

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Washington, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Marla K. Jackson Agent for General Chemical Company Brazos Associates, Inc. 1806 Auburn Drive Carrollton, TX 75007-1451

AUG 2 4 2010

Subject:

Notification per PR Notice 98-10 (chemical description and efficacy statement)

RootX

EPA Reg. No. 68464-1

Application Dated August 2, 2010, 2010

Dear Ms. Jackson:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the subject product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been date-stamped "Notification" and will be placed in our records.

If you have any questions, please call me directly at 703-305-5697 or Mindy Ondish at 703-605-0723.

Sincerely,

Jim Tompkins Product Manager 25

Herbicide Branch

Registration Division (7505P)

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Please read instructions on reverse before comp. A form.  United State Environmental Protect Washington, DC	ction Agency	Registra Amendn  ✓ Other	tion	Approvel expires 2-28-95 OPP Identifier Number
Applica	ation for Pesticide - Sec	tion I		
1. Company/Product Number 68464-1	2. EPA Product Man Mr. Jim Tompkin	=		nosed Classification
4. Company/Product (Name) RootX	<b>PM#</b> 25			
5. Name and Address of Applicant (Include ZIP Code)  General Chemical Company 1705 B. Salem Industrial Drive, N.E.  Salem, OR 97303  Check if this is a new address				FIFRA Section 3(c)(3) possition and labeling
	Section - II			
Amendment - Explain below.  Resubmission in response to Agency letter dated	Final printe	d labels in repsonse ter dated Application.		TIFICATION AUG 2 4 2010
Notification - Explain below.	Other - Exp	lain below.		
18 U.S.C. Sec 1001 to willfully make any false statement to EPA and 40 CFR 152.46, this product may be in violation of FIFRA a No Registration Service Fee is required for this Notification.				
	Section - III		<del></del>	
1. Material This Product Will Be Packaged In:  Child-Resistant Packaging  Yes  No  * Certification must be submitted  If "Yes" Unit Packaging wgt.  No. per Unit Packaging wgt.		2. Type of (	Metal Plastic Glass Paper Other (Sp	ecify)
3. Location of Net Contents Information 4. Size(s)  Label Container	Retail Container	5. Location of Lab	el Direction	5
6. Manner in Which Label is Affixed to Product Lit Pa	hograph Othe per glued enciled			
	Section - IV			
1. Contact Point (Complete items directly below for identific	ation of individual to be contacted,	if necessary, to pro	cess this e	pplication.)
Name Marla K. Jackson	Title Agent for General Chemcial		<b>Telephone</b> 972-939-83	No. (Include Area Code) 890 e
ိုင်ငံ ငံ မို <b>ငြိုertif</b> I certify that the statements l have made on this gorm I acknowledge that any knowlinglly false or misleading both under applicable law.	fication and all attachments thereto are true statement may be punishable by fi	e, accurate and com ne or imprisonment	plete.	3. Date Application Recalved ို့ o (Stamped)
White Coffee	3. Title Agent for General Chemical Cor	mpany	(((((	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
4. Typed Name  Marla K. Jackson	5. Date 08/02/2010		(((((	(((((



### **Brazos Associates, Inc.®**

1806 Auburn Drive • Carrollton, TX 75007-1451 Phone: 972-939-8390 • Facsimile: 972-939-8370

#### By Overnight Courier Service

August 2, 2010

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

Attn: Jim Tompkins

Product Manager 25

Dear Mr. Tompkins:

Subject:

RootX

EPA Reg. No.: 68464-1

This Notification submission is being made on behalf of our client, General Chemical Company. This notification is being filed in accordance with PR-Notice 98-10.

The purpose of the attached Notification is to have the option of placing an informative paragraph statement regarding the product on either the front/side/back or pamphlet of the label.

Attached with the submission, please find one (1) label with the changes made underscored. We would greatly appreciate this label being "Stamped Accepted" so in order that we can send less paperwork for state registrations as we have submitted so many label changes this year. If possibles it would be most appreciated to be reviewed as quickly as time allows you and your workload at we are underscored.

Office of Pesticide Programs (7504P) U.S. Environmental Protection Agency August 2, 2010 Page 2

Should you have any questions or require additional information please do not hesitate to contact us.

Sincerely,

Marla K. Jackson

Agent for General Chemical Co.

Attachments as noted

cc:

Mr. Parke Raffensperger

President

General Chemical Company

[FRONT LABEL PANEL]

**NOTIFICATION** 

AUG 2 4 2010

# ROOTX

Kills Roots in Sanitary and Storm Sewers
Self Foams on Contact With Water
Inhibits New Root Growth
Does Not Contain Copper

Active Ingredient:	
Dichlobenil: (2,6 dichlorobenzonitrile)	. 0.55%
Other Ingredients:	. <u>99.45%</u>
Total	100.00%

### Keep Out of Reach of Children

### **CAUTION**

See Side [Back] Panel For Additional Precautionary Statements

EPA Reg. No. 68464-1 EPA Est. No. 68464-OR-001

General Chemical Co. P.O. Box 7626 Salem OR 97303 1.800.844.4974

[Optional placement of statement: On Front/Back/Side and or Pamphlet of Label]

ROOTX contains Dichlobenil which kills the roots and prevents new growth. Dichlobenil is readily absorbed on organic and inogranic colloids of sludge and clay in pipe joints providing residual control of root regrowth by inhibiting the development of actively dividing meristem cells in root tips. New root growths, formed outside the pipe joints are retarded or inhibited in growth when they come in contact with Dichlobenil reside the pipe. ROOTX self foams on contact with water. The foam acts as a carrying agent, putting the active ingredient in contact with the tree roots above the flow.

NET	WEIGHT	LBS

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Harmful if swallowed, inhaled or absorbed through skin. Avoid breathing dust.

Have the product doctor, or going t	FIRST AID  container or label with you when calling a poison control center or for treatment.
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
	NOTE TO PHYSICIAN

Probable muçosal damaga may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed

For emergency assistance, please call toll free 800/858-7378.

Personal Protective Equipment: (PPE):—Applicators and other handlers, including mixers and loaders, must wear long-sleeved shirt, long pants, shoes plus socks and chemical-resistant gloves. Mixers and loaders must also wear a chemical-resistant apron. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls: When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6)), the requirements may be reduced or modified as specified in the WPS.

#### **User Safety Recommendations**

Users should: •Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

- •Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- •Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards: For terrestrial uses, do not use near a well or where drinking water is stored. Do not apply directly to water or to areas where surface water is present or to inter tidal areas below the mean high water mark. Do not contaminate water when disposing of equipment, wash water or rinsate. This chemical has properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow may result in ground-water contamination.

#### **Directions For Use**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read the following directions for use thoroughly before application.

# [THE FOLLOWING BOXED NON-WPS STATEMENT WILL APPEAR ON 2, 4, AND 20 POUND CONTAINERS:]

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies wher this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

When used in inhabited buildings (residences, offices, hospitals, etc.), windows must be open or an exhaust fan must be operating during the application.

# [THE FOLLOWING STORAGE AND DISPOSAL LANGUAGE WILL APPEAR ON 1 POUND CONTAINERS:]

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry place. Avoid storage near food or feed products.

Pesticide Disposal and Container Handling: Nonrefillable container. Do not reuse or refill this container. If empty: Place in trash or offer for recycling, if available. If partially filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

# [THE FOLLOWING STORAGE AND DISPOSAL LANGUAGE WILL APPEAR ON 2 AND 4 POUND RIGID CONTAINERS:]

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry place. Avoid storage near food or feed products.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of

on site or at an approved waste disposal facility.

Container Disposal: Nonrefillable container. Do not reuse or refill this container.

Completely empty container by shaking and tapping the sides and bottom to loosen clinging particles. Empty residue into application site, triple rinse with a small amount of water to reduce foaming. Pour rinsate into application site. If empty, place in trash or offer for recycling, if available. If partially filled, call your local solid waste agency for disposal instructions.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry place. Avoid storage near food or feed products.

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Disposal: Nonrefillable container. Do not reuse or refill this container.

Completely empty bag by shaking and tapping the sides and bottom to loosen clinging particles. Then dispose of bag in a sanitary landfill, or by incineration, if permitted by Stage and local authorities.

# [THE FOLLOWING DIRECTIONS FOR USE WILL APPEAR ON 1 POUND CONTAINERS:]

#### NOT FOR USE IN SEPTIC SYSTEMS IN THE STATE OF FLORIDA

Do not apply this product in a way that will contact any person or pet, either directly or through drift. Keep people and pets out of area during application.

#### Application Method for Sewer Lines that have Root Problems:

Residential 4" sewer lines, utilize a 1 lb. container: ADD ENTIRE CONTENTS of a 1 lb container to toilet bowl. Flush immediately to avoid foam overflowing bowl. Flush a second time to push foam completely into sewer line, and a third time if you have a 1.6 gallon low flow toilet. Restrict water usage from four to six hours. Do not apply through sink or tub.

# [OPTIONAL: THE FOLLOWING TWO PARAGRAPHS MAY APPEAR ON 1 POUND CONTAINERS SOLD AT RETAIL LOCATIONS FOR RESIDENTIAL-USE:]

#### [Application\_Method for Root Control Along Sidewalks and Driveways:

To inhibit the entry of roots beneath pavement structures and the resulting damage caused by root growth, cut a 3" or deeper edging along the structure and pour 2 oz. per foot of ROOTX into it in a thin strip. Then cover the edged area with soil. Immediately following application, thoroughly water-in ROOTX. Repeat annually to prevent root growth near the surface along sidewalks and driveways. Do not enter or allow workers to enter the treated area until ROOTX is thoroughly watered in and the treated soil has dried.]

#### [Application Method for Root Control In Between Tree Roots and Sewer Lines:

To prevent long term root growth from the tree to sewer lines, bore a series of small holes, 2 feet apart, into the ground near the offending tree or outside the sewer joints using water or mechanical boring equipment. Add 4 oz. of ROOTX per hole and fill with soil. Be sure that the holes location and depth is directly between the offending tree and sewer line. Immediately following application, thoroughly water in ROOTX. Repeat annually to prevent root growth in between tree roots and sewer lines. Do not enter or allow workers to enter the treated area until ROOTX is thoroughly watered in and the treated soil has dried.]

# [ONE OR BOTH OF THE FOLLOWING USE DIRECTIONS WILL APPEAR ON A 2 POUND CONTAINERS:]

NOT FOR USE IN SEPTIC SYSTEMS IN THE STATE OF FLORIDA

# [OPTIONAL: APPLICATION METHOD FOR CONTAINERS WITHOUT FUNNEL APPLICATOR HEAD]

**Application Method for Sewer Lines that Have Root Problems:** 

Residential 4" sewer lines up to 50 ft. utilize a 2 lb. container. Add entire dry contents of a 2 lb container into a pail or bucket and mix the two components that were in the container thoroughly. Do not add any water or liquid to the mixture. A proper mixture has been achieved when both chemicals A (white) and B (brown) form a tan mixture of white and brown chemicals. This process should take approximately two minutes. Then slowly pour the ROOTX mixture into the toilet bowl or a sewer clean out if available. When applying into the toilet, make sure to flush immediately after emptying the contents into the bowl. This will help avoid the foam overflowing the bowl. Make sure that when you are pouring the chemical into the application site you do not create a splash which could come in contact with user's eyes. When applying into a sewer clean out, flush the toilet one time [Optional Statement: or up to 6 times for 1.6 gallon low flow toilets], or add 5-10 gallons of water behind it to push the foam completely through the sewer line. Restrict water usage from four to six hours after application.

## [OPTIONAL: APPLICATION METHOD FOR CONTAINERS WITH FUNNEL APPLICATOR HEAD]

Application Method for square containers with mixing Funnel/Applicator in Sewer Lines that Have Root Problems:

Residential 4" sewer lines up to 50 ft. utilize a 2 lb. container. Unscrew lid from top of container. Take the mixing funnel/applicator and put the wide threaded end into the opening where the lid was in the square container. Rotate the mixing funnel/applicator clockwise screwing the mixing funnel into the square container so that it fits tightly. Grasping the bottom of the square container and the narrow end of the mixing funnel applicator, (putting a hand over the mixing funnel/applicator cap which is located at the narrow end of the mixing funnel/applicator), rock the square container with the mixing/funnel applicator attached back and forth for approximately one minute allowing the two dry components of RootX to go in to the funnel and then back into the square container several times. After the one minute mixing process you may then take the cap off the narrow end of the mixing/funnel applicator and pour the entire 2lb.'s of the dry product mixture through the mixing funnel/applicator directly into a sewer cleanout of toilet bowl if a sewer cleanout is not available. (Put no more than 2lb.s of RootX in a toilet o bowl to minimize the possibility of foam overflow.) When applying into a sewer glean out, flush the toilet two times [Optional Statement: or up to 6 times for 1.6 gallon low flow toilets], for add 5 10 gallons of water into the cleanout to push the foam completely through the sewer kne. When applying into the toilet make sure to flush the toilet and add the dry mixture into the toilet bowl as the water is going down the drain. It is suggested that when

doing a toilet application, that you have a 5 gallon bucket filled with water readily available to further push the foam down the toilet drain if the foam comes back up the drain. This will help avoid the foam overflowing the bowl. Restrict water usage from four to six hours after application.]

# [THE FOLLOWING DIRECTIONS FOR USE WILL APPEAR ON 4 POUND CONTAINERS:]

NOT FOR USE IN SEPTIC SYSTEMS IN THE STATE OF FLORIDA

# [OPTIONAL: APPLICATION METHOD FOR CONTAINERS WITHOUT FUNNEL APPLICATOR HEAD]

#### **Application Method for Sewer Lines that Have Root Problems:**

Residential 4" sewer lines up to 100 ft. or 6" sewer lines up to 75 ft. utilize a 4 lb container. Add entire dry contents of a 4 lb container into a pail or bucket and mix the two components that were in the container thoroughly. Do not add any water or liquid to the mixture. A proper mixture has been achieved when both chemicals A (white) and B (brown) form a tan mixture of white and brown chemicals. This process should take approximately two minutes Then slowly pour the ROOTX mixture into the sewer clean out. Make sure that when you are pouring the chemical into the application site you do not create a splash which could come into contact with the user's eyes. Add 5-10 gallons of water behind it to push the foam completely through the sewer line. Do not apply a 4 lb container through a toilet because of the

probability of a foam overflow. Restrict water usage from four to six hours after application.

#### [OPTIONAL: THE FOLLOWING MAY APPEAR ON 4 POUND CONTAINERS:]

#### [Application Method for Root Control Along Sidewalks and Driveways:

Follow mixing directions immediately above. To inhibit the entry of roots beneath pavement structures and the resulting damage caused by root growth, cut a 3" or deeper edging along the structure and pour 2 oz. per foot of ROOTX into it in a thin strip. Then cover the edged area with soil. Immediately following application, thoroughly water-in ROOTX. Repeat annually to prevent root growth near the surface along sidewalks and driveways. Do not enter or allow workers to enter the treated area until ROOTX is thoroughly watered in and the treated soil has dried.]

[Application Method for Root Control In Between Tree Roots and Sewer Lines:

Follow mixing directions inimediately above. To prevent long term root growth from the tree to sewer lines, bore as series of small holes, 2 feet apart, into the ground near the offending tree or outside the sewer joints using water or mechanical boring equipment. Add 4 oz. of ROOTX per hole and fill with soil. Be sure that the holes location and depth is directly between the offending tree and sewer line. Immediately following application, thoroughly water in ROOTX. Repeat annually to prevent root growth in between tree roots; and sewer lines. Do not enter or allow workers to enter the treated area until ROOTX is

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### [SIDE/BACK LABEL PANEL]

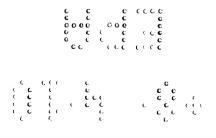
thoroughly watered in and the treated soil has dried.]

# [OPTIONAL: APPLICATION METHOD FOR CONTAINERS WITH FUNNEL APPLICATOR HEAD]

[Application Method for square containers with mixing Funnel/Applicator in Sewer Lines that Have Root Problems:

Residential 4" sewer lines up to 100 ft. or 6" sewer lines up to 75 ft. utilize a 4 lb container. 4lb.s of RootX must be applied only through sewer cleanout. Do not apply 4lbs of RootX through toilet.

Unscrew lid from top of container. Take the mixing funnel/applicator and put the wide threaded end into the opening where the lid was in the square container. Rotate the mixing funnel/applicator clockwise screwing the mixing funnel into the square container so that it fits tightly. Grasping the bottom of the square container and the narrow end of the mixing funnel applicator, (putting a hand over the mixing funnel/applicator cap which is located at the narrow end of the mixing funnel/applicator), rock the square container with the mixing/funnel applicator attached back and forth for approximately one minute allowing the two dry components of RootX to go in to the funnel and then back into the square container several times. After the one minute mixing process you may then take the cap off the narrow end of the mixing/funnel applicator and pour the entire 4lb.'s of the dry product mixture through the mixing funnel/applicator directly into a sewer cleanout (NOTE: Only the 2lb. container should of RootX applied into a toilet bowl to avoid foam overflow.) When applying into a sewer clean out, flush the toilet two times [Optional Statement: or up to 6 times for 1.6 gallon low flow toilets], or add 5-10 gallons of water into the cleanout to push the foam completely through the sewer line. Restrict water usage from four to six hours after application.]



# [THE FOLLOWING DIRECTIONS FOR USE WILL APPEAR ON 20 POUND BAGS:]

NOT FOR USE IN SEPTIC SYSTEMS IN THE STATE OF FLORIDA

#### **Directions for FDU 100 Method**

1. Preparing for Application After determining the correct Orifice size for the FDU 100, take the FDU 100 along with the ROOTX to the upstream manhole, where the ROOTX application will begin. Place the cleaner hose with cleaner nozzle into downstream manhole, as in normal operation, and send the hose with nozzle to the upstream manhole where the ROOTX application will begin. Once the cleaner hose has reached the upstream manhole, pull the hose out of the manhole and lay it on top of the ground.

You should now have your cleaner hose, ROOTX bags, FDU 100 with Foam Dispersal Nozzle, Plastic Locking Pin, Transfer Tube and Rubber O-Rings at the upstream manhole where the ROOTX application will begin.

Suggestions: To prevent having to enter a manhole to retrieve the cleaner hose, it is recommended that a Single Wire Hydraulic hose, 15-20 feet in length, 3/4" or 1" in diameter, be used as a leader hose which can then be attached to the cleaner hose. Attach the cleaner nozzle to the leader hose and send it to the upstream manhole, use a long pole with a hook on the end to pull the leader hose out of the manhole. This makes retrieval of the cleaner hose much easier and does not require that someone enter the manhole to retrieve the hose. Another suggestion is that the cleaner operator introduces slack in the cleaner hose, which will make it easier to retrieve at the upstream manhole.

2. Mixing the ROOTX Open the ROOTX box which contains two 20# bags of ROOTX The FDU 100 is designed to hold one 20# bag of ROOTX which is sufficient to treat up to 400 ft. of 6-18" pipe. Take one ROOTX bag and remove the plastic tie in the middle of the bag which separates the two dry components, the white chemical A and the brown chemical B. Be careful not to puncture or tear the bag during this process. After you have removed the plastic tie, grab each end of the bag and begin to mix the chemicals by shaking the bag vigorously from the side to side. A proper mixture has been achieved when both chemicals A and B form a tan mixture of white and brown chemicals. This process should take approximately two minutes.

WARNING: A carbon dioxide ( $CO_2$ ) buildup will occur during the mixing process. In the event that the bag should become so full of  $CO_2$  gas that it may break, you should open a small hole in the end of the bag to release the gas, then continue the mixing process until you achieve the proper inixture.

- 3. Attaching the Transfer Tube After a proper mixture has been achieved, open the end of the narrow part of the bag with either scissors or a knife. Open just the end where the bag has been sealed. Take the Transfer Tube which has a single groove at one end and two grooves at the other end, and insert it into the opening you have created, single groove end first. Then place the rubber O-rings over the bag and into the grooves which the bag material is covering, leaving one groove exposed and uncovered on the outside of the bag. The exposed groove will be used in locking the Transfer Tube into the FDU 100.
- 4. Putting ROOTX into the FDU 100 You should now have a bag with the ROOTX mixed to form a tan color and a Transfer Tube attached to the narrow end of the chemical bag. Take the Transfer Tube and slip it into the FDU 100 where the Foam Dispersal Nozzle fits. Take the plastic locking pin and insert it into the locking hole. Push the Plastic Locking Pin in as far as it will go. Lift the bag slowly, letting the ROOTX flow through the Transfer Tube into the FDU 100. Tap both the ROOTX bag and the FDU 100 occasionally to make sure you have proper flow and that the product is settling into the FDU 100. After completion of the transfer of ROOTX to the FDU 100, pull out the Plastic Locking Pin and remove the Transfer Tube from the FDU 100. Then insert the Foam Dispersal Nozzle into the FDU 100 and lock it into place with the Plastic Locking Pin. Remove the rubber O-rings from the Transfer Tube out of the narrow end of the bag. Be sure to save your Transfer Tube and rubber O-rings for future applications.
- 5. Application The FDU 100 should now be filled with 20 pounds of ROOTX Attach the cleaner hose to the Inlet End Cap of the FDU 100. Slowly reel in the cleaner hose while lowering the FDU 100 into the manhole. Suggestion: Attaching a string to the Foam Dispersal Nozzle end of the FDU 100 will enable the worker at the upstream manhole to lower the FDU 100 into the hole, while the cleaner operator is pulling the cleaner hose back slowly, without entry, while the operator is slowly retrieving the cleaner hose. The string should be attached in such a manner that it will not hang up in the pipe during the foam spray application. Once the FDU 100 is placed in the hole, the cleaner operator should be signaled to start the water, and only run the cleaner at an engine idle speed. The worker at the upstream manhole should verify that foam is emitting from the nozzle. Once the foam dispersal has been verified, the FDU 100 should be pulled through the pipe at a speed no greater than 20 feet per minute.

The nozzle of the FDU 100 should always be out of the water during the application of ROOTX. This will insure that the product is properly dispersed onto the roots. In situations where a high flow is present, it is suggested that the flow be bypassed to keep the nozzle from being submerged or to place the FDU 100 on a skid which will lift the nozzle above the flow level. (The skid would be similar to what is used for a camera of cleaning nozzle).

6. Finished Application The ROOTX application is finished when the FDU 100 reaches the downstream manhole. The cleaner is now turned off and the FDU 100 is retrieved from the downstream manhole. Smaller size pipe requires gently shaking and pulling by the operator at ground level, in order to retrieve the applicator. After the FDU 100 is removed, unhook the cleaner hose and detach the Foam Dispersal Nozzle. Then wash out any excess ROOTX with a hose, making sure that the wash water goes directly into the sewer through the open manhole. You are now ready for another application.

### **Direct Application Method**

ROOTX is a very flexible product, not only can it be applied in conjunction with a Jetter Truck, but it can also be applied by pouring the ROOTX directly into the sewer or storm line.

- 1. A 40# ROOTX box contains two 20# bags of pre-packaged chemical. Each 20# bag contains the two components which make up ROOTX. These two components are separated by a center tie.
- 2. ROOTX is a two component chemical. Both components should be mixed so that proper foaming action is created. This can be done by releasing the center tie which separates the two components and shaking the bag back and forth until the brown and white components are thoroughly mixed.
- 3. To effectively treat 300 ft. of 8-10 inch line, you must pour 40 pounds of the ROOTX directly into the manhole. Then follow with 25-30 gallons of water to create the foaming action. The foam will move down the line with the flow, leaving a residue throughout the pipe and coating the roots with the root killing chemical.

### **Storm Line Application**

ROOTX may be applied in a storm line by utilizing the FDU 100 method described above. In pipe size larger than 18" or in high flow situations the FDU 100 should be placed on a skid similar to what is used for a camera or cleaning nozzle. This will insure that a sufficient amount of chemical is getting on the roots.

ROOTX may also be applied in storm lines by the Direct Application Method described above. Utilize the following rates for pipe size larger than 10":

4-40# Boxes per 12" x 300' 6-40# Boxes per 16" x 300' 8-40# Boxes per 20" x 300' 10-40# Boxes per 24" x 300' 12-40# Boxes per 36" x 300' Add 50% for 450' lines or longer

# [THE FOLLOWING WARRANTY LANGUAGE WILL APPEAR ON ALL CONTAINERS]

NOTICE: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER WILL NOT BE LIABLE FOR ANY LOSS, INJURY OR DAMAGES AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, PURCHASERS AND/OR USERS OF THIS PRODUCT HEREBY WAIVE ANY LIABILITY. THERE ARE NO **IMPLIED** WARRANTIES MERCHANTABILITY OR OF FITNESS FOR THE PARTICULAR PURPOSE, AND THERE ARE NO OTHER IMPLIED WARRANTIES, EXCEPT AS SPECIFICALLY SET FORTH ON THIS LABEL. MANUFACTURER'S OBLIGATION ON ANY CLAIM IS LIMITED TO REPLACEMENT OF ANY DEFECTIVE PACKAGE OF TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ROOTX. MANUFACTURER WILL NOT BE LIABLE FOR ANY LOSS, INJURY OR DAMAGES TO PERSONS OR PROPERTY RESULTING FROM FAILURE OR IMPROPER USE OF THE PRODUCT, NOR WILL THE MANUFACTURER BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND SUSTAINED BY THE PURCHASER OR USER OF THIS PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, PURCHASERS AND/OR USERS OF THIS PRODUCT HEREBY WAIVE ANY STRICT LIABILITY OR PRODUCT LIABILITY CLAIM THEY MIGHT HAVE AGAINST THE MANUFACTURER AND/OR SELLER. SELLER MANUFACTURER ARE NOT LIABLE FOR ANY USE OF THIS PRODUCT NOT IN COMPLIANCE WITH THE DIRECTIONS ON THIS LABEL.

[Optional Statement: Visit www.roebic.com to register for free reminder email]

Revised: 7/30/2010