BELL ENVIRONMENTAL CONSULTANTS, INC.

Blue Mountain Plaza Shopping Center

WESTCHESTER COUNTY, NEW YORK

Final Engineering Report

NYSDEC Site Number: V001610

RECEIVED
DEC 06 2013
Remedial Bureau C
Div of Environmental Remediation

Prepared for:

Kurtsam Realty
20 Welcher Avenue
P.O. Box 383
2106 Quaker Ridge Road
Croton-On-Hudson, New York

Prepared by:

BELL Environmental Consultants, Inc.
230 Route 206, Suite 205
Flanders, NJ 07836
(973) 584-7777

NOVEMBER 2013

Disregard via John B. Miles NYSDEC

I Donald Bello certify that I am currently a NYS registered professional engineer, I had primary direct responsibility for the implementation of the subject construction program, and I certify that the Remedial Work Plan (or Remedial Design or Plans and Specifications) was implemented and that all construction activities were completed in substantial conformance with the DER-approved Remedial Work Plan(or Remedial Design or Plans and Specifications).

The data submitted to DER demonstrates that the remediation requirements set forth in the Remedial Work Plan (or Remedial Design or Plans and Specifications) and all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in the work plan(or Remedial Design or Plans and Specifications).

All use restrictions, institutional controls, engineering controls and/or any operation and maintenance requirements applicable to the site are contained in an environmental easement created and recorded pursuant to ECL 71-3605 and that any affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

A Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of any engineering controls employed at the site including the proper maintenance of any remaining monitoring wells, and that such plan has been approved by DER.

Donald Bello	11/13/13	
Name (Print)	Date	Signature

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FINAL ENGINEERING REPORT

1.0 BACKGROUND AND SITE DESCRIPTION

Kurtsam Realty entered into a Voluntary Cleanup Agreement (VCA) with the New York State Department of Environmental Conservation (NYSDEC) in December, 2004, to investigate and remediate a 5.4-acre property located in Peekskill, New York. The property was remediated to commercial use, and will be used as a shopping center.

The site is located in the County of Westchester, New York and is identified as Section 48.2 Block 1 and Lots 1 and 2 on the Peekskill Tax Map # 28. The site is situated on an approximately 5.4-acre area bounded by BASF to the north and east, Welcher Avenue to the south, and South Street to the west (see Figure 1). The boundaries of the site are fully described in Appendix A: Survey Map, Metes and Bounds.

An electronic copy of this FER with all supporting documentation is included as Appendix B.

2.0 SUMMARY OF SITE REMEDY

2.1 REMEDIAL ACTION OBJECTIVES

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this site.

2.1.1 Groundwater, Soil, and Vapor Intrusion RAOs

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.
- Prevent ingestion or contact with remaining soil contamination at the site.

2.1.2 DESCRIPTION OF SELECTED REMEDY

The site was remediated in accordance with the remedy selected by the NYSDEC in the Interim Remedial Measures Work Plan dated February 8, 2007 and minor modification dated April 2007.

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

1. Execution and recording of a Deed Restriction to restrict land use and prevent future exposure to any contamination remaining at the site.
2. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Deed Restriction, which includes plans for: (1) Institutional and Engineering Controls, (2) ground water monitoring, (3) operation and maintenance and (4) reporting;
3. Implementation of an asphalt cover system in all areas not covered by buildings or grass area.

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS

An internal remedial measure was implemented at the site. This consisted of the installation of the two sub-slab depressurization systems described below.

3.1 INTERIM REMEDIAL MEASURES

The interim remedial measures at the site consist of two sub-slab depressurization systems installed beneath the building that house the dry cleaning establishment (Figure 1). The first system was installed in September 2007 beneath two tenant spaces, the dry cleaning establishment and a pizzeria. The second system was installed in the adjacent two tenant spaces that are now occupied by a single tenant, a martial arts studio (Figure 1) in October 2010. Details and Specifications for both sub-slab depressurization systems have been included in Appendix C.

Decommissioning and removal of a 1,000-gallon #2 fuel oil UST located directly behind the dry cleaners building was completed in accordance with NYSDEC approved

May 2002 workplan on November 7, 2002. Four composite PE soil samples (PE-1, PE-1 (DUP), PE-2, and PE-3) were collected from the sidewalls and base of the excavation associated with the 1,000-gallon #2 fuel oil UST. Table 2 provides a summary of those compounds, which were detected in at least one sample. Figure 5 shows samples with concentrations in excess of NYSDEC RSCO. The compounds that exceed the soil cleanup objectives can be attributed to historic fill in several areas of the Site.

- Benzo(a)anthracene was detected at concentrations above the RSCO of 0.036 ppm in soil samples PE-1 (0.19 ppm), PE-1 DUP (0.19 ppm), PE-2 (0.26 ppm), and PE-3 (0.15 ppm).
- Benzo(a)pyrene was detected at concentrations above the RSCO (0.061 ppm) in soil samples PE-1 (0.22 ppm), PE-1 (DUP) (0.21 ppm), PE-2 (0.26 ppm), and PE-3 (0.15 ppm).
- Dibenz(a,h)anthracene was detected at concentrations above the RSCO (0.014 ppm) in soil samples PE-1 (0.046 ppm) and PE-2 (0.058 ppm).

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved Interim Remedial Measures Workplan for the Blue Mountain Plaza Shopping Center site (February 2007, minor modification April 2007). While the Interim Remedial Measures Workplan was initially prepared for two of four tenant spaces, the NYSDEC letter dated December 18, 2009 requested that the remaining spaces within the building also be remediated.

4.1 Governing Documents

4.1.1 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site. The HASP has been included as Appendix D.

4.2 Remedial Program Elements

4.2.1 Contractors and Consultants

- RAData, located at 27 Ironia Road, Flanders, NJ, performed the installation of both sub-slab depressurization systems;
- Bell Environmental Consultants, Inc.

4.3 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING

Since contaminated groundwater and vapor intrusion remains at the site, Institutional and Engineering Controls are required to protect human health and the environment. These Engineering and Institutional Controls (ECs/ICs) are described in the following sections. Long-term management of these EC/ICs and residual contamination will be performed under the Site Management Plan (SMP) approved by the NYSDEC. Table 1 provides the last round of ground water data collected from the monitoring wells onsite. Table 2 provides the most recent air sampling data collected from the tenant spaces discussed above.

4.4 OTHER ENGINEERING CONTROLS

Since remaining groundwater/soil vapor exists beneath the site, Engineering Controls (EC) are required to protect human health and the environment. The site has the following primary Engineering Controls, as described in the following subsections.

Detailed specifications for the two sub-slab depressurization systems are provided in Appendix C. Procedures for monitoring, operating and maintaining the sub-slab depressurization system are provided in Appendix C and the Operation and Maintenance Plan in Section 4 of the Site Management Plan (SMP). The Monitoring Plan also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect on-site ECs.

An asphalt cover system has been implemented at the site for the remaining soil contamination. The cover system will be routinely checked and repaired when needed. The NYSDEC will be contacted in writing when any repairs are completed to the asphalt cover system.

4.5 INSTITUTIONAL CONTROLS

The site remedy requires that a Deed Restriction be placed on the property to (1) implement, maintain and monitor the Engineering Controls; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; (3) implement a groundwater usage restriction where contaminants remain; and, (4) limit the use and development of the site to commercial uses only. A recorded copy of the Deed Restriction for the site has been included in Appendix A.

TABLES

FIGURES

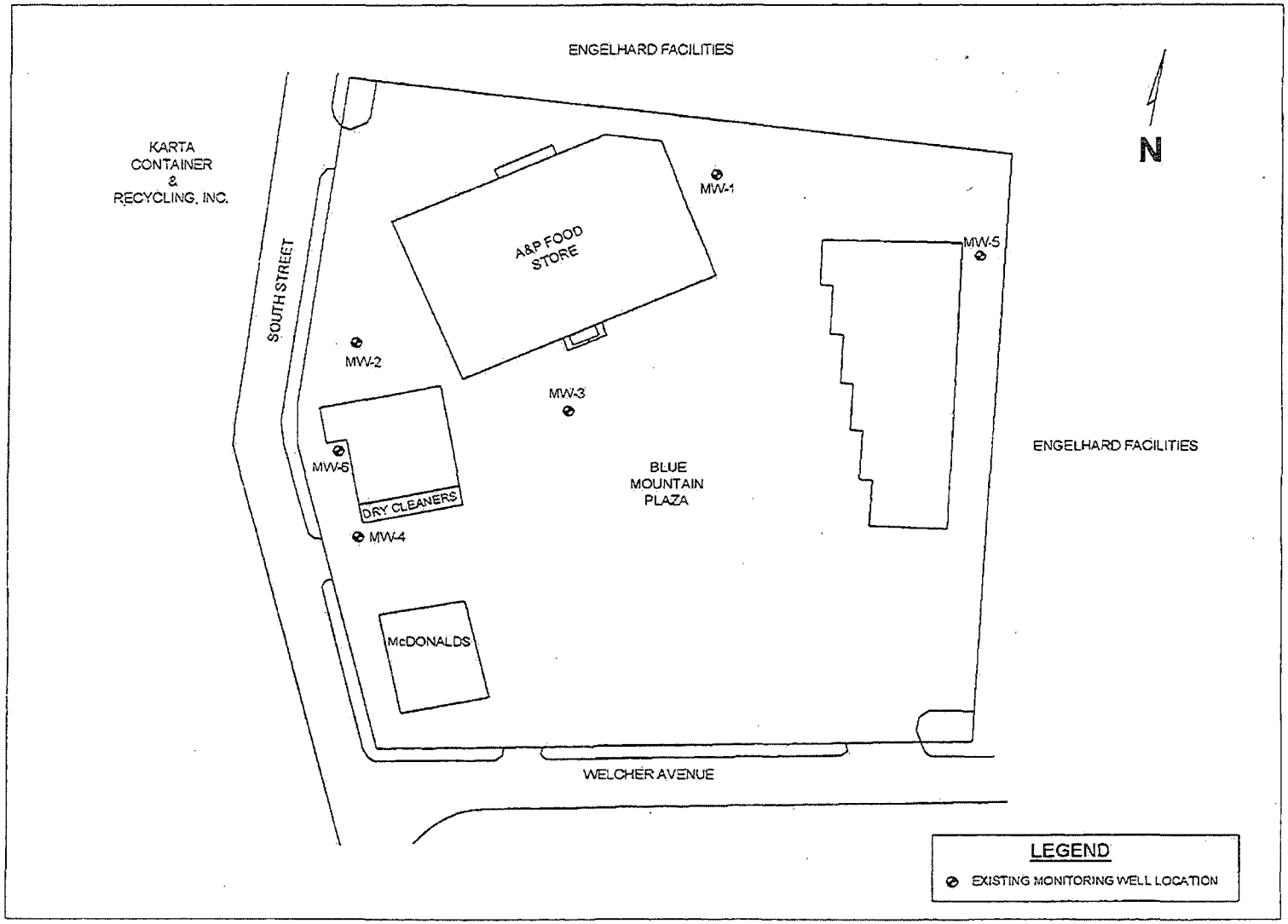


FIGURE 1 SITE PLAN

BELL ENVIRONMENTAL CONSULTANTS, INC.
230 ROUTE 206, SUITE 205
FLANDERS, NJ 07836

PEEKSKILL PLAZA
20 WELCHER AVENUE
PEEKSKILL, NEW YORK

93042-01
December, 2002
1" = 116'

APPENDIX A

Office of the Westchester County Clerk

201301310011700 1001Y

Payment Cover Page

Submitter Information

Name:	Office of the Westchester County Clerk Customer Ser	Phone:	9149953111
Address 1:	110 Dr. Martin Luther King Jr. Blvd.	Fax:	
Address 2:		Email:	email@westchestergov.com
City/State/Zip:	White Plains NY 10601	Reference for Submitter:	KURTSAM REALTY CORP

Payment Due

Control Number	Document Type	Fees	Transfer Tax	Mortgage Tax	Total
530313237	Declaration (DLR)	$230.50	$0.00	$0.00	$230.50
				Total Due :	$230.50

Payment Details

Fees	CHECK # 2625 (Check, Uncertified)	PENDING	$230.50
		Total Amount :	$230.50

The Office of the Westchester County Clerk: This page is part of the instrument; the County Clerk will rely on the information provided on this page for purposes of indexing this instrument. To the best of submitter's knowledge, the information contained on this Recording and Endorsement Cover Page is consistent with the information contained in the attached document.

530313237DLR001R

Westchester County Recording & Endorsement Page

Prepared: 1/31/2013 12:22:37 PM

Submitter Information

Name:	Office of the Westchester County Clerk Customer Ser	Phone:	9149953111
Address 1:	110 Dr. Martin Luther King Jr. Blvd.	Fax:	
Address 2:		Email:	email@westchestergov.com
City/State/Zip:	White Plains NY 10601	Reference for Submitter:	KURTSAM REALTY CORP

Document Details

Control Number: **530313237** Document Type: **Declaration (DLR)**

Package ID: 2013013100117001000 Document Page Count: **37** Total Page Count: **38**

Parties

☐ Additional Parties on Continuation page

1st PARTY		2nd PARTY	
1: KURTSAM REALTY CORP	- Other	1: KURTSAM REALTY CORP	- Other
2:		2:	

Property

☐ Additional Properties on Continuation page

Street Address: 20 WELCHER AVENUE Tax Designation: 42.8-1-1 & 2

City/Town: PEEKSKILL Village:

Cross- References

☐ Additional Cross-Refs on Continuation page

1: 10032/00124 2: 3: 4:

Supporting Documents

Recording Fees

Statutory Recording Fee:	$40.00
Page Fee:	$190.00
Cross-Reference Fee:	$0.50
Mortgage Affidavit Filing Fee:	$0.00
RP-5217 Filing Fee:	$0.00
TP-584 Filing Fee:	$0.00
Total Recording Fees Paid:	**$230.50**

Transfer Taxes

Consideration:	$0.00
Transfer Tax:	$0.00
Mansion Tax:	$0.00
Transfer Tax Number:	

Mortgage Taxes

Document Date:	
Mortgage Amount:	$0.00
Basic:	$0.00
Westchester:	$0.00
Additional:	$0.00
MTA:	$0.00
Special:	$0.00
Yonkers:	$0.00
Total Mortgage Tax:	**$0.00**

Dwelling Type: Exempt: ☐

Serial #:

Record and Return To

☐ Pick-up at County Clerk's office

KURTSAM REALTY CORP
PO BOX 383

CROTON ON HUDSON, NY 10520

DECLARATION of COVENANTS and RESTRICTIONS

THIS COVENANT is made the 23rd day of August 2011, by Kurtsam Realty Corporation and having an office for the transaction of business at 2114 Quaker Ridge Road, Croton-On-Hudson, New York 10520.

WHEREAS, Blue Mountain Shopping Center is the subject of Voluntary Agreement executed by Division of Environmental Remediation as part of the New York State Department of Environmental Conservation's (the "Department's) Voluntary Cleanup (#V00160-3, namely that parcel of real property located on 20 Welcher Avenue in the City of Peekskill, County of Westchester, State of New York, which is part of lands conveyed by John J. Sherlock, Esq. to Kurtsam Realty Corporation by deed dated May 14, 1991 and recorded in the Westchester County Clerk's Office on May 14, 1991 in Book 10032 of Deeds at Page 124 and being more particularly described in Appendix "A," attached to this declaration and made a part hereof, and hereinafter referred to as "the Property"; and

WHEREAS, the Department approved a remedy to eliminate or mitigate all significant threats to the environment presented by the contamination disposed at the Property and such remedy requires that the Property be subject to restrictive covenants.

NOW, THEREFORE, Kurtsam Realty Corporation for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions is as shown on a map attached to this declaration as Appendix "B" and made a part hereof.

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where contamination remains at the Property subject to the provisions of the Site Management Plan ("SMP"), there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils.

Third, the owner of the Property shall not disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the Remedy, are described in the SMP, unless in each instance they first obtain a written waiver of such prohibition from the Department or Relevant Agency.

Fourth, the owner of the Property shall prohibit the Property from ever being used for purposes other than for commercial use without the express written waiver of such prohibition by the Relevant Agency.

Fifth, the owner of the Property shall prohibit the use of the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or Relevant Agency. [If no groundwater restriction is necessary, use the corresponding template, which omits this clause and renumbers subsequent paragraphs]

Sixth, the owner of the Property shall provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department or Relevant Agency, which will certify that the institutional and engineering controls put in place are unchanged from the previous certification, comply with the SMP, and have not been impaired.

Seventh, the owner of the Property shall continue in full force and effect any institutional and engineering controls required for the Remedy and maintain such controls, unless the owner first obtains permission to discontinue such controls from the Department or Relevant Agency, in compliance with the approved SMP dated [not yet approved] which is incorporated and made enforceable hereto subject to modifications as approved by tbe Department or Relevant Agency.

Eighth, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Property, and shall provide that the owner and its successors and assigns consent to enforcement by the Department or Relevant Agency of the prohibitions and restrictions that the Voluntary Agreement require to be recorded, and hereby covenant not to contest the authority of the Relevant Agency to seek enforcement.

Ninth, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Department or Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

Jules Fredric Schwalb - Authorized Signature
Kurtzman Realty Corp.

STATE OF NEW YORK)
) s.s.:
COUNTY OF Westchester)

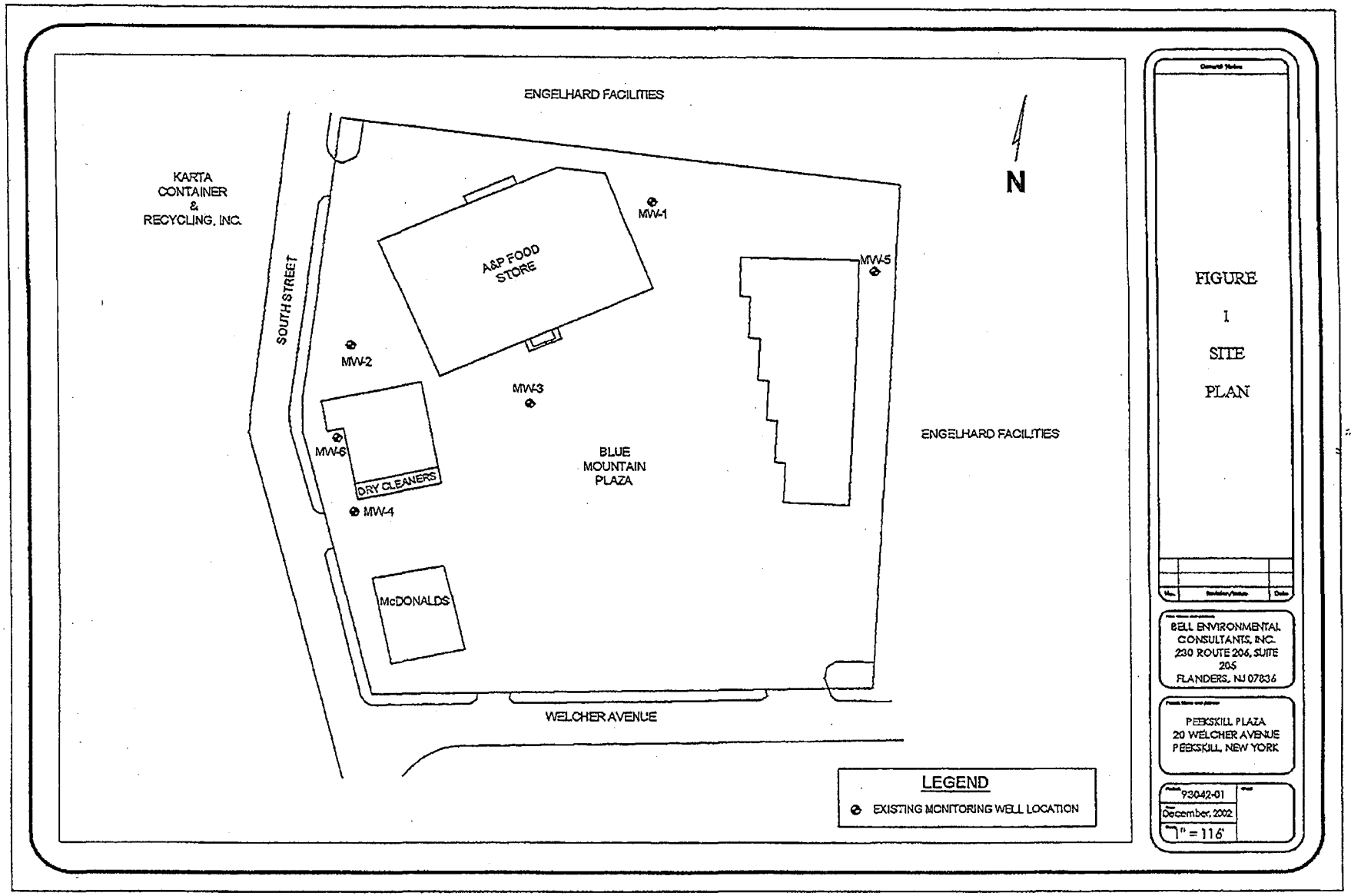
On the 16th day of January, in the year ~~2011~~ 2013, before me, the undersigned, personally appeared Jules F. Schwalb, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Livia Villa
Notary Public - State of New York
Qualified in Westchester County
My Commission Expires 06/09/2016
No. 01VI6188714

Notary Public State of New York

[10/09]

APPENDIX A


ENGELHARD FACILITIES
KARTA CONTAINER & RECYCLING, INC.
SOUTH STREET
A&P FOOD STORE
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
DRY CLEANERS
BLUE MOUNTAIN PLAZA
ENGELHARD FACILITIES
McDONALDS
WELCHER AVENUE
N
LEGEND
EXISTING MONITORING WELL LOCATION
FIGURE
1
SITE
PLAN
BELL ENVIRONMENTAL CONSULTANTS, INC.
230 ROUTE 206, SUITE 205
FLANDERS, NJ 07836
PEEKSKILL PLAZA
20 WELCHER AVENUE
PEEKSKILL, NEW YORK
93042-01
December, 2002
1" = 116'

APPENDIX B

LIBER 11000 PAGE 1624

Referee's Deed in Foreclosure

CORRECTION DEED

THIS IS A LEGAL INSTRUMENT AND SHOULD BE EXECUTED UNDER SUPERVISION OF AN ATTORNEY

THIS DEED, made the 14th day of May nineteen hundred and ninety-one

BETWEEN JOHN J. SHERLOCK, ESQ., 149 Grand Street, White Plains, New York

referee

duly appointed in the action hereinafter mentioned, grantor and

KURTSAM REALTY CORP., a domestic corporation, organized and existing under and by virtue of the laws of the State of New York, with offices at Suite 245, 1301 Franklin Avenue, Garden City, New York 11530

grantee

WITNESSETH, that the grantor, the referee appointed in an action between

KURTSAM REALTY CORP.,

plaintiff,

and MICHAEL N. APPELL, BERNARD KOSTER, FRED FELSON, FRANK ZELLER, PEEKSKILL PLAZA PARTNERSHIP, GOLDEN'S TREE SERVICE, INC., and "JOHN DOE", "JANE DOE", "RICHARD ROE", and "MARY ROE", the names of the last mentioned defendants being fictitious, their true names being unknown to the Plaintiff, it being intended to designate tenants or persons in possession of the hereinafter described mortgaged premises, or some part or parts thereof, all persons who claim interest therein acquired after the filing of the Notice of Pendency

defendants,

foreclosing a mortgage recorded on the third day of March 19 86 in the office of the Clerk of the County of Westchester in (Liber) ~~XXXXXXXX~~ 9736 of mortgages, at page 250 * in pursuance of a judgment amended entered at a motion term of the Supreme Court of State of N.Y. on the 10th day of May 19 90, Index # 7008/89 and in consideration of ONE HUNDRED THOUSAND AND 00/100 ($100,000.00)

Dollars paid by the grantee, being the highest sum bid at the sale under said judgment does hereby grant and convey unto the grantee,

ALL that lot, piece or parcel of land with the buildings and improvements thereon, situate lying and being in the City of Peekskill, County of Westchester and State of New York, at the intersection of the highway known as the New York and Albany Post Road, with the highway known as Welcher Avenue, being bounded and described as follows:

BEGINNING at a point at the corner formed by the intersection of the easterly side of Lower South Street and the northerly side of Welcher Avenue as widened and now laid out;

THENCE running along the northerly side of Welcher Avenue as widened and now laid out, North 79°50'20" East 470.90 feet to the Westerly line of land now or formerly of James W. Husted and a stone wall;

THENCE running along said last mentioned land and the center line of said stone wall, North 6°34' West 321.31 feet and North 4°24' West 172.54 feet to the southerly line of land now or formerly of Atlantic and Pacific Novelty Co. and a stone wall;

RUNNING along said last mentioned land and the center line of said stone wall, South 88°17'50" West 337.38 feet, and South 87°09'50" West 190.43 feet to the easterly side of Lower South Street

THENCE running along said easterly side of Lower South Street South 0°08'00" East 266.88 feet, South 10°42'00" East 38.41 feet, and South 22°59'20" East 271.82 feet to the point of BEGINNING

* along with a certain mortgage recorded on the 17th day of September, 1987 in Liber 11630 of mortgages at p. 279, both mortgages having been consolidated and modified to form a single lien on the premises, said Consolidation and Modification Agreement was recorded on the 17th day of September, 1987 in Liber 11630 of Mortgages at p. 301. Both these recited documents were filed in the office of the Clerk of the County of Westchester (div. of Land Records.)

THIS IS A CORRECTION DEED EXECUTED TO CORRECT A CERTAIN REFEREE'S DEED IN FORECLOSURE FILED IN THE 20th DAY OF JUNE, NINETEEN HUNDRED AND NINETY IN THE OFFICE OF THE CLERK OF THE COUNTY OF WESTCHESTER (DIV. OF LAND RECORDS) IN LIBER 9832 OF MORTGAGES AT PAGE 112

TO HAVE AND TO HOLD the premises herein granted unto the grantee and assigns forever.

IN WITNESS WHEREOF, the grantor has hereunto set his hand and seal, the date first above written.

John J. Sherlock L.S.

Referee

WCB:19

LIBER 10032 PAGE 125

STATE OF New York, COUNTY OF Westchester ss.:

On the 15th day of May 1991 before me came

John J. Sherlock, Esq.

to me known and known to me to be the individual described in, and who executed, the foregoing instrument, and acknowledged to me that he executed the same.

JOSEPH LOUIS LATWIN
Notary Public, State of New York
No. 60-4843238
Qualified in Westchester County
Commission Expires 7/31, 1991

Referee's Deed
In
Foreclosure

FILE No. 2019W498

John J. Sherlock, Esq, referee

TO

Kurtsam Realty Corp.

SECTION 42.8 formerly sec 31
BLOCK 1 bl 1, lot 2, 2.1
LOT 1, 2
COUNTY OF Westchester
City of Peekskill

Recorded At Request of
First American Title Insurance Company of New York
RETURN BY MAIL TO:

Kurtsam Realty
P.O. BOX 383
CROTON ON HUDSON, NY

Zip No. 10520

STANDARD FORM OF NEW YORK BOARD OF TITLE UNDERWRITERS
Distributed by
First American Title Insurance Company of New York

CR59624

LIBER 10032 PAGE 126

WESTCHESTER COUNTY RECORDING AND ENDORSEMENT PAGE
(THIS PAGE FORMS PART OF THE INSTRUMENT)

ADDITIONAL COMMENTS	RECORD AND RETURN
	TITLE COMPANY NUMBER

THE FOREGOING INSTRUMENT WAS ENDORSED FOR THE RECORD AS FOLLOWS:

TYPE OF INSTRUMENT SDE
(SEE CODES FOR DEFINITIONS)

THE PROPERTY IS SITUATED IN WESTCHESTER COUNTY, N.Y. IN THE

- 02 TOWN OF BEDFORD
- 06 TOWN OF CORTLANDT
- 09 TOWN OF EASTCHESTER
- 11 TOWN OF GREENBURGH
- 12 TOWN OF HARRISON
- 16 TOWN OF LEWISBORO
- 17 TOWN OF MAMARONECK
- 19 TOWN OF MT. KISCO
- 20 TOWN OF MT. PLEASANT
- 21 CITY OF MT. VERNON
- 22 TOWN OF NEW CASTLE
- 23 CITY OF NEW ROCHELLE
- 24 TOWN OF NORTH CASTLE
- 26 TOWN OF NORTH SALEM
- 28 TOWN OF OSSINING
- 30 CITY OF PEEKSKILL
- 31 TOWN OF PELHAM
- 35 TOWN OF POUND RIDGE
- 36 CITY OF RYE
- 37 TOWN OF RYE
- 38 TOWN OF SCARSDALE
- 39 TOWN OF SOMERS
- 42 CITY OF WHITE PLAINS
- 43 CITY OF YONKERS
- 44 TOWN OF YORKTOWN

LIBER 10032
PAGE 124
STAT'Y CHARGE 5.25
REC'ING CHARGE 6
REC. MGT. FUND 4.75
CROSS REFERENCE 1.50
CERT/RECEIPT
TOTAL 17.50
$ None CONSIDERATION

RECEIVED
$ Exempt
MAY 17 1991
REAL ESTATE TRANSFER TAX WESTCHESTER COUNTY
10177

MORTGE. DATE
MORTGE. AMOUNT
EXEMPT YES NO
REC'D TAX ON ABOVE MTGE:
BASIC $
ADDTL $
SUBTOTAL $
SPECIAL $
TOTAL $
SERIAL No.
DWELLING: 1-6 OVER
DUAL TOWN
DUAL COUNTY/STATE
HELD
NOT HELD

ANDREW J. SPANO
WESTCHESTER COUNTY CLERK

TERMINAL No. DATE RETURNED

EXAMINED BY
WITNESS MY HAND AND OFFICIAL SEAL

RECEIVED
91 MAY 17 AM 11:07
ANDREW J. SPANO
WESTCHESTER COUNTY CLERK

First American Title Insurance Company
of New York

1 North Broadway P.O. Box 838 White Plains, New York 10601
(914) 997-1444

November 22, 1985

William Groh, Esq.
143 East State Street
Trenton, NJ 08618

Re: Title No. 201-W-4498
Premises: South St & Welcher Ave
Purchaser/Mortgagor: Peekskill Plaza Partnership

Gentlemen:

Enclosed please find the following in connection with the above-referenced title:

(XX) Survey
(XX) Survey reading Amended
( ) Housing & Building
( ) Certificate of Occupancy
( ) Fire Department
( ) Emergency Repairs
( ) Board of Health
( ) Fuel Oil Permit
( ) Air Pollution
( ) Copy of Certificate of Occupancy
( ) Dept of Highways

Kindly attach same to report previously sent to you and make it a part thereof.

Very truly yours,

MM:rs
cc: Michael Zients, Esq.

Margaret Miller
Assistant Vice President

First American Title Insurance Company
of New York
1 North Broadway P.O. Box 332 White Plains, New York 10601
(914) 997-1444

November 14, 1985.

William Groh, Esq.
143 East State Street
Trenton, NJ 08619

Re: 201-W-4488
Peekskill Plaza Partnership -to-
US Trust Company

Dear Mr. Groh:

In confirmation of my telephone converstaion with your office today, please be advised that the survey submitted by Salvatore Romeo is not suitable for title insurance purposes.

An inspection of the premises under examination reveals that variation(s) which may effect our insurance are missing from the survey map.

Should you have any questions concerning this matter, please do not hesitate to contact the undersigned.

Very truly yours,

Margaret Miller
Assistant Vice President

cc: Robinson, Silverman, Pearce,
Aronsohn & Berman, Esqs.
Att.: Michael Zients, Esq.

MM/ss

First American Title Insurance Company of New York

Proposed Insured:

Purchaser

Title No.: 201-W-4498

Effective Date: 10/9/85

N/V

Redated: 1/~~23/86~~ ~~1/31/86~~ 1-31-86

Mortgagee Emil Landau ~~Chase Manhattan Bank, its successors and/or assigns~~

Amount of Insurance

Fee $

Mortgage $~~2,000,000.00~~ 1,000,000

THIS COMPANY CERTIFIES that a good and marketable title to the premises described in Schedule A, subject to the liens, encumbrances and other matter, if any, set forth in this certificate may be conveyed and/or mortgaged by:

AS TO THE LAND:

MICHAEL N. APPELL; BERNARD KOSTER; FRED FELSON; AND FRANK ZELLER,
(Title acquired by deed from Peekskill Plaza Partnership dated 6/27/80, recorded 7/9/80 in Liber 7642 cp 99.)

AS TO THE BUILDINGS:

PEEKSKILL PLAZA PARTNERSHIP
(Title acquired by deed from Emil Landau dated 6/27/80, recorded 7/9/80 in Liber 7642 op 94.)

Premises described in Schedule "A" are known as:

Address:

County: Westchester City: Peekskill

District: Town:

Section: 31

Block: 1

Lot: 2, 2.1

1. FINANCING STATEMENT is presented to a Filing Officer for filing pursuant to the Uniform Commercial Code.

No. of Additional Sheets Presented:

3. ☐ The Debtor is a transmitting

1. Debtor(s) (Last Name First) and Address(es):

PEEKSKILL PLAZA
PARTNERSHIP
0 Whiteshead Road
wrenceville, NJ

2. Secured Party(ies) Name(s) and Address(es):

EMIL LANDAU
One Pamela Lane
New Rochelle, NY 10804

4. For Filing Officer: Date, Time, No. Filing Office

RECEIVED
WESTCHESTER COUNTY CLERK
'80 JUN 9 PM 12 54

25238

5. This Financing Statement covers the following types (or items) of property:

All fixtures and articles of personal property, including but not limited to steam and hot-water boilers, pipes, radiators, bathtubs, water closets, refrigerators, gas and electrical fixtures, engines, motors, shades and all other furnishings in the building erected upon the premises, now or hereafter attached to, or used in connection with the premises, shall be deemed to be and remain a part of the realty and are covered by the lien of said mortgage, together with all replacements of any of the above described articles of personal property, chattels or fixtures, and all additional objects to be permanently installed in and attached into the building or buildings as part of the real property.

80-03853

6. Assignee(s) of Secured Party and Address(es)

25238

7. ☐ The above listed crops are growing or to be grown on*
☐ The above listed goods are or are to be affixed to*
☐ The above listed goods are to be cut or extracted or the like (including oil and gas) from*
*(If applicable-Real Estate Below)

☐ Products of the Collateral are also covered.

8. Describe Real Estate Here:

☐ This statement is to be indexed in the Real Estate Records.

9. Name of a Record Owner

No. & Street XXXX City Peekskill County Westchester Section XX 31 Block 1 Lot 2 & 2.1

10. This statement is filed without the debtor's signature to perfect a security interest in collateral (check appropriate box)
☒ under a security agreement signed by debtor authorizing secured party to file this statement, or
☐ which is proceeds of the original collateral described above in which a security interest was perfected, or
☐ acquired after a change of name, identity or corporate structure of the debtor, or ☐ as to which the filing has lapsed, or already subject to a security interest in another jurisdiction when
☐ when the collateral was brought into the state, or ☐ when the debtor's location was changed to this state.

Peekskill Plaza Partnership

By

Signature(s) of Debtor(s) Gen. Partner

Signature(s) of Secured Party(ies)

(1) Filing Officer Copy-Numerical

(1-78) STANDARD FORM - FORM UCC-1 - Approved by Secretary of State of New York, Pennsylvania & Texas

(4)

7-9-80

NOTICE UNDER MECHANIC'S LIEN LAW

To the Clerk of the County of Westchester and to all others to whom it may concern:

PLEASE TAKE NOTICE, that KING ELECTRICAL CONTRACTORS, INC., a New York corporation having its principal place of business at 532 North High Street, Mount Vernon, New York as lienor, has and claims a lien for the principal and interest of the price and value of the labor and materials hereinafter mentioned upon the buildings and appurtenances and upon the real property upon which the same may stand, or be intended to stand, hereinafter described pursuant to the Lien Law of the State of New York and hereby states upon information and belief:

1. The name and address of lienor's attorneys are Ross & Cohen, Esqs., 655 Third Avenue, New York, New York 10017.

2. The owner of the real property is Peekskill Plaza Partnership, c/o Arthur Schwartz, 690 Whitehead Road, Lawrenceville, New Jersey, and the interest of the owner as far as known to the lienor is owner in fee.

3. The name of the person by whom the lienor was employed and with whom the contract was made is Master

Environmental Business Corporation d/b/a Mebco Industries, Inc., 136-23 34th Avenue, Flushing, New York.

3a. The name of the person to whom the lienor furnished materials and for whom the lienor performed services is Master Environmental Business Corporation d/b/a Mebco Industries, Inc.

4. The labor performed included, but was not limited to, electrical wiring and modifications.

The materials furnished included, but was not limited to, electrical conduit, wire, fuses, circuit breakers and related hardware and electrical supplies.

5. The agreed price and value of the labor performed and materials furnished by the lienor is $94,404.00.

6. The amount unpaid to the lienor for said labor performed and material furnished is $32,404.00 for which amount this lien is filed.

7. The date upon which the first item of work and labor was performed was May 29, 1984. The date upon which the first item of material was furnished was May 29, 1984. The date upon which the last item of work and labor was performed was

September 21, 1984. The date upon which the last item of material was furnished was September 21, 1984.

8. The property subject to the lien is known and described as the A&P Food Store, Peekskill Plaza Mall on Welcher Avenue and South Street, Peekskill, New York being in Section 31, Block 1, Lots 2 and 2-1 as shown on the Land and Tax Map of the County of Westchester.

9. The said labor and materials were performed and furnished for and used in the improvement of the real property hereinbefore described. That eight months have not elapsed, dating from the last item of work performed, or from the last items of materials furnished, or since the completion of the contract, or since the final performance of the work, or since the final furnishing of the materials for which this lien is claimed.

Dated: New York, New York
November 12, 1984

KING ELECTRICAL CONTRACTORS, INC.

By: Steven Corrado

0450B

STATE OF NEW YORK)
ss.:
COUNTY OF WESTCHESTER)

Steven Corrado being duly sworn, deposes and says:

That deponent is the President of KING ELECTRICAL CONTRACTORS, INC. the lienor herein; that deponent has read the foregoing Notice of Lien and knows the contents thereof, and that the same are true to deponent's own knowledge, except as to the matters therein stated to be alleged upon information and belief, and that as to those matters deponent believes them to be true.

The reason this verification is made by deponent is that deponent is an officer to wit, the President of KING ELECTRICAL CONTRACTORS, INC. which is a domestic corporation and deponent is familiar with the facts and circumstances herein.

The sources of deponent's information and the grounds of deponent's belief as to all matters not herein stated upon deponent's knowledge are as follows: books and records of the corporation.

Steven Corrado

Steven Corrado

Sworn to before me this
day of November, 1984

Notary Public

DOMINIC J. LOFARO
Notary Public, State of New York
No. 60-7584350
Qualified in Westchester County
Term Expires March 30, 19 85

DM LT

KING ELECTRICAL CONTRACTORS, INC., a New York corporation,

Lienor,

-against-

PEEKSKILL PLAZA PARTNERSHIP, c/o Arthur Schwartz, 690 Whitehead Road, Lawrenceville, New Jersey,

Owner,

-and-

ENVIRONMENTAL BUSINESS CORPORATION c/b/a MEBCO INDUSTRIES, INC., 136-23 34th Avenue, Flushing, New York,

Contractor.

Amount of Lien: $32,404

TYPE OF DOCUMENT

FILING

PAGES

FEE

JAN 9

NOTICE UNDER MECHANIC'S LIEN LAW

DEPUTY

CHECKED BY

ROSS & COHEN
ATTORNEYS AT LAW
685 THIRD AVENUE
NEW YORK, N.Y. 10017

FILED
1984 NOV 26 AM 9:08
ANDREW J. SPANO
WESTCHESTER COUNTY CLERK

FILED
1984 NOV 28 PM 2:48
ANDREW J. SPANO
WESTCHESTER COUNTY CLERK

First American Title Insurance Company of New York

TAX SEARCH

Title No:
201-W-4498

Assessed Valuation:

	2	2.1
Land	$55,440.	10,500.
Total	$263,835.	74,287.

Please see tax map attached.

Assessed To: Peekskill Plaza Partnership

Address : South St. & Welcher Avenue

County of Westchester City of Peekskill

Town Village

School District: Hendrick Hudson

Section 31 Block 1 Lot 2 , 2.1

CITY COMPTROLLER

		2	2.1	
1985 City Tax		$32,591.53	9,176.67	Year: 1/1-12/31
	1st	$16,295.77 Pd.	4,588.34 Pd.	Lien: 4/1
	2nd	$16,295.76 ~~Open~~ Pd	4,588.33 ~~Open~~ Pd	Due : 4/1-10/1
1985/86 School		$17,199.32	4,842.74	Year: 7/1-6/30
	~~1st~~	$ 8,599.66 Pd.	2,421.37 Pd.	Lien: 8/1
	2nd	$ 8,599.66 Open	2,421.37 Open	Due : 8/1-2/1

Water Account # 21-1083.01	Water to 7/19/85	$ 20.25 Open	10/28/85 $20.25 open
	.02	$151.54 Open	132.66 open
	.03	$208.37 Open	202.42 open
	.04	$ 20.25 Open	20.25 open
	.05	$ 52.20 Open	28.15 open
	.06	$181.10 Open	369.81 open
	.08	$ 20.25 Open	20.66 open
	.09	$ 20.25 Open	21.07 open
	.10	$100.44 Open	37.26 open

Our policy does not insure against such items which have not become a lien up to the date of closing, or installments due after such date. Neither our tax search nor our policy covers any part of streets on which the premises to be insured abut.

Possible charges since last reading.

Nothing further found 10/2/85

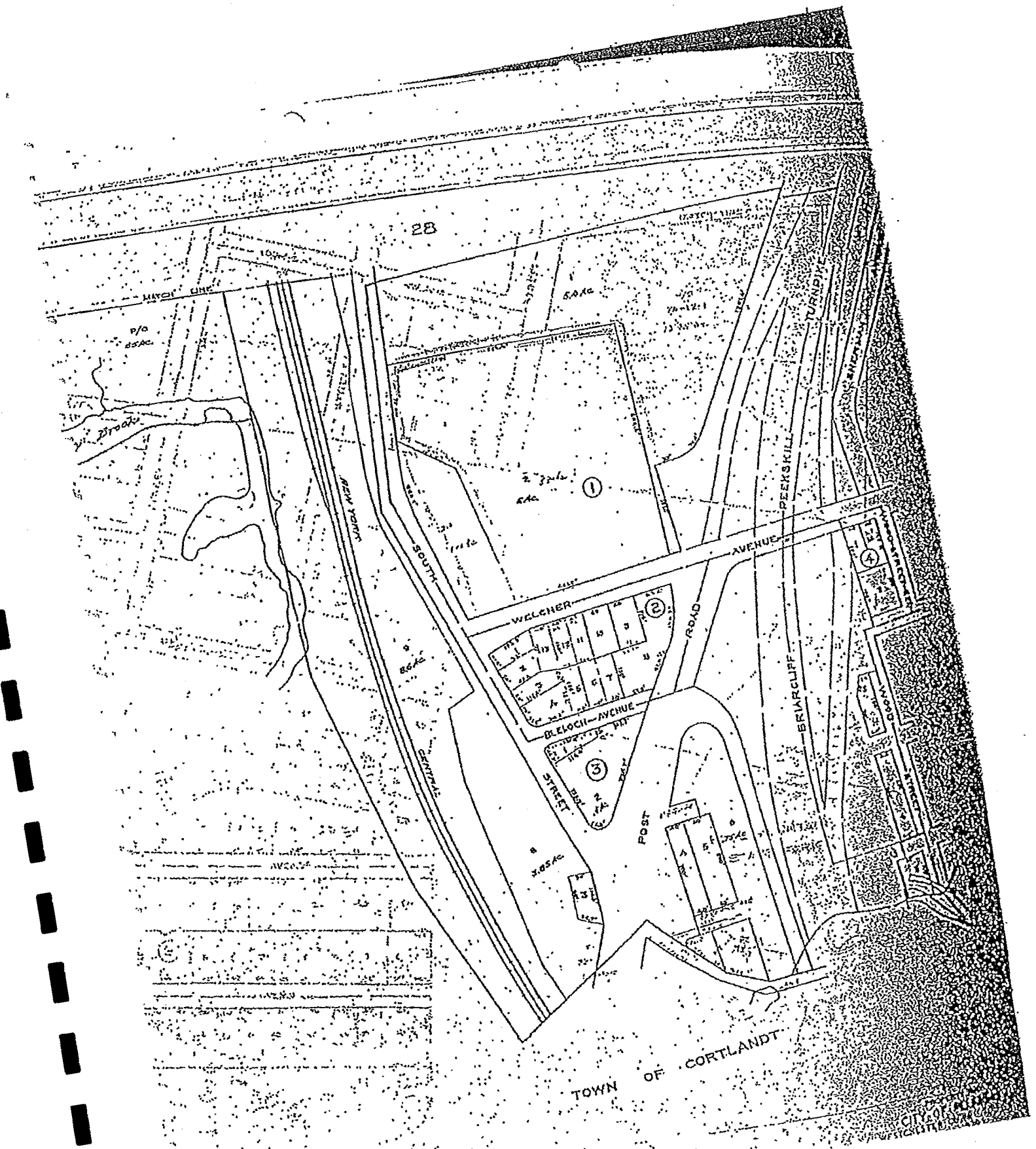
If the tax lots above mentioned cover more or less than the premises under examination, this fact will be noted herein. In such case, the interested parties should take the necessary steps to make the tax map conform to the description to be insured.

,12

,13

20.25 open

146.38 open


28
HITCH LINE
P/O 85AC.
5.4Ac
6.4Ac
NEW YORK
SOUTH
CENTRAL
AVENUE
PEEKSKILL
TURNPIKE
WELGNER
ROAD
BLEECH-AVENUE
STREET
POST
BRIARCLIFF
TOWN OF CORTLANDT
CITY OF

Westchester County

City Taxes

City	Tax	Fiscal Year Begins	Due Dates	Lien Dates
Mount Vernon	City	January 1	January and July 1	January 1
	School	July 1	July and January 1	July 1
	County & Sewer	January 1	April 1	January 1
New Rochelle	City	January 1	January and July 1	When confirmed
	School	July 1	October and April 1	When confirmed
Peekskill	City	January 1	February, April, July and October 1	February 1
	School	July 1	July and February 1	July 1
Rye	City	January 1	February and May 1	February 1
	City School District	July 1	August and November 1	August 1
	School District #1	July 1	August and November 1	August 1
White Plains	City	July 1	July and January 1	July and January 1
	School	July 1	July and January 1	July 1
	Sewer*	January 1	April 1	January 1
Yonkers	City	July 1	July, October and January 1	When confirmed
	Sewer*	January 1	April 1	When confirmed

*State, County and Sewer District Taxes levied by the County of Westchester, but collected by the Cities of White Plains and Yonkers. In the City of Yonkers, such taxes become a lien when confirmed and are due April 1, with a fiscal period of January 1 to December 31.

TOWN AND SCHOOL TAXES (except in the above listed Cities)

In all towns School Taxes are due in two payments, the first payment due September 1, and the second due January 1, except: The School Taxes for Eastchester and Scarsdale are due in one payment on September 1. In the Village of Bronxville they are payable with the Village Tax on June 1 and December 1. They become a lien in all Towns on September 1 unless directed otherwise by resolution of the Town Board. The Fiscal Year for all School Taxes will commence on July 1.

The Town Tax for the Town of Harrison becomes a lien on February 1 and is payable in two payments. These payments become due on February and June 1. They also obtain payment for the State, County and Sewer District Taxes for a Fiscal Year beginning on January 1—Due Date and Lien Date of April 1. In all other Towns, the Town Tax is Due and becomes a Lien on April 1. In all Towns, the Fiscal Year begins on January 1.

Village Taxes

Village	Fiscal Year	Due Dates	Lien Dates
Ossining	January 1 to December 31	January and July 1	January 1
Portchester	April 1 to March 31	May and November 1	May 1
Scarsdale	June 1 to May 31	July 1	July 1
Eighteen Other Villages	June 1 to May 31	July 1	June 1

The entire annual Village Tax is due on June 1 for the following Villages: Buchanan, Croton, Dobbs Ferry, Elmsford, Larchmont, Pelham, Pelham Manor. The Village Tax is to be paid in two payments on June and December 1 for the following Villages: Ardsley, Briarcliff Manor, Bronxville, Hastings, Irvington, Mamaroneck, Mount Kisco, Tuckahoe, North Tarrytown, Pleasantville and Tarrytown.

Westchester Taxes: Penalties are added if the tax is not paid within 30 days from the date it is payable. Inquiry should be made as to interest and penalties.

*The School Taxes for the Town of Eastchester are now permitted to be paid in halves. The first half is due September 1, and the second half is due on January 1.

THIS INFORMATION IS BELIEVED TO BE ACCURATE BUT IS NOT GUARANTEED.

FTWC-9

First American Title Insurance Company of New York

Title No.
201-W-4498

MUNICIPAL DEPARTMENT SEARCHES AND STREET REPORT

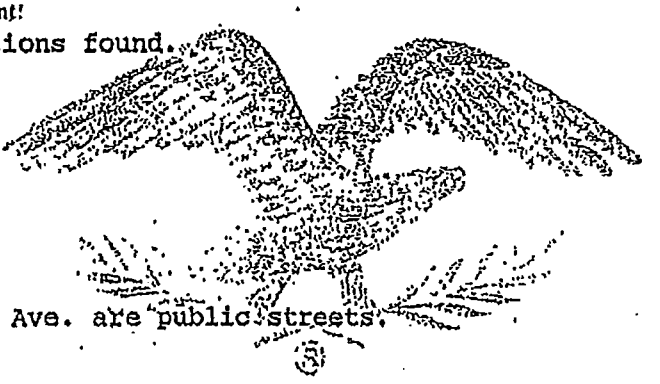
Any searches or returns reported herein are furnished FOR INFORMATION ONLY. They will not be insured and the company assumes no liability for the accuracy thereof. They will *not be continued* to the date of closing.

Search made by Department of Buildings:

Shows no violations found. No C. of O. found for this Bldg. by City of Peekskill Bldg. Dept. Copy of C. of O. herewith for shed.

Search made by Fire Department:

Shows no violations found.



Street Report:

Main St. & Gran Ave. are public streets.

STREET VAULTS

In New York City, if there is a STREET VAULT, it is suggested that applicant investigate possible unpaid license fees by the City of New York for the use of such vault, because the right to maintain it IS NOT INSURED, nor does the Company insure that the vault charges have been paid.

CITY OF PEEKSKILL, N. Y.

No. 138

Certificate Of Occupancy and Compliance

Issued 8/1 19 63 To Evelyn Miller

Permit No. 2947 Location 1701 Main St, Peekskill

Tax Map Section 30 Block 13 Lot 2

Use District C-3 General Commercial

This Certifies that the

(Description of Bldg.) 1 Story Open Shed

situated on the above mentioned premises has been completed and complies with the provisions of the Building Code and Zoning Ordinance of the City of Peekskill and permission is hereby granted for its occupancy for the purpose specified below

Storage and Display

or that permission for such use has been granted by the Zoning Board of Appeals by order dated

19

Type of Variance

Special Conditions Subject to construction of Dry well for Roof Drains as approved by Westchester County Dept. of Public Works

Dry well o/c Comm Plan 9/5/63

Fee 2.00 Paid Cash

Timothy C. McAloney

Building Commissioner

MEMORANDUM OF LEASE

LESSOR:
Frank Zeller 12.5% interest
Michael N. Appell 35% interest
Bernard Koster 26.25% Interest
Fred Felson 26.25% Interest

Dated: 6/27/80
Recd: 7/22/80
Liber 7643 mp 793

LESSEE: Peekskill Hills Partnership

FTWC-11

First American Title Insurance Company of New York

Title No. _____

REPORT OF CLOSING

By whom closed _____ Date Closed _____

Transaction closed at office of _____

The persons present were:

Name	Address	Interest

The identity of the persons executing the papers delivered on closing was established by the following evidence: _____

Title policy is to be sent

(Fee) — To _____

Address _____

Check Box if Mtge. Policy delivered on closing ☐

(Mtge.) — To _____

Address _____

The following instruments were executed and delivered:

1. Kind of instrument _____

By _____

To or With _____

Dated _____ Recorded _____

L. _____ p. _____

Consideration or amount $ _____

CLOSER: (a) Always PRINT Name of Insured fully and completely and write all other names legibly. (b) Where there are two persons, indicate whether husband or wife. (c) If first names are unusual indicate whether male or female. Abstract fully terms of payment of any mortgage delivered on closing. Show addresses of all grantees and individual mortgagees.

Recitals in instrument, and other pertinent information or instructions *must* be noted here.

(See Over)

Certification - Page 2

As to Lease recorded in L 7643, cp 793
~~Lessor~~ dated 6-27-80

Lessor: Michael N. Appell
Bernard Kotten
Fred Felson
Frank Zeller

Lessee: Peekskill Plaza Partnership

First American Title Insurance Company of New York

Title No. 201-W-4498

SCHEDULE A

ALL of their undivided right, title and interest in all that lot, piece or parcel of land with the buildings and improvements thereon, situate lying and being in the City of Peekskill, County of Westchester and State of New York, at the intersection of the highway known as the New York and Albany Post Road, with the highway known as Welcher Avenue, being bounded and described as follows:

BEGINNING at a point at the corner formed by the intersection of the easterly side of Lower South ~~Road~~, and the northerly side of Welcher Avenue as widened and now laid out;

thence running along the northerly side of Welcher Avenue as widened and now laid out, North 79° 50' 20" East 470.90 feet to the Westerly line of land now or formerly of James W. Husted and a stone wall;

thence running along said last mentioned land and the center line of said stone wall, North 6° 34' West 321.31 feet, and North 4° 24' West 172.54 feet to the southerly line of land now or formerly of Alantic and Pacific Novelty Co. and a stone wall;

running along said last mentioned land and the center line of said stone wall, South 88° 17' 50" West 337.38 feet, and South 87° 09' 50" West 190.43 feet to the easterly side of Lower South Street;

thence running along said easterly side of Lower South Street South 0° 08' 00" East 266.88 feet, South 10° 42' 00" East 38.41 feet, and South 22° 59' 20" East 271.82 feet to the point of BEGINNING.

The policy to be issued under this report will insure the title to such buildings and improvements erected on the premises which by law constitute real property.

FOR CONVEYANCING ONLY

TOGETHER with all the right, title and interest of the party of the first party, of, in and to the land lying in the street in front of and adjoining said premises.

First American Title Insurance Company of New York

SCHEDULE B

Hereinafter set forth are additional matters which will appear in our policy as exceptions from coverage unless disposed of to our satisfaction prior to the closing or delivery of the policy.

DISPOSITION

1. Rights of tenants or person in possession, if any.

2. Taxes, tax liens, tax sales, water rents, sewer rents and assessments set forth herein.

3. Survey Reading: See sheet annexed.

4. Mortgages of record: FOUR

A) Liber 7593 mp 340;

B) Liber 7759 mp 628, which two mortgages at (A) and (B) were consolidated by the terms of the latter; held of record by Prudential Savings Bank;

C) Liber 8168 mp 116, assigned in Liber 8215 mp 335, held of record by ~~Bank Leumi Trust Company~~;

D) Liber 8168 mp 153, modified by Agreement in Liber 8386 mp 311 and assigned in Liber 8372 mp 571, held of record by Gertrude Landau (Due to the fact that this mortgage is held by a private individual, a satisfaction piece is required to omit this mortgage. A "pay-off" letter cannot be accepted.)

5. Assignments of Rents and Leases recorded as follows:

A) Liber 7351 cp 646;
B) Liber 7351 cp 657;
C) Liber 7351 cp 668;
D) Liber 7351 cp 679;
E) Liber 7351 cp 690;
F) Liber 7388 cp 342; and
G) Liber 7354 cp 183.

-CONTINUED-

First American Title Insurance Company of New York

Title No. 201-W-4498

SCHEDULE B *(Continued)*

6. The following judgment must be satisfied of record in the Westchester County Clerk's Office:

JUDGMENT

Dawes, a Division of May Sports Inc. 850 Sherman Avenue Hamden, CT V. Michael Appel, d/b/a North Ave. Bicycles 556 North Avenue New Rochelle, New York Vol. 172	Amount: $2,366.53 Dock.: 10/12/83 Perf.: 18008/83 Court: Westchester County Atty: Corwin & Friedman, Esqs. 34 South Broadway White Plains, NY

7. Title to personal property is not insured, but the U.C.C. Financing Statement shown on the attached schedule must be satisfied and discharged of record as it is filed so as to affect the real property. (See photocopy annexed).

8. One (1) Mechanics Lien shown on the attached schedule must be discharged of record in the County Clerk's Office. (See photocopy annexed)

9. Proof is required as to the date of formation of Peekskill Plaza Partnership, a partnership, and as to the names of all parties or persons interested as partners therein and proof shown that there has been no change in the composition of the partnership by either adding or dropping partners since its formation.

10. The Articles (Agreement) of Partnership of Peekskill Plaza Partnership must be submitted to the Title Company for consideration prior to closing. In the absence of articles all of the partners must consent in writing or join in the execution of the closing deed or mortgage.

11. NOTE - Deed to Michael N. Appell, et al, recorded in Liber 7642 cp 99 contains a recital conveying land only and NOT the buildings or improvements situated on the premises therein.

12. Memorandum of Lease recorded in Liber 7643 cp 793 and the Terms and conditions of the underlying lease referred to therein.

13).

FTWC-4A

First American Title Insurance Company of New York

Title No.

SCHEDULE B *(Continued)*

Except 13. Memorandum of Lease in Liber 6931 cp 147 and Amendments thereto (Lessee is the Great Atlantic and Pacific Tea Company, Inc.)

Except 14. The Chase Manhattan Bank, N.A. must consent to the mortgage and must subordinate its lease to the Mortgage to be insured herein.

Except 15. The Great Atlantic and Pacific Tea Company, Inc. must consent to the Mortgage and must subordinate its lease to the Mortgage to be insured herein.

16. If the [illegible] around mortgage insured hereunder is to be insured for the full amount of the mortgage, the following exceptions will be added:

Except A) Estoppel certificates to be procured from the holders of prior mortgages.

Omit B) The insured mortgagee must join in the mortgage for the express purpose of assuming the obligations of paying the principal and interest indebtedness owing on the prior mortgages.

Omit C) Liability hereunder is limited to the amount disbursed by the mortgagee, and interest thereon, but such liability shall not include disbursements made subsequent to the date of the policy:

1) Unless such disbursement increased the debt under the insured mortgage and are made by the mortgagee out of its own funds pursuant to an obligation to disburse or protect the lien of the insured mortgage and

2) Unless the insured mortgage provides that such disbursements are secured thereby and, as to obligations or rights of prior lienors, that the mortgagee shall be subrogated to the right of said prior lienors:

Note: Upon proper satisfactory to the Company, Exception # 14, 15 & 16A will be omitted post closing + Waiver of Mergers

First American Title Insurance Company of New York

Title No.

SCHEDULE B *(Continued)*

AMENDED SURVEY READING

Survey made by John Salvatore Romeo dated 3/9/85, last brought to date 11/18/85 shows premises are improved by Three (3) 1 story brick buildings; also shows the following:

A) Curbs partly on southerly and westerly portions of premises herein and partly on Welcher Avenue and Lower South Street; Policy excepts rights and easements of others by reason thereof;

B) Overhead wires, poles and vent on Lower South Street; said wires cross westerly portion of premises; policy excepts rights and easements of others by reason thereof;

C) Open drain grate inside southerly record line; Policy excepts rights and easements of others by reason thereof;

D) Chain link fence generally on northerly line;

E) Chain link fence east of easterly line an undisclosed distance;

F) Edge of macadam pavement south of northerly line and west of easterly line an undisclosed distance;

G) Utility poles south of northerly line. Note - Inspection made 11/22/85 shows an additional pole and utility wires extending from said poles to premises adjoining on the north; Policy excepts rights and easements of others by reason thereof;

H) Transformer inside easterly record line; Policy excepts rights and easements of others by reason thereof;

I) Manholes within record lines; Policy excepts rights and easements of others by reason thereof;

J) Light poles inside southerly, westerly and easterly record lines; Policy excepts rights and easements of others by reason thereof;

K) Drainage intakes, pipes and storage pit throughout premises;

L) Macadam extends onto Welcher Avenue and Lower South Street,

First American Title Insurance Company of New York

Title No. 201-VT-4498

SCHEDULE B *(Continued)*

SURVEY READING

Until survey is received and read into title, policy will except any state of facts an accurate survey may show.

The distances, dimensions and locations of the boundary lines of the premises herein described cannot be guaranteed without a survey acceptable and approved by the Law Department of this Company.

Superseded

FTWC-5

First American Title Insurance Company of New York

Title No. 201-W-4498

MORTGAGES

A

Mortgagor: E. Landau Industries, Inc.

Amount: $ 450,000.00

Dated: 5/7/74

Mortgagee: Prudential Savings Bank

Recorded: 5/20/74

Liber: 7593

Record:

Page: 340

Reel:

Except

-continued-

First American Title Insurance Company of New York

Title No. 201-W-4498

MORTGAGES
(continued)

B

Mortgagor: Emil Landau

Amount: $ 400,000.00

Dated: 8/3/76

Mortgagee: Prudential Savings Bank

Recorded: 8/9/76

Liber: 7759

Record:

Page: 628

Reel:

Consolidated with mortgage in Liber 7593 mp 340 to form a lien for $838,909.13.

Exempt

-continued-

FTWC-3

First American Title Insurance Company of New York

Title No. 201-W- 4498-

MORTGAGES (continued)

Mortgagor: Peekskill Plaza Partnership

Amount: $ 2,100,000.00

Dated: 6/27/80

Mortgagee: Michael N. Appell - 35%;
Bernard Koster - 26.25%;
Fred Felson - 26.25%; and
Frank Zeller - 12.50%

Recorded: 7/9/80

Liber: 8168

Record: Page: 116

Reel:

This is a wrap around mortgage which includes in its indebtedness the obligations due under a mortgage recorded in L 7583 mp 340, L 7719 mp 626 + L 8166 mp 153

ASSIGNMENT OF MORTGAGE

Michael N. Appell - 35%;
Bernard Koster - 26.25%;
Fred Felson - 26.25%; and
Frank Zeller - 12.50%

to

Bank Leumi Trust Company
of New York
579 5th Avenue
New York, NY

Dated: 11/30/80

Recorded: 1/5/81

Liber: 8215

Page: 335

Assigns mortgage recorded in Liber 8168 mp 116 as collateral security

-continued-

Omit for
This Transaction only
Schedule attached

PTWC-22

First American Title Insurance Company of New York

201-W-4498

MORTGAGES OF RECORD
(continued)

B

Mortgagor: Peekskill Plaza Partnership Amount: $ 675,000.00

Dated: 6/27/80

Mortgagee: Emil Landau Recorded: 7/9/80

Liber: 8168

Page: 153

Does not pertain only to Lot 1 Undivided

MODIFICATION AGREEMENT

Michael N. Appell, Bernard J. Koster, Fred H. Felson, Frank Zeller, and Arthur Schwartz

Dated: 11/2/81

Recorded: 8/23/82

Liber: 8366

Page: 311

with

Emil Landau

Modifies mortgage recorded in Liber 8168 mp 153

ASSIGNMENT OF MORTGAGE

Emil Landau

to

Gertrude Landau

Dated: 8/27/82

Recorded: 9/13/83

Liber: 8372

Page: 571

Assigns mortgage recorded in Liber 8168 mp 153

ASSIGNMENT OF LEASE

E Landau Industries Inc. and John Saekel

to

Prudential Savings Bank

Dated: 5/1/74

Recorded: 9/16/76

Liber: 7351

Page: 679

As additional security for consolidated mortgages for $850,000 to the party of the first part assigns to the party of the third part all rights, title and interest in and to lease dated 3/10/65 made by Peekskill Plaza Corporation to the party of the second part.

ASSIGNMENT OF LEASE

E Landau Industries Inc. and On-The-Dot Cleahers, Inc.

to

Prudential Savings Bank

Dated: 5/6/74

Recordad: 9/16/76

Liber: 7351

Page: 690

As additional security for consolidated mortgages for $850,000 to the party of the first part assigns to the party of the third part all rights, title and interest in and to lease dated 3/18/60 made by Peekskill Plaza Corporation to the party of the third part.

ASSIGNMENT OF LEASE

E Landau Industries Inc. and On-The-Dot Cleaners Inc.

to

Prudential Savings Bank

Dated: 5/6/74

Recorded: 4/28/77

Liber: 7388

Page: 342

Re: Recording of Liber 7351 op 690 to add corporate seal of the party of the second part.

ASSIGNMENT OF LEASE

E Landau Industries Inc. and Great Atlantic & Pacific Tea Company Inc.

to

Prudential Savings Bank

Dated: 5/6/74

Recorded: 9/29/76

Liber: 7354

Page: 183

Assigns right title and interest in and to lease to the party of the second part.

ASSIGNMENT OF LEASE

E Landau Industries Inc. and Benjamin Martorano

to

Prudential Savings Bank

Dated: 5/1/74

Recorded: 9/16/74

Liber: 7351

Page: 646

As additional security for consolidated mortgage for $850,000 to the party of the first part assigns to the party of the third part all rights, title and interest in and to lease made by Peekskill Corporation to Benjamin Martarono dated 3/30/67.

ASSIGNMENT OF LEASE

E Landau Industries Inc. and George Olson

to

Prudential Savings Bank

Dated: 5/6/74

Recorded: 9/16/74

Liber: 7351

Page: 657

As additional security for consolidated mortgage for $850,000 to the party of the first part to the party of the third part rights, title and interest in and to lease dated 5/1/72 made by Peekskill Plaza Company to James T. Kell.

ASSIGNMENT OF LEASE

E Landau Industries Inc. and Chase Manhattan Bank N.A.

to

Prudential Savings Bank

Dated: 5/6/74

Recorded: 9/16/74

Liber: 7351

Page: 668

As additional security for consolidated mortgages for $850,000 to the party of the first part assigns to the party of the third part all right, title and interest in and to lease dated 11/5/73 made by Peekskill Plaza Corp. to the party of the second part.

-continued-

APPENDIX B

APPENDIX C

FINAL PROJECT REPORT FOR THE INSTALLATION OF ACTIVE SOIL DEPRESSURIZATION SYSTEMS AT THE BLUE MOUNTAIN PLAZA 20 WELCHER AVENUE, PEEKSKILL, NEW YORK

Prepared for:

Kurtsam Realty
Box 383 Quaker Ridge Road
Croton On Hudson, New York 10520

Prepared by:

Mr. David Grammer
RAdata, Inc.
27 Ironia Road
Flanders, New Jersey
Phone: (973) 927-7303 Fax: (973) 927-4980
E-Mail: dg@radata.com

December 27, 2007

ACTIVE SOIL DEPRESSURIZATION SYSTEMS

THE BLUE MOUNTAIN PLAZA, 20 WELCHER AVENUE, PEEKSKILL, NEW YORK

1.0 INTRODUCTION AND BACKGROUND

RAdata, Inc. has completed the installation of Active Soil Depressurization Systems (ASDS) at the Blue Mountain Plaza located at 20 Welcher Avenue in Peekskill, New York owned by Kurtsam Realty. This work commenced on November 13, 2007 and was completed on November 14, 2007.

Indoor air sampling was previously conducted at the site by Bell Environmental, 230 Route 206, Flanders, New Jersey. Analytical data from indoor air and soil gas samples are from September 2002, June 2003 and April 2005, and were provided to the client. These samples were collected from the sub-slab area, in the basement, and first floor of the Mountain Dry Cleaners and Anthony's Family Restaurant. One outdoor location adjacent to Anthony's Family Restaurant basement window was also collected. The Mountain Dry Cleaners and Anthony's Family Restaurant have been impacted by the vapor intrusion of contaminants emanating from ground water and soil contamination. The results of these samplings show numerous volatile organic compounds (VOCs) that exceed the New York State Department of Health (NYDOH) background concentrations at all three sample depths; sub-slab, basement and first floor.

1.1 Site Description

The subject facility is a one-story masonry building with a basement. The basement is partitioned into two sections, one beneath The Mountain Dry Cleaners and one beneath Anthony's Family Restaurant, by drywall over wooden studs. Each section of the basement is approximately 80 feet long and 20 feet wide. There is a concrete slab with masonry outer walls. The facility is a one story building approximately 18 feet high with a brick exterior. The age of the foundation is unknown. The building has a flat roof. Total square footage of indoor space is approximately 3,300 square feet.

1.2 Site Contaminants

Air sampling conducted at the Blue Mountain Plaza property prior to the installation of the Active Soil Depressurization Systems detected the following contaminants exceeding the New York State Department of Health (NYDOH) background concentrations.

Benzene	Carbon Tetrachloride
Chloroform	Chloromethane
Ethylbenzene	Ethyl Alcohol
Styrene	cis-1.2-dichloroethene
Dichlorodifluoromethane	MTBE
N-hexane	Tetrachloroethene
Toluene	Trichloroethene
Trichlorofluoromethane	Total Xylenes
1,2,4 - trimethylbenzene	

2.0 MITIGATION APPROACH

The primary method for reducing soil borne pollutants is Active Soil Depressurization Systems (ASDS). Active Soil Depressurization Systems prevent soil borne pollutants entry into the building by creating a negative pressure (vacuum) beneath the slab through fan activated PVC pipe routed to the exterior of the building and vented above the roofline. It is at this location where these pollutants are quickly diluted by the ambient air. The Active Soil Depressurization Systems also removes moisture and other soil pollutants that enter the building, therefore, improving the overall air quality of the building.

The Active Soil Depressurization Systems are installed so as to coordinate with other building components especially those that require maintenance or clearance of any type. All mitigation components are installed to facilitate servicing, maintenance and repair or replacement of other equipment components both inside and outside of the building. All systems, materials and equipment were installed level, plumb, parallel or perpendicular to other building systems and components unless otherwise specified. All fan components are UL or equivalent rated.

3.0 INSTALATION OF PERMANENT ACTIVE SOIL DEPRESSURIZATION SYSTEMS

Based on data gathered during the sub-slab vacuum testing the decision was made by RAdata, Inc. to install a total of two (2) permanent ASDS systems. One (1) ASDS system is being used to treat Mountain Dry Cleaners and one (1) system is being used to treat Anthony's Family Restaurant. Systems locations can be found on the As Built Drawing (Attachment 1). After four-inch (4") holes where core drill cut through the concrete floor, about one cubic foot of soil was removed from beneath the slab using a shop vac.

Soil was placed in a 55-gallon drum for future disposal. These holes were piped with three-inch (3") Schedule 40 PVC pipe routed through the window at the rear of the Mountain Dry Cleaners. Window was replaced using plywood. Split-ring hangers, clevis hangers and two-hole straps were used to attach the pipe securely to the building. The exhaust of three-inch (3") Schedule 40 PVC pipe was routed above the roofline at that location. The vent fans are mounted directly to the PVC pipe slightly below the roofline using rubber couplers. Fans units are two (2) Dynavac GP 501 fans (70-140 Watts), maximum pressure of 4.00 Inches of Water, capable of evacuating 95 Cubic Feet Per Minute at I" static pressure (Attachment 2). Conte Electric, 34 Brook Street, Croton-On-Hudson, New York 10520 (914-271-6636) provided electrical service to the fan units. Each fan unit is wired to circuit Number 14 in the electrical box found in the Mountain Dry Cleaners. Electrical service disconnects are located on the exterior of the building directly next to the fan units. To provide constant evaluation of system performance Mini-magnehelic pressure gauges were installed in a conspicuous location on the PVC pipe along with audio alarms, which sound when fan failure has occurred. All components of the ASDS systems are clearly labeled as to their function. RAdata, Inc. contact information labels are attached to each system and are clearly visible.

3.1 Vacuum and Air Stream Measurements of Permanent Active Soil Depressurization Systems

Bell Environmental conducted sub-slab vacuum measurements using a digital Micro manometer after systems installation to determine sphere of influence of the two ASDS systems. Six locations where used to determine this sphere of influence within the buildings, three locations in the Mountain Drycleaners and three locations in Anthony's Family Restaurant, and one location outside of Anthony's Family Restaurant (Attachment 3). The goal of a successful ASDS system is to create a negative pressure of between -.015 and -.02 Inches of Water Column. Bell Environmental also conducted measurements of the outbound effluent air-stream, the purpose of which was to determine whether operation of the ASDS requires a New York State Department of Health (NYDOH) air permit for discharge of volatile organic compounds (VOCs). There results are found on Attachment 4.

3.2 Conclusions of Vacuum and Air-Stream Measurements for Permanent Active Soil Depressurization Systems

The sub-floor vacuum created by the two (2) ASDS systems was found to be at or slightly below the goal of a successful ASDS system, which is to create a negative pressure of between -.015 and -.02 Inches of Water Column. Only one of the sub-floor vacuum results met the criteria of the desired vacuum to produce a reversal of the sub-slab soil gas.

Raw emission rates for VOCs were calculated by Bell Environmental to determine weather or not the ASDS had a potential to emit compounds above the NYDOH

Threshold Reporting Limits during normal operating conditions. Based on the results of their investigation and the operating parameters at the time of site inspection, the ASDS operation may meet the requirements for an NYDOH air permit (Attachment 4).

4.0 DISPOSAL OF SOIL AND CONSTRUCTION DEBRIS

The one 55-gallon container of soil removed from beneath the floor, as well as construction debris, was disposed of by Clean Ventures, 2001 South First Street, Elizabeth, New Jersey, (908-355-5800). The drums were removed from the site on December 19, 2007. A copy of the disposal manifest can be found as Attachment 5.

5.0 PERMITS

A copy of the City of Peekskill Building and Electrical permits for the installation of the ASDS can be found as Attachment 6.

6.0 WORKER HEALTH AND SAFETY

A copy of our Worker Health Plan For Installing the Active Soil Depressurization Systems can be found as Attachment 7. Phase Associates, LLC, 316 Eisenhower Parkway, Livingston, New Jersey, 973-597-0750, prepared this document for RAdata, Inc.

7.0 OPERATIONS AND MAINTENANCE

The building Owner is responsible for ongoing system monitoring and maintenance as well as verification sampling of indoor air quality. RAdata, Inc. should conduct an inspection at six-month intervals after the installation has been completed. After the first year, a reduced inspection frequency may be appropriate and changed to once a year. Comprehensive maintenance procedures can be found as Attachment 8.

8.0 WARRANTIES

RAdata, Inc. warranties all system components and workmanship for a period of three (3) years from the date of installation.

9.0 CONCLUSION

The goal of a successful ASDS system is to create a negative pressure of between -.02 and -.015 Inches of Water Column. Sub floor vacuum measurements reflect an acceptable vacuum in only one of the six interior test holes (Attachment 3). However, all vacuum readings are very close to the established goal. Post treatment test results will be the defining factor as to the success of the ASDS systems.

10.0 CONTACT INFORMATION

GENERAL CONTRACTOR

Radata. Inc.
27 Ironia Road
Flanders, New Jersey 07836
973-927-7303Telephone
973-917-4980Fax
dg@radata.com

SUB CONTRACTORS

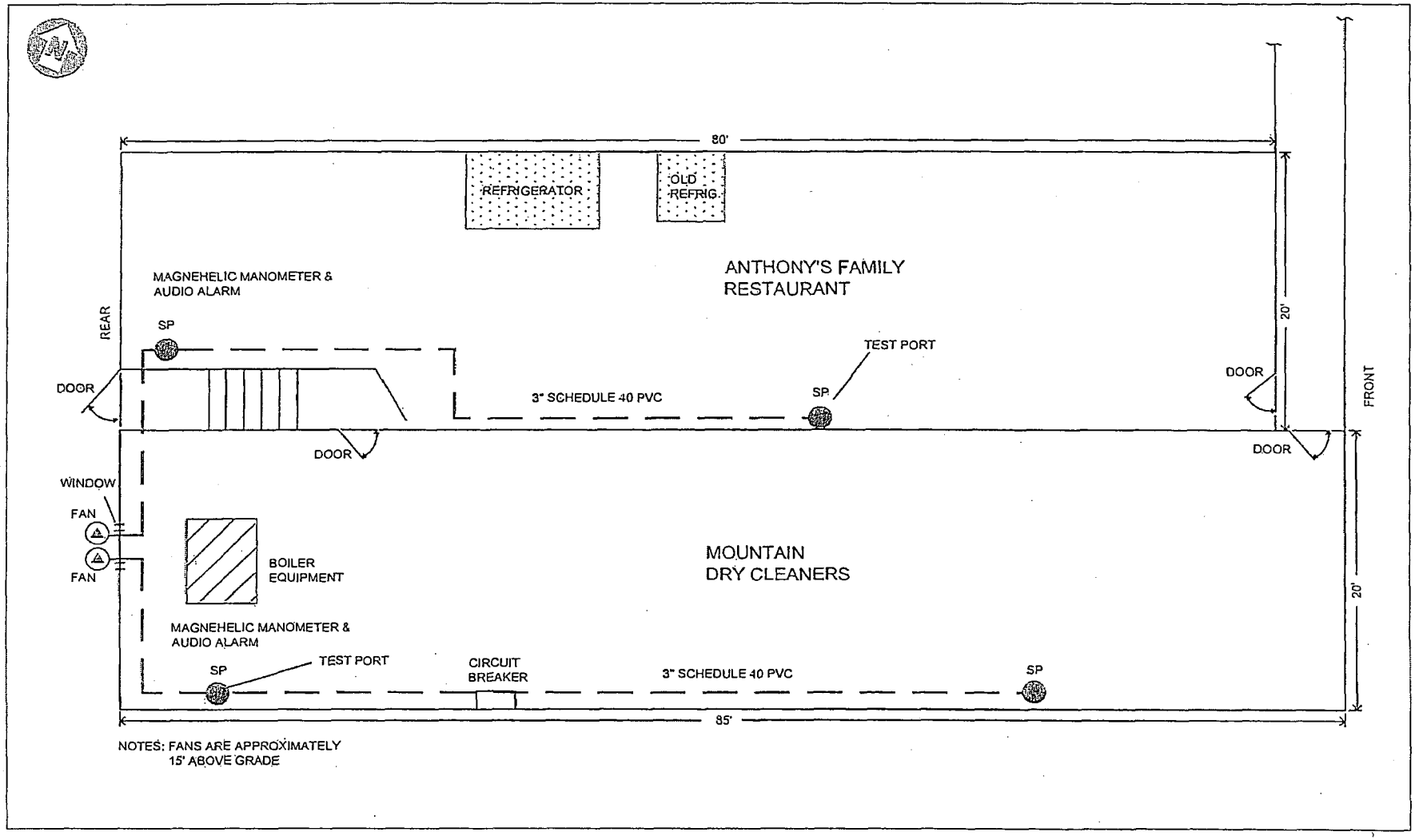
Electrical Service
Conti Electric, Inc.
34 Brook Street
Croton-on-Hudson 10520
914-271-6636

Environmental Consulting
Brownfield Associates, Inc.
P.O. Box 600
Belmar, New Jersey 07719
732-280-1420

Waste Disposal
Clean Ventures, Inc.
201 South 1st Street
Elizabeth, NJ 07206
908-355-5800

ATTACHMENT

1



10 5 0 10 20

SCALE: 1" = 10'

LEGEND

3" SCHEDULE 40 PVC

FAN LOCATION (RADON AWAY-GP501)

SUCTION POINT LOCATION (SP)

CHK.	
REV	
DWG BY	YAF
DATE	12-10-07

FIGURE 1

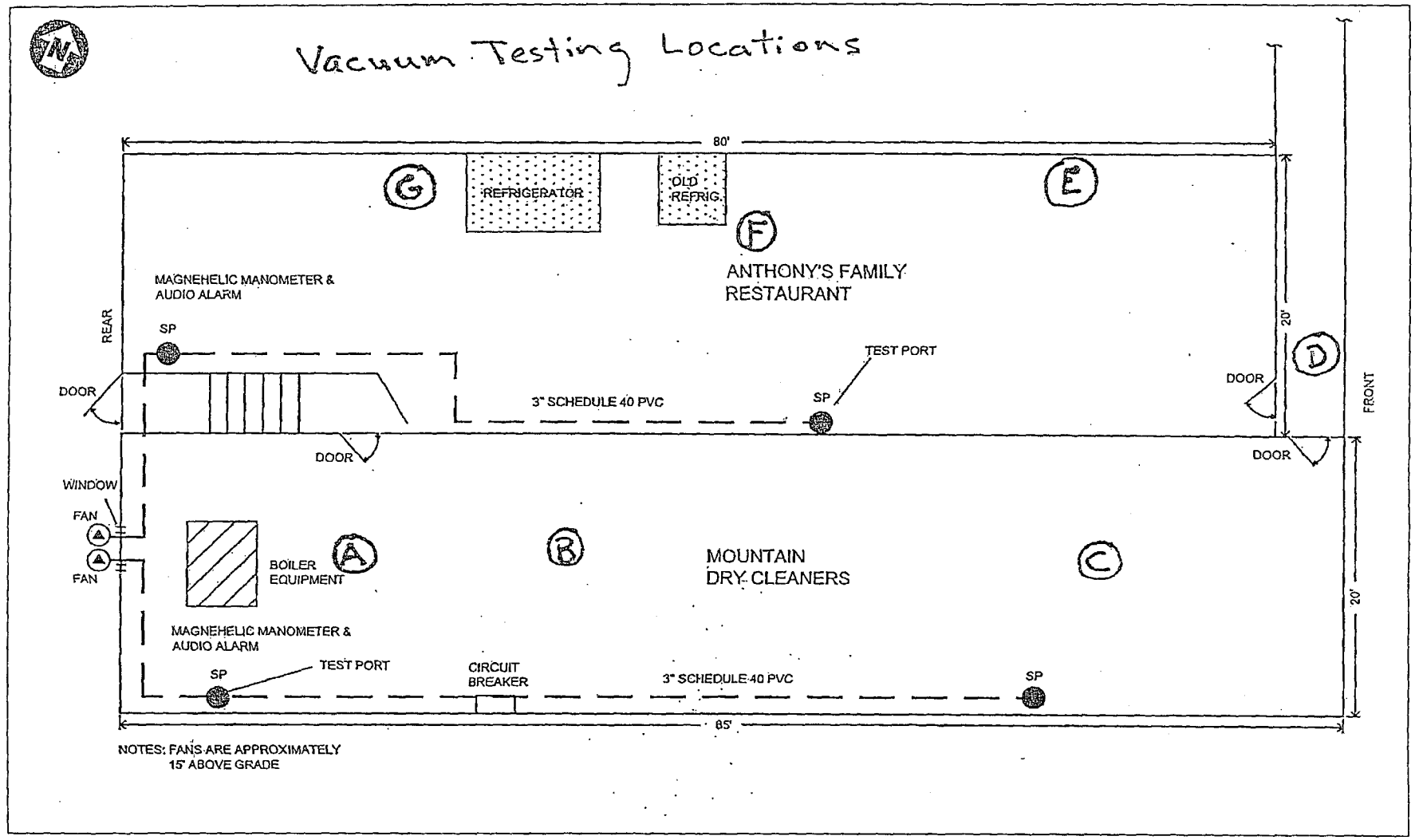
AS-BUILT DRAWING
20 WELCHER AVENUE
PEEKSKILL, NEW YORK

Equity Environmental Engineering LLC
4 Gold Mine Road
Flanders, NJ 07836
Phone: (973) 527-7451

RAdata, Inc.
27 Ironia Road, Unit 2
Flanders, NJ 07836
973-927-7303

ATTACHMENT

2



10 5 0 10 20

SCALE: 1" = 10'

LEGEND

3" SCHEDULE 40 PVC

FAN LOCATION (RADON AWAY-GP501)

SUCTION POINT LOCATION (SP)

CHK		FIGURE 1
REV		AS-BUILT DRAWING 20 WELCHER AVENUE PEEKSKILL, NEW YORK
DWG BY	TAF	*Equity Environmental Engineering, LLC* 4 Gold Mine Road Flanders, NJ 07836 Phone: (973) 527-7451
DATE	12-10-07	**RAdata, Inc.** 27 Ironia Road, Unit 2 Flanders, NJ 07836 973-927-7303

ATTACHMENT

3

POST TREATMENT SUBFLOOR VACUUM TESTING FOR THE BLUE MOUNTAIN PLAZA 20 WELCHER AVENUE, PEEKSKILL, NEW YORK

Test Hole # A	-0.29 inches of water column
Test Hole # B	-0.14 inches of water column
Test Hole # C	-0.12 inches of water column
Test Hole # D	-0.04 inches of water column
Test Hole # E	-0.08 inches of water column
Test Hole # F	-0.13 inches of water column
Test Hole # G	-0.14 inches of water column

ATTACHMENT

4

THESE RESULTS ARE UNAVAILABLE IN RADATA'S JOB FOLDER. PLEASE REFER TO BELL ENVIRONMENTAL'S FILES ON THIS PROJECT

ATTACHMENT

5

Cycle Chem, Inc
201 South First Street Elizabeth, NJ 07206 PHONE: 908-355-5800, FAX: 908-355-0562

Land Disposal Restriction Notification and Certification Form

Generator: BLUE MOUNTAIN PLAZA SHOPPING CENTER
EPAID: NYR000064378

Manifest Number: 227231
Manifest Tracking Number: 00102682 DJK

The EPA hazardous wastes identified below must be treated to the applicable treatment standards Set forth In 40 CFR 268.40.

EPA Waste Code Information

Manifest Line	Waste-water?	EPA Codes
Page 1 Line 1	No	F002, F003, F005

Spent Solvent Constituents

Manifest Line	Solvents
Page 1 Line 1	F002: tetrachloroethylene F003: xylene F005: benzene

Underlying Hazardous Constituents

(None present unless identified below.)

Manifest Line	Constituents

I certify that all information submitted On this Land Disposal Restriction and Certification Form is accurate and complete, to the best of my knowledge and information.

Signature: _____ Name: John Cowell

Title: Mitigation Specialist Date: 12/19/07

ATTACHMENT

6

TO BE KEPT ON THE WORK

CITY OF PEEKSKILL
DEPARTMENT OF PUBLIC WORKS
BUILDING DEPT.
Municipal Building, Peekskill, N. Y.

No 10933

PERMIT

Fee 125.00/100

Permission is hereby granted to INSTALL AN ACTIVE Soil Depressurization System

Location 20 Welcher Ave Peekskill NY 10566

Owner Kurtsam Realty 383 Quaker Ridge Road Croton-on-Hudson NY Address

Contractor RADATA INC Address 27 Ironia Rd Flanders NJ

Dimensions (overall) 40' x 40' Materials Schedule 40 PVC

Foundations
- Thickness below grade ..... Materials below grade .....
- Thickness above grade 7' EXISTING Materials above grade .....

Footings: Dimensions ..... Depth below grade ..... ft. ..... in.

Thickness of
- Outside Walls — 1st 2nd 3rd 4th 5th 6th
- Division Walls

Stories High ..... Distance from Street line .....

Kind of Roof ..... Material of Roof .....

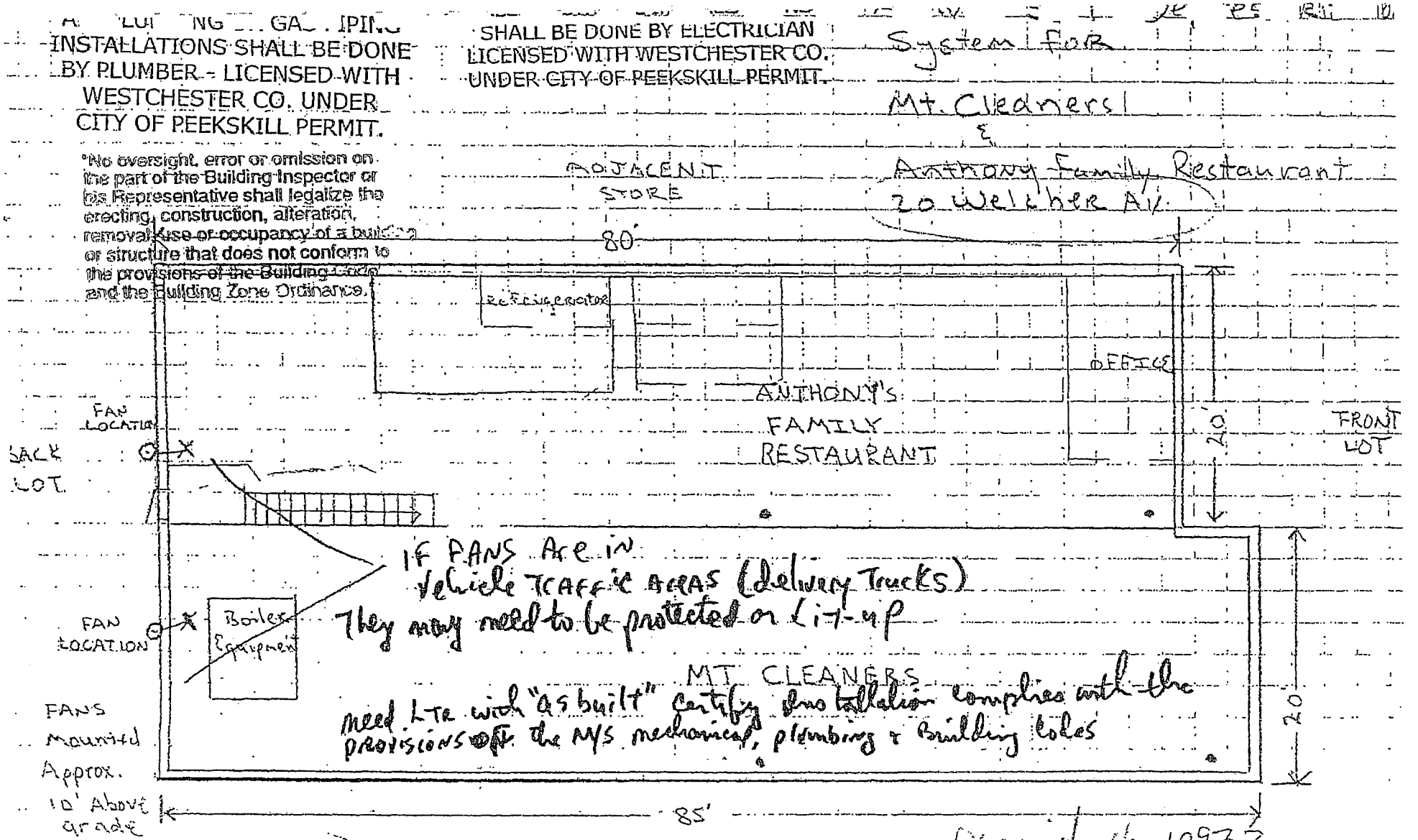
Size of joists 1st 2nd 3rd 4th 5th 6th

Special Conditions Issued Subject to notes on plan and field inspections

Date of issue Nov 1 20 23 Expiration date Nov 1 20 24

Director of Public Works

This Permit is granted upon the express condition that every person acting under same shall conform to the representations of the application thereof as well as all Building, Zoning and other Ordinances of the City of Peekskill and Statutes of this State. This permit must be kept on the work to which it applies at all times during working hours, and may be revoked at any time for a breach of its conditions.


INSTALLATIONS SHALL BE DONE BY PLUMBER - LICENSED WITH WESTCHESTER CO. UNDER CITY OF PEEKSKILL PERMIT.
SHALL BE DONE BY ELECTRICIAN LICENSED WITH WESTCHESTER CO. UNDER CITY OF PEEKSKILL PERMIT.
"No oversight, error or omission on the part of the Building Inspector or his Representative shall legalize the erecting, construction, alteration, removal, use or occupancy of a building or structure that does not conform to the provisions of the Building Code and the Building Zone Ordinance.
System for
Mt. Cleaners
&
Anthony Family Restaurant
20 Weicher Ave.
ADJACENT STORE
80'
Refrigerator
OFFICE
ANTHONY'S FAMILY RESTAURANT
FAN LOCATION
BACK LOT
FRONT LOT
20'
IF FANS Are in Vehicle TRAFFIC AREAS (delivery Trucks) They may need to be protected or Lift-up
FAN LOCATION
Boiler Equipment
MT. CLEANERS
need LTR with "as built" certify installation complies with the provisions of the M/S mechanical, plumbing & Building Codes
20'
FANS mounted Approx. 10' Above grade
85'
PIPE WILL BE SCHEDULE 40 3" or 4"
Cast IRON PIPE WILL BE USED IN OCCUPIED SPACE
DRIVE
Permit # 10933
107 KB
x Suction Points
. Proposed Suction Points

BY THIS CERTIFICATE OF COMPLIANCE THE

NEW YORK ELECTRICAL INSPECTION SERVICES

150 White Plains Road, Suite 104, Tarrytown, NY 10591

CERTIFIES THAT

Upon the application of:

Conte Electric Inc. - Victor Conte

34 Brook Street

Croton-on-Hudson, NY 10520

Upon premises owned by:

Kurtsam Realty Corp -

20 Welcher Avenue

Peekskill, NY 10566

Located at: 20 Welcher Avenue, Peekskill, NY 10566

Application Number: 10067092

Certificate Number: 10067092

Section: 42.8 Block: 1 Lot: 1 BDC: 144 Permit Number: 10934

A visual inspection of the electrical system at this premise described as a Commercial occupancy, wherein the premises electrical system consisting of electrical devices and wiring, described below, located in/on the premises at: 20 Welcher Avenue, Peekskill, NY 10566

Basement, Outside. was inspected in accordance with the NYS and NFPA 70-99 and the detail of the installation, as set forth below, was founded to be in compliance therewith on the 11 Day of December 2007.

Name	Date	Quantity	Rating	Circuit	Type
Receptacle		2			Convenience
Switch		2			A/C

D. Morabito

Officer: Nick Morabito

This certificate may not be altered in any way and is validated only by the presence of a raised seal at the location indicated.

This certificate is valid for work preformed before date of inspection only. jmccue 4

Dec 17 07 01:00p Conte Electric Inc. 9142713387 p.2

David Greener
Director of City Services

Howard D. Wessells Jr.
General Foreman / Deputy Director

Edward A. Khuns III
Water Superintendent

Vince Powell
Asst. Water Superintendent

Victor Pizzella
Building Inspector

CITY OF PEEKSKILL
DEPARTMENT OF CITY SERVICES
Bureau of Public Works

Cert. Number 1492 Fee $50.00 Ck# 26468

CERTIFICATE OF COMPLIANCE

DATE ISSUED	December 24, 2007	TO	Radata, Inc.
PERMIT NUMBER	10938	LOCATION	20 Welcher Avenue
SECTION	42.8	BLOCK	1 LOT 1
USE DISTRICT	C – 1 A		

The following described construction project complies with all applicable laws and permission is hereby granted for its

USE: Soil depressurization system.

APPROVED

Brian O. Havranek

Building inspector

City Hall • 840 Main Street • Peekskill, NY 10566 • (914) 734-4130 • *fax* (914) 734-2770

ATTACHMENT

7

PROVIDED AS A SEPARATE DOCUMENT

ATTACHMENT

8

RAdata, Inc.

27 Ironia Road, Unit 2
Flanders, New Jersey 07836
973-927-7303 973-927-4980 fax
1-800-447-2366

OPERATIONS AND MAINTENANCE SCHEDULE FOR THE ACTIVE SOIL DEPRESSURIZATION SYSTEMS FOR THE BLUE MOUNTAIN PLAZA PEEKSKILL, NEW YORK

The blower units used in the active soil vapor depressurization systems are maintenance free and require no attention until the U-Tube manometers indicate the fan unit has failed.

90 DAY SERVICE: RAdata, Inc. recommends that the magnehelic gauges be observed and checked for proper blower functions every 90 days to ensure the proper function of the fan units. Refer to As Built Drawings provided by RAdata, Inc. for system locations

YEARLY SERVICE: It is recommended that the active soil depressurization systems be serviced on a yearly basis. That work will consist of:

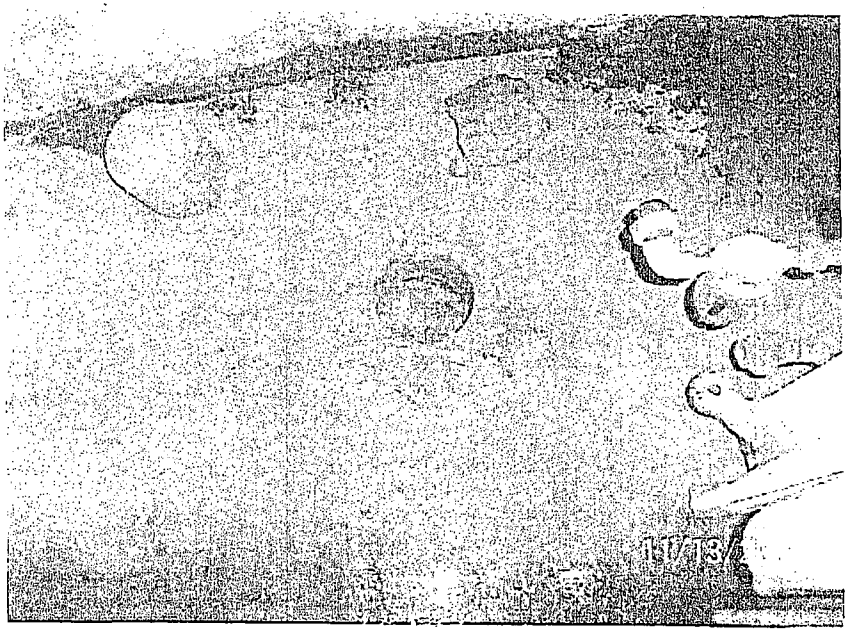
- Removing and cleaning fan, note fans condition
- Adjust worm drive
- Check pipe clamps for breakage
- Check for moisture in pipe and make corrective adjustments if necessary
- Re-caulk all floor penetrations where accessible
- Check magnehelic manometers. Replace if necessary
- Register vacuum measurements
- Check electrical connections
- Measurement sub-floor communication
- Add system labeling if necessary
- Check all fire barriers
- Check for moisture under floor

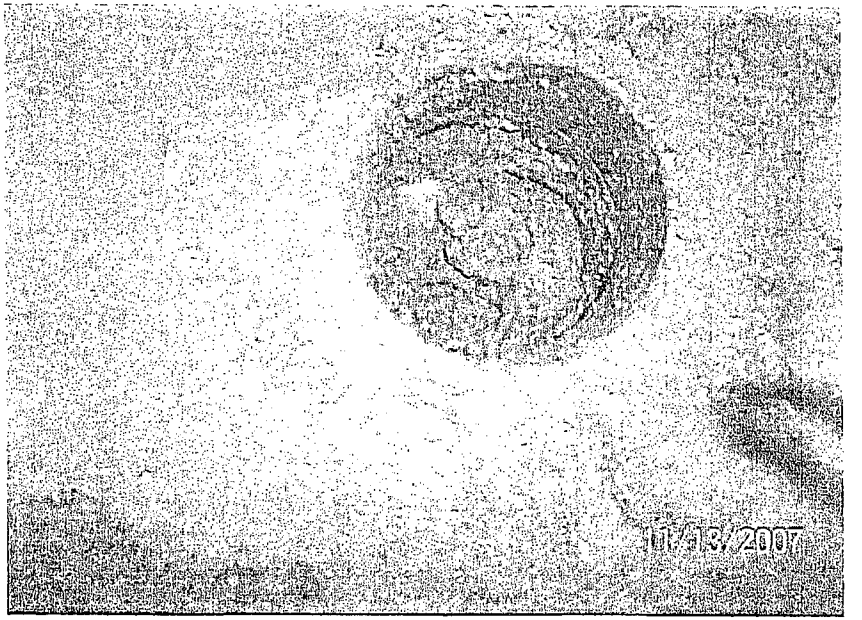
Please contact our office for additional information regarding service on the active soil depressurization systems.

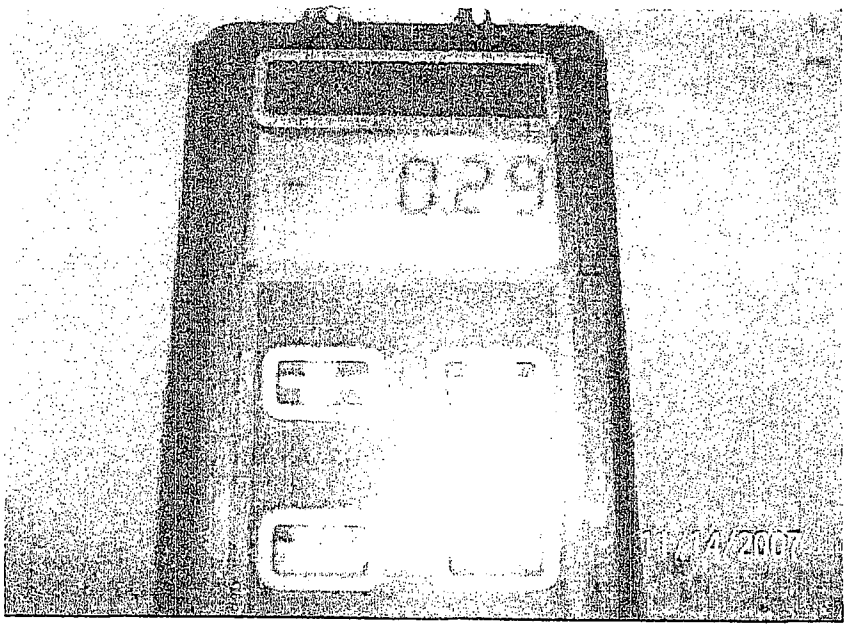
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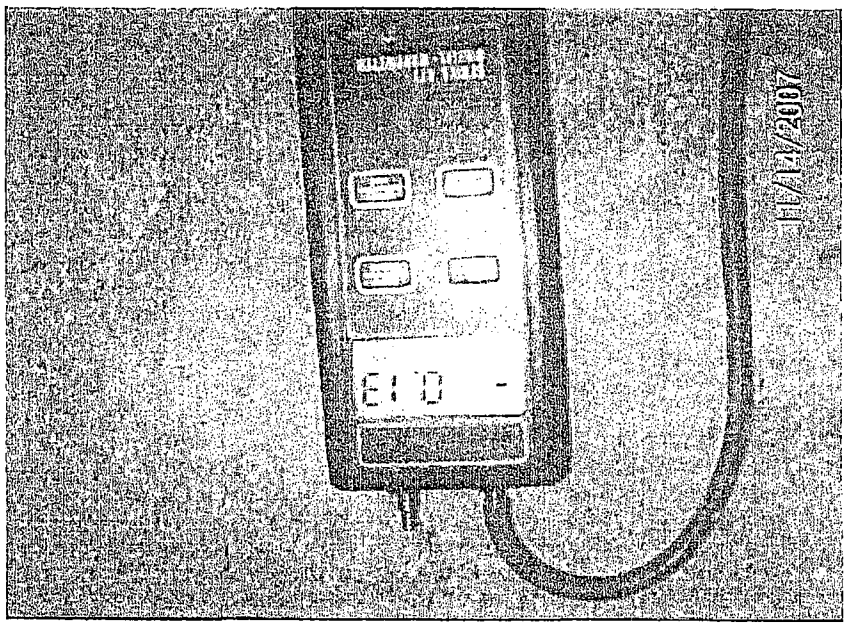
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20 Wilcher Ave Peaksill, NY

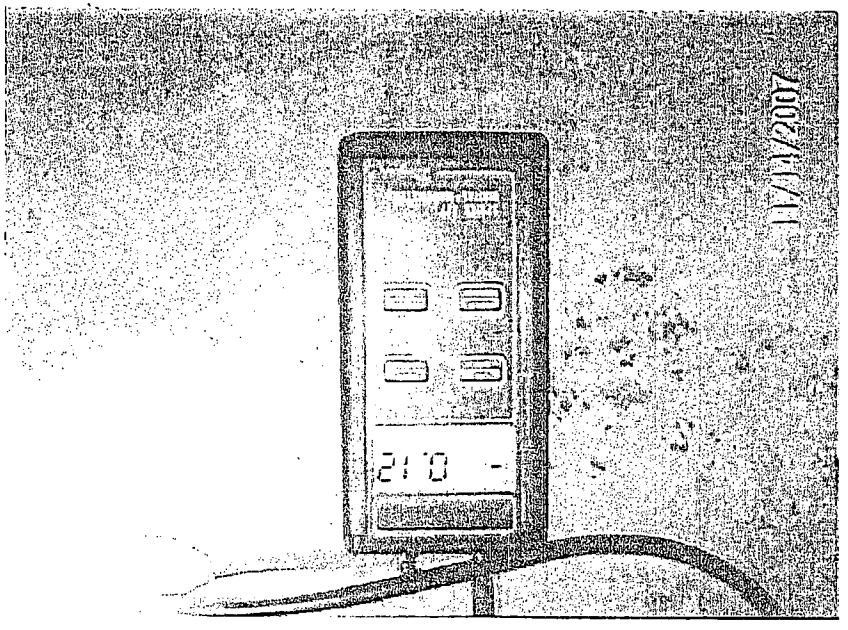


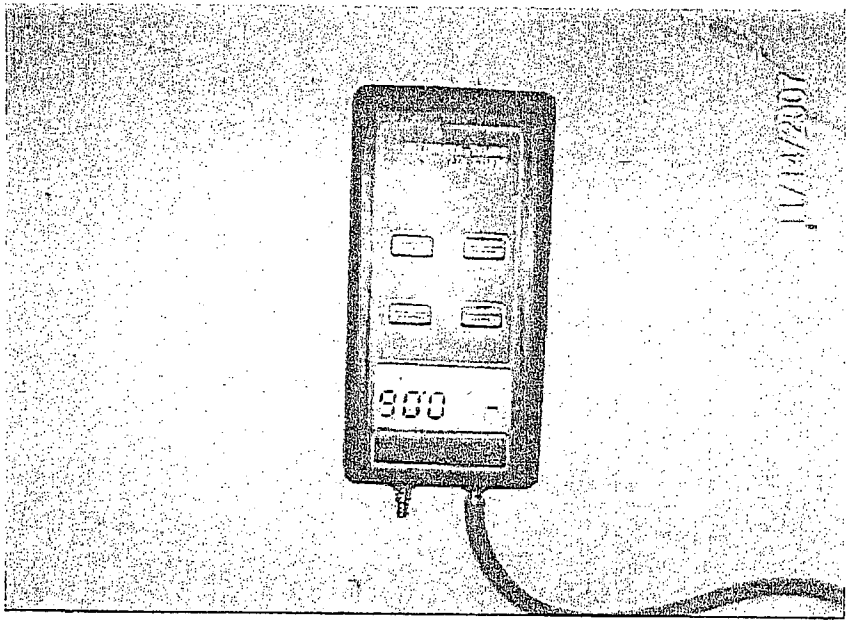


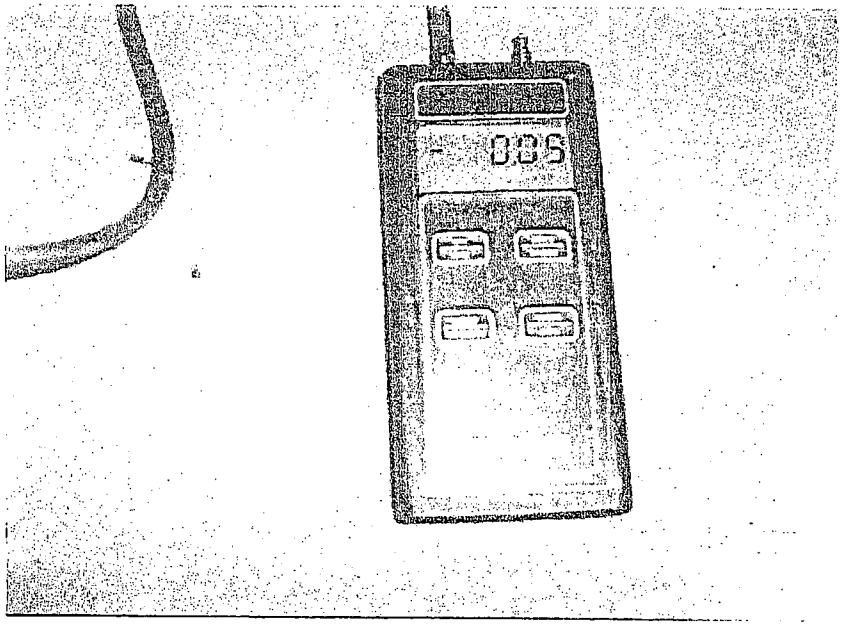


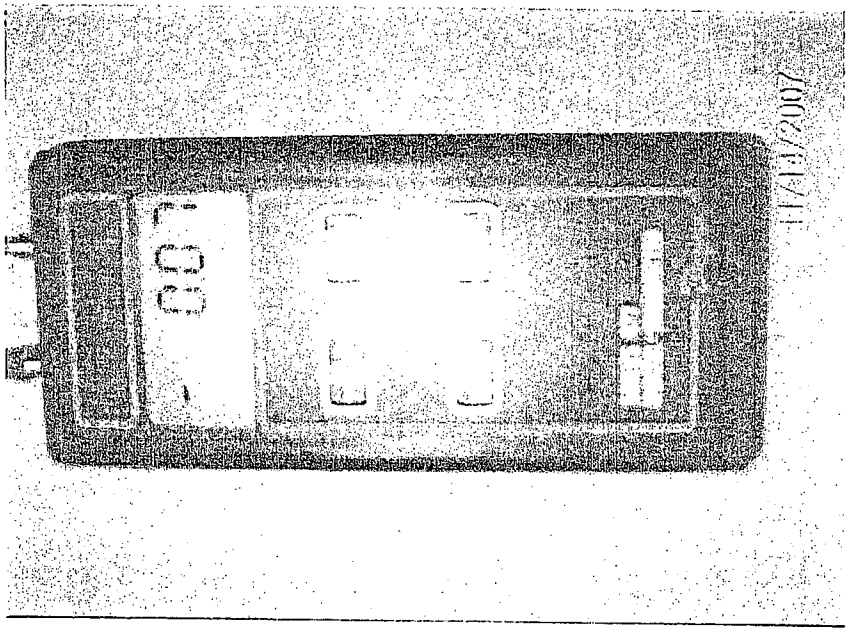


20 Welders Are Recalled, CPSC

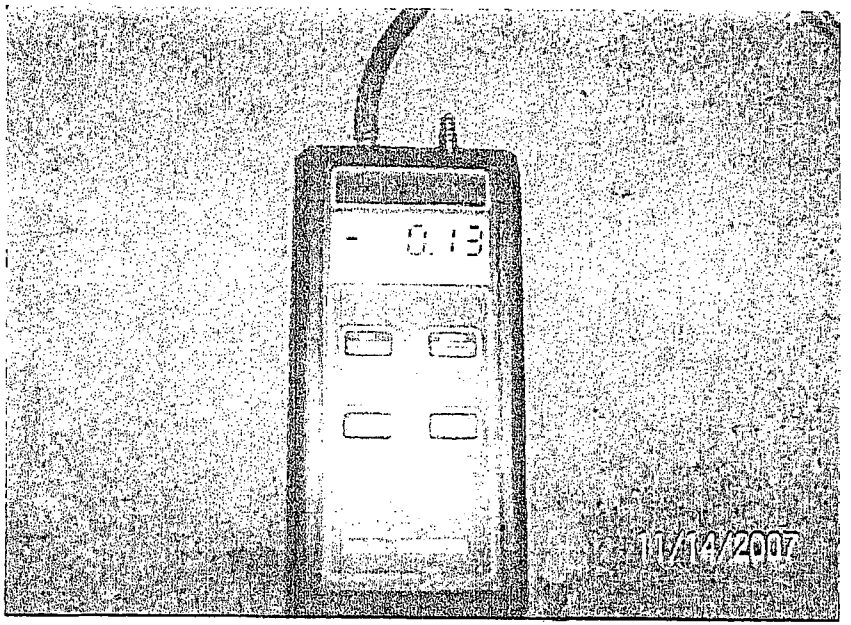


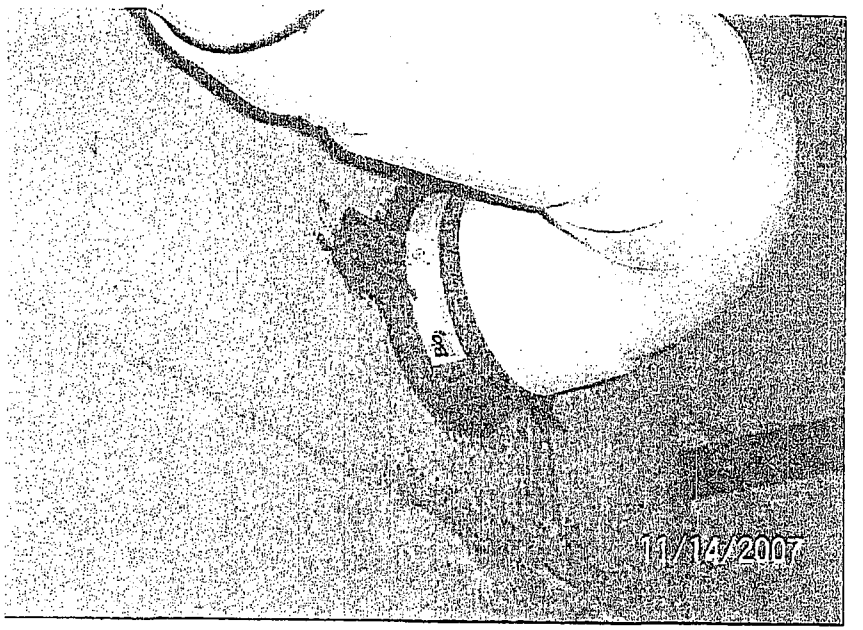


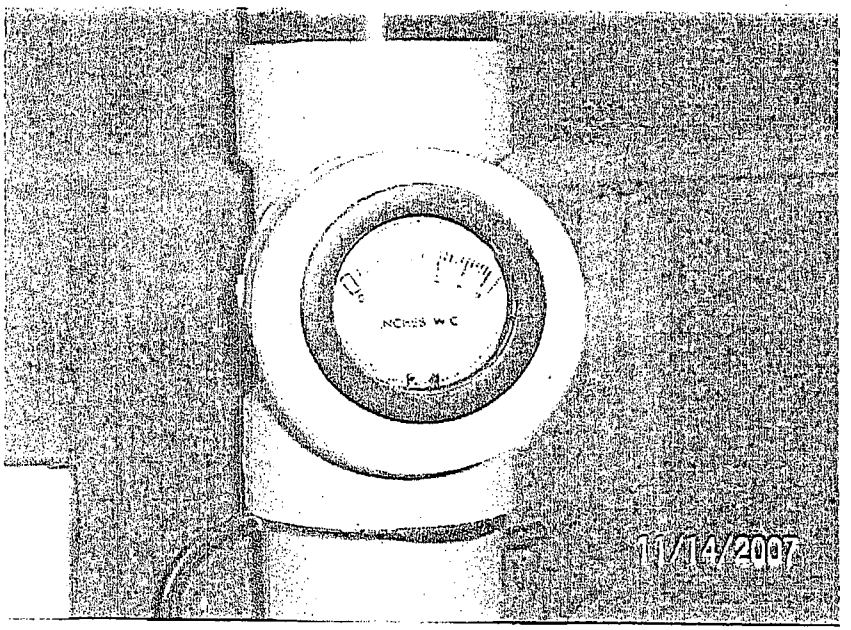


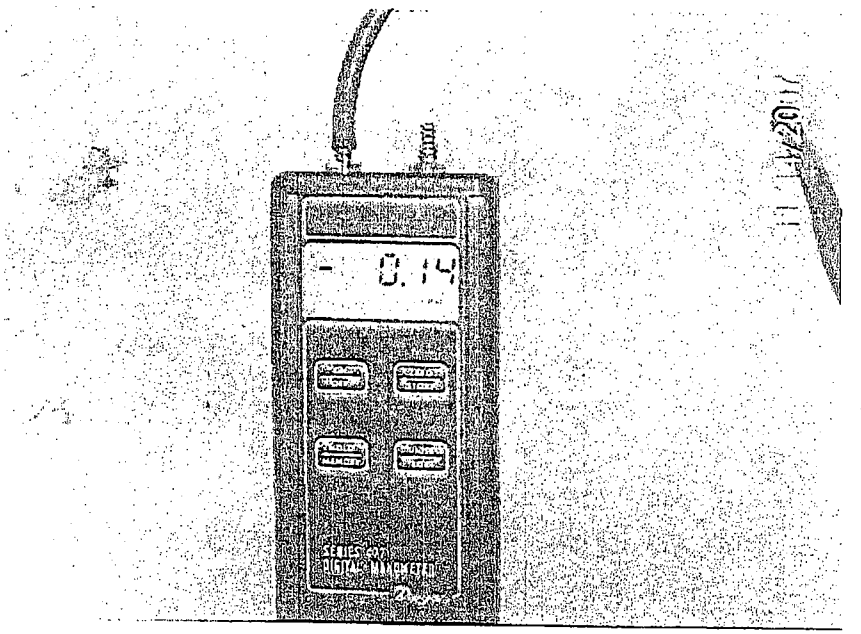


20 Wells are Partially In

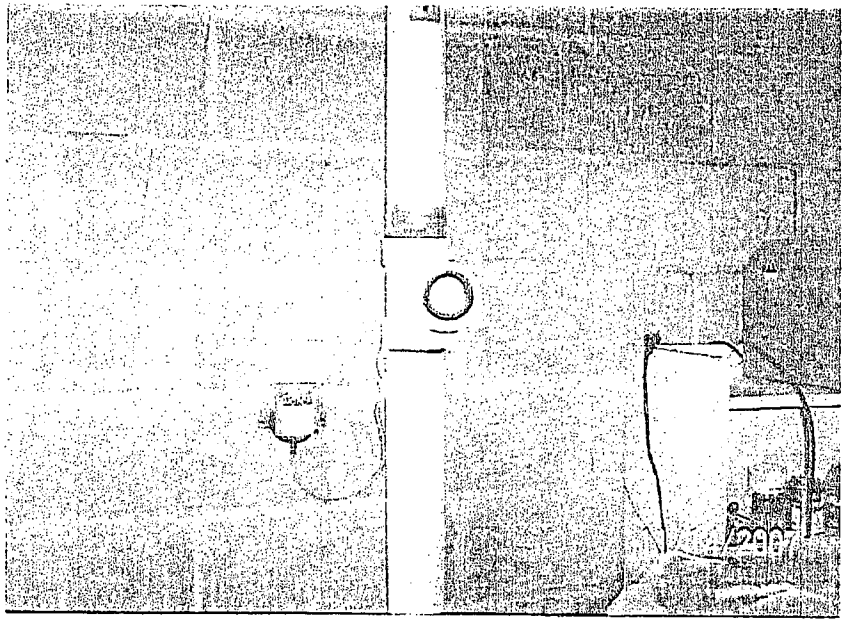


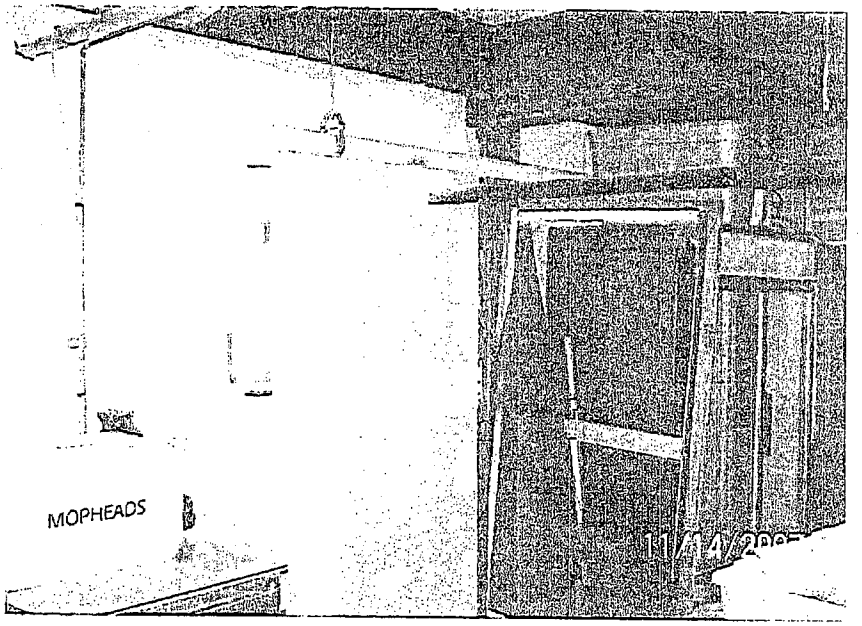


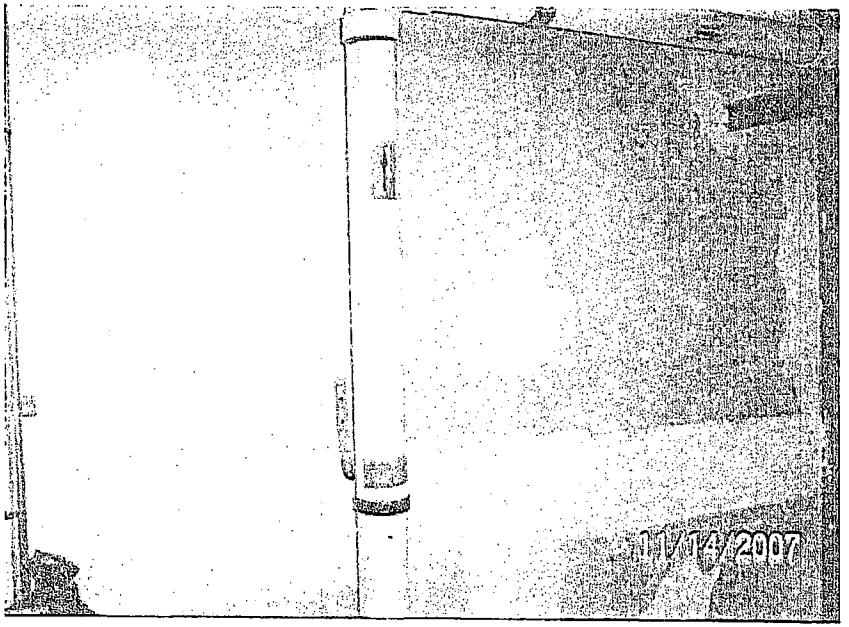


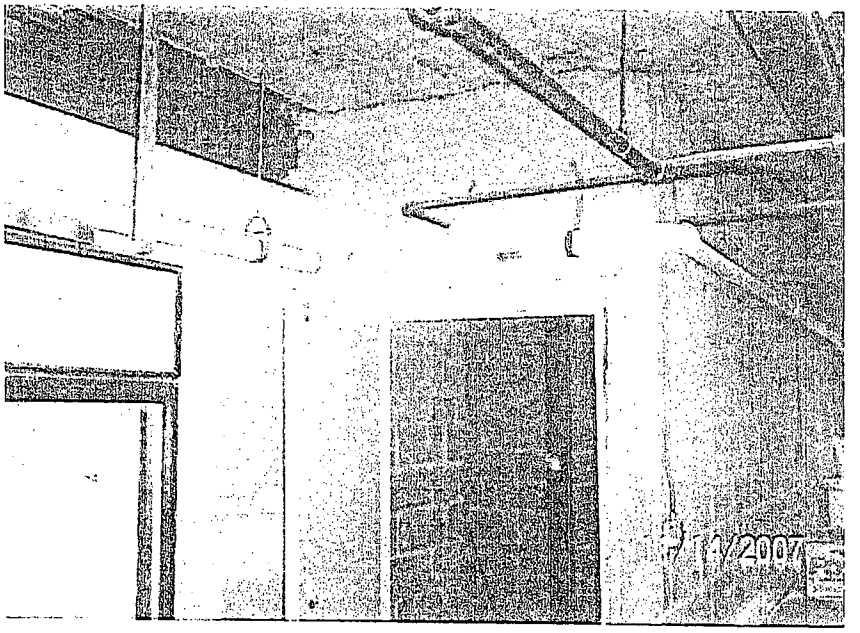


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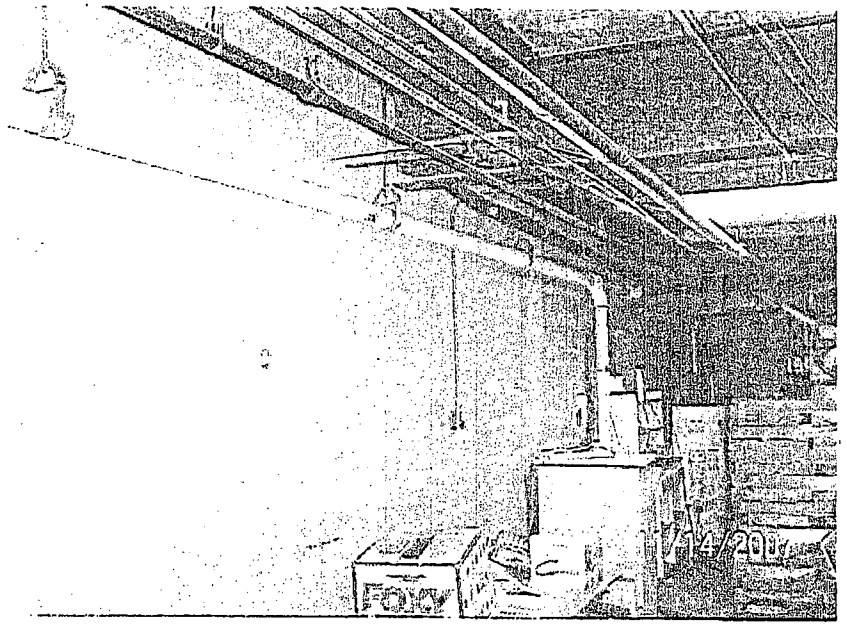


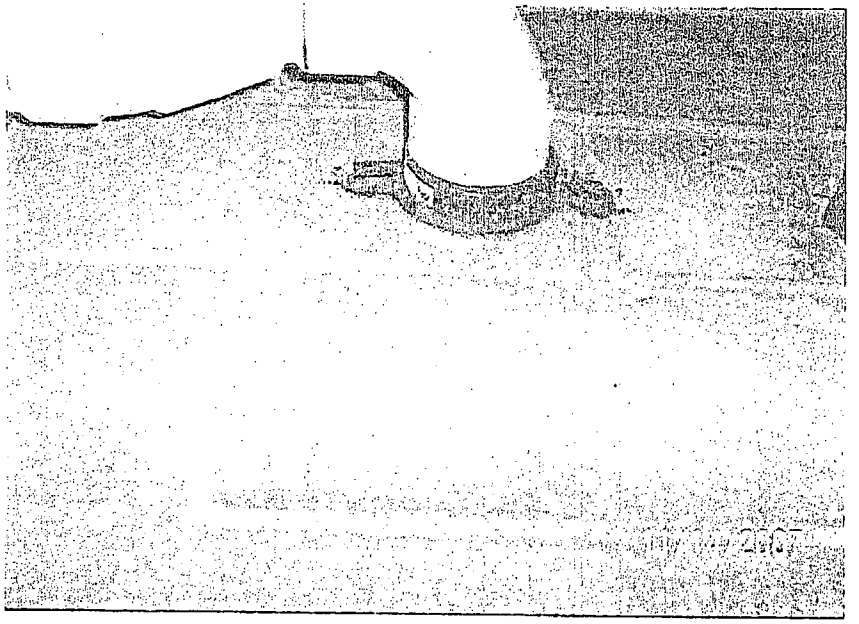


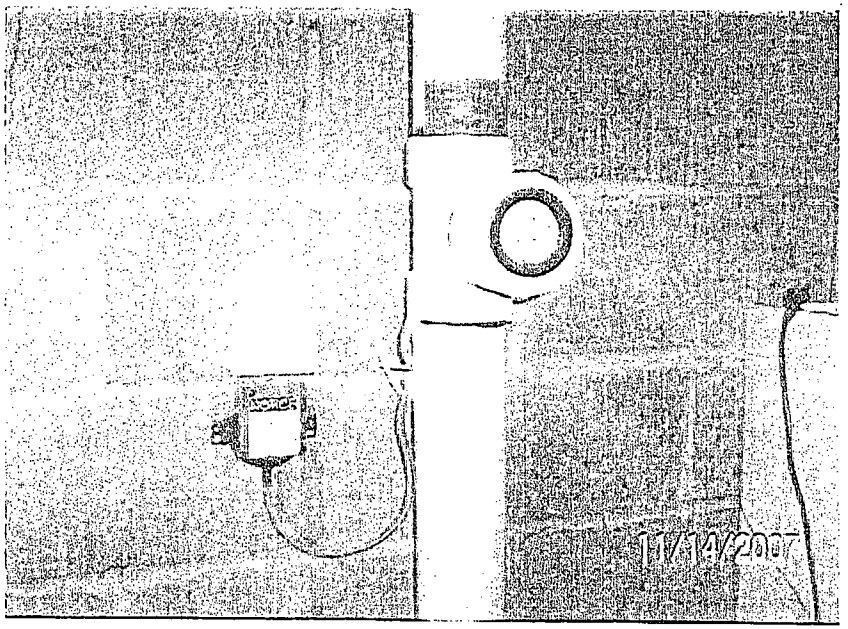


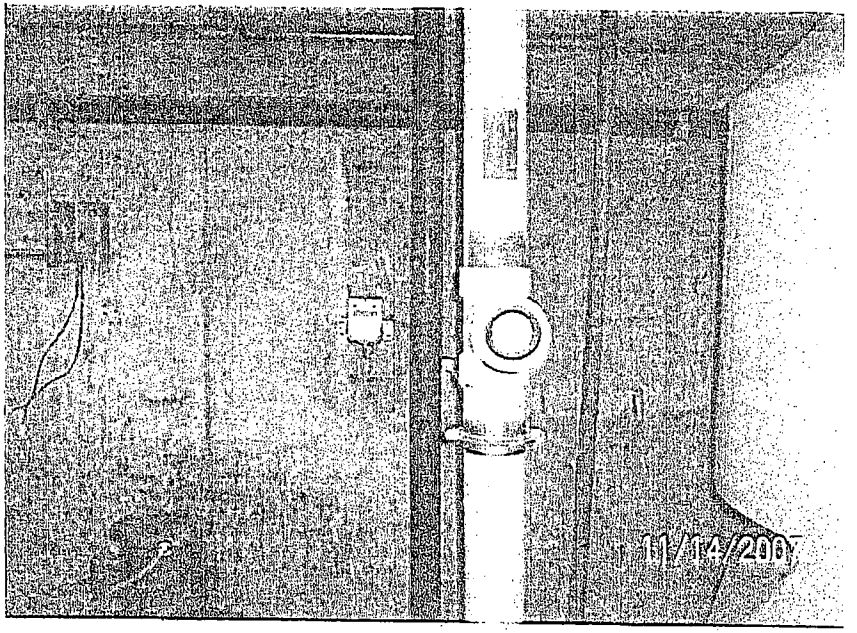


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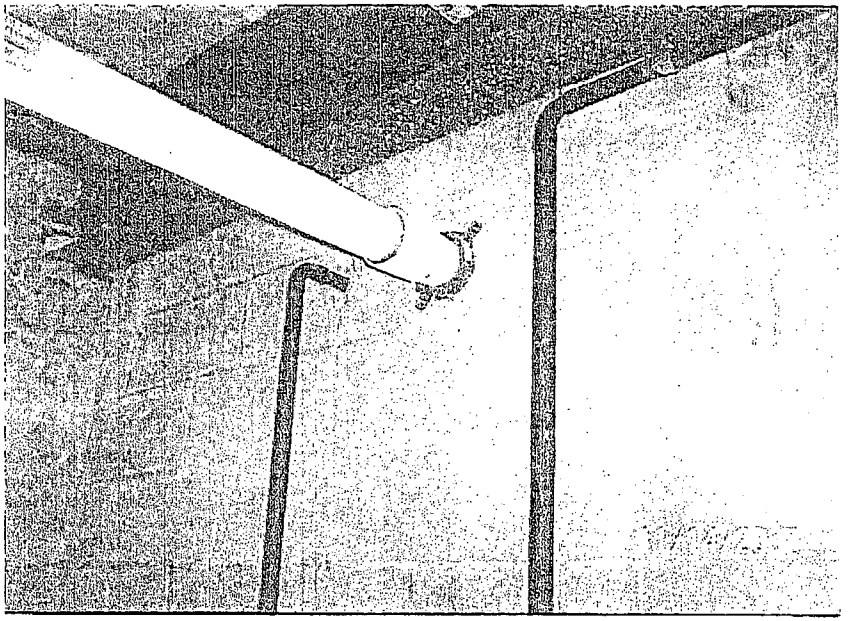


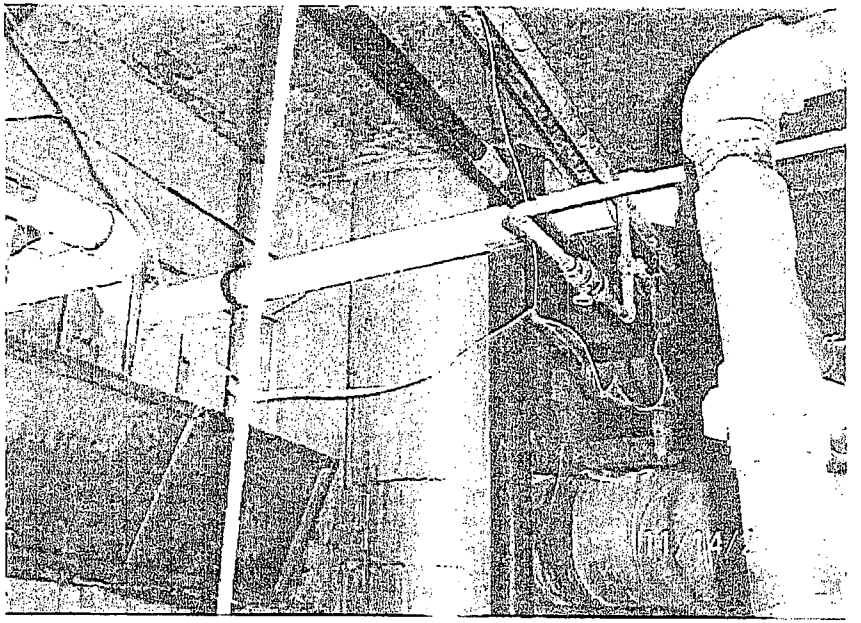


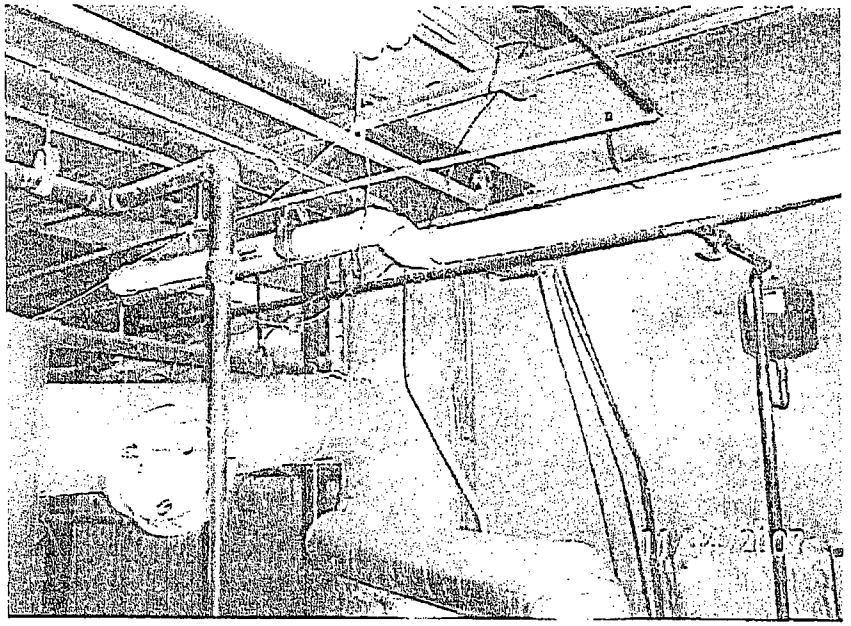


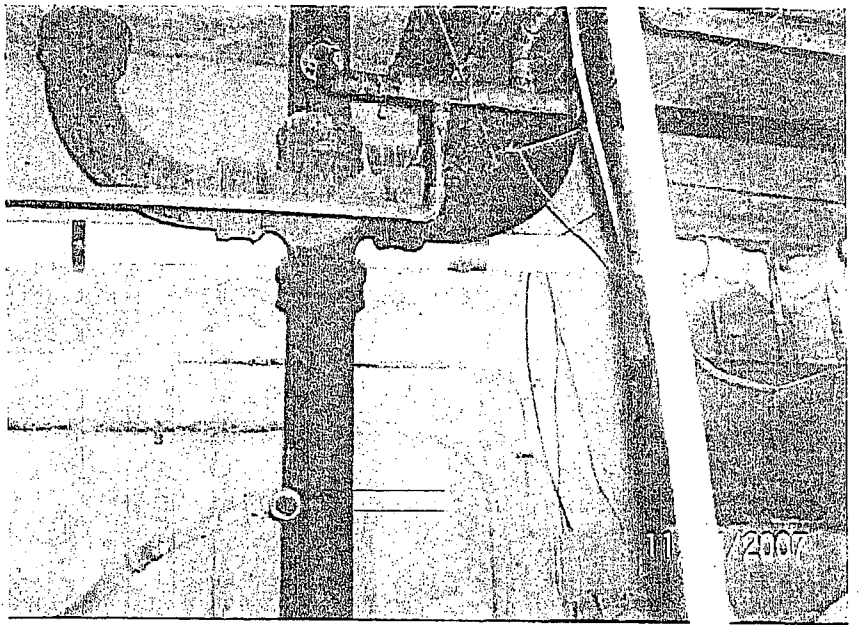


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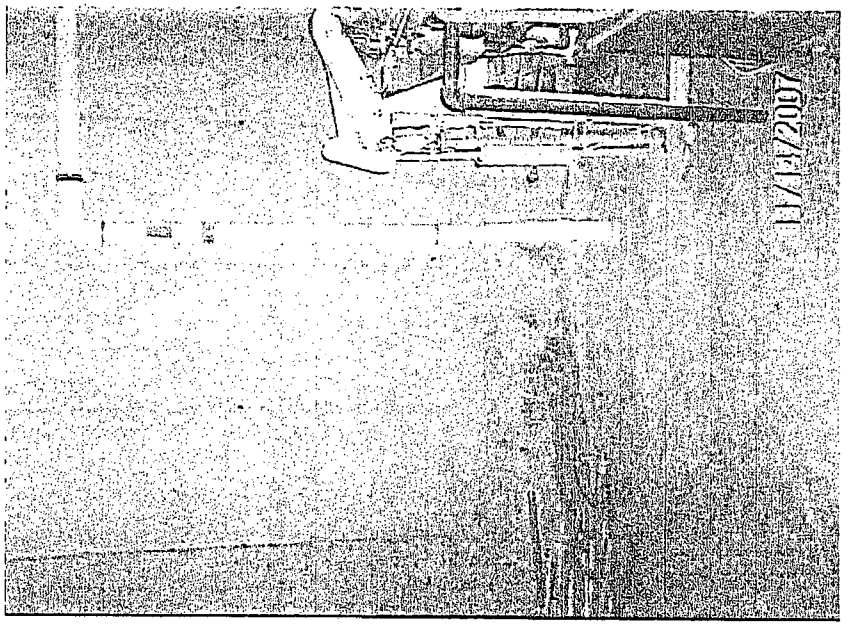


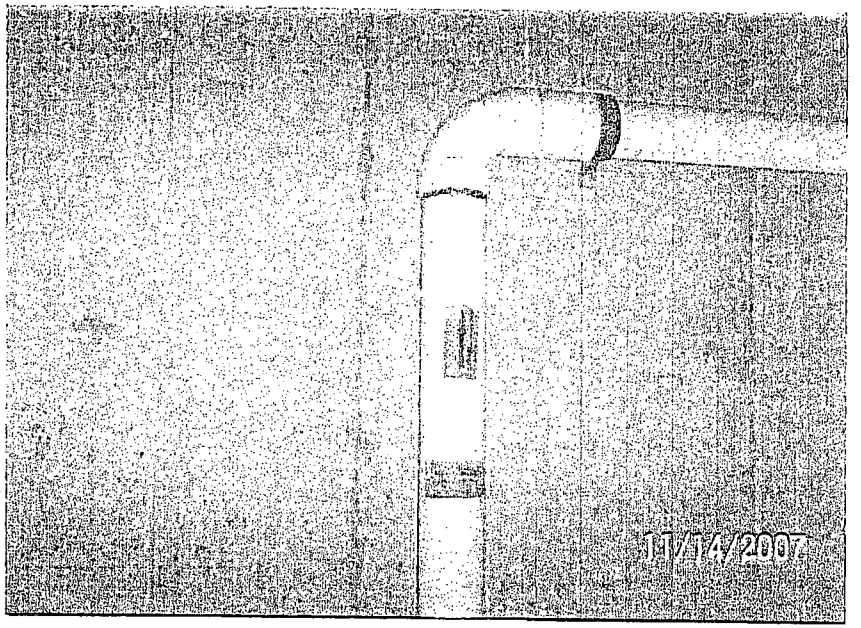


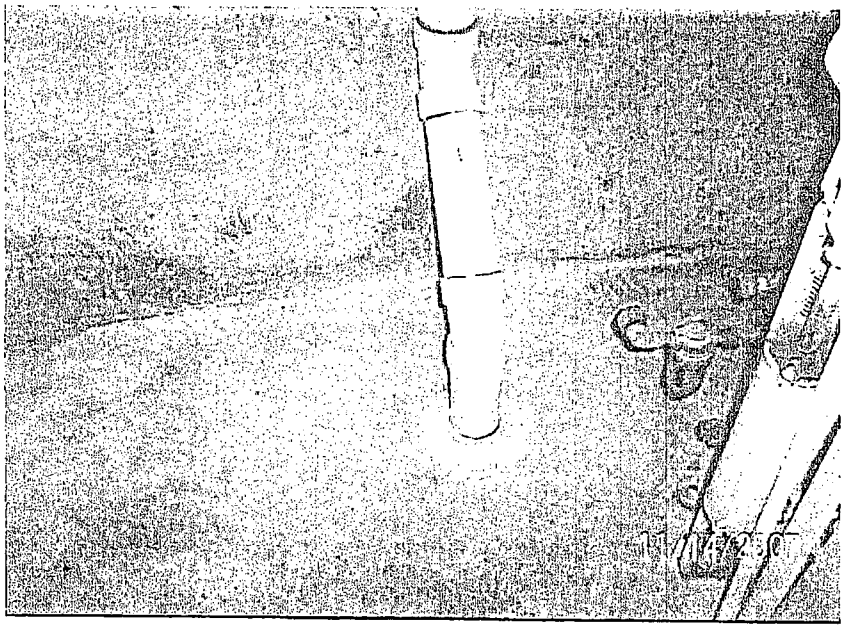


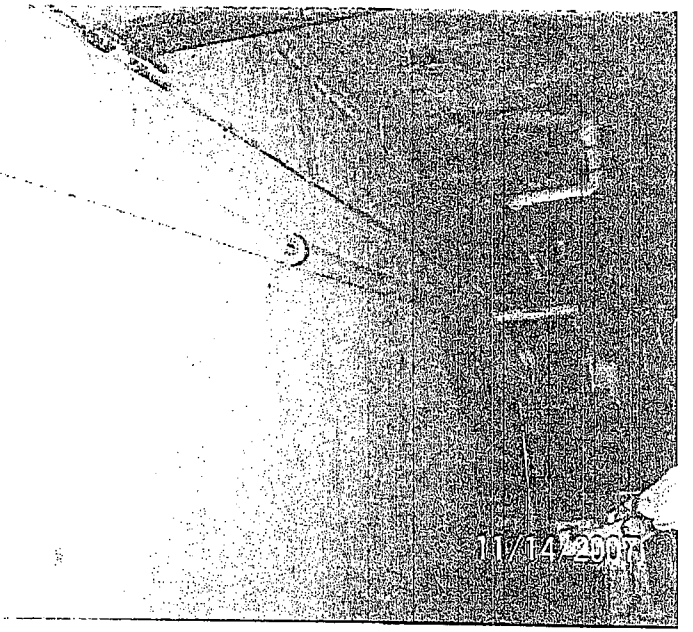


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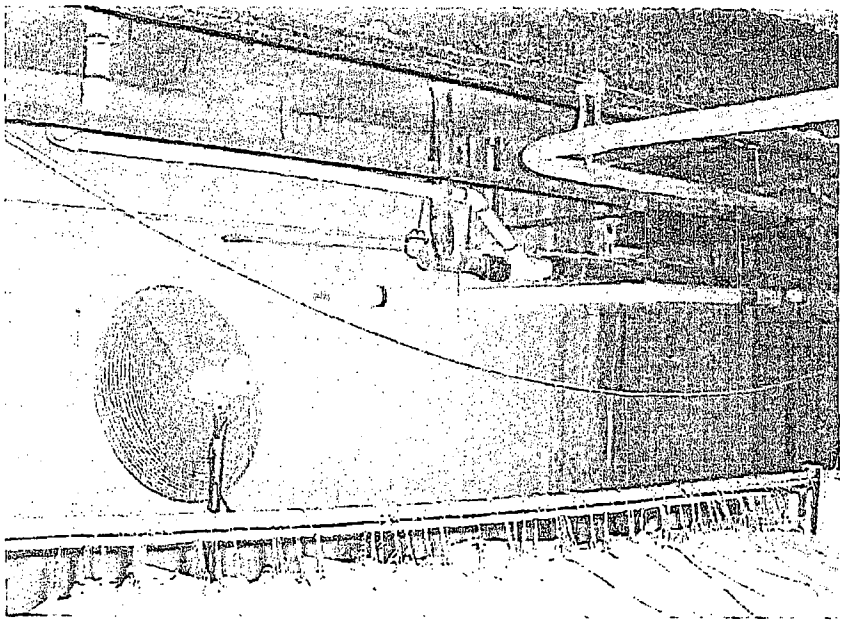


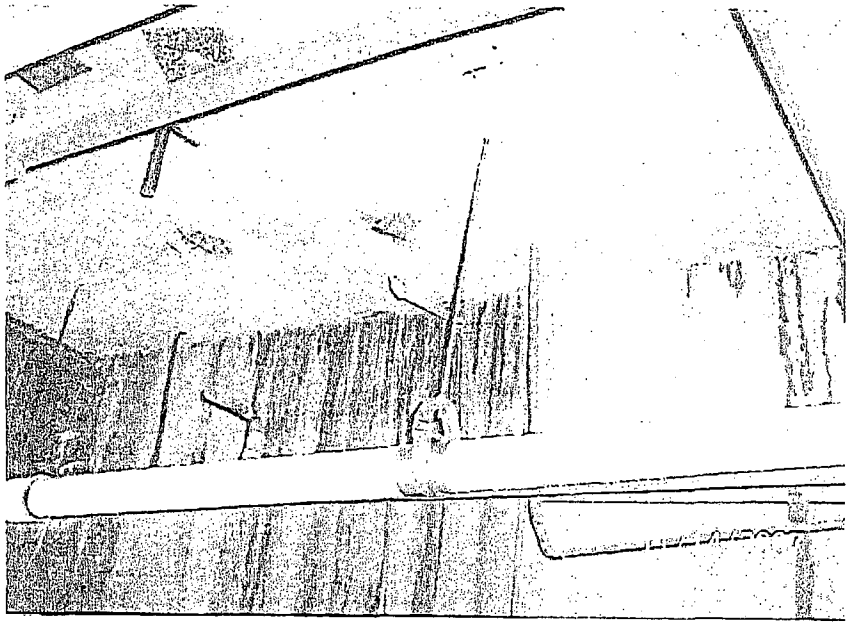


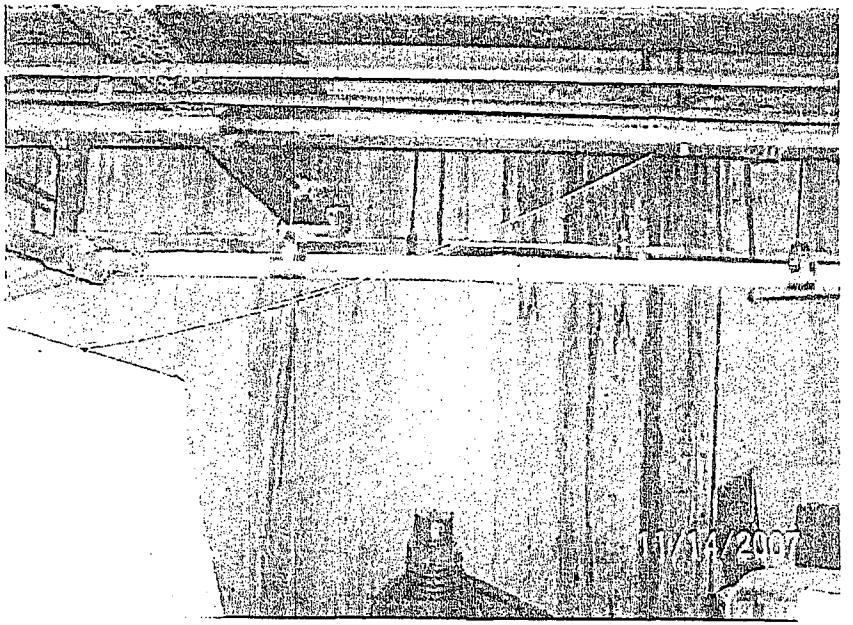


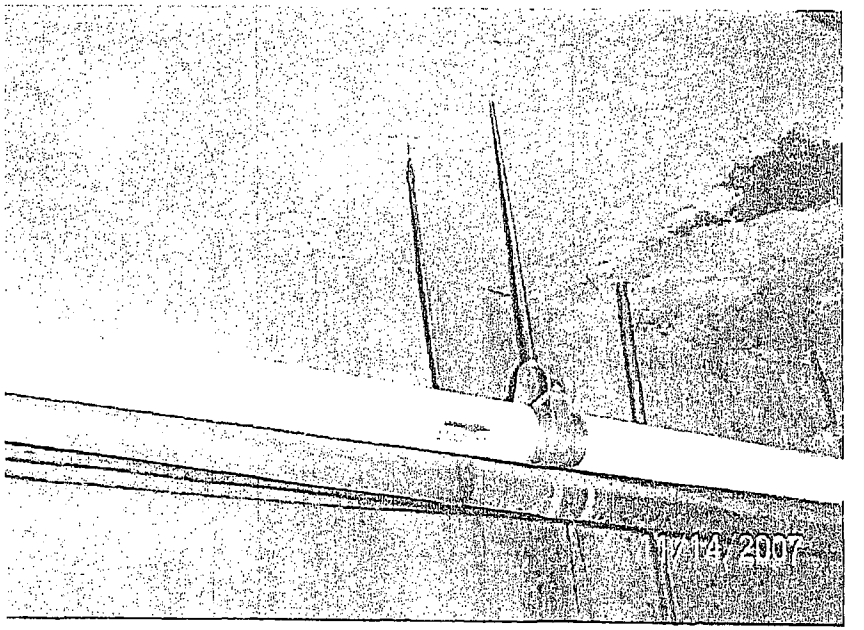


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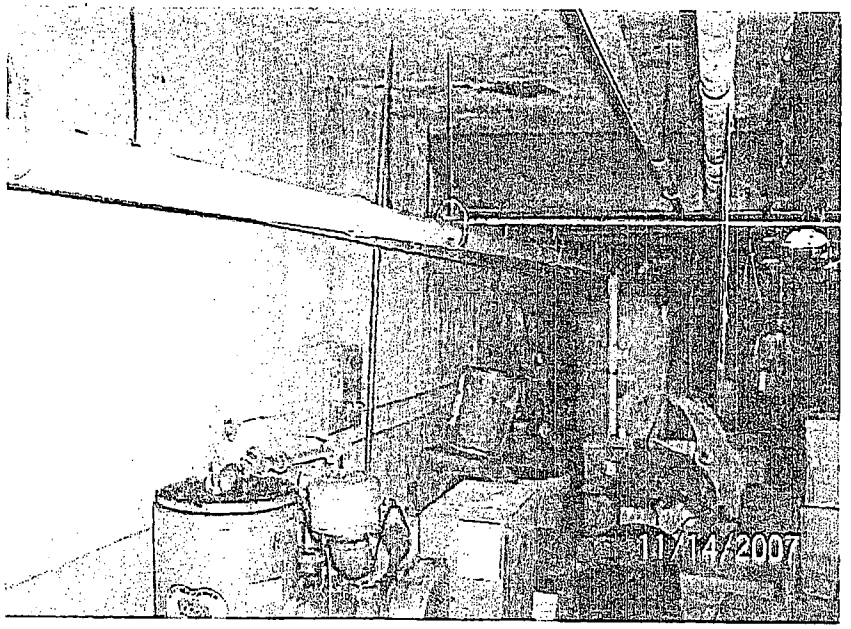


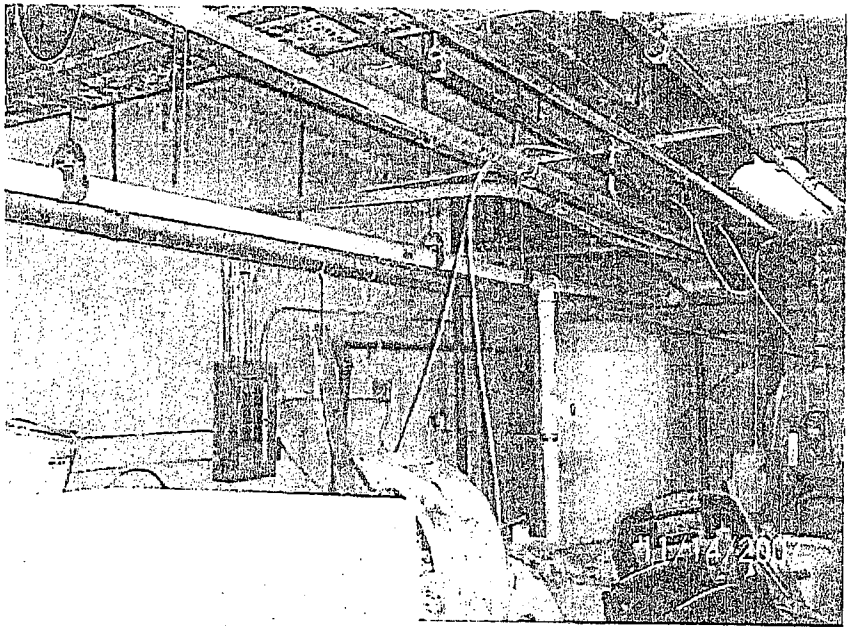


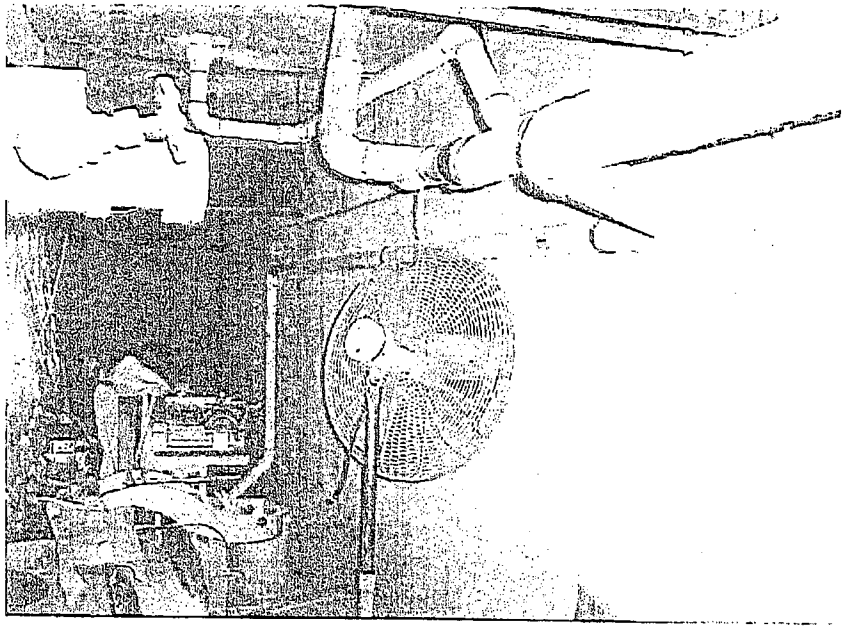


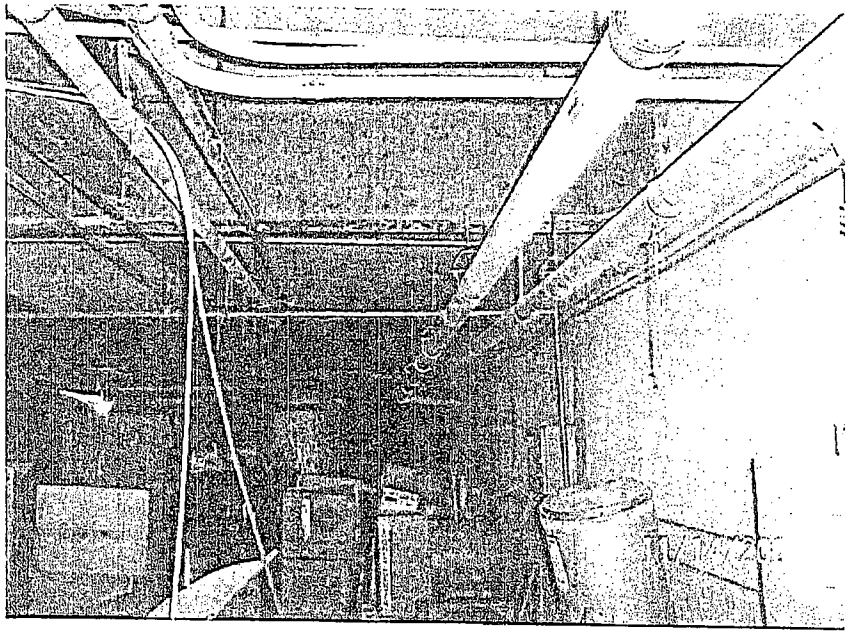


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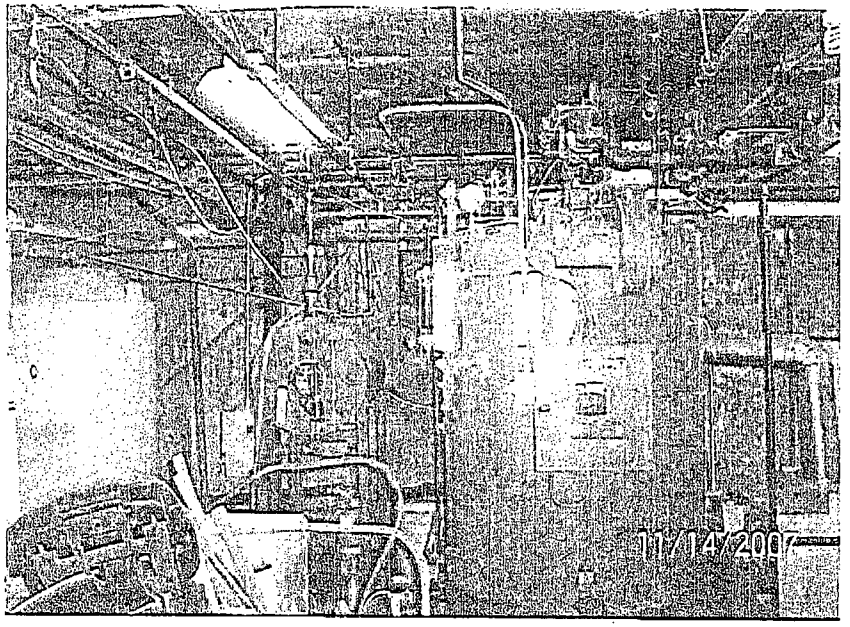


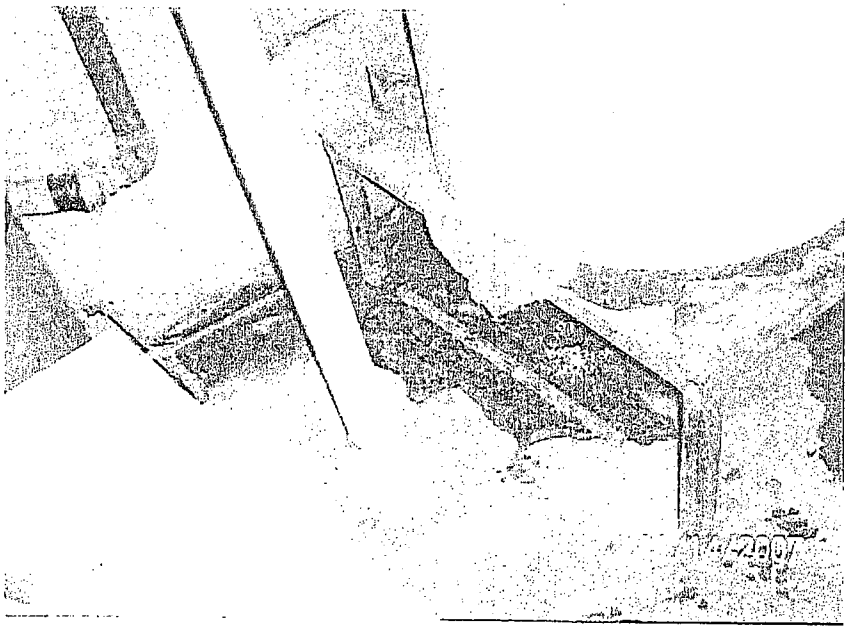


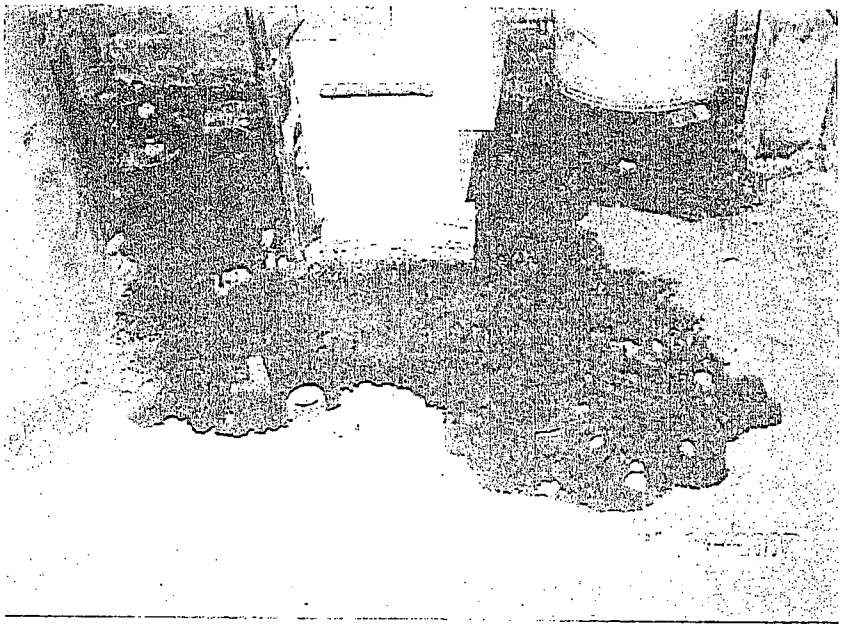


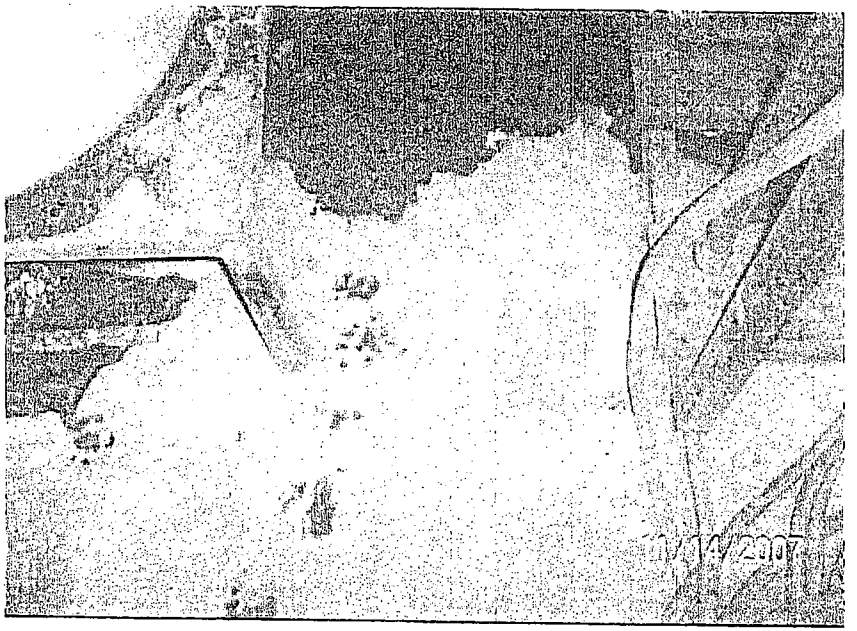


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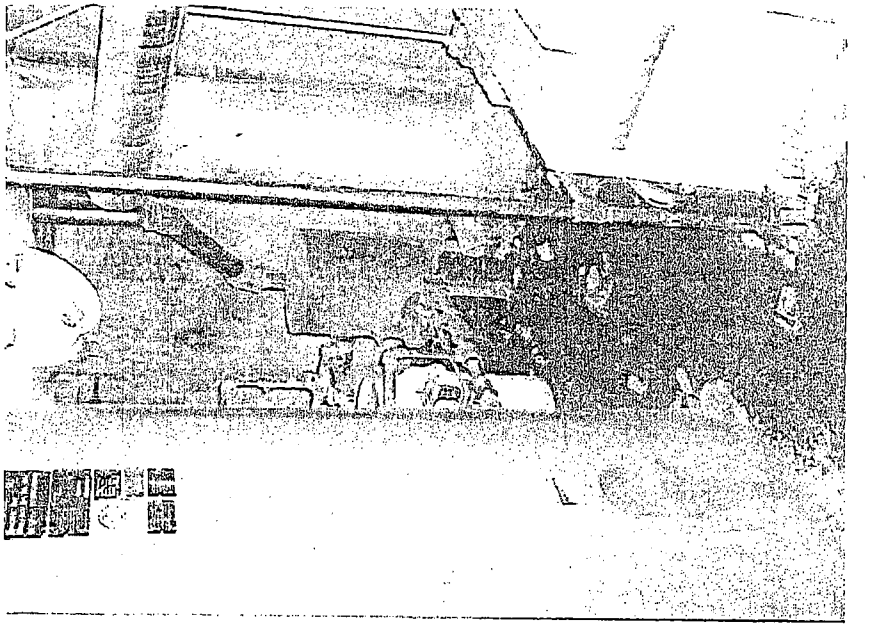


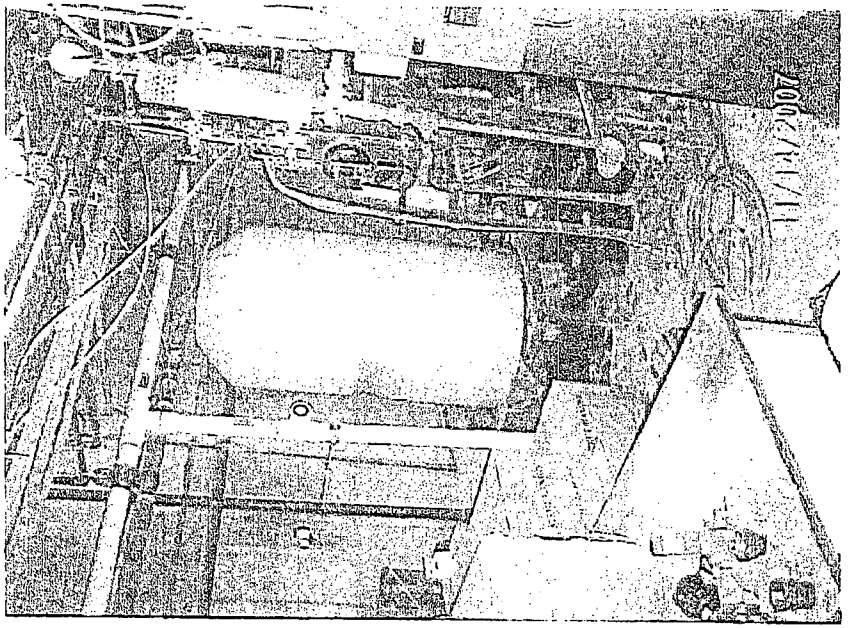




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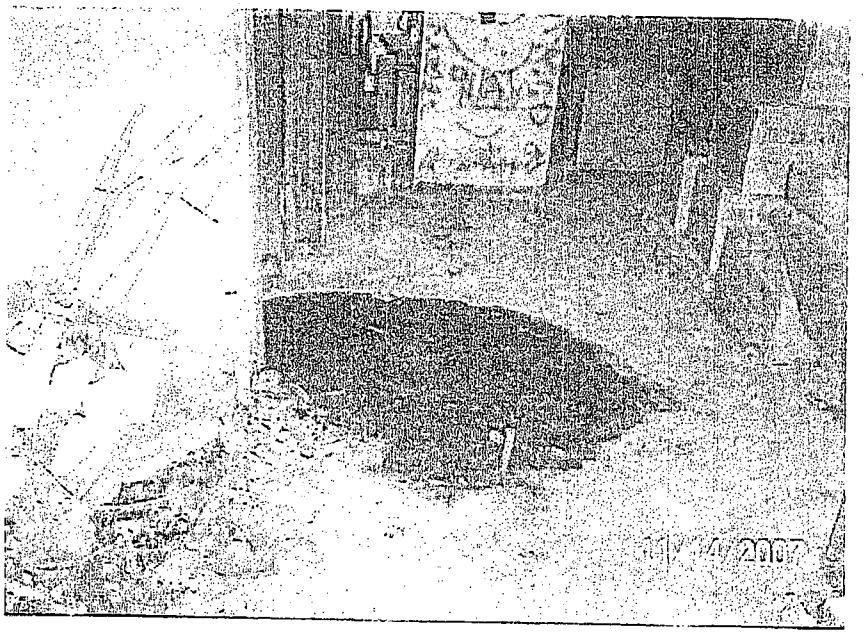


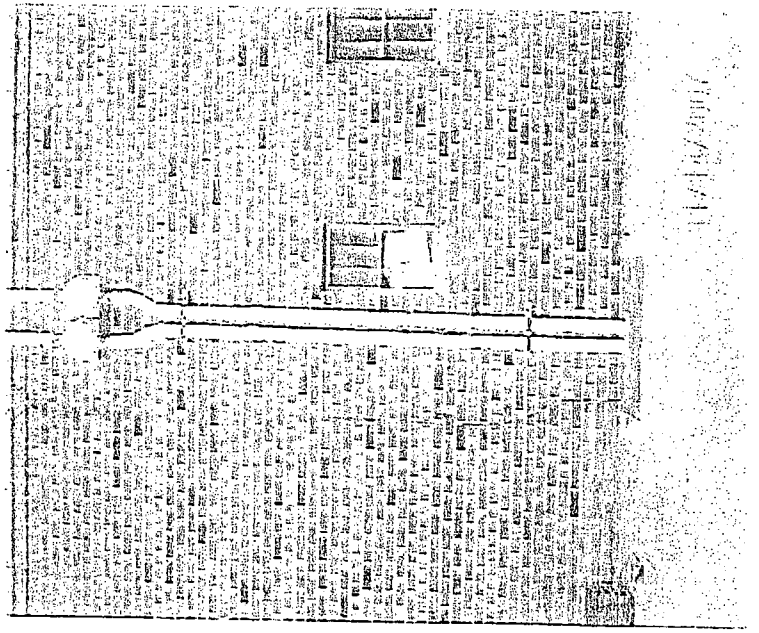


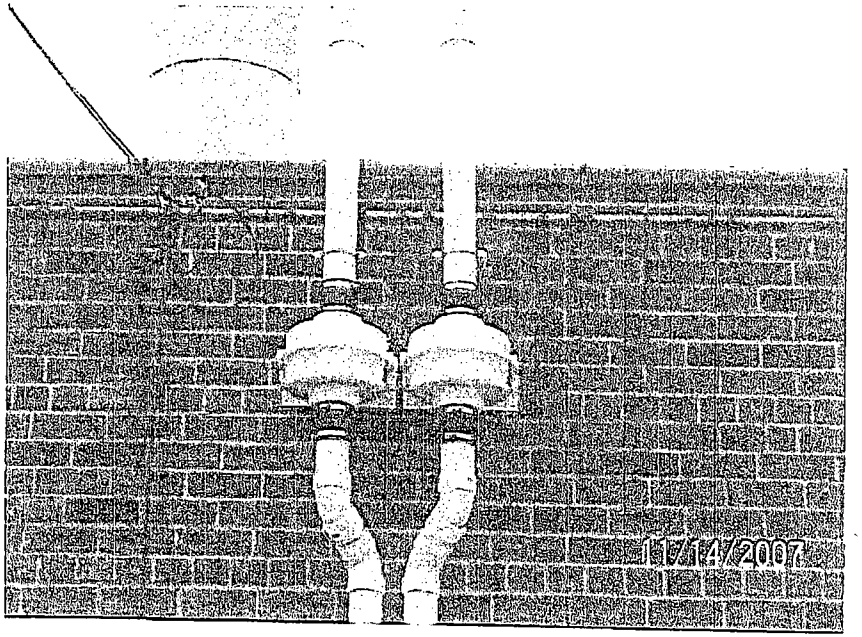


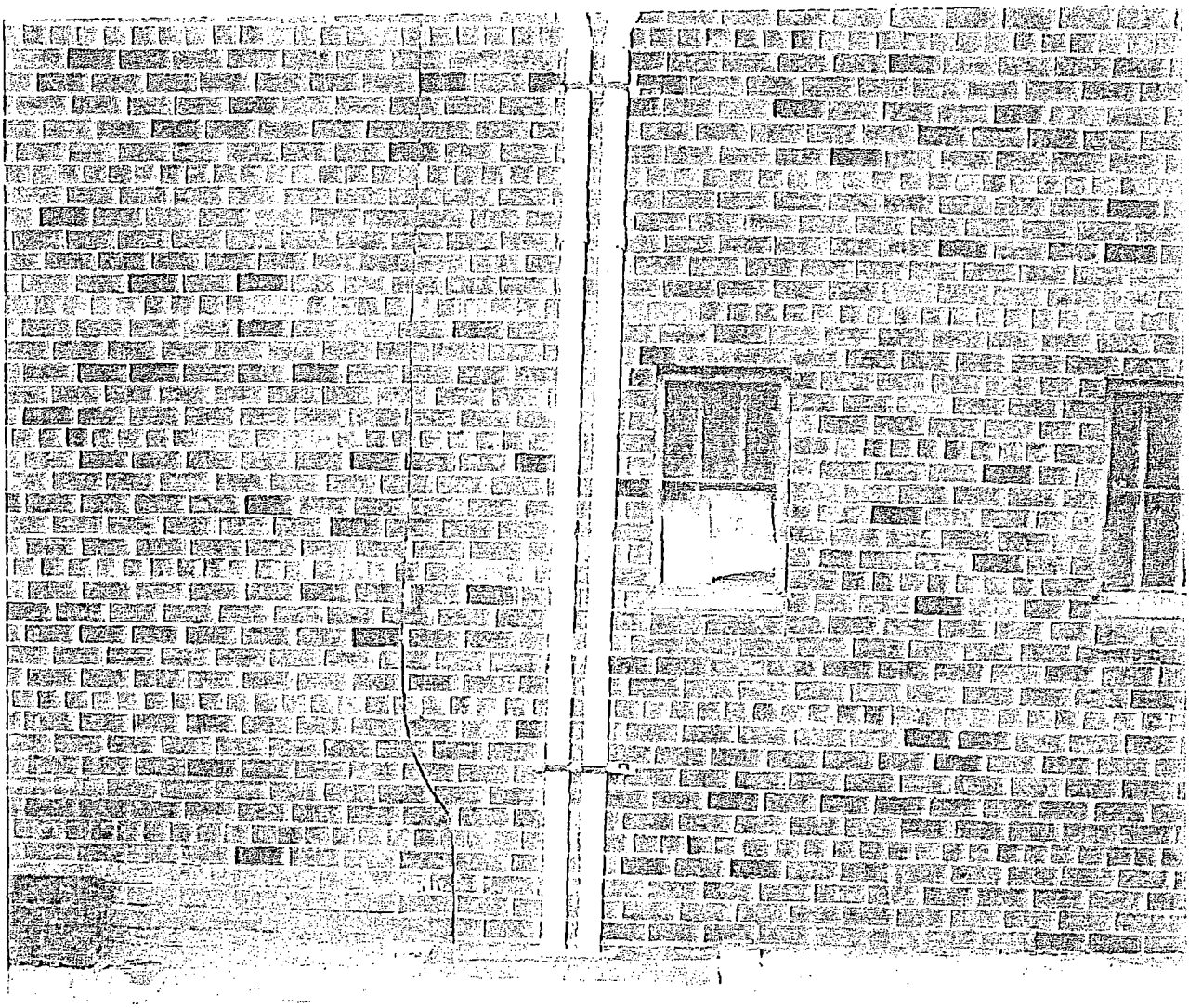
20 Welcher Ave Peekskill, NY











COPY

FINAL PROJECT REPORT FOR THE INSTALLATION OF ACTIVE SOIL DEPRESSURIZATION SYSTEMS AT THE BLUE MOUNTAIN PLAZA, 20 WELCHER AVENUE, PEEKSKILL, N.Y

Prepared for:

Kurtsam Realty
Box 383 Quaker Ridge Road
Croton-On-Hudson, New York 10520

Prepared by:

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RAdata, Inc.
27 Ironia Road
Flanders, New Jersey
Phone: (973) 927-7303 Fax: (973) 927-4980
E-Mail: dg@radata.com

January 14, 2011

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INSTALLATION OF ACTIVE SOIL DEPRESSURIZATION SYSTEMS

THE BLUE MOUNTAIN PLAZA, 20 WELCHER AVENUE, GO NO SEN KARATE DOJO, FITNESS KICKBOXING AND VACANT WASH "N" DRY, PEEKSKILL, N.Y

1.0 INTRODUCTION AND BACKGROUND

RAdata, Inc. has completed the installation of Active Soil Depressurization Systems (ASDS) at the Go No Sen Karate Dojo, Fitness Kickboxing and the vacant Wash "N" Dry located in The Blue Mountain Plaza at 20 Welcher Avenue in Peekskill, New York. This complex is owned by Kurtsam Realty. This work commenced on October 19, 2010 and was completed on October 21, 2010.

Indoor and soil air sampling was previously conducted at the site by Bell Environmental, 230 Route 206, Flanders, New Jersey. The results of these samplings show numerous volatile organic compounds (VOCs) that exceed the New York State Department of Health (NYDOH) background concentrations.

1.1 Site Description

The subject facility is a one-story masonry building with a basement. The basement is partitioned into two sections, one beneath the Go No Sen Karate Dojo and Fitness Kickboxing which is dissected into various use rooms and one beneath the vacant Wash "N" Dry. There is a concrete slab with masonry outer walls. The facility is a one story building approximately 18 feet high with a brick exterior. The age of the foundation is unknown. The building has a flat roof. Total square footage of indoor space is approximately 3,000 square feet +/-.

1.2 Site Contaminants

Air sampling conducted at the Blue Mountain Plaza property prior to the installation of the Active Soil Depressurization Systems detected the following contaminants exceeding the New York State Department of Health (NYDOH) background concentrations.

Acetone	Chloroform
Ethanol	Tetrachloroethene (PCE)
Trichlorofluoromethane	Trichloroethene (TCE)
Tetrahydrofuran	Total Xylenes
Cis-1,2-Dichloroethylene	Chloromethane

N-Hexane

2.0 MITIGATION APPROACH

The primary method for reducing soil borne pollutants according to the N.Y.D.O.H Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006) is Active Soil Depressurization Systems (ASDS). Active Soil Depressurization Systems prevent soil borne pollutants entry into the building by creating a negative pressure (vacuum) beneath the slab through fan activated PVC pipe routed to the exterior of the building and vented above the roofline. It is at this location where these pollutants are quickly diluted by the ambient air. The Active Soil Depressurization Systems may also remove moisture and other soil pollutants that enter the building, therefore thus improving the overall air quality of the building.

The Active Soil Depressurization Systems are installed so as to coordinate with other building components especially those that require maintenance or clearance of any type. All mitigation components are installed to facilitate servicing, maintenance and repair or replacement of other equipment components both inside and outside of the building. All systems, materials and equipment were installed level, plumb, parallel or perpendicular to other building systems and components unless otherwise specified. All fan components are UL or equivalent rated.

3.0 INSTALATION OF PERMANENT ACTIVE SOIL DEPRESSURIZATION SYSTEMS

Based on data gathered during the sub-slab vacuum testing the decision was made by RAdata, Inc. to install a total of three (3) permanent ASDS. Systems locations can be found on the As Built Drawing as Attachment 1. After four (4) four-inch (4") holes were core drilled through the concrete floor, about one cubic foot of soil was removed from beneath the slab using a shop vac. Soil was placed in a 55-gallon drum for proper disposal. These holes were piped with three-inch (3") Schedule 40 PVC pipe (ASTM D 1785) routed to the exterior of the building. Two (2) of the ASDS were routed to the rear of the building and one (1) to the right side of the building. Split-ring hangers, clevis hangers and two-hole straps were used to attach the pipe securely to the building. The

exhaust of three-inch (3") Schedule 40 PVC pipe was routed above the roofline at that location. The vent fans are mounted directly to the PVC pipe slightly below the roofline using rubber couplers.

There was also an existing sump pit and submersible sump pump in the basement that was covered using a removable Plexiglas cover.

The three (3) fan units are Dynavac GP 501 fans (70-140 Watts) with a maximum pressure of 4.00 Inches of Water capable of evacuating 95 Cubic Feet Per Minute at 1" static pressure. Fan specifications can be found as Attachment 2. Conte Electric, 34 Brook Street, Croton-On-Hudson, New York 10520 (914-271-6636) provided electrical service to the fan units. Electrical service disconnects are located on the exterior of the building directly next to the fan units. To provide constant evaluation of system performance, Mini-magnehelic pressure gauges were installed in a conspicuous location on the PVC pipe in the basement area along with audio alarms which sound when fan failure has occurred. All components of the ASDS systems are clearly labeled as to their function. RAdata, Inc. contact information labels are attached to each system and are clearly visible.

The ASDS should not be turned off until the N.Y.D.O.H receives, and has had the opportunity to comment on, a proposal to turn off the mitigation systems. Systems should remain in place and operational until they are no longer needed to address current or potential exposures related to soil vapor intrusion.

3.1 Vacuum and Air Stream Measurements of Permanent Active Soil Depressurization Systems

After the installation of the ASDS, RAdata, Inc. conducted sub-slab vacuum measurements using a Dwyer digital Micro manometer to determine their sphere of influence. Four (4) test point locations were used to determine the sphere of influence within this particular portion of the building. The sub-slab vacuum test point locations and test results can be found as Attachment 3. The goal of a successful ASDS system is to create a negative pressure of -.004 Inches of Water Column or 1 Pascal. The outbound effluent air-stream should also be tested, the purpose of which is to determine whether operation of the ASDS requires a New York State Department of Health (N.Y.D.O.H) air permit for discharge of volatile organic compounds (VOCs).

3.2 Conclusions of Vacuum Measurements For The Active Soil Depressurization Systems

All four (4) test point locations indicate that the sub-floor vacuum created by the three (3) ASDS meets or exceed the goal of a successful ASDS system which is to create a negative pressure of -.004 Inches of Water Column or 1 Pascal.

4.0 DISPOSAL OF SOIL AND CONSTRUCTION DEBRIS

The one 55-gallon container of soil removed from beneath the floor, as well as construction debris, was disposed of by Clean Ventures, 2001 South First Street, Elizabeth, New Jersey, (908-355-5800). The drums were removed from the site on December 19, 2007. A copy of the disposal manifest can be found as Attachment 4.

5.0 PERMITS

RAdata, Inc. and its sub-contractors have procured the necessary permits for the installation of the ASDS. A copy of the City of Peekskill Building and Electrical permits for the installation of the ASDS can be found as Attachment 5.

6.0 WORKER HEALTH AND SAFETY

A copy of our Worker Health and Safety Plan For Installing the Active Soil Depressurization Systems can be found as Attachment 6. Phase Associates, LLC, 316 Eisenhower Parkway, Livingston, New Jersey, 973-597-0750, prepared this document for RAdata, Inc.

7.0 OPERATIONS, MAINTENANCE AND MONITORING

The building Owner is responsible for ongoing system Operations, Maintenance and Monitoring as well as verification sampling of indoor air quality. RAdata, Inc. should conduct an inspection at a six-month interval after the installation has been completed. After the first year, a reduced inspection frequency may be appropriate and changed to once every 12 to 18 months. Based upon a demonstration of the system's reliability, the N.Y.D.O.H recommends that, if a different frequency is desired, a petition describing the alternative frequency and the reasons that frequency is preferred may be submitted to the State. Submission of an annual certification to the N.Y.D.O.H may be required. Comprehensive maintenance procedures can be found as Attachment 7.

8.0 WARRANTIES

All work was completed in a professionsl, workmanlike manner. RAdata, Inc. warranties all system components and workmanship for a period of three (3) years from the date of installation.

9.0 CONCLUSION

The goal of a successful ASDS system is to create a negative pressure of between -.004 Inches of Water Column. Sub floor vacuum measurements reflect an acceptable vacuum in all four (4) interior test point locations. Test point locations and results can be found as Attachment 3. Post treatment indoor air sampling test results will be the defining factor as to the success of the ASDS systems.

10.0 CONTACT INFORMATION

GENERAL CONTRACTOR

Radata. Inc.
27 Ironia Road
Flanders, New Jersey 07836
973-927-7303 Telephone
973-917-4980 Fax
dg@radata.com

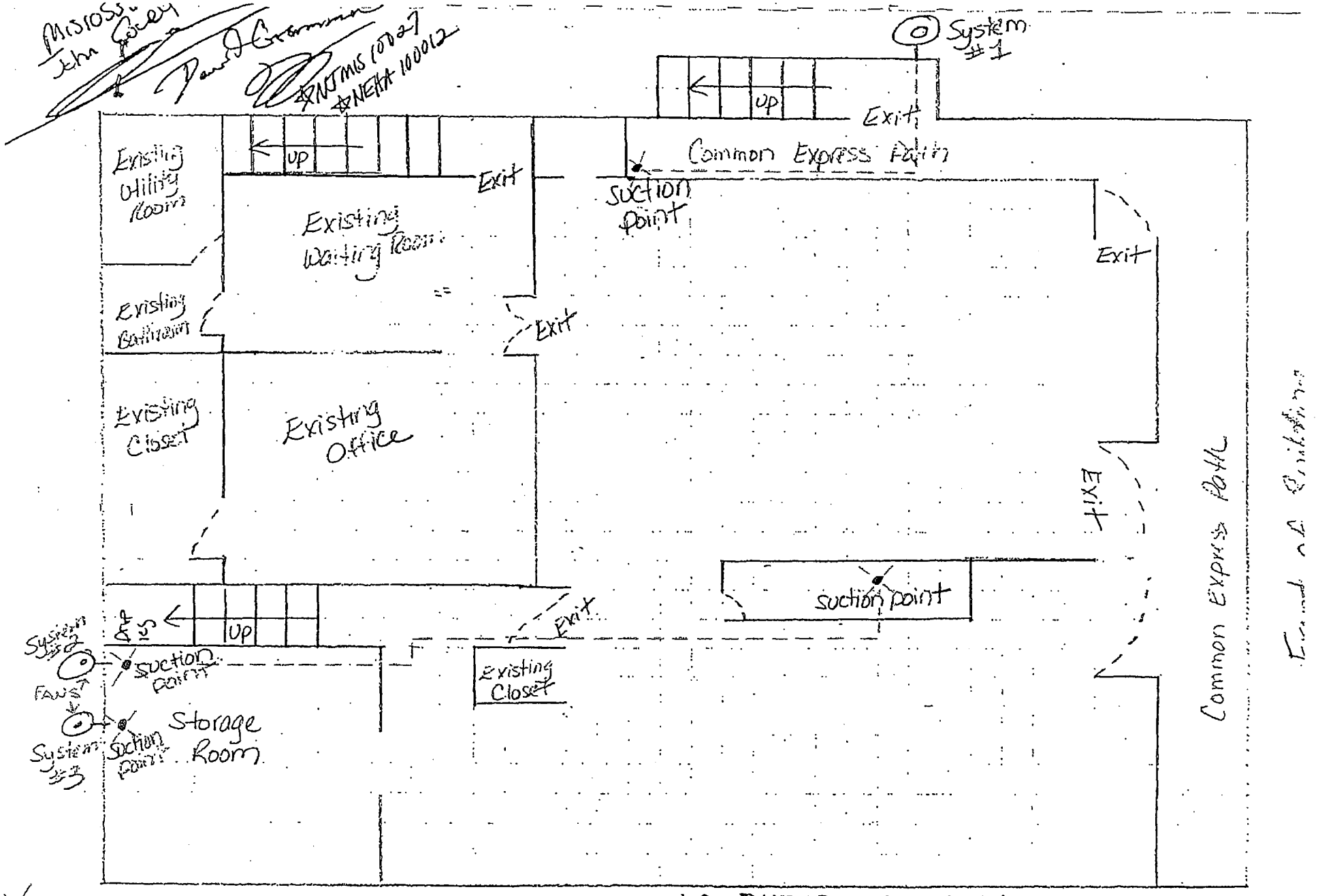
SUB CONTRACTORS

Electrical Service
Conti Electric, Inc.
34 Brook Street
Croton-on-Hudson 10520
914-271-6636

Soil Waste Disposal
Clean Ventures, Inc.
201 South 1st Street
Elizabeth, NJ 07206
908-355-5800

ATTACHMENT

1



Go No Sen Karate Dojo
20 Welcher Ave Peekskill, NY

AS BUILT DRAWING

Drawing Not to Scale.

ATTACHMENT

2

RadonAway Ward Hill, MA IN014 Rev F

XP/GP/XR Series Fan Installation Instructions

Please Read And Save These Instructions.

DO NOT CONNECT POWER SUPPLY UNTIL FAN IS COMPLETELY INSTALLED. MAKE SURE ELECTRICAL SERVICE TO FAN IS LOCKED IN "OFF" POSITION. DISCONNECT POWER BEFORE SERVICING FAN.

1. WARNING! Do not use fan in hazardous environments where fan electrical system could provide ignition to combustible of flammable materials.

2. WARNING! Do not use fan to pump explosive or corrosive gases.

3. WARNING! Check voltage at the fan to insure it corresponds with nameplate.

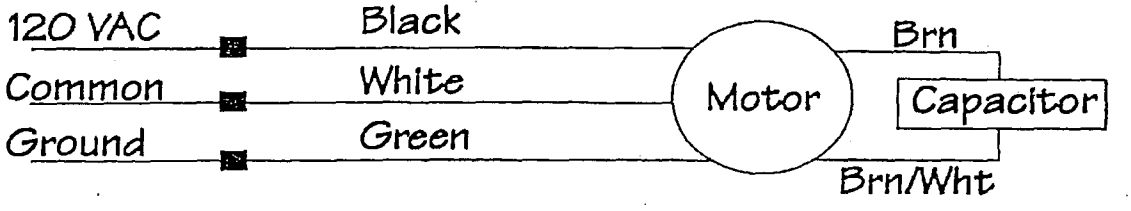
4. WARNING! Normal operation of this device may affect the combustion airflow needed for safe operation of fuel burning equipment. Check for possible backdraft conditions on all combustion devices after installation.

5. NOTICE! There are no user serviceable parts located inside the fan unit. Do NOT attempt to open. Return unit to the factory for service.

6. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician.

7. WARNING! Do not leave fan unit installed on system piping without electrical power for more than 48 hours. Fan failure could result from this non-operational storage.

DynaVac GP/XP/XR/RP Series Fan Wiring Diagram



RadonAway™

INSTALLATION INSTRUCTION IN014 Rev F

DynaVac - XP/XR Series		DynaVac - GP Series	
XP101	p/n 23008-1,-2	GP201	p/n 23007-1
XP151	p/n 23010-1,-2	GP301	p/n 23006-1,-2
XP201	p/n 23011-1,-2	GP401	p/n 23009-1
XR161	p/n 23018-1,-2	GP501	p/n 23005-1,-2
XR261	p/n 23019-1,-2		

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1 INTRODUCTION

The DynaVac GP/XP/XR Series Radon Fans are intended for use by trained, professional Radon mitigators. The purpose of this instruction is to provide additional guidance for the most effective use of a DynaVac Fan. This instruction should be considered as a supplement to EPA standard practices, state and local building codes and state regulations. In the event of a conflict, those codes, practices and regulations take precedence over this instruction.

1.2 ENVIRONMENTALS

The GP/XP/XR Series Fans are designed to perform year-round in all but the harshest climates without additional concern for temperature or weather. For installations in an area of severe cold weather, please contact RadonAway for assistance. When not in operation, the fan should be stored in an area where the temperature is never less than 32 degrees F. or more than 100 degrees F.

1.3 ACOUSTICS

The GP/XP/XR Series Fan, when installed properly, operates with little or no noticeable noise to the building occupants. The velocity of the outgoing air should be considered in the overall system design. In some cases the "rushing" sound of the outlet air may be disturbing. In these instances, the use of a RadonAway Exhaust Muffler is recommended.

1.4 GROUND WATER

In the event that a temporary high water table results in water at or above slab level, water may be drawn into the riser pipes thus blocking air flow to the GP/XP/XR Series Fan. The lack of cooling air may result in the fan cycling on and off as the internal temperature rises above the thermal cutoff and falls upon shutoff. Should this condition arise, it is recommended that the fan be turned off until the water recedes allowing for return to normal operation.

1.5 SLAB COVERAGE

The GP/XP/XR Series Fan can provide coverage up to 2000+ sq. ft. per slab penetration. This will primarily depend on the sub-slab material in any particular installation. In general, the tighter the material, the smaller the area covered per penetration. Appropriate selection of the GP/XP/XR Series Fan best suited for the sub-slab material can improve the slab coverage. The GP & XP series have a wide range of models to choose from to cover a wide range of subslab material. The higher static suction fans are generally used for tighter subslab materials. The XR Series is specifically designed for high flow applications such as stone/gravel and drain tile. Additional suction points can be added as required. It is recommended that a small pit (5 to 10 gallons in size) be created below the slab at each suction hole.

1.6 CONDENSATION & DRAINAGE

Condensation is formed in the piping of a mitigation system when the air in the piping is chilled below its dew point. This can occur at points where the system piping goes through unheated space such as an attic, garage or outside. The system design must provide a means for water to drain back to a slab hole to remove the condensation. The GP/XP/XR Series Fan **MUST** be mounted vertically plumb and level, with the outlet pointing up for proper drainage through the fan. Avoid mounting the fan in any orientation that will allow water to accumulate inside the fan housing. The GP/XP/XR Series Fans are **NOT** suitable for underground burial.

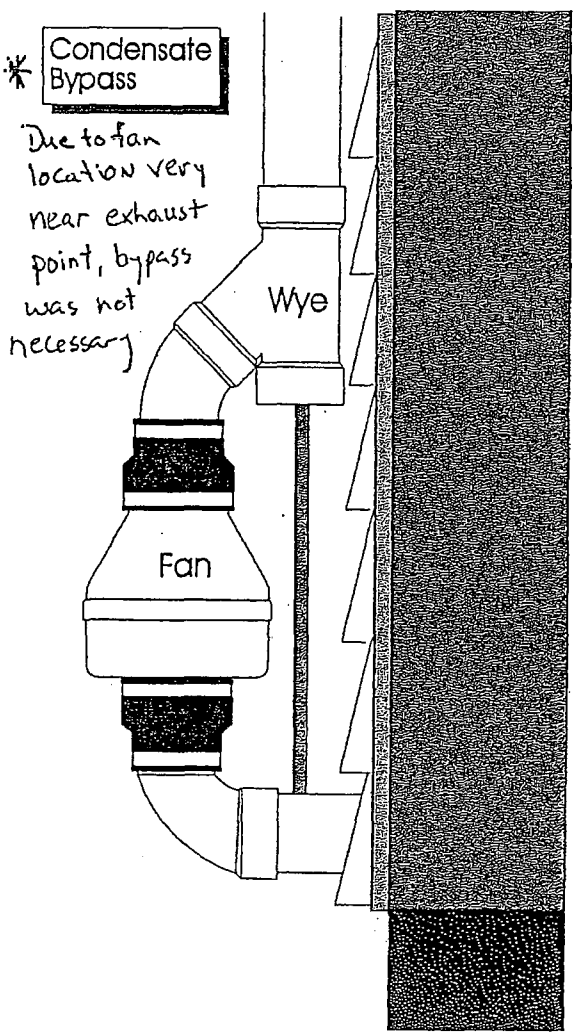
For GP/XP/XR Series Fan piping, the following table provides the minimum recommended pipe diameter and pitch under several system conditions.

Pipe Dia.	Minimum Rise per Foot of Run* @25 CFM	@50 CFM	@100 CFM
4"	1/8"	1/4"	3/8"
3"	1/4"	3/8"	1 1/2"



*Typical GP/XP/XR Series Fan operational flow rate is 25 - 90 CFM. (For more precision, determine flow rate by using the chart in the addendum.)

Under some circumstances in an outdoor installation a condensate bypass should be installed in the outlet ducting as shown. This may be particularly true in cold climate installations which require long lengths of outlet ducting or where the outlet ducting is likely to produce large amounts of condensation because of high soil moisture or outlet duct material. Schedule 20 piping and other thin-walled plastic ducting and Aluminum downspout will normally produce much more condensation than Schedule 40 piping.



The bypass is constructed with a 45 degree Wye fitting at the bottom of the outlet stack. The bottom of the Wye is capped and fitted with a tube that connects to the inlet piping or other drain. The condensation produced in the outlet stack is collected in the Wye fitting and drained through the bypass tube. The bypass tubing may be insulated to prevent freezing.

1.7 "SYSTEM ON" INDICATOR

A properly designed system should incorporate a "System On" Indicator for affirmation of system operation. A manometer, such as a U-Tube, or a vacuum alarm is recommended for this purpose.

1.8 ELECTRICAL WIRING

The GP/XP/XR Series Fans operate on standard 120V 60 Hz. AC. All wiring must be performed in accordance with the National Fire Protection

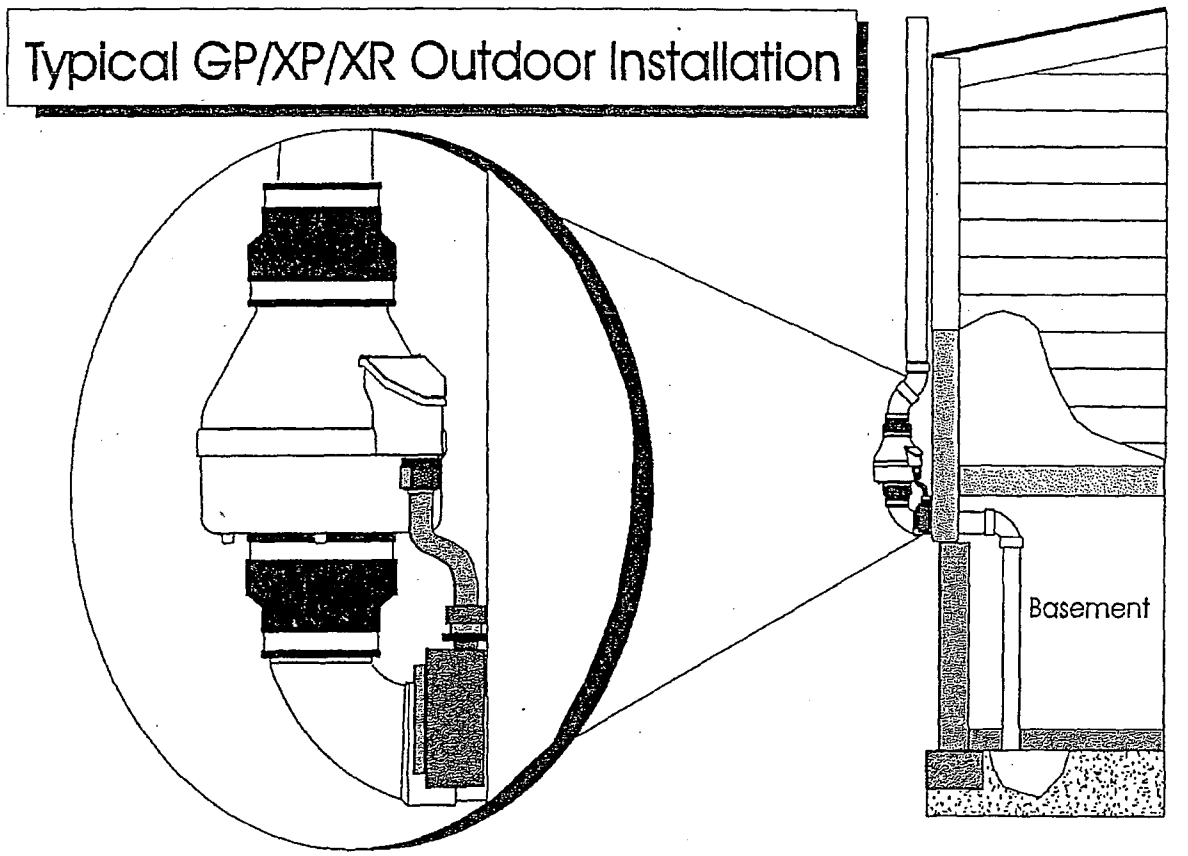
Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a U.L. listed watertight conduit.

1.9 SPEED CONTROLS

The GP/XP/XR Series Fans are rated for use with electronic speed controls ,however, they are generally not recommended.

2.0 INSTALLATION

The GP/XP/XR Series Fan can be mounted indoors or outdoors. (It is suggested that EPA recommendations be followed in choosing the fan location.) The GP/XP/XR Series Fan may be mounted directly on the system piping or fastened to a supporting structure by means of optional mounting bracket.



2.1 MOUNTING

Mount the GP/XP/XR Series Fan vertically with outlet up. Insure the unit is plumb and level. When mounting directly on the system piping assure that the fan does not contact any building surface to avoid vibration noise.

2.2 MOUNTING BRACKET (optional)

The GP/XP/XR Series fan may be optionally secured with the integral mounting bracket on the GP Series fan or with RadonAway P/N 25007-2 mounting bracket for an XP/XR Series fan. Foam or rubber grommets may also be used between the bracket and mounting surface for vibration isolation.

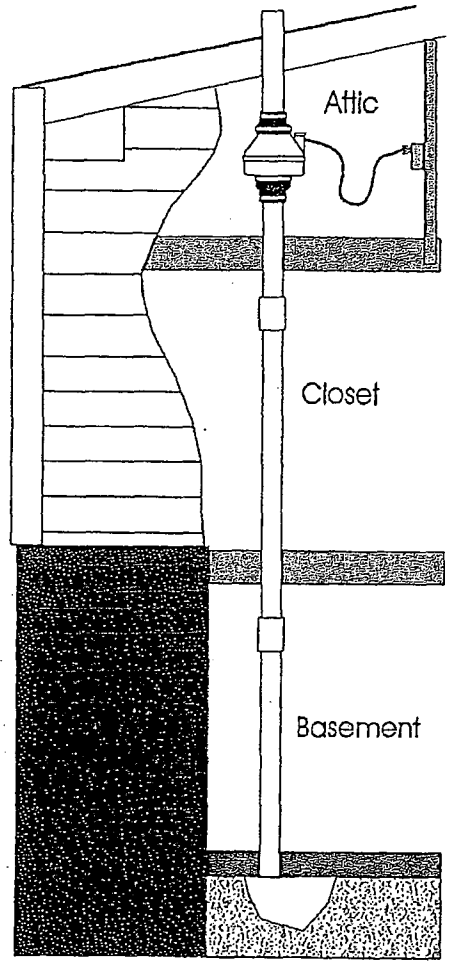
2.3 SYSTEM PIPING

Complete piping run, using flexible couplings as means of disconnect for servicing the unit and vibration isolation.

2.4 ELECTRICAL CONNECTION

Connect wiring with wire nuts provided, observing proper connections:

Fan Wire	Connection
Green	Ground
Black	AC Hot
White	AC Common



2.5 VENT MUFFLER (optional)

Install the muffler assembly in the selected location in the outlet ducting. Solvent weld all connections. The muffler is normally installed at the end of the vent pipe.

2.6 OPERATION CHECKS

_____ Verify all connections are tight and leak-free.

_____ Insure the GP/XP/XR Series Fan and all ducting is secure and vibration-free.

_____ Verify system vacuum pressure with manometer. Insure vacuum pressure is less than maximum recommended operating pressure

(Based on sea-level operation, at higher altitudes reduce by about 4% per 1000 Feet.)
(Further reduce Maximum Operating Pressure by 10% for High Temperature environments)
See Product Specifications. If this is exceeded, increase the number of suction points.

_____ Verify Radon levels by testing to EPA protocol.

GP SERIES PRODUCT SPECIFICATIONS

The following chart shows fan performance for the GPx01 Series Fan:

	Typical CFM Vs Static Suction "WC						
	1.0"	1.5"	2.0"	2.5"	3.0"	3.5"	4.0"
* GP501	95	87	80	70	57	30	5
GP401	93	82	60	38	12	-	-
GP301	92	77	45	10	-	-	-
GP201	82	58	5	-	-	-	-

	Maximum Recommended Operating Pressure*
* GP501	3.8" W.C. (Sea Level Operation)**
GP401	3.0" W.C. (Sea Level Operation)**
GP301	2.4" W.C. (Sea Level Operation)**
GP201	1.8" W.C. (Sea Level Operation)**

**Reduce by 10% for High Temperature Operation*
***Reduce by 4% per 1000 feet of altitude*

	Power Consumption @ 120 VAC
* GP501	70 - 140 watts
GP401	60 - 110 watts
GP301	55 - 90 watts
GP201	40 - 60 watts

Inlet/Outlet: 3.5" OD (3.0" PVC Sched 40 size compatible)
Mounting: Fan may be mounted on the duct pipe or with integral flanges.
Weight: 12 lbs.
Size: 13H" x 12.5" x 12.5"
Recommended ducting: 3" or 4" Schedule 20/40 PVC Pipe
Storage temperature range: 32 - 100 degrees F.
Normal operating temperature range: -20 - 120 degrees F.
Maximum inlet air temperature: 80 degrees F.
Continuous Duty
Class B Insulation
3000 RPM
Thermally protected
Rated for Indoor or Outdoor Use
GP301C / GP501C Rated for Commercial Use

LISTED Electric Fan ETL® 77728 Tested to UL Std. 507

IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the GPx01/XP/XR Series Fan for shipping damage within 15 days of receipt. Notify RadonAway of any damages immediately. Radonaway is not responsible for damages incurred during shipping. However, for your benefit, Radonaway does insure shipments.

There are no user serviceable parts inside the fan. Do not attempt to open. Return unit to factory for service.

Install the GPx01/XP/XR Series Fan in accordance with all EPA standard practices, and state and local building codes and state regulations.

WARRANTY

Subject to any applicable consumer protection legislation, RadonAway warrants that the GPX01/XP/XR/RP Series Fan (the "Fan") will be free from defects in materials and workmanship for a period of 90 days from the date of purchase (the "Warranty Term").

RadonAway will replace any Fan which fails due to defects in materials or workmanship. The Fan must be returned (at Owner's cost) to the RadonAway factory. Any Fan returned to the factory will be discarded unless the Owner provides specific instructions along with the Fan when it is returned regardless of whether or not the Fan is actually replaced under this warranty. Proof of purchase must be supplied upon request for service under this Warranty.

This Warranty is contingent on installation of the Fan in accordance with the instructions provided. This Warranty does not apply where any repairs or alterations have been made or attempted by others, or if the unit has been abused or misused. Warranty does not cover damage in shipment unless the damage is due to the negligence of RadonAway.

5 YEAR EXTENDED WARRANTY WITH PROFESSIONAL INSTALLATION.

RadonAway will extend the Warranty Term of the fan to 5 years from date of manufacture if the Fan is installed in a professionally designed and professionally installed radon system or installed as a replacement fan in a professionally designed and professionally installed radon system. Proof of purchase and/or proof of professional installation may be required for service under this warranty. Outside the Continental United States and Canada the extended Warranty Term is limited to one (1) year from the date of manufacture.

RadonAway is not responsible for installation, removal or delivery costs associated with this Warranty.

EXCEPT AS STATED ABOVE, THE GPx01/XP/XR/RP SERIES FANS ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL RADONAWAY BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR RELATING TO, THE FAN OR THE PERFORMANCE THEREOF. RADONAWAY'S AGGREGATE LIABILITY HEREUNDER SHALL NOT IN ANY EVENT EXCEED THE AMOUNT OF THE PURCHASE PRICE OF SAID PRODUCT. THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT, TO THE EXTENT THE SAME DOES NOT MEET WITH RADONAWAY'S WARRANTY AS PROVIDED ABOVE.

For service under this Warranty, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping cost to and from factory.

RadonAway
3 Saber Way
Ward Hill, MA 01835
TEL. (978) 521-3703
FAX (978) 521-3964

Record the following information for your records:

Serial No._____

Purchase Date_____

ATTACHMENT

3

RESULTS OF POST TREATMENT VACUUM TESTING AT 20 WELCHER AVENUE, PEEKSKILL, NEW YORK

All results are reported in inches of water column

TEST POINT 1 **-0.055 INCHES OF WATER COLUMN**

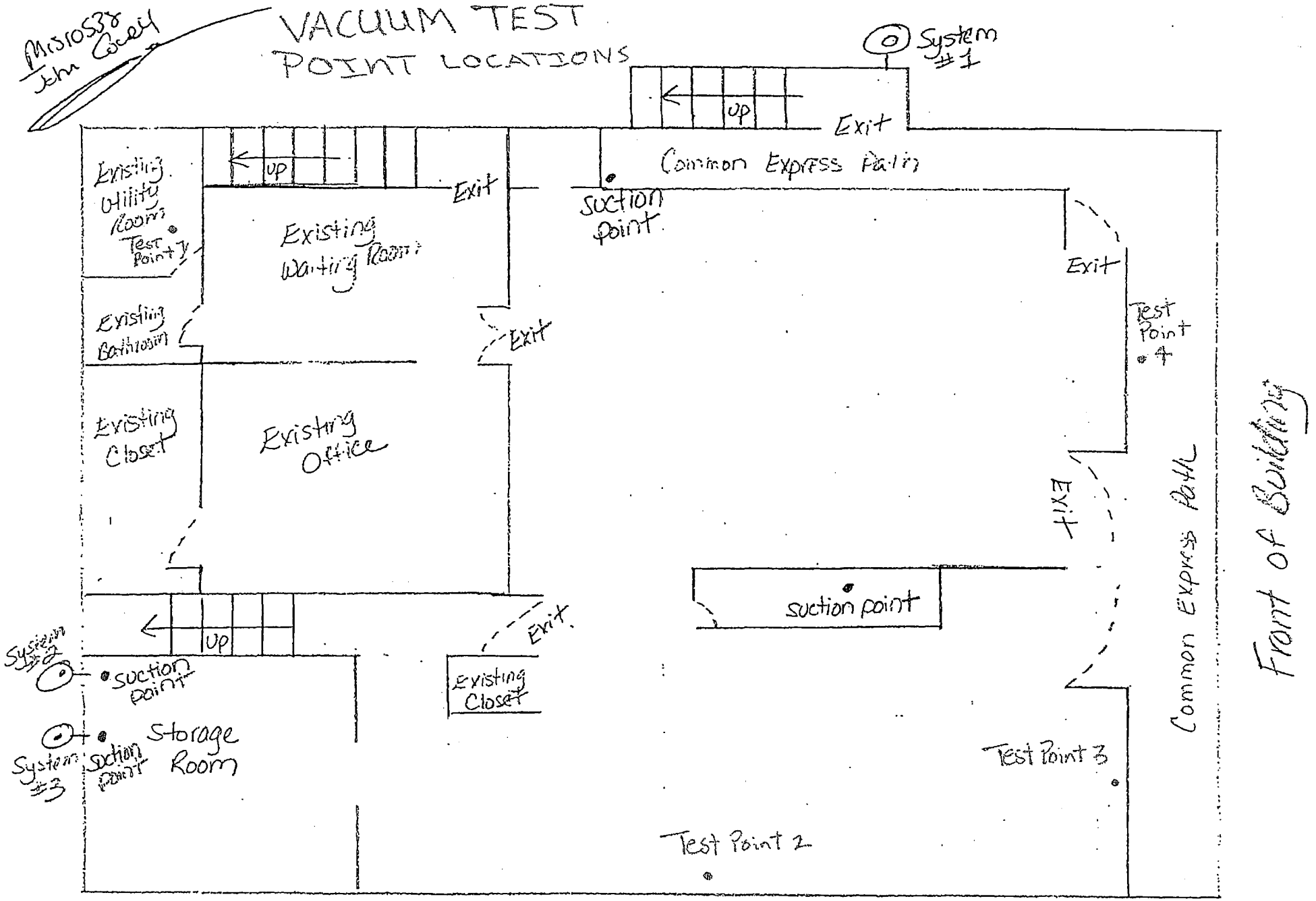
TEST POINT 2 **-0.223 INCHES OF WATER COLUMN**

TEST POINT 3 **-0.131 INCHES OF WATER COLUMN**

TEST POINT 4 **-0.101 INCHES OF WATER COLUMN**

All measurements were taken using a Dwyer Digital Micromanometer capable of measuring to -0.000 inches of water column.

New York State Department of Health suggests an induced vacuum of -0.004 inches of water column or 1 Pascal be the goal of a successful ASDS installation



Go No Sen Karate Dojo
20 Welcher Ave Peekskill, NY

Drawing Not to Scale.

ATTACHMENT

4

PERMIT APPLICATION HAS BEEN MADE (ATTACHED). PICK-UP AND DISPOSAL IS PENDING U.S.E.P.A DISPOSAL NUMBER. MANIFEST WILL FOLLOW UNDER A SEPARATE COVER

RAdata
27 Ironia Road, Unit 2
Flanders, New Jersey 07836
973-927-7303 973-927-4980 fax
1-800-447-2366

January 3, 2011

USEPA Region 2
DEPP-RCRA Programs Branch
Attn: RCRA Notifications
290 Broadway, 22nd Floor
New York, NY 10007-1866

Re: RCRA Subtitle C Site Identification Form
Site Location: 20 Welcher Ave, Peekskill, NY

Dear DEPP-RCRA Programs Branch:

Please find enclosed our application to request an EPA ID Number for the removal of the contaminated soil at the above site.

Please contact me at my office when you are ready to issue to the ID Number. I will be coordinating the removal.

Please feel free to contact us with any questions.

Thank you,

Lisa Francis
Mitigation Department

c: file

OMB# 2050-0024; Expires 11/30/2011

SEND COMPLETED FORM TO: Tha Appropriate State or Regional Office.	United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM	

1. Reason for Submittal (MARK ALL BOX(ES) THAT APPLY)

Reason for Submittal:

- [X] To provide an Initial Notification (first time submitting site identification information / to obtain an EPA ID number for this location)
- [ ] To provide a Subsequent Notification (to update site identification information for this location)
- [ ] As a component of a First RCRA Hazardous Waste Part A Permit Application
- [ ] As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment #_____)
- [ ] As a component of the Hazardous Waste Report (If marked, see sub-bullet below)
  - [ ] Site was a TSD facility and/or generator of ≥1,000 kg of hazardous waste, >1 kg of acute hazardous waste, or >100 kg of acute hazardous waste spill cleanup in one or more months of the report year (or State equivalent LQG regulations)

2. Site EPA ID Number

EPA ID Number | | | | | | | | | | | | |

3. Site Name

Name: ~~Bristol Mountain~~ Shopping Center

4. Site Location Information

Street Address: 20 Welcher Avenue

City, Town, or Village: Peekskill | County: Weschester

State: New York | Country: United States | Zip Code: 10566

5. Site Land Type

[X] Private [ ] County [ ] District [ ] Federal [ ] Tribal [ ] Municipal [ ] State [ ] Other

6. NAICS Code(s) for the Site (at least 5-digit codes)

A. 41415 | C. 41513

B. 41416 | D. 415319

7. Site Mailing Address

Street or P.O. Box: 20 Welcher Avenue

City, Town, or Village: Peekskill ~~New York~~

State: New York | Country: United States | Zip Code: 10566

8. Site Contact Person

First Name: Fred | MI: | Last: Schwalb

Title: Manager

Street or P.O. Box: P.O. Box 383

City, Town or Village: Croton-On-Hudson

State: New York | Country: US | Zip Code: 10520

Email: jfschwalb@aol.com

Phone: 914-271-5706 | Ext.: | Fax:

9. Legal Owner and Operator of the Site

A. Name of Site's Legal Owner: KURTSON REALTY CO | Date Became Owner: 3/3/1986

Owner Type: [X] Private [ ] County [ ] District [ ] Federal [ ] Tribal [ ] Municipal [ ] State [ ] Other

Street or P.O. Box: P.O. Box 383

City, Town, or Village: Croton-On-Hudson | Phone: 914-271-5706

State: New York | Country: US | Zip Code: 10520

B. Name of Site's Operator: Kurtson Realty | Date Became Operator: 3/3/1986

Operator Type: [X] Private [ ] County [ ] District [ ] Federal [ ] Tribal [ ] Municipal [ ] State [ ] Other

EPA ID Number | | |

EPA ID Number | | | | | | | | | | | | | |

OMB#: 2050-0024; Expires 11/30/2011

12. Notification of Hazardous Secondary Material (HSM) Activity

Y ☐ N ☐ Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25)?

If "Yes", you must fill out the Addendum to the Site Identification Form: Notification for Managing Hazardous Secondary Material.

13. Comments

14. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all owner(s) and operator(s) must sign (see 40 CFR 270.10(b) and 270.11).

Signature of legal owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
[signature]	Fred Schwalb, Manager	12/12/10

D. Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

- You must check with your State to determine if you are eligible to manage laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

☐ 1. Opting into or currently operating under 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories
See the item-by-item instructions for definitions of types of eligible academic entities. Mark all that apply:

☐ a. College or University

☐ b. Teaching Hospital that is owned by or has a formal written affiliation agreement with a college or university

☐ c. Non-profit institute that is owned by or has a formal written affiliation agreement with a college or university

☒ 2. Withdrawing from 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories

11. Description of Hazardous Waste

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-Regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.

ATTACHMENT

5

RAdata, Inc.
27 Ironia Road, Unit 2
Flanders, New Jersey 07836
973-927-7303 973-927-4980 fax
1-800-447-2366

URGENT!

10/4/2010

TO: Kurtsam Realty or Current Resident
Attention: Fred Schwalb
Box 383 Quaker Ridge Road
Croton-On-Hudson NY 10520

PROPERTY: Blue Mountain Plaza
20 Welcher Avenue
Peekskill NY 10566

Enclosed are the permits from the local municipality for the system installed at the above property. At this point it is mandatory for you to contact your municipality, give them your permit number (located at the top right side of your permits) and schedule a final inspection (a final inspection is required for each permit application). The number(s) you will need are listed below. Once the final inspection is completed, you must phone our office so that we can close out your file. If you have any questions, please phone our office. This must be completed within 30 days.

- x **Building Inspection, please call 914-734-4140**
- x **Electric Inspection, please call**

****Failure to complete these inspections could result in the following complications:****

1.) Loss of Radon reduction warranty.
2.) Up to $500.00 in fines.
3.) Charge back of fines and penalties assessed to our firm.
4.) Lien placed on title of property.
5.) Inability to transfer title until inspection is complete.

Thank you,
David Grammer, President

Inspection done 10/21/10 passed

TO BE KEPT ON THE WORK

CITY OF PEEKSKILL
DEPARTMENT OF PUBLIC WORKS
BUILDING DEPT.
Municipal Building, Peekskill, N.Y.

11601

PERMIT

Fee 190.00

Permission is hereby granted TO INSTALL SOIL DEPRESSURIZATION SYSTEM (RADON)

Location 20 Welcher Avenue (KARATE STUDIO)

Owner KURTSAM REALTY Address 383 Quaker Ridge Road CROTON HUDSON NY

Contractor RADATA INC. Address 27 IRONIA Rd, FLANDERS N.J. 07836

Dimensions (overall) 40'x40' APPROX Materials CONVENTIONAL

Foundations { Thickness below grade ..... Materials below grade .....
Thickness above grade ..... Materials above grade .....

EXISTING

Footings: Dimensions ..... Depth below grade ..... ft. ..... in.

Thickness of { Outside Walls 1st 2nd 3rd 4th 5th 6th
Division Walls

Stories High ..... Distance from Street line .....

Kind of Roof ..... Material of Roof .....

Size of Joists 1st 2nd 3rd 4th 5th 6th

Special Conditions SUBJECT TO NOTES ON PLANS, FIELD INSPECTIONS, ELEC. CERTIFICATE

Date of Issue Sept 30 20 10 Expiration date Sept 30 20 11

~~Director of Public Works~~ [signature]

This permit is granted upon the express condition that every person acting under same shall conform to the representations of the application thereof as well as all Building, Zoning and other Ordinances of the City of Peekskill and Statutes of this State. This permit must be kept on the work to which it applies at all times during working hours, and may be revoked at any time for a breach of its conditions.

ATTACHMENT

6

GENERAL HEALTH AND SAFETY PLAN

for

KURTSAM REALTY

20 WELCHER AVENUE

PEEKSKILL, NY

October 19, 2010

Prepared by:

Gary P. Schwartz

PHASE Associates, LLC

316 Eisenhower Pkwy

Livingston, New Jersey 07039

Gary P. Schwartz CIH, CSP, CMC

Signature of Preparer

RAdata, Inc.

27 Ironia Road

Flanders, NJ 07836

973-927-7303

800-447-2366

973-927-8221(f)

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PROJECT NUMBER: _____

PROJECT NAME: Installation of Active Soil Depressurization Systems

LOCATION/ADDRESS: 20 Welcher Avenue, Peekskill, NY

PROJECT MANAGER: Blair B. Miers, RAdata, Inc.

SAFETY MANAGER: David Grammer, RAdata, Inc.

The purpose of this Health and Safety Plan (HASP) is to identify, evaluate and control radiation and chemical health and safety hazards, and to provide for emergency response during field activities. All employees of RAdata, Inc., (RAdata) as well as its contractors and subcontractors who have agreed to abide by this, and who are involved in field activities on this project, will be bound by these provisions. Contractors and subcontractors who abide by this HASP, but whose work activities are not covered by this HASP must develop and follow their own site specific HASP.

RAdata's Company's HASP is based on a general review and evaluation of potential hazards and risks regarding most projects. It outlines the health and safety procedures, and the equipment required, needed to minimize the potential for harm to field personnel and site visitors. A separate site-specific HASP will be required for each project. This is because work activities, site conditions and exposures to various combinations of contaminants present are variable.

2.1 SITE DESCRIPTION & HISTORY

This project is occurring at 20 Welcher Avenue in Peekskill, NY.

2.2 KEY PERSONNEL

2.1.1 Responsible Person of HASP: David Grammer, President or his designee

This person will have the following responsibilities:

- To provide the Health and Safety Officer with project-related health and safety
- information to keep this document updated.
- To implement the HASP.
- To monitor compliance with the HASP.

2.1.2 Health and Safety Officer: Blair Miers

The Health and Safety Officer has the following responsibilities:

- To monitor compliance with the HASP.
- To assist in complying with the terms of this HASP, and applicable regulations.

The Health and Safety Officer has the authority to take the following actions:

- To suspend work or otherwise limit personnel exposure if this HASP appears to be unsuitable or inadequate.
- To direct personnel to modify any work practices that are deemed to be hazardous to health and safety.
- To remove field personnel from the project if their physical actions or mental condition endangers their own health and safety, or that of their coworkers.

3.1 PERSONNEL MEDICAL CLEARANCE

Prior to working at any site, RAdata assigned employees must: 1) be certified by a licensed, RAdata-approved physician as being physically able to perform their assigned field work, and to use the Personal Protective Equipment (PPE) which may be required for this project, in accordance with the provisions of OSHA Regulation 29 CFR 1910.120(f)(2) have successfully completed an 40-hour basic health and safety training course (Level C) for field personnel or its equivalent, and 3) passed a Quantitative Respirator Fit Test. Site managers and supervisors must have successfully completed an 8-hour managers' health and safety course, in addition to the other clearance requirements.

RAdata subcontractor employees must also have similar medical, training, and respirator fit clearances and they will be required to provide proof of clearance before beginning work.

3.2 HAZARD TRAINING

All personnel working on-site who have potential exposures to health or safety hazards shall be thoroughly trained as specified in OSHA Regulations 29 CFR 1910.120(e). This training will include: (1) Attendance at an initial Respiratory Protection Course; (2) Seal checked and Fit tested through an acceptable OSHA quantitative fit test method. All personnel should have successfully completed the 40 hour Hazardous Waste Operations and Emergency Response course and annual 8 hour refresher courses.

In addition to the above, all RAdata personnel should be versed on the company's safety and health program and employee training program; personal protective equipment program; spill containment program; air quality monitoring (by Bell Environmental); emergency response; monitoring equipment usage and calibration; and, health hazard monitoring procedures and techniques.

At the time of job assignment, special training will be provided to on-site personnel who may be exposed to unique or special hazards. If unique or special hazards are unexpectedly encountered, specialized training will be provided before work proceeds.

3.3 INCIDENT REPORTING

A Health & Safety Incident Report will be filed for any incident involving personnel working at a Site. Situations covered by this policy include, but are not limited to, inhalation, hand or eye injuries. Worker's Compensation Insurance reports for RAdata employees must be filed within 48 hours of each incident or illness which results from work-related activities and requires medical attention.

3.4 ILLUMINATION, SANITATION AND CONFINED SPACE ENTRY

3.4.1 Illumination

If the project work is expected to occur inside the building, the illumination requirements set forth by OSHA Regulations 29 CFR 1910.120 (m) will be met.

3.4.2 Sanitation

The sanitation requirements regarding potable and non-potable waters, toilet facilities and washing facilities will be followed as set forth in OSHA Regulations 29 CFR 1910.120(n).

3.4.3 Confined Space Entry

Confined Space Entries are not anticipated since personnel will not be entering the drill pipe chase or network.

3.5 RESPIRATOR MAINTENANCE, FITTING AND DECONTAMINATION

Respirators will be cleaned daily according to procedures described below. Cartridges will be replaced either daily or if breakthrough is detected at any time while in use. The following checks will be performed daily, in addition to the above:

- Exhalation valve - pull off plastic cover and check valve for debris or for tears in the neoprene valve, which could cause leakage.
- Inhalation valves - screw off both cartridges and visually inspect neoprene valves for tears. Make sure that the inhalation valves and cartridge receptacle gaskets are in place.
- Make sure a protective lens cover is in place.
- Make sure you have the correct cartridges.
- Make sure that the face piece harness is not damaged. The serrated portion of the harness can fragment which will prevent proper face seal adjustment.
- Make sure the speaking diaphragm retainer ring is hand tight.

NOTE: <u>The respirator MUST be Leak-Tested before each use</u>.

Test the respirator for leakage by using both the positive- and the negative-pressure method. Lightly place your palm over the exhalation valve cover. Exhale gently. The body of the respirator should bulge slightly outward from your face. If any leakage is detected around the face seal, readjust the head harness straps and repeat the test until there is no leakage. If leakage is detected other than in the face seal, the condition must be investigated and corrected before another test is made. The negative pressure test must also be made. Lightly place your palms or some impervious material, like Saran Wrap® over the cartridges or filter holders. Inhale gently. The face-piece should collapse against the face. The respirator must pass these two tightness tests before the respirator is used. The respirator will not furnish protection unless all inhaled air is drawn through suitable cartridges or filters. **NOTE: Respirators provide no protection in oxygen-deficient atmospheres!**

After use, follow these steps to clean your respirator:

- Wash with Alconox® solution and brush gently. (This step will remove any soil/solid particulate matter that may have been collected on the respirator during field activities.)
- Rinse with distilled/de-ionized water, making sure that the inhalation and exhalation valves are clean and unobstructed.
- Wipe with sanitizing solution. (This step will assure the sterility of the respirator.)
- Allow your respirator to air dry.
- Place the respirator inside a sealed bag or a clean area away from extreme heat or extreme cold.

3.6 PROJECT MANAGER NOTIFICATION

All field personnel must inform the Project Manager before entering a building Site.

IF ANY PREVIOUSLY UNIDENTIFIED POTENTIAL HAZARDS ARE DISCOVERED DURING ANY FIELD WORK, LEAVE THAT AREA OF THE SITE IMMEDIATELY AND CONTACT THE PROJECT MANAGER FOR FURTHER INSTRUCTIONS.

3.7 OSHA INFORMATION AND STATE WAGE AND INFORMATION POSTERS

In accordance with the Occupational Safety and Health Act of 1970, a copy of the OSHA information poster must be present at the Site. It will be posted at full size (11" x 17") in a permanent structure or temporary field office, or be distributed to on-site personnel by way of this HASP. Appropriate state of New Jersey wage and employment posters will also be posted in accordance with state laws.

3.8 PROHIBITIONS

Smoking, eating, drinking, chewing tobacco or toothpicks, applying cosmetics, storing food or food containers, and having open fires will be permitted only in designated areas that will be established by the Project Manager. Under no circumstances will any of the above activities be permitted within the Exclusion or Contamination Reduction Zones. Good personal hygiene should be practiced by field personnel to avoid ingesting contaminants.

3.9 INITIAL SITE SAFETY MEETING AND SIGNING THE HEALTH AND SAFETY PLAN COMPLIANCE AGREEMENT

The project manager will hold an initial site safety meeting with RAdata, subcontractor and contractor field personnel before work activities begin at any Site. At this meeting, it will be verified that all personnel have been provided with or have reviewed a HASP for the work activities to be performed at a Site. For RAdata personnel, its subcontractor's personnel, and contractor personnel whose employer(s) have adopted this HASP, the HASP shall be reviewed, discussed and questions will be answered. Signed Health and Safety Plan Compliance

Agreement Forms of personnel who will be following this HASP will be collected by the project manager and filed. Individuals refusing to sign the Form will not be allowed to work on the Site.

3.10 DAILY SITE SAFETY BRIEFINGS

During field operations, site safety briefings will be held at the start of each day by the project manager to review and plan specific health and safety aspects of scheduled work. All field personnel who are following this HASP are required to attend these briefings. These meetings and their content shall be documented by the Project Manager. Potential subjects that may be discussed are presented below:

1. Preliminary
   - Medical clearances.
   - Training requirements.
   - Written HASP availability.
   - Designation of responsibilities for on-site personnel.
   - Identification of on-site personnel trained and certified to administer First Aid.

2. Training topics

Review of site specific HASP including: types of hazards; pathways of exposure; levels of protection; contamination avoidance; prohibitions; work procedures; confined space entry; work zones; emergency response procedures; and, specific on-site area/work tasks of concern.

Decontamination.
Personnel Protective Equipment.
Air Quality Monitoring Program.
Questions and Answers

3.11 UNDERGROUND STRUCTURES

Caution will be exercised whenever the possibility of encountering subsurface obstructions exists. Before beginning intrusive activities, all available sources of information (such as site utility drawings, public utility drawings, construction drawings, and discussions with former employees) will be reviewed. If underground obstructions are unexpectedly encountered, the area will be excavated using manual equipment until the nature of the obstruction is discerned.

An assessment of the known or suspected chemical and physical hazards have been made for each of the activities specified below.

4.1 APPROVED WORK ACTIVITIES

Work activities which may be performed under this HASP are limited to the following:
This HASP does not cover any site activities. These would be found in the project site specific HASPs.

4.2 HAZARDS

4.2.1 Chemical Agents

Ensure that all specific chemical hazards be identified and in concentrations in excess of the NJDEP Indoor Air Screening Level are reviewed. A full listing of chemicals, current through August 2006 is found in Attachment A, while the chemicals found on-site are listed below.

TABLE 4.2.1 SUMMARY DATA FOR CONTAMINANT CONCENTRATION IN EXCESS OF THE NJDEP INDOOR AIR SCREENING LEVEL

Contaminant Of Concern	CAS #	OSHA PEL (TWA)	IDLH	Flam-mable?	Carcin-ogen?	Residential Health-based Values	Nonresidential Health-based Values

4.2.1.1 Chemical Exposure Evaluation Criteria

For chemical agents, the primary sources of environmental evaluation criteria for the workplace are: (1) NIOSH Recommended Exposure Limits (RELs), (2) the American Conference of Governmental Industrial Hygienists' (ACGIH®) Threshold Limit Values (TLVs®) and (3) the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs).

Contaminants usually enter the body through the mouth (ingestion), the lung (inhalation) or by absorption through the skin and mucous membranes. Chemical exposure through these routes will be controlled by limiting eating, drinking, and smoking to uncontaminated areas; through the use of hygiene practices and decontamination procedures; and by the use of appropriate engineering controls and personal protective equipment (PPE).

There are four levels of personal protection (Levels A, B, C, and D), according to the degree of protection they afford, with Level A providing the greatest degree of protection. The initial level of personal protective equipment to be used while performing activities at a Site will be based on the hazard assessment performed for the project.

Level D will be used while performing activities at a site unless results of initial Photoionization Detector (PID) results show elevated VOC and/or radon gas airborne values. The building should be placed under positive ventilation to dilute the elevated airborne VOC and radon emissions. If this fails to lower the airborne VOCs and/or radon, then personnel must don for level C protection.

4.2.2 Ionizing Radiation and Radioactive Agents

As a guide to the evaluation of the hazards posed by workplace exposures, NIOSH field staff use environmental evaluation criteria to assess a number of chemical and physical agents. For physical agents such as ionizing radiation, the primary sources of environmental evaluation criteria for the workplace are: (I) the National Council on Radiation Protection and Measurements (NCRP) limits of exposure to ionizing radiation (2) the International Commission on Radiological Protection (ICRP) limits of exposure to ionizing radiation, (3) the U.S. Department of Labor, OSHA PELs (4) the U.S. Department of Energy (DOE) standards for external and internal exposure, (5) the U.S. Nuclear Regulatory Commission (NRC) occupational dose limits (6) the U.S. Environmental Protection Agency (EPA) federal radiation protection guidance for occupational exposure (6) the Food and Drug Administration (FDA) performance standards for ionizing radiation emitting products (7) the U.S. Department of Transportation (DOT) radiation limits for Transportation of radioactive materials (8) the International Air Transportation Association (IATA) radiation protection and quality assurance programs and (9) the International Atomic Energy Agency (IAEA) occupational radiation protection safety standards.

Natural radiation background exposure varies around the world from less than 0.005 mR/hr to more than 2.5 mR/hr19, producing an annual dose of about 40 millirem (mrem) to 22,000 mremb, respectively. The greatest dose is due to anomalous, localized deposits of NORM. Variations in the natural radiation a 1 pCi/L = 37 Becquerel per cubic meters (Bq/m3)
b A millirem is a unit of measure of ionizing radiation exposure of living tissues that takes into account the differences in biological harm (Relative Biological Effectiveness [RBE factor]) caused by different types of ionizing radiation.

The average annual background dose in the United States has been reported to be about 360 mrem. Radon exposure is responsible for about 55% of background dose (about 200 mrem) and is greater where the presence of NORM material (uranium and thorium) is elevated. Cosmic radiation produces an annual dose of 27 mrem (8%) and terrestrial radiation from NORM in the crust of the earth accounts for 28 mrem (8%). Radiation exposure from internally deposited radioactive material, mainly potassium-40, delivers about 39 mrem (11%) to each person. Medical and other manmade sources of radiation exposure (including consumer products) account for about 63 mrem (18%). Other industrial sources of radiation exposure account for only 3 mrem (0.3%) and include the nuclear fuel cycle, fallout, and artificial sources.

Important forms of ionizing radiation include the alpha and beta particles and gamma rays emitted from radioactive materials. These are called ionizing radiation because they can remove (knock) electrons out of atoms and molecules, creating electrically charged particles called ions. This ionization process transfers energy from the radiation to the irradiated material, and can cause chemical and physical changes in human tissue. The various types of ionizing radiation differ widely in their abilities to penetrate tissue and deposit energy. Alpha particles travel only a very short distance (less than 1 mm) in living tissue and thus cannot

penetrate the skin. These particles are present with radon and two of the radon decay products. Beta particles are identical to electrons, are thousands of times smaller than alpha particles, and can penetrate deeper into tissue. However, they are easily stopped by a thin sheet of metal foil. Gamma rays have no mass or electrical charge, and travel much greater distances than either alpha or beta particles. This means their energy is deposited over a longer path and is relatively unlikely to damage living tissue unless the exposure rate is high.

4.2.3 Radium

Radium, formed upon the radioactive decay of uranium and thorium, is a naturally occurring silvery-white radioactive metal that can exist in several forms called isotopes. Two of the main radium isotopes found in the environment are 226Ra (uranium decay series; Appendix I) and radium-228 (228Ra, thorium decay series). Historically, radium has been used as a radiation source for treating cancer and in radiography of metals. It has been combined with other metals as a neutron source for research and radiation instrument calibration. Radium was also a component of luminous paints used for watch and clock dials, aircraft instrument panels, military instruments, and compasses. The EPA has set a drinking water limit of 5 pCi/L for 226Ra and 228Ra (combined).

4.2.4 Radon in Air

Radon is a colorless, odorless, tasteless, radioactive gas formed from the radioactive decay of radium in the uranium decay chain. Uranium and radium are found around the world in soil, rocks, and water at various concentrations. Because radon is a gas, it may escape into the air from the material in which it is formed; therefore radon gas is ubiquitous outdoors as well as indoors. High concentrations of radon can accumulate in poorly ventilated indoor locations or when a large amount of 226Ra is present. Radon decays with a half-life of about 4 days into a series of solid, short-lived radioisotopes commonly called radon daughters or progeny. Two progeny, polonium-218 and polonium214, emit alpha particles and are responsible for most of the health effects associated with inhalation of radon and its decay products.

4.2.5 Airborne Radioactivity Government standards and Guideline Exposure Levels

1 WLM / year (2040 hrs per year)
0.083 WLM (170 hrs)
NIOSH Recommended Exposure 0.083 WL (average concentration per work shift)
Limits 20.8 pCi/L (40% Equilibrium Factor; EF)
16.6 pCi/L (50% EF)
8.3 pCi/L (100% EF)
100 pCi/L (40 hr work week)

OSHA Permissible Exposure

Limits (1971 regulation) 25 pCi/L (posting requirement for airborne radioactivity)
3 pCi/L (40 hr work week for workers less than 18 yrs old)

NRC Occupational Exposure 30 pCi/L (yearly avg); Derived Air Concentration
Limits 3 pCi/L (yearly average for workers less than 18 yrs old)

EPA Recommended Public Limit 4 pCi/L (non-occupational action limit to initiate remediation efforts)
IAEA Recommended 4 WLM
Occupational Dose Limits* 32.4 pCi/L (2000 hrs per year; 40% EF)

WLM = Working Level Months pCi/L = picoCuries per liter

* The IAEA recommendations correspond to an annual effective dose of 2 rem (0.02 Sievert, Sv).

The major route of radon exposure is inhalation. The typical concentration range for radon in ambient air is 0.003 to 2.6 pCi/L. A typical level of radon found indoors in homes, schools, or office buildings is about 1.5 pCi/L, although much higher concentrations (> 200 pCi/L) have been measured. Persons who work with uranium and phosphate fertilizers, persons living near uranium mines and processing facilities, and persons handling fossils and other artifacts rich in uranium or radium have a greater chance of being exposed to higher levels of uranium, radium, and radon than the general population.

4.2.6 OSHA Interpretation of Radon in the Workplace

In December 2002, OSHA provided guidance on its regulations regarding proper interpretation of the workplace radon standards The OSHA standard refers to airborne radioactive material exposure limits that were published by the Atomic Energy Commission (AEC) in 1969. Both the AEC and the OSHA limits were for a 40-hour exposure in any workweek of 7 consecutive days. In 1996 the OSHA standard was redesignated as 29 CFR 1910.1096, although no changes were made to the exposure limits. The Nuclear Regulatory Commission (NRC) has since changed the format of the tables in Appendix B of 10 CFR Part 20 and converted the limits to annual averages, reduced the radon exposure limits, and moved limits for miners from the table to the regulatory text.

Case law supports the interpretation that the original version of a referenced federal regulation is the enforceable regulation. Therefore, the 1969 version of Appendix B to 10 CFR Part 20 that was referenced in the original OSHA ionizing radiation standard in 1971 is enforceable. The applicable 222Ra exposure limit issued by OSHA in 1971 for adult employees is 100 pCi/L averaged over a 40-hour work week. However, many requirements of the current NRC regulation provide as much or more protection than the OSHA standard for workers exposed to airborne radioactive materials. A series of questions and answers regarding radon exposure in the workplace is provided in Appendix II.

EPA Recommendations and Action Levels for Radon

The recommendations and action levels for indoor radon provided by the EPA are not enforceable for a working environment. However, the EPA and the U.S. Surgeon General issued a Health Advisory that recommends testing all homes for radon below the third floor and testing schools nationwide for radon.

They also recommended abating homes with radon levels that are at or above 4 pCi/L, the EPA National Voluntary Action Level. This level represents a radon concentration where the cost of remediation is warranted by the risk of health effects. The EPA believes that the indoor radon concentration can be lowered to 2 pCi/L fairly simply, and encourages homeowners, home

builders, and building code organizations to construct radon-resistant homes. Radon testing is encouraged when existing homes are sold.

4.2.7 Radon in Water

The EPA is proposing new public health standards for radon in drinking water. The proposal provides two options to states and community water systems for reducing radon health risks in both drinking water and indoor air. Information about the proposed rule and information relating to the status of the rule can be found at: www.epa.gov/safewater/radon.html.

The proposed regulation provides that states may adopt Multimedia Mitigation (MMM) programs and the Alternative Maximum Contaminant Level (AMCL) in water of 4,000 pCi/L. According to the EPA, the AMCL is the most effective approach for radon risk reduction and the one the EPA expects most states to adopt. In the absence of this regulatory expectation, small (10,000 or fewer customers) Community Water Systems (CWS) are expected to comply with a level of 4,000 pCi/L in drinking water, and develop and implement a state-approved local MMM program plan to reduce indoor radon risks from soil and rock under homes and buildings. If Arkansas has an approved MMM program plan, the 4,000 pCi/L standard for radon in drinking water would be adopted to obtain primacy. Under the proposed requirements, an MMM program plan must address four criteria:

1. Public involvement in development of the MMM program plan
2. Quantitative goals for existing homes fixed and new homes built radon resistant
3. Strategies for achieving goals
4. Plan to track and report results

The CWS must monitor radon in drinking water22, and report its results to the state. If the radon level is below 300 pCi/L, the CWS will need only to continue to meet monitoring requirements and will not be covered by the requirements regarding MMM programs.

4.2.8 Health Effects from Radium and Radon Exposures

Cancer is the major health effect of concern from exposure to radium, radon, and its short-lived progeny. Oral exposure to radium is known to cause lung, bone, brain, and nasal passage tumors in humans. Inhalation exposure to radon may cause lung cancer in humans. The EPA has classified radium as a Group A, human carcinogen, but it has not classified radon for carcinogenicity. Chronic exposure to radon in humans and animals via inhalation has resulted in respiratory effects (chronic lung disease, pneumonia, fibrosis of the lung), while animal studies have reported effects on the blood and a decrease in body weight. Smokers exposed to radon are at greater risk for lung cancer (approximately 10 to 20 times) than are nonsmokers similarly exposed. No information is available on the acute (short-term) effects of radium or radon in humans. Reference material for the Radioactivity and Radiation section came from: http://www.cdc.gov/niosh/hhe/reports/pdfs/2004-0094-2978.pdf.

4.2.9 Physical Agents

Physical agents include noise. There is also a risk of physical injury when working with powered drills, etc. Field personnel should be able to recognize these hazards and take steps to avoid injurious contact with them.

4.3.0 Noise Exposure

Work at any site may be conducted with high noise levels from equipment such as drills. Standards require that hearing protection be used when noise levels exceed 85 dBA, averaged over an 8-hour day. Hearing protection will be required at this site for noise exposures greater than 85 dBA for any length of time. In the absence of a noise meter, an appropriate rule of thumb is that when normal conversation is difficult to hear or understand at a distance of three feet, hearing protection is required. RAdata personnel shall have hearing protection on-site and available for use at all times.

4.3.1 Safety Hazards

Use of steel-toed work boots, safety glasses or goggles, and hard hats will be required when in an Exclusion Zone. Personnel should be aware that when PPE such as respirators, gloves, and protective clothing are worn, visibility, hearing, and manual dexterity are impaired.

4.3.2 Drilling, Pile Driving and Excavation

The hazards involved with the use of drills and excavation equipment are significant and include pinch points, entrapment in machinery, impact from moving part and improper operations. Use of hand tools, moving the rigs/equipment, and conducting required repairs can increase physical risks. Working with and around a drills can involve a high risk of serious injury or death. In order to reduce the risk, proper safety precautions must be observed at all times.

4.3.3 Odors

During the course of excavation, odorous gases may escape from the core drill areas. The Project Manager for the site will determine the most effective means of exhausting these odors.

4.3.4 Contaminated Dust

Contaminated sub-surface soils may become a source of dust. Inhaling contaminated dust may result in adverse health effects from exposure to the contaminant(s) on the dust particles.

5.1 AIR QUALITY MONITORING INSTRUMENTATION

Air quality will be measured to determine exposure potentials prior to the start of work, and at various times during the course of the project. Instruments which may be used to monitor air quality are discussed below:

- Photoionization Detector

The HNu Systems Model PI-101 Photoionization Detector (PID) or equivalent should be used to detect trace concentrations of certain organic gases and a few inorganic gases in the air. Methane, ethane, and the major components of air are not detected by the HNu PID. PID readings reflect total (readable) vapors in the air. PID readings must be given as "PID units", rather than "ppm". The PID detects mixtures of compounds simultaneously. PID readings do not measure concentrations of any individual compound when a mixture of compounds is present.

The PID will be calibrated twice each day (before start of work and after the conclusion of work) using an isobutylene standard (molecular weight = 56.2) for calibration. Calibrations will be logged. PID readings should be measured in the breathing zone of the most highly exposed worker (i.e., the person who is closest to the source of known or suspected contamination) at least hourly.

5.2 AIR QUALITY RESPONSE LEVELS

The Project Manager for the site will decide when to change protection levels in response to air monitoring results. He will obtain the air monitoring results from Bell Environmental.

5.3 MONITORING GUIDELINES

5.3.1 Background Organic Vapor Monitoring

The Health and Safety Officer should monitor for background PID readings. They should be taken at least twice daily: before the start, and after the conclusion of, work activities. Background levels will be taken at a location which is unaffected by on-site work. Once work at the Site begins, reselection of the original background location may be required.

5.3.2 Air Monitoring Protocol

During intrusive work activities (i.e. drilling, excavation) at least one series (series=Organic Vapor, Toxic gas, Combustible gas, and Oxygen) of readings should be taken every 30 minutes. During non-intrusive work activities, one series will be performed at the start of work, one series at some point during the work, and one near the conclusion of the work. This will be in addition to the background monitoring described in the previous section.

5.3.3 Documenting Monitoring Results

A calibration log will be kept for each of the monitoring instruments used, which describes the calibration by the Project Manager for each project.

5.4 EMISSION CONTROL MEASURES

Vapor (i.e. volatile organic compounds) or dust (i.e. concrete oil or soil contaminated particulates) emissions resulting from field operations do not usually exceed either regulatory action levels. If the action levels are significantly exceeded, measures to suppress the responsible emissions should be investigated. Appropriate measures would include cessation of operations until the exact cause of the emission is identified and corrected. Vapor control may include purging the building with fresh air to create positive pressure conditions. Ensure the pails are sealed up immediately after they are filled with concrete and/or soil. This will prevent any potential vapor and or dust release into the building. Fugitive dust emission control is always a recommended practice using water spraying. However, this is not practical if the project is inside a building.

TABLE 5-1

Air Monitoring Action Levels

Instrument Type	Measurement Reading	Level of Respiratory Protection	Cartridge Change Schedule
PID (non-methane)	Background-0.5 ppm (in breathing zone)	Level D	Change out every two weeks
PID (non-methane)	>0.5 ppm (NT above background)	Level D	Change out every two weeks
*	< 1 WLM per annum or per NJDEP criteria for radon	Level D	Change out every two weeks
PID (non-methane)	PCE/TCB confirmed at or above 0.8-25ppm	Level C Lower range is for benzene exposure at OSHA PEL at 1 ppm	8 hour or end of shift whichever is shorter
PID (non-methane)	25 to 50 ppm	Stop work consult with Project Mgr.	8 hour or end of shift whichever is shorter
*	>1 WLM per annum or per NJDEP criteria for radon	Level C-utilize positive ventilation system prevent radon infiltration	8 hour or end of shift whichever is shorter

* testing devices to be used dictated per NJDEP worker exposure criteria

NOTE: If any breakthrough is experienced in terms of odor, taste and irritation while wearing the respirator, personnel shall immediately exit the exclusion zone and report the incident to the HSM. The cartridge change schedule shall be revisited and modified as necessary.

6.1 DESCRIPTION OF LEVELS OF PROTECTION

The personal protection equipment specified in this HASP will be available to all field personnel. RAdata is required to provide the specified equipment (or its equivalent) to all of their exposed employees. The following requirements will also be met, in accordance with OSHA regulations:

Facial hair may not interfere with the proper fit of respirators;
Contact lenses will not be worn on-site; without exception.
Eyeglasses that interfere with the proper fit of full-face respirators will not be worn; and,
No eating, drinking or smoking will be allowed in any area where respiratory protection is required.

Modified Level D Personal Protective Equipment

- Hard hat
- Safety glasses or goggles
- Steel-toed leather work boots
- Rubber overboots, steel-toed rubber boots, or disposable "booties"
- Nitrile-butadiene rubber outer gloves
- Nitrile surgical gloves (to be work underneath outer gloves)
- Polyethylene coated Tyvek coveralls[1] (taped at cuffs)

Modified Level C Personal Protective Equipment

- Hard hat
- NIOSH Certified MSA Comfo Classic Half face or Advantage 3000 full face Air-Purifying Respirator with applicable chemical cartridge combined with a P-100 filter (depending on whether the airborne emissions is from VOCs and/or radon)
- Chemical resistant work boots
- Rubber overboots, steel-toed rubber boots, or disposable "booties"
- Nitrile-butadiene rubber outer gloves
- Nitrile surgical gloves (to be worn underneath outer gloves)
- Saranex impregnated Tyvek coveralls (taped at cuffs)

A first aid kit, multi-purpose dry chemical UL Class 10A-10B-C fire extinguisher, portable eye wash bottle, appropriate barricades should be available on Site.

Selection of the PPE specified for this project is based on a review of known or suspected hazards, routes of potential exposure (inhalation, skin absorption, ingestion, and skin or eye contact) and the effectiveness of personal protective equipment in providing a barrier to these hazards. In addition, PPE has been selected to match the work requirements and task-specific conditions of the job, and to provide adequate protection without causing unnecessary discomfort or physical impairment to the worker.

6.2 INITIAL PPE LEVELS FOR SPECIFIC WORK TASKS

The selection of Initial Levels-of-Protection takes into consideration the physical, biological and chemical hazards posed by the site as well as those posed by the various pieces of personnel protective clothing. Initial Levels-of-Protection are established so as to obtain acceptable levels of protection while not imposing an unacceptable level of physical stress on the wearer.

Ensure all initial PPE levels have been established for the tasks at each Project. Use the table below to list the level of protection and work activity:

Work Activity	Level of Protection

SECTION 7.0
DESIGNATION OF WORK ZONES

This section of the Health & Safety Plan applies to excavation projects where contaminated soils are exposed and may release their contaminants to the air, or come in contact with field personnel. To minimize the migration of contaminant from the Site to uncontaminated areas, three work zones will be set up:

Zone 1:	Exclusion Zone
Zone 2:	Contamination Reduction Zone
Zone 3:	Support Zone

The Exclusion Zone is the area where contamination occurs or could occur. Initially, the Exclusion Zone should extend a distance of a few feet from the edge of intrusive activity unless conditions at the Site warrant either a larger or smaller distance as determined by the Project Manager.

The Support Zone is the area of the Site where significant exposure to contamination is not expected to occur during non-intrusive activities. The Support Zone is considered to be the "clean area" of the Site where RAdata personnel not in PPE can stand and observe.

Between the Exclusion Zone and Support Zone is the Contamination Reduction Zone, which provides a transition zone between the contaminated and clean areas of the Site. The Contamination Reduction Zone will be located directly outside of the Exclusion Zone. All personnel must decontaminate when leaving the Exclusion Zone. A Contamination Reduction Zone (decontamination area) will be established adjacent to each individual area of intrusive work.

Personnel who have been in contact with contaminated materials will decontaminate themselves in the following manner:

- Deposit contaminated equipment on plastic drop cloths.
- Stand in wash tub containing Alconox® and water, wash boots and outer gloves with long handled brush.
- Rinse boots and outer gloves with long handled brush in a wash tub containing clear water or use a sprayer to rinse off boots and gloves.
- Remove ankle and wrist tapes; place in disposal drum.
- Remove outer gloves and place in disposal drum.
- Remove Tyvek® or Saranex® suit and place in disposal drum.
- Remove respirator and place on table to be decontaminated.
- Remove inner gloves and place in disposal drum.
- Wash hands and face.

All tools or equipment which have been in contact with contaminated materials, must be decontaminated after leaving the Exclusion Zone. This decontamination is to be performed using a high pressure/hot water "steam type" cleaner or a spray/rinse decontamination sequence as described in Section 3.6, Respirator Maintenance, Fitting and Decontamination, as appropriate.

Contaminated liquids from the decontamination area and contaminated clothing should be disposed of in accordance with the specific site protocols.

9.0 EMERGENCY RESPONSE

Emergencies addressed by this plan include:

- Fire;
- Chemical or Radioactive over-exposures; and,
- Physical injuries to site personnel.

The Health & Safety Officer and Project Manager must be notified as soon as possible of any on-site emergency or potential emergency including fire, explosive conditions or OSHA-recordable physical injury.

9.1 EMERGENCY RECOGNITION AND PREVENTION

9.1.1 Chemical and Radioactive Exposures

Work should always be performed in a manner that minimizes exposure to radioactive and chemical contaminants through skin or eye contact, inhalation or ingestion. Work practices to reduce the risk of chemical exposure include:

- PPE will be used by all field personnel covered by this HASP. A formal revision to the HASP must be made by the Health and Safety Officer to modify the PPE specifications.
- Keep hands away from face during work activities.
- Minimize all skin and eye contact with contaminants.

Early recognition of the signs and symptoms of chemical and/or radioactive exposures are essential for the prevention of serious chemical exposure incidents. Symptoms of exposure to the compounds present at the Site include the following: fatigue, weakness; eye, nose, and/or throat irritation; dizziness; nausea; vomiting; malaise; tremors; aggressive confusion; cyanosis (blue color to skin); anemia; and muscle spasms.

If a person experiences any of these symptoms, or recognizes any of them in a fellow worker, the person experiencing the symptoms will stop work immediately and report to the Project Manager. If the symptoms persist or affect performance in any way, the Project Manager will arrange for medical treatment. If the symptoms are serious, or affect several people, work activities in the exposure area will be discontinued until more is known about the cause(s). Incident reporting procedures as specified in Section 3.3 will be initiated.

9.2 EMERGENCY ALERTING PROCEDURES

The Project Manager will alert the appropriate work groups when an emergency occurs. The communication method(s) will be established by the Project Manager. The Project Manager and any isolated work group will carry radios if direct contact cannot be maintained. If direct contact cannot be maintained, an air horn or verbal signal will be used to signal personnel to stop work and assemble in the Contamination Reduction Zone. If evacuation of the Site is necessary, a pre-arranged signal from the air horn or verbal alert will be sounded.

9.3 EVACUATION PROCEDURES AND ROUTES

Evacuation from the Contamination Reduction Zone will proceed in an upwind direction from the emergency. If evacuation to the Support Zone does not provide sufficient protection from the emergency, personnel will be advised to evacuate the Site proper.

9.4 TELEPHONE NUMBERS FOR EMERGENCY SERVICES

Ensure that telephone numbers of local emergency services are provided and listed below:

Emergency Service	Telephone Number
Ambulance	911
Fire Department	911
Police Department	(914) 737-8000
Primary Hospital (Trauma Center)	
Hudson Valley Hospital Center	(914) 737-9000
1980 Crompond Road, Cortlandt Manor, NY	
Poison Control Center	(800) 962-1253
US EPA National Response Center	(800) 424-8802
NJ DEP Hotline	(800) 927-6337
NJ Department of Health	(800) 367-6543
Below Ground Utilities (State of NJ BPU)	(800) 272-1000

These telephone numbers must be verified by the Project Manager before the start of field work. Ensure that the specific HASP contains a map and directions.

9.5 EMERGENCY RESPONSE PERSONNEL

The Project Manager will have the primary role in responding to all emergencies at each Site. The Project Manager, will be present at the Site during all work activities. If any emergency such as a fire, chemical exposure, or physical injury occurs, the Project Manager shall be notified immediately. The Project Manager will direct all site personnel in cases of emergency.

After an emergency has occurred at the Site, the causes and responses to that emergency shall be thoroughly investigated, reviewed and documented by the Project Manager; this documentation is to be submitted to the Health and Safety Officer within 48 hours of the incident.

9.6 DECONTAMINATION PROCEDURES DURING AN EMERGENCY

Decontamination of an injured or exposed worker or during a site emergency shall be performed only if decontamination does not interfere with essential treatment or evacuation.

If a worker has been injured or exposed and decontamination can be done: Wash, rinse, and/or cut off protective clothing and equipment.

If a worker has been injured or exposed and cannot be decontaminated:

- Wrap the victim in blankets, plastic or rubber to reduce contamination of other personnel;
- Alert emergency and off-site medical personnel to potential contamination; and,
- Have the Project Manager or other personnel familiar with the incident and contaminants at the Site accompany the victim to the hospital. If possible, send a copy of the appropriate MSDS(s) with the victim.

9.7 EMERGENCY MEDICAL TREATMENT AND FIRST AID PROCEDURES

Emergency medical treatment or First Aid may be administered at the Site by the PROJECT MANAGER or other personnel who have been certified in First Aid.

General emergency medical and First Aid procedures are as follows:

- Remove the injured or exposed person(s) from immediate danger.
- Render First Aid as needed; decontaminate affected personnel, if necessary.
- Call an ambulance for transport to local hospital immediately. <u>This procedure shall be followed even if there is no apparent serious injury.</u>
- Evacuate other personnel at the Site to safe places until the Project Manager determines that it is safe for work to resume.

- Report the accident to the Health and Safety Officer immediately.

9.8 DIRECTIONS TO THE HOSPITAL FROM SITE

The route and/or directions to the hospital from the Site must be included with each specific Project HASP. List as a separate attachment.

The directions to the hospital from the Site must be verified by the Project Manager prior to the start of field work. List as a separate attachment.

SECTION 10.0
PERSONNEL ASSIGNMENTS

I have reviewed the Health and Safety Plan for Kurtsam Realty, 20 Welcher Ave, Peekskill, NY. I have read the HASP, understand it, and agree to comply with all of its provisions. I understand that I could be prohibited from working on the project for violating any of the safety requirements specified in the Health and Safety Plan.

Name	Company
Signature	Date
Name	Company
Signature	Date
Name	Company
Signature	Date
Name	Company
Signature	Date
Name	Company
Signature	Date

NJDEP INDOOR AIR SCREENING LEVEL

Attachment A

Contaminant Of Concern	CAS #	OSHA PEL (TWA)	IDLH	Flammable?	Carcinogen?	Residential Health-based Values (ppbv)	Nonresidential Health-based Values (ppbv)
Acetone	67-64-1	1000	2500	Y	N	1400	1900
Benzene	71-43-2	1 ppm	500 ppm	Y	Y	0.07	0.2
Bromodichloro-methane	75-27-4	-		N	Y	0.02	0.03
Bromoethene (vinyl bromide)	593-60-2	-	-	Y	Y	0.01	0.03
Bromoform	75-25-2	0.5	850	N	Y	.2	0.4
Bromomethane (methyl bromide)	74-83-9	C20	250	Y	N	1	2
1,3-Butadiene (vinyl ethylene)	106-99-0	1	2000	Y	Y	0.03	0.06
2-Butanone (MEK)	78-93-3	200	3000	Y	N	1700	2400
Carbon disulfide	75-15-0	20	500	Y	N	230	330
Carbon tetrachloride	56-23-5	10	200	N	Y	0.02	0.04
Chlorobenzene	108-90-7	75	1000	Y	N	11	16
Chloroethane (ethyl chloride)	75-00-3	1000	3800	Y	Y	0.8	2
Chloroform	67-66-3	C50	500	N	Y	0.02	0.04
Chloromethane (methyl chloride)	74-87-3	100	2000	Y	N	46	64
3-Chloropropene (allyl chloride)	107-18-6	2	20	Y	Y	0.1	0.2

2-Chlorotoluene (o-chlorotoluene)	95-49-8	-	-	Y	N	14	20

Contaminaut Of Concern	CAS #	OSHA PEL (TWA)	IDLH	Flam-mable?	Carcin-ogen?	Residential Health-based Values (ppbv)	Nonresidential Health-based Values (ppbv)
Cyclohexane	110-82-7	300	1300	Y	N	1800	2500
Dibromochloro-methane	124-48-1	-			Y	0.009	0.02
1,2-Dibromoethane (ethylene dibromide)	106-93-4	20	100	N	Y	0.0004	0.0009
1,2-Dichlorobenzene (o)	95-50-1	50	200	N	N	24	34
1,3-Dichlorobenzene (m)	541-73-1	-		N	N	2	3
1,4-Dichlorobenzene (p)	106-46-7	75	150	N	Y	0.05	0.1
Dichlorodifluoro-methane (Freon 12)	75-71-8	1000	15000	N	N	37	52
1,1-Dichloroethane	75-34-3	100	3000	Y	N	130	180
1,2-Dichloroethane	107-06-2	50	50	Y	Y	0.02	0.04
1,1-Dichloroethene	75-35-4	-	-	Y	N	55	77
1,2-Dichloroethene (trans)	540-59-0	200	1000	Y	N	18	26
1,2-Dichloroethene (total)	156-59-2	-			N	8	12
1,2-Dichloropropane	78-87-5	75	400	Y	Y	0.02	0.04
1,3-Dichloropropene (total)	542-75-6	-	-	Y	Y	0.1	0.3
Ethylbenzene	100-41-4	100	800	Y	N	240	340
Hexachlorobutadiene	87-68-3	-	-	N	Y	0.008	0.02

Contaminant Of Concern	CAS #	OSHA PEL (TWA)	IDLH	Flammable?	Carcinogen?	Residential Health-based Values (ppbv)	Nonresidential Health-based Values (ppbv)
n-Hexane	110-54-3	500	1100	Y	N	210	290
Methylene chloride (dichloromethane)	75-09-2	25	2300	N	Y	1	2
4-Methyl-2-pentanone (MIBK)	108-10-1	100	500	Y	N	770	1100
MTBE (methyl t-butyl ether)	1634-04-4	50		Y	Y	0.4	1
Styrene	100-42-5	100	700	Y	N	250	340
t-Butyl alcohol (TBA)	75-65-0	100	1600	Y	N	22	30
1,1,2,2-Tetrachloroethane	79-34-5	5	100	N	Y	0.005	0.01
Tetrachloroethylene (PCE)	127-18-4	100	150	N	Y	0.05	0.1
Toluene	108-88-3	200	500	Y	N	1400	1900
1,2,4-Trichlorobenzene	120-82-1	-	-	N	N	5	7
1,1,1-Trichloroethane	71-55-6	350	700	N	N	190	260
1,1,2-Trichloroethane	79-00-5	10	100	N	Y	0.02	0.05
Trichloroethylene (TCE)	79-01-6	100	1000	N	Y	0.003	0.007
Trichlorofluoromethane (Freon 11)	75-69-4	1000	2000	N	N	130	180
1,1,2-Trichloro-1,1,2-trifluoroethane (Freon TF)	76-13-1	1000	2000	N	N	4100	5700
Vinyl chloride	75-01-4	1	-	Y	Y	0.03	0.4
Xylenes (total)	-	100	900	Y	N	25	35

I have reviewed the Health and Safety Plan for Kurtsam Realty, 20 Welcher Ave, Peekskill, NY. I have read the HASP, understand it, and agree to comply with all of its provisions. I understand that I could be prohibited from working on the project for violating any of the safety requirements specified in the Health and Safety Plan.

John Cowell	RAdata, Inc
Name	Company
Signature	10/19/10
	Date
Derek Gompertz	Ra data inc.
Name	Company
Signature	10/19/10
	Date
Niko Kalyvas	Conte Electric Inc.
Name	Company
Signature	10/20/10
	Date
Luis Tepan	Conte Electric Inc.
Name	Company
Signature	10/20/10
	Date
DOUGLAS HOWELL	CONTE ELECTRIC ENG
Name	Company
Signature	10/20/10
	Date

ATTACHMENT

7

RAdata, Inc.

27 Ironia Rond, Unit 2
Flanders, New Jersey 07836
973-927-7303 973-927-4980 fax
1-800-447-2366

OPERATIONS AND MAINTENANCE SCHEDULE FOR THE ACTIVE SOIL DEPRESSURIZATION SYSTEMS

The blower units used in the active soil vapor depressurization systems are maintenance free and require no attention until the U-Tube manometers indicate the fan unit has failed.

30 DAY SERVICE: RAdata, Inc. recommends that the magnehelic gauges be observed and checked for proper blower functions every 30 days to ensure the proper function of the fan units.

Refer to As Built Drawings provided by RAdata, Inc. for systems location.

YEARLY SERVICE: It is recommended that the active soil depressurization systems be serviced on a yearly basis. That work will consist of:

- Removing and cleaning fan, note fans condition
- Adjust worm drive
- Check pipe clamps for breakage
- Check for moisture in pipe and make corrective adjustments if necessary
- Re-caulk all floor penetrations where accessible
- Check magnehelic manometers. Replace if necessary
- Register vacuum measurements
- Check electrical connections
- Measurement sub-floor communication
- Add system labeling if necessary
- Check all fire barriers
- Check for moisture under floor

Please contact our office for additional information regarding service on the active soil depressurization systems.

ATTACHMENT

8

R data

27 Ironia Road, Unit 2
Flanders, New Jersey 07836
973-927-7303
973-927-4980 Fax

Proposal

Kurtsam Realty
Box 383 Quaker Ridge Road
Croton-On-Hudson, NY 10520

Attention: Fred Schwalb
973-584-7777x119 Bell Env.
DKeane@bellenvironmental.com

7/8/2010
No: 17844

Job Location: Go No Sen Karate Dojo
20 Welcher Avenue
Peekskill, NY 10566

County: Westchester

Job Description

In October of 2006 the New York State Department of Environmental Conservation (N.Y.S.D.E.C.) in consultation with the New York State Department of Health (N.Y.S.D.O.H) established a Guidance of Evaluating Soil Vapor Intrusion in the State of New York. The objective of the remedial techniques stated in that document is to eliminate the pathway between the source (contaminated ground water or subsurface soils) and the building occupants. That document represents Active Sub Slab Depressurization Systems (ASDS) to be the most effective application for this purpose. The required system design, installation and evaluation guidance are drawn from United States Envirnomental Protection Agency (U.S.E.P.A.) radon remediation publications. In the N.Y.S.D.O.H document it is recommended that a Environmental Professional, such as a Licensed Radon Mitigation Business, be used for this type of work. The goal of this type of installation is to achieve a sub slab vacuum measured at 1 Pascal or 0.004 inches of water thus reducing the potential for inhalation of vapors migrating from the soil through the building slab.

**SYSTEM CLASSIFICATION: It is stated in the N.Y.S.D.O.H. Guidance that this type of installation be considered temporary. Guidance recommendations are to remove the system when either the remediation of the underlying contaminated soil or water is complete, or the vapor intrusion no longer exceeds acceptable standards. THE VENTING SYSTEM OUTLINED IN THIS PROPOSAL, IF CONSIDERED A PERMANENT ADDITION TO THIS BUILDING AND WILL REQUIRE YEARLY SERVICE, AND INDOOR AIR MONITORING SHOULD BE IMPLEMENTED. Submission of an annual certification to the State may be required.

**SYSTEM SPECIFICATIONS: The number of venting systems suggested for this portion of the building is a total of three (3). The facility is a 5,100 square foot one story masonry building with a finished basement area. The basement is partitioned into multiple use rooms. Various radon remediation publications recommend installing one ventilation system for each 1,500 square feet of foundation area.

Install three (3) Active Soil Depressurization Systems (ASDS) to address the VOC contamination below the concrete basement slab consisting of the following actions:

1). Drill four inch (4") holes through the basement concrete slab. Two (2) slab penetrations will be installed along the interior perimeter of the building foundation and one (1) slab penetration will be installed in a central closet area. These holes will be piped with three or four inch (3"/4") Schedule 40 PVC. Piping shall be fastened to the wall or concrete deck using industry standard metal straps and hangers. Supports for the ASDS shall be six feet (6') on horizontal runs and every eight feet (8') on runs that do not penetrate floors, celilings or roof. A sample port and vacuum gauge shall be installed for each system. Systems will be clearly labeled to identify their purpose.

2). Extend three (3) manifolds to the rear of the building. Extend vent pipes vertical to a termination point no less than 12" above the roofline. Exterior vent pipes shall be anchored to brick wall with pipe supports every eight feet (8'). Vent points will conform with all venting specifications provided by The N.Y.S.D.OH.

3). Exhaust fans will be Fantech, Dynavac or Festa blowers (one year warranty). Fans will be mounted at rear of building about 10' above grade. Fan units will be hard wired by a New York State Licensed Electrician with an on/off switch provided for each fan. Magnehelic gauges and audio alarms will be placed on all systems to alert occupants if system(s) fan(s) have stopped working. Monitoring devices shall be placed in plain view of employees and/or management. Audio alarms devices will be hard wired by a New York State Licensed Electrician on separate breakers to prevent accidental disconnect. Electrical service for fans and alarms units is

ESTIMATED at $1,595.00. Cost over runs will be documented and passed along to the CLIENT with a plus 20% cost adjustment

4.) Upon completion of the installation of the ASDS, Radata, Inc. shall provide an Operations and Maintenance Manual and review systems installation and maintenance requirements with the property owner or representative:

a. The systems operation, including equipment manuals and specifications for mechanical and electrical components. RAdata, Inc. will provide contact information including name, telephone number, and e-mail address to the property owner for future contact.

b. How the warning system functions and what procedures are to be followed if it is activated.

c. All guarantees or warranties will be transferred to the property owner as well as manuals or equipment documents.

SYSTEMS INSTALLED PURSUANT TO SPECIFICATIONS OF ASTM 2121 - 03

Air Discharge Permit requirements (if applicable), as well as the retesting of contaminants in the exhaust stream, will be the responsibility of Bell Environmental. Sampling at six months and each year thereafter will be the responsibility of Bell Environmental as per N.Y.S.D.O.H requirements. This will continue to demonstrate that Air Discharge Permit Requirements are complied with unless their standards are changed in the future. After the installation is complete it will be the responsibility of the client to sample and maintain required measurements for all aspects associated with indoor and exhaust vapor limits in the systems, and the occupied space, as per N.Y.S.D.O.H. requirements.

**CONFIRMATORY TESTING: Pressure field extension testing will be completed to qualify the extent of the sub-floor vacuum. Backdraft conditions will also be evaluated for the boiler and other combustion equipment.

**SOIL DISPOSAL: The removal and disposal of all soil and concrete removed from under the floor during the installation of the described systems will be the responsibility of RAdata, Inc. Disposal will be coordinated with Bell Environmental. A disposal manifest will be a part of the final work product. RAdata will place soils and contaminated building debris, as well as, but not limited to, work coveralls and gloves in appropriate containers for removal. Removal and disposal of the drum from the job site will be completed by Clean Ventures, 201 South First St, Elizabeth, NJ. or another approved vendor. ESTIMATED DISPOSAL COST IS $1,350.00. Cost over runs will be documented and passed along to the CLIENT with a plus 20% cost adjustment.

**DRAWINGS: An "As Built" final plan drawing signed by a N.E.H.A. Radon Mitigation Specialist will be supplied with final work documents. For permit purposes as required by the local municipality, initial drawings for the installation of a Commercial Grade Radon Exhaust System will be supplied by RAdata, Inc. and signed by a N.E.H.A. Radon Mitigation Specialist. The need for the signature of a New York Licensed Architect or Engineer, if required by the town, would be an additional cost.

** REQUIRED VACUUM: The outlined ASDS goal will be to create a measurable vacuum in the order of 1 Pascal or -0.004 inches of water column in all areas under the slab. This will be measured by RAdata, Inc. with the use of a micro-monometer and the results will be reported to the Client.

**ONGOING MONITORING & MAINTENANCE: In ASDS Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006) must be referred to. This document is a guidance, not a regulation, rule or requirement. The client is accountable for the ongoing system verification sampling, monitoring and maintenance requirements.

**VERIFICATION PROCEDURES: Bell Environmental will conduct exhaust stream VOC measurements to support the lack of the need for an air discharge permit at the time of the installation. Confirmatory indoor air sampling should be conducted by the client two to four weeks after systems is operational to verify the effectiveness of the system and the results should be below the N.Y.S.D.O.H. acceptable limits. If these tests are not conducted between November through March, a second round in that time frame is required unless the reduction is an order of magnitude or greater. If the pressure gauge installed on the systems indicate that the remedial system is not operating efficiently, the system should be repaired. An inspection should be conducted by RAdata, Inc. semi-annually to determine if the system is operating properly. After the first year a reduced inspection frequency may be appropriate and changed to once a year.

**WORKER HEALTH & SAFETY PLAN:. RADATA, INC. will supply to the client a Worker Health and Safety Plan appropriate for this project.

**WARRANTY: RAdata, Inc. assumes no responsibility and/or liability for the success or failure of this treatment system for the removal of vapors other than radon gas. Where RAdata, Inc. will demonstrate system performance and achieved sub floor vacuum there is no warranty, either expressed or implied, as the reduction of any vapors other than radon gas impacting the safety and

habitability of the treated spaces. Any testing and/or additional filtration of other vapors in the building or filtration of the air stream exiting the systems remains the responsibility of the client. RAdata, Inc. shall be held harmless from any and all aspects of measurable gas concentrations or indoor air quality issues other than radon gas as set forth by our standard warranty. As the Subsurface Depressurization Systems move air from the soil beneath the concrete floor, the guidance of the U.S.E.P.A. and the represent findings that additional soil gases should be included in the exhaust stream. The outlined soil vapor venting system will create a measurable induced vacuum in the order of 1 Pascal or 0.004 inches of water column in all areas under the slab. This will be measured by RAdata, Inc. with the use of a micro-monometer.

WARRANTY RESTRICTIONS: Sub-floor material must be porous and free of standing water. If conditions are not appropriate for proper airflow, additional work may be necessary at an additional cost.

Subtotal: **$37,975.00**

Notes:

1) All work areas must be made accessible for service crew prior to installation or there will be an addditional charge of $125 per hour (per man) added for the time it takes our staff to access work area properly.
2) Prices subject to change after 60 days.

TOTAL JOB COST: **$37,975.00**

GUARANTEE: NA

WARRANTY RESTRICTIONS: NA

All material is guaranteed to be as specified. All work will be completed in a professional manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents, or delays beyond our control. Owner to carry fire, tornado,and other necessary insurance. Our workers are fully covered by Workman's Compensation insurance.

Payment Terms: Net 30 days

The above, specifications, and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Acceptance of Proposal: Curtis and Lea Ltd Corp

By: [signature] 8/30/10

Customer Signature Date

System Proposed/Designed by:

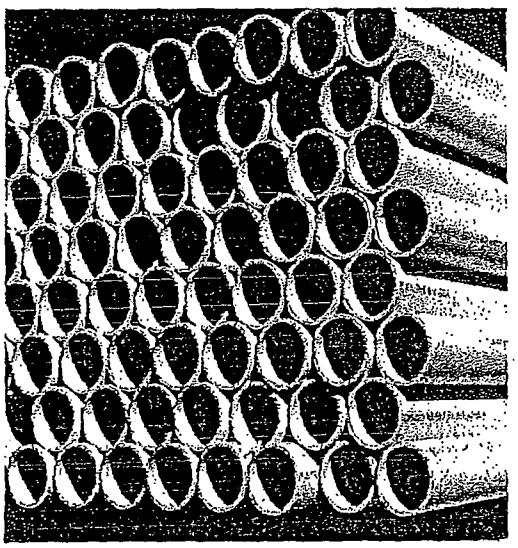
David Grammer, Mitigation Specialist

ATTACHMENT 9

North American Pipe Corporation

www.northamericanpipe.com

Product Description:



ASTM D1785/D2665
Schedule 40/DWV Dual Rated Pipe

North American Pipe's ASTM D1785 Schedule 40 Dual Rated (both Pressure and DWV rating) product line is manufactured to meet the needs of a broad range of industrial, commercial and residential piping systems. With top quality raw materials and modern processing technology, North American Pipe's ASTM D1785 Schedule 40 Dual Rated pipe meets all industry standards in addition to our own rigorous quality control WDhdDrdV. 1 RrWAP ericDn PiSe'VAS70 ' 1785 Schedule 40 Dual Rated product line carries both a pressure and DWV rating to give the designer, installer and end user the flexibility of one product for two distinct applications. North American Pipe produces a broad range of sizes in both plain end and belled end configurations in our Schedule 40 product line. Whether specifying or installing our pipe you can be assured that North American Pipe will SrRvide We SiSe "5 ighWOn 7iP e, All We 7iP e".

This product is made in accordance with the following specifications:

ASTM D1784	ASTM D1785	ASTM DCS7O
ANSI/NSc 14	ANSI/NSc S1	ASTM DCSS5

Short Form Specification for North American Pipe Corporation ASTM D1785/D2665 Schedule 40/DWV Dual Rated Pipe

Schedule 40 water distribution pipe shall be made in accordance with ASTM D1785 and ASTM DCSS5 from a PVC compound conforming to a cell classification of 1C454 as defined by ASTM D1784. Belled end of solvent weld pipe shall meet the requirements of ASTM DCS7Owhen installed in accordance with ASTM DC855. Solvent weld belled end pipe shall be tested and approved for contact with potable water in accordance with ANSI/NSc S1 and NSc 14 and be cactory Mutual approved. Pipe shall be dual marked for use in water distribution and drain, waste, and vent applications.

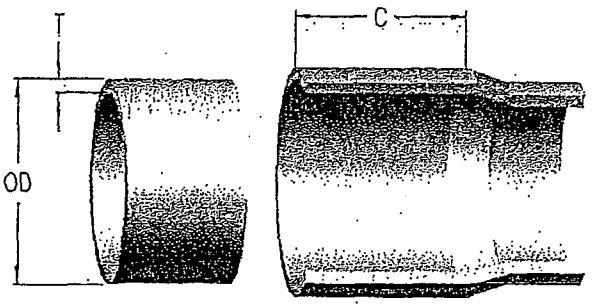
Rev: 07/2006

2801 Post Oak Blvd. | Suite 600 | Houston | TX | 77056
Phone: 713-840-7473 Toll Free 800-999-7473 Fax: 713-552-0087

North American Pipe Corporation

www.northamericanpipe.com

ASTM D1785/D2665 Schedule 40/DWV Dual Rated Pipe



NOMINAL PIPE SIZE	OUTSIDE DIA. – 120 (OD)	**APPROX. BELL DEPTH (C)	(T)	PRESSURE RATING (psi)
½"	.840	1.75	.109	S00
¾"	1.050	Q50	.11P	480
1"	1.P15	Q50	.1PP	450
1¼"	1.SS0	Q50	.140	P70
1½"	1.900	Q50	.145	PP0
2"	QP75	P.Q5	.154	Q80
2½"	Q875	P.50	.QOP	P00
3"	P.500	4.Q5	.Q1S	QS0
4"	4.500	5.50	.QP7	QQ0
5"	5.5SP	S.00	.Q58	190
6"	S.SQ5	7.00	.Q80	180
8"	8.SQ5	7.50	.PQO	1S0
10"	10.750	8.50	.PS5	140
12"	1Q750	10.00	.40S	1P0
14"	14.000	10.00	.4P7	1P0
16"	1S.000	10.00	.500	1P0

Note: These dimensions are for estimating purposes only ** Nominal depth, depth will vary by pressure class

Rev: 07/2006

2801 Post Oak Blvd. | Suite 600 | Houston | TX | 77056
Phone: 713-840-7473 Toll Free 800-999-7473 Fax: 713-552-0087

North American Pipe Corporation

MATERIAL SAFETY DATA SHEET

Effective Date: March 8, 2007

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Polyvinyl Chloride Pipe
Chemical Name: Mixture
Synonyms: Not applicable
Chemical Family: Mixture of Polyvinyl Chloride Homopolymer
Formula: Mixture, see below.

COMPANY ADDRESS: North American Pipe Corporation
2801 Post Oak Blvd.
Houston, TX 77056

EMERGENCY CONTACT: CALL 1-217-324-6515
THESE NUMBERS ARE AVAILABLE DAYS, NIGHTS, WEEKENDS, AND HOLIDAYS, EXCEPT ON DECEMBER 24 TO 26.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	% By Weight	OSHA PEL-TWA mg/m^3	ACGIH TLV-TWA mg/m^3
Polyvinyl chloride resin (chloroethene homopolymer), treated as nuisance particulate	9002-86-2	95	5 (respirable fraction) 15 (total dust)	3 (respirable particulate) 10 (total particulate)
Calcium carbonate	1317-65-3	3-4	5 (respirable fraction) 15 (total dust)	10 (total particulate)
Waxes	NE	1-2	NE	2 (as Paraffin Wax Fume)
Titanium dioxide	13463-67-7	<1	15 (total dust)	10 (total particulate)

NE = Not Established

3. HAZARDS IDENTIFICATION

This product is non-hazardous under Hazard Communication Standard 29 CFR 1910.1200.

HAZARD RATINGS	Degree of hazard (0 = low, 4 = extreme)
National Fire Protection Association	Health: 1 Flammability: 1 Reactivity: 0 Specific Hazard: None
Hazardous Materials Identification System	Health: 1 Flammability: 1 Reactivity: 0

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MATERIAL SAFETY DATA SHEET

4. FIRST AID MEASURES

EYE CONTACT:	Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Consult a physician immediately.
SKIN CONTACT:	Cool skin rapidly if contacted with molten polymer. Obtain medical attention for thermal burns or skin irritation.
INHALATION:	The product is not expected to present an inhalation hazard , unless mechanically chipped or pulverized or if melted during fire. If dust or fumes are inhaled, remove to fresh air.
SWALLOWING:	No adverse health effects expected from ingestion.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable
Lower Explosive Limit: Not applicable
Upper Explosive Limit: Not applicable
Autoignition Temp: 849°F (470°C)

EXTINGUISHING MEDIA:	Use water spray, dry chemical, or foam.
SPECIAL FIRE FIGHTING PROCEDURES:	Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing if involved in fire.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	PVC homopolymers are self-extinguishing plastic materials. They will burn in the presence of other materials that support combustion and will generate hydrogen chloride, phosgene, benzene, carbon monoxide, carbon dioxide, aromatic and aliphatic hydrocarbons, and other gases.

6. STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Collect scrap for reprocessing, or for landfill in compliance with local regulations.

7. HANDLING/STORAGE

Use any methods that keep dust to a minimum. General storage procedures are acceptable.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

EYE PROTECTION:	Safety glasses are required if there is a possibility of getting dust particles in eyes. Have eye wash equipment nearby.
SKIN PROTECTION:	None required.

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MATERIAL SAFETY DATA SHEET

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION (C2 17'D)

VENTILATION:	Local exhaust ventilation is recommended to control airborne dust.
RESPIRATORY PROTECTION:	If dust or fumes exist, use a NIOSH/MSHA approved respirator. At unknown concentrations and for fire fighting, use self-contained breathing apparatus (SCBA). Always use respirators in accordance with instructions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form:	Solid
Boiling Point:	Not available
Heat Deflection Temperature:	168°F (76°C)
Vapor Density:	Not applicable
Vapor Pressure (mm Hg):	Not applicable
Evaporation Rate:	Not applicable
% Volatile by Volume:	Not applicable
Density:	Not determined
Specific Gravity:	1.42
Solubility in Water (20 °C):	Insoluble
Melting Point:	Not available
Viscosity:	Not applicable
Odor:	Plastic, resin odor
Appearance:	Blue, Green, Purple, Light Gray, or White plastic pipe
pH:	Not applicable

10. STABILITY/REACTIVITY

Stability: Stable under normal storage conditions.

CONDITIONS TO AVOID:	None known.
INCOMPATIBLE MATERIALS:	None known.
HAZARDOUS DECOMPOSITION PRODUCTS:	Hydrogen chloride, benzene, carbon monoxide, carbon dioxide, aromatic and aliphatic hydrocarbons, and other gases could be released in fire.
POLYMERIZATION:	Hazardous polymerization not expected.

11. TOXICOLOGICAL INFORMATION

No toxicological data were found for this product. The effects reported are those anticipated based on the components of this product.

POTENTIAL ROUTES OF EXPOSURE:	Inhalation of dust is the most likely route of exposure to this product.
SIGNS, SYMPTOMS, AND TOXIC EFFECTS OF OVEREXPOSURE:	Exposure to high concentrations of dust of this product will cause irritation of the respiratory tract with cough, difficulty breathing, dryness of the throat, or eye irritation.

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MATERIAL SAFETY DATA SHEET

11. TOXICOLOGICAL INFORMATION (C2 17'D)

ANIMAL TOXICITY DATA:

Component	Inhalation LC_{50}	Dermal LD_{50} (mg/kg)	Oral LD_{50} (mg/kg)
PVC homopolymer	No data found.	No data found.	No data found.
Calcium carbonate	No data found.	No data found.	No data found.
Titanium dioxide	No data found.	No data found.	No data found.

REPRODUCTIVE EFFECTS: No data were found regarding reproductive effects in humans or animals for any component of this product.

MUTAGENICITY DATA: No mutagenicity data were found for any component of this product.

DESIGNATION AS POTENTIAL CARCINOGEN: IARC designates PVC homopolymer and titanium dioxide as Group 3, "nRW classifiable as to lWFDUFlnRgHnlFlWln KXP DnV."

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: No data were found regarding this issue.

INTERACTIONS WITH CHEMICALS THAT ENHANCE TOXICITY: No data were found regarding this issue.

12. ECOLOGICAL INFORMATION

No data were found regarding adverse ecological impacts of this product.

13. DISPOSAL CONSIDERATIONS

Disposal should conform to federal, state, and local regulations. If hazardous according to 40 CFR part 261.31 or 32, or possesses characteristics of 40 CFR 261 Subpart C, dispose in a facility meeting the requirements of 40 CFR 264 or 265. If non-hazardous, dispose in a facility meeting the requirements of 40 CFR 257. Before attempting cleanup, refer to hazard information and personal protection information in other sections of this MSDS. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

RCRA Status of Unused Material: If discarded in unaltered form, should be tested in accordance to 40CFR 261 Subpart C and disposed as specified above.

14. TRANSPORTATION INFORMATION

U.S.D.O.T. SHIPPING NAME, ID NO, HAZARD CLASS: Not Regulated (also, Canada via rail and truck.)

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MATERIAL SAFETY DATA SHEET

15. REGULATORY INFORMATION

SARA 313 LISTING:	This product does not contain any substance subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.
SARA 312 HAZARD CLASS:	Not applicable.
SARA EXTREMELY HAZARDOUS SUBSTANCES:	Not applicable.
EPA HAZARDOUS SUBSTANCES LIST: (40 CFR 302.4):	Not hazardous.
CA PROPOSITION 65:	This product does not contain any substance listed in the State of California Safe Drinking Water and Toxic Enforcement Act of 1986, as updated (February 23, 2001).
PENN. RIGHT-TO-KNOW:	All required components are identified.
N.g. RIGHT-TO-KNOW:	All required components are identified.
MASS. RIGHT-TO-KNOW:	All required components are identified.
TSCA INVENTORY STATUS:	All components of this product are listed on the TSCA Inventory.
CANADIAN WHMIS CLASS:	Not applicable.

16. OTHER INFORMATION

REVISIONS:	Entire MSDS reviewed March 8, 2007.
PREPARED BY:	Tetra Tech EM, Inc., using standard references and information provided and directed by North American Pipe Corporation.

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PRODUCT DATA SHEET

June 2007

BIOSTOP® 500+ Firestopping Sealant

Classified Through-Penetration Firestop System Numbers CAJ-1204, CAJ-1262, CAJ-1264, CAJ-1330, CAJ-1328, CAJ-2127, CAJ-1321, CAJ-2128, CAJ-2129,CAJ-2130, CAJ-2131, CAJ-2156, CAJ-2179, CAJ-2183, CAJ-2245, CAJ-2248, CAJ-3103, CAJ-3104, CAJ-5005, CAJ-5016, CAJ-5081, CAJ-5082, CAJ-5083, CAJ-5086, CAJ5135, CAJ-5137, CAJ-8051, CAJ8026, CAJ8008, CBJ-3002, CBJ-3004, CBJ-3005, CBJ-3006, WL-1103, WL-1100, WL-1103, WL-1105, WL-1115, WL-1119, WL-1105, WL-1107, WL-1117, WL-1121, WL-1160, WL-1116, WL-1178, WL-1180, WL-1182, WL2202, WL-2210, WL-1200, WL-2133, WL-2136, WL-2193, WL-2191, WL-2233, WL-2105, WL-3093, WL-3156, WL-3095, WL-5062, WL-5058, WL-5050, WL-5076, WL-5065, WL-5033, WL-5128, WL-7036, WL7037, WL-7037, WL-2105, WL-5062, WL-5058, WJ-1060, WJ-1060, WJ-1062, WJ-2040, WJ-2074, WJ-2064, WJ-2066, WJ-3027, WJ-5021, WJ-5017, WJ-5019, WJ-5030, WJ-5034, WJ-5040, WJ-5060, WJ-7015, WJ-7017, WJ-2026, WJ-1037, WJ-1039, WJ-1044, WJ-1045, WJ-3057, WJ-3059, FC-1031, FC-1033, FC-1055, FC-1054, FC-1056, FC-2059, FC-2060, FC-2061, FC-2062, FC-2068, FC-2070, FC-2079, FC2131, FC-2130, FC-2149, FC-2151, FC-2191, FC-2193, FC-3052, FC-5016, FC-8016, FC-6016, FC-2078, FC-5021, FC-5020, TRC/PV 60-06, and TRC/PV 120-15 & HW/D-0180,HDW-0015 & HWD0057

1. Product Description

Biostop® 500+ is a one component, general purpose fire rated sealant and smoke seal for construction joints and around penetrations through fire rated walls and floors. Biostop® 500+ is a water based, extremely intumescent, non-sag caulking grade sealant that is easy to apply as well as to retrofit. It cures to an elastomeric seal that is suitable where dynamic movement is expected. In the event of a fire, Biostop® 500+ will prevent the spread of flames, smoke, hot gases and water through joint openings and through-penetrations. No dilution or mixing is required for use. No special skills are necessary for installation. Biostop® 500+ is applied with a conventional caulking gun, bulk loading gun or can be troweled from the pail. For large applications, it can be pumped directly from the pail. Biostop® 500+ is rated for 1, 2, 3 and 4 hours and has been tested in accordance with the ASTM E814, (UL 1479), UL 2079 and ULC-S115-95 test standards. BIOSTOP® 500+ is protected in a wet stage as well as in a dry stage against mold growth with a combination of biocides.

Use Biostop® 500+ for various applications:

Through Wall/Floor Penetrations
Top of the Wall Construction Joints
Deflection Track Wall Systems
Wall to Floor Joints
Floor to Wall Joints
Concrete on Steel Deck to Wall
1,2 , 3 and 4 Hour Gypsum Walls
Concrete and Concrete Block Walls (CMU)
Up to 2" PVC (open)
Up to 3" PVC/PBS (closed)
Crosslinked Polyethylene (PEX) tubing
Steel, Copper,Cast Iron and EMT Pipe
Fiberglass Insulated Pipe
AB/PVC Insulation Pipe
Telephone/Power Cables
Acoustical sealant

For a complete list of product applications or for additional technical information, call RECTORSEAL for the latest updated information.

Biostop® 500+ Features

- Water Based
- Excellent Freeze-Thaw
- Flexible Set
- Highly Intumescent
- Paintable
- VOC Compliant
- Safe and Easy to Use
- Minimum 2 Year Shelf Life

2. Material Properties

Asbestos Fillers	None
Solvents	None
Hazardous Ingredients	None
Application	Caulking Gun or Trowel



Activation of Intumescence:

Expansion Begins	375° F
Expansion Greatest	575° to 1100° F
Color	Red
Cure Time	3 to 4 weeks (at 77° F)
Density	10.4 +/- 0.3 lbs./gal.
Elastomeric	Yes
Freeze-Thaw	Excellent
Skin Over Time	30 min. (at 77° F)
pH Value	6.5 to 7
Volume Coverage:	
for 10.3 oz. tube	18 cu. in.
for 20.2 oz.	35.3 cu. in.
for 5 gallon	1155 cu. in.
VOC	Negligible

ASTM E 84, UL 723 Tunnel Test

Flame Spread	5
Smoke Index	10

STC 54*

*Tested in a UL 411 wall assembly/section to ASTM E90.

3. Applications

Biostop®500+ can be used in interior applications as a general purpose fire rated sealant and smoke seal for construction joints on both vertical and horizontal surfaces. Also, for applications around penetrations through fire rated walls and floors. Biostop® 500+ is an excellent fire

PRODUCT DATA SHEET

December 2005

Biostop® Pipe Collar

Classified Through-Penetration FireStop System Numbers
CAJ2135, CAJ2152, CAJ2154, CAJ2156, CAJ5106, CAJ2181, CAJ2177, CAJ2198, CAJ2200, CAJ2266, WL2109, WL2120, WL2118, WL2135, WL2136, WL2133, WL2208, WL2256,WL3151, WJ2040, WJ3055, FC2059, FC2060, FC2061, FC2068, FC2166, FC8016, FC8018, FA2044

1. Product Description

Biostop® Pipe Collars are prefabricated for open and closed through-penetration firestop systems using 1 1/2" (38 mm) to 6" (152 mm) plastic pipe. An easy locking mechanism assures easy installation. The collar design greatly reduces the time and expense that is required to install competitive collars.

Biostop® Pipe Collar Features

- Saves on Labor Cost
- Easy Installation
- Economical
- No Measurement of Material Required
- Highly Intumescent
- Tested for PVC, CPVC, ABS and PVC/ABS Foam Core, FRPP

2. Material Properties

Asbestos Fillers	None
Solvents	None
Hazardous Ingredients	None

Activation of Intumescence:

Expansion Begins 375°F (190° C)
Expansion Greatest 575°(302°C) to 1100°F(593°C)

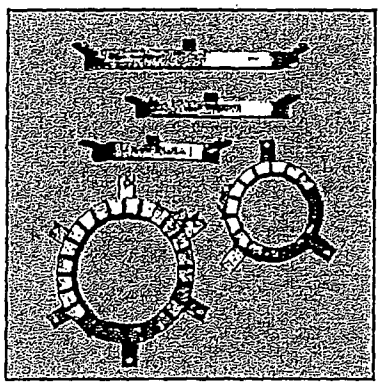
3. Applications

Biostop® Pipe Collars are used to seal off plastic pipe both in closed and vented (DWV) conditions. Also for use on up to 6" (152 mm) diameter ABS (cellular core or solid core), FRPP, PVC and CPVC pipe. The collar may be used on up to 3 hour rated concrete floors and walls, up to 2 hour rated gypsum walls and up to 2 hour rated wood floors.

4. Installation Data

Biostop® Pipe Collars are prefilled and very easy to install.

1) Select the proper collar to fit the diameter of pipe used.
2) Making sure annular space is within the limits set by the tested conditions, attach collar around the pipe on the underside of the floor or to each side of a wall by firmly placing against the wall or floor and securing interlocking tabs [1 1/2" (38 mm), 2" (51 mm), 3" (76 mm) and 4" (102 mm)] or fastening the buckle [6" (152 mm)].
3) If needed, mark and predrill wall or floor for required anchors. Properly secure the appropriate anchor into each of the anchoring tabs. In concrete, use 1/4" (6 mm)x 1 1/4" (32 mm)hex washer head type concrete anchors or appropriate steel expansion/ wedge anchors. In gypsum, use 1/8" (3 mm)x 2" (51 mm) MOLLY type hollow wall anchors.
4) If an additional smoke seal is required, Biostop® 500+ may be applied within the annular space before the attachment of the collar.



5. Testing Data

Biostop® Pipe Collars are classified by Underwriters Laboratories as a Firestop Device. For specific test criteria, see the UL Fire Resistance Directory or call RectorSeal. Biostop® Pipe Collars were tested at a minimum .01 inches (2.5 Pa) of water positive pressure in accordance with UL 1479 (ASTM E814) test standards.
Complies to Required Environmental Exposure Testing of Accelerated Aging and High Humidity as per UL 1479 Fire Test of Through-Penetration Firestops.

IPS
WELD-ON

MATERIAL SAFETY DATA SHEET

Date Revised: APR 2007
Supersedes: OCT 2004

Information on this form is furnished solely for the purpose of compliance with the Occupational Safety and Health Act and shall not be used for any other purpose. IPS Corporation urges the customers receiving this Material Safety Data Sheet to study it carefully to become aware of the hazards, if any, of the product involved. In the interest of safety, you should notify your employees, agents and contractors of the information on this sheet.

SECTION I

MANUFACTURER'S NAME	Transportation Emergencies:
IPS Corporation	CHEMTREC: (800) 424-9300
ADDRESS	Medical Emergencies:
17109 S. Main St., P.O. Box 379, Gardena, CA. 90248	3 E COMPANY (24 Hour No.) (800) 451-8346
	Business: (310) 898-3300

CHEMICAL NAME and FAMILY	TRADE NAME:
Solvent Cement for PVC Plastic Pipe	WELD-ON HOT 'R COLD 727 Low VOC Cement for PVC Plastic Pipe
Mixture of PVC Resin and Organic Solvents	FORMULA: Proprietary

SECTION II - HAZARDOUS INGREDIENTS

None of the ingredients below are listed as carcinogens by IARC, NTP or OSHA	CAS#	APPROX %	ACGIH-TLV	ACGIH-STEL	OSHA-PEL	OSHA-STEL	DUPONT (A) AEL	DUPONT (B) STEL
Polyvinyl Chloride Resin (PVC)	NON/HAZ		N/A		N/A			
Tetrahydrofuran (THF)**	109-99-9	29 - 44	50 PPM	100 PPM	200 PPM	250 PPM	50 PPM	75 PPM
Methyl Ethyl Ketone (MEK)	78-93-3	4 - 15*	200 PPM	300 PPM	200 PPM	300 PPM		
Cyclohexanone	108-94-1	8 - 17	20 PPM Skin		50 PPM			
Acetone	67-64-1	1 -11	500 PPM	750 PPM	750 PPM	1000 PPM		

All of the constituents of Weld-On adhesive products are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.

(A) Dupont and BASF mfg's Acceptable Exposure Limit (AEL) for 8 hour and 12 hour TWA. (B) Dupont/BASF recommended STEL for 15 minute TWA.

**Information found in a report from the National Toxicology Program (NTP) on an inhalation study in rats and mice suggests that Tetrahydrofuran (THF) can cause tumors in animals. In the study the rats and mice were exposed to THF vapor levels up to 1800 PPM for two years (their lifetime), 6 hours/day, 5 days/week. Test results showed evidence of liver tumors in female mice and kidney tumors in male rats. No evidence of tumors was seen in female rats and male mice. There is no data linking Tetrahydrofuran exposure with cancer in humans.

BULK SHIPPING INFORMATION / CONTAINERS LARGER THAN ONE LITER	
DOT Shipping Name:	Adhesive
DOT Hazard Class:	3
Identification Number:	UN 1133
Packaging Group:	II
Label Required:	Flammable Liquid

SHIPPING INFORMATION FOR CONTAINERS LESS THAN ONE LITER	
DOT Shipping Name:	Consumer Commodity
DOT Hazard Class:	ORM-D

SPECIAL HAZARD DESIGNATIONS

	HMIS	NFPA	HAZARD RATING
HEALTH:	2	2	0 - MINIMAL
FLAMMABILITY:	3	3	1 - SLIGHT
REACTIVITY:	0	1	2 - MODERATE
PROTECTIVE			3 - SERIOUS
EQUIPMENT:	B - H		4 - SEVERE

B = Eye, Hand/Skin (for normal solvent-welding activities)
H = Eye, Hand/Skin, Respiratory Protection and Impermeable Apron (splash/ immersion risks)

SECTION III - PHYSICAL DATA

APPEARANCE	ODOR	BOILING POINT (°F/°C)
Clear, medium syrupy liquid	Ethereal	151°F (67°C) Based on first boiling component: THF
SPECIFIC GRAVITY @ 73°F ± 3.6° (23°C ± 2°)	**VAPOR PRESSURE (mm Hg.)**	**PERCENT VOLATILE BY VOLUME (%)**
Typical 0.968 ± 0.040	143 mm Hg. based on first boiling component, THF @ 68°F (20°C)	Approx: 80 - 90 %
VAPOR DENSITY (Air = 1)	**EVAPORATION RATE (BUAC = 1)**	**SOLUBILITY IN WATER**
2.49	>1.0	Solvent portion completely soluble in water. Resin portion separates out.

VOC STATEMENT: VOC as manufactured: 850 Grams/Liter (g/l). Maximum VOC emission when applied & tested per SCAQMD Rule 1168, Test Method 316A: 510 g/l

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	FLAMMABLE LIMITS (PERCENT BY VOLUME)	LEL	UEL
-4°F (-20°C) T.C.C. Based on THF		2	11.8

FIRE EXTINGUISHING MEDIA

Ansul "Purple K" potassium bicarbonate dry chemical, any appropriately sized ABC dry chemical, carbon dioxide or foam extinguisher can be used for small fires. Use of a water fog by trained personnel can extinguish small/large fires.

SPECIAL FIRE FIGHTING PROCEDURES

Evacuate enclosed areas. Stay upwind. Close quarters or confined spaces require self-contained breathing apparatus, positive pressure hose masks or airline masks. Use of a water fog by trained personnel can extinguish small/large fires and avoid water flow or water streams/spray distributing burning material or contaminated water over a large area or into sewers or storm drains. Use water spray to cool containers, to flush spills from source of ignition and to disperse vapors.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire hazard because of low flash point and high volatility. Vapors are heavier than air and may travel to source(s) of ignition at or near ground or lower level(s) and flash back.

SECTION V - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: ___X___ Inhalation ___X___ Skin Contact _____ Eye Contact _____ Ingestion

EFFECT OF OVEREXPOSURE

ACUTE:

Inhalation:	Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.
Skin Contact:	Skin irritant. Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.
Skin Absorption:	Prolonged or widespread exposure may result in the absorption of harmful amounts of material.
Eye Contact:	Overexposure may result in severe eye injury with corneal or conjuctival inflammation on contact with the liquid. Vapors slightly uncomfortable
Ingestion:	Moderately toxic. May cause nausea, vomiting, diarrhea. May cause mental sluggishness.
CHRONIC:	Symptoms of respiratory tract irritation and damage to respiratory epithelium were reported in rats exposed to 5000 ppm THF for 90 days. Elevation of SGPT suggests a disturbance in liver function. The NOEL was reported to be 200 ppm.

REPRODUCTIVE EFFECTS	TERATOGENICITY	MUTAGENICITY	EMBRYOTOXICITY	SENSITIZATION TO PRODUCT	SYNERGISTIC PRODUCTS
N. AP.	N. AP.	N. AP.	N. AP.	N. AP.	N. AV.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing diseases of the eyes, skin or respiratory system may have increased susceptibility to the toxicity of excessive exposures.

EMERGENCY AND FIRST AID PROCEDURES

Inhalation:	If overcome by vapors, remove to fresh air and if breathing stopped, give artificial respiration. If breathing is difficult, give oxygen. Call physician.
Eye Contact:	Flush eyes with plenty of water for 15 minutes and call a physician.
Skin Contact:	Remove contaminated clothing and shoes. Wash skin with plenty of soap and water for at least 15 minutes. If irritation develops, get medical attention.
Ingestion:	Give 1 or 2 glasses of water or milk. Do not induce vomiting. Call physician or poison control center immediately.

SECTION VI - REACTIVITY

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	Keep away from heat, sparks, open flame and other sources of ignition.

INCOMPATIBILITY

(MATERIALS TO AVOID) Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.

HAZARDOUS DECOMPOSITION PRODUCTS

When forced to burn, this product gives out carbon monoxide, carbon dioxide, hydrogen chloride and smoke.

HAZARDOUS	MAY OCCUR		CONDITIONS TO AVOID
POLYMERIZATION	WILL NOT OCCUR	X	Keep away from heat, sparks, open flame and other sources of ignition.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Eliminate all ignition sources. Avoid breathing of vapors. Keep liquid out of eyes. Flush with large amount of water. Contain liquid with sand or earth. Absorb with sand or nonflammable absorbent material and transfer into steel drums for recovery or disposal. Prevent liquid from entering drains.

WASTE DISPOSAL METHOD

Follow local, State and Federal regulations. Consult disposal expert. Can be disposed of by incineration. Excessive quantities should not be permitted to enter drains. Empty containers should be air dried before disposing. Hazardous Waste Code (CA): 214.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

Atmospheric levels should be maintained below established exposure limits contained in Section II. If airborne concentrations exceed those limits, use of a NIOSH approved organic vapor cartridge respirator with full face-piece is recommended. The effectiveness of an air purifying respirator is limited. Use it only for a single short-term exposure. For emergency and other conditions where short-term exposure guidelines may be exceeded, use an approved positive pressure self-contained breathing apparatus.

VENTILATION

Use only with adequate ventilation. Do not use in close quarters or confined spaces. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed in Section II. Use only explosion-proof ventilatio equipment.

PROTECTIVE GLOVES	EYE PROTECTION
PVA coated rubber gloves for frequent dipping/immersion. Use of latex/nitrile surgical gloves or solvent resistant barrier creme should provide adequate protection when normal solvent-cement welding practices and procedures are used for solvent welding of plastic sheet/pipe joints.	Splashproof chemical goggles, face shield, safety glasses (spectacles) with brow guards & side shields, etc. as appropriate for exposure.

OTHER PROTECTIVE EQUIPMENT AND HYGIENIC PRACTICES

Impervious apron and a source of running water to flush or wash the eyes and skin in case of contact.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

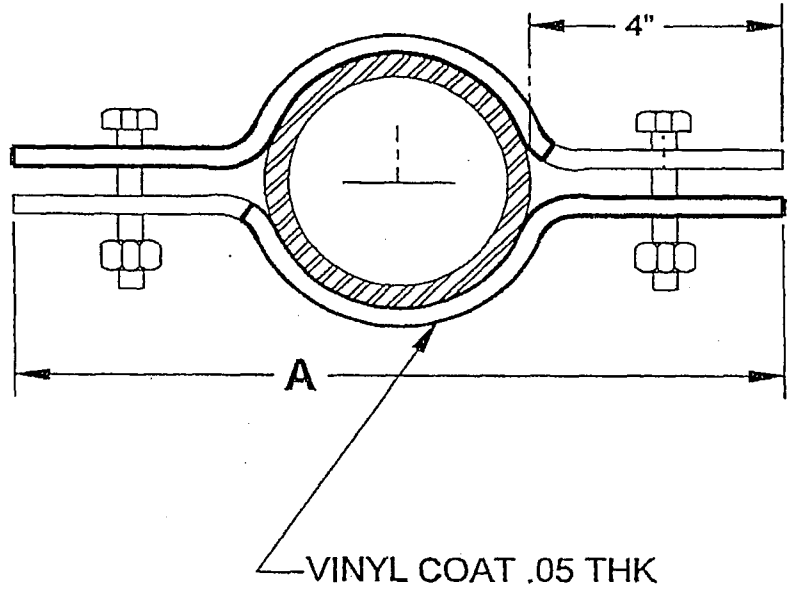
Store in the shade between 40°F - 110°F (5°C - 43.7°C). Keep away from heat, sparks, open flame and other sources of ignition. Avoid prolonged breathing of vapor. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Train employees on all special handling procedures before they work with this product.

OTHER PRECAUTIONS

Follow all precautionary information given on container label, product bulletins and our solvent cementing literature. All material handling equipment should be electrically grounded.

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

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SIZE	A	STOCK	BOLT
1/2	9.00	1/8 X 1.00	5/16 X 1.25
3/4	9.40	1/8 X 1.00	5/16 X 1.25
1	9.50	1/8 X 1.00	5/16 X 1.25
1-1/4	10.00	1/8 X 1.00	5/16 X 1.25
1-1/2	10.50	5/32 X 1.00	5/16 X 1.25
2	11.00	5/32 X 1.00	3/8 X 1.50
2-1/2	11.50	1/4 X 1.00	3/8 X 1.50
3	11.50	1/4 X 1.00	3/8 X 1.50
4	13.00	1/4 X 1.00	7/16 X 1.50
5	14.00	1/4 X 1.25	1/2 X 2.00
6	15.00	1/4 X 1.50	1/2 X 2.00
8	18.50	3/8 X 1.50	5/8 X 2.50
10	21.00	3/8 X 2.00	5/8 X 2.50
12	23.00	1/2 X 2.00	5/8 X 2.50

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS +/- 1/8 DECIMALS .XX +/- .03 .XXX +/- .01 ANGLES .XX + 1

MATERIAL: CQ STEEL

DO NOT SCALE DRAWING

CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE

APPROVALS	DATE
DRAWN EG	
CHECKED SB	
	4/05

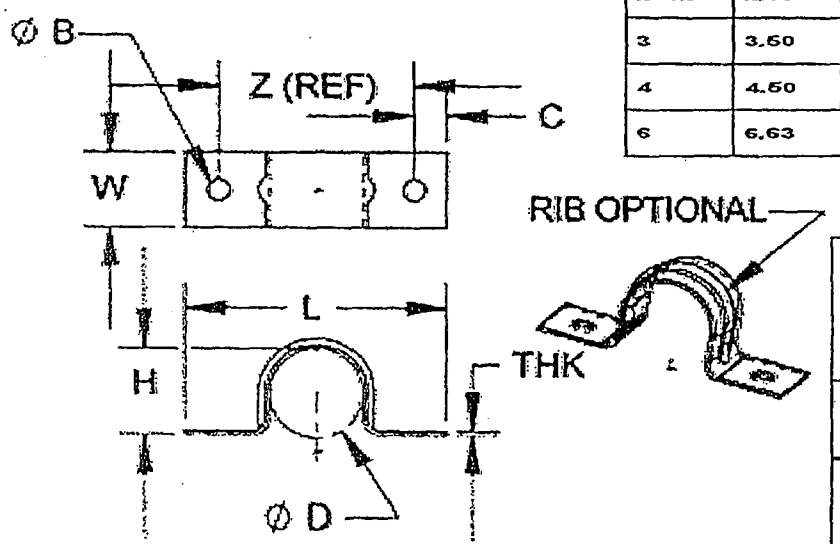
GREENFIELD MFG CO
920 LEVICK ST., PHILA., PA. 19111

P/N PLASTIC RISER CLAMP

A FIG 107 REV.

SCALE CAD FILE: 107.SLDDRW SHEET OF

Size	D	H	THK	W	L	B	C	Z (ref)
Tol.	0.06	.03	US Gage	.12	.25	.032	.06	.06
	-0.02	-.06		-.03	-.12	-.016	-.03	-.06
3/8	0.69	0.68	20 Ga.	0.75	2.38	0.200	0.38	1.62
1/2	0.84	0.84	20 Ga.	0.75	2.62	0.200	0.38	1.80
3/4	1.05	1.05	19 Ga.	0.75	2.75	0.200	0.38	2.06
1	1.31	1.31	18 Ga.	1.00	3.40	0.281	0.38	2.62
1 1/4	1.66	1.66	16 Ga.	1.00	4.25	0.281	0.50	3.26
1 1/2	1.90	1.90	16 Ga.	1.00	4.20	0.281	0.50	3.44
2	2.38	2.38	14 Ga.	1.00	5.06	0.281	0.66	4.21
2 1/2	2.88	2.88	13 Ga.	1.00	6.31	0.340	0.75	4.88
3	3.50	3.50	13 Ga.	1.00	7.30	0.340	0.75	5.88
4	4.50	4.50	12 Ga.	1.00	8.38	0.340	0.75	7.12
6	6.63	6.60	12 Ga.	1.25	11.12	0.340	0.81	9.50

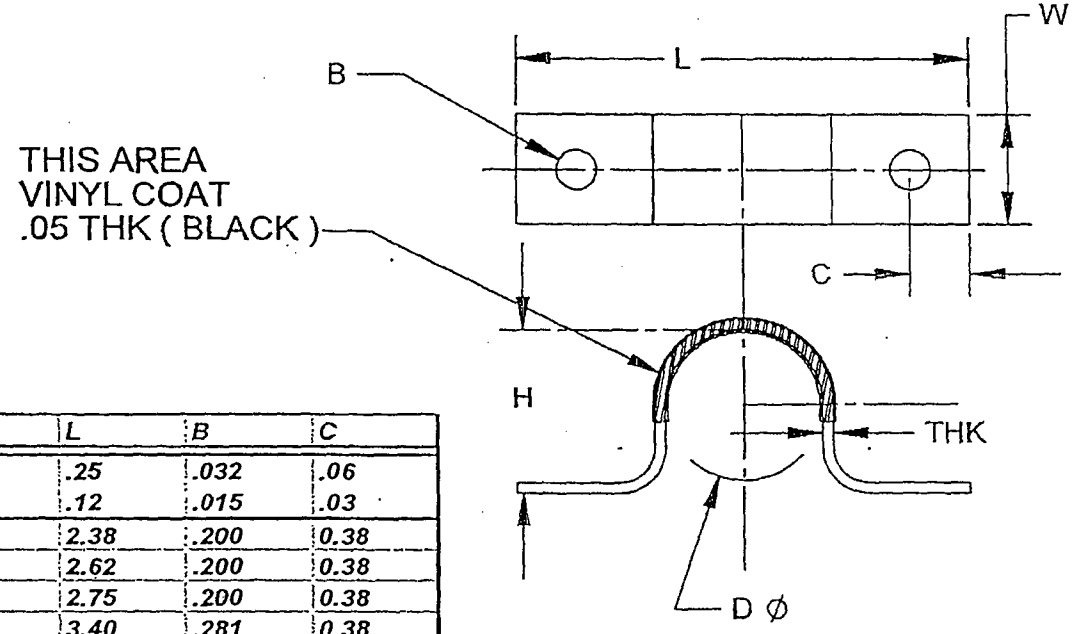


Greenfield Mfg Co Inc

920 Levick Street, Philadelphia PA. 19111-5498

Material STEEL	GALVANIZED PIPE STRAP
Finish GALV.	FIG. 600

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SIZE	D	H	Thk	W	L	B	C
+Tol	.06	.03	U S	.12	.25	.032	.06
-Tol	.02	.06	Gage	.03	.12	.015	.03
3/8	.69	.68	20 Ga	.75	2.38	.200	0.38
1/2	.84	.84	20 Ga	.75	2.62	.200	0.38
3/4	1.05	1.05	19 Ga	.75	2.75	.200	0.38
1	1.31	1.31	18 Ga	.75	3.40	.281	0.38
1-1/4	1.66	1.66	16 Ga	1.0	4.25	.281	0.50
1-1/2	1.90	1.90	14 Ga	1.0	4.20	.281	0.50
2	2.38	2.38	14 Ga	1.0	5.00	.281	0.66
2-1/2	2.88	2.88	13 Ga	1.0	6.31	.340	0.75
3	3.50	3.50	13 Ga	1.0	7.30	.340	0.75
4	4.50	4.50	12 Ga	1.0	8.50	.340	0.75

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES ARE:

FRACTIONS	DECIMALS	ANGLES
+/- 1/8	.XX +/- .03 .XXX +/- .01	.XX + 1

MATERIAL: PRE GALVANIZED SHEET STEEL

DO NOT SCALE DRAWING

CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE

APPROVALS	DATE
DRAWN EG	
CHECKED SB	

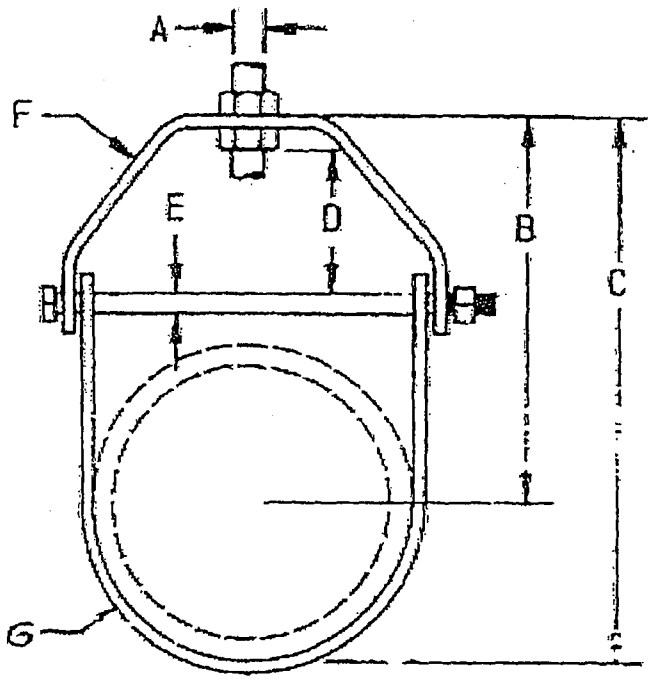
GREENFIELD MFG CO

920 LEVICK ST., PHILA., PA. 19111

P/N PIPE STRAP, COATED

A FIG 603 REV.

SCALE CAD FILE: SHEET OF



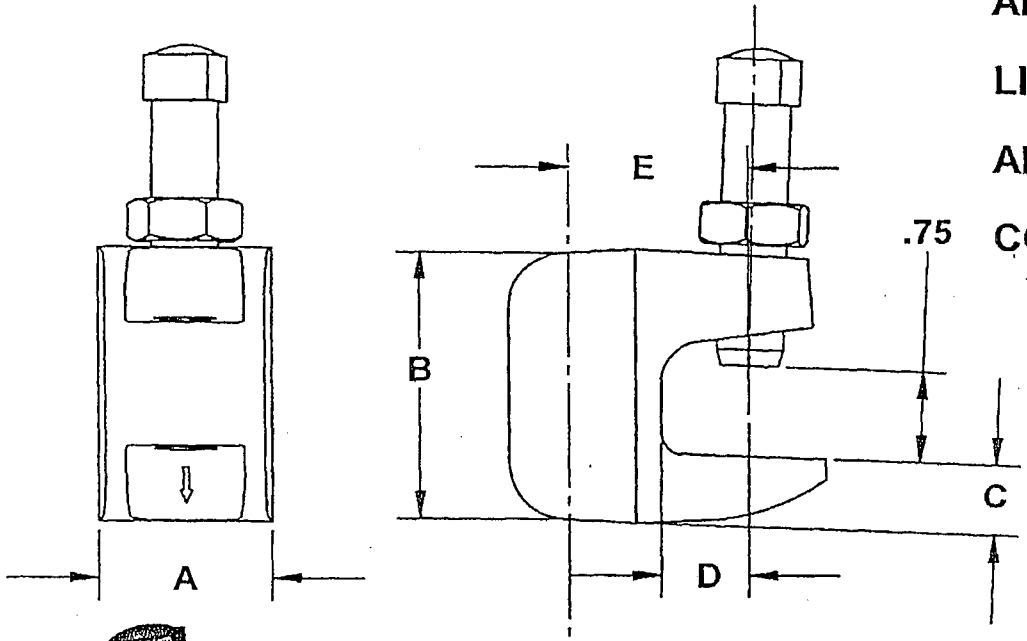
Size	A	B	C	D	E	F-Top	G-Bottom
1/2"	3/8"	1.5	2.0	0.62	1/4"	16ga x .75	16ga x .75
3/4"	3/8"	1.8	2.3	0.62	1/4"	16ga x .75	16ga x .75
1"	3/8"	2.2	2.8	0.88	1/4"	16ga x 1	16ga x 1.0
1.25"	3/8"	2.5	3.7	1.20	1/4"	16ga x 1	16ga x 1.0
1.5"	3/8"	2.8	4.0	1.20	1/4"	16ga x 1	16ga x 1.0
2"	3/8"	2.8	4.5	1.20	1/4"	14ga x 1	14ga x 1.0
2.5"	3/8"	3.8	6.0	2.00	1/4"	12ga x 1	13ga x 1.0
3"	3/8"	4.0	6.5	2.00	1/4"	12ga x 1	13ga x 1.0
4"	3/8"	4.7	7.0	2.00	5/16"	11ga x 1.25	12ga x 1.25

Greenfield Mfg Co Inc

920 Levick Street, Philadelphia PA. 19111-5498

Material Steel	Clevis - Light
Finish None	FIG NO: 104

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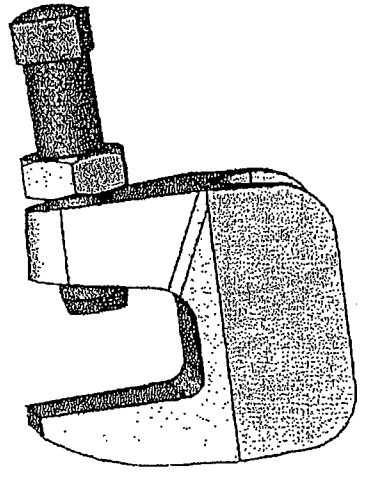
APPROVALS:

LISTED FM

APPROVED UL

COMPLIES WITH MSS SP-58 TYPE 19

SEE MSS SP-69 FOR PROPER SET SCREW RECOMMENDATIONS



ROD SIZE	WT PER 100 PCS	MAX REC LOAD	CTN QTY	A	B	C	D	E
3/8	28	350#	100	.88	1.50	.31	.50	1.00
1/2	34	470#	100	.88	1.50	.31	.50	1.00
5/8	42	550#	50	1.12	1.75	.34	.63	1.37
3/4	80	700#	50	1.37	1.87	.41	.63	1.37
7/8	84	1000#	25	1.37	1.87	.41	.63	1.37

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES ARE:

FRACTIONS	DECIMALS	ANGLES
+/- 1/8	.XX +/- .03 .XXX +/- .01	.XX + 1

MATERIAL

DUCTILE IRON

DO NOT SCALE DRAWING

CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE

APPROVALS	DATE
DRAWN EG	
CHECKED SB	

GREENFIELD MFG CO

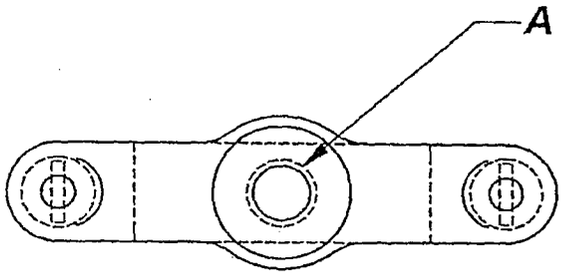
920 LEVICK ST , PHILA.,PA. 19111

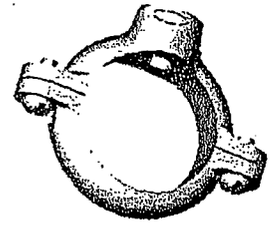
JUNIOR TOP BEAM CLAMP

A | P/N **FIG 125** | REV.

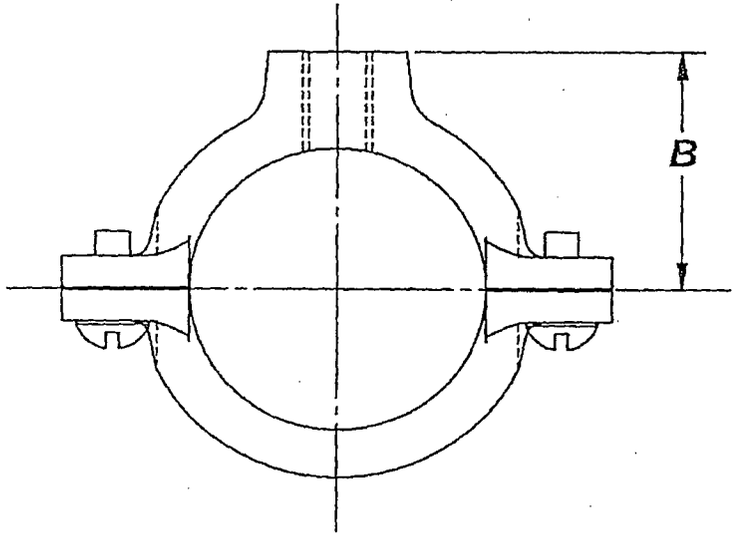
SCALE | CAD FILE: | SHEET OF

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FOR IRON PIPE



PIPE SIZE	A	B	WT / C APPROX	MAX REC LOAD
3/8	3/8	0.69	10	180
1/2	3/8	0.82	10	180
3/4	3/8	0.94	12	180
1	3/8	1.06	14	180
1-1/4	3/8	1.23	19	180
1 - 1/2	3/8	1.31	21	180
2	3/8	1.62	30	180

USE FIG 385
FOR SIZES 2-1/2 THRU 4

COMPLIES WITH WWH-171D TYP 25

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS +/- 1/8 DECIMALS .XX +/- .03 .XXX +/- .01 ANGLES .XX + 1

MATERIAL
DUCTILE IRON

DO NOT SCALE DRAWING

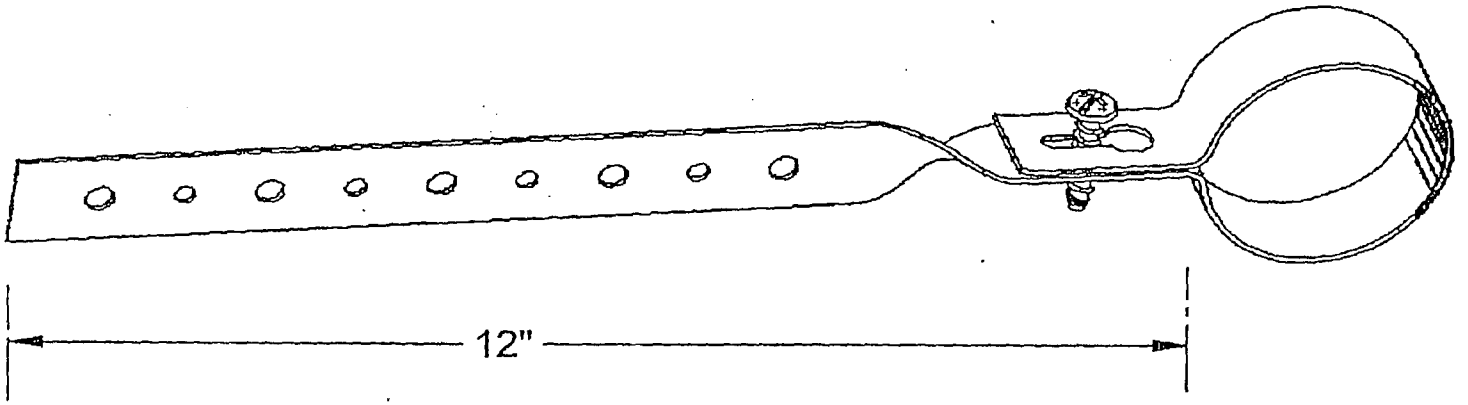
CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE

APPROVALS		DATE
DRAWN	EG	11/05
CHECKED	SB	11/05

GREENFIELD MFG CO
920 LEVICK ST , PHILA.,PA. 19111

P/N SPLIT RING HANGER
A FIG 202 REV.
SCALE CAD FILE: 202.SLDDRW SHEET OF

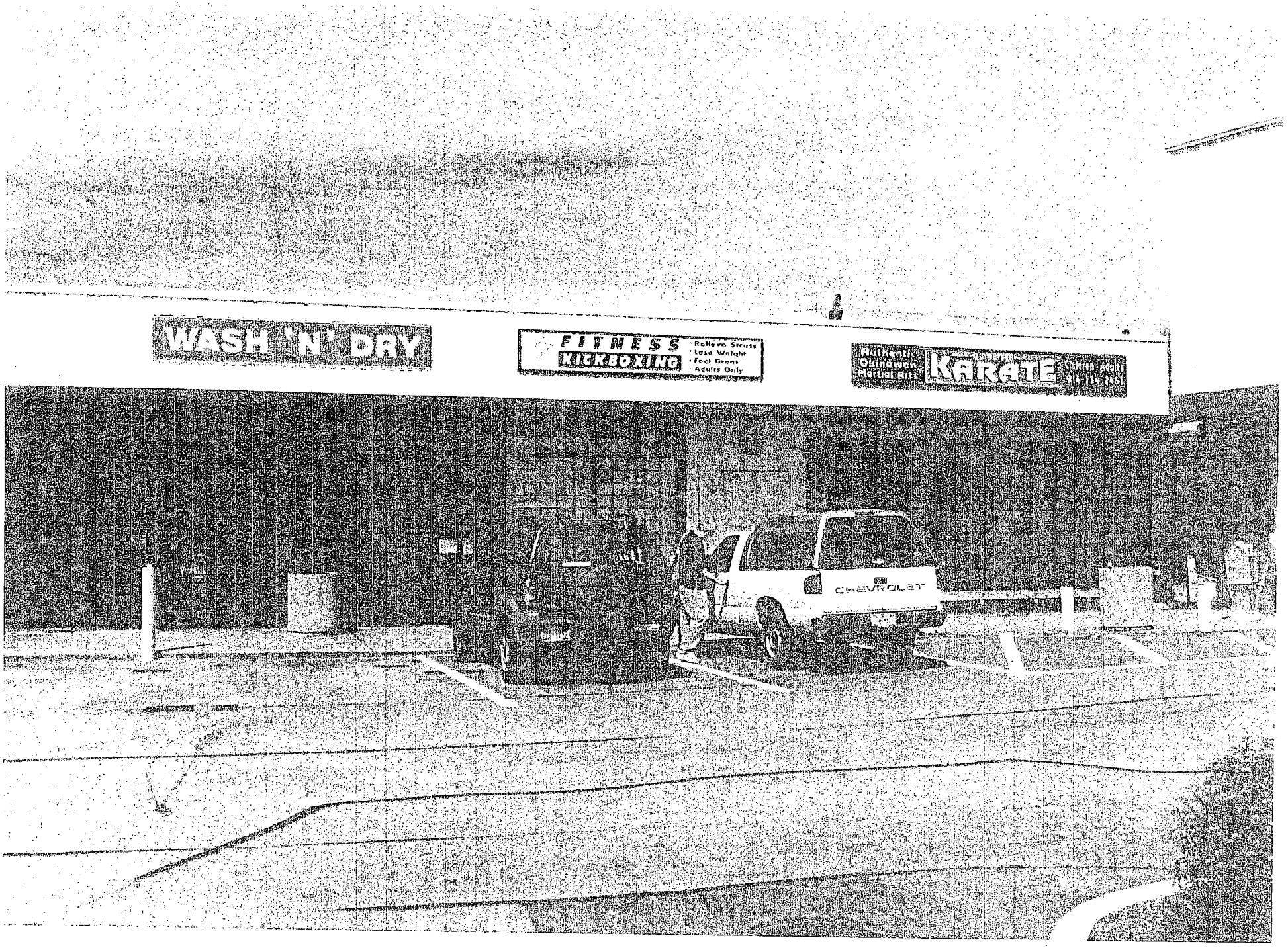
SIZE	MATERIAL
1-1/2	18 GA X 3/4
2	18 GA X 3/4
3	16 GA X 3/4
4	16 GA X 3/4

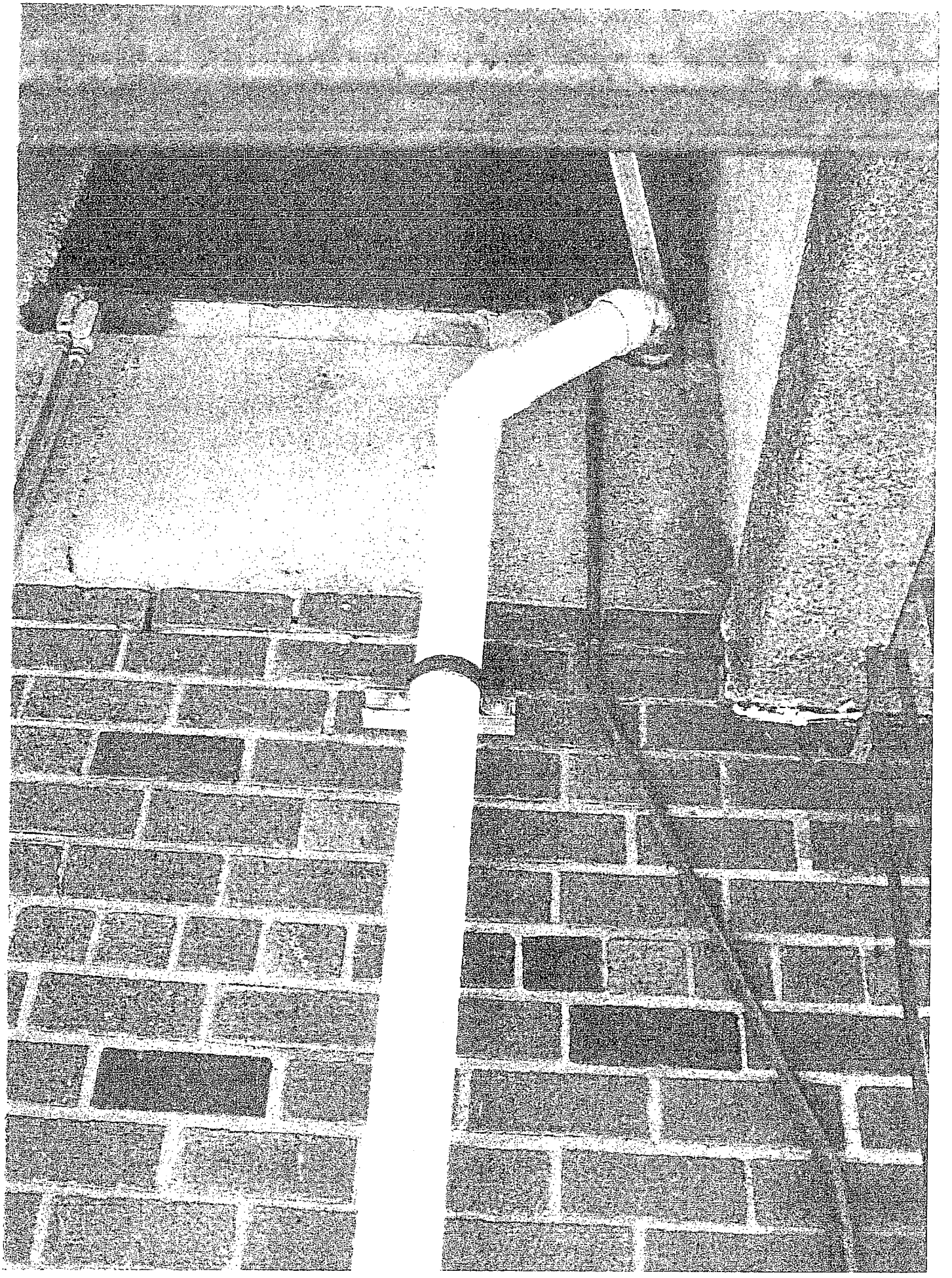


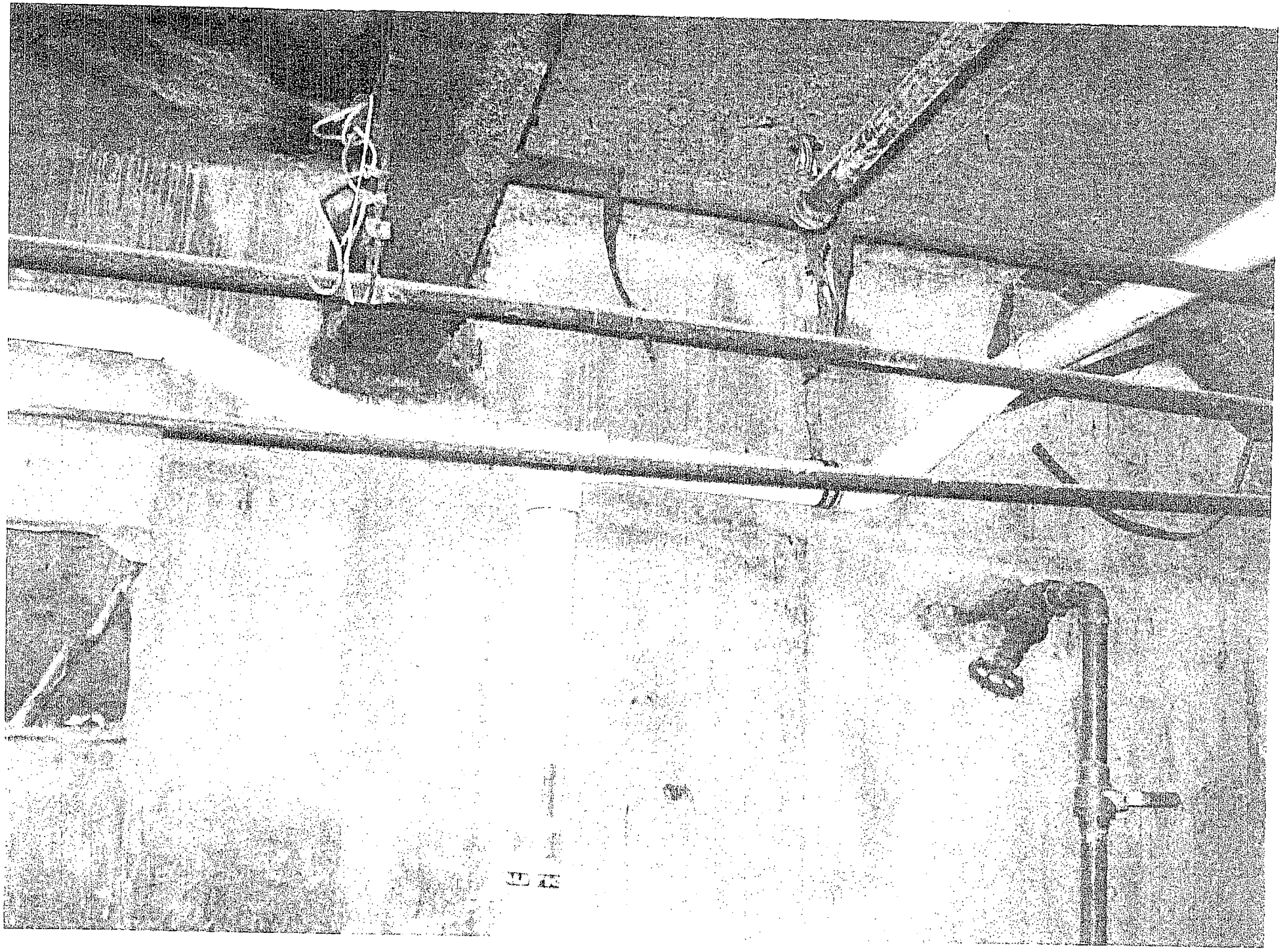
MAXIMUM REC LOAD
150 LBS
SAFTEY FACTOR = 4

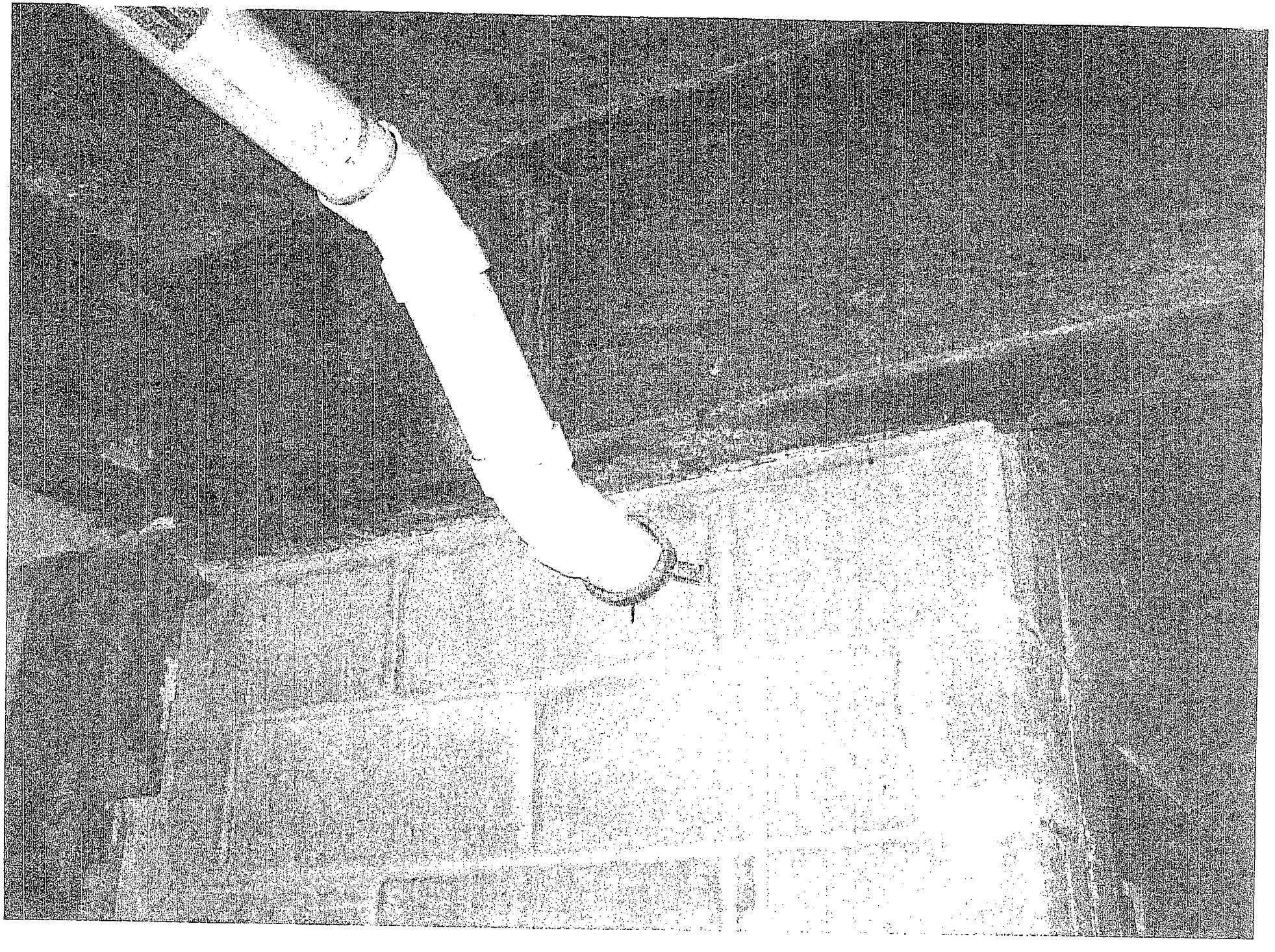
MATERIAL GALV. STEEL		**Greenfield Mfg Co** 920 Levick St, Phila.,Pa. 19111-5498	
FINISH NONE	TOLERANCES XXX XX FR	Dr. EG Chk. SB Appr. sb Date 4/10/03	**DWV HANGER (UNCOATED)** FSCM 98320 P/N **FIG - 120**

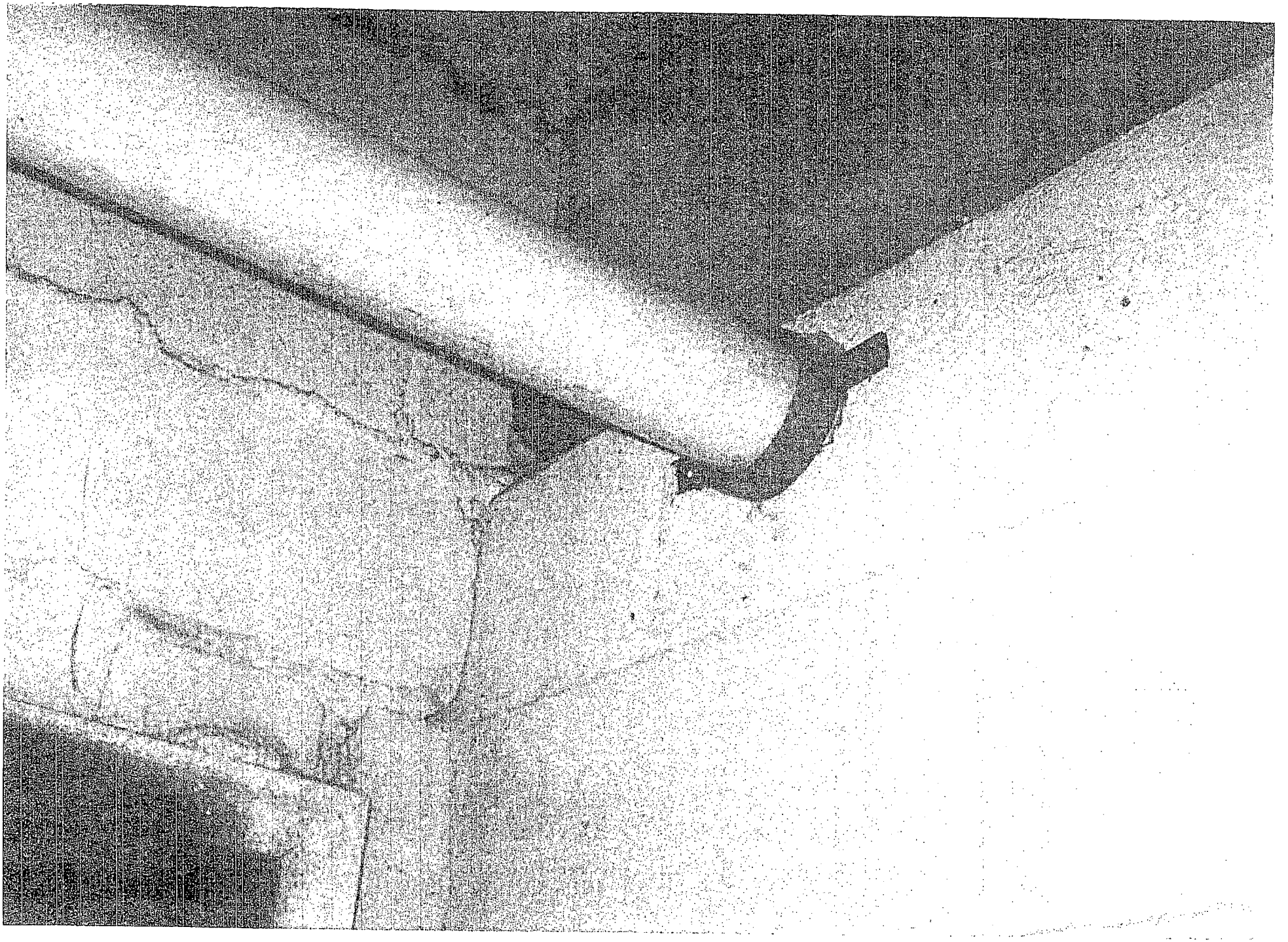
ATTACHMENT 10


WASH 'N' DRY
FITNESS
KICKBOXING
Relieve Stress
Lose Weight
Feel Great
Adults Only
KARATE
CHEVROLET

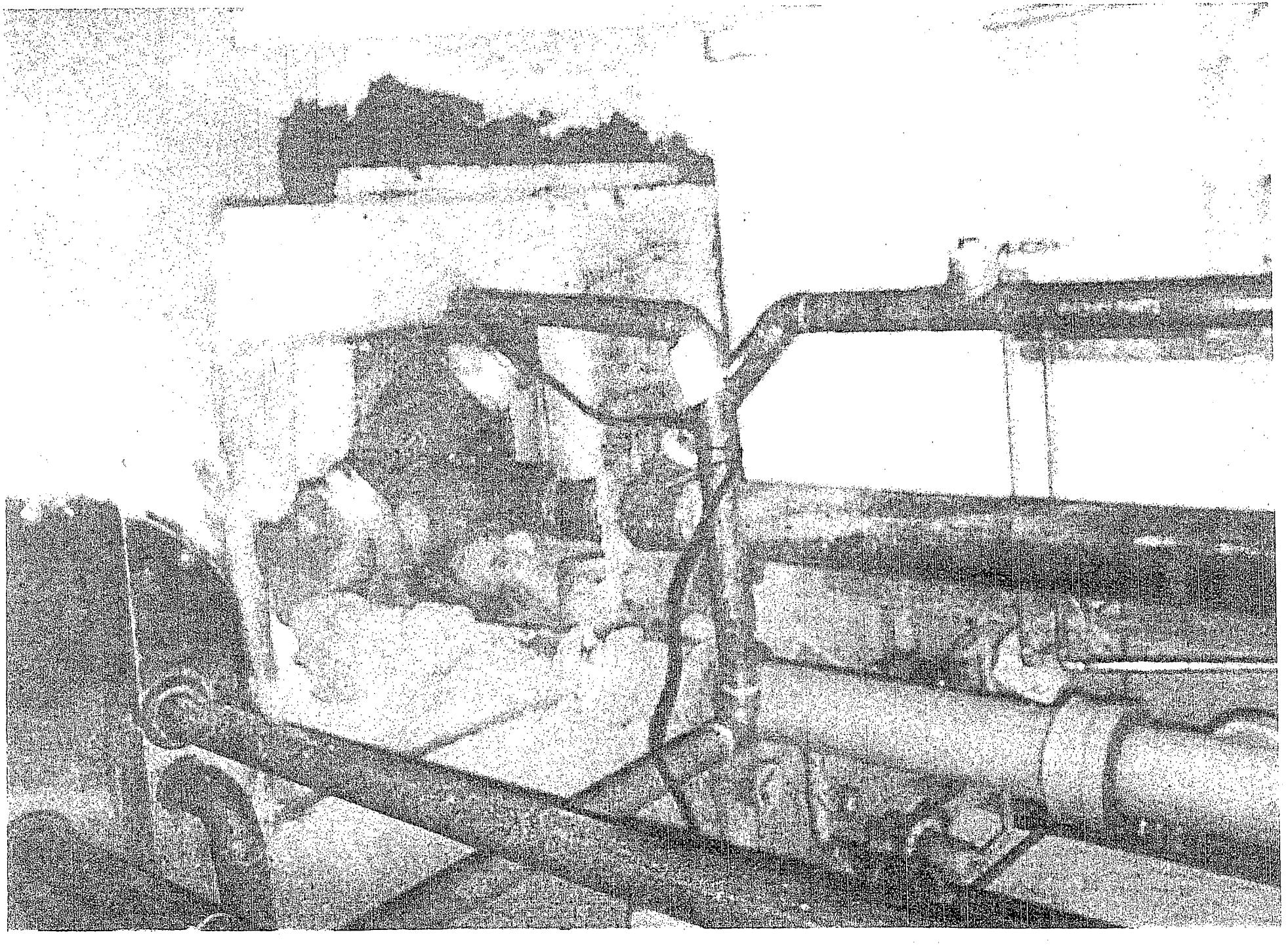






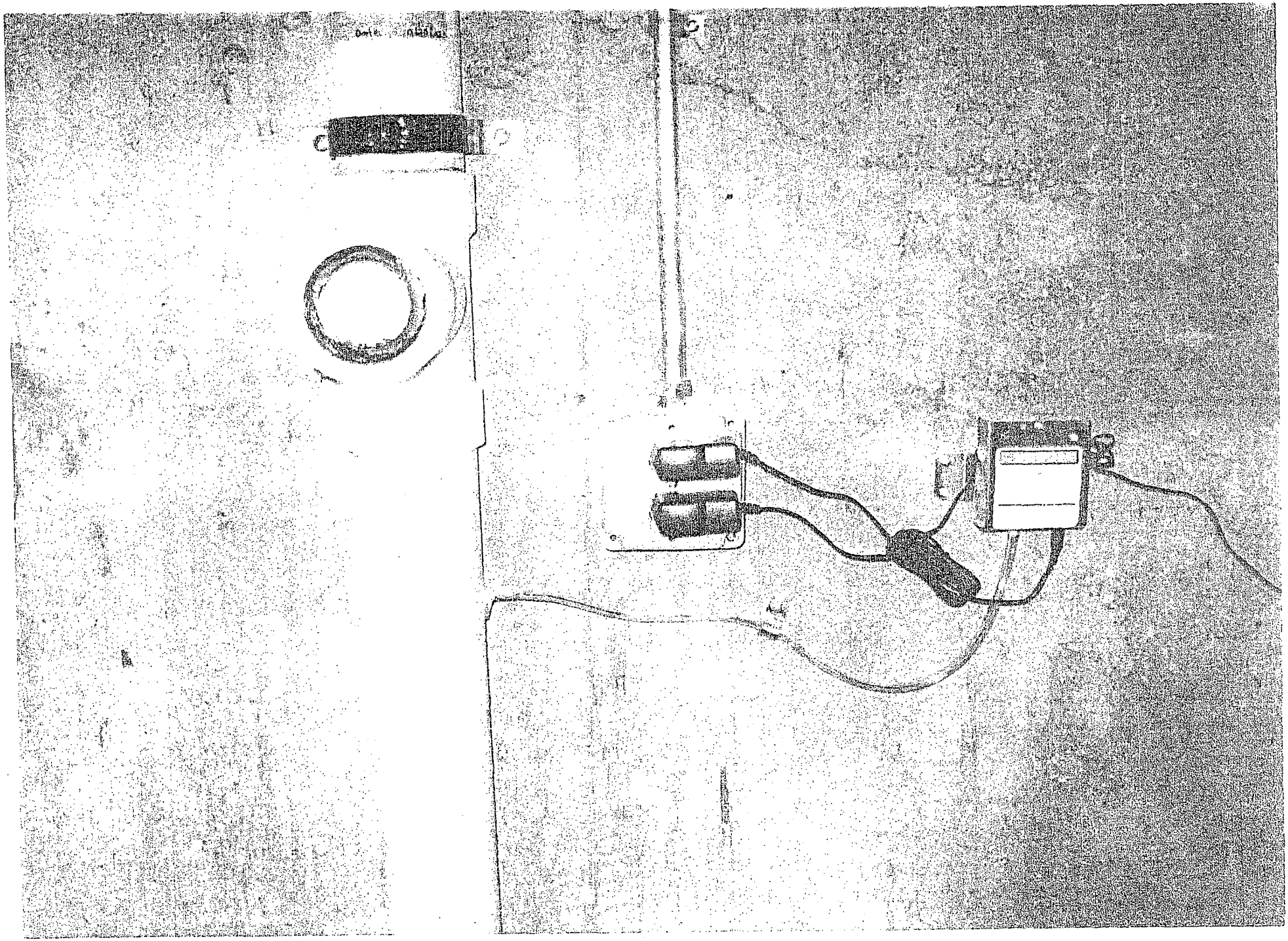


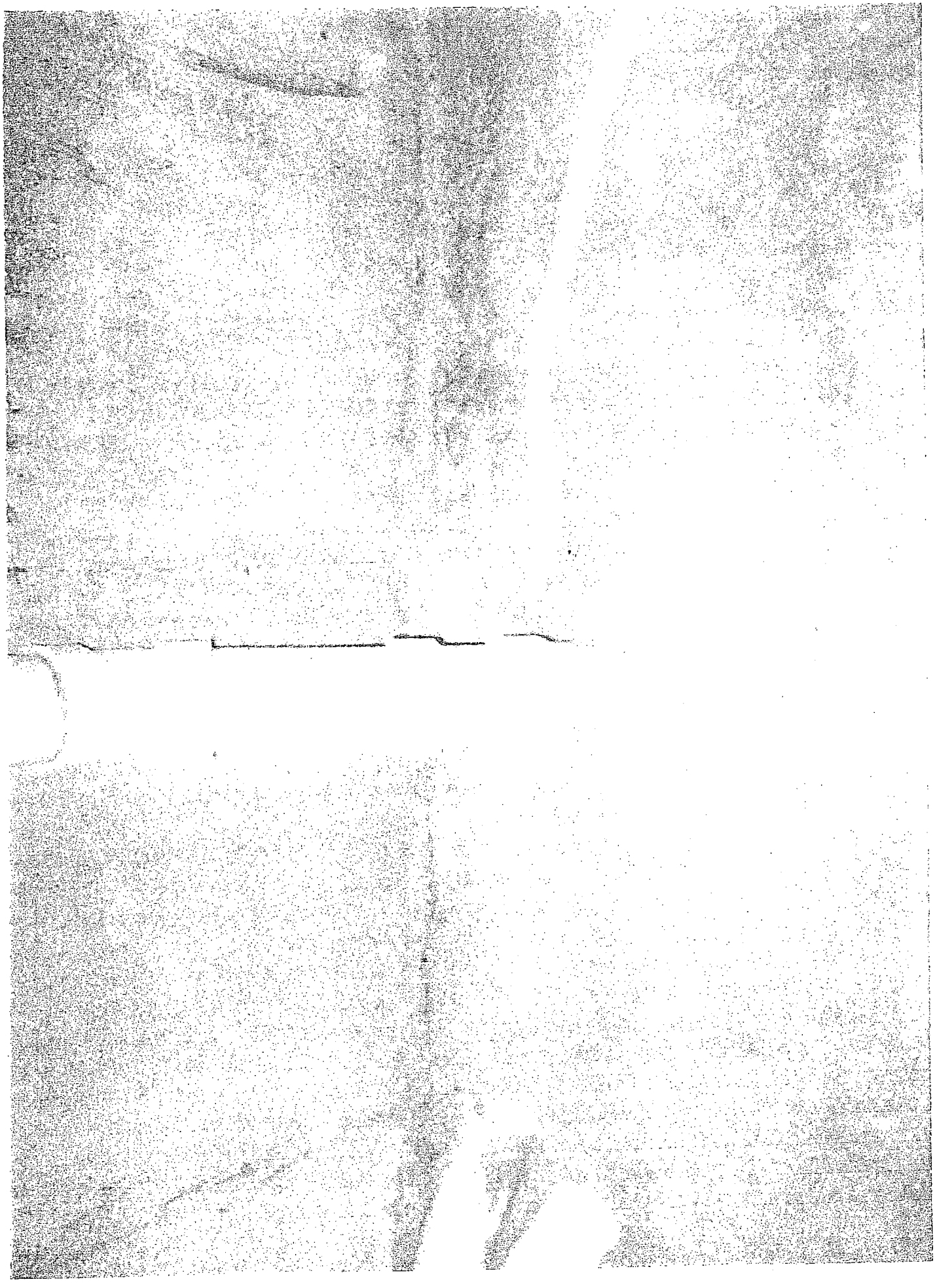
ACTIVE

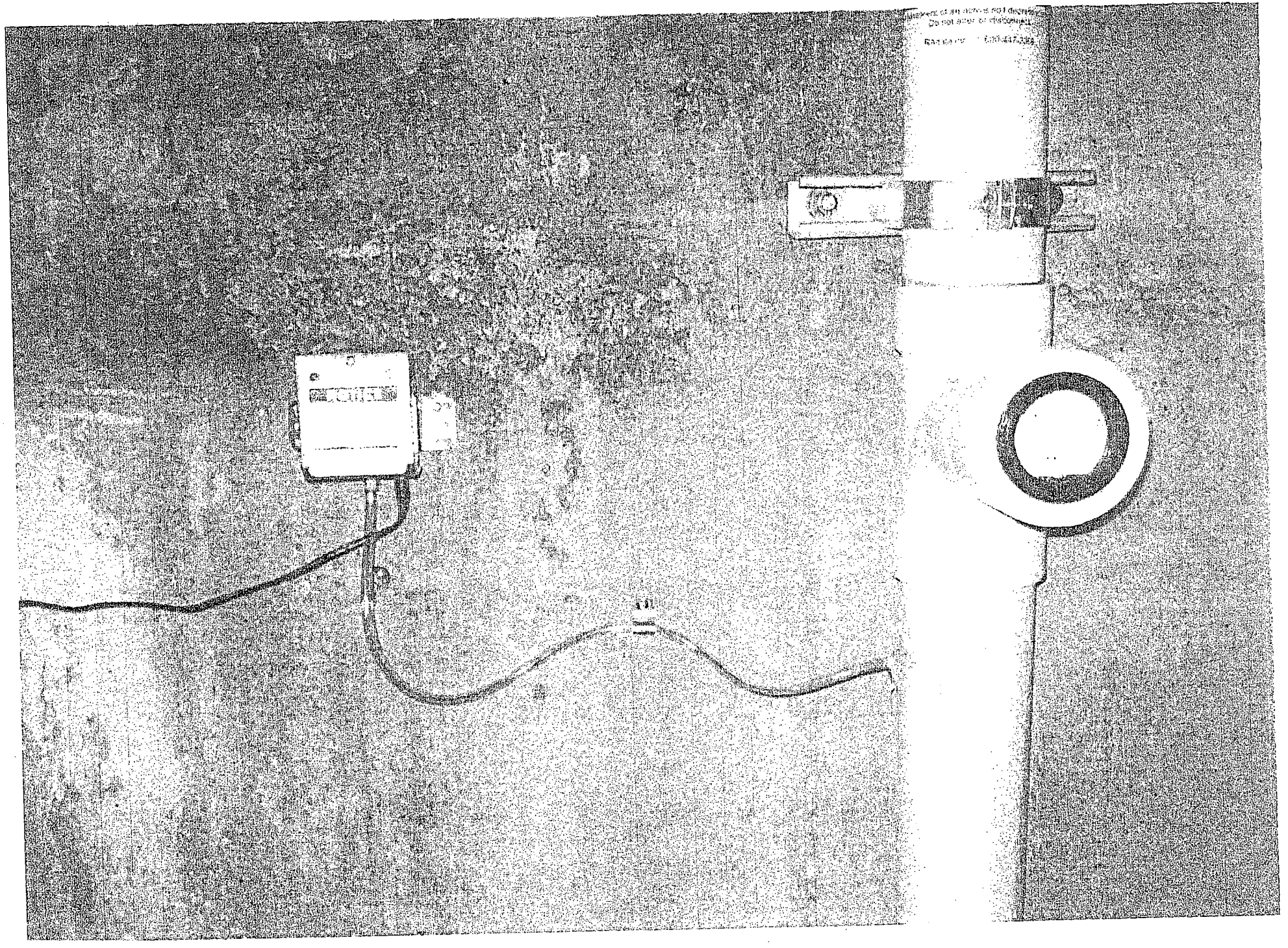


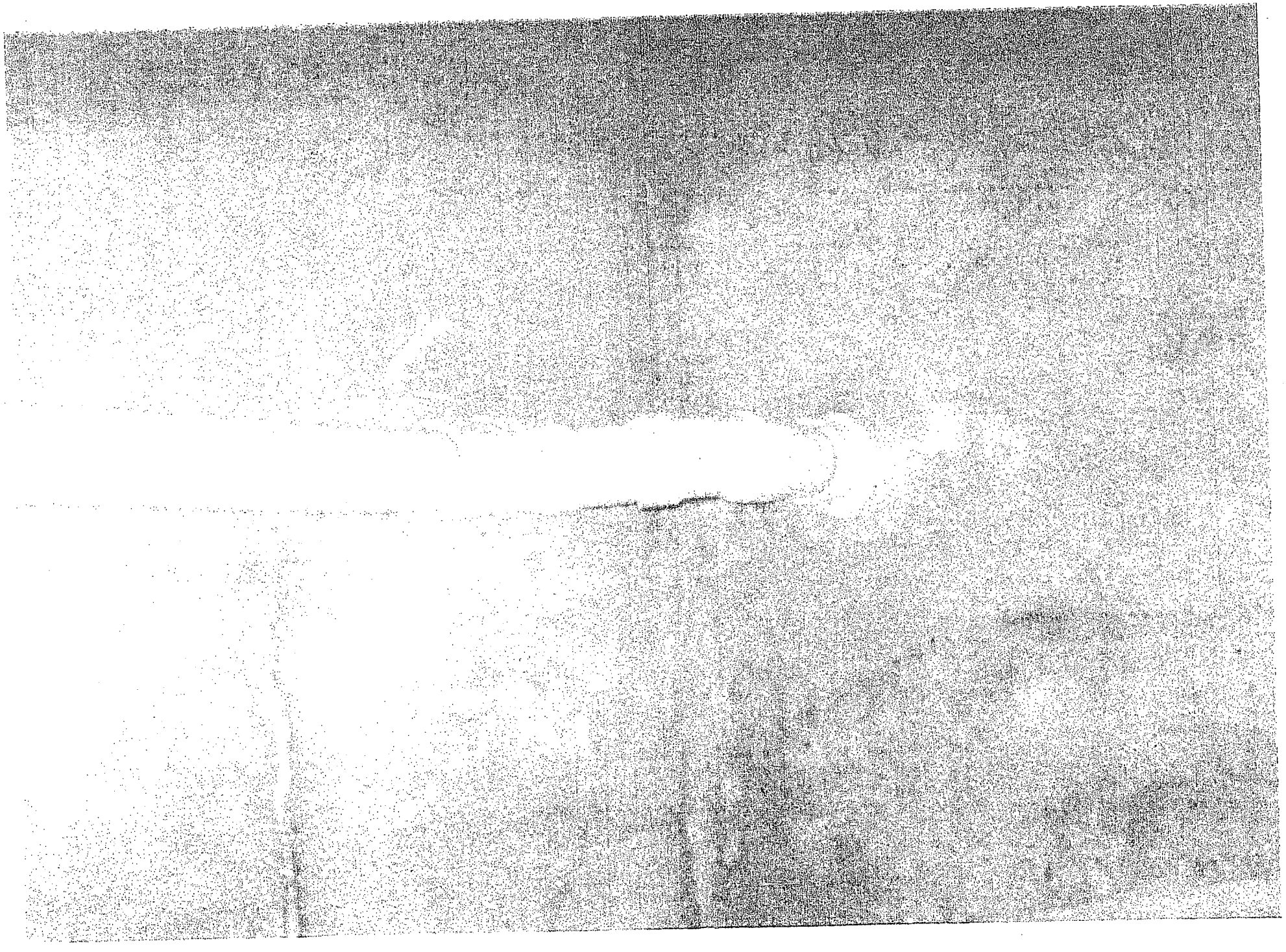


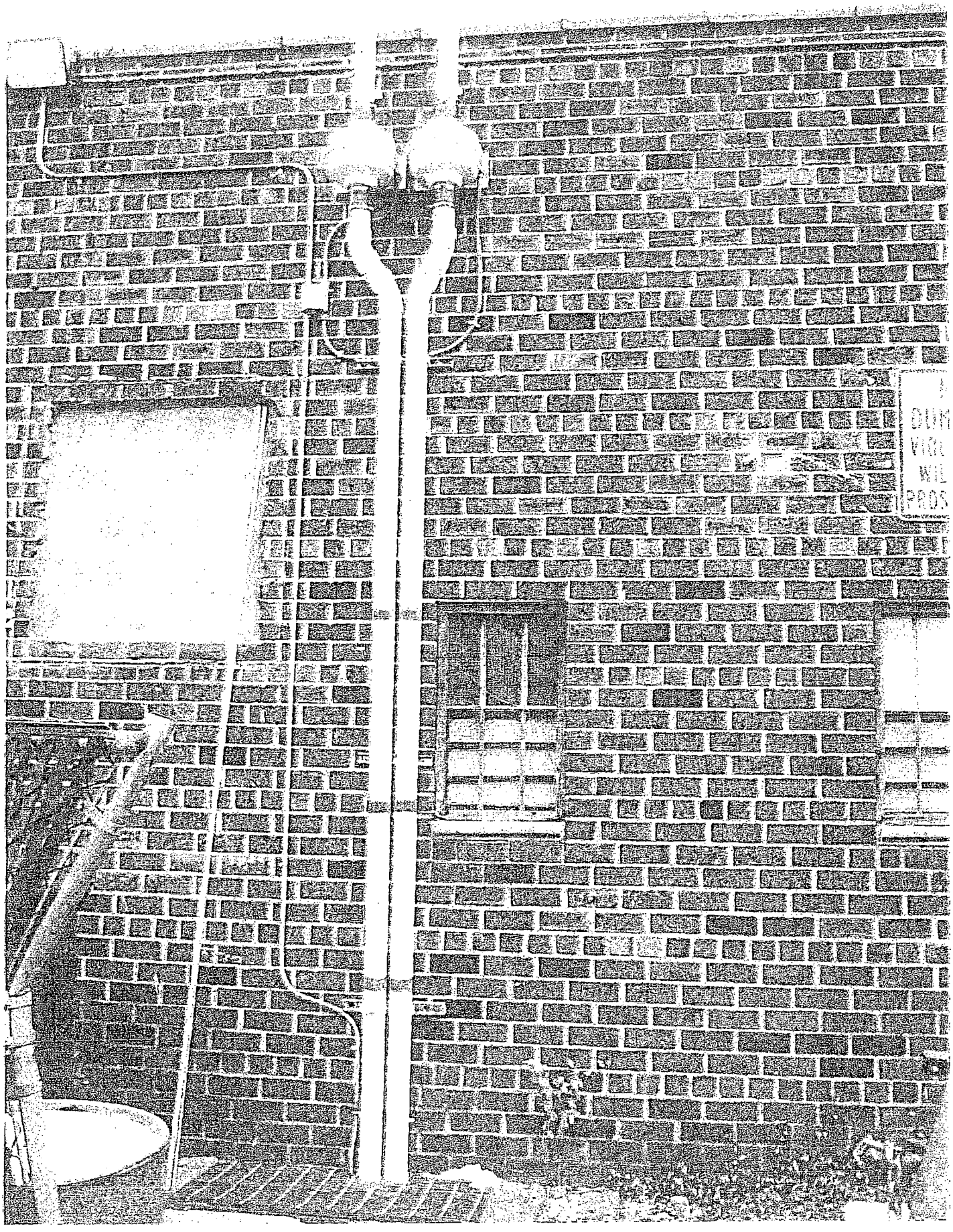
NOICE

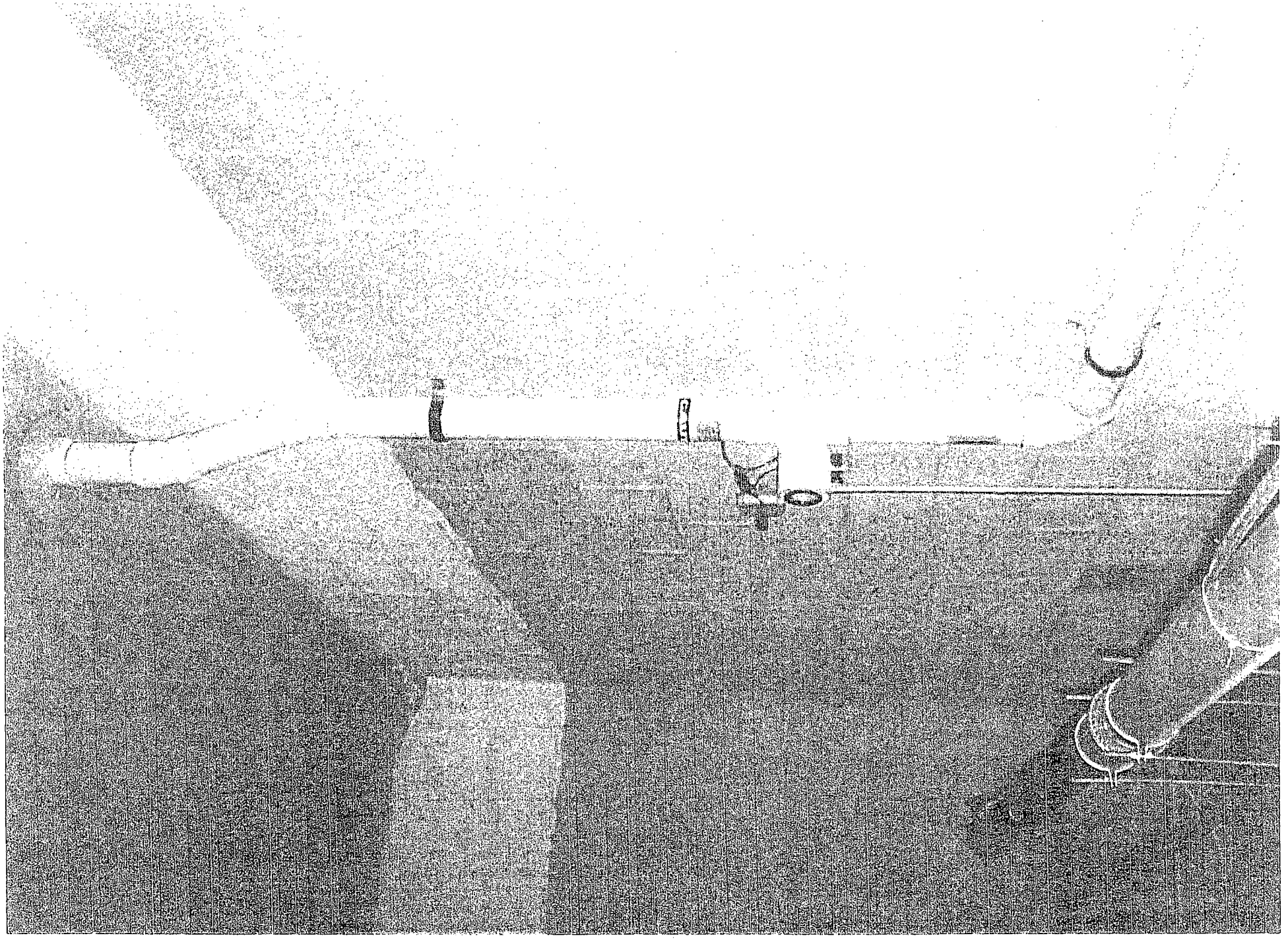












APPENDIX D

COPY

FINAL PROJECT REPORT FOR THE INSTALLATION OF ACTIVE SOIL DEPRESSURIZATION SYSTEMS AT THE BLUE MOUNTAIN PLAZA, 20 WELCHER AVENUE, PEEKSKILL, N.Y

Prepared for:

Kurtsam Realty
Box 383 Quaker Ridge Road
Croton-On-Hudson, New York 10520

Prepared by:

Mr. David Grammer
RAdata, Inc.
27 Ironia Road
Flanders, New Jersey
Phone: (973) 927-7303 Fax: (973) 927-4980
E-Mail: dg@radata.com

January 14, 2011

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1.1 Site Description....1
1.2 Site Contaminants....1

2.0 MITIGATION APPROACH....2

3.0 INSTALLATION OF PERMANENT ACTIVE SOIL DEPRESSURIZATION STSTEMS....3

3.1 Vacuum and Air Stream Measurements of Permanent Active Soil Depressurization Systems....3

3.2 Conclusions of Vacuum Measurements For The Active Soil Depressurization Systems....3

4.0 DISPOSAL OF CONTAMINATED SOILS....4

5.0 PERMITS....4

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7.0 OPERATIONS, MAINTENANCE AND MONITORING....4

8.0 WARRANTIES....4

9.0 CONCLUSION....5

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Sub Slab Vacuum Measurements....ATTACHMENT 3

Waste Disposal Manifest....ATTACHMENT 4

Local Municipality Permits....ATTACHMENT 5

RAdata, Inc. Health and Safety Plan....ATTACHMENT 6

Operations, Maintenance and Monitoring....ATTACHMENT 7

Copy of Contract....ATTACHMENT 8

MSDS and Material Information....ATTACHMENT 9

Project Photographs....ATTACHMENT 10

INSTALLATION OF ACTIVE SOIL DEPRESSURIZATION SYSTEMS

THE BLUE MOUNTAIN PLAZA, 20 WELCHER AVENUE, GO NO SEN KARATE DOJO, FITNESS KICKBOXING AND VACANT WASH "N" DRY, PEEKSKILL, N.Y

1.0 INTRODUCTION AND BACKGROUND

RAdata, Inc. has completed the installation of Active Soil Depressurization Systems (ASDS) at the Go No Sen Karate Dojo, Fitness Kickboxing and the vacant Wash "N" Dry located in The Blue Mountain Plaza at 20 Welcher Avenue in Peekskill, New York. This complex is owned by Kurtsam Realty. This work commenced on October 19, 2010 and was completed on October 21, 2010.

Indoor and soil air sampling was previously conducted at the site by Bell Environmental, 230 Route 206, Flanders, New Jersey. The results of these samplings show numerous volatile organic compounds (VOCs) that exceed the New York State Department of Health (NYDOH) background concentrations.

1.1 Site Description

The subject facility is a one-story masonry building with a basement. The basement is partitioned into two sections, one beneath the Go No Sen Karate Dojo and Fitness Kickboxing which is dissected into various use rooms and one beneath the vacant Wash "N" Dry. There is a concrete slab with masonry outer walls. The facility is a one story building approximately 18 feet high with a brick exterior. The age of the foundation is unknown. The building has a flat roof. Total square footage of indoor space is approximately 3,000 square feet +/-.

1.2 Site Contaminants

Air sampling conducted at the Blue Mountain Plaza property prior to the installation of the Active Soil Depressurization Systems detected the following contaminants exceeding the New York State Department of Health (NYDOH) background concentrations.

Acetone	Chloroform
Ethanol	Tetrachloroethene (PCE)
Trichlorofluoromethane	Trichloroethene (TCE)
Tetrahydrofuran	Total Xylenes
Cis-1,2-Dichloroethylene	Chloromethane

N-Hexane

2.0 MITIGATION APPROACH

The primary method for reducing soil borne pollutants according to the N.Y.D.O.H Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006) is Active Soil Depressurization Systems (ASDS). Active Soil Depressurization Systems prevent soil borne pollutants entry into the building by creating a negative pressure (vacuum) beneath the slab through fan activated PVC pipe routed to the exterior of the building and vented above the roofline. It is at this location where these pollutants are quickly diluted by the ambient air. The Active Soil Depressurization Systems may also remove moisture and other soil pollutants that enter the building, therefore thus improving the overall air quality of the building.

The Active Soil Depressurization Systems are installed so as to coordinate with other building components especially those that require maintenance or clearance of any type. All mitigation components are installed to facilitate servicing, maintenance and repair or replacement of other equipment components both inside and outside of the building. All systems, materials and equipment were installed level, plumb, parallel or perpendicular to other building systems and components unless otherwise specifled. All fan components are UL or equivalent rated.

3.0 INSTALATION OF PERMANENT ACTIVE SOIL DEPRESSURIZATION SYSTEMS

Based on data gathered during the sub-slab vacuum testing the decision was made by RAdata, Inc. to install a total of three (3) permanent ASDS. Systems locations can be found on the As Built Drawing as Attachment 1. After four (4) four-inch (4") holes were core drilled through the concrete floor, about one cubic foot of soil was removed from beneath the slab using a shop vac. Soil was placed in a 55-gallon drum for proper disposal. These holes were piped with three-inch (3") Schedule 40 PVC pipe (ASTM D 1785) routed to the exterior of the building. Two (2) of the ASDS were routed to the rear of the building and one (1) to the right side of the building. Split-ring hangers, clevis hangers and two-hole straps were used to attach the pipe securely to the building. The

exhaust of three-inch (3") Schedule 40 PVC pipe was routed above the roofline at that location. The vent fans are mounted directly to the PVC pipe slightly below the roofline using rubber couplers.

There was also an existing sump pit and submersible sump pump in the basement that was covered using a removable Plexiglas cover.

The three (3) fan units are Dynavac GP 501 fans (70-140 Watts) with a maximum pressure of 4.00 Inches of Water capable of evacuating 95 Cubic Feet Per Minute at 1" static pressure. Fan specifications can be found as Attachment 2. Conte Electric, 34 Brook Street, Croton-On-Hudson, New York 10520 (914-271-6636) provided electrical service to the fan units. Electrical service disconnects are located on the exterior of the building directly next to the fan units. To provide constant evaluation of system performance, Mini-magnehelic pressure gauges were installed in a conspicuous location on the PVC pipe in the basement area along with audio alarms which sound when fan failure has occurred. All components of the ASDS systems are clearly labeled as to their function. RAdata, Inc. contact information labels are attached to each system and are clearly visible.

The ASDS should not be turned off until the N.Y.D.O.H receives, and has had the opportunity to comment on, a proposal to turn off the mitigation systems. Systems should remain in place and operational until they are no longer needed to address current or potential exposures related to soil vapor intrusion.

3.1 Vacuum and Air Stream Measurements of Permanent Active Soil Depressurization Systems

After the installation of the ASDS, RAdata, Inc. conducted sub-slab vacuum measurements using a Dwyer digital Micro manometer to determine their sphere of influence. Four (4) test point locations were used to determine the sphere of influence within this particular portion of the building. The sub-slab vacuum test point locations and test results can be found as Attachment 3. The goal of a successful ASDS system is to create a negative pressure of -.004 Inches of Water Column or 1 Pascal. The outbound effluent air-stream should also be tested, the purpose of which is to determine whether operation of the ASDS requires a New York State Department of Health (N.Y.D.O.H) air permit for discharge of volatile organic compounds (VOCs).

3.2 Conclusions of Vacuum Measurements For The Active Soil Depressurization Systems

All four (4) test point locations indicate that the sub-floor vacuum created by the three (3) ASDS meets or exceed the goal of a successful ASDS system which is to create a negative pressure of -.004 Inches of Water Column or 1 Pascal.

4.0 DISPOSAL OF SOIL AND CONSTRUCTION DEBRIS

The one 55-gallon container of soil removed from beneath the floor, as well as construction debris, was disposed of by Clean Ventures, 2001 South First Street, Elizabeth, New Jersey, (908-355-5800). The drums were removed from the site on December 19, 2007. A copy of the disposal manifest can be found as Attachment 4.

5.0 PERMITS

RAdata, Inc. and its sub-contractors have procured the necessary permits for the installation of the ASDS. A copy of the City of Peekskill Building and Electrical permits for the installation of the ASDS can be found as Attachment 5.

6.0 WORKER HEALTH AND SAFETY

A copy of our Worker Health and Safety Plan For Installing the Active Soil Depressurization Systems can be found as Attachment 6. Phase Associates, LLC, 316 Eisenhower Parkway, Livingston, New Jersey, 973-597-0750, prepared this document for RAdata, Inc.

7.0 OPERATIONS, MAINTENANCE AND MONITORING

The building Owner is responsible for ongoing system Operations, Maintenance and Monitoring as well as verification sampling of indoor air quality. RAdata, Inc. should conduct an inspection at a six-month interval after the installation has been completed. After the first year, a reduced inspection frequency may be appropriate and changed to once every 12 to 18 months. Based upon a demonstration of the system's reliability, the N.Y.D.O.H recommends that, if a different frequency is desired, a petition describing the alternative frequency and the reasons that frequency is preferred may be submitted to the State. Submission of an annual certification to the N.Y.D.O.H may be required. Comprehensive maintenance procedures can be found as Attachment 7.

8.0 WARRANTIES

All work was completed in a professionsl, workmanlike manner. RAdata, Inc. warranties all system components and workmanship for a period of three (3) years from the date of installation.

9.0 CONCLUSION

The goal of a successful ASDS system is to create a negative pressure of between -.004 Inches of Water Column. Sub floor vacuum measurements reflect an acceptable vacuum in all four (4) interior test point locations. Test point locations and results can be found as Attachment 3. Post treatment indoor air sampling test results will be the defining factor as to the success of the ASDS systems.

10.0 CONTACT INFORMATION

GENERAL CONTRACTOR

Radata. Inc.
27 Ironia Road
Flanders, New Jersey 07836
973-927-7303 Telephone
973-917-4980 Fax
dg@radata.com

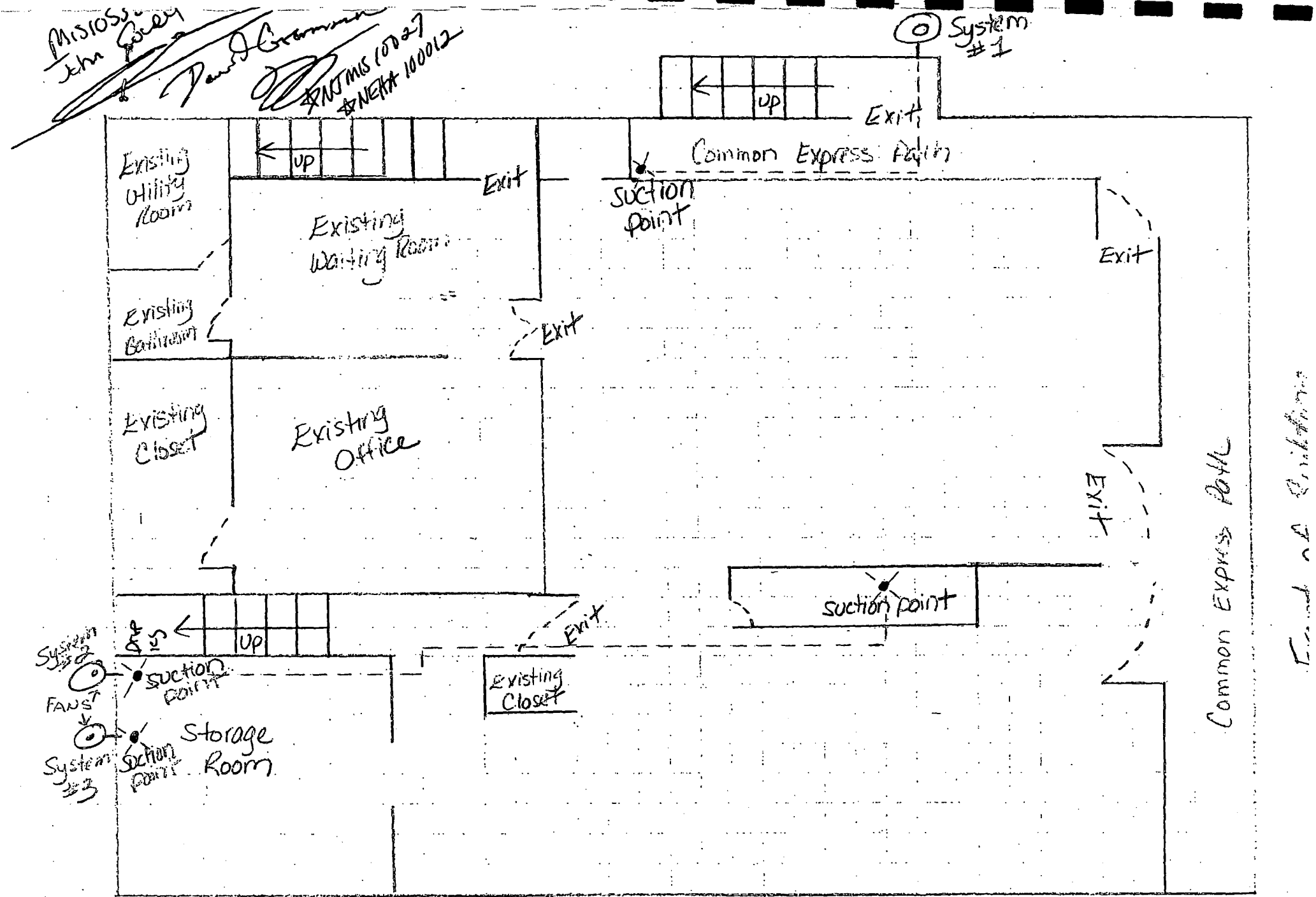
SUB CONTRACTORS

Electrical Service
Conti Electric, Inc.
34 Brook Street
Croton-on-Hudson 10520
914-271-6636

Soil Waste Disposal
Clean Ventures, Inc.
201 South 1st Street
Elizabeth, NJ 07206
908-355-5800

ATTACHMENT

1


System #1
up
Exit
Common Express Path
Existing Utility Room
Existing Waiting Room
Suction point
Exit
Existing Ballroom
Exit
Existing Closet
Existing Office
Exit
suction point
Exit
System #2
FANS
suction point
Existing Closet
System #3
Suction point
Storage Room
Common Express Path
Exit
Suction Points
PVC Pipe
Go No Sen Karate Dojo
20 Welcher Ave Peekskill, NY
AS BUILT DRAWING
Drawing Not to Scale.

ATTACHMENT

2

RadonAway Ward Hill, MA IN014 Rev F

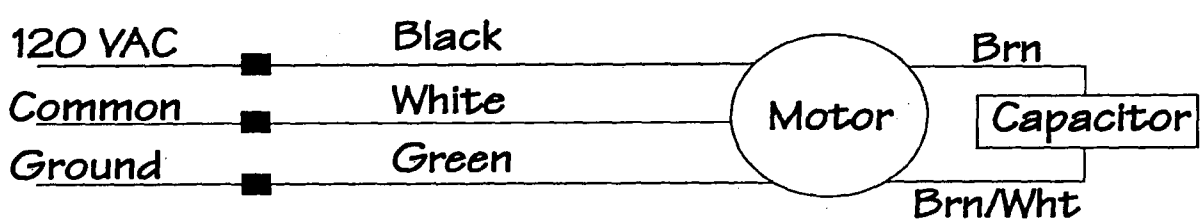
XP/GP/XR Series Fan Installation Instructions

Please Read And Save These Instructions.

DO NOT CONNECT POWER SUPPLY UNTIL FAN IS COMPLETELY INSTALLED. MAKE SURE ELECTRICAL SERVICE TO FAN IS LOCKED IN "OFF" POSITION. DISCONNECT POWER BEFORE SERVICING FAN.

1. WARNING! Do not use fan in hazardous environments where fan electrical system could provide ignition to combustible of flammable materials.
2. WARNING! Do not use fan to pump explosive or corrosive gases.
3. WARNING! Check voltage at the fan to insure it corresponds with nameplate.
4. WARNING! Normal operation of this device may affect the combustion airflow needed for safe operation of fuel burning equipment. Check for possible backdraft conditions on all combustion devices after installation.
5. NOTICE! There are no user serviceable parts located inside the fan unit. **Do NOT attempt to open.** Return unit to the factory for service.
6. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician.
7. WARNING! Do not leave fan unit installed on system piping without electrical power for more than 48 hours. Fan failure could result from this non-operational storage.

DynaVac GF/XP/XR/RP Series Fan Wiring Diagram



RadonAway™

INSTALLATION INSTRUCTION IN014 Rev F

DynaVac - XP/XR Series		DynaVac - GP Series	
XP101	p/n 23008-1,-2	GP201	p/n 23007-1
XP151	p/n 23010-1,-2	GP301	p/n 23006-1,-2
XP201	p/n 23011-1,-2	GP401	p/n 23009-1
XR161	p/n 23018-1,-2	* GP501	p/n 23005-1,-2
XR261	p/n 23019-1,-2		

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1 INTRODUCTION

The DynaVac GP/XP/XR Series Radon Fans are intended for use by trained, professional Radon mitigators. The purpose of this instruction is to provide additional guidance for the most effective use of a DynaVac Fan. This instruction should be considered as a supplement to EPA standard practices, state and local building codes and state regulations. In the event of a conflict, those codes, practices and regulations take precedence over this instruction.

1.2 ENVIRONMENTALS

The GP/XP/XR Series Fans are designed to perform year-round in all but the harshest climates without additional concern for temperature or weather. For installations in an area of severe cold weather, please contact RadonAway for assistance. When not in operation, the fan should be stored in an area where the temperature is never less than 32 degrees F. or more than 100 degrees F.

1.3 ACOUSTICS

The GP/XP/XR Series Fan, when installed properly, operates with little or no noticeable noise to the building occupants. The velocity of the outgoing air should be considered in the overall system design. In some cases the "rushing" sound of the outlet air may be disturbing. In these instances, the use of a RadonAway Exhaust Muffler is recommended.

1.4 GROUND WATER

In the event that a temporary high water table results in water at or above slab level, water may be drawn into the riser pipes thus blocking air flow to the GP/XP/XR Series Fan. The lack of cooling air may result in the fan cycling on and off as the internal temperature rises above the thermal cutoff and falls upon shutoff. Should this condition arise, it is recommended that the fan be turned off until the water recedes allowing for return to normal operation.

1.5 SLAB COVERAGE

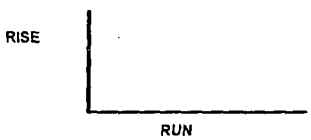
The GP/XP/XR Series Fan can provide coverage up to 2000+ sq. ft. per slab penetration. This will primarily depend on the sub-slab material in any particular installation. In general, the tighter the material, the smaller the area covered per penetration. Appropriate selection of the GP/XP/XR Series Fan best suited for the sub-slab material can improve the slab coverage. The GP & XP series have a wide range of models to choose from to cover a wide range of subslab material. The higher static suction fans are generally used for tighter subslab materials. The XR Series is specifically designed for high flow applications such as stone/gravel and drain tile. Additional suction points can be added as required. It is recommended that a small pit (5 to 10 gallons in size) be created below the slab at each suction hole.

1.6 CONDENSATION & DRAINAGE

Condensation is formed in the piping of a mitigation system when the air in the piping is chilled below its dew point. This can occur at points where the system piping goes through unheated space such as an attic, garage or outside. The system design must provide a means for water to drain back to a slab hole to remove the condensation. The GP/XP/XR Series Fan **MUST** be mounted vertically plumb and level, with the outlet pointing up for proper drainage through the fan. Avoid mounting the fan in any orientation that will allow water to accumulate inside the fan housing. The GP/XP/XR Series Fans are **NOT** suitable for underground burial.

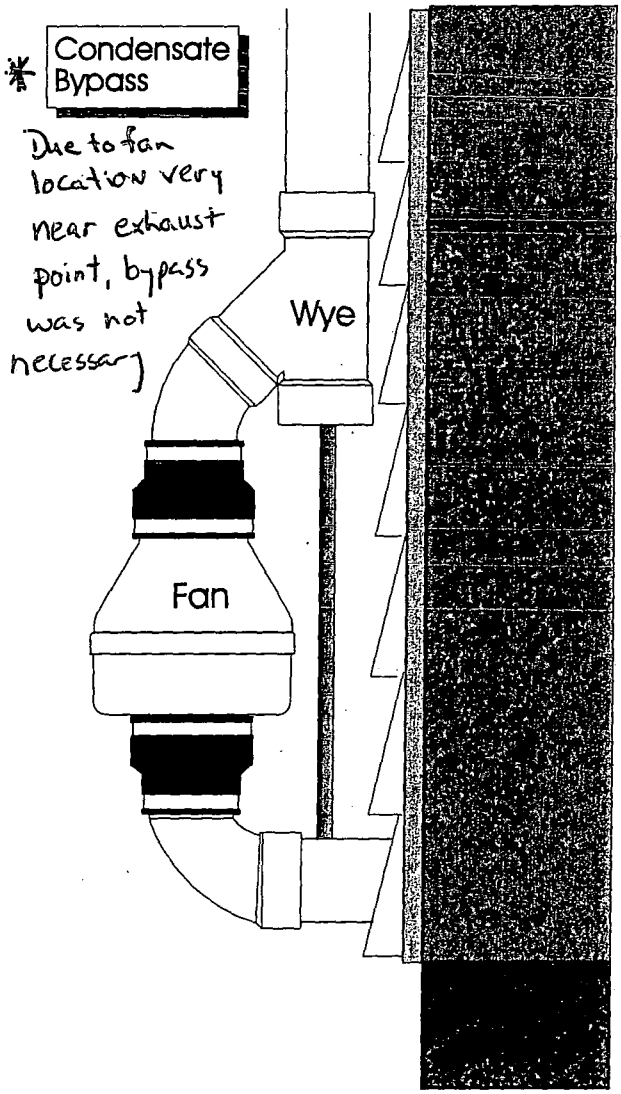
For GP/XP/XR Series Fan piping, the following table provides the minimum recommended pipe diameter and pitch under several system conditions.

Pipe Dia.	Minimum Rise per Foot of Run* @25 CFM	@50 CFM	@100 CFM
4"	1/8"	1/4"	3/8"
3"	1/4"	3/8"	1 1/2"



*Typical GP/XP/XR Series Fan operational flow rate is 25 - 90 CFM. (For more precision, determine flow rate by using the chart in the addendum.)

Under some circumstances in an outdoor installation a condensate bypass should be installed in the outlet ducting as shown. This may be particularly true in cold climate installations which require long lengths of outlet ducting or where the outlet ducting is likely to produce large amounts of condensation because of high soil moisture or outlet duct material. Schedule 20 piping and other thin-walled plastic ducting and Aluminum downspout will normally produce much more condensation than Schedule 40 piping.



The bypass is constructed with a 45 degree Wye fitting at the bottom of the outlet stack. The bottom of the Wye is capped and fitted with a tube that connects to the inlet piping or other drain. The condensation produced in the outlet stack is collected in the Wye fitting and drained through the bypass tube. The bypass tubing may be insulated to prevent freezing.

1.7 "SYSTEM ON" INDICATOR

A properly designed system should incorporate a "System On" Indicator for affirmation of system operation. A manometer, such as a U-Tube, or a vacuum alarm is recommended for this purpose.

1.8 ELECTRICAL WIRING

The GP/XP/XR Series Fans operate on standard 120V 60 Hz. AC. All wiring must be performed in accordance with the National Fire Protection

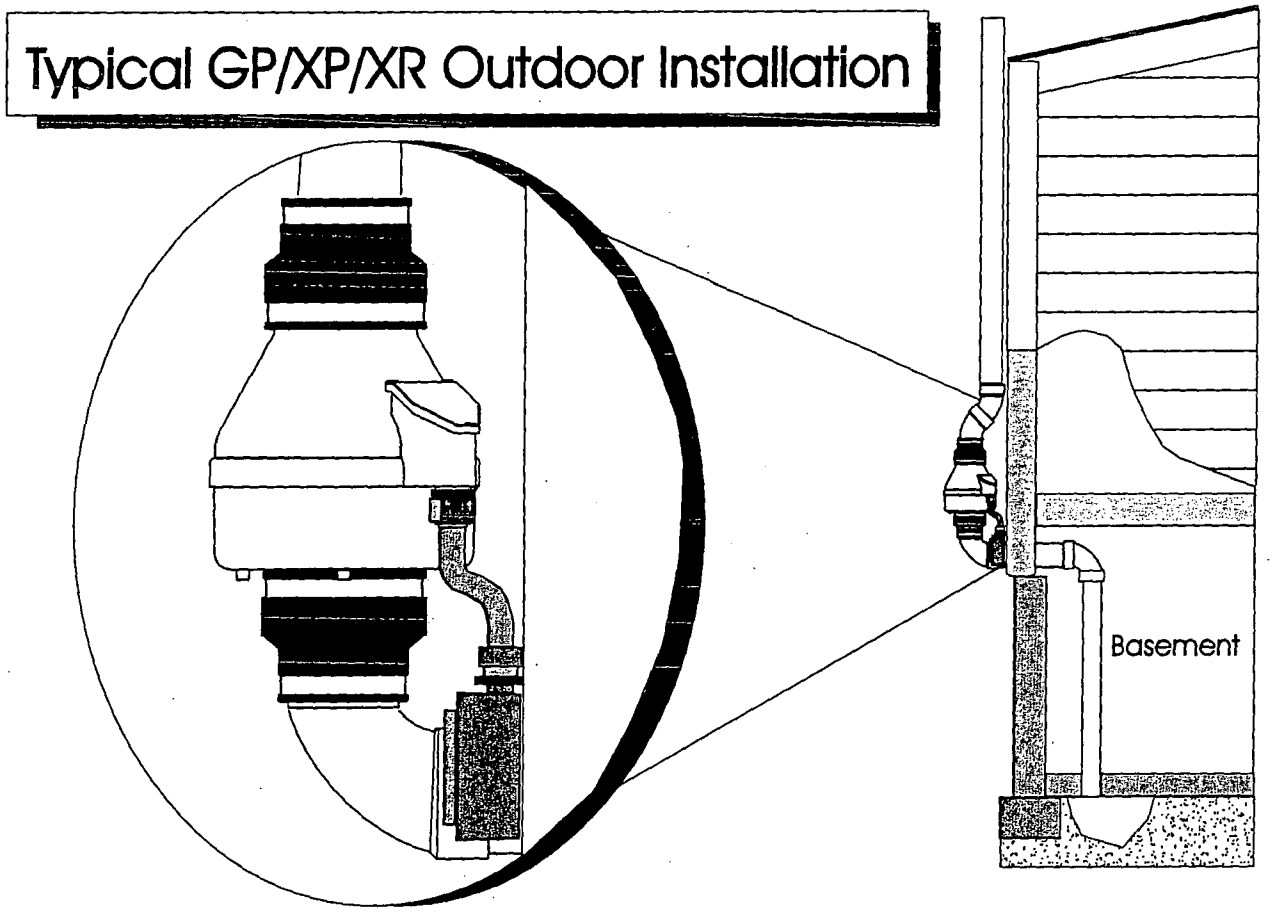
Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a U.L. listed watertight conduit.

1.9 SPEED CONTROLS

The GP/XP/XR Series Fans are rated for use with electronic speed controls ,however, they are generally not recommended.

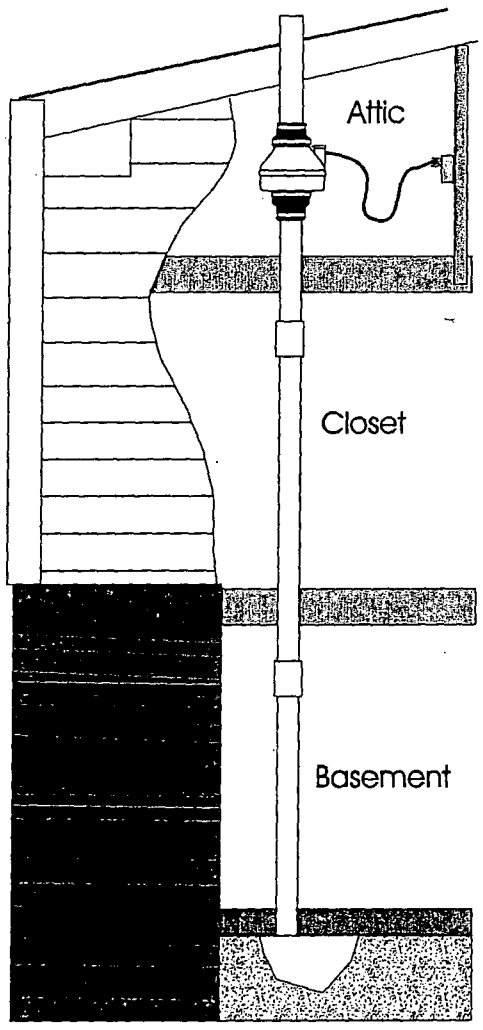
2.0 INSTALLATION

The GP/XP/XR Series Fan can be mounted indoors or outdoors. (It is suggested that EPA recommendations be followed in choosing the fan location.) The GP/XP/XR Series Fan may be mounted directly on the system piping or fastened to a supporting structure by means of optional mounting bracket.



2.1 MOUNTING

Mount the GP/XP/XR Series Fan vertically with outlet up. Insure the unit is plumb and level. When mounting directly on the system piping assure that the fan does not contact any building surface to avoid vibration noise.



2.2 MOUNTING BRACKET (optional)

The GP/XP/XR Series fan may be optionally secured with the integral mounting bracket on the GP Series fan or with RadonAway P/N 25007-2 mounting bracket for an XP/XR Series fan. Foam or rubber grommets may also be used between the bracket and mounting surface for vibration isolation.

2.3 SYSTEM PIPING

Complete piping run, using flexible couplings as means of disconnect for servicing the unit and vibration isolation.

2.4 ELECTRICAL CONNECTION

Connect wiring with wire nuts provided, observing proper connections:

Fan Wire	Connection
Green	Ground
Black	AC Hot
White	AC Common

2.5 VENT MUFFLER (optional)

Install the muffler assembly in the selected location in the outlet ducting. Solvent weld all connections. The muffler is normally installed at the end of the vent pipe.

2.6 OPERATION CHECKS

_____ **Verify** all connections are tight and **leak-free.**

_____ **Insure** the GP/XP/XR Series Fan and all ducting is secure and vibration-free.

_____ **Verify** system vacuum pressure with manometer. **Insure** vacuum pressure is **less than** maximum recommended operating pressure

(Based on sea-level operation, at higher altitudes reduce by about 4% per 1000 Feet.)

(Further reduce Maximum Operating Pressure by 10% for High Temperature environments)

See Product Specifications. If this is exceeded, increase the number of suction points.

_____ **Verify Radon levels by testing to EPA protocol.**

GP SERIES PRODUCT SPECIFICATIONS

The following chart shows fan performance for the GPx01 Series Fan:

Typical CFM Vs Static Suction "WC	1.0"	1.5"	2.0"	2.5"	3.0"	3.5"	4.0"
* GP501	95	87	80	70	57	30	5
GP401	93	82	60	38	12	-	-
GP301	92	77	45	10	-	-	-
GP201	82	58	5	-	-	-	-

Maximum Recommended Operating Pressure*		
* GP501	3.8" W.C.	(Sea Level Operation)**
GP401	3.0" W.C.	(Sea Level Operation)**
GP301	2.4" W.C.	(Sea Level Operation)**
GP201	1.8" W.C.	(Sea Level Operation)**

**Reduce by 10% for High Temperature Operation*

***Reduce by 4% per 1000 feet of altitude*

Power Consumption @ 120 VAC	
* GP501	70 - 140 watts
GP401	60 - 110 watts
GP301	55 - 90 watts
GP201	40 - 60 watts

Inlet/Outlet: 3.5" OD (3.0" PVC Sched 40 size compatible)

Mounting: Fan may be mounted on the duct pipe or with integral flanges.

Weight: 12 lbs.

Size: 13H" x 12.5" x 12.5"

Recommended ducting: 3" or 4" Schedule 20/40 PVC Pipe

Storage temperature range: 32 - 100 degrees F.

Normal operating temperature range: -20 - 120 degrees F.

Maximum inlet air temperature: 80 degrees F.

Continuous Duty

Class B Insulation

3000 RPM

Thermally protected

Rated for Indoor or Outdoor Use

GP301C / GP501C Rated for Commercial Use

LISTED Electric Fan ETL® 77728 Tested to UL Std. 507

IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the GPx01/XP/XR Series Fan for shipping damage within 15 days of receipt. Notify RadonAway of any damages immediately. Radonaway *is not* responsible for damages incurred during shipping. However, for your benefit, Radonaway does insure shipments.

There are no user serviceable parts inside the fan. **Do not attempt to open.** Return unit to factory for service.

Install the GPx01/XP/XR Series Fan in accordance with all EPA standard practices, and state and local building codes and state regulations.

WARRANTY

Subject to any applicable consumer protection legislation, RadonAway warrants that the GPX01/XP/XR/RP Series Fan (the "Fan") will be free from defects in materials and workmanship for a period of 90 days from the date of purchase (the "Warranty Term").

RadonAway will replace any Fan which fails due to defects in materials or workmanship. The Fan must be returned (at Owner's cost) to the RadonAway factory. Any Fan returned to the factory will be discarded unless the Owner provides specific instructions along with the Fan when it is returned regardless of whether or not the Fan is actually replaced under this warranty. Proof of purchase must be supplied upon request for service under this Warranty.

This Warranty is contingent on installation of the Fan in accordance with the instructions provided. This Warranty does not apply where any repairs or alterations have been made or attempted by others, or if the unit has been abused or misused. Warranty does not cover damage in shipment unless the damage is due to the negligence of RadonAway.

5 YEAR EXTENDED WARRANTY WITH PROFESSIONAL INSTALLATION.

RadonAway will extend the Warranty Term of the fan to 5 years from date of manufacture if the Fan is installed in a professionally designed and professionally installed radon system or installed as a replacement fan in a professionally designed and professionally installed radon system. Proof of purchase and/or proof of professional installation may be required for service under this warranty. Outside the Continental United States and Canada the extended Warranty Term is limited to one (1) year from the date of manufacture.

RadonAway is not responsible for installation, removal or delivery costs associated with this Warranty.

EXCEPT AS STATED ABOVE, THE GPx01/XP/XR/RP SERIES FANS ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL RADONAWAY BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR RELATING TO, THE FAN OR THE PERFORMANCE THEREOF. RADONAWAY'S AGGREGATE LIABILITY HEREUNDER SHALL NOT IN ANY EVENT EXCEED THE AMOUNT OF THE PURCHASE PRICE OF SAID PRODUCT. THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT, TO THE EXTENT THE SAME DOES NOT MEET WITH RADONAWAY'S WARRANTY AS PROVIDED ABOVE.

For service under this Warranty, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping cost to and from factory.

RadonAway
3 Saber Way
Ward Hill, MA 01835
TEL. (978) 521-3703
FAX (978) 521-3964

Record the following information for your records:

Serial No._____
Purchase Date_____

ATTACHMENT

3

RESULTS OF POST TREATMENT VACUUM TESTING AT 20 WELCHER AVENUE, PEEKSKILL, NEW YORK

All results are reported in inches of water column

TEST POINT 1 -0.055 INCHES OF WATER COLUMN

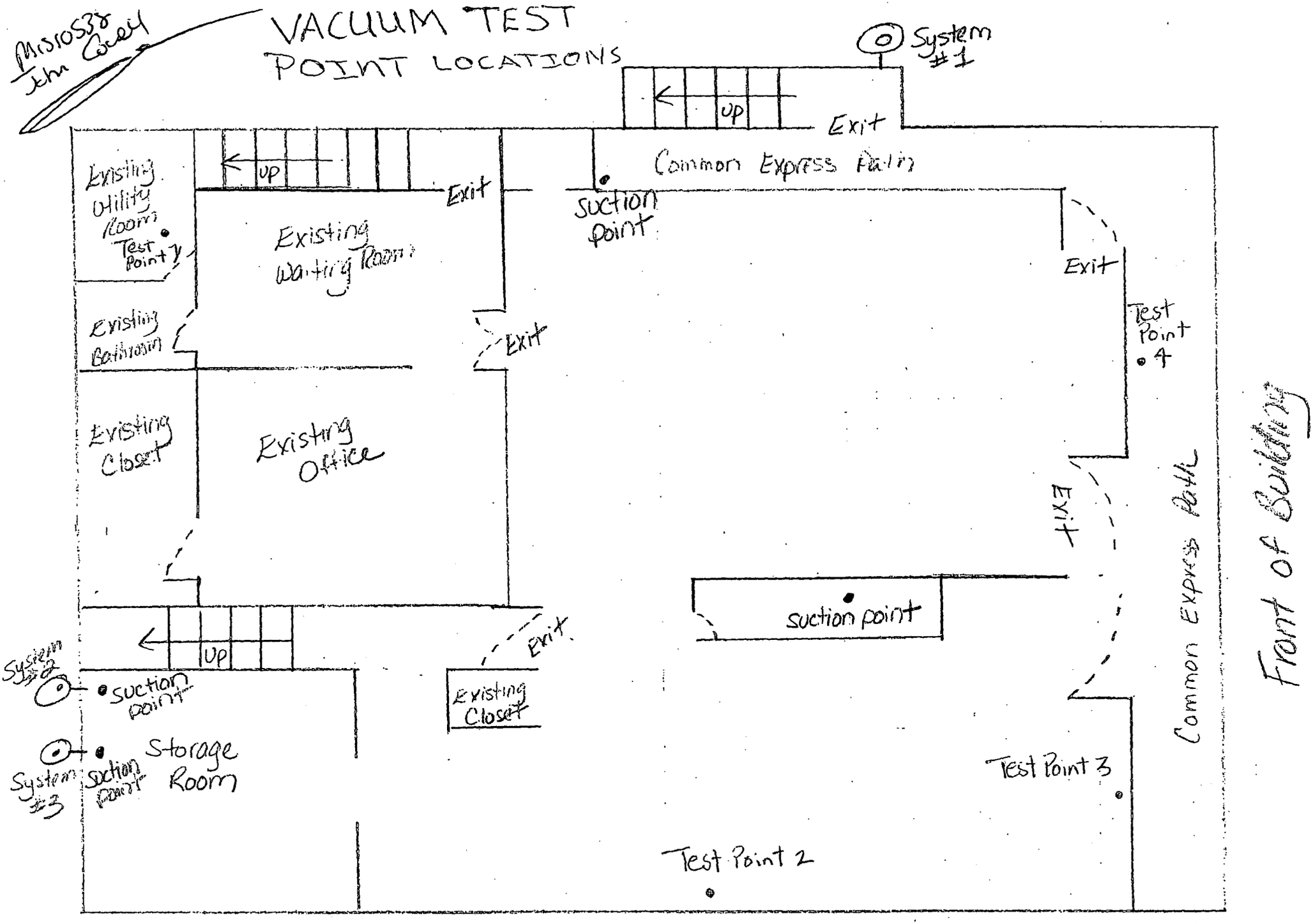
TEST POINT 2 -0.223 INCHES OF WATER COLUMN

TEST POINT 3 -0.131 INCHES OF WATER COLUMN

TEST POINT 4 -0.101 INCHES OF WATER COLUMN

All measurements were taken using a Dwyer Digital Micromanometer capable of measuring to -0.000 inches of water column.

New York State Department of Health suggests an induced vacuum of -0.004 inches of water column or 1 Pascal be the goal of a successful ASDS installation



Go No Sen Karate Dojo
20 Welcher Ave Peekskill, NY

Drawing Not to Scale.

ATTACHMENT

4

PERMIT APPLICATION HAS BEEN MADE (ATTACHED). PICK-UP AND DISPOSAL IS PENDING U.S.E.P.A DISPOSAL NUMBER. MANIFEST WILL FOLLOW UNDER A SEPARATE COVER

RAdata
27 Ironia Road, Unit 2
Flanders, New Jersey 07836
973-927-7303 973-927-4980 fax
1-800-447-2366

January 3, 2011

USEPA Region 2
DEPP-RCRA Programs Branch
Attn: RCRA Notifications
290 Broadway, 22nd Floor
New York, NY 10007-1866

Re: RCRA Subtitle C Site Identification Form
Site Location: 20 Welcher Ave, Peekskill, NY

Dear DEPP-RCRA Programs Branch:

Please find enclosed our application to request an EPA ID Number for the removal of the contaminated soil at the above site.

Please contact me at my office when you are ready to issue to the ID Number. I will be coordinating the removal.

Please feel free to contact us with any questions.

Thank you,

Lisa Francis
Mitigation Department

c: file

OMB# 2050-0024; Expires 11/30/2011

SEND COMPLETED FORM TO: The Appropriate State or Regional Office.	United States Environmental Protection Agency **RCRA SUBTITLE C SITE IDENTIFICATION FORM**	

1. Reason for Submittal (MARK ALL BOX(ES) THAT APPLY)

Reason for Submittal:

- [X] To provide an Initial Notification (first time submitting site identification information / to obtain an EPA ID number for this location)
- [ ] To provide a Subsequent Notification (to update site identification information for this location)
- [ ] As a component of a First RCRA Hazardous Waste Part A Permit Application
- [ ] As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment #_____)
- [ ] As a component of the Hazardous Waste Report (If marked, see sub-bullet below)
  - [ ] Site was a TSD facility and/or generator of ≥1,000 kg of hazardous waste, >1 kg of acute hazardous waste, or >100 kg of acute hazardous waste spill cleanup in one or more months of the report year (or State equivalent LQG regulations)

2. Site EPA ID Number

EPA ID Number | | | | | | | | | | | | |

3. Site Name

Name: ~~Blue Hill Plaza~~ Shopping Center

4. Site Location Information

Street Address: 20 Welcher Avenue

City, Town, or Village: Peekskill | County: Weschester

State: New York | Country: United States | Zip Code: 10566

5. Site Land Type

[X] Private [ ] County [ ] District [ ] Federal [ ] Tribal [ ] Municipal [ ] State [ ] Other

6. NAICS Code(s) for the Site (at least 5-digit codes)

A. 4 4 5 1 1 1 | C. 4 5 3 1 1 1

B. 4 4 6 1 1 1 | D. 4 5 3 1 9 9

7. Site Mailing Address

Street or P.O. Box: 20 Welcher Avenue

City, Town, or Village: Peekskill ~~New York~~

State: New York | Country: United States | Zip Code: 10566

8. Site Contact Person

First Name: Fred | MI: | Last: Schwalb

Title: Manager

Street or P.O. Box: P.O. Box 383

City, Town or Village: Croton-On-Hudson

State: New York | Country: US | Zip Code: 10520

Email: jfschwalb@aol.com

Phone: 914-271-5706 | Ext.: | Fax:

9. Legal Owner and Operator of the Site

A. Name of Site's Legal Owner: KURTSAM REALTY Corp | Date Became Owner: 3/3/1986

Owner Type: [X] Private [ ] County [ ] District [ ] Federal [ ] Tribal [ ] Municipal [ ] State [ ] Other

Street or P.O. Box: P.O. Box 383

City, Town, or Village: Croton-On-Hudson | Phone: 914-271-5706

State: New York | Country: US | Zip Code: 10520

B. Name of Site's Operator: Kurtsam Realty | Date Became Operator: 3/3/1986

Operator Type: [X] Private [ ] County [ ] District [ ] Federal [ ] Tribal [ ] Municipal [ ] State [ ] Other

EPA ID Number | | |

EPA ID Number | | | | | | | | | | | | OMB#: 2050-0024; Expires 11/30/2011

12. Notification of Hazardous Secondary Material (HSM) Activity

Y ☐ N ☐ Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25)?

If "Yes", you must fill out the Addendum to the Site Identification Form: Notification for Managing Hazardous Secondary Material.

13. Comments

14. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all owner(s) and operator(s) must sign (see 40 CFR 270.10(b) and 270.11).

Signature of legal owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
[signature]	Fred Schwab / Manager	12/12/10

D. Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

- You must check with your State to determine if you are eligible to manage laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

☐ 1. Opting into or currently operating under 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories
See the item-by-item instructions for definitions of types of eligible academic entities. Mark all that apply:

☐ a. College or University

☐ b. Teaching Hospital that is owned by or has a formal written affiliation agreement with a college or university

☐ c. Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university

☒ 2. Withdrawing from 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories

11. Description of Hazardous Waste

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-Regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.

ATTACHMENT

5

RAdata, Inc.
27 Ironia Road, Unit 2
Flanders, New Jersey 07836
973-927-7303 973-927-4980 fax
1-800-447-2366

URGENT!

10/4/2010

TO: Kurtsam Realty or Current Resident
Attention: Fred Schwalb
Box 383 Quaker Ridge Road
Croton-On-Hudson NY 10520

PROPERTY: Blue Mountain Plaza
20 Welcher Avenue
Peekskill NY 10566

Enclosed are the permits from the local municipality for the system installed at the above property. At this point it is mandatory for you to contact your municipality, give them your permit number (located at the top right side of your permits) and schedule a final inspection (a final inspection is required for each permit application). The number(s) you will need are listed below. Once the final inspection is completed, you must phone our office so that we can close out your file. If you have any questions, please phone our office. This must be completed within 30 days.

- x **Building Inspection, please call 914-734-4140**
- x **Electric Inspection, please call**

****Failure to complete these inspections could result in the following complications:****

1.) Loss of Radon reduction warranty.
2.) Up to $500.00 in fines.
3.) Charge back of fines and penalties assessed to our firm.
4.) Lien placed on title of property.
5.) Inability to transfer title until inspection is complete.

Thank you,
David Grammer, President

Inspection done 10/21/10 passed

TO BE KEPT ON THE WORK

CITY OF PEEKSKILL
DEPARTMENT OF PUBLIC WORKS
BUILDING DEPT.
Municipal Building, Peekskill, N.Y.

11601

PERMIT

Fee 190 c/no

Permission is hereby granted To install soil depressuization system (Radon)

Location 20 Welchen Avenue (Karate Studio)

Owner Kurtsam Realty Address 383 Quaker Ridge Road Croton Hudson NY

Contractor RADATA INC, Address 27 Ironia Rd, Flanders N.J. 07836

Dimensions (overall) 40'x40' Approx Materials Conventional

Foundations { Thickness below grade ..... Materials below grade .....
Thickness above grade ..... Materials above grade .....

EXISTING

Footings: Dimensions ..... Depth below grade ..... ft. ..... in.

Thickness of { Outside Walls 1st 2nd 3rd 4th 5th 6th
Division Walls

Stories High ..... Distance from Street line .....

Kind of Roof ..... Material of Roof .....

Size of joists 1st 2nd 3rd 4th 5th 6th

Special Conditions Subject to notes on plans, Field inspections, elec. certificate

Date of issue Sept 30 20 10 Expiration date Sept 30 20 11

~~Director of Public Works~~ Victor Zelle

This permit is granted upon the express condition that every person acting under same shall conform to the representations of the application thereof as well as all Building, Zoning and other Ordinances of the City of Peekskill and Statutes of this State. This permit must be kept on the work to which it applies at all times during working hours, and may be revoked at any time for a breach of its conditions.

ATTACHMENT

6

GENERAL HEALTH AND SAFETY PLAN

for

KURTSAM REALTY
20 WELCHER AVENUE
PEEKSKILL, NY

October 19, 2010

Prepared by:

Gary P. Schwartz

***PHASE* Associates, LLC**

316 Eisenhower Pkwy

Livingston, New Jersey 07039

Gary P. Schwartz, CIH, CSP, CMC

Signature of Preparer

RAdata, Inc.
27 Ironia Road
Flanders, NJ 07836
973-927-7303
800-447-2366
973-927-8221(f)

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PROJECT NUMBER: _____

PROJECT NAME: Installation of Active Soil Depressurization Systems

LOCATION/ADDRESS: 20 Welcher Avenue, Peekskill, NY

PROJECT MANAGER: Blair B. Miers, RAdata, Inc.

SAFETY MANAGER: David Grammer, RAdata, Inc.

The purpose of this Health and Safety Plan (HASP) is to identify, evaluate and control radiation and chemical health and safety hazards, and to provide for emergency response during field activities. All employees of RAdata, Inc., (RAdata) as well as its contractors and subcontractors who have agreed to abide by this, and who are involved in field activities on this project, will be bound by these provisions. Contractors and subcontractors who abide by this HASP, but whose work activities are not covered by this HASP must develop and follow their own site specific HASP.

RAdata's Company's HASP is based on a general review and evaluation of potential hazards and risks regarding most projects. It outlines the health and safety procedures, and the equipment required, needed to minimize the potential for harm to field personnel and site visitors. A separate site-specific HASP will be required for each project. This is because work activities, site conditions and exposures to various combinations of contaminants present are variable.

2.1 SITE DESCRIPTION & HISTORY

This project is occurring at 20 Welcher Avenue in Peekskill, NY.

2.2 KEY PERSONNEL

2.1.1 Responsible Person of HASP: David Grammer, President or his designee

This person will have the following responsibilities:

- To provide the Health and Safety Officer with project-related health and safety
- information to keep this document updated.
- To implement the HASP.
- To monitor compliance with the HASP.

2.1.2 Health and Safety Officer: Blair Miers

The Health and Safety Officer has the following responsibilities:

- To monitor compliance with the HASP.
- To assist in complying with the terms of this HASP, and applicable regulations.

The Health and Safety Officer has the authority to take the following actions:

- To suspend work or otherwise limit personnel exposure if this HASP appears to be unsuitable or inadequate.
- To direct personnel to modify any work practices that are deemed to be hazardous to health and safety.
- To remove field personnel from the project if their physical actions or mental condition endangers their own health and safety, or that of their coworkers.

3.1 PERSONNEL MEDICAL CLEARANCE

Prior to working at any site, RAdata assigned employees must: 1) be certified by a licensed, RAdata-approved physician as being physically able to perform their assigned field work, and to use the Personal Protective Equipment (PPE) which may be required for this project, in accordance with the provisions of OSHA Regulation 29 CFR 1910.120(f)(2) have successfully completed an 40-hour basic health and safety training course (Level C) for field personnel or its equivalent, and 3) passed a Quantitative Respirator Fit Test. Site managers and supervisors must have successfully completed an 8-hour managers' health and safety course, in addition to the other clearance requirements.

RAdata subcontractor employees must also have similar medical, training, and respirator fit clearances and they will be required to provide proof of clearance before beginning work.

3.2 HAZARD TRAINING

All personnel working on-site who have potential exposures to health or safety hazards shall be thoroughly trained as specified in OSHA Regulations 29 CFR 1910.120(e). This training will include: (1) Attendance at an initial Respiratory Protection Course; (2) Seal checked and Fit tested through an acceptable OSHA quantitative fit test method. All personnel should have successfully completed the 40 hour Hazardous Waste Operations and Emergency Response course and annual 8 hour refresher courses.

In addition to the above, all RAdata personnel should be versed on the company's safety and health program and employee training program; personal protective equipment program; spill containment program; air quality monitoring (by Bell Environmental); emergency response; monitoring equipment usage and calibration; and, health hazard monitoring procedures and techniques.

At the time of job assignment, special training will be provided to on-site personnel who may be exposed to unique or special hazards. If unique or special hazards are unexpectedly encountered, specialized training will be provided before work proceeds.

3.3 INCIDENT REPORTING

A Health & Safety Incident Report will be filed for any incident involving personnel working at a Site. Situations covered by this policy include, but are not limited to, inhalation, hand or eye injuries. Worker's Compensation Insurance reports for RAdata employees must be filed within 48 hours of each incident or illness which results from work-related activities and requires medical attention.

3.4 ILLUMINATION, SANITATION AND CONFINED SPACE ENTRY

3.4.1 Illumination

If the project work is expected to occur inside the building, the illumination requirements set forth by OSHA Regulations 29 CFR 1910.120 (m) will be met.

3.4.2 Sanitation

The sanitation requirements regarding potable and non-potable waters, toilet facilities and washing facilities will be followed as set forth in OSHA Regulations 29 CFR 1910.120(n).

3.4.3 Confined Space Entry

Confined Space Entries are not anticipated since personnel will not be entering the drill pipe chase or network.

3.5 RESPIRATOR MAINTENANCE, FITTING AND DECONTAMINATION

Respirators will be cleaned daily according to procedures described below. Cartridges will be replaced either daily or if breakthrough is detected at any time while in use. The following checks will be performed daily, in addition to the above:

- Exhalation valve - pull off plastic cover and check valve for debris or for tears in the neoprene valve, which could cause leakage.
- Inhalation valves - screw off both cartridges and visually inspect neoprene valves for tears. Make sure that the inhalation valves and cartridge receptacle gaskets are in place.
- Make sure a protective lens cover is in place.
- Make sure you have the correct cartridges.
- Make sure that the face piece harness is not damaged. The serrated portion of the harness can fragment which will prevent proper face seal adjustment.
- Make sure the speaking diaphragm retainer ring is hand tight.

NOTE: <u>The respirator MUST be Leak-Tested before each use</u>.

Test the respirator for leakage by using both the positive- and the negative-pressure method. Lightly place your palm over the exhalation valve cover. Exhale gently. The body of the respirator should bulge slightly outward from your face. If any leakage is detected around the face seal, readjust the head harness straps and repeat the test until there is no leakage. If leakage is detected other than in the face seal, the condition must be investigated and corrected before another test is made. The negative pressure test must also be made. Lightly place your palms or some impervious material, like Saran Wrap® over the cartridges or filter holders. Inhale gently. The face-piece should collapse against the face. The respirator must pass these two tightness tests before the respirator is used. The respirator will not furnish protection unless all inhaled air is drawn through suitable cartridges or filters. **NOTE: Respirators provide no protection in oxygen-deficient atmospheres!**

After use, follow these steps to clean your respirator:

- Wash with Alconox® solution and brush gently. (This step will remove any soil/solid particulate matter that may have been collected on the respirator during field activities.)
- Rinse with distilled/de-ionized water, making sure that the inhalation and exhalation valves are clean and unobstructed.
- Wipe with sanitizing solution. (This step will assure the sterility of the respirator.)
- Allow your respirator to air dry.
- Place the respirator inside a sealed bag or a clean area away from extreme heat or extreme cold.

3.6 PROJECT MANAGER NOTIFICATION

All field personnel must inform the Project Manager before entering a building Site.

IF ANY PREVIOUSLY UNIDENTIFIED POTENTIAL HAZARDS ARE DISCOVERED DURING ANY FIELD WORK, LEAVE THAT AREA OF THE SITE IMMEDIATELY AND CONTACT THE PROJECT MANAGER FOR FURTHER INSTRUCTIONS.

3.7 OSHA INFORMATION AND STATE WAGE AND INFORMATION POSTERS

In accordance with the Occupational Safety and Health Act of 1970, a copy of the OSHA information poster must be present at the Site. It will be posted at full size (11" x 17") in a permanent structure or temporary field office, or be distributed to on-site personnel by way of this HASP. Appropriate state of New Jersey wage and employment posters will also be posted in accordance with state laws.

3.8 PROHIBITIONS

Smoking, eating, drinking, chewing tobacco or toothpicks, applying cosmetics, storing food or food containers, and having open fires will be permitted only in designated areas that will be established by the Project Manager. Under no circumstances will any of the above activities be permitted within the Exclusion or Contamination Reduction Zones. Good personal hygiene should be practiced by field personnel to avoid ingesting contaminants.

3.9 INITIAL SITE SAFETY MEETING AND SIGNING THE HEALTH AND SAFETY PLAN COMPLIANCE AGREEMENT

The project manager will hold an initial site safety meeting with RAdata, subcontractor and contractor field personnel before work activities begin at any Site. At this meeting, it will be verified that all personnel have been provided with or have reviewed a HASP for the work activities to be performed at a Site. For RAdata personnel, its subcontractor's personnel, and contractor personnel whose employer(s) have adopted this HASP, the HASP shall be reviewed, discussed and questions will be answered. Signed Health and Safety Plan Compliance

Agreement Forms of personnel who will be following this HASP will be collected by the project manager and filed. Individuals refusing to sign the Form will not be allowed to work on the Site.

3.10 DAILY SITE SAFETY BRIEFINGS

During field operations, site safety briefings will be held at the start of each day by the project manager to review and plan specific health and safety aspects of scheduled work. All field personnel who are following this HASP are required to attend these briefings. These meetings and their content shall be documented by the Project Manager. Potential subjects that may be discussed are presented below:

1. Preliminary
   - Medical clearances.
   - Training requirements.
   - Written HASP availability.
   - Designation of responsibilities for on-site personnel.
   - Identification of on-site personnel trained and certified to administer First Aid.

2. Training topics

Review of site specific HASP including: types of hazards; pathways of exposure; levels of protection; contamination avoidance; prohibitions; work procedures; confined space entry; work zones; emergency response procedures; and, specific on-site area/work tasks of concern.

Decontamination.
Personnel Protective Equipment.
Air Quality Monitoring Program.
Questions and Answers

3.11 UNDERGROUND STRUCTURES

Caution will be exercised whenever the possibility of encountering subsurface obstructions exists. Before beginning intrusive activities, all available sources of information (such as site utility drawings, public utility drawings, construction drawings, and discussions with former employees) will be reviewed. If underground obstructions are unexpectedly encountered, the area will be excavated using manual equipment until the nature of the obstruction is discerned.

An assessment of the known or suspected chemical and physical hazards have been made for each of the activities specified below.

4.1 APPROVED WORK ACTIVITIES

Work activities which may be performed under this HASP are limited to the following: This HASP does not cover any site activities. These would be found in the project site specific HASPs.

4.2 HAZARDS

4.2.1 Chemical Agents

Ensure that all specific chemical hazards be identified and in concentrations in excess of the NJDEP Indoor Air Screening Level are reviewed. A full listing of chemicals, current through August 2006 is found in Attachment A, while the chemicals found on-site are listed below.

TABLE 4.2.1 SUMMARY DATA FOR CONTAMINANT CONCENTRATION IN EXCESS OF THE NJDEP INDOOR AIR SCREENING LEVEL

Contaminant Of Concern	CAS #	OSHA PEL (TWA)	IDLH	Flam-mable?	Carcin-ogen?	Residential Health-based Values	Nonresidential Health-based Values

4.2.1.1 Chemical Exposure Evaluation Criteria

For chemical agents, the primary sources of environmental evaluation criteria for the workplace are: (1) NIOSH Recommended Exposure Limits (RELs), (2) the American Conference of Governmental Industrial Hygienists' (ACGIH®) Threshold Limit Values (TLVs®) and (3) the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs).

Contaminants usually enter the body through the mouth (ingestion), the lung (inhalation) or by absorption through the skin and mucous membranes. Chemical exposure through these routes will be controlled by limiting eating, drinking, and smoking to uncontaminated areas; through the use of hygiene practices and decontamination procedures; and by the use of appropriate engineering controls and personal protective equipment (PPE).

There are four levels of personal protection (Levels A, B, C, and D), according to the degree of protection they afford, with Level A providing the greatest degree of protection. The initial level of personal protective equipment to be used while performing activities at a Site will be based on the hazard assessment performed for the project.

Level D will be used while performing activities at a site unless results of initial Photoionization Detector (PID) results show elevated VOC and/or radon gas airborne values. The building should be placed under positive ventilation to dilute the elevated airborne VOC and radon emissions. If this fails to lower the airborne VOCs and/or radon, then personnel must don for level C protection.

4.2.2 Ionizing Radiation and Radioactive Agents

As a guide to the evaluation of the hazards posed by workplace exposures, NIOSH field staff use environmental evaluation criteria to assess a number of chemical and physical agents. For physical agents such as ionizing radiation, the primary sources of environmental evaluation criteria for the workplace are: (1) the National Council on Radiation Protection and Measurements (NCRP) limits of exposure to ionizing radiation (2) the International Commission on Radiological Protection (ICRP) limits of exposure to ionizing radiation, (3) the U.S. Department of Labor, OSHA PELs (4) the U.S. Department of Energy (DOE) standards for external and internal exposure, (5) the U.S. Nuclear Regulatory Commission (NRC) occupational dose limits (6) the U.S. Environmental Protection Agency (EPA) federal radiation protection guidance for occupational exposure (6) the Food and Drug Administration (FDA) performance standards for ionizing radiation emitting products (7) the U.S. Department of Transportation (DOT) radiation limits for Transportation of radioactive materials (8) the International Air Transportation Association (IATA) radiation protection and quality assurance programs and (9) the International Atomic Energy Agency (IAEA) occupational radiation protection safety standards.

Natural radiation background exposure varies around the world from less than 0.005 mR/hr to more than 2.5 mR/hr19, producing an annual dose of about 40 millirem (mrem) to 22,000 mremb, respectively. The greatest dose is due to anomalous, localized deposits of NORM. Variations in the natural radiation a 1 pCi/L = 37 Becquerel per cubic meters (Bq/m3)
b A millirem is a unit of measure of ionizing radiation exposure of living tissues that takes into account the differences in biological harm (Relative Biological Effectiveness [RBE factor]) caused by different types of ionizing radiation.

The average annual background dose in the United States has been reported to be about 360 mrem. Radon exposure is responsible for about 55% of background dose (about 200 mrem) and is greater where the presence of NORM material (uranium and thorium) is elevated. Cosmic radiation produces an annual dose of 27 mrem (8%) and terrestrial radiation from NORM in the crust of the earth accounts for 28 mrem (8%). Radiation exposure from internally deposited radioactive material, mainly potassium-40, delivers about 39 mrem (11%) to each person. Medical and other manmade sources of radiation exposure (including consumer products) account for about 63 mrem (18%). Other industrial sources of radiation exposure account for only 3 mrem (0.3%) and include the nuclear fuel cycle, fallout, and artificial sources.

Important forms of ionizing radiation include the alpha and beta particles and gamma rays emitted from radioactive materials. These are called ionizing radiation because they can remove (knock) electrons out of atoms and molecules, creating electrically charged particles called ions. This ionization process transfers energy from the radiation to the irradiated material, and can cause chemical and physical changes in human tissue. The various types of ionizing radiation differ widely in their abilities to penetrate tissue and deposit energy. Alpha particles travel only a very short distance (less than 1 mm) in living tissue and thus cannot

penetrate the skin. These particles are present with radon and two of the radon decay products. Beta particles are identical to electrons, are thousands of times smaller than alpha particles, and can penetrate deeper into tissue. However, they are easily stopped by a thin sheet of metal foil. Gamma rays have no mass or electrical charge, and travel much greater distances than either alpha or beta particles. This means their energy is deposited over a longer path and is relatively unlikely to damage living tissue unless the exposure rate is high.

4.2.3 Radium

Radium, formed upon the radioactive decay of uranium and thorium, is a naturally occurring silvery-white radioactive metal that can exist in several forms called isotopes. Two of the main radium isotopes found in the environment are 226Ra (uranium decay series; Appendix I) and radium-228 (228Ra, thorium decay series). Historically, radium has been used as a radiation source for treating cancer and in radiography of metals. It has been combined with other metals as a neutron source for research and radiation instrument calibration. Radium was also a component of luminous paints used for watch and clock dials, aircraft instrument panels, military instruments, and compasses. The EPA has set a drinking water limit of 5 pCi/L for 226Ra and 228Ra (combined).

4.2.4 Radon in Air

Radon is a colorless, odorless, tasteless, radioactive gas formed from the radioactive decay of radium in the uranium decay chain. Uranium and radium are found around the world in soil, rocks, and water at various concentrations. Because radon is a gas, it may escape into the air from the material in which it is formed; therefore radon gas is ubiquitous outdoors as well as indoors. High concentrations of radon can accumulate in poorly ventilated indoor locations or when a large amount of 226Ra is present. Radon decays with a half-life of about 4 days into a series of solid, short-lived radioisotopes commonly called radon daughters or progeny. Two progeny, polonium-218 and polonium214, emit alpha particles and are responsible for most of the health effects associated with inhalation of radon and its decay products.

4.2.5 Airborne Radioactivity Government standards and Guideline Exposure Levels

1 WLM / year (2040 hrs per year)
0.083 WLM (170 hrs)
NIOSH Recommended Exposure 0.083 WL (average concentration per work shift)
Limits 20.8 pCi/L (40% Equilibrium Factor; EF)
16.6 pCi/L (50% EF)
8.3 pCi/L (100% EF)
100 pCi/L (40 hr work week)

OSHA Permissible Exposure

Limits (1971 regulation) 25 pCi/L (posting requirement for airborne radioactivity)
3 pCi/L (40 hr work week for workers less than 18 yrs old)

NRC Occupational Exposure 30 pCi/L (yearly avg); Derived Air Concentration
Limits 3 pCi/L (yearly average for workers less than 18 yrs old)

EPA Recommended Public Limit 4 pCi/L (non-occupational action limit to initiate remediation efforts)
IAEA Recommended 4 WLM
Occupational Dose Limits* 32.4 pCi/L (2000 hrs per year; 40% EF)

WLM = Working Level Months pCi/L = picoCuries per liter

* The IAEA recommendations correspond to an annual effective dose of 2 rem (0.02 Sievert, Sv).

The major route of radon exposure is inhalation. The typical concentration range for radon in ambient air is 0.003 to 2.6 pCi/L. A typical level of radon found indoors in homes, schools, or office buildings is about 1.5 pCi/L, although much higher concentrations (> 200 pCi/L) have been measured. Persons who work with uranium and phosphate fertilizers, persons living near uranium mines and processing facilities, and persons handling fossils and other artifacts rich in uranium or radium have a greater chance of being exposed to higher levels of uranium, radium, and radon than the general population.

4.2.6 OSHA Interpretation of Radon in the Workplace

In December 2002, OSHA provided guidance on its regulations regarding proper interpretation of the workplace radon standards The OSHA standard refers to airborne radioactive material exposure limits that were published by the Atomic Energy Commission (AEC) in 1969. Both the AEC and the OSHA limits were for a 40-hour exposure in any workweek of 7 consecutive days. In 1996 the OSHA standard was redesignated as 29 CFR 1910.1096, although no changes were made to the exposure limits. The Nuclear Regulatory Commission (NRC) has since changed the format of the tables in Appendix B of 10 CFR Part 20 and converted the limits to annual averages, reduced the radon exposure limits, and moved limits for miners from the table to the regulatory text.

Case law supports the interpretation that the original version of a referenced federal regulation is the enforceable regulation. Therefore, the 1969 version of Appendix B to 10 CFR Part 20 that was referenced in the original OSHA ionizing radiation standard in 1971 is enforceable. The applicable 222Ra exposure limit issued by OSHA in 1971 for adult employees is 100 pCi/L averaged over a 40-hour work week. However, many requirements of the current NRC regulation provide as much or more protection than the OSHA standard for workers exposed to airborne radioactive materials. A series of questions and answers regarding radon exposure in the workplace is provided in Appendix II.

EPA Recommendations and Action Levels for Radon

The recommendations and action levels for indoor radon provided by the EPA are not enforceable for a working environment. However, the EPA and the U.S. Surgeon Ceneral issued a Health Advisory that recommends testing all homes for radon below the third floor and testing schools nationwide for radon.

They also recommended abating homes with radon levels that are at or above 4 pCi/L, the EPA National Voluntary Action Level. This level represents a radon concentration where the cost of remediation is warranted by the risk of health effects. The EPA believes that the indoor radon concentration can be lowered to 2 pCi/L fairly simply, and encourages homeowners, home

builders, and building code organizations to construct radon-resistant homes. Radon testing is encouraged when existing homes are sold.

4.2.7 Radon in Water

The EPA is proposing new public health standards for radon in drinking water. The proposal provides two options to states and community water systems for reducing radon health risks in both drinking water and indoor air. Information about the proposed rule and information relating to the status of the rule can be found at: www.epa.gov/safewater/radon.html.

The proposed regulation provides that states may adopt Multimedia Mitigation (MMM) programs and the Alternative Maximum Contaminant Level (AMCL) in water of 4,000 pCi/L. According to the EPA, the AMCL is the most effective approach for radon risk reduction and the one the EPA expects most states to adopt. In the absence of this regulatory expectation, small (10,000 or fewer customers) Community Water Systems (CWS) are expected to comply with a level of 4,000 pCi/L in drinking water, and develop and implement a state-approved local MMM program plan to reduce indoor radon risks from soil and rock under homes and buildings. If Arkansas has an approved MMM program plan, the 4,000 pCi/L standard for radon in drinking water would be adopted to obtain primacy. Under the proposed requirements, an MMM program plan must address four criteria:

1. Public involvement in development of the MMM program plan
2. Quantitative goals for existing homes fixed and new homes built radon resistant
3. Strategies for achieving goals
4. Plan to track and report results

The CWS must monitor radon in drinking water22, and report its results to the state. If the radon level is below 300 pCi/L, the CWS will need only to continue to meet monitoring requirements and will not be covered by the requirements regarding MMM programs.

4.2.8 Health Effects from Radium and Radon Exposures

Cancer is the major health effect of concern from exposure to radium, radon, and its short-lived progeny. Oral exposure to radium is known to cause lung, bone, brain, and nasal passage tumors in humans. Inhalation exposure to radon may cause lung cancer in humans. The EPA has classified radium as a Group A, human carcinogen, but it has not classified radon for carcinogenicity. Chronic exposure to radon in humans and animals via inhalation has resulted in respiratory effects (chronic lung disease, pneumonia, fibrosis of the lung), while animal studies have reported effects on the blood and a decrease in body weight. Smokers exposed to radon are at greater risk for lung cancer (approximately 10 to 20 times) than are nonsmokers similarly exposed. No information is available on the acute (short-term) effects of radium or radon in humans. Reference material for the Radioactivity and Radiation section came from: http://www.cdc.gov/niosh/hhe/reports/pdfs/2004-0094-2978.pdf.

4.2.9 Physical Agents

Physical agents include noise. There is also a risk of physical injury when working with powered drills, etc. Field personnel should be able to recognize these hazards and take steps to avoid injurious contact with them.

4.3.0 Noise Exposure

Work at any site may be conducted with high noise levels from equipment such as drills. Standards require that hearing protection be used when noise levels exceed 85 dBA, averaged over an 8-hour day. Hearing protection will be required at this site for noise exposures greater than 85 dBA for **any** length of time. In the absence of a noise meter, an appropriate rule of thumb is that when normal conversation is difficult to hear or understand at a distance of three feet, hearing protection is required. RAdata personnel shall have hearing protection on-site and available for use at all times.

4.3.1 Safety Hazards

Use of steel-toed work boots, safety glasses or goggles, and hard hats will be required when in an Exclusion Zone. Personnel should be aware that when PPE such as respirators, gloves, and protective clothing are worn, visibility, hearing, and manual dexterity are impaired.

4.3.2 Drilling, Pile Driving and Excavation

The hazards involved with the use of drills and excavation equipment are significant and include pinch points, entrapment in machinery, impact from moving part and improper operations. Use of hand tools, moving the rigs/equipment, and conducting required repairs can increase physical risks. Working with and around a drills can involve a high risk of serious injury or death. In order to reduce the risk, proper safety precautions must be observed at all times.

4.3.3 Odors

During the course of excavation, odorous gases may escape from the core drill areas. The Project Manager for the site will determine the most effective means of exhausting these odors.

4.3.4 Contaminated Dust

Contaminated sub-surface soils may become a source of dust. Inhaling contaminated dust may result in adverse health effects from exposure to the contaminant(s) on the dust particles.

5.1 AIR QUALITY MONITORING INSTRUMENTATION

Air quality will be measured to determine exposure potentials prior to the start of work, and at various times during the course of the project. Instruments which may be used to monitor air quality are discussed below:

- **Photoionization Detector**

The HNu Systems Model PI-101 Photoionization Detector (PID) or equivalent should be used to detect trace concentrations of certain organic gases and a few inorganic gases in the air. Methane, ethane, and the major components of air are not detected by the HNu PID. PID readings reflect total (readable) vapors in the air. PID readings must be given as "PID units", rather than "ppm". The PID detects mixtures of compounds simultaneously. PID readings do not measure concentrations of any individual compound when a mixture of compounds is present.

The PID will be calibrated twice each day (before start of work and after the conclusion of work) using an isobutylene standard (molecular weight = 56.2) for calibration. Calibrations will be logged. PID readings should be measured in the breathing zone of the most highly exposed worker (i.e., the person who is closest to the source of known or suspected contamination) at least hourly.

5.2 AIR QUALITY RESPONSE LEVELS

The Project Manager for the site will decide when to change protection levels in response to air monitoring results. He will obtain the air monitoring results from Bell Environmental.

5.3 MONITORING GUIDELINES

5.3.1 Background Organic Vapor Monitoring

The Health and Safety Officer should monitor for background PID readings. They should be taken at least twice daily: before the start, and after the conclusion of, work activities. Background levels will be taken at a location which is unaffected by on-site work. Once work at the Site begins, reselection of the original background location may be required.

5.3.2 Air Monitoring Protocol

During intrusive work activities (i.e. drilling, excavation) at least one series (series=Organic Vapor, Toxic gas, Combustible gas, and Oxygen) of readings should be taken every 30 minutes. During non-intrusive work activities, one series will be performed at the start of work, one series at some point during the work, and one near the conclusion of the work. This will be in addition to the background monitoring described in the previous section.

5.3.3 Documenting Monitoring Results

A calibration log will be kept for each of the monitoring instruments used, which describes the calibration by the Project Manager for each project.

5.4 EMISSION CONTROL MEASURES

Vapor (i.e. volatile organic compounds) or dust (i.e. concrete oil or soil contaminated particulates) emissions resulting from field operations do not usually exceed either regulatory action levels. If the action levels are significantly exceeded, measures to suppress the responsible emissions should be investigated. Appropriate measures would include cessation of operations until the exact cause of the emission is identified and corrected. Vapor control may include purging the building with fresh air to create positive pressure conditions. Ensure the pails are sealed up immediately after they are filled with concrete and/or soil. This will prevent any potential vapor and or dust release into the building. Fugitive dust emission control is always a recommended practice using water spraying. However, this is not practical if the project is inside a building.

TABLE 5-1

Air Monitoring Action Levels

Instrument Type	Measurement Reading	Level of Respiratory Protection	Cartridge Change Schedule
PID (non-methane)	Background-0.5 ppm (in breathing zone)	**Level D**	Change out every two weeks
PID (non-methane)	>0.5 ppm (NT above background)	**Level D**	Change out every two weeks
*	< 1 WLM per annum or per NJDEP criteria for radon	**Level D**	Change out every two weeks
PID (non-methane)	PCE/TCE confirmed at or above 0.8-25ppm	**Level C** Lower range is for benzene exposure at OSHA PEL at 1 ppm	8 hour or end of shift whichever is shorter
PID (non-methane)	25 to 50 ppm	Stop work consult with Project Mgr.	8 hour or end of shift whichever is shorter
*	>1 WLM per annum or per NJDEP criteria for radon	Level C-utilize positive ventilation system prevent radon infiltration	8 hour or end of shift whichever is shorter

* testing devices to be used dictated per NJDEP worker exposure criteria

NOTE: If any breakthrough is experienced in terms of odor, taste and irritation while wearing the respirator, personnel shall immediately exit the exclusion zone and report the incident to the HSM. The cartridge change schedule shall be revisited and modified as necessary.

6.1 DESCRIPTION OF LEVELS OF PROTECTION

The personal protection equipment specified in this HASP will be available to all field personnel. RAdata is required to provide the specified equipment (or its equivalent) to all of their exposed employees. The following requirements will also be met, in accordance with OSHA regulations:

Facial hair may not interfere with the proper fit of respirators;
Contact lenses will not be worn on-site; without exception.
Eyeglasses that interfere with the proper fit of full-face respirators will not be worn; and,
No eating, drinking or smoking will be allowed in any area where respiratory protection is required.

Modified Level D Personal Protective Equipment

- Hard hat
- Safety glasses or goggles
- Steel-toed leather work boots
- Rubber overboots, steel-toed rubber boots, or disposable "booties"
- Nitrile-butadiene rubber outer gloves
- Nitrile surgical gloves (to be work underneath outer gloves)
- Polyethylene coated Tyvek coveralls[(1)] (taped at cuffs)

Modified Level C Personal Protective Equipment

- Hard hat
- NIOSH Certified MSA Comfo Classic Half face or Advantage 3000 full face Air-Purifying Respirator with applicable chemical cartridge combined with a P-100 filter (depending on whether the airborne emissions is from VOCs and/or radon)
- Chemical resistant work boots
- Rubber overboots, steel-toed rubber boots, or disposable "booties"
- Nitrile-butadiene rubber outer gloves
- Nitrile surgical gloves (to be worn underneath outer gloves)
- Saranex iinpregnated Tyvek coveralls (taped at cuffs)

A first aid kit, multi-purpose dry chemical UL Class 10A-10B-C fire extinguisher, portable eye wash bottle, appropriate barricades should be available on Site.

Selection of the PPE specified for this project is based on a review of known or suspected hazards, routes of potential exposure (inhalation, skin absorption, ingestion, and skin or eye contact) and the effectiveness of personal protective equipment in providing a barrier to these hazards. In addition, PPE has been selected to match the work requirements and task-specific conditions of the job, and to provide adequate protection without causing unnecessary discomfort or physical impairment to the worker.

6.2 INITIAL PPE LEVELS FOR SPECIFIC WORK TASKS

The selection of Initial Levels-of-Protection takes into consideration the physical, biological and chemical hazards posed by the site as well as those posed by the various pieces of personnel protective clothing. Initial Levels-of-Protection are established so as to obtain acceptable levels of protection while not imposing an unacceptable level of physical stress on the wearer.

Ensure all initial PPE levels have been established for the tasks at each Project. Use the table below to list the level of protection and work activity:

Work Activity	Level of Protection

SECTION 7.0
DESIGNATION OF WORK ZONES

This section of the Health & Safety Plan applies to excavation projects where contaminated soils are exposed and may release their contaminants to the air, or come in contact with field personnel. To minimize the migration of contaminant from the Site to uncontaminated areas, three work zones will be set up:

Zone 1:	Exclusion Zone
Zone 2:	Contamination Reduction Zone
Zone 3:	Support Zone

The Exclusion Zone is the area where contamination occurs or could occur. Initially, the Exclusion Zone should extend a distance of a few feet from the edge of intrusive activity unless conditions at the Site warrant either a larger or smaller distance as determined by the Project Manager.

The Support Zone is the area of the Site where significant exposure to contamination is not expected to occur during non-intrusive activities. The Support Zone is considered to be the "clean area" of the Site where RAdata personnel not in PPE can stand and observe.

Between the Exclusion Zone and Support Zone is the Contamination Reduction Zone, which provides a transition zone between the contaminated and clean areas of the Site. The Contamination Reduction Zone will be located directly outside of the Exclusion Zone. All personnel must decontaminate when leaving the Exclusion Zone. A Contamination Reduction Zone (decontamination area) will be established adjacent to each individual area of intrusive work.

Personnel who have been in contact with contaminated materials will decontaminate themselves in the following manner:

- Deposit contaminated equipment on plastic drop cloths.
- Stand in wash tub containing Alconox® and water, wash boots and outer gloves with long handled brush.
- Rinse boots and outer gloves with long handled brush in a wash tub containing clear water or use a sprayer to rinse off boots and gloves.
- Remove ankle and wrist tapes; place in disposal drum.
- Remove outer gloves and place in disposal drum.
- Remove Tyvek® or Saranex® suit and place in disposal drum.
- Remove respirator and place on table to be decontaminated.
- Remove inner gloves and place in disposal drum.
- Wash hands and face.

All tools or equipment which have been in contact with contaminated materials, must be decontaminated after leaving the Exclusion Zone. This decontamination is to be performed using a high pressure/hot water "steam type" cleaner or a spray/rinse decontamination sequence as described in Section 3.6, Respirator Maintenance, Fitting and Decontamination, as appropriate.

Contaminated liquids from the decontamination area and contaminated clothing should be disposed of in accordance with the specific site protocols.

9.0 EMERGENCY RESPONSE

Emergencies addressed by this plan include:

- Fire;
- Chemical or Radioactive over-exposures; and,
- Physical injuries to site personnel.

The Health & Safety Officer and Project Manager must be notified as soon as possible of any on-site emergency or potential emergency including fire, explosive conditions or OSHA-recordable physical injury.

9.1 EMERGENCY RECOGNITION AND PREVENTION

9.1.1 Chemical and Radioactive Exposures

Work should always be performed in a manner that minimizes exposure to radioactive and chemical contaminants through skin or eye contact, inhalation or ingestion. Work practices to reduce the risk of chemical exposure include:

- PPE will be used by all field personnel covered by this HASP. A formal revision to the HASP must be made by the Health and Safety Officer to modify the PPE specifications.
- Keep hands away from face during work activities.
- Minimize all skin and eye contact with contaminants.

Early recognition of the signs and symptoms of chemical and/or radioactive exposures are essential for the prevention of serious chemical exposure incidents. Symptoms of exposure to the compounds present at the Site include the following: fatigue, weakness; eye, nose, and/or throat irritation; dizziness; nausea; vomiting; malaise; tremors; aggressive confusion; cyanosis (blue color to skin); anemia; and muscle spasms.

If a person experiences any of these symptoms, or recognizes any of them in a fellow worker, the person experiencing the symptoms will stop work immediately and report to the Project Manager. If the symptoms persist or affect performance in any way, the Project Manager will arrange for medical treatment. If the symptoms are serious, or affect several people, work activities in the exposure area will be discontinued until more is known about the cause(s). Incident reporting procedures as specified in Section 3.3 will be initiated.

9.2 EMERGENCY ALERTING PROCEDURES

The Project Manager will alert the appropriate work groups when an emergency occurs. The communication method(s) will be established by the Project Manager. The Project Manager and any isolated work group will carry radios if direct contact cannot be maintained. If direct contact cannot be maintained, an air horn or verbal signal will be used to signal personnel to stop work and assemble in the Contamination Reduction Zone. If evacuation of the Site is necessary, a pre-arranged signal from the air horn or verbal alert will be sounded.

9.3 EVACUATION PROCEDURES AND ROUTES

Evacuation from the Contamination Reduction Zone will proceed in an upwind direction from the emergency. If evacuation to the Support Zone does not provide sufficient protection from the emergency, personnel will be advised to evacuate the Site proper.

9.4 TELEPHONE NUMBERS FOR EMERGENCY SERVICES

Ensure that telephone numbers of local emergency services are provided and listed below:

Emergency Service	Telephone Number
Ambulance	911
Fire Department	911
Police Department	(914) 737-8000
Primary Hospital (Trauma Center)	
Hudson Valley Hospital Center	(914) 737-9000
1980 Crompond Road, Cortlandt Manor, NY	
Poison Control Center	(800) 962-1253
US EPA National Response Center	(800) 424-8802
NJ DEP Hotline	(800) 927-6337
NJ Department of Health	(800) 367-6543
Below Ground Utilities (State of NJ BPU)	(800) 272-1000

These telephone numbers must be verified by the Project Manager before the start of field work. Ensure that the specific HASP contains a map and directions.

9.5 EMERGENCY RESPONSE PERSONNEL

The Project Manager will have the primary role in responding to all emergencies at each Site. The Project Manager, will be present at the Site during all work activities. If any emergency such as a fire, chemical exposure, or physical injury occurs, the Project Manager shall be notified immediately. The Project Manager will direct all site personnel in cases of emergency.

After an emergency has occurred at the Site, the causes and responses to that emergency shall be thoroughly investigated, reviewed and documented by the Project Manager; this documentation is to be submitted to the Health and Safety Officer within 48 hours of the incident.

9.6 DECONTAMINATION PROCEDURES DURING AN EMERGENCY

Decontamination of an injured or exposed worker or during a site emergency shall be performed only if decontamination does not interfere with essential treatment or evacuation.

If a worker has been injured or exposed and decontamination can be done: Wash, rinse, and/or cut off protective clothing and equipment.

If a worker has been injured or exposed and cannot be decontaminated:

- Wrap the victim in blankets, plastic or rubber to reduce contamination of other personnel;
- Alert emergency and off-site medical personnel to potential contamination; and,
- Have the Project Manager or other personnel familiar with the incident and contaminants at the Site accompany the victim to the hospital. If possible, send a copy of the appropriate MSDS(s) with the victim.

9.7 EMERGENCY MEDICAL TREATMENT AND FIRST AID PROCEDURES

Emergency medical treatment or First Aid may be administered at the Site by the PROJECT MANAGER or other personnel who have been certified in First Aid.

General emergency medical and First Aid procedures are as follows:

- Remove the injured or exposed person(s) from immediate danger.
- Render First Aid as needed; decontaminate affected personnel, if necessary.
- Call an ambulance for transport to local hospital immediately. <u>This procedure shall be followed even if there is no apparent serious injury.</u>
- Evacuate other personnel at the Site to safe places until the Project Manager determines that it is safe for work to resume.

- Report the accident to the Health and Safety Officer immediately.

9.8 DIRECTIONS TO THE HOSPITAL FROM SITE

The route and/or directions to the hospital from the Site must be included with each specific Project HASP. List as a separate attachment.

The directions to the hospital from the Site must be verified by the Project Manager prior to the start of field work. List as a separate attachment.

SECTION 10.0
PERSONNEL ASSIGNMENTS

I have reviewed the Health and Safety Plan for Kurtsam Realty, 20 Welcher Ave, Peekskill, NY. I have read the HASP, understand it, and agree to comply with all of its provisions. I understand that I could be prohibited from working on the project for violating any of the safety requirements specified in the Health and Safety Plan.

Name	Company
Signature	Date
Name	Company
Signature	Date
Name	Company
Signature	Date
Name	Company
Signature	Date
Name	Company
Signature	Date

NJDEP INDOOR AIR SCREENING LEVEL

Attachment A

Contaminant Of Concern	CAS #	OSHA PEL (TWA)	IDLH	Flam-mable?	Carcin-ogen?	Residential Health-based Values (ppbv)	Nonresidential Health-based Values (ppbv)
Acetone	67-64-1	1000	2500	Y	N	1400	1900
Benzene	71-43-2	1 ppm	500 ppm	Y	Y	0.07	0.2
Bromodichloro-methane	75-27-4	-		N	Y	0.02	0.03
Bromoethene (vinyl bromide)	593-60-2	-	-	Y	Y	0.01	0.03
Bromoform	75-25-2	0.5	850	N	Y	.2	0.4
Bromomethane (methyl bromide)	74-83-9	C20	250	Y	N	1	2
1,3-Butadiene (vinyl ethylene)	106-99-0	1	2000	Y	Y	0.03	0.06
2-Butanone (MEK)	78-93-3	200	3000	Y	N	1700	2400
Carbon disulfide	75-15-0	20	500	Y	N	230	330
Carbon tetrachloride	56-23-5	10	200	N	Y	0.02	0.04
Chlorobenzene	108-90-7	75	1000	Y	N	11	16
Chloroethane (ethyl chloride)	75-00-3	1000	3800	Y	Y	0.8	2
Chloroform	67-66-3	C50	500	N	Y	0.02	0.04
Chloromethane (methyl chloride)	74-87-3	100	2000	Y	N	46	64
3-Chloropropene (allyl chloride)	107-18-6	2	20	Y	Y	0.1	0.2

2-Chlorotolouene (o-chlorotoluene)	95-49-8	-	-	Y	N	14	20

Contaminant Of Concern	CAS #	OSHA PEL (TWA)	IDLH	Flam-mable?	Carcin-ogen?	Residential Health-based Values (ppbv)	Nonresidential Health-based Values (ppbv)
Cyclohexane	110-82-7	300	1300	Y	N	1800	2500
Dibromochloro-methane	124-48-1	-			Y	0.009	0.02
1,2-Dibromoethane (ethylene dibromide)	106-93-4	20	100	N	Y	0.0004	0.0009
1,2-Dichlorobenzene (o)	95-50-1	50	200	N	N	24	34
1,3-Dichlorobenzene (m)	541-73-1	-		N	N	2	3
1,4-Dichlorobenzene (p)	106-46-7	75	150	N	Y	0.05	0.1
Dichlorodifluoro-methane (Freon 12)	75-71-8	1000	15000	N	N	37	52
1,1-Dichloroethane	75-34-3	100	3000	Y	N	130	180
1,2-Dichloroethane	107-06-2	50	50	Y	Y	0.02	0.04
1,1-Dichloroethene	75-35-4	-	-	Y	N	55	77
1,2-Dichloroethene (trans)	540-59-0	200	1000	Y	N	18	26
1,2-Dichloroethene (total)	156-59-2	-			N	8	12
1,2-Dichloropropane	78-87-5	75	400	Y	Y	0.02	0.04
1,3-Dichloropropene (total)	542-75-6	-	-	Y	Y	0.1	0.3
Ethylbenzene	100-41-4	100	800	Y	N	240	340
Hexachlorobutadiene	87-68-3	-	-	N	Y	0.008	0.02

Contaminant Of Concern	CAS #	OSHA PEL (TWA)	IDLH	Flam-mable?	Carcin-ogen?	Residential Health-based Values (ppbv)	Nonresidential Health-based Values (ppbv)
n-Hexane	110-54-3	500	1100	Y	N	210	290
Methylene chloride (dichloromethane)	75-09-2	25	2300	N	Y	1	2
4-Methyl-2-pentanone (MIBK)	108-10-1	100	500	Y	N	770	1100
MTBE (methyl t-butyl ether)	1634-04-4	50		Y	Y	0.4	1
Styrene	100-42-5	100	700	Y	N	250	340
t-Butyl alcohol (TBA)	75-65-0	100	1600	Y	N	22	30
1,1,2,2-Tetrachloro-ethane	79-34-5	5	100	N	Y	0.005	0.01
Tetrachloroethylene (PCE)	127-18-4	100	150	N	Y	0.05	0.1
Toluene	108-88-3	200	500	Y	N	1400	1900
1,2,4-Trichlorobenzene	120-82-1	-	-	N	N	5	7
1,1,1-Trichloroethane	71-55-6	350	700	N	N	190	260
1,1,2-Trichloroethane	79-00-5	10	100	N	Y	0.02	0.05
Trichloroethylene (TCE)	79-01-6	100	1000	N	Y	0.003	0.007
Trichlorofluoro-methane (Freon 11)	75-69-4	1000	2000	N	N	130	180
1,1,2-Trichloro-1,1,2-trifluoroethane (Freon TF)	76-13-1	1000	2000	N	N	4100	5700
Vinyl chloride	75-01-4	1	-	Y	Y	0.03	0.4
Xylenes (total)	-	100	900	Y	N	25	35

SECTION 10.0
PERSONNEL ASSIGNMENTS

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Name	Company
John Cowell	RAdata, Inc
Signature	Date
	10/19/10

Name	Company
Derek Gompertz	Ra data inc.
Derek Gompertz	10/19/10
Signature	Date

Name	Company
Niko Kalyvas	Conte Electric Inc.
Signature	Date
	10/20/10

Name	Company
Luis Tepan	Conte Electric Inc.
Signature	Date
	10/20/10

Name	Company
DOUGLAS HOWELL	CONTE ELECTRIC ENG
Signature	Date
	10/20/10

ATTACHMENT

7

RAdata, Inc.

27 Ironia Road, Unit 2
Flanders, New Jersey 07836
973-927-7303 973-927-4980 fax
1-800-447-2366

OPERATIONS AND MAINTENANCE SCHEDULE FOR THE ACTIVE SOIL DEPRESSURIZATION SYSTEMS

The blower units used in the active soil vapor depressurization systems are maintenance free and require no attention until the U-Tube manometers indicate the fan unit has failed.

30 DAY SERVICE: RAdata, Inc. recommends that the magnehelic gauges be observed and checked for proper blower functions **every 30 days** to ensure the proper function of the fan units.

Refer to As Built Drawings provided by RAdata, Inc. for systems location.

YEARLY SERVICE: It is recommended that the active soil depressurization systems be serviced **on a yearly basis.** That work will consist of:

- Removing and cleaning fan, note fans condition
- Adjust worm drive
- Check pipe clamps for breakage
- Check for moisture in pipe and make corrective adjustments if necessary
- Re-caulk all floor penetrations where accessible
- Check magnehelic manometers. Replace if necessary
- Register vacuum measurements
- Check electrical connections
- Measurement sub-floor communication
- Add system labeling if necessary
- Check all fire barriers
- Check for moisture under floor

Please contact our office for additional information regarding service on the active soil depressurization systems.

ATTACHMENT

8

R data

27 Ironia Road, Unit 2
Flanders, New Jersey 07836
973-927-7303
973-927-4980 Fax

Proposal

Kurtsam Realty
Box 383 Quaker Ridge Road
Croton-On-Hudson, NY 10520

Attention: Fred Schwalb
973-584-7777x119 Bell Env.
DKeane@bellenvironmental.com

7/8/2010
No: 17844

Job Location: Go No Sen Karate Dojo
20 Welcher Avenue
Peekskill, NY 10566

County: Westchester

Job Description

In October of 2006 the New York State Department of Environmental Conservation (N.Y.S.D.E.C.) in consultation with the New York State Department of Health (N.Y.S.D.O.H) established a Guidance of Evaluating Soil Vapor Intrusion in the State of New York. The objective of the remedial techniques stated in that document is to eliminate the pathway between the source (contaminated ground water or subsurface soils) and the building occupants. That document represents Active Sub Slab Depressurization Systems (ASDS) to be the most effective application for this purpose. The required system design, installation and evaluation guidance are drawn from United States Envirnomental Protection Agency (U.S.E.P.A.) radon remediation publications. In the N.Y.S.D.O.H document it is recommended that a Environmental Professional, such as a Licensed Radon Mitigation Business, be used for this type of work. The goal of this type of installation is to achieve a sub slab vacuum measured at 1 Pascal or 0.004 inches of water thus reducing the potential for inhalation of vapors migrating from the soil through the building slab.

**SYSTEM CLASSIFICATION: It is stated in the N.Y.S.D.O.H. Guidance that this type of installation be considered temporary. Guidance recommendations are to remove the system when either the remediation of the underlying contaminated soil or water is complete, or the vapor intrusion no longer exceeds acceptable standards. THE VENTING SYSTEM OUTLINED IN THIS PROPOSAL, IF CONSIDERED A PERMANENT ADDITION TO THIS BUILDING AND WILL REQUIRE YEARLY SERVICE, AND INDOOR AIR MONITORING SHOULD BE IMPLEMENTED. Submission of an annual certification to the State may be required.

**SYSTEM SPECIFICATIONS: The number of venting systems suggested for this portion of the building is a total of three (3). The facility is a 5,100 square foot one story masonry building with a finished basement area. The basement is partitioned into multiple use rooms. Various radon remediation publications recommend installing one ventilation system for each 1,500 square feet of foundation area.

Install three (3) Active Soil Depressurization Systems (ASDS) to address the VOC contamination below the concrete basement slab consisting of the following actions:

1). Drill four inch (4") holes through the basement concrete slab. Two (2) slab penetrations will be installed along the interior perimeter of the building foundation and one (1) slab penetration will be installed in a central closet area. These holes will be piped with three or four inch (3"/4") Schedule 40 PVC. Piping shall be fastened to the wall or concrete deck using industry standard metal straps and hangers. Supports for the ASDS shall be six feet (6') on horizontal runs and every eight feet (8') on runs that do not penetrate floors, celilings or roof. A sample port and vacuum gauge shall be installed for each system. Systems will be clearly labeled to identify their purpose.

2). Extend three (3) manifolds to the rear of the building. Extend vent pipes vertical to a termination point no less than 12" above the roofline. Exterior vent pipes shall be anchored to brick wall with pipe supports every eight feet (8'). Vent points will conform with all venting specifications provided by The N.Y.S.D.OH.

3). Exhaust fans will be Fantech, Dynavac or Festa blowers (one year warranty). Fans will be mounted at rear of building about 10' above grade. Fan units will be hard wired by a New York State Licensed Electrician with an on/off switch provided for each fan. Magnehelic gauges and audio alarms will be placed on all systems to alert occupants if system(s) fan(s) have stopped working. Monitoring devices shall be placed in plain view of employees and/or management. Audio alarms devices will be hard wired by a New York State Licensed Electrician on separate breakers to prevent accidental disconnect. Electrical service for fans and alarms units is

ESTIMATED at $1,595.00. Cost over runs will be documented and passed along to the CLIENT with a plus 20% cost adjustment

4.) Upon completion of the installation of the ASDS, Radata, Inc. shall provide an Operations and Maintenance Manual and review systems installation and maintenance requirements with the property owner or representative:

a. The systems operation, including equipment manuals and specifications for mechanical and electrical components. RAdata, Inc. will provide contact information including name, telephone number, and e-mail address to the property owner for future contact.

b. How the warning system functions and what procedures are to be followed if it is activated.

c. All guarantees or warranties will be transferred to the property owner as well as manuals or equipment documents.

SYSTEMS INSTALLED PURSUANT TO SPECIFICATIONS OF ASTM 2121 - 03

Air Discharge Permit requirements (if applicable), as well as the retesting of contaminants in the exhaust stream, will be the responsibility of Bell Environmental. Sampling at six months and each year thereafter will be the responsibility of Bell Environmental as per N.Y.S.D.O.H requirements. This will continue to demonstrate that Air Discharge Permit Requirements are complied with unless their standards are changed in the future. After the installation is complete it will be the responsibility of the client to sample and maintain required measurements for all aspects associated with indoor and exhaust vapor limits in the systems, and the occupied space, as per N.Y.S.D.O.H. requirements.

**CONFIRMATORY TESTING: Pressure field extension testing will be completed to qualify the extent of the sub-floor vacuum. Backdraft conditions will also be evaluated for the boiler and other combustion equipment.

**SOIL DISPOSAL: The removal and disposal of all soil and concrete removed from under the floor during the installation of the described systems will be the responsibility of RAdata, Inc. Disposal will be coordinated with Bell Environmental. A disposal manifest will be a part of the final work product. RAdata will place soils and contaminated building debris, as well as, but not limited to, work coveralls and gloves in appropriate containers for removal. Removal and disposal of the drum from the job site will be completed by Clean Ventures, 201 South First St, Elizabeth, NJ. or another approved vendor. ESTIMATED DISPOSAL COST IS $1,350.00. Cost over runs will be documented and passed along to the CLIENT with a plus 20% cost adjustment.

**DRAWINGS: An "As Built" final plan drawing signed by a N.E.H.A. Radon Mitigation Specialist will be supplied with final work documents. For permit purposes as required by the local municipality, initial drawings for the installation of a Commercial Grade Radon Exhaust System will be supplied by RAdata, Inc. and signed by a N.E.H.A. Radon Mitigation Specialist. The need for the signature of a New York Licensed Architect or Engineer, if required by the town, would be an additional cost.

** REQUIRED VACUUM: The outlined ASDS goal will be to create a measurable vacuum in the order of 1 Pascal or -0.004 inches of water column in all areas under the slab. This will be measured by RAdata, Inc. with the use of a micro-monometer and the results will be reported to the Client.

**ONGOING MONITORING & MAINTENANCE: In ASDS Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006) must be referred to. This document is a guidance, not a regulation, rule or requirement. The client is accountable for the ongoing system verification sampling, monitoring and maintenance requirements.

**VERIFICATION PROCEDURES: Bell Environmental will conduct exhaust stream VOC measurements to support the lack of the need for an air discharge permit at the time of the installation. Confirmatory indoor air sampling should be conducted by the client two to four weeks after systems is operational to verify the effectiveness of the system and the results should be below the N.Y.S.D.O.H. acceptable limits. If these tests are not conducted between November through March, a second round in that time frame is required unless the reduction is an order of magnitude or greater. If the pressure gauge installed on the systems indicate that the remedial system is not operating efficiently, the system should be repaired. An inspection should be conducted by RAdata, Inc. semi-annually to determine if the system is operating properly. After the first year a reduced inspection frequency may be appropriate and changed to once a year.

**WORKER HEALTH & SAFETY PLAN: RADATA, INC. will supply to the client a Worker Health and Safety Plan appropriate for this project.

**WARRANTY: RAdata, Inc. assumes no responsibility and/or liability for the success or failure of this treatment system for the removal of vapors other than radon gas. Where RAdata, Inc. will demonstrate system performance and achieved sub floor vacuum there is no warranty, either expressed or implied, as the reduction of any vapors other than radon gas impacting the safety and

habitability of the treated spaces. Any testing and/or additional filtration of other vapors in the building or filtration of the air stream exiting the systems remains the responsibility of the client. RAdata, Inc. shall be held harmless from any and all aspects of measurable gas concentrations or indoor air quality issues other than radon gas as set forth by our standard warranty. As the Subsurface Depressurization Systems move air from the soil beneath the concrete floor, the guidance of the U.S.E.P.A. and the represent findings that additional soil gases should be included in the exhaust stream. The outlined soil vapor venting system will create a measurable induced vacuum in the order of 1 Pascal or 0.004 inches of water column in all areas under the slab. This will be measured by RAdata, Inc. with the use of a micro-monometer.

WARRANTY RESTRICTIONS: Sub-floor material must be porous and free of standing water. If conditions are not appropriate for proper airflow, additional work may be necessary at an additional cost.

Subtotal: $37,975.00

Notes:

1) All work areas must be made accessible for service crew prior to installation or there will be an addditional charge of $125 per hour (per man) added for the time it takes our staff to access work area properly.
2) Prices subject to change after 60 days.

TOTAL JOB COST: $37,975.00

GUARANTEE: NA

WARRANTY RESTRICTIONS: NA

All material is guaranteed to be as specified. All work will be completed in a professional manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents, or delays beyond our control. Owner to carry fire, tornado,and other necessary insurance. Our workers are fully covered by Workman's Compensation insurance.

System Proposed/Designed by:

David Grammer, Mitigation Specialist

Payment Terms: Net 30 days

The above, specifications, and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Acceptance of Proposal: Kurtis Lee Hyatt

by: [signature] 8/30/10

Customer Signature **Date**

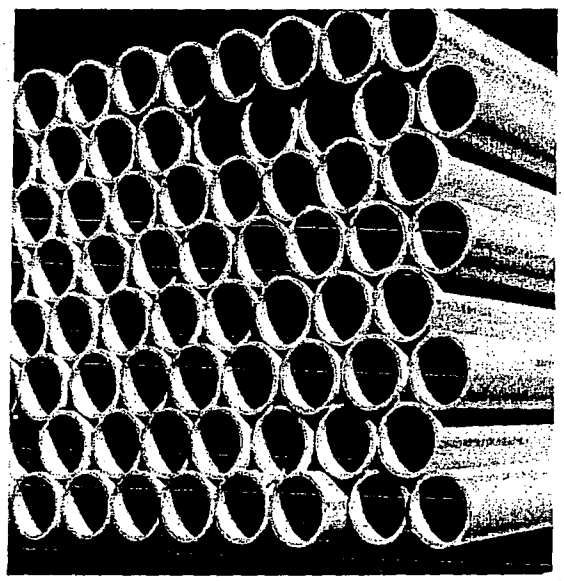
ATTACHMENT

9

North American Pipe Corporation

www.northamericanpipe.com

Product Description:



ASTM D1785/D2665
Schedule 40/DWV Dual Rated Pipe

North American Pipe's ASTM D1785 Schedule 40 Dual Rated (both Pressure and DWV rating) product line is manufactured to meet the needs of a broad range of industrial, commercial and residential piping systems. With top quality raw materials and modern processing technology, North American Pipe's ASTM D1785 Schedule 40 Dual Rated pipe meets all industry standards in addition to our own rigorous quality control WQhdDrdV. 1 RrWAP ericDn PiSe'VAS70 ' 1785 Schedule 40 Dual Rated product line carries both a pressure and DWV rating to give the designer, installer and end user the flexibility of one product for two distinct applications. North American Pipe produces a broad range of sizes in both plain end and belled end configurations in our Schedule 40 product line. Whether specifying or installing our pipe you can be assured that North American Pipe will SrRvide We SiSe "5 ighWOn 7iP e, All We 7iP e".

This product is made in accordance with the following specifications:

ASTM D1784	ASTM D1785	ASTM DOS7O
ANSI/NSc 14	ANSI/NSc S1	ASTM DOSS5

Short Form Specification
for North American Pipe Corporation
ASTM D1785/D2665 Schedule 40/DWV Dual Rated Pipe

Schedule 40 water distribution pipe shall be made in accordance with ASTM D1785 and ASTM DOSS5 from a PVC compound conforming to a cell classification of 1O454 as defined by ASTM D1784. Belled end of solvent weld pipe shall meet the requirements of ASTM DOS7O when installed in accordance with ASTM DO855. Solvent weld belled end pipe shall be tested and approved for contact with potable water in accordance with ANSI/NSc S1 and NSc 14 and be cactory Mutual approved. Pipe shall be dual marked for use in water distribution and drain, waste, and vent applications.

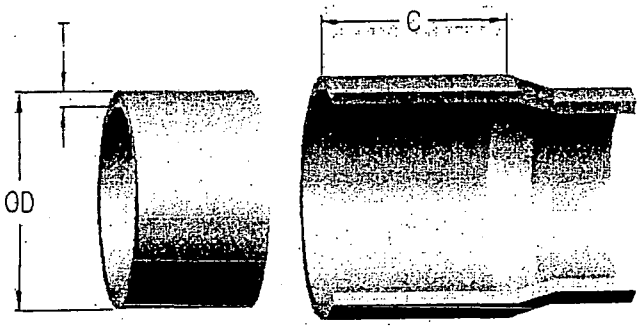
Rev: 07/2006

2801 Post Oak Blvd. | Suite 600 | Houston | TX | 77056
Phone: 713-840-7473 Toll Free 800-999-7473 Fax: 713-552-0087

North American Pipe Corporation

www.northamericanpipe.com

ASTM D1785/D2665 Schedule 40/DWV Dual Rated Pipe



NOMINAL PIPE SIZE	OUTSIDE DIA. – 120. (OD)	**APPROX. BELL DEPTH (C)	(T)	PRESSURE RATING (psi)
½"	.840	1.75	.109	S00
¾"	1.050	Q50	.11P	480
1"	1.P15	Q50	.1PP	450
1¼"	1.SS0	Q50	.140	P70
1½"	1.900	Q50	.145	PP0
2"	QP75	P.O5	.154	O80
2½"	Q875	P.50	.OOP	P00
3"	P.500	4.O5	.O1S	OS0
4"	4.500	5.50	.OP7	OOO
5"	5.5SP	S.00	.O58	190
6"	S.SO5	7.00	.O80	180
8"	8.SO5	7.50	.POO	1S0
10"	10.750	8.50	.PS5	140
12"	1Q750	10.00	.40S	1P0
14"	14.000	10.00	.4P7	1P0
16"	1S.000	10.00	.500	1P0

Note: These dimensions are for estimating purposes only ** Nominal depth, depth will vary by pressure class

Rev: 07/2006

2801 Post Oak Blvd. | Suite 600 | Houston | TX | 77056
Phone: 713-840-7473 Toll Free 800-999-7473 Fax: 713-552-0087

North American Pipe Corporation

MATERIAL SAFETY DATA SHEET

Effective Date: March 8, 2007

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Polyvinyl Chloride Pipe
Chemical Name: Mixture
Synonyms: Not applicable
Chemical Family: Mixture of Polyvinyl Chloride Homopolymer
Formula: Mixture, see below.

COMPANY ADDRESS:
North American Pipe Corporation
2801 Post Oak Blvd.
Houston, TX 77056

EMERGENCY CONTACT: CALL 1-217-324-6515
THESE NUMBERS ARE AVAILABLE DAYS, NIGHTS, WEEKENDS, AND HOLIDAYS, EXCEPT ON DECEMBER 24 TO 26.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	% By Weight	OSHA PEL-TWA mg/m^3	ACGIH TLV-TWA mg/m^3
Polyvinyl chloride resin (chloroethene homopolymer), treated as nuisance particulate	9002-86-2	95	5 (respirable fraction) 15 (total dust)	3 (respirable particulate) 10 (total particulate)
Calcium carbonate	1317-65-3	3-4	5 (respirable fraction) 15 (total dust)	10 (total particulate)
Waxes	NE	1-2	NE	2 (as Paraffin Wax Fume)
Titanium dioxide	13463-67-7	<1	15 (total dust)	10 (total particulate)

NE = Not Established

3. HAZARDS IDENTIFICATION

This product is non-hazardous under Hazard Communication Standard 29 CFR 1910.1200.

HAZARD RATINGS Degree of hazard (0 = low, 4 = extreme)

National Fire Protection Association — Health: 1 Flammability: 1 Reactivity: 0 Specific Hazard: None

Hazardous Materials Identification System — Health: 1 Flammability: 1 Reactivity: 0

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MATERIAL SAFETY DATA SHEET

4. FIRST AID MEASURES

EYE CONTACT:	Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Consult a physician immediately.
SKIN CONTACT:	Cool skin rapidly if contacted with molten polymer. Obtain medical attention for thermal burns or skin irritation.
INHALATION:	The product is not expected to present an inhalation hazard , unless mechanically chipped or pulverized or if melted during fire. If dust or fumes are inhaled, remove to fresh air.
SWALLOWING:	No adverse health effects expected from ingestion.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable
Lower Explosive Limit: Not applicable
Upper Explosive Limit: Not applicable
Autoignition Temp: 849°F (470°C)

EXTINGUISHING MEDIA:	Use water spray, dry chemical, or foam.
SPECIAL FIRE FIGHTING PROCEDURES:	Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing if involved in fire.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	PVC homopolymers are self-extinguishing plastic materials. They will burn in the presence of other materials that support combustion and will generate hydrogen chloride, phosgene, benzene, carbon monoxide, carbon dioxide, aromatic and aliphatic hydrocarbons, and other gases.

6. STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Collect scrap for reprocessing, or for landfill in compliance with local regulations.

7. HANDLING/STORAGE

Use any methods that keep dust to a minimum. General storage procedures are acceptable.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

EYE PROTECTION:	Safety glasses are required if there is a possibility of getting dust particles in eyes. Have eye wash equipment nearby.
SKIN PROTECTION:	None required.

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MATERIAL SAFETY DATA SHEET

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION (C2 1 7'D)

VENTILATION:	Local exhaust ventilation is recommended to control airborne dust.
RESPIRATORY PROTECTION:	If dust or fumes exist, use a NIOSH/MSHA approved respirator. At unknown concentrations and for fire fighting, use self-contained breathing apparatus (SCBA). Always use respirators in accordance with instructions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form:	Solid
Boiling Point:	Not available
Heat Deflection Temperature:	168°F (76°C)
Vapor Density:	Not applicable
Vapor Pressure (mm Hg):	Not applicable
Evaporation Rate:	Not applicable
% Volatile by Volume:	Not applicable
Density:	Not determined
Specific Gravity:	1.42
Solubility in Water (20 °C):	Insoluble
Melting Point:	Not available
Viscosity:	Not applicable
Odor:	Plastic, resin odor
Appearance:	Blue, Green, Purple, Light Gray, or White plastic pipe
pH:	Not applicable

10. STABILITY/REACTIVITY

Stability:	Stable under normal storage conditions.
CONDITIONS TO AVOID:	None known.
INCOMPATIBLE MATERIALS:	None known.
HAZARDOUS DECOMPOSITION PRODUCTS:	Hydrogen chloride, benzene, carbon monoxide, carbon dioxide, aromatic and aliphatic hydrocarbons, and other gases could be released in fire.
POLYMERIZATION:	Hazardous polymerization not expected.

11. TOXICOLOGICAL INFORMATION

	No toxicological data were found for this product. The effects reported are those anticipated based on the components of this product.
POTENTIAL ROUTES OF EXPOSURE:	Inhalation of dust is the most likely route of exposure to this product.
SIGNS, SYMPTOMS, AND TOXIC EFFECTS OF OVEREXPOSURE:	Exposure to high concentrations of dust of this product will cause irritation of the respiratory tract with cough, difficulty breathing, dryness of the throat, or eye irritation.

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MATERIAL SAFETY DATA SHEET

11. TOXICOLOGICAL INFORMATION (C2 1 7'D)

ANIMAL TOXICITY DATA:

Component	Inhalation LC_{50}	Dermal LD_{50} (mg/kg)	Oral LD_{50} (mg/kg)
PVC homopolymer	No data found.	No data found.	No data found.
Calcium carbonate	No data found.	No data found.	No data found.
Titanium dioxide	No data found.	No data found.	No data found.

REPRODUCTIVE EFFECTS: No data were found regarding reproductive effects in humans or animals for any component of this product.

MUTAGENICITY DATA: No mutagenicity data were found for any component of this product.

DESIGNATION AS POTENTIAL CARCINOGEN: IARC designates PVC homopolymer and titanium dioxide as Group 3, "nRW classifiable as to [illegible]"

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: No data were found regarding this issue.

INTERACTIONS WITH CHEMICALS THAT ENHANCE TOXICITY: No data were found regarding this issue.

12. ECOLOGICAL INFORMATION

No data were found regarding adverse ecological impacts of this product.

13. DISPOSAL CONSIDERATIONS

Disposal should conform to federal, state, and local regulations. If hazardous according to 40 CFR part 261.31 or 32, or possesses characteristics of 40 CFR 261 Subpart C, dispose in a facility meeting the requirements of 40 CFR 264 or 265. If non-hazardous, dispose in a facility meeting the requirements of 40 CFR 257. Before attempting cleanup, refer to hazard information and personal protection information in other sections of this MSDS. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

RCRA Status of Unused Material: If discarded in unaltered form, should be tested in accordance to 40CFR 261 Subpart C and disposed as specified above.

14. TRANSPORTATION INFORMATION

U.S.D.O.T. SHIPPING NAME, ID NO, HAZARD CLASS: Not Regulated (also, Canada via rail and truck.)

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MATERIAL SAFETY DATA SHEET

15. REGULATORY INFORMATION

SARA 313 LISTING:	This product does not contain any substance subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.
SARA 312 HAZARD CLASS:	Not applicable.
SARA EXTREMELY HAZARDOUS SUBSTANCES:	Not applicable.
EPA HAZARDOUS SUBSTANCES LIST: (40 CFR 302.4):	Not hazardous.
CA PROPOSITION 65:	This product does not contain any substance listed in the State of California Safe Drinking Water and Toxic Enforcement Act of 1986, as updated (February 23, 2001).
PENN. RIGHT-TO-KNOW:	All required components are identified.
N.g. RIGHT-TO-KNOW:	All required components are identified.
MASS. RIGHT-TO-KNOW:	All required components are identified.
TSCA INVENTORY STATUS:	All components of this product are listed on the TSCA Inventory.
CANADIAN WHMIS CLASS:	Not applicable.

16. OTHER INFORMATION

REVISIONS:	Entire MSDS reviewed March 8, 2007.
PREPARED BY:	Tetra Tech EM, Inc., using standard references and information provided and directed by North American Pipe Corporation.

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PRODUCT DATA SHEET

June 2007

BIOSTOP® 500+ Firestopping Sealant

Classified Through-Penetration Firestop System Numbers CAJ-1204, CAJ-1262, CAJ-1264, CAJ-1330, CAJ-1328, CAJ-2127, CAJ-1321, CAJ-2128, CAJ-2129,CAJ-2130, CAJ-2131, CAJ-2156, CAJ-2179, CAJ-2183, CAJ-2246, CAJ-2248, CAJ-3103, CAJ-3104, CAJ-5006, CAJ-5016, CAJ-5081, CAJ-5082, CAJ-5083, CAJ-5086, CAJ5135, CAJ-5137, CAJ-8051, CAJ6026, CAJ6009, CBJ-3003, CBJ-3004, CBJ-3005, CBJ-3006, WL-1103, WL-1100, WL-1103, WL-1109, WL-1115, WL-1119, WL-1105, WL-1107, WL-1117, WL-1121, WL-1150, WL-1116, WL-1178, WL-1180, WL-1182, WL2202, WL-2210, WL-1200, WL-2133, WL-2136, WL-2193, WL-2191, WL-2239, WL-2105, WL-3093, WL-3156, WL-3095, WL-5062, WL-5058, WL-5060, WL-5076, WL-5085, WL-5093, WL-5128, WL-7036, WL7037, WL-7037, WL-2105, WL-5062, WL-5058, WJ-1060, WJ-1080, WJ-1062, WJ-2040, WJ-2074, WJ-2064, WJ-2066, WJ-3027, WJ-5021, WJ-5017, WJ-5019, WJ-5030, WJ-5034, WJ-5040, WJ-5060, WJ-7015, WJ-7017, WJ-2026, WJ-1037, WJ-1039, WJ-1044, WJ-1045, WJ-3057, WJ-3059, FC-1031, FC-1033, FC-1056, FC-1064, FC-1066, FC-2059, FC-2060, FC-2061, FC-2062, FC-2068, FC-2070, FC-2079, FC2131, FC-2133, FC-2149, FC-2151, FC-2191, FC-2193, FC-3052, FC-8016, FC-8016, FC-8016, FC-2078, FC-5021, FC-5023, TRC/PV 60-06, and TRC/PV 120-15 & HWD-0180,HDW-0015 & HWD0057

1. Product Description

Biostop® 500+ is a one component, general purpose fire rated sealant and smoke seal for construction joints and around penetrations through fire rated walls and floors. Biostop® 500+ is a water based, extremely intumescent, non-sag caulking grade sealant that is easy to apply as well as to retrofit. It cures to an elastomeric seal that is suitable where dynamic movement is expected. In the event of a fire, Biostop® 500+ will prevent the spread of flames, smoke, hot gases and water through joint openings and through-penetrations. No dilution or mixing is required for use. No special skills are necessary for installation. Biostop® 500+ is applied with a conventional caulking gun, bulk loading gun or can be troweled from the pail. For large applications, it can be pumped directly from the pail. Biostop® 500+ is rated for 1, 2, 3 and 4 hours and has been tested in accordance with the ASTM E814, (UL 1479), UL 2079 and ULC-S115-95 test standards. BIOSTOP® 500+ is protected in a wet stage as well as in a dry stage against mold growth with a combination of biocides.

Use Biostop® 500+ for various applications:

Through Wall/Floor Penetrations
Top of the Wall Construction Joints
Deflection Track Wall Systems
Wall to Floor Joints
Floor to Wall Joints
Concrete on Steel Deck to Wall
1,2 , 3 and 4 Hour Gypsum Walls
Concrete and Concrete Block Walls (CMU)
Up to 2" PVC (open)
Up to 3" PVC/PBS (closed)
Crosslinked Polyethylene (PEX) tubing
Steel, Copper,Cast Iron and EMT Pipe
Fiberglass Insulated Pipe
AB/PVC Insulation Pipe
Telephone/Power Cables
Acoustical sealant

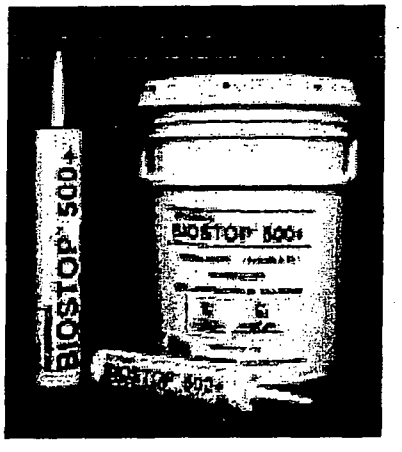
For a complete list of product applications or for additional technical information, call RECTORSEAL for the latest updated information.

Biostop® 500+ Features

- Water Based
- Excellent Freeze-Thaw
- Flexible Set
- Highly Intumescent
- Paintable
- VOC Compliant
- Safe and Easy to Use
- Minimum 2 Year Shelf Life

2. Material Properties

Asbestos Fillers	None
Solvents	None
Hazardous Ingredients	None
Application	Caulking Gun or Trowel



Activation of Intumescence:

Expansion Begins	375° F
Expansion Greatest	575° to 1100° F
Color	Red
Cure Time	3 to 4 weeks (at 77° F)
Density	10.4 +/- 0.3 lbs./gal.
Elastomeric	Yes
Freeze-Thaw	Excellent
Skin Over Time	30 min. (at 77° F)
pH Value	6.5 to 7
Volume Coverage:	
for 10.3 oz. tube	18 cu. in.
for 20.2 oz.	35.3 cu. in.
for 5 gallon	1155 cu. in.
VOC	Negligible

ASTM E 84, UL 723 Tunnel Test

Flame Spread	5
Smoke Index	10

STC 54*

*Tested in a UL 411 wall assembly/section to ASTM E90.

3. Applications

Biostop® 500+ can be used in interior applications as a general purpose fire rated sealant and smoke seal for construction joints on both vertical and horizontal surfaces. Also, for applications around penetrations through fire rated walls and floors. Biostop® 500+ is an excellent fire

PRODUCT DATA SHEET

December 2005

Biostop® Pipe Collar

Classified Through-Penetration FireStop System Numbers
CAJ2135, CAJ2152, CAJ2154, CAJ2156, CAJ5106, CAJ2181, CAJ2177, CAJ2198, CAJ2200, CAJ2266, WL2109, WL2120, WL2118, WL2135, WL2136, WL2133, WL2208, WL2256,WL3151, WJ2040, WJ3055, FC2059, FC2060, FC2061, FC2068, FC2166, FC8016, FC8018, FA2044

1. Product Description

Biostop® Pipe Collars are prefabricated for open and closed through-penetration firestop systems using 1 1/2" (38 mm) to 6" (152 mm) plastic pipe. An easy locking mechanism assures easy installation. The collar design greatly reduces the time and expense that is required to install competitive collars.

Biostop® Pipe Collar Features

- Saves on Labor Cost
- Easy Installation
- Economical
- No Measurement of Material Required
- Highly Intumescent
- Tested for PVC, CPVC, ABS and PVC/ABS Foam Core, FRPP

2. Material Properties

Asbestos Fillers	None
Solvents	None
Hazardous Ingredients	None

Activation of Intumescence:

Expansion Begins 375°F (190° C)
Expansion Greatest 575°(302°C) to 1100°F(593°C)

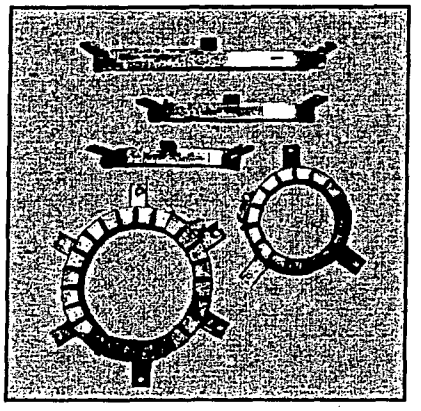
3. Applications

Biostop® Pipe Collars are used to seal off plastic pipe both in closed and vented (DWV) conditions. Also for use on up to 6" (152 mm) diameter ABS (cellular core or solid core), FRPP, PVC and CPVC pipe. The collar may be used on up to 3 hour rated concrete floors and walls, up to 2 hour rated gypsum walls and up to 2 hour rated wood floors.

4. Installation Data

Biostop® Pipe Collars are prefilled and very easy to install.

1) Select the proper collar to fit the diameter of pipe used.
2) Making sure annular space is within the limits set by the tested conditions, attach collar around the pipe on the underside of the floor or to each side of a wall by firmly placing against the wall or floor and securing interlocking tabs [1 1/2" (38 mm), 2" (51 mm), 3" (76 mm) and 4" (102 mm)] or fastening the buckle [6" (152 mm)].
3) If needed, mark and predrill wall or floor for required anchors. Properly secure the appropriate anchor into each of the anchoring tabs. In concrete, use 1/4" (6 mm)x 1 1/4" (32 mm)hex washer head type concrete anchors or appropriate steel expansion/ wedge anchors. In gypsum, use 1/8" (3 mm)x 2" (51 mm) MOLLY type hollow wall anchors.
4) If an additional smoke seal is required, Biostop® 500+ may be applied within the annular space before the attachment of the collar.



5. Testing Data

Biostop® Pipe Collars are classified by Underwriters Laboratories as a Firestop Device. For specific test criteria, see the UL Fire Resistance Directory or call RectorSeal. Biostop® Pipe Collars were tested at a minimum .01 inches (2.5 Pa) of water positive pressure in accordance with UL 1479 (ASTM E814) test standards.
Complies to Required Environmental Exposure Testing of Accelerated Aging and High Humidity as per UL 1479 Fire Test of Through-Penetration Firestops.

IPS
WELD-ON

MATERIAL SAFETY DATA SHEET

Date Revised: APR 2007
Supersedes: OCT 2004

Information on this form is furnished solely for the purpose of compliance with the Occupational Safety and Health Act and shall not be used for any other purpose. IPS Corporation urges the customers receiving this Material Safety Data Sheet to study it carefully to become aware of the hazards, if any, of the product involved. In the interest of safety, you should notify your employees, agents and contractors of the information on this sheet.

SECTION I

MANUFACTURER'S NAME
IPS Corporation
ADDRESS
17109 S. Main St., P.O. Box 379, Gardena, CA. 90248

Transportation Emergencies:
CHEMTREC: (800) 424-9300
Medical Emergencies:
3 E COMPANY (24 Hour No.) (800) 451-8346
Business: (310) 898-3300

CHEMICAL NAME and FAMILY
Solvent Cement for PVC Plastic Pipe
Mixture of PVC Resin and Organic Solvents

TRADE NAME:
WELD-ON HOT 'R COLD 727 Low VOC Cement for PVC Plastic Pipe
FORMULA: Proprietary

SECTION II - HAZARDOUS INGREDIENTS

None of the Ingredients below are listed as carcinogens by IARC, NTP or OSHA	CAS#	APPROX %	ACGIH-TLV	ACGIH-STEL	OSHA-PEL	OSHA-STEL	DUPONT (A) AEL	DUPONT (B) STEL
Polyvinyl Chloride Resin (PVC)	NON/HAZ		N/A		N/A			
Tetrahydrofuran (THF)**	109-99-9	29 - 44	50 PPM	100 PPM	200 PPM	250 PPM	50 PPM	75 PPM
Methyl Ethyl Ketone (MEK)	78-93-3	4 - 15*	200 PPM	300 PPM	200 PPM	300 PPM		
Cyclohexanone	108-94-1	8 - 17	20 PPM Skin		50 PPM			
Acetone	67-64-1	1 -11	500 PPM	750 PPM	750 PPM	1000 PPM		

All of the constituents of Weld-On adhesive products are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.

(A) Dupont and BASF mfg's Acceptable Exposure Limit (AEL) for 8 hour and 12 hour TWA, (B) Dupont/BASF recommended STEL for 15 minute TWA.

**Information found in a report from the National Toxicology Program (NTP) on an inhalation study in rats and mice suggests that Tetrahydrofuran (THF) can cause tumors in animals. In the study the rats and mice were exposed to THF vapor levels up to 1800 PPM for two years (their lifetime), 6 hours/day, 5 days/week. Test results showed evidence of liver tumors in female mice and kidney tumors in male rats. No evidence of tumors was seen in female rats and male mice. There is no data linking Tetrahydrofuran exposure with cancer in humans.

BULK SHIPPING INFORMATION / CONTAINERS LARGER THAN ONE LITER

DOT Shipping Name:	Adhesive
DOT Hazard Class:	3
Identification Number:	UN 1133
Packaging Group:	II
Label Required:	Flammable Liquid

SHIPPING INFORMATION FOR CONTAINERS LESS THAN ONE LITER

DOT Shipping Name:	Consumer Commodity
DOT Hazard Class:	ORM-D

SPECIAL HAZARD DESIGNATIONS

	HMIS	NFPA	HAZARD RATING
HEALTH:	2	2	0 - MINIMAL
FLAMMABILITY:	3	3	1 - SLIGHT
REACTIVITY:	0	1	2 - MODERATE
PROTECTIVE			3 - SERIOUS
EQUIPMENT:	B - H		4 - SEVERE

B = Eye, Hand/Skin (for normal solvent-welding activities)
H = Eye, Hand/Skin, Respiratory Protection and Impermeable Apron (splash/ immersion risks)

SECTION III - PHYSICAL DATA

APPEARANCE Clear, medium syrupy liquid	**ODOR** Ethereal	**BOILING POINT (°F/°C)** 151°F (67°C) Based on first boiling component: THF
SPECIFIC GRAVITY @ 73°F ± 3.6° (23°C ± 2°) Typical 0.968 ± 0.040	**VAPOR PRESSURE (mm Hg.)** 143 mm Hg. based on first boiling component, THF @ 68°F (20°C)	**PERCENT VOLATILE BY VOLUME (%)** Approx: 80 - 90 %
VAPOR DENSITY (Air = 1) 2.49	**EVAPORATION RATE (BUAC = 1)** >1.0	**SOLUBILITY IN WATER** Solvent portion completely soluble in water. Resin portion separates out.

VOC STATEMENT: VOC as manufactured: 850 Grams/Liter (g/l). Maximum VOC emission when applied & tested per SCAQMD Rule 1168, Test Method 316A: 510 g/l.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	FLAMMABLE LIMITS (PERCENT BY VOLUME)	LEL	UEL
-4°F (-20°C) T.C.C. Based on THF		2	11.8

FIRE EXTINGUISHING MEDIA
Ansul "Purple K" potassium bicarbonate dry chemical, any appropriately sized ABC dry chemical, carbon dioxide or foam extinguisher can be used for small fires. Use of a water fog by trained personnel can extinguish small/large fires.

SPECIAL FIRE FIGHTING PROCEDURES
Evacuate enclosed areas. Stay upwind. Close quarters or confined spaces require self-contained breathing apparatus, positive pressure hose masks or airline masks. Use of a water fog by trained personnel can extinguish small/large fires and avoid water flow or water streams/spray distributing burning material or contaminated water over a large area or into sewers or storm drains. Use water spray to cool containers, to flush spills from source of ignition and to disperse vapors.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Fire hazard because of low flash point and high volatility. Vapors are heavier than air and may travel to source(s) of ignition at or near ground or lower level(s) and flash back.

ff-d

SECTION V - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: ___X___ Inhalation ___X___ Skin Contact _____ Eye Contact _____ Ingestion

EFFECT OF OVEREXPOSURE

ACUTE:

Inhalation: Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.

Skin Contact: Skin irritant. Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.

Skin Absorption: Prolonged or widespread exposure may result in the absorption of harmful amounts of material.

Eye Contact: Overexposure may result in severe eye injury with corneal or conjuctival inflammation on contact with the liquid. Vapors slightly uncomfortable

Ingestion: Moderately toxic. May cause nausea, vomiting, diarrhea. May cause mental sluggishness.

CHRONIC: Symptoms of respiratory tract irritation and damage to respiratory epithelium were reported in rats exposed to 5000 ppm THF for 90 days. Elevation of SGPT suggests a disturbance in liver function. The NOEL was reported to be 200 ppm.

REPRODUCTIVE EFFECTS	TERATOGENICITY	MUTAGENICITY	EMBRYOTOXICITY	SENSITIZATION TO PRODUCT	SYNERGISTIC PRODUCTS
N. AP.	N. AP.	N. AP.	N. AP.	N. AP.	N. AV.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing diseases of the eyes, skin or respiratory system may have increased susceptibility to the toxicity of excessive exposures.

EMERGENCY AND FIRST AID PROCEDURES

Inhalation: If overcome by vapors, remove to fresh air and if breathing stopped, give artificial respiration. If breathing is difficult, give oxygen. Call physician.

Eye Contact: Flush eyes with plenty of water for 15 minutes and call a physician.

Skin Contact: Remove contaminated clothing and shoes. Wash skin with plenty of soap and water for at least 15 minutes. If irritation develops, get medical attention.

Ingestion: Give 1 or 2 glasses of wafer or milk. Do not induce vomiting. Call physician or poison control center immediately.

SECTION VI - REACTIVITY

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	Keep away from heat, sparks, open flame and other sources of ignition.

INCOMPATIBILITY

(MATERIALS TO AVOID) Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.

HAZARDOUS DECOMPOSITION PRODUCTS

When forced to burn, this product gives out carbon monoxide, carbon dioxide, hydrogen chloride and smoke.

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	Keep away from heat, sparks, open flame and other sources of ignition.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Eliminate all ignition sources. Avoid breathing of vapors. Keep liquid out of eyes. Flush with large amount of water. Contain liquid with sand or earth. Absorb with sand or nonflammable absorbent material and transfer into steel drums for recovery or disposal. Prevent liquid from entering drains.

WASTE DISPOSAL METHOD

Follow local, State and Federal regulations. Consult disposal expert. Can be disposed of by incineration. Excessive quantities should not be permitted to enter drains. Empty containers should be air dried before disposing. Hazardous Waste Code (CA): 214.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

Atmospheric levels should be maintained below established exposure limits contained in Section II. If airborne concentrations exceed those limits, use of a NIOSH approved organic vapor cartridge respirator with full face-piece is recommended. The effectiveness of an air purifying respirator is limited. Use it only for a single short-term exposure. For emergency and other conditions where short-term exposure guidelines may be exceeded, use an approved positive pressure self-contained breathing apparatus.

VENTILATION

Use only with adequate ventilation. Do not use in close quarters or confined spaces. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed in Section II. Use only explosion-proof ventilatio equipment.

PROTECTIVE GLOVES PVA coated rubber gloves for frequent dipping/immersion. Use of latex/nitrile surgical gloves or solvent resistant barrier creme should provide adequate protection when normal solvent-cement welding practices and procedures are used for solvent welding of plastic sheet/pipe joints.

EYE PROTECTION Splashproof chemical goggles, face shield, safety glasses (spectacles) with brow guards & side shields, etc. as appropriate for exposure.

OTHER PROTECTIVE EQUIPMENT AND HYGIENIC PRACTICES

Impervious apron and a source of running water to flush or wash the eyes and skin in case of contact.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store in the shade between 40°F - 110°F (5°C - 43.7°C). Keep away from heat, sparks, open flame and other sources of ignition. Avoid prolonged breathing of vapor. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Train employees on all special handling procedures before they work with this product.

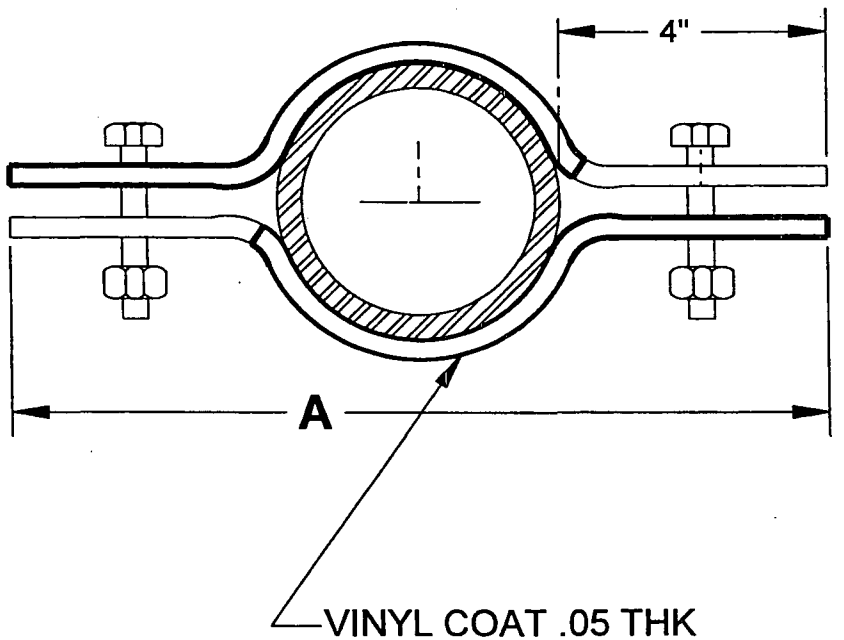
OTHER PRECAUTIONS

Follow all precautionary information given on container label, product bulletins and our solvent cementing literature. All material handling equipment should be electrically grounded.

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

ff-d

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SIZE	A	STOCK	BOLT
1/2	9.00	1/8 X 1.00	5/16 X 1.25
3/4	9.40	1/8 X 1.00	5/16 X 1.25
1	9.50	1/8 X 1.00	5/16 X 1.25
1-1/4	10.00	1/8 X 1.00	5/16 X 1.25
1-1/2	10.50	5/32 X 1.00	5/16 X 1.25
2	11.00	5/32 X 1.00	3/8 X 1.50
2-1/2	11.50	1/4 X 1.00	3/8 X 1.50
3	11.50	1/4 X 1.00	3/8 X 1.50
4	13.00	1/4 X 1.00	7/16 X 1.50
5	14.00	1/4 X 1.25	1/2 X 2.00
6	15.00	1/4 X 1.50	1/2 X 2.00
8	18.50	3/8 X 1.50	5/8 X 2.50
10	21.00	3/8 X 2.00	5/8 X 2.50
12	23.00	1/2 X 2.00	5/8 X 2.50

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS +/- 1/8 DECIMALS .XX +/- .03 .XXX +/- .01 ANGLES .XX + 1

MATERIAL
CQ STEEL

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CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE

APPROVALS	DATE
DRAWN EG	
CHECKED SB	
4/05	

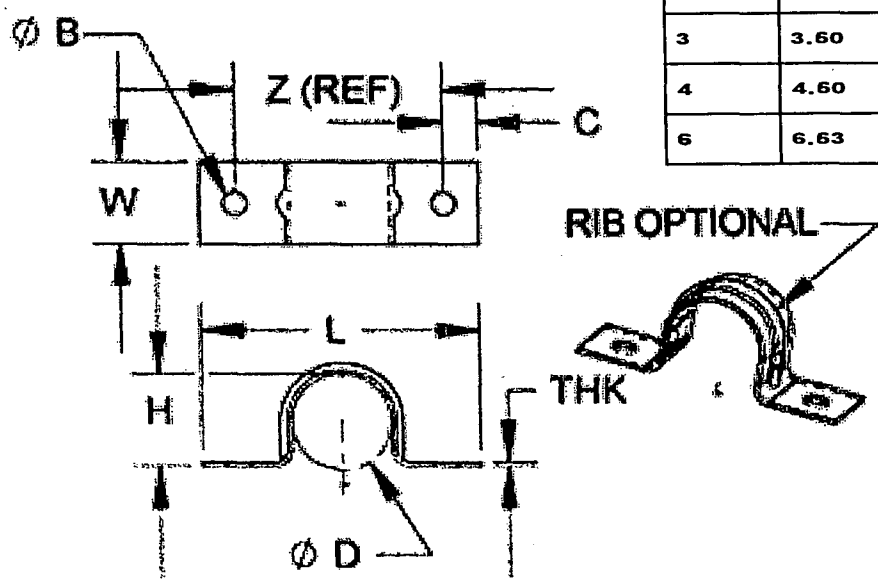
GREENFIELD MFG CO
920 LEVICK ST , PHILA.,PA. 19111

P/N PLASTIC RISER CLAMP

A FIG 107 REV.

SCALE CAD FILE: 107.SLDDRW SHEET OF

Size	D	H	THK	W	L	B	C	Z (ref)
Tol.	0.06	.03	US Gage	.12	.26	.032	.06	.06
	-0.02	-.06		-.03	-.12	-.015	-.03	-.06
3/8	0.69	0.68	20 Ga.	0.76	2.38	0.200	0.38	1.62
1/2	0.84	0.84	20 Ga.	0.76	2.62	0.200	0.38	1.80
3/4	1.06	1.05	19 Ga.	0.76	2.75	0.200	0.38	2.06
1	1.31	1.31	18 Ga.	1.00	3.40	0.281	0.38	2.62
1 1/4	1.66	1.66	16 Ga.	1.00	4.26	0.281	0.50	3.26
1 1/2	1.90	1.90	16 Ga.	1.00	4.20	0.281	0.60	3.44
2	2.38	2.38	14 Ga.	1.00	5.06	0.281	0.66	4.21
2 1/2	2.88	2.88	13 Ga.	1.00	6.31	0.340	0.75	4.88
3	3.50	3.50	13 Ga.	1.00	7.30	0.340	0.75	6.88
4	4.50	4.50	12 Ga.	1.00	8.38	0.340	0.75	7.12
6	6.63	6.60	12 Ga.	1.26	11.12	0.340	0.81	9.60

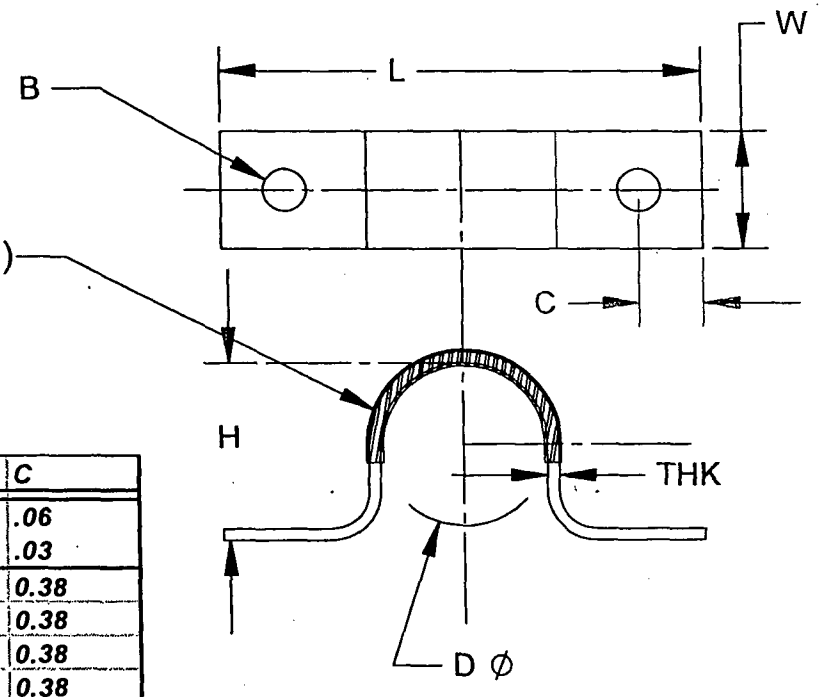


Greenfield Mfg Co Inc

920 Levick Street, Philadelphia PA. 19111-5498

Material STEEL	GALVANIZED PIPE STRAP
Finish GALV.	FIG. 600

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SIZE	D	H	Thk	W	L	B	C
+Tol	.06	.03	U S	.12	.25	.032	.06
-Tol	.02	.06	Gage	.03	.12	.015	.03
3/8	.69	.68	20 Ga	.75	2.38	.200	0.38
1/2	.84	.84	20 Ga	.75	2.62	.200	0.38
3/4	1.05	1.05	19 Ga	.75	2.75	.200	0.38
1	1.31	1.31	18 Ga	.75	3.40	.281	0.38
1-1/4	1.66	1.66	16 Ga	1.0	4.25	.281	0.50
1-1/2	1.90	1.90	14 Ga	1.0	4.20	.281	0.50
2	2.38	2.38	14 Ga	1.0	5.00	.281	0.66
2-1/2	2.88	2.88	13 Ga	1.0	6.31	.340	0.75
3	3.50	3.50	13 Ga	1.0	7.30	.340	0.75
4	4.50	4.50	12 Ga	1.0	8.50	.340	0.75

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES ARE:

FRACTIONS +/- 1/8 DECIMALS .XX +/- .03 .XXX +/- .01 ANGLES .XX + 1

MATERIAL PRE GALVANIZED SHEET STEEL

DO NOT SCALE DRAWING

CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE

APPROVALS	DATE
DRAWN EG	
CHECKED SB	

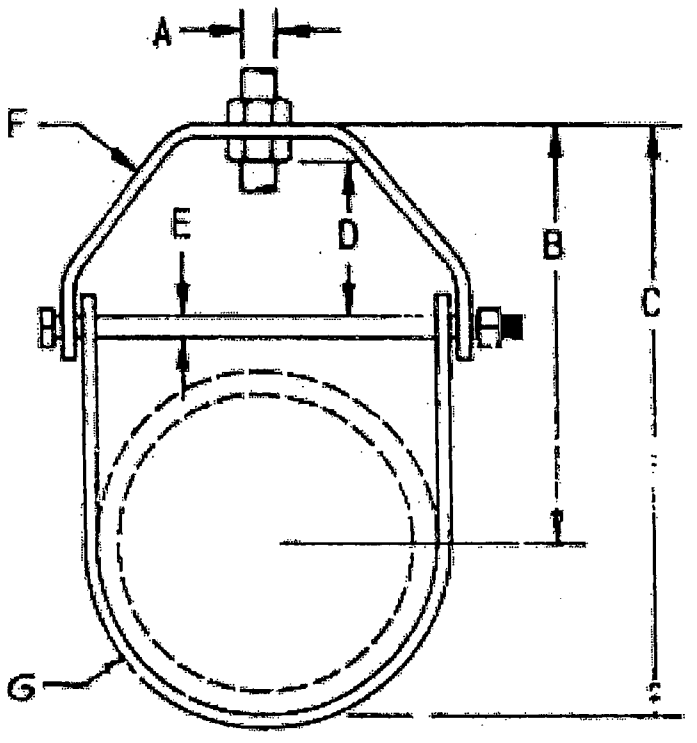
GREENFIELD MFG CO

920 LEVICK ST , PHILA.,PA. 19111

P/N PIPE STRAP,COATED

A FIG 603 REV.

SCALE CAD FILE: SHEET OF



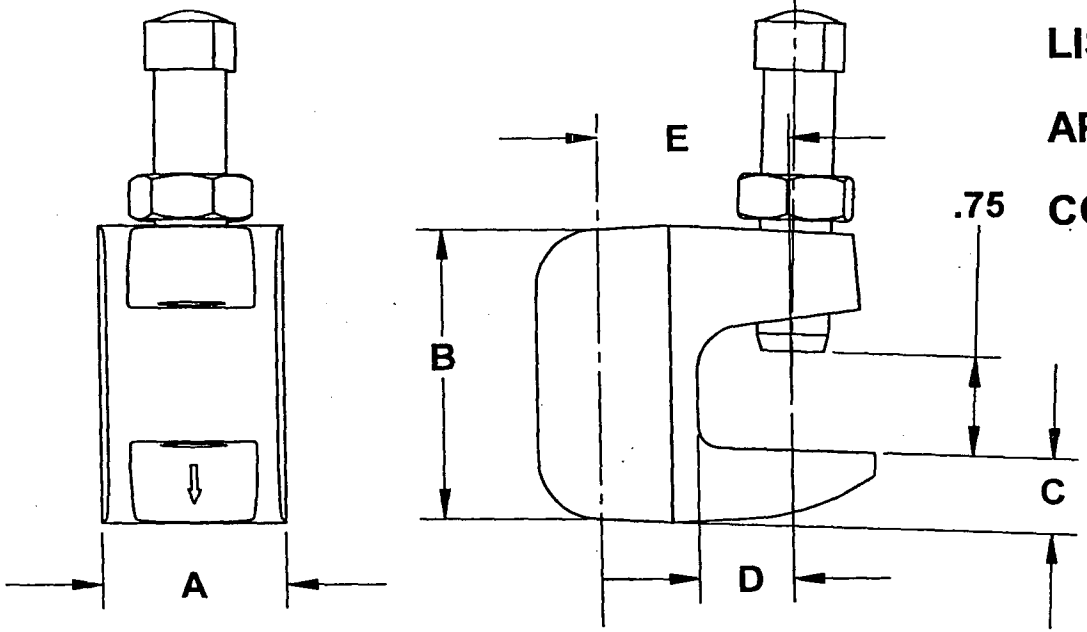
Size	A	B	C	D	E	F-Top	G-Bottom
1/2"	3/8"	1.5	2.0	0.62	1/4"	16ga x .75	16ga x .75
3/4"	3/8"	1.8	2.3	0.62	1/4"	16ga x .75	16ga x .75
1"	3/8"	2.2	2.8	0.88	1/4"	16ga x 1	16ga x 1.0
1.25"	3/8"	2.5	3.7	1.20	1/4"	16ga x 1	16ga x 1.0
1.5"	3/8"	2.8	4.0	1.20	1/4"	16ga x 1	16ga x 1.0
2"	3/8"	2.8	4.5	1.20	1/4"	14ga x 1	14ga x 1.0
2.5"	3/8"	3.8	6.0	2.00	1/4"	12ga x 1	13ga x 1.0
3"	3/8"	4.0	6.5	2.00	1/4"	12ga x 1	13ga x 1.0
4"	3/8"	4.7	7.0	2.00	5/16"	11ga x 1.25	12ga x 1.25

Greenfield Mfg Co Inc

920 Levick Street, Philadelphia PA. 19111-5498

Material Steel	Clevis - Light
Finish None	FIG. NO: 104

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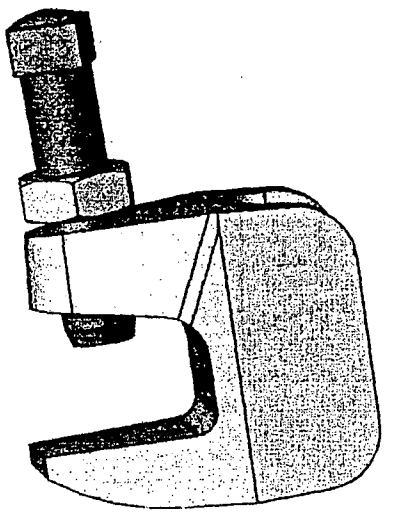
APPROVALS:

LISTED FM

APPROVED UL

COMPLIES WITH MSS SP-58 TYPE 19

SEE MSS SP-69 FOR PROPER SET SCREW RECOMMENDATIONS



ROD SIZE	WT PER 100 PCS	MAX REC LOAD	CTN QTY	A	B	C	D	E
3/8	28	350#	100	.88	1.50	.31	.50	1.00
1/2	34	470#	100	.88	1.50	.31	.50	1.00
5/8	42	550#	50	1.12	1.75	.34	.63	1.37
3/4	80	700#	50	1.37	1.87	.41	.63	1.37
7/8	84	1000#	25	1.37	1.87	.41	.63	1.37

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES ARE:

FRACTIONS	DECIMALS	ANGLES
+/- 1/8	.XX +/- .03 .XXX +/- .01	.XX + 1

MATERIAL

DUCTILE IRON

DO NOT SCALE DRAWING

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APPROVALS	DATE
DRAWN EG	
CHECKED SB	

GREENFIELD MFG CO

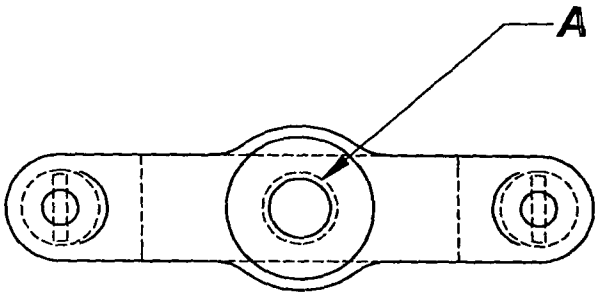
920 LEVICK ST , PHILA.,PA. 19111

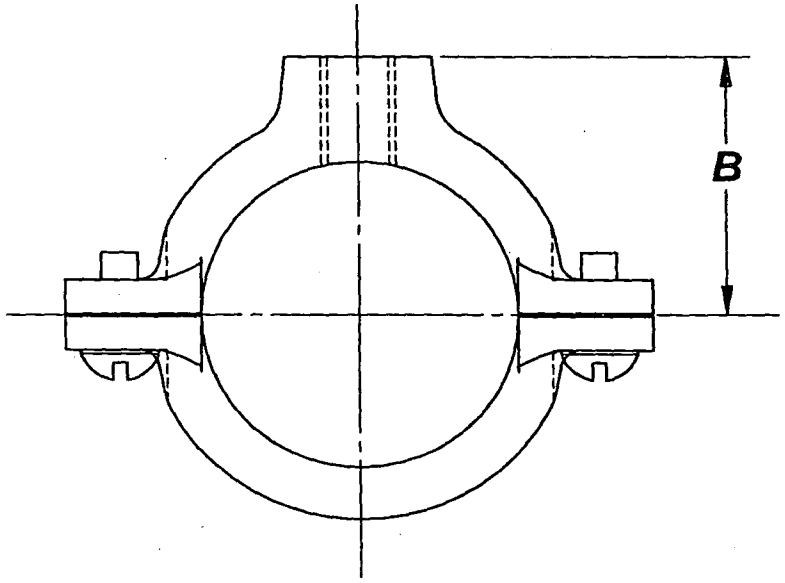
JUNIOR TOP BEAM CLAMP

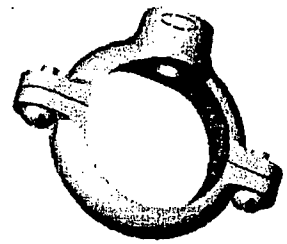
A | P/N **FIG 125** | REV.

SCALE | CAD FILE: | SHEET OF

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FOR IRON PIPE

PIPE SIZE	A	B	WT / C APPROX	MAX REC LOAD
3/8	3/8	0.69	10	180
1/2	3/8	0.82	10	180
3/4	3/8	0.94	12	180
1	3/8	1.06	14	180
1-1/4	3/8	1.23	19	180
1 - 1/2	3/8	1.31	21	180
2	3/8	1.62	30	180

USE FIG 385
FOR SIZES 2-1/2 THRU 4

COMPLIES WITH WWH-171D TYP 25

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS +/- 1/8 DECIMALS .XX +/- .03 .XXX +/- .01 ANGLES .XX + 1

MATERIAL
DUCTILE IRON

DO NOT SCALE DRAWING

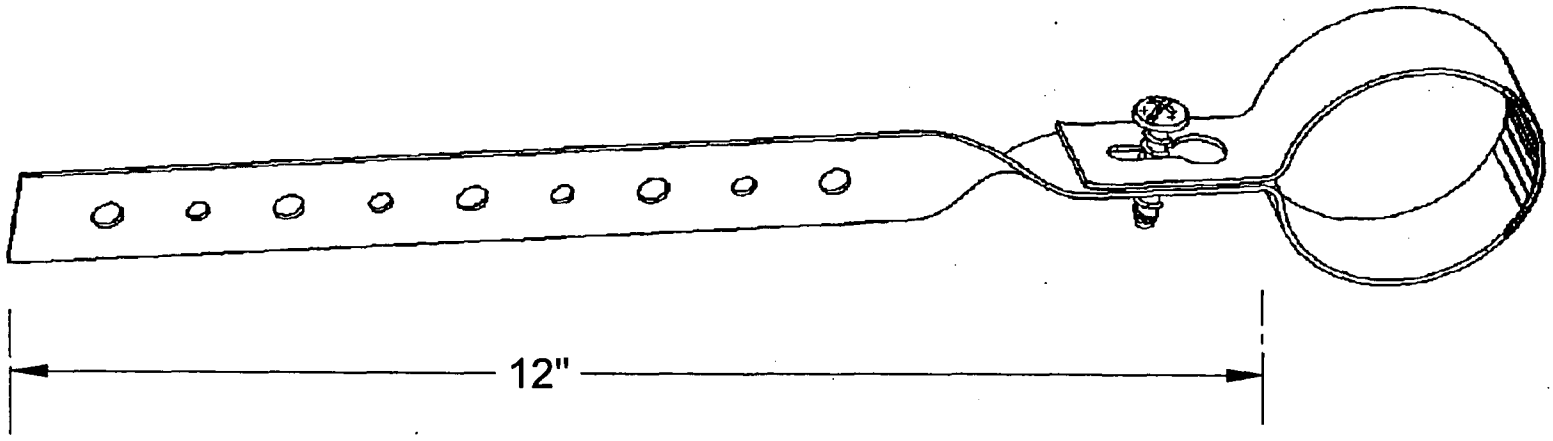
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APPROVALS	DATE
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CHECKED SB	11/05

GREENFIELD MFG CO
920 LEVICK ST , PHILA.,PA. 19111

P/N **SPLIT RING HANGER**
A **FIG 202** REV.
SCALE CAD FILE: **202.SLDDRW** SHEET OF

SIZE	MATERIAL
1-1/2	18 GA X 3/4
2	18 GA X 3/4
3	16 GA X 3/4
4	16 GA X 3/4

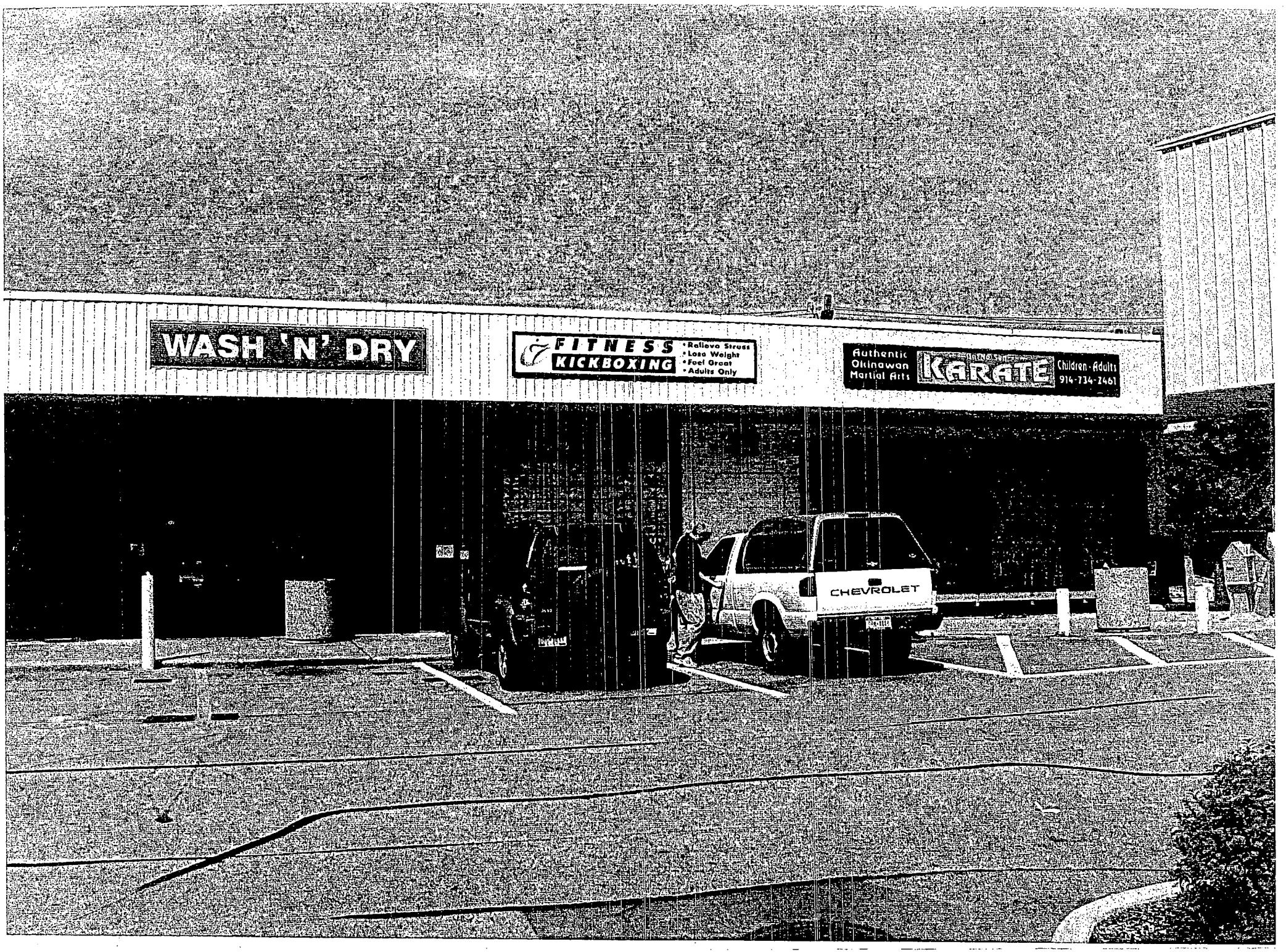


MAXIMUM REC LOAD
150 LBS
SAFTEY FACTOR = 4

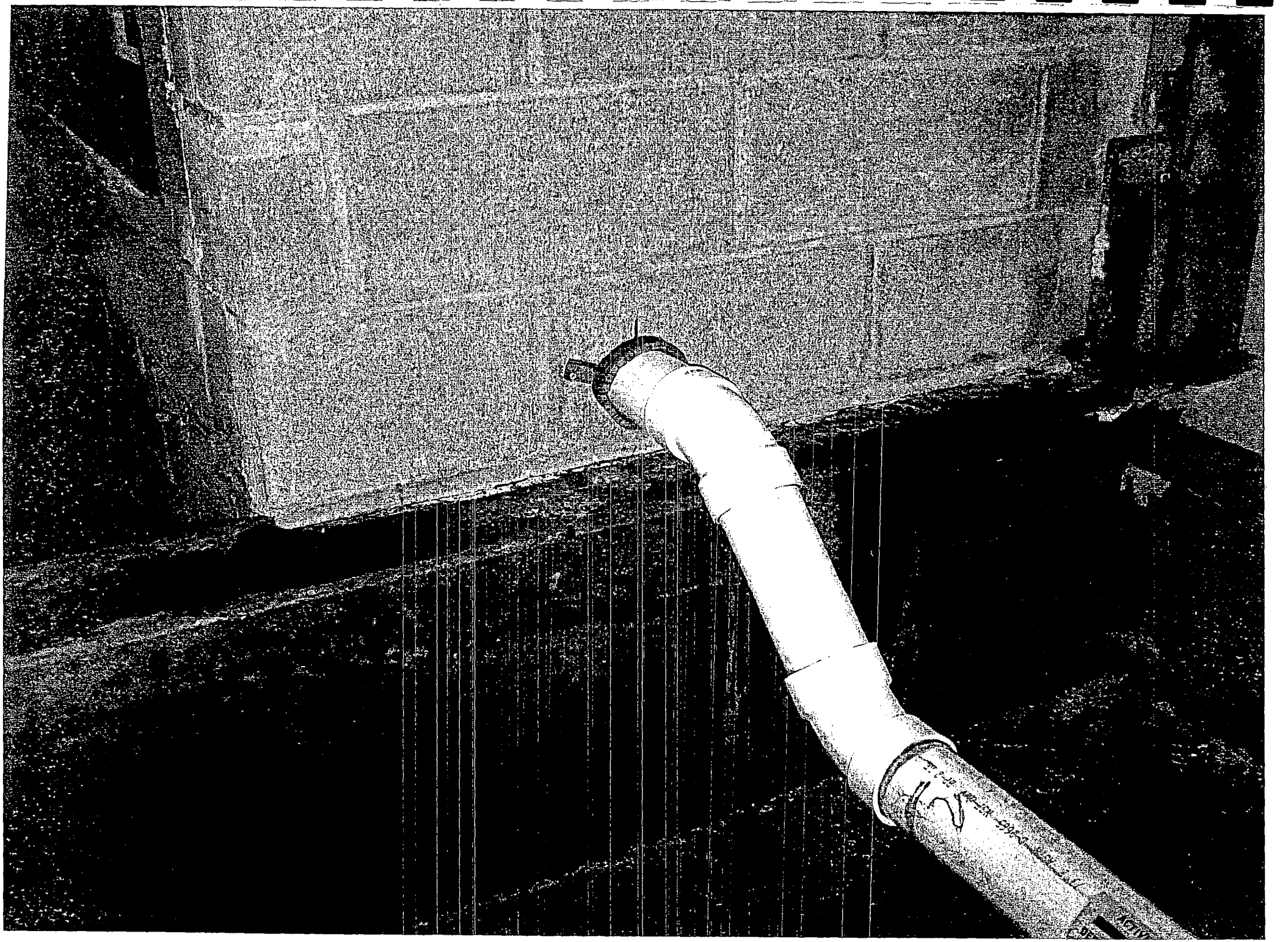
MATERIAL GALV. STEEL		**Greenfield Mfg Co** **920 Levick St , Phila.,Pa. 19111-5498**		
FINISH NONE	TOLERANCES XXX XX FR	Dr. EG Chk. SB Appr. sb Date 4/10/03	**DWV HANGER (UNCOATED)**	
			FSCM 98320	P/N **FIG - 120**

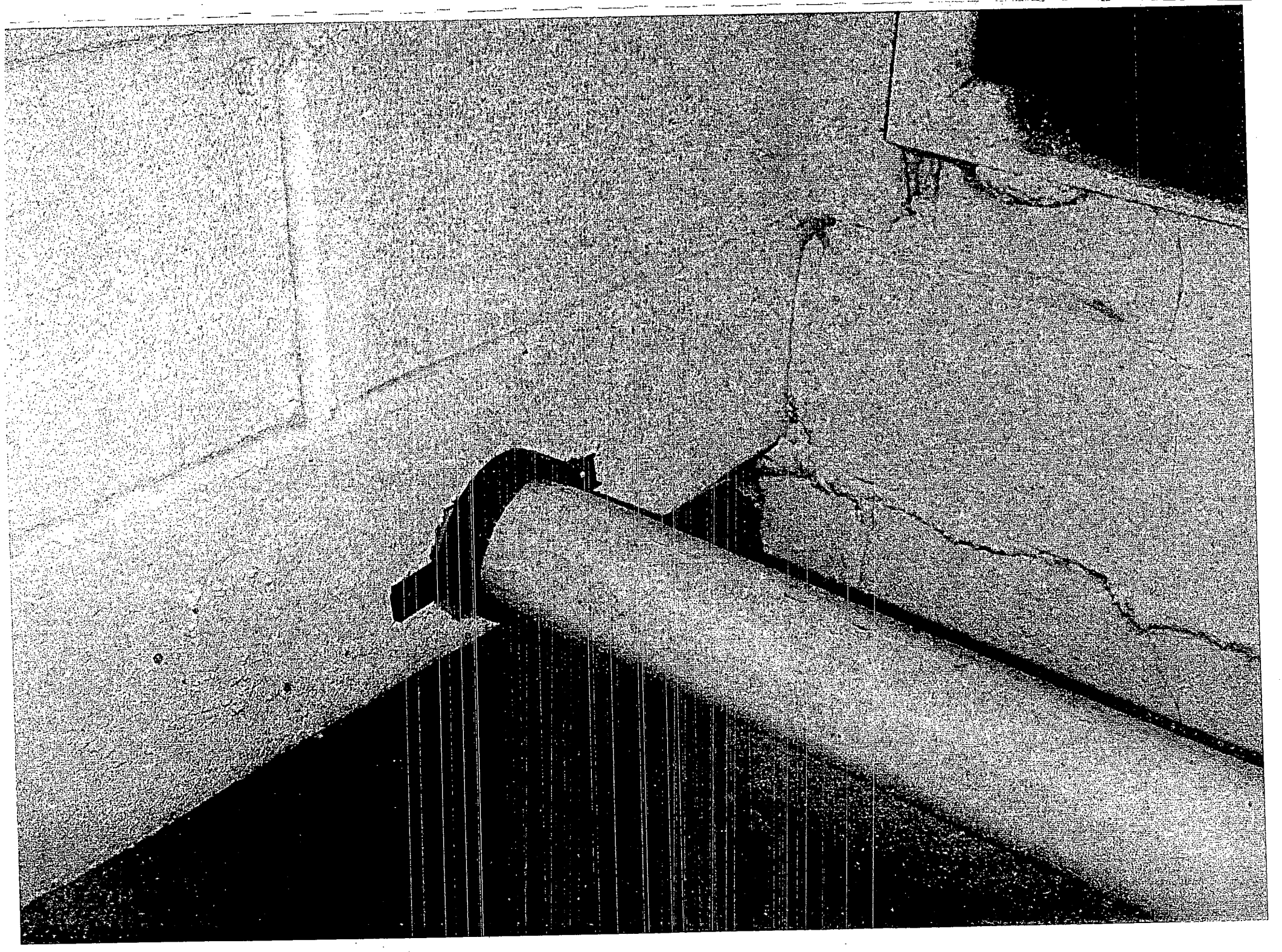
ATTACHMENT

10


WASH 'N' DRY
FITNESS KICKBOXING
•Relieve Stress
•Lose Weight
•Feel Great
•Adults Only
Authentic Okinawan Martial Arts
KARATE
Children · Adults
914-734-2461
CHEVROLET

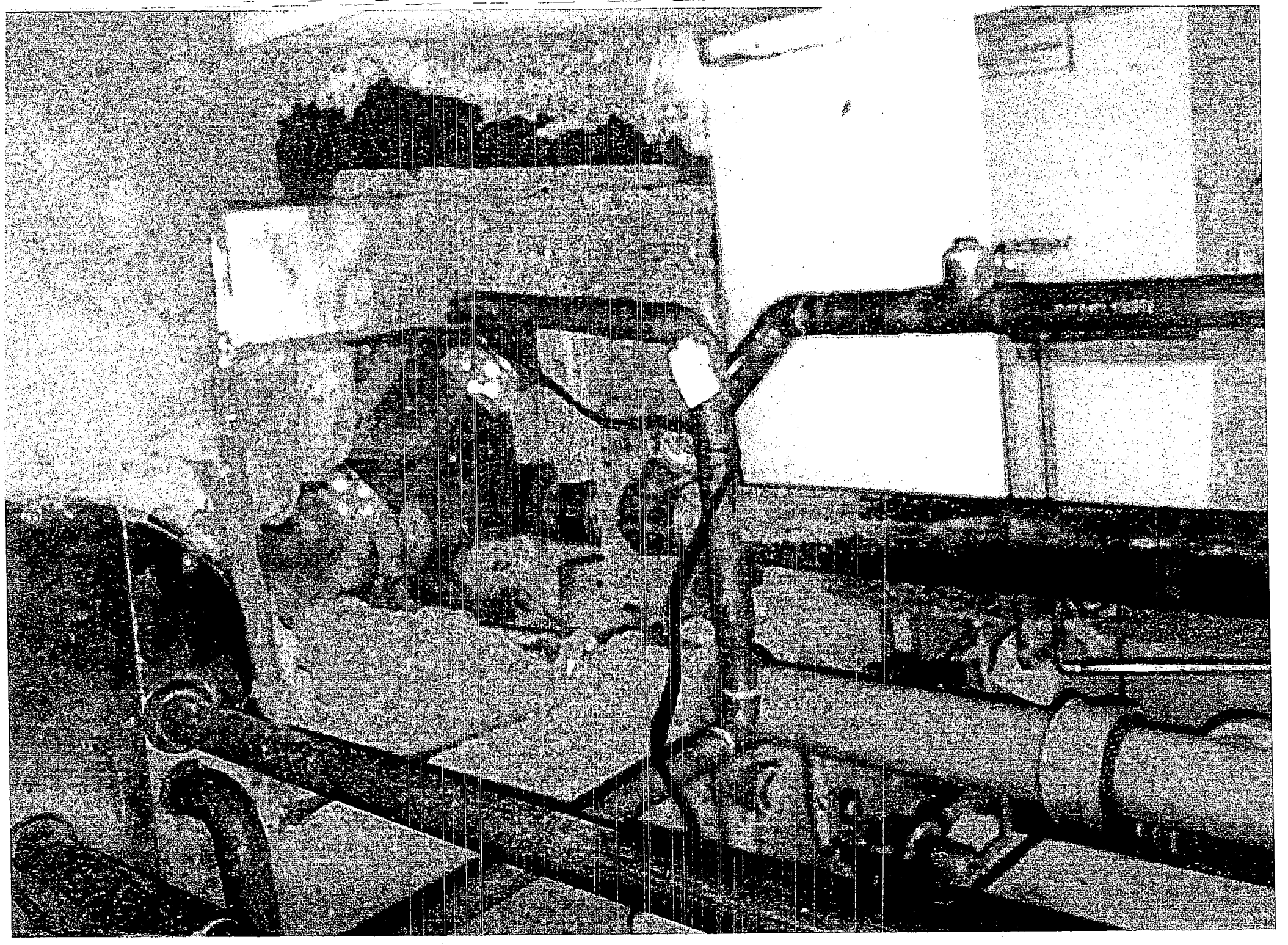




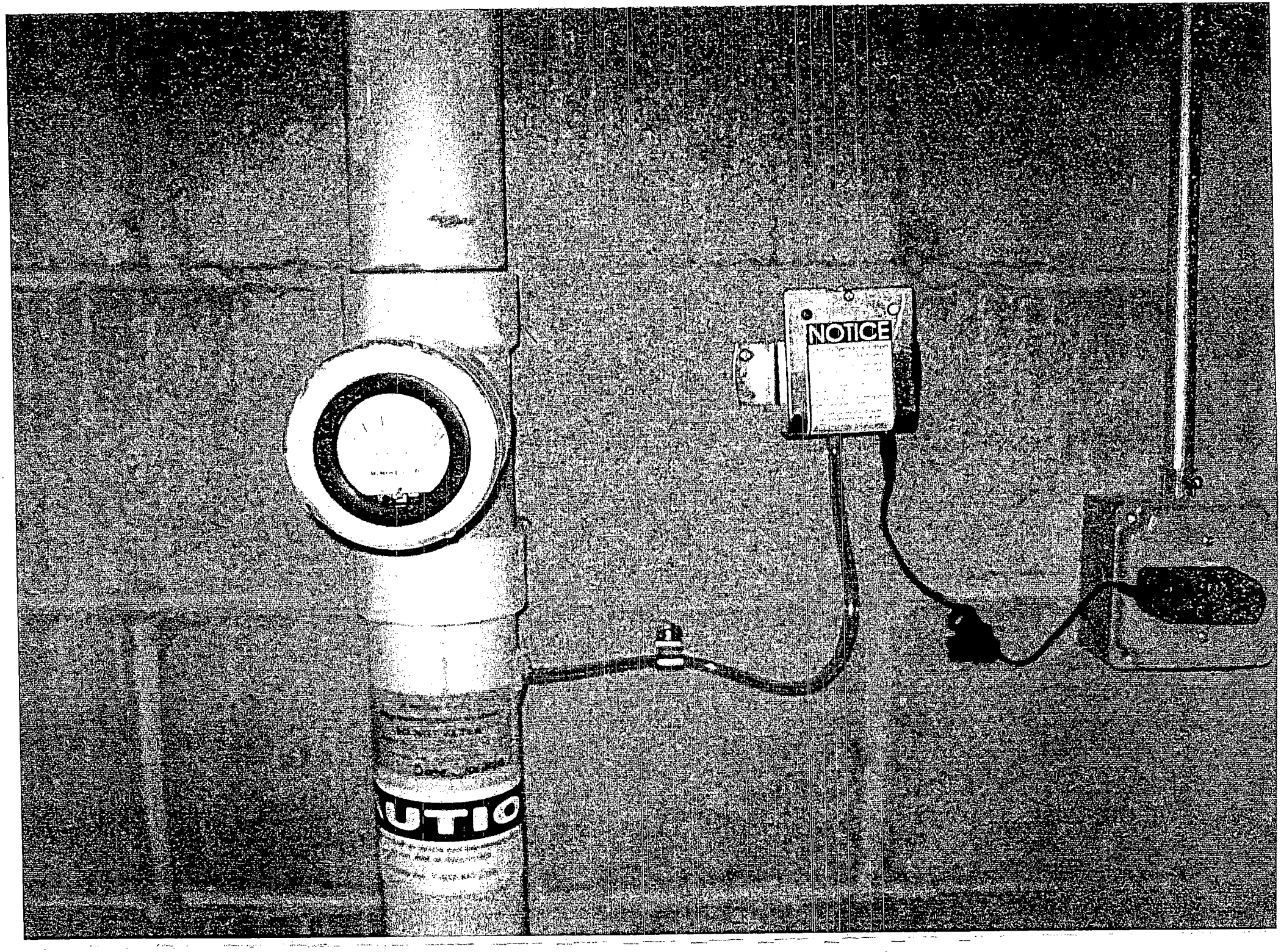


DIRECTION OF FLOW

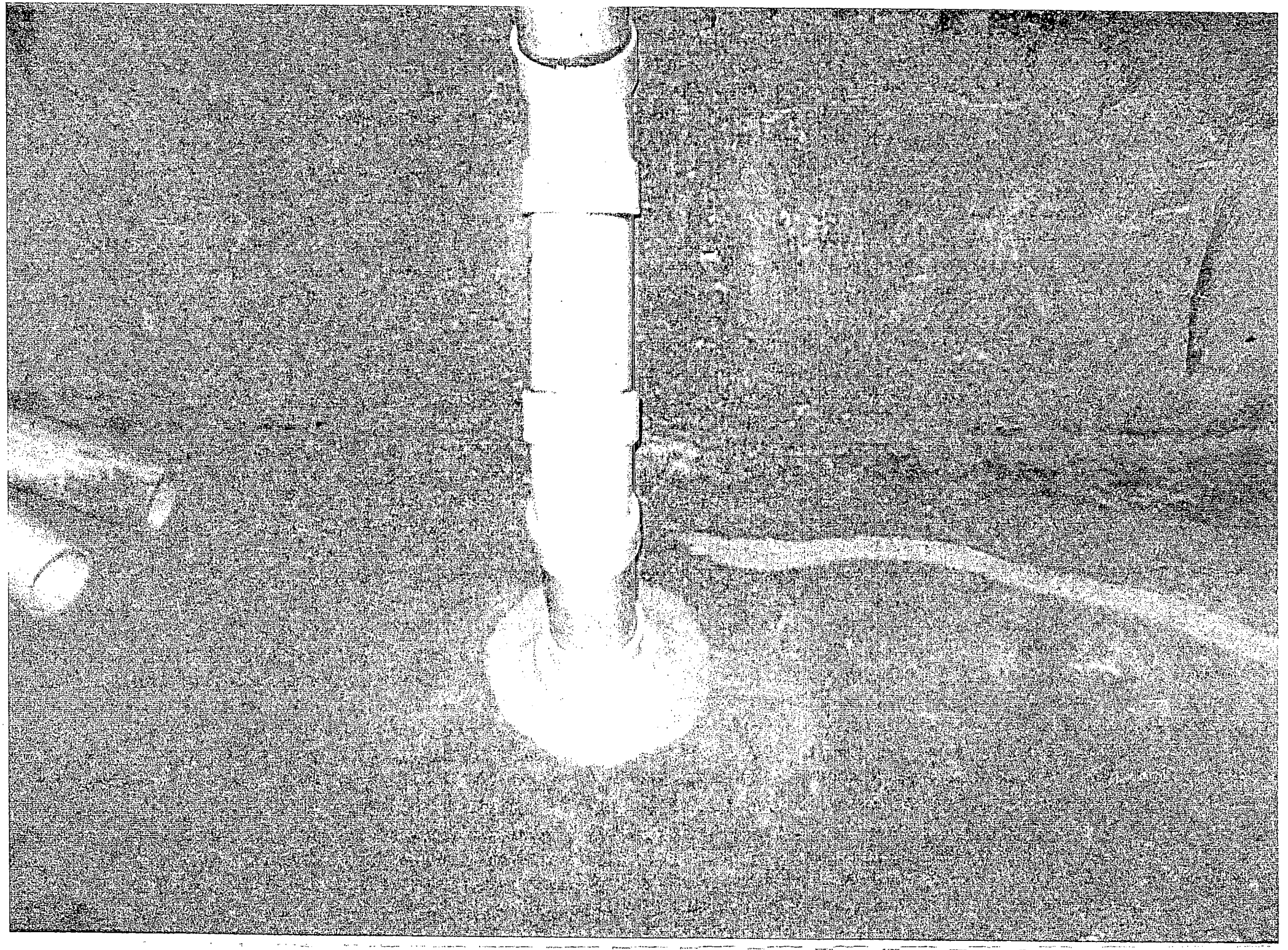
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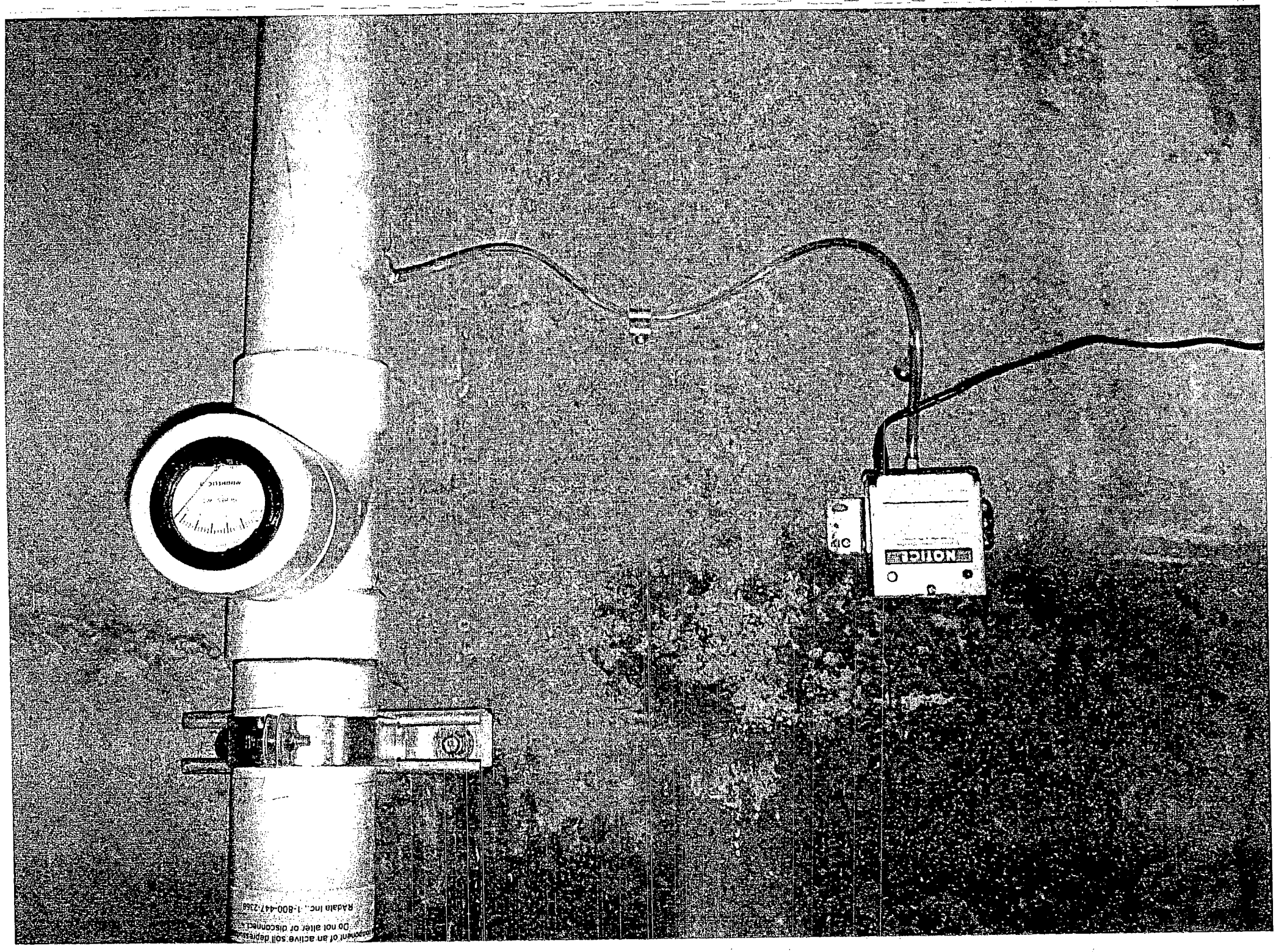


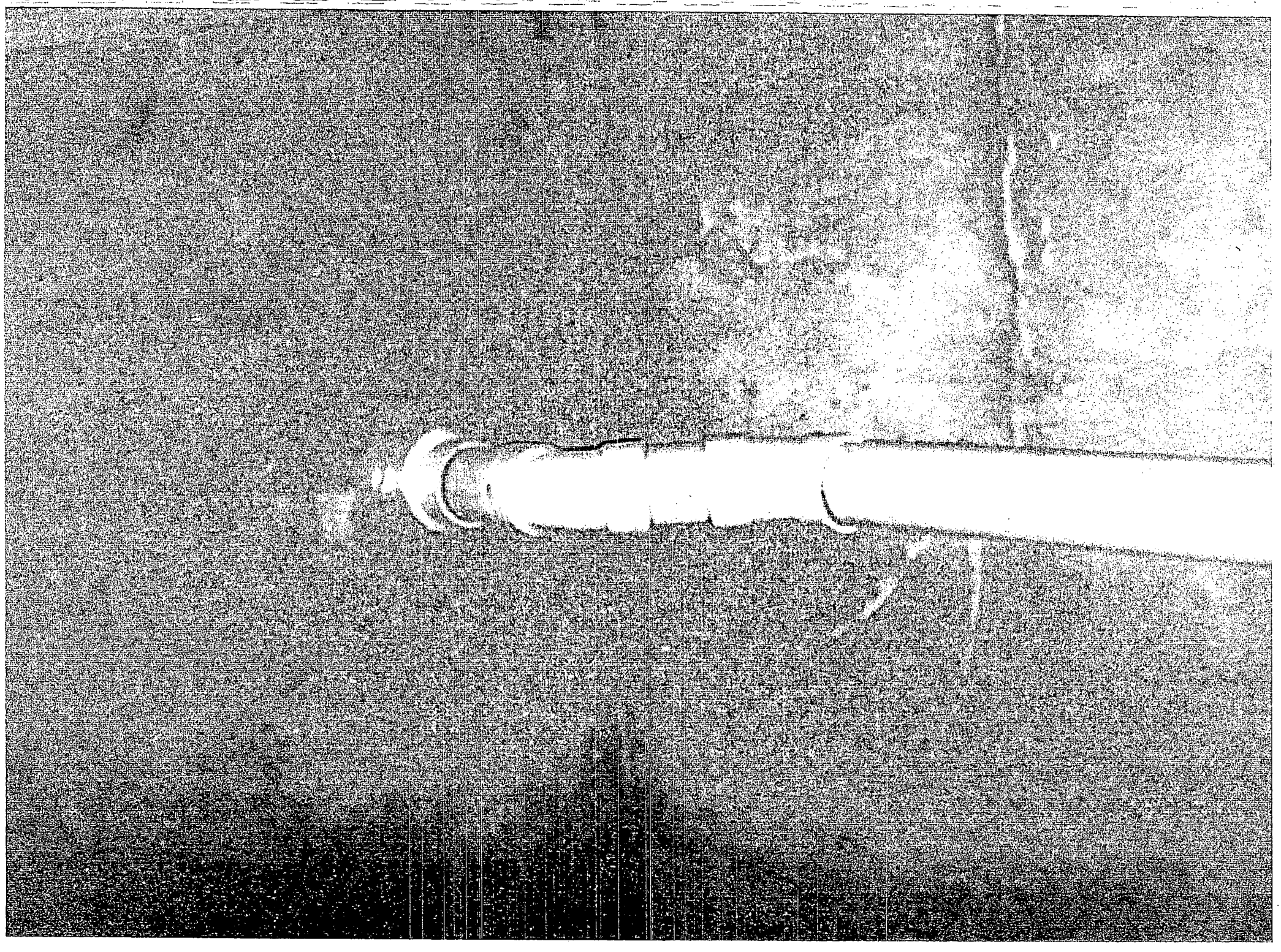



NOTICE

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NOTICE
Radalin Inc., 1-800-447-2366
Do not alter or disconnect.




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APPENDIX D

SITE SPECIFIC HEALTH AND SAFETY PLAN
PEEKSKILL PLAZA SHOPPING CENTER
20 WELCHER AVENUE
PEEKSKILL, WESTCHESTER COUNTY, NEW YORK

Prepared For:
Peekskill Plaza
20 Welcher Avenue
Peekskill, New York

Prepared By:
BELL Environmental Consultants, Inc.
230 Route 206, PO Box 632
Flanders, New Jersey 07836
November 2007
BELL Project # EOGO1-93042-07

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ATTACHMENT B

SITE HEALTH AND SAFETY PLAN
REVIEW RECORD

1.0 INTRODUCTION

Personnel involved in the field investigation activities at the Peekskill Plaza Shopping Center (herein referred to as the site) may be potentially exposed to many different hazards which include:

- Inhalation of toxic airborne contaminants;
- Skin contact with contaminated soil and water;
- Presence of flammable/combustible atmospheres;
- Oxygen-deficient atmospheres;
- Heat stress or cold exposure due to personal protective equipment and air temperatures; and
- Physical hazards (e.g., working near heavy equipment, accidental falls, etc.).

Sufficient preparation is necessary before performing work at the site in order to minimize the risk of injury or illness.

1.1 PURPOSE

The purpose of this Site Specific Health and Safety Plan (SSHSP) is to provide Bell Environmental Consultants, Inc. (BELL) personnel and assigned subcontractors with protection standards, mandatory safety practices, procedures, and contingencies while performing operations in potentially hazardous environments. This SSHSP has been prepared in accordance with the following regulations:

- Occupational Safety and Health Administration (OSHA) Standards for General Industry, 29 CFR 1910 (especially 29 CFR 1910.120 "Hazardous Waste Operations and Emergency Response").
- OSHA Standards for Construction Industry, 29 CFR 1926.
- National Institute of Occupational Safety and Health (NIOSH), OSHA, U.S. Environmental Protection Agency (U.S. EPA), and U.S. Coast Guard "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities," October, 1985.

- ANSI Z358.1 Emergency Eyewash and Shower Equipment
- ANSI Z88.2 Practices for Respirator Protection
- ANSI Z87.1 Practice for Occupational and Educational Eye and Face Protection
- State Department of Health Guidance Document for Community Health and Safety and Community Air Monitoring Plans

2.0 ROLES AND RESPONSIBILITIES

The chain of command for safety and health-related issues during all activities at the site is presented below.

2.1 ALL PERSONNEL

All BELL and subcontractors' personnel shall adhere to the requirements of this SSHSP. Any unsafe conditions or practices, accidents, illness, or questions shall be promptly reported to the Site Safety and Health Officer (SSHO) and to the Project Manager.

2.2 BELL PROJECT MANAGER

Before the start of any onsite activities, the Project Manager will assign industrial hygiene support personnel to oversee and implement safety and health procedures as required during onsite work. This support staff will also include the SSHO.

The Project Manager will also be responsible for:

- Providing overall supervision of all safety and health procedures involved for the project;
- Establishing and ensuring that BELL personnel, subcontractor personnel, and all visitors comply with the site control zones and all safety and health procedures outlined in this HASP; and
- Investigating accidents and preparing any incident reports that may be required.

2.3 BELL SITE SAFETY AND HEALTH OFFICER

The SSHO will be present on the site as required for site work and remedial work and will be responsible for compliance with the SSHSP. The SSHO will report directly to the Project Manager on all project-related safety and health matters.

Responsibilities of the SSHO will include:

- Ordering a cessation to onsite activities when unsafe conditions create unacceptable safety or health risks;
- Providing a safety and health briefing to all personnel working on the site prior to those persons entering the exclusion zone;

- Conducting and documenting all necessary monitoring of environmental conditions at the site, including monitoring of heat stress and cold exposure;
- Supervising decontamination procedures to ensure the complete decontamination of all personnel, tools, and equipment;
- Supervising the distribution, use, maintenance, and disposal of personal protective clothing and equipment;
- Ensuring that all personnel assigned to the project meet the medical and training requirements for hazardous waste operations as delineated in the regulations and guidance outlined in Section 1.1; and
- Evaluate the need for and implement changes in personal protective clothing and equipment during the course of onsite operations.

2.4 KEY PERSONNEL

The key personnel assigned to the Site by this SSHSP are listed below:

Title	Name
Project Manager	Lori L. Calestini
SSHO	Douglas R. Keane
Other Field Personnel	Marianne Brody

3.0 SITE DESCRIPTION AND HISTORY

3.1 SITE DESCRIPTION

The site contains a shopping center known as Blue Mountain Plaza, which is located in Peekskill, Westchester County, New York. The shopping center consists of three buildings and a large paved parking area. Currently, the shopping center is occupied by the following tenants: A&P supermarket; McDonald's restaurant; a dry cleaner; a laundromat; a beauty salon; a bank; and several other restaurants. The site location map is provided in Figure 1.

The site encompasses approximately 5.4 acres and is bordered by the following: to the west by South Street, across which is the New York Central Railroad rail line; to the north and east by Merl Corporation, a hazardous waste generator; and to the south by Welcher Avenue, across which is a single-family residence and a Mobil gasoline service station. The site topography is relatively level. Stormwater runoff flows towards the onsite storm drains, which eventually discharge to the municipal stormwater sewer system. A general site configuration is shown on Figure 2.

3.2 SITE HISTORY

The site was vacant until sometime between 1941 and 1951, at which time a house was constructed. In the late 1950's, the site was utilized as a minor league baseball field and a stock car race track. The house and all other structures were demolished in 1958 during construction of the present-day shopping center.

In 1988, an Environmental Assessment was conducted for the site by Environmental Risk Limited (ERL) on behalf of a prospective purchaser of the property. The purpose of the assessment was to determine the past and present land use practices of the property and to investigate and characterize the soils and ground water to evaluate overall environmental quality and assess any existing contamination. ERL installed four ground water monitoring wells (PS-1, PS-2, PS-3, and PS-4) and collected ground water samples for analysis of toxic metals, volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs). Four soil samples were collected during monitoring well installation and submitted for analysis of toxic metals, VOCs, and PCBs. Evaluation of the ground water analytical results indicated that no toxic metals or PCBs were detected. However, tetrachloroethylene was detected in the ground water sample collected from monitoring well PS-4 at a concentration of 140.0 parts per billion (ppb), which exceeds the NYDEC Guidance Value of 0.7 ppb. PS-4 also contained 1,2-dichloroethylene and trichloroethylene at concentrations below the applicable NYDEC Guidance Values. ERL concluded that the dry cleaning establishment was the potential source of the chlorinated

compounds. The soil sample collected from PS-4 contained 1,2-dichlorethane at a concentration exceeding the NYDEC Guidance Value.

ERL conducted a second investigation in 1988 which included the installation of three additional ground water monitoring wells (PS-5, PS-6, and PS-7), collected soil samples during well installation, and sampled the new wells in addition to PS-4. Samples were submitted for analysis of VOCs. Tetrachloroethylene was detected in the ground water samples collected from PS-4, PS-6, and PS-7 at concentrations exceeding the NYDEC Guidance Value. Soil samples collected from PS-6 and PS-7 also contained tetrachloroethylene at concentrations exceeding the standards. Toluene was also detected in soil samples.

The site has previously been evaluated by the New York Department of Environmental Conservation (NYDEC) for placement on the "Inactive Hazardous Waste Disposal Sites" list. An Order of Consent was entered into by Peekskill Plaza and the NYDEC for the purpose of developing and implementing a Preliminary Site Assessment (PSA) in order to characterize potential hazardous wastes at the site, and allow the NYDEC to determine the risks involved to public health or the environment. In December 1993, the NYDEC prepared a PSA workplan which proposed the installation of four ground water monitoring wells with the collection of ground water and soil samples from each well for analysis of target compound list (TCL) volatiles.

4.0 PURPOSE AND SCOPE OF SSHSP

The main objective of the field investigation is to gather the data necessary to evaluate the possible need for further activities and if needed, to allow for an evaluation of the appropriate methods for these activities. In order to best utilize the data generated during the investigation to support the decision-making process, a clear definition of the objectives and procedures for data collection is required. The specific objectives of the field investigation are to:

- Identify and characterize the nature of the contaminants in the soil and ground water;
- Identify any volatile organic vapors present within onsite soils;
- Determine aquifer characteristics;
- Collect data adequate to allow assessment of the extent to which the detected contaminants pose a threat to the public health, welfare, or the environment; and
- Assess what, if any, further activities are warranted.

Specific field work tasks are outlined in detail in the Quality Assurance Project Plan (AQPP). Health and safety concerns that may arise during the performance of these tasks are outlined below:

- Potential exposure to tetrachloroethylene (PCE), xylene, and/or toluene during monitoring well installation and sampling activities. This SSHSP addresses the potential of exposure to workers involved in drilling/excavation activities at the site; and
- Potential exposure to high levels of VOCs during drilling/sampling/UST removal activities or the performance of a soil vapor survey.

5.0 HAZARD ANALYSIS

This section assesses the chemical and physical hazards that are known to presently exist at the site and those that may be created as a result of work on the site as outlined in the Scope of Work.

5.1 CHEMICAL HAZARDS

Exposure to tetrachloroethylene, toluene, 1,2 dichloroethane, 1,2 dichloroethylene, and trichloroethylene, as detected during the performance of an Environmental Assessment by ERL, exist for all BELL employees, subcontractors, and authorized personnel while working at the site. The compounds detected during the assessment are listed in Section 3.2 of this document. A summary of the exposure symptoms and exposure guidance for contaminants of concern known to exist at the site are listed in Table 1. Precautions have been established to minimize the risk of skin contact with contaminated soil and water, as well as from inhalation of any contaminant. Proper and regular use of PPE shall be followed as outlined in Section 9.0 to reduce the risk of inhalation or skin exposure. Routine air monitoring as outlined in Section 8.1 shall be conducted at the site to ensure the safety for all those potentially exposed.

As with all hazards, safe work practices shall be followed at all times as outlined in Section 10.5.

5.2 PHYSICAL HAZARDS

All BELL employees, subcontractors, and authorized personnel will potentially be subject to not only the hazards of contamination, but also to the dangers presented by various task activities. In addition, heat stress associated with working in personal protective equipment and cold exposure may be encountered. Potential physical hazards expected to be present at the site during field investigations include but are not limited to the following:

- Drilling/ Excavating equipment;
- Excessive noise;
- Energized overhead and underground utility lines;
- Heat stress;
- Cold exposure;

- Ticks and biting insects;
- Sunburn/sunglare; and
- Poison ivy.

Most of the physical hazards listed above can be abated through the use of safe work practices as outlined in Section 10.5 during drilling, as well as the exercise of common sense. Some hazards, however, require special and additional precautionary measures which are discussed below.

5.2.1 Drilling/Excavating Hazards

The operation of a drill rig/excavator places employees and bystanders at risk. Equipment must be placed on a stable location to avoid the collapse of unstable structures underneath. Additionally, to prevent electrocution hazards, activities must not occur near underground and above ground utilities and must not be operated under adverse weather conditions. The equipment must be operated in a place that does not present hazards to field personnel due to moving and falling tools, equipment, and the potentially contaminated soil which is removed. The area in which the equipment is to be operated, must be demarcated with barriers to prevent bystanders from entering a hazardous zone. Work zones must include adequate buffer zones between the actual work area and the support zone. Standard traffic cones are not generally adequate in this situation, due to their low vertical profile, taller, 28-inch high cones can be effectively modified with warning flags and barricade tape. Safety pennants and plastic or steel "A-frame" type barricades may also be used in high traffic areas. Barriers demarcating the work zone (including a buffer area) are needed even if the site is inactive during work operations. Personnel shall be required to wear hard hats, with BELL personnel required to stand a minimum of 15 feet away from the equipment being used.

5.2.2 Heat Stress

All personnel entering the immediate work area or Exclusion Zone should be familiar with the signs and symptoms of heat stress, which include but are not limited to the following:

- Heat cramps--painful contractions of voluntary muscles;
- Heat exhaustion--dizziness, lightheadedness, slurred speech, rapid pulse, confusion, fainting, fatigue, copious perspiration, cool skin that can be pale and clammy, and nausea.
- Heat stroke--hot, dry, flushed skin; delirium, and coma in some cases.

Heat stress can be prevented by resting frequently in a shaded area and consuming large quantities of fresh, potable water and electrolyte-replenishing fluids (i.e., Gatorade). If heat exhaustion symptoms are observed, the person will be required to rest in a shaded area and consume the above-mentioned liquids.

If symptoms are wide spread among the field workers or are observed frequently, an appropriate work/rest schedule will be implemented to ensure the safety of all personnel. This may involve limiting the amount of work period so that after one minute of rest, a worker's heart rate will not exceed 110 beats per minute. If the heart rate is higher than 110 beats per minute, the next working period should be shortened by 33 percent, while the length of the rest period remains constant. If the heart rate continues to exceed 110 beats per minute, the following working period shall be shortened by an additional 33 percent. A worker's heart beat at rest should be determined prior to the beginning of work. A healthy individual's resting heart rate is typically 60-72 heart beats per minute.

If the symptoms of heat stroke are observed, the victim will immediately be transported to the nearest hospital (Attachment A). Workers should not hesitate to seek medical attention if heat stroke is suspected.

5.2.3 Cold Exposure

Ambient temperatures at the site, when combined with the effects of windy conditions and water, can contribute to the effects of cold exposure. Temperatures do not need to be below freezing for the symptoms of cold exposure to develop. Cases of hypothermia are often reported at temperatures between 45 and 50 degrees Fahrenheit when conditions are wet and winds speeds are moderate. Pain in the hands and feet are usually the first warning signs of the danger of cold stress. Severe shivering indicates that the body temperature has fallen to 95 degrees Fahrenheit or below. If this condition is observed, immediate removal of the worker to a warmer area is advised. Other symptoms indicating a need to enter a warmer area include frostnip (the feeling of excessive fatigue, drowsiness, irritability, or euphoria).

As recommended by the American Governmental Industrial Hygienists (ACGIH), when temperatures are at or below 10 degrees Fahrenheit (with wind chill considered), SSHO will be in attendance at all times, work involving heavy sweating will be ceased, and sitting or standing still in the cold temperatures will be minimized. In addition, a work-warming regimen as recommended by the ACGIH in the ACGIH Threshold Limit Values and Biological Exposure Indices for 1993-1994 may be implemented by the SSHO.

5.2.4 Personal Protective Equipment (PPE)

Personal protective equipment will be issued according to each work task's required level of protection. This is outlined in Section 9.0 of this SSHSP, and is designed to protect workers from potential exposure to contamination during the various work assignments they are given during the duration of the project. In addition, routine engineering controls and safe work practices will be implemented at the site to reduce and maintain worker exposure at or below the OSHA-regulated permissible exposure limits (PELs) or ACGIH Threshold Limit Values for the specific hazardous materials encountered at the site and listed in Table 1.

6.0 TRAINING

6.1 SITE WORKERS

All BELL and subcontractor personnel performing onsite tasks shall be trained as required by the U.S. Department of Labor OSHA Standard, 29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response." This training will include:

- A minimum of 40 hours of initial offsite instruction;
- A minimum of three days of actual field experience under the direct supervision of a trained, experienced supervisor;
- An annual eight hour "refresher" training period; and
- Respirator fit-testing.

The date of training for each site worker will be documented on the Site Worker Training and Physical Examination Record presented in Table 2.

6.2 ONSITE MANAGEMENT AND SUPERVISORS

Onsite managers and supervisors who are directly responsible for, or who supervise workers shall receive at least eight additional hours of specialized training in managing such operations. The date of this training will be documented on the Site Worker Training and Physical Examination Record presented in Table 2.

6.3 PRE-ENTRY ORIENTATION SESSION

Before entering the site or the exclusion zone, all personnel shall attend a pre-entry orientation session presented by the SSHO and designed to outline and highlight specific hazards that should be expected, planned for, and avoided. All personnel shall verify their attendance at this session by signing the SSHSP Review Record shown in Attachment B.

Any visitors entering designated work areas or the exclusion zone (see Section 10 for more detail) will also be subject to all applicable safety and health regulations during field operations at the site. The SSHO will be responsible for briefing the personnel at the site of potential contamination hazards that may be encountered, site safety, and emergency response plans. Visitors will be under the direct supervision of the SSHO and the Site Manager or his/her representative at all times.

At a minimum, the pre-entry orientation session shall address the potential health effects and hazards associated with exposure to the chemicals known or suspected to be present at the site. The physical/chemical properties and likely routes of exposure to these chemicals will also be discussed.

Personnel shall be instructed in the use, care, maintenance, limitations, and fitting of personal protective equipment. Respirator training shall conform to ANSI Z88.2 (1980) and OSHA 29 CFR 1910.134. Personnel shall not be fit-tested or issued a respirator if facial hair interferes with the face-to-faceplate seal of the respirator. Qualitative fit testing shall be performed annually. Records of the fit testing shall be maintained. Positive/negative fit testing shall be performed by the user each time the respirator is donned.

Other items to be discussed include decontamination procedures, safe work practices, emergency procedures, and medical and training requirements.

7.0 MEDICAL REQUIREMENTS

All site workers and visitors must have satisfactorily completed a comprehensive physical examination within the past 12 months as per 29 CFR 1910.120. The protocol for medical examinations is determined by the examining physician. However, the minimum requirements for initial and interim examination of each site worker, including subcontractors, will be documented on the Surveillance Protocol for Field Workers shown in Table 3.

8.0 ENVIRONMENTAL MONITORING

8.1 GENERAL/ COMMUNITY AIR MONITORING PLAN

A total volatile organics instrument shall be used to periodically check the concentrations of airborne volatiles at the site. A Community Air Monitoring Plan (CAMP) has also been incorporated into the environmental monitoring for volatiles and particulates for the downwind perimeter of each designated work area when certain activities are in progress. The intent of the CAMP is to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The CAMP also provides a means to confirm that work activities did not spread contamination off-site through the air.

A photoionization detector (PID) (e.g., Hnu system) or OVA with a flame ionization detector (FID) will be used to screen all work areas for volatile organic compounds and to measure worker breathing zone levels of organic vapors and gases during investigative activities. Flammable/combustible gases shall be monitored using a combustible gas indicator (CGI)/oxygen analyzer.

The PID shall be used in all areas of site work, which includes drilling/excavating locations and decontamination areas. In addition to the PID, the CGI shall be used during monitoring well installation. A table listing the monitoring instrument usage requirements can be found in Table 4. Measurements will be recorded in the Environmental Monitoring Record provided in Table 5.

8.2 PERIMETER MONITORING

Periodic perimeter monitoring shall be conducted at least each day using a total volatile organics direct-reading instrument at locations both upwind and downwind at the perimeter of the site. Additionally, particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone for all ground intrusive activities (i.e. soil excavation, test pitting or trenching, and installation of soil borings and monitoring welis). Visual observations will also be made. Measurements will also be periodically taken downwind of each active work area to assess the affect of work on the potential for offsite migration of contaminants. Periodic upwind measurements will also be used to establish background concentrations. Periodic monitoring for volatile organic compounds will be required during non-intrusive activities (i.e. the collection of soil and sediment samples, or the collection of ground water samples from existing monitoring wells). If airborne levels of volatile constituents or particulates exceed action levels on average for fifteen minutes at the perimeter of the exclusion zone, then the exclusion zone will be expanded to include all areas subjected to elevated levels. If these measures are not

effective and action levels continue to be exceeded, workers shall upgrade to Level C. If levels of airborne constituents exceed background levels at the perimeter of the site, work will be stopped and the suspected source of the constituents (i.e., borehole) will be covered to halt emissions, and the Project Manager will be notified. A decision will then be made as to how best to proceed with the work and how to more fully characterize and control the airborne emissions.

8.2.1 Upgradient/Downgradient Action Levels

General action levels established for the PID measurements are based on volatile organic compounds (VOCs) which were identified in soil samples analyzed from the site, and typical chlorinated solvents used in dry cleaning establishments. The particulate monitoring will be performed using a PDR 1000 data-logging aerosol monitoring. The level of PPE required may be upgraded/downgraded by the Project Manager and Corporate Health & Safety Officer and is based on the following general action levels (see Section 9.0 for PPE).

Volatile Organic Compound Action Levels:

0-5 ppm total VOCs - Level D

5-25 ppm total VOCs - Level C

> 25 ppm total VOCs - stop work, institute vapor control

The following table represents the **8**-hour time weighted averages (TWA) for the specific compounds detected at the site:

Compound	TWA (ppm)
toluene	200
tetrachloroethylene	25
trichloroethylene	50
1,2 dichloroethane	50
1,2 dichloroethylene	200

Airborne Particulate Action Levels (Based on 15-minute average):

0-100ug/m^3 PM-10 particulate level (or air dust is observed leaving area) – dust suppression techniques must be employed and work may continue provided downwind particulate levels do not exceed 150 ug/ m^3 above the upwind particulate level and provided no visible dust is migrating from the work area.

>150 ug/ m^3 above upwind particulate levels – work must be stopped and reevaluation of activities initiated. Work may resume provided that dust suppression measures and controls are successful in reducing the downwind PM-10 particulate concentration to within 150 ug/m^3 of the upwind level and in preventing visible dust migration.

All readings will be recorded and will be available for State personnel to review.

8.2.2 Calibration and Maintenance

All direct-reading instruments must be calibrated on a daily basis and documented in the equipment calibration log with the exception of the aerosol monitors that are calibrated annually by the manufacturer (MIE). A known concentration of a specific gas (usually isobutylene or methane, depending upon the type of instrument being used) will be used for the calibration. Instructions in the manufacturer's operations manual regarding cleaning and maintenance shall be followed.

8.2.3 Recordkeeping Requirements

The results of air monitoring measurements for each instrument shall be recorded on standard air monitoring data forms illustrated in Table 5. For measurements taken periodically, readings at the anticipated source and in the breathing zone must be recorded at least twice for each new monitoring well location. More frequent monitoring may be conducted at the discretion of the SSHO. At the end of each work day, the SSHO will document each instance of non-compliance (if any) with the SSHSP corrective action specified, and whether responsible workers responded to the corrective action. All exposure monitoring records will be attached to the master copy of this SSHSP and submitted to the Project Manager at the completion of project activities. A calibration and maintenance log for each instrument shall also be kept.

8.3 MONITORING INSTRUMENTS

8.3.1 Volatile Organic Monitoring

A total volatile organics instrument shall be used to periodically check the concentrations of airborne volatiles at the site. A photoionization detector (PID) will be used to screen all work areas for volatile organic compounds and to measure worker breathing zone levels of organic vapors and gases during field activities.

A PID operates on the theory of the electromagnetic spectrum. An electrical pump pulls the sample of air past an ultraviolet (UV) light source. Constituents of the sample are ionized, producing an instrument response if their ionization potential (IP) is equal to or

less than the ionizing energy supplied by the instrument's UV lamp source (e.g., 11.7 eV, 10.2 eV). The radiation produces an ion pair for each molecule of contaminant ionized. The free electrons produce a current directly proportional to the number of ions produced. This current is amplified, detected, and displayed on the meter. The meter displays total organic gas and vapor concentration in parts per million (ppm).

There are limitations associated with the use of a PID. Detection limits are typically higher than with analytical methods. The PID analyzes for a broad range of contaminants and is not contaminant specific. The specificity depends on the sensitivity of the detector to the compounds being measured, the number of interfering species present, and the concentration of the compounds being measured relative to interferences. Optimum specificity can be obtained by choosing the UV lamp source that best suits the potential contaminants of concern. Physical test conditions such as temperature and relative humidity may affect the results. Additionally, needle fluctuations (movement) are exacerbated by movement of the instrument. Consistency in the meter reading technique is extremely important.

8.3.2 Combustible Gas Indicator/Oxygen Meter

Monitoring for flammable/combustible gases shall be performed using a combustible gas indicator/oxygen analyzer. An oxygen meter has two principle components for operation, the oxygen sensing device and the meter readout. A typical sensor consists of the following: two electrodes; a sensing electrode and a counting electrode; a housing containing a basic electrolyte solution; and a semipermeable Teflon membrane. Oxygen molecules diffuse through the membrane into the solution. Reaction between the oxygen and the electrodes produces a minute electric current that is directly proportional to the sensor's oxygen content. This current passes through the electronic circuit and the resulting signal is shown as a needle deflection on a meter (or an LCD readout), that is usually calibrated to read 0 to 10%, 0 to 25%, or 0 to 100% oxygen in air.

A CGI measures the concentration of a flammable vapor or gas in air, indicating the results as a percentage of the Lower Explosive Limit (LEL) of the calibration gas, usually methane or pentane in air. The LEL of a combustible gas or vapor is the lowest concentration by volume in air that will explode, ignite, or burn when there is an ignition source. The Upper Explosive Limit (UEL) is the maximum concentration by volume in air that will explode, ignite, or burn when there is an ignition source. Above the UEL, there is insufficient oxygen to support combustion so ignition is impossible. Below the LEL, there is insufficient fuel to support ignition.

The CGI's operation is based on the fact that a measurable amount of heat is released when a combustible gas or vapor is burned. Most CGI's operate on the "hot wire" principle. In the combustion chamber, a platinum filament is heated. The platinum filament is an integral part of a balanced resistor circuit called a Wheatstone Bridge. The

hot filament combusts the gas on the immediate surface of the element, thus raising the temperature of the filament. As the temperature of the filament increases, so does its resistance. This change in resistance causes an imbalance in the Wheatstone Bridge. This is measured as the ratio of combustible vapor present compared to the total required to reach the LEL. For example, if the meter reads 0.5 (or 50, depending on the readout), this means that 50% of the concentration of combustible gas needed to reach an unstable flammable or combustible situation is present. Thus, the typical meter readout indicates concentrations up to the LEL of the gas.

8.3.3 Particulate Monitoring Devices

The particulate monitoring will be performed using two MIE PDR 1000 real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedence of the action level.

8.4 HEAT STRESS MONITORING

Ambient temperatures at the site combined with the requirements for PPE use may contribute to heat stress. When ambient temperatures reach or exceed 75 degrees Fahrenheit, body temperatures will be monitored using fever strips or oral thermometers, and heart rates will be monitored when heat stress conditions occur. Work-rest regimens will be adjusted accordingly.

8.5 COLD EXPOSURE MONITORING

Ambient temperatures at the site combined with the effects of wind and water may contribute to cold exposure. Temperatures need not be below freezing before the symptoms of cold exposure are exhibited. Cases of hypothermia are often reported at temperatures between 45 and 50 degrees Fahrenheit when conditions are wet/gusty. When such conditions develop or when ambient temperatures fall below freezing, increased onsite medical surveillance will be performed to detect the development of signs or symptoms of cold exposure, including shivering, apathy or lethargy, and numbness or pain in the extremities. Those personnel exhibiting the early signs or symptoms shall have their body temperature monitored using and oral thermometer and shall receive further monitoring and first aid as necessary.

9.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Based on an evaluation of the potential hazards existing at the site, the levels of personal protection and specific PPE for each work task are listed in Table 6.

All respiratory protective equipment must be approved by the NIOSH/Mine Safety and Health Administration (MSHA). The minimum level of protective equipment required for every personnel in the exclusion zone is Level D. All subcontractors will be responsible for providing their own personal protective equipment and personal decontamination equipment for their personnel. The level of PPE required may be upgraded/downgraded at the discretion of the SSHO. These decisions will be based upon field monitoring (see Section 8.2). Modifications to Level C respiratory protection will be based on field monitoring and field conditions. Section 8.2.1 details the action levels along with the corresponding PPE that shall be worn.

9.1 MAINTENANCE AND IN-USE INSPECTION OF PROTECTIVE EQUIPMENT

For personal protective equipment to be effective, it is necessary to ensure that the equipment be properly used, maintained, and inspected throughout the day before, during, and after work periods. Procedures for these operations will be described to all personnel during pre-entry sessions.

9.1.1 Gloves/Body Coverings

Polyvinyl alcohol (PVAL), Teflon (PTFE), or Viton (FPM) gloves shall be worn at all times while working in the exclusion zone (Section 10.1.1). All gloves will be inspected on a regular basis and will be replaced promptly if torn. Tyveks, if needed, will also be inspected on a regular basis and replaced if torn.

9.1.2 Respirators

All respirators will be inspected and checked daily for leaks both visually and with negative or positive pressure checks on the personnel using them. Respirator cartridges will be replaced immediately if it is suspected that they have been subjected to gross contamination or if excessive resistance to breathing develops. All respirator maintenance will be performed by the worker with assistance and periodic inspection by the SSHO.

The exteriors of all respirators will be wet-wiped whenever workers exit the work areas, as specified in Section 11.4. All respirators will be rinsed with a solution containing a sanitizer recommended by the respirator manufacturer. Respirators will then be hung to drip dry and, if not used on a daily basis, placed inside plastic bags for protection against dust.

10.0 SITE CONTROL

A strict check-in and check-out system will be used to control and record each worker and piece of equipment involved in the work being performed inside the site boundaries. Only those personnel identified as "authorized" will be permitted to enter the exclusion and contaminant reduction zones. A master list of authorized personnel will be available and will only include personnel who have received the appropriate training and medical certification required by this SSHSP and OSHA requirements.

10.1 WORK ZONES

Work zones are designed to prevent workers, visitors, and the surrounding environment from exposure to site constituents during all aspects of onsite activities. Work zones and support areas will be established by BELL. Movement of personnel and equipment between different zones and on/off the site will be controlled by means of designated access points. Minimum PPE for work in each zone is described in Section 9.0.

10.1.1 Exclusion Zone

The exclusion zone encompasses the surface areas around the location of invasive operations within a 25 foot radius. It is anticipated that this will be a Level D exclusion zone. However, Level C may be required based on monitoring results (see Section 8.2.1). The exclusion zone will be marked in the field by placing caution tape around the exterior of the zone.

10.1.2 Contamination Reduction Zone

The contaminant reduction zone will be established as a buffer zone between the exclusion zone and the support zone of the site. All personnel and equipment leaving the exclusion zone will do so through the contamination reduction zone. As necessary, personnel and equipment decontamination will take place in this zone. It is anticipated that modified Level D PPE will be utilized in this zone.

10.1.3 Support Zone

The support zone will be established in the vicinity of the contamination reduction zone and staged upwind of the exclusion zone. No special clothing or protective equipment is required in this area. Support facilities (supplies, equipment, storage, and maintenance areas) will be located in this zone. No equipment or personnel will be permitted to enter the support zone from the exclusion zone without removal of all potentially contaminated PPE and following specific decon procedures. Furthermore, the support zone may have

to be moved depending on wind conditions in order to keep the support zone upwind of the exclusion zone.

10.2 SITE ENTRY AND EXIT

All personnel entering the exclusion zone will be required to wear the PPE specified in Section 9.0. The following procedures shall be used when leaving the exclusion zone and contamination reduction zone:

- Personnel will exit through the designated exit points;
- Personnel will proceed through appropriate decontamination, as specified in Section 11.0; and
- Equipment shall be staged at designated equipment drop off points.

All protective equipment will be removed in the contaminant reduction zone and all personnel shall sign the Site Entry and Exit Log (Attachment C) when appropriate.

10.3 COMMUNICATIONS

Communication between field personnel is not expected to be an issue due to the anticipated level of protection required by this investigation (Level D). During site orientation, standard emergency hand signals shall be reviewed in case unforeseen incidents occur during the site work which make communications difficult. In the unlikely event that respirators are required, field personnel shall use full-face respirators.

10.4 "BUDDY" SYSTEM

All work done in the exclusion zone will be scheduled so that no employee works alone in this zone at any time. Each team worker must maintain visual contact with another specified team worker at all times. The "buddy" system will ensure against a worker's becoming stressed or injured without a co-worker being aware of his/her condition. Workers must "watch out" for one another while working in proximity to potential chemical and physical hazards.

10.5 SAFE WORK PRACTICES

10.5.1 Site-Specific Practices

General safe work practices, which must be followed by all onsite workers, include:

- All personnel in the exclusion zone shall wear the appropriate PPE as required in Section 9.0.
- Eating, drinking, chewing gum and/or tobacco are prohibited in the exclusion and contamination reduction zones. Smoking is prohibited at all locations.
- No sitting or kneeling in areas which are obviously contaminated.
- Hands and face must be thoroughly washed upon leaving the exclusion zone.
- Any defective PPE must be repaired or replaced immediately.
- Prescription drugs must not be taken by personnel unless specifically approved by an occupational physician. Controlled or unauthorized drugs will not be permitted at any time.
- When respirators are required, facial hair that interferes with the face-to-faceplate fit of the respirator will not be permitted.
- Personnel onsite must use the buddy system; visual contact must be maintained between team members at all times.
- Personnel must periodically check for ticks.
- Personnel must wear protective clothing when working in vegetative areas to minimize contact with poison ivy.

10.5.2 Daily Startup and Shutdown Procedures

The following procedures will be followed daily prior to the start of work activities:

- The SSHO will review the conditions at the site to assess the need for modification of the work and safety plans.
- All personnel will be briefed and updated on any new safety procedures that become necessary.

- All safety equipment in use will be inspected to ensure proper functioning.
- The SSHO will ensure that first aid equipment is readily available.
- The SSHO will initiate appropriate monitoring activities.

The following procedures will be followed at the end of each day's operations and before all work breaks:

- All personnel will proceed through the appropriate decontamination procedures and facilities prior to leaving the site or eating.

11.0 DECONTAMINATION

11.1 GENERAL

All personnel will be trained in the decontamination procedures that will be implemented when workers or equipment exit exclusion and contamination reduction zones. Decontamination will be performed to minimize the potential contamination of equipment and the spread of contamination from one zone to another.

11.2 PERSONNEL

No worker, except in an emergency situation, will exit the exclusion zone without first going through the proper decontamination sequences.

Upon leaving the exclusion zone, all personnel will wash non-disposable boots and outer gloves at the decontamination station located at the exclusion/contamination reduction zone boundary. The wash solution will be a detergent/water solution. Outer disposable clothing, if used will be removed and placed in sealed plastic bags or drums for disposal. Tyvek coveralls may be worn out of the exclusion zone if there is no evidence of gross contamination; however, Tyvek coveralls may not be worn out of the contamination reduction zone. Exterior surfaces of respirators will be wet-wiped, then respirators will be removed and placed in a plastic bag for temporary storage and cleaning.

During decontamination procedures, personal protective clothing and equipment (if utilized) will be doffed in the following order:

- Outer gloves
- Boot covers
- Coveralls
- Respirator
- Inner Gloves

11.3 DECONTAMINATION NOTICE TO EMERGENCY PERSONNEL

In the event of an on-site emergency requiring local emergency medical personnel, ambulance crews, and/or hospital room staff, the appropriate personnel will be notified by BELL's Project or Site Manager of the potential for hazardous materials to be encountered. They will be advised and warned of the possibility of having to receive contaminated clothes and/or injured workers; they will be advised of appropriate decontamination procedures.

11.4 RESPIRATOR DECONTAMINATION

All respirators used on site will be cleaned daily by the individuals to whom they have been assigned. Each worker will be responsible for cleaning and maintaining his/her own respirator. A wash basin or sink of solution containing sanitizer recommended by the manufacturer must be provided for final rinsing of respirators at the end of the day. Respirators will then be hung to drip-dry and, if not used daily, will be placed inside plastic bags for protection against decontamination. Respirator cartridges will be changed if contamination is suspected, sampling data indicate potential saturation conditions exist, or if breathing resistance becomes significant. The SSHO will also spot check respirators to ensure that all are properly cleaned, maintained, and stored.

11.5 EQUIPMENT DECONTAMINATION

Equipment shall be steam-cleaned at the site's designated cleaning area prior to performing work and prior to leaving the site.

11.6 DISPOSAL OF WASTES GENERATED DURING REMEDIATION ACTIVITIES

Spent respirator cartridges and disposable protective coveralls will be bagged, labeled, and stored onsite for testing prior to disposal.

12.0 EMERGENCY RESPONSE PLAN

Any significant onsite emergencies will ultimately be handled by offsite professional emergency support personnel. Initial responses and first-aid treatment, however, will be available onsite.

In the event of a hazardous materials emergency, the SSHO onsite will direct the emergency response until appropriate emergency crews arrive at the site. The SSHO will identify and evaluate hazards presented by the emergency.

12.1 EMERGENCY EQUIPMENT

Emergency equipment will be provided by BELL. Emergency equipment for the exclusion zone will be kept in the contamination reduction zone. The equipment will include:

- Portable emergency eye wash
- Two multipurpose (ABC-rated) fire extinguishers
- An adequately stocked first-aid kit

A second adequately stocked first-aid kit will be available in the support zone.

12.2 PRE-EMERGENCY PLANNING

Before the start of any work on the site, BELL's Project Manager or Site Manager will inform the local fire and rescue authorities of the start date and the anticipated scope of work.

First-aid kits will be onsite at all times during any investigative activities.

12.3 EMERGENCY RECOGNITION AND PREVENTION

Emergency conditions that may possibly occur during drilling activities at the site include but are not limited to the following:

- Explosion/Fire
- Medical Emergency
- Heavy equipment accident

- Overexposure of personnel to potentially hazardous compounds
- Heat stress
- Cold exposure

In order to ensure that hazard recognition and accident prevention protocols are being maintained, personnel must follow the requirements of this SSHSP, particularly the hazard evaluation in Section 5.0, PPE requirements in Section 9.0, and the site control requirements described in Section 10.0.

12.4 OPERATIONS SHUTDOWN

An operations shutdown may be mandated by BELL on recommendations from the Project Manager or SSHO. Conditions warranting work stoppage will include but are not limited to the following:

- Uncontrolled fire;
- Explosion;
- Any condition immediately dangerous to life and health or the environment;
- Heat stress exhibited by the wok crew;
- Potential for electrical storms;
- Treacherous weather-related conditions;
- Limited visibility; and/or
- Airborne concentrations in excess of the protection factors afforded by the respirators in use.

When any of these conditions are found to exist at the site, operations will be stopped and the work site area closed. All personnel will leave the work area until the Project Manager has determined that operations may resume.

12.5 FIRE AND EXPLOSION RESPONSE PROCEDURES

Fires on the site can be started by natural events, work activities, or the activities of others. BELL personnel will be instructed in the use of multipurpose (ABC-rated) fire extinguishers which will be on hand at all times. They will be advised to attempt to control only very small fires. The procedure for using a fire extinguisher is to pull the safety pin, point the nozzle at the base of the flames, and discharge the extinguisher in a sweeping motion from a distance of approximately six feet. The extinguisher operator should move in as the flames are being put out. BELL will contact the local fire company(ies) immediately in the event of a fire that requires help and that cannot be extinguished with onsite fir equipment.

12.6 EVACUATION FROM WORK ZONES

If an onsite emergency occurs, the SSHO will sound a site emergency alarm. All personnel will meet in and area designated during the pre-entry briefing and located in the support zone. A worker head count will be performed to ensure that all personnel are accounted for.

In case of an emergency, evacuated personnel may be decontaminated rapidly by removing exterior clothing. If a worker is critically injured in the exclusion zone, the worker may be removed immediately from the area--DO NOT take the time to decontaminate an injured worker and seek medical attention at once.

12.7 REPORTING INCIDENTS

BELL will report incidents to local, state, and federal agencies in accordance with all applicable regulations. The Project Manager must be notified of all accidents and incidents.

BELL will notify the Peekskill Plaza representative in the event of personal injury, fire, explosion, and all other emergency situations.

12.8 EMERGENCY MEDICAL TREATMENT AND FIRST AID

BELL personnel will be instructed in first-aid procedures. Only minor injuries will be treated onsite with the first-aid kit that is available. For major injuries contact the Hudson Valley Hospital Center. The phone numbers for the local hospital, police, fire, and ambulance are provided in Attachment A.

13.0 REFERENCES

American Conference of Governmental Industrial Hygienists, 1993, ACGI Threshold Limit Values and Biological Exposure Indices for 1993-1994.

American National Standards Institute (ANSI), 1980, American National Standard Practices for Respiratory Protection Z88.2.

National Institute of Occupational Safety and Health (NIOSH), OSHA, U.S. Environmental Protection Agency (U.S. EPA), and U.S. Coast Guard, 1985, Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, October.

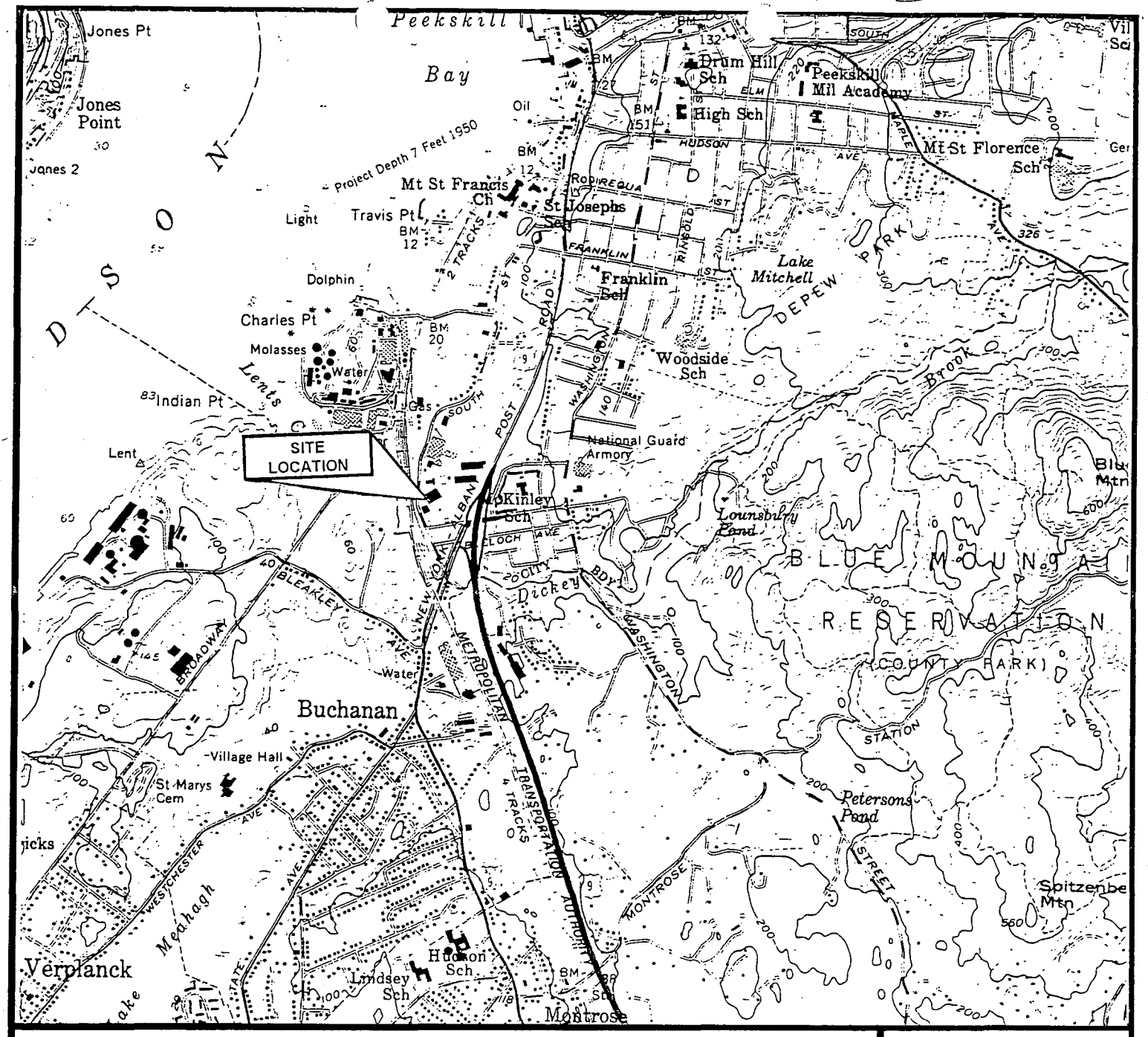
Occupational Safety and Health Administration (OSHA), 1981, Standards for Construction Industry, 29 CFR 1926.

OSHA, 1986, Respiratory Protection 29 CFR 1910.134.

OSHA, 1987, Standards for General Industry, 29 CFR 1910.120 - Hazardous Waste Operations and Emergency Response.

FIGURES

9304201 I



SITE LOCATION MAP

Peekskill Plaza
20 Welcher Avenue

Peekskill **Westchester County** **New York**

QUAD LOCATION



USGS 7.5 MINUTE
PEEKSKILL, NY
QUADRANGLE

SCALE 1:24,000

1 1/2 0 1 Mile

1000 0 1000 2000 3000 4000 5000 6000 7000 Feet

1 0.5 0 1 Kilometer

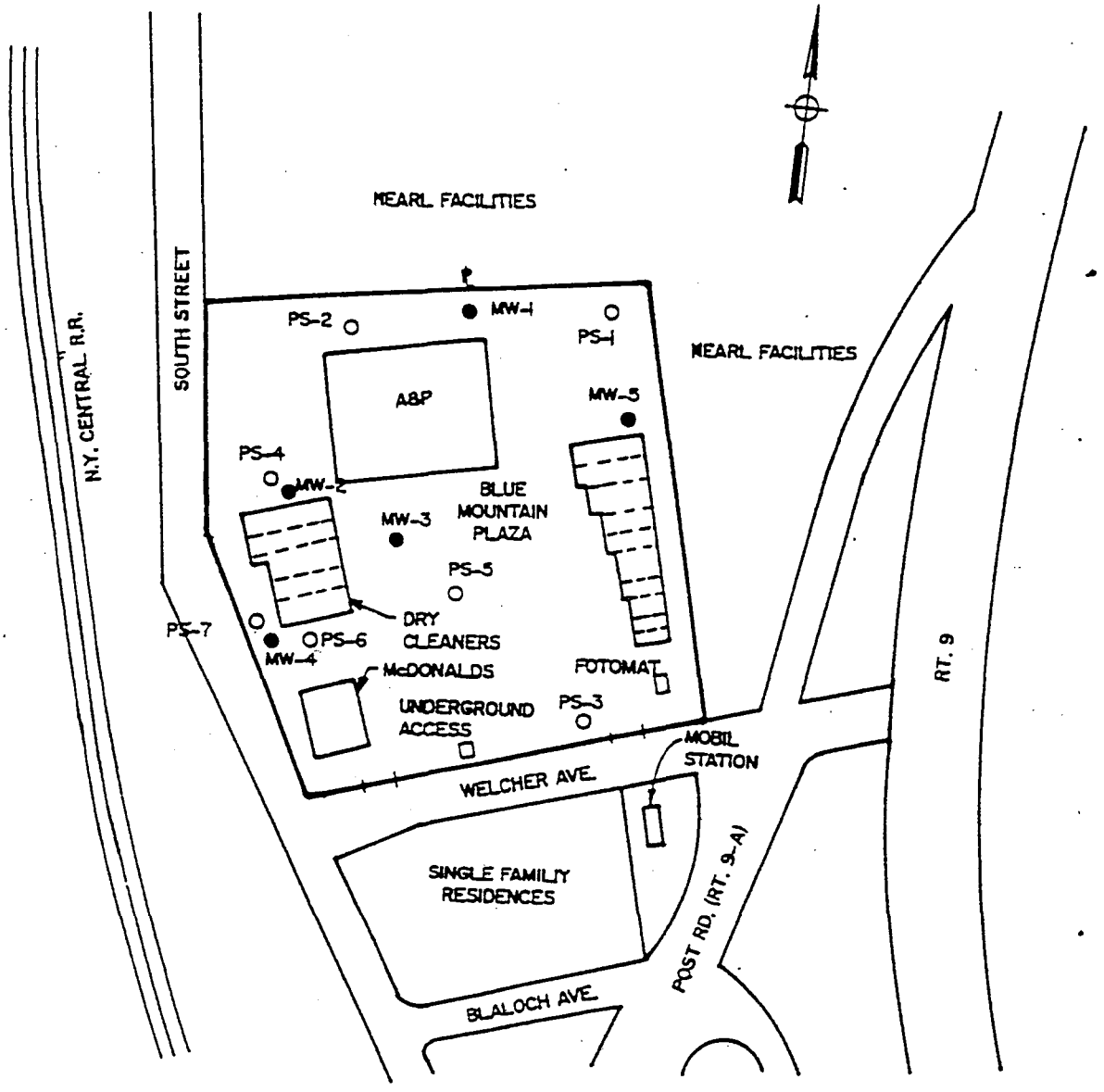
CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

N

Figure # 1

BELL PROJECT # EOG01-93042-01

93042-01-I

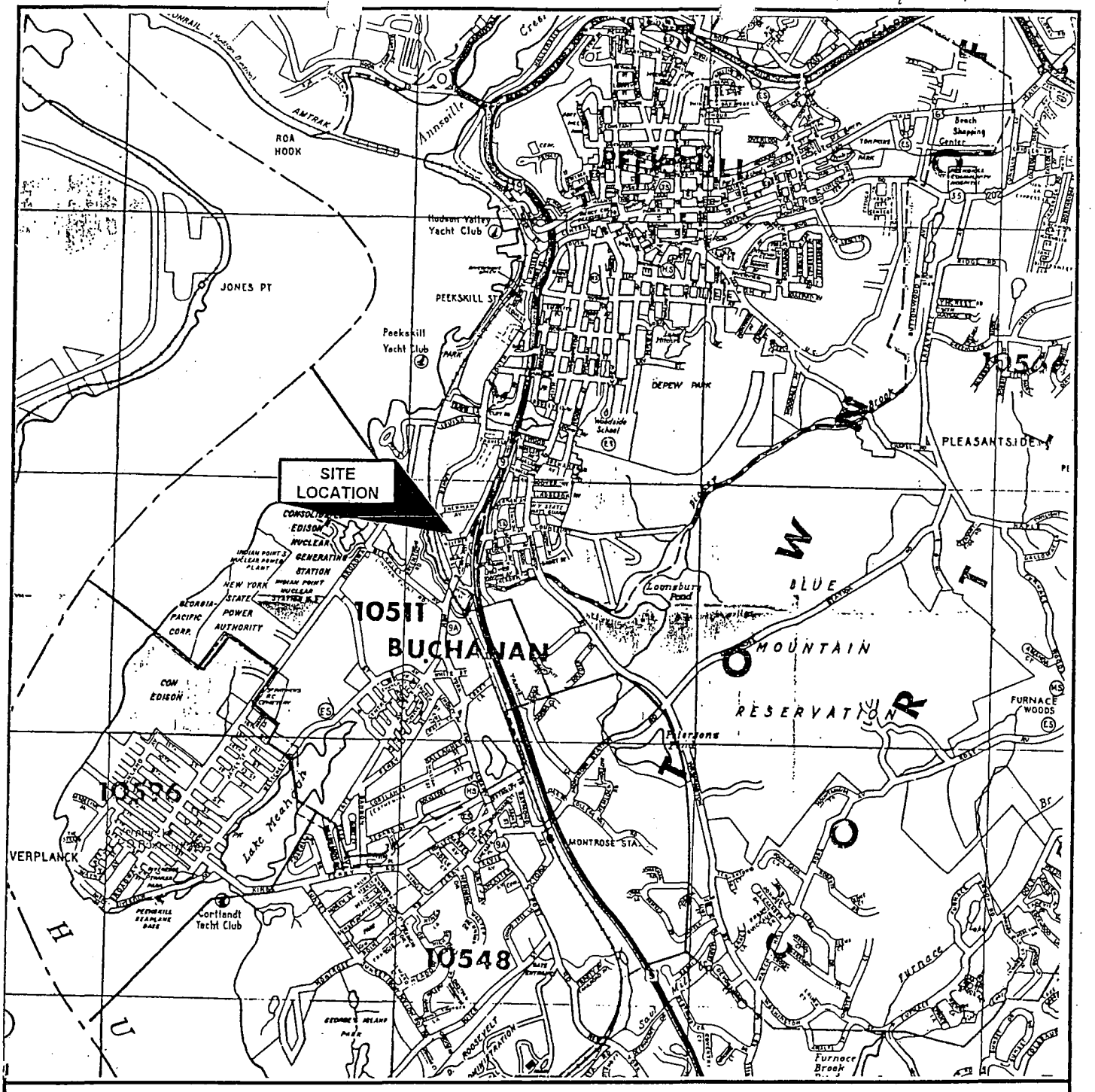


GENERAL SITE CONFIGURATION MAP

Peekskill Plaza
20 Welcher Avenue
Peekskill, Westchester County, New York

BELL PROJECT # EOG01-93042-01	Figure 2 Not to Scale

9304201 I



HOSPITAL ROUTE MAP

Peekskill Plaza
20 Welcher Avenue
Peekskill, Westchester County, New York

BELL PROJECT # EOG01-93042-01

Figure 3

1" = 3,000'

TABLES

TABLE 1 HAZARDOUS SUBSTANCE LIST

Contaminant	Maximum Concentration Detected in Soii (s) or Water (w)*	PEL/TLV**	Signs and Symptoms of Exposure
Tetrachloroethylene	133.0 ug/kg - s 104 ug/l - w	25,000 ug/l 170 mg/m^3	Irritation to eyes, nose, throat; nausea; dizziness; liver damage.
Trichloroethylene	2.8 ug/l - w	50,000 ug/l 269 mg/m^3	Headache; vertigo; visual disturbance; tremors; nausea; vomiting; cardiac arrhythmia.
T - 1,2 - Dichloroethylene	4.8 ug/l- w	200,000 ug/l 793 mg/m^3	Irritation to eyes and respiratory system; depression.
1,2 Dichloroethane	89.0 mg/kg - s 3.0 mg/l - w	100,000 ug/l 405 mg/m^3	Depression; skin irritant; liver and kidney damage.
Chloroform	1.0 ug/l - w	240 mg/m^3	Dizziness; mental dullness; nausea; headaches; eye and skin irritation.
Toluene	7,282 ug/kg - s 1.4 ug/l - w	300,000 ppb	Irritation to eyes and nose; fatigue; weakness; confusion; dilated pupils; insomnia.
Xylenes	170.0 mg/kg - s	435 mg/m^3	Dizziness, excitement, drowsiness, irritation of eyes, nose, and throat, nausea, vomiting, dermatitis

Notes:

* Analytical results

** Permissible Exposure Limit (PEL) (OSHA 29 CFR 1910.1000) or Threshold Limit Value (TLV) (ACGIH from Threshold Limit Values and Biological Exposure Indices for 1993-1994)

NA A PEL/TLV has not been established for this compound

NSF No Symptoms Found for exposure for this individual compound

TABLE 2 SITE WORKER TRAINING AND PHYSICAL EXAMINATION RECORD

Name	Initial Training	Annual Refresher	Last Physical
Douglas R. Keane	August 11, 2002	August 25, 2007	August 20, 2007
Marianne Brody	November 1, 2004	November 7, 2007	November 20, 2007

TABLE 3 SURVEILLANCE PROTOCOL FOR FIELD WORKERS

Exam/Test/Procedure	Placement	Yearly	Termination
1. Baseline occupational medical history	X		
2. Interim occupational and medical history		X	X
3. Complete physical examination	X	X	X
4. Screening (vision tester)	X	X	X
5. Audiogram	X	*	*
6. Electrocardiogram	X	*	*
7. Pulmonary function test	X	X	X
8. Chest X-ray	X	*	*
9. Complete blood count w/differential and platelets	X	X	X
10. Biochemical blood profile	X	X	X
11. Urinalysis with microscopic examination	X	X	X
12. Other specific tests	**	**	**
13. Report and copies to employer	X	X	X
14. Report to Corporate Health & Safety Officer	X	X	X
15. Reports and copies to consulting physician	X	X	X

* Examination to be ordered by examining physician only if there are significant clinical indications from medical or work history or physical examination.

** Tests to evaluate specific toxic exposures may be ordered by the examining physician in urgent situations or in routine exams as previously arranged in specific protocol or as arranged by HCI.
No special tests are necessary for this project.

TABLE 4 MONITORING INSTRUMENT USAGE REQUIREMENTS

Work Tasks	Instrument	Frequency and Location
Monitoring Well Installation	PID, Dust monitors	Initially before site work begins, at least twice in the breathing zone during installation of each monitoring well, and whenever conditions change. In addition, to be used during headspace analyses for soil.
Monitoring Well Installation	CGI	Periodically in the breathing zone
Decontamination	PID	At the perimeter of the decon area
Ground Water Sampling	PID	Initially before site work begins and whenever conditions change.

TABLE 5 ENVIRONMENTAL MONITORING RECORD

INSTRUMENT: _____

TIME	DESCRIPTION OF LOCATION	READING

TABLE 6 PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS

Work Task	Initial Level of Protection	Specific PPE
Well Installation/Soil Sampling	D	Hard hat, steel toe/shank boots, latex inner gloves, disposable nitrile outer gloves, Tyvek suit, safety glasses, and hearing protection.
Well Installation/Soil Sampling	C	Same as above but including a full-face air purifying canister/cartridge equipped respirator (NiOSH approved).
Ground Water Monitoring Well Sampling	D	Steel toe/shank boots, disposable nitrile gloves, cotton field coveralls, and safety glasses.

ATTACHMENTS

ATTACHMENT A

EMERGENCY TELEPHONE NUMBERS

ATTACHMENT A

EMERGENCY TELEPHONE NUMBERS

- *Emergency Telephone Numbers*

Police: Peekskill	911
Fire Department: Peekskill	911
Ambulance: Peekskill	911
Hospital: Hudson Valley Hospital Center	(914) 737 - 9000
Bell Environmental Consultants, Inc:	(973)-584 - 7777
Site Telephone:	(973-945-6730

- *Hospital*

Hospital Name:	Hudson Valley Hospital Center
Emergency Room Telephone:	(914) 737 - 9000 EXT. 2
Address:	1980 Crompond Road Peekskill, New York

Directions to Hospital from Site:
From the site, make a left onto Welcher Avenue. Go under the Route 9 overpass and take the third left onto Washington Street. Continue on Washington Street for approximately 1.25 miles and make a right onto Central Avenue. Continue on Central Avenue (which becomes Park Street) to the end. Make a right onto Finch Street and a quick left onto Crompond Road. The hospital will be approximately 1.5 blocks on the left.

REVIEW RECORD ATTACHMENT B

SITE SAFETY AND HEALTH PLAN REVIEW RECORD

AUTHORIZED BELL ENVIRONMENTAL CONSULTANTS, INC. PERSONNEL

I have reviewed this Health and Safety Plan prepared for activities to be conducted at the Peekskill Plaza site located in Peekskill, New York, as described in the Site Specific Health and Safety Plan and I agree to abide by the procedures described therein.

Name	**Signature**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

ATTACHMENT C

SITE ENTRY AND EXIT LOG

ATTACHMENT C

SITE ENTRY AND EXIT LOG

DATE	NAME	REPRESENTING	TIME IN	TIME OUT