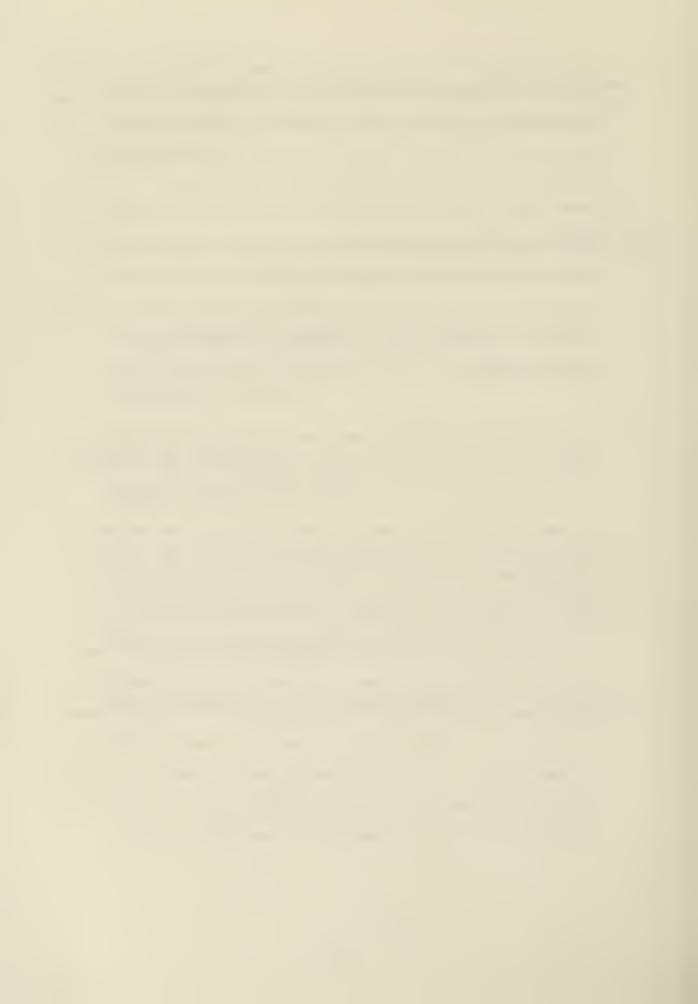
I. THE COMMITTEE RECOMMENDS:

- That the General Assembly create a nonlapsing, revolving Underground Storage Tank Remedial Action Fund to be administered by the Department of Natural Resources and Community Development.
- 2. That the Fund consist of any moneys appropriated for it by the General Assembly or that shall be available to it from any other source, including reimbursements to the Department from persons responsible for underground storage tank releases resulting in remedial action by the Department.
- 3. That the Fund be used to defray the costs of any project or program for remedial action, including investigations, abatement, and clean-up necessary to protect human health or the environment from releases from underground storage tanks that the Department is authorized to regulate to implement a federally approved program pursuant to the 1984 amendments to the Federal Resource Conservation and Recovery Act.
- 4. That the Department be allowed to use the Fund to contract with other governmental agencies or private contractors to assist it in authorized remedial actions.

- 5. That the Department be authorized to use the Fund to match any moneys made available to the State for the purposes of the Fund.
- 6. That, when feasible, the Department seek reimbursement for its remedial action from persons responsible for underground storage tank releases resulting in such remedial action.
- 7. That the Fund not be used to defray costs in seeking reimbursement, but that such costs be deducted from any reimbursement obtained.
- 8. That the Department be authorized to develop and adopt rules to implement the Fund.
- 9. That the General Assembly appropriate \$1 million from the General Fund for fiscal year 1987-1988 to the Department of Natural Resources and Community Development to establish the Underground Storage Tank Remedial Action Fund.

(See Appendix E for the proposed implementing legislation.)

- II. THE COMMITTEE RECOMMENDS that the General Assembly appropriate \$67,100 to the Department of Human Resources for fiscal year 1987-1988 for the estimated laboratory costs associated with analyzing petroleum samples from underground storage tank leakages submitted by local health departments.
- III. THE COMMITTEE RECOMMENDS that the General Assembly support the propsed expansion budget request by the Department of Human Resources to fund two additional toxicologist positions for the interpretation of instances of water supply contamination.
 - IV. THE COMMITTEE RECOMMENDS that the Legislative Research
 Commission continue its study of groundwater contamination
 from underground storage tank leakages. The committee
 recommends that the study include the nature and extent
 of damage and potential damage to groundwater by leaking
 underground storage tanks; how dependent the State is on
 this groundwater; where the major problems have occurred
 due to leakages; existing federal, State, and local laws
 on underground storage tanks and the interrelationship of
 these laws in the regulation and enforcement of underground
 storage tank standards; and the need to clean up existing
 contamination, to provide alternate water sources to people
 whose private wells have been contaminated, to avoid future
 contamination, and who should bear the costs thereof.



LEGISLATIVE RESEARCH COMMISSION

Senator J. J. Harrington, Cochairman Senator Henson P. Barnes Senator A. D. Guy Senator Ollie Harris Senator Lura Tally Senator Robert D. Warren

Representative Liston B. Ramsey, Cochairman Representative Christopher S. Barker, Jr. Representative John T. Church Representative Bruce Ethridge Representative Aaron Fussell Representative Barney Paul Woodard



GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 1985

RATIFIED BILL

CHAPTER 790 SENATE BILL 636

AN ACT AUTHORIZING STUDIES BY THE LEGISLATIVE RESEARCH COMMISSION, MAKING TECHNICAL AMENDMENTS THERETO, AND TO MAKE OTHER AMENDMENTS.

The General Assembly of North Carolina enacts:

Section 1. Studies Authorized. The Legislative Research Commission may study the topics listed below. Listed with each topic is the 1985 bill or resolution that originally proposed the issue or study and the name of the sponsor. The Commission may consider the original bill or resolution in determining the nature, scope and aspects of the study. The topics are:

(1) Continuation of the Study of Revenue Laws (H.J.R.

17-Lilley),

- (2) Continuation of the Study of Water Pollution Control (H.J.R. 141-Evans),
- (3) Adolescent Sexuality Teaching (H.J.R., 275-Jeralds),
 (4) Continuation of the Study on the Problems of the Aging (H.J.R., 322-Greenwood),
- (5) Continuation of the Study of Municipal Incorporations (H. J. R. 389-Greenwood),

(6) School Discipline (H.J.R. 861-Colton).

- (7) Bail Bondsmen and Bail Bond Forfeiture (8.8.967-Watkins),
 - (8) Preventative Medicine (H.B. 1052-Locks),
 - (9) Life Care Arrangements (H. B. 1053-Locks), (10) State Personnel System (H. B. 1064-Wiser),
 - (11) Long-Term Health Care Insurance (H.B. 1103-Locks),

(12) Itinerant Merchants (H.B. 1170-Lancaster),

(13) Manufactured Housing Zoning (H.B., 1178-Ballance; S.B. 636-Plyler),

(14) Interest Rate Regulation (H.J.B. 1227-Evans),

(15) Underground Storage Tank Leakage Hazards and other ground water hazards (H.B. 1281-Locks),

(16) Mental Patient Commitments (H.J. R. 1313-Miller),

(17) High-Level Radioactive Waste Disposal (H.B. 1373-Diamont: S.B. 655-Hipps),

(18) Stun Guns (H. J. R. 1390-McDowell),

- (19) Continuation of the Study of Water Quality in Haw River and B. Everett Jordan Reservoir (H.J.R. 1393-Hackney),
- (20) Authority of Boards of County Commissioners in Certain Counties over Commissions, Boards and Agencies (H.J.R.. 1405-Holroyd),

(21) Superintendent of Public Instruction and State

Board of Education (H.J.B. 1412-Nye),

- (22) Rental Referral Agencies (H.B. 1421-Stamey),
- (23) Child Abuse Testimony Study (S. B. 165-Hipps), (24) Home Schooling Programs (S. J. B. 224-Winner),
- (25) Pretrial Release (S.J. B. 297-Winner),

- (26) Inmate Substance Abuse Therapy Program (S.J.R. 317-Plyler),
 - (27) Inmate Work-Release Centers (S. B. 406-Swain),
 - (28) Community College System (S.B. 425-Martin),
- (29) Community Service Alternative Punishment and Bestitution (S.B. 495-Swain),
- (30) State Employee Salaries and Benefits (S. B. 514-Jordan),
 - (31) State Infrastructure Needs (S.B. 541-Royall),
- (32) Commercial Laboratory Water Testing (S.B. 573-Taft),
 - (33) Outdoor Advertising (S. B. 611-Thomas, R. P.),
- (34) Premium Tax Rate on Insurance Companies (S. B. 633-Hardison)
- (35) Continuation of the Study of Child Support (S.B. 638-Marvin),
 - (36) Local Government Financing (S.B. 670-Rauch),
 - (37) Medical Malpractice and Liability (S. B. . 703-Taft),
 - (38) Marketing of Perishable Food (S.B. 718-Basnight).
 - (39) Child Protection (S.B. 802-Hipps),
 - (40) Legislative Ethics and Lobbying (S.B. 829-Rauch),
 - (41) Satellite Courts (S.B. 850-Barnes),
- (42) Substantive Legislation in Appropriations Bills (5.8. 851-8and),
 - (43) School Finance Act (S.B. 848-Taft).
- Sec. 2. Transportation Problems at Public Pacilities. The Legislative Research Commission may identify and study transportation problems at public transportation facilities in North Carolina.
- Sec. 2.1. The Legislative Research Commission may study the feasibility of the prohibition of investment by the State Treasurer of stocks of the retirement systems listed in G.S. 147-69.2(b)(6), or of the assets of the trust funds of The University of North Carolina and its constituent institutions deposited with the State Treasurer pursuant to G.S. 116-36.1 and G.S. 147-69.2(19) in a financial institution that has outstanding loans to the Republic of South Africa or in stocks, securities, or other obligations of a company doing business in or with the Republic of South Africa.
- Sec. 3. Reporting Dates. For each of the topics the Legislative Research Commission decides to study under this act or pursuant to G.S. 120-30.17(1), the Commission may report its findings, together with any recommended legislation, to the 1987 General Assembly, or the Commission may make an interim report to the 1986 Session and a final report to the 1987 General Assembly.
- Sec. 4. Bills and Resolution References. The listing of the original bill or resolution in this act is for reference purposes only and shall not be deemed to have incorporated by reference any of the substantive provisions contained in the original bill or resolution.
- Sec. 5. The last sentence of G.S. 120-19.4(b) is amended by deleting the citation "G.S. 5-4" and inserting in lieu thereof the following: "G.S. 5A-12 or G.S. 5A-21, whichever is applicable".

Sec. 6. G.S. 120-99 is amended by adding a new paragraph to read:

"The provisions of G.S. 120-19.1 through G.S. 120-19.8 shall apply to the proceedings of the Legislative Ethics Committee as if it were a joint committee of the General Assembly, except that the chairman shall sign all subpoenas on behalf of the Committee.

Sec. 7. G.S. 120-30.17 is amended by adding a new subsection to read:

"(9) For studies authorized to be made by the Legislative Research Commission, to request another State agency, board, commission or committee to conduct the study if the Legislative Research Commission determines that the other body is a more appropriate vehicle with which to conduct the study. If the other body agrees, and no legislation specifically provides otherwise, that body shall conduct the study as if the original authorization had assigned the study to that body and shall report to the General Assembly at the same time other studies to be conducted by the Legislative Research Commission are to be reported. The other agency shall conduct the transferred study within the funds already assigned to it."

Sec. 8. This act is effective upon ratification.
In the General Assembly read three times and ratified, this the 18th day of July, 1985.

ROBERT B. JORDAN III
Robert B. Jordan III
President of the Senate

LISTON B. RAMSEY

Liston B. Ramsey Speaker of the House of Representatives





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GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 1985

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HOUSE BILL 1281 Second Edition Engrossed 6/19/85

		Short Title: Underground Storage Tanks/LRC Study. (Public)		
Sponsors: Representatives Locks; Wood.				
		Referred to: Rules.		
		May 20, 1985		
	1	A BILL TO BE ENTITLED		
	2	AN ACT AUTHORIZING THE LEGISLATIVE RESEARCH COMMISSION TO STUDY		
	3	GROUNDWATER CONTAMINATION LEAKAGES FROM UNDERGROUND STORAGE		
	4	TANKS.		
	5	The General Assembly of North Carolina enacts:		
	6	Section 1. The Legislative Research Commission may		
	7	study groundwater contamination leakages from underground storage		
	8	tanks. The study may consider whether such a problem exists,		
	9	what guidelines have governed underground storage tanks until the		
1	0	present time, damage to groundwater by leakages from underground		
1	1	storage tanks, how dependent the State is on this groundwater,		
		where major problems have occurred due to leakages, and the		
		necessity for legislation in this area [H-for the clean-up of		
		existing contamination, the avoidance of future contamination and		
1!	5 1	who should bear the cost thereof].		
16	3	Sec. 2. This act shall become effective July 1, 1985.		
17	7			
18	3			
19)			
20)			



UNDERGROUND STORAGE TANKS AND GROUNDWATER HAZARDS; WATER POLLUTION

Auth: Chapter 790 § 1 (02) (15) (SB 636- Sen. Plyler, et al). HB 1281 (Rep. Locks, et al)

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GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 1985 RATIFIED BILL

CHAPTER 551 SENATE BILL 831

AN ACT TO PROVIDE FOR REGULATION OF UNDERGROUND STORAGE TANKS. The General Assembly of North Carolina enacts:

Section 1. G.S. 143B-282(2) is amended by adding a new

subparagraph to read:

"h. For governing the registration, construction, installation, monitoring, repair, closure, financial responsibility, and leaks of underground tanks used for the storage of hazardous substances or oil pursuant to Article 21 or Article 21A of Chapter 143 of the General Statutes."

Sec. 2. G.S. 143-215.3(a) is amended by adding a new

subdivision to read:

"(15) To develop and adopt standards and regulations necessary to implement programs to prevent pollution from underground tanks containing oil or hazardous substances, in accordance with those requirements made mandatory upon approved State programs by federal agencies administering the Resource Conservation and Recovery Act, as amended, including the Hazardous and Solid Waste Amendments of 1984."

Sec. 3. This act shall become effective July 1, 1985.
In the General Assembly read three times and ratified,
this the 1st day of July, 1985.

LISTON B. RAMSEY

Liston B. Ramsey
Speaker of the House of Representatives



INTRODUCED BY:

Referred to:

A BILL TO BE ENTITLED

AN ACT TO ESTABLISH THE UNDERGROUND STORAGE TANK REMEDIAL

ACTION FUND.

The General Assembly of North Carolina enacts:

Section 1. The General Statutes are amended by adding a new section to read:

"\$ 143-215.3A. <u>Underground storage tank remedial action</u> fund.

There is established the Underground Storage Tank Remedial Action Fund under the control of the Department of Natural Resources and Community Development, which shall be a nonlapsing, revolving fund. The Fund shall consist of any moneys appropriated for the Fund by the General Assembly or that shall be available to it from any other source, including reimbursements to the Department from persons responsible for underground storage tank releases resulting in remedial action by the Department. The moneys shall be used to defray the costs of any project or program for remedial action, including investigations, abatement, and cleanup, necessary to protect human health or the environment from releases from underground storage tanks regulated pursuant to G.S. 143-215.3(a) (15) and (16). The Department may use the Fund to contract with other governmental agencies or private contractors to assist it in

- remedial actions authorized in this section. The Fund may also
- be used to match any moneys made available to the State for the
- 3 purposes of this section.
- When feasible, the Department shall seek reimbursement for
- 5 remedial action taken pursuant to this section from persons
- 6 responsible for underground storage tank releases resulting in
- 7 such remedial action. The Fund shall not be used to defray
- 8 costs incurred in seeking reimbursement, but such costs may be
- 9 deducted from any reimbursement obtained."
- Sec. 2. G.S. 143-215.3(a) is amended by adding a new
- 11 subdivision to read:
- "(16) To develop and adopt standards and regulations
- 13 necessary to implement the Underground Storage Tank Remedial
- 14 Action Fund as established pursuant to G.S. 143-215.3A."
- Sec. 3. There is appropriated from the General Fund
- 16 to the Department of Natural Resources and Community Develop-
- ment the sum of one million dollars (\$1,000,000) for fiscal
- 18 year 1987-88 to establish the Underground Storage Tank Remedial
- 19 Action Fund.
- Sec. 4. G.S. 147-69.2(a) is amended by adding a new
- 21 subdivision to read:
- "(18.1) The Underground Storage Tank Remedial Action
- 23 Fund,".
- Sec. 5. This act shall become effective July 1,
- ²⁵ 1987.

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