Department of Environmental Protection

FILE

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

July 26, 1995

Mr. T. Cecchini, Supervisor
Tangible Personal Property
Lee County Property Appraiser
Post Office Box 1546
Fort Myers, Florida 33902

Re: Robbins Manufacturing Co.

Dear Mr. Cecchini:

I have reviewed the June 28, 1995, material submitted by Robbins Manufacturing Co. in support of their request for relief from ad valorem taxes. The material provided satisfies the requirements of Chapter 62-8, Florida Administrative Code. The Department has determined that the drip pad, liners, leak detection system and roof are all eligible for assessment as pollution control equipment pursuant to ss. 193.621, Florida Statutes. I have no way of verifying that the drip pad, liners, leak detection system and roof are the "Treat Equip Envirnmntl Update" on the Robbins Fixed Asset - Asset Status Report attached to your May 19, 1995, letter.

In the future, you may wish to instruct industries requesting such an exemption to provide a listing of specific items of equipment whose primary purpose is pollution control. Such listing should have the capital cost and assumed salvage value for each item of equipment. With the list should be a statement from a professional engineer, registered in the State of Florida, that the primary purpose of the listed equipment is for control of pollution. If you have any questions, I may be contacted at (904) 487-0472, or via Suncom 277-0472.

Sincerely,

Hamilton S. Oven

Hamilton S. Oven, P.E.

STATE OF FLORIDA

LEE COUNTY
PROPERTY APPRAISER

KENNETH M. WILKINSON, C.F.A.

MEMBER

International Association of Assessing Officers

July 12, 1995

Department of Environmental Regulation
ATT: Hamilton Owen
2600 Blair Stone Rd.
Tallahassee, FL. 32399-2400

Lee County Property Appraiser
P. O. Box 1546
Ft. Myers, FL. 33902
Attn: T. Cecchini

Re: Pollution Control Device Approval for Robbins Manufacturing Co.

Dear Sir,

Robbins Manufacturing has requested the attached list of equipment to be approved for pollution control. We ask for your apporval and consideration in this matter as specified in the statute.

Sincerely,

T. Cecchini

T. Cecchini
Supervisor Tangible Personal Property

DEPARTMENT OF
ENVIRONMENTAL PROTECTION
JUL 17 1995
SITING COORDINATION

P.O. BOX 1546 • FORT MYERS, FLORIDA 33902 • (813) 339-6100 • Fax (813) 339-6160

STUDDARD,
GLISSON &
SMITH, INC.

June 28, 1995

Ms. T. Cecchini, Supervisor
Tangible Personal Property
Lee County Property Appraiser
P.O. Box 1546
Ft. Myers, FL 33902

RE: Robbins Mfg.
Pollution Control Exemption

Dear Ms. Cecchini:

Pursuant to your recent request enclosed is a copy of an October 1994 assessment report of the pollution control equipment in use at the referenced location.

This report was prepared by McPherson & Associates, P.C. whose Florida registration number is 45566.

I hope this document will enable you to complete processing the 1995 personal property return for this location in addition to the pollution control exemption.

If you need any further information, please do not hesitate to contact our office.

Very truly yours,

STUDDARD, GLISSON & SMITH, INC.

Malinda Gillilan

Malinda Gillilan

Enclosure: assessment report

#16 Norcross Street, Suite 100, Roswell, Georgia 30075
(404) 642-6711, FAX (404) 642-6820

DRIP PAD ASSESSMENT REPORT

ROBBINS MANUFACTURING COMPANY WOOD PRESERVING PLANT FT. MYERS, FLORIDA

Prepared for:

Robbins Manufacturing Company
13001 North Nebraska Avenue
P. O. Box 17939
Tampa, Florida 33682

October 6, 1994

Prepared by:

McPherson & Associates, P.C. • Structural Engineers
355 Crawford Parkway • Suite 418 • Portsmouth, Virginia 23704
(804) 398-8854 • Fax (804) 398-9103

McPHERSON & ASSOCI
355 Crawford Parkwa
Portsmouth, Vir
804•39
FAX 8

BLE OF CONTENTS

October 6, 1994

Page

. 1-1

. 2-1

. 3-1

. . . 4-1

. 5-1

Mr. Mike Provenza
Robbins Manufacturing Company
13001 North Nebraska Avenue
P.O. Box 17939
Tampa, FL 33682

Re: Robbins Manufacturing Company Drip Pad
Ft. Myers, Florida

Dear Mike:

McPherson & Associates, P.C. is pleased to provide this report concern
assessment of the drip pad at the Ft. Myers, Florida facility. This report was base
inspection of the drip pad, as well as a thorough investigation of the record keeping
Myers facility. Our inspection and report are based upon the requirements of 40 CFR
264 and 265, Subpart W requirements of the United States Environmental Protection Age
(USEPA). This annual assessment and report is a requirement of those regulations.

We have enjoyed working with Robbins Manufacturing Company on the annual assessment for the above referenced project. If there are any questions concerning this report or our inspection procedures, please advise.

Sincerely,

McPherson & Associates, P.C.

Roland McPherson

Roland E. McPherson, P.E.

REM:mlp

DRIP PAD ASSESSMENT REPORT

ROBBINS MANUFACTURING COMPANY
FT. MYERS, FLORIDA
OCTOBER 6, 1994

TABLE OF CONTENTS

FIGURES

APPENDICES

INTRODUCTION

DRIP PAD ASSESSMENT REPORT
ROBBINS MANUFACTURING COMPANY
FT. MYERS, FLORIDA
OCTOBER 6, 1994

1.0 INTRODUCTION

On December 6, 1990 the United States Environmental Protection Agency (USEPA) published regulations concerning drippage associated with wood preserving operations. These regulations are founded in Title 40 of the Code of Federal Regulations (40 CFR) Parts 264 and 265, Subpart W. These regulations require that owners and operators of wood preserving facilities have their facilities evaluated and certified to be in compliance with design and operating requirements of 40 CFR, 265.443. As part of this evaluation, an assessment must be made and upgrades to the existing drip pad must be completed prior to certification.

Robbins Manufacturing Company of Ft. Myers, Florida has completed the requirements of an initial assessment. Based upon this initial assessment, Robbins Manufacturing Company obtained a certification that the drip pad was in accordance with the requirements of 40 CFR as of October 6, 1992. As required by USEPA regulations, they also obtained an annual recertification as of October 6, 1993.

The USEPA regulations require that drip pads have an annual inspection performed by an independent, registered Professional Engineer to determine if the drip pad is still in compliance with the USEPA regulations. This annual certification requires that an independent Professional Engineer fully inspect the existing drip pad for cracks, possible leaks, and other deterioration. In addition, the annual inspection will include a review of the record keeping of the treatment plant to ensure that records have been kept in accordance with Section 265.443 of CFR.

DRIP PAD ASSESSMENT REPORT

ROBBINS MANUFACTURING COMPANY
FT. MYERS, FLORIDA
OCTOBER 6, 1994

1.0 INTRODUCTION

Robbins Manufacturing Company retained the services of McPherson & Associates, P.C. to complete this annual inspection and certification.

SITE LOCATION AND HISTORY

2.0 SITE LOCATION AND HISTORY

This Robbins Manufacturing Company facility is located at 3250 Metro Parkway in Ft. Myers, Florida. The Ft. Myers facility is approximately 4 miles west of Interstate 75 and 4 miles north of Daniels Parkway. Figure 1 is a site location map.

There is currently one drip pad in use at the Ft. Myers facility. The drip pad layout can be seen in Figure 2. The drip pad was completed in August of 1992 and is considered a new drip pad in accordance with the EPA regulations. As can be seen in Figure 2, the drip pad is constructed of eighteen separate sections of slab with three expansion joints running in the plan north-south direction with two intermittent control joints also running in the north-south direction. In the east-west direction there are two sawcut control joints that run the length of the pad. The drip pad dimensions are 60' x 115'. The drip pad is adjacent to an elevated track pad on the north side and is open on the other three sides. A summary of the drip pad construction and the initial assessment is included in the following section, Assessment Results.

In the fall of 1992, a new roof structure was built over the drip pad to keep rain water from falling directly onto the drip pad. Based on the installation of this new roof and control of run-on/run-off, the existing drip pad does not have to meet the requirements of handling storm water from a 24-hour, 25 year storm.

2.0 SITE LOCATION AND HISTORY

The Robbins wood treating facility in Ft. Myers, Florida uses both full cell and modified cell treatment processes. In both processes, a vacuum is applied to the treatment cylinder after pressure treating to enhance recovery of excess preservative. An automated process control system has been installed to increase process efficiency. This feature, together with implementation of improved wood treatment processes, currently allows Robbins to minimize drippage from the residue on treated wood. This has resulted in a minimal amount of drippage that reaches the drip pad. It should be noted that the drip pad has only been subjected to wood treated with CCA and has not been used for the drippage of creosote.

The drip pad currently in use is an 8" thick concrete slab-on-grade with wire mesh reinforcing. Concrete strength is 4000 psi at 28 days. There is curbing, sumps, and slope that were incorporated into the drip pad construction to allow for containment of drippage. A 60 mil primary liner and a 60 mil secondary liner were also installed to insure the containment of drippage. The drip pad has an underslab leak detection system.

The original rules and regulations as published in the Federal Registrar dated December 6, 1990, listed drip pads as existing if built before December 6, 1990 and new if built after this date. In November, 1992, the USEPA modified the 1990 listings to divide drip pads into three categories; those built prior to December 6, 1990 are existing drip pads; those built between December 6, 1990 and November 5, 1992 are modified drip pads and those built after November

2.0 SITE LOCATION AND HISTORY

5, 1992 are new drip pads. Modified drip pads are required to have a liner and leak detection system but are not required to have a coating. The Ft. Myers drip pad is considered "modified" and meets all requirements of Subpart W of the EPA.

The initial assessment was completed by McPherson & Associates, P.C. in October 1992. As part of the EPA requirements, Robbins Manufacturing Company is required to have the drip pad inspected on an annual basis and certification issued in order to continue to operate. The purpose of our inspection and this report is to complete this annual certification requirement.

ASSESSMENT RESULTS

3.0 ASSESSMENT RESULTS

The initial assessment of the drip pad was completed by representatives of McPherson & Associates, P.C. in September of 1992. A summary of this initial assessment, which is dated October 6, 1992, is as follows.

DRIP PAD:

1. The drip pad is considered "modified" since it was built between December 6, 1990 and November 5, 1992.
2. The drip pad is in full compliance with the EPA Regulations.
3. The construction of the drip pad was completed in August 1992.
4. The completion date is verified by copies of the concrete compressive strength test reports prepared by Law Engineering which is an independent testing laboratory. It is also verified by a sealed copy of this report.
5. Materials used for the drip pad are 8" thick concrete reinforced with one layer of the 6 x 6 - 4/4 welded wire fabric 3" down from top of the slab the drip pad is also reinforced with fibrillated polypropylene fibers mixed in the concrete. Based on the results of the concrete compressive strength tests, the actual concrete strength is 5000 p.s.i. at 28 days. The drip pad design was based on a concrete compressive strength of 4000 p.s.i. at 28 days.
6. The drip pad free-drains treatment drippage to the associated collection system.

3.0 ASSESSMENT RESULTS

7. A topographic survey of the top of drip pad elevations has not been completed, but it is obvious from the site inspection that the drip pad properly free-drains. This has also been verified by witnessing the drainage of treatment drippage at the site.

8. The drip pad has a concrete curb or berm around the perimeter. The curb is approximately 8" wide and 4" high on the plan east and west sides of the drip pad. The curb (or wall) is 8" wide and 18" high on the plan north side. There is a 4'-0" wide by 10" tall curb on the plan south side with a ramp on the southeast corner for drip pad access.

9. The drip pad is not coated with an impermeable material.

10. The drip pad is of sufficient structural strength and thickness to prevent failure from physical contact, climatic conditions, stress of installation and stress of daily operations. Concrete compressive strength tests were completed by Law Engineering, 6360 Arc Way, Suite 1A, Ft. Myers, Florida. A copy of the concrete test reports are included in this report.

11. Geotechnical evaluation of the site was completed by Geraghty & Miller, Inc. of Tampa, Florida.

12. Structural analysis of the drip pad and treating plant slab was completed by Frank Annessi who is a registered Professional Engineer with Hickson Corporation. A copy of the analysis is located at the office of Hickson Corporation as well as McPherson &

Associates, P.C. Certification of the drip pad design was provided by means of the Professional Engineers seal on the drawings and by a copy of this report.

13. There is a synthetic liner below the drip pad to prevent leakage into the subsurface soil or groundwater.

14. The drip pad is constructed with a leak detection system immediately above the secondary liner and immediately below the primary liner (or waterstop) which is made of the same material as the liner. Robbins Manufacturing Company has as-built construction documents on file as well as certification of the installation. Copies of the liner installation information and certification are included in this report.

15. The joints in the drip pad have been caulked with Dow Corning 888 at a couple of locations (the plan west half of the drip pad) and Ruscoe Highway Products Permanent Sealer 983 for the rest of the drip pad. Product data sheets are included in this report in Appendix B.

PAD LINER:

1. The drip pad liner is designed of sufficient strength and thickness to prevent failure due to pressure gradients, physical contact with the water or drip pad leakage, climatic conditions, stress of installation, and stress of daily operation.

3.0 ASSESSMENT RESULTS

2. The drip pad liner consist of a 60 mil primary liner (waterstop) with a geonet below and then a 60 mil secondary liner below the geonet. Both liners are made of high density polyethylene (HDPE) material. Robbins Manufacturing Company currently has on file a copy of the synthetic liner material analysis, material warranty, installation warranty, and installation certification. All joints in the liner material were tested and certified. The liner was installed by Comanco Environmental Corporation. We have included a copy of the liner analysis, warranties and certifications in this report.

3. The liner is placed on a base capable of supporting the liner and able to resist pressure gradients above and below the liner and prevent failure due to minor settlement, compression or uplift.

4. The geotechnical assessment with soil classification is provided in a report by Geraghty & Miller, Inc.. The soil classification directly below the liner is light tan to dark grey, fine to medium sand (SM or SP).

5. The existing soil at the drip pad site location was tested by Geraghty & Miller, Inc. for excessive levels of arsenic, chromium and lead. The results of their tests indicate that the above three chemical levels are acceptable. A copy of the soil assessment is on file at Robbins Manufacturing Company and is included in this report.

6. The drip pad liner has been installed to free-drain treatment leakage to the associated detection and collection systems. The construction drawings delineated the liner slope and collection system and they were installed in accordance with the drawings.

3.0 ASSESSMENT RESULTS

LEAK DETECTION SYSTEM:

1. The leak detection system consists of a HDPE geonet layer with vent/flush wells and monitoring wells. The system has been divided into four (4) zones by a HDPE zone separation strip to isolate the location of leaks. Each zone has a vent/flush well and monitoring well. The leak detection system is between the primary liner and the secondary liner. The leak detection system was installed by Comanco Environmental Corporation.
2. The geonet is chemically resistant to treatment drippage and is sufficiently strong to prevent collapse under pressures exerted by overlaying materials and loads.
3. It has been designed to provide early detection of any drippage that has passed through the drip pad and primary liner.
4. The monitoring wells have been installed at the low point of each zone. They are constructed of HDPE vertical pipe. They are securely capped with a steel lid. The construction drawings clearly identify the leak detection zones and corresponding monitoring wells. These drawings are maintained at Robbins Manufacturing Company at Ft. Myers, Florida.

3.0 ASSESSMENT RESULTS

DRIP PAD COATING:

1. The drip pad is uncoated, but has three barriers (i.e., drip pad and two liners).

GENERAL:

1. The drip pad will be fully protected by a roof and run-on, run-off has been controlled by curbs and exterior grade elevations so the system does not need to be designed for 24 hour, 25 year storm water.

The annual assessment of the existing drip pad was completed by a representative of McPherson & Associates, P.C. on September 8, 1994. This assessment included the following:

1. Review of the original certification including all documents pertaining to concrete strength, reinforcing for the drip pads, drip pad slopes, run-on/run-off water, waste water management, and all other items provided for the initial certification. This also included a review of the assessment report and final certification by McPherson & Associates, P.C.
2. A review of all of the construction documents for the construction of the drip pad.

3. A review of the record keeping program of Robbins Manufacturing Company at Ft. Myers from the period of October 6, 1993 until September 8, 1994.

4. An inspection of the existing drip pad to detect any cracks or deterioration in the coating or concrete and to record the location of all deficiencies.

Upon arrival at the site, McPherson & Associates, P.C. requested a copy of the operating log for the drip pad. This documentation allowed McPherson & Associates, P.C. to review the record keeping procedures for the Fort Myers facility. The record keeping program consists of the following four areas:

1. <u>DRIPPAGE RECORD</u> - The USEPA requires that the treatment time of each charge be recorded as well as the date and time at which the drippage has ceased for that charge. Lumber is required to stay on the drip pad until all drippage has ceased before it can be removed and placed in a storage yard. The drippage record at the Ft. Myers facility included charge number, number of packs, date and time removed from cylinder, date and time drippage ceased, and operator signature. A sample of the "Drippage Record" is included in Appendix A. It is our opinion that the drippage records are kept in excellent condition.

2. **DRIP PAD CLEANING RECORD** - The USEPA requires that drip pad surfaces be cleaned thoroughly at least once every seven days so that the drip pad can be inspected. Robbins Manufacturing Company has provided a record that includes date, time, cleaning technique used, and operator's signature. A sample of the "Drip Pad Cleaning Record" is included in Appendix A. It is our opinion that this record has been kept in excellent condition.

3. **DRIP PAD WEEKLY INSPECTION REPORT** - The USEPA requires that drip pads must be inspected on a weekly basis and after major storms. Robbins Manufacturing at Ft. Myers has weekly inspection records that include the signature of the inspector, date of inspection, reason for the inspection (weekly or storm), comments as to deterioration, malfunction, or improper operation of the control systems, comments as to the presence of leakage in the leak detection system, comments as to whether the leak detection system is functioning properly, and comments as to any surface deterioration or cracking. A sample of the "Drip Pad Weekly Inspection Record" is included in Appendix A. It is our opinion that this record has been kept in excellent condition.

4. **WASTE REMOVAL RECORDS** - The USEPA requires that waste removed from the drip pad and the associated collection system must be recorded and

should be removed at least once every ninety days. The waste removal records at Robbins Manufacturing at Ft. Myers includes the date, time, waste type, waste source, approximate amount, and the operator's signature. A sample of "Waste Removal Records" is included in Appendix A. It is our opinion that the waste removal records have been kept in excellent condition.

Based on our review of the record keeping for the drip pad at the Ft. Myers site, it is our opinion that the records are kept in good order. In addition to the above records, Ft. Myers also keeps a "Drip Pad Routine Maintenance Report" which describes any work done to the drip pad. A sample copy of this report is included in Appendix A.

After reviewing the initial assessment documents and the record keeping program, we proceeded to walk the drip pad and inspect it for cracks, deterioration, and other possible signs of failure. Our inspection of the drip pad indicated that it is in good to excellent condition. We noted that from the time of the original completion of the drip pad to the present, two major north-south cracks developed at about the third points of the length of the drip pad. These cracks were repaired in September of 1993. It is our understanding that the cracks were sawed out with a joint saw and caulked with "Ruscoe 983". A data sheet for "Ruscoe 983" is included in Appendix B. In addition to the repair of the two major cracks in the drip pad, Robbins Manufacturing replaced the curbs along the east and west ends of the drip pad in order to

provide a more substantial curb. This work was completed during the summer of 1993. During 1994, Robbins installed a 10" high by 4' wide curb on the south side with an access ramp in the southeast corner.

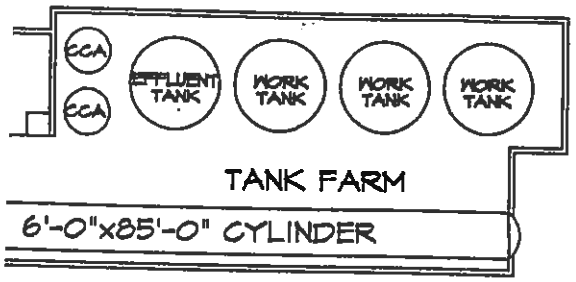
4.0 RECOMMENDATIONS

Based upon our previous discussion in the Assessment Results section of this report (Section III), we would like to provide Robbins Manufacturing Company with the following recommendations:

1. The drip pad does not have a dedicated forklift. Either a dedicated forklift should be assigned to the drip pad or the tires should receive a triple wash before coming on or off of the drip pad. This falls under the EPA requirement to "minimize tracking of drippage off of the drip pad."

It should be noted that the Ft. Myers facility only generates one 55-gallon drum of waste for every three to four months of operation.

RCEPTOR PIT



— CURBING

— MONITORING WELLS

LEGEND:

● MONITORING WELL

○ VENT/FLUSH WELL

SON & TES, P.C. RD PKWY I, VIRGINIA	DRAWN BY: JSS DESIGN BY: REM DATE 9/23/94	ROBBINS MANUFACTURING CO. FT. MYERS, FLORIDA DRIP PAD LAYOUT	FIGURE F-2

DRIP PAD ROUTINE MAINTENANCE REPORT

Facility Name: Robbins Mfg Date: 4/25-26-27/94

Address: 3250 Metro Pkwy Time: ---

Ft. Myers FL 33916

Contractor Name: _____

Representative Name: _____

Address: _____ Phone: _____

_____

Work description (Section of pad repaired; methods and products used in repair, etc.)

A 8 inch high by 4 feet wide curb ~~of~~ reinforced concrete was poured to repair damages to the pad on the south side of the drip pad, it attends from existing asphalt to the west end of the pad, all joints were sealed with Rascor permanent sealer. The monitering wells were raised to the new height.

Maintenance activity supervised by:

_____ Date: _____

(Print Name)

_____

(Signature)

DRIP PAD ROUTINE MAINTENANCE REPORT

Facility Name: Robbins Mfg. Date: 4/27/94

Address: 3250 Metro Pkwy Time: 1500

Ft. Myers FL. 33916

Contractor Name: Self

Representative Name: Tracy Hobson

Address: Phone:

Work description (Section of pad repaired; methods and products used in repair, etc.)

Resealed all joints on drip pad with Ruscoe Permanent Sealer.

Maintenance activity supervised by:

(Print Name) Date:

(Signature)

DRIP PAD ROUTINE MAINTENANCE REPORT

Facility Name: Robbins Mfg Date: 4/26/94

Address: 3250 Metro Pkwy Time: 1300

Ft. Myers FL. 33916

Contractor Name: Self

Representative Name: Tracy Hobson

Address: Phone:

Work description (Section of pad repaired; methods and products used in repair, etc.)

The cracks on the east curb was repaired by sawing cracks and filling with Ruscoe Permanent Sealer.

Maintenance activity supervised by:

Tracy Hobson Date: 4-26/94
(Print Name)

Tracy Hobson
(Signature)

APPENDIX B PRODUCT DATA SHEETS

RUSCOE HIGHWAY PRODUCTS

CONSPEC MATERIALS, INC.
5403 W. CRENSHAW STREET
TAMPA, FLORIDA 33634
(813) 885-4324

INFORMATION ON JOINT SEALANT

PERMANENT SEALER 983
HIGHWAY JOINT SEALANT

TYPE: ..... Nitrile Rubber.

CURE: ..... One-part; solvent evaporation cure.

SPECIAL PROPERTIES: ..... Easy to use; bonds to concrete without use of primer; no tooling; good recovery from extension/compression; resealable to itself.

PRIMARY USE: ..... Sealing highway concrete contracting joints.

DESCRIPTION

RUSCOE PERMANENT SEALER 983 nitrile rubber highway joint sealant is a one part nitrile rubber material that readily extrudes over a wide temperature range and cures to produce a durable, tough, flexible rubber highway joint seal.

Due to its excellent adhesive characteristics and good extension/compression recovery, PERMANENT SEALER 983 gives outstanding performance in highway joints in which extreme movement occurs.

Contraction joints are generally sealed to restrict intrusion of incompressibles, water and deicing chemicals at the joint surface.

RUSCOE 983 Highway Joint Sealant features:

- Easy application—one part, ready to use as supplied; no mixing required; dispensed directly from container into joint with air powered pump.
- No priming—primer not required for bonding to concrete; surface must be clean.
- No tooling—self leveling eliminates need to tool sealant.
- Seals irregular surfaces—can be used to seal joints where spalls have occurred.
- Long life reliability—cured sealant remains rubbery from -60° to 300°F. (-51° to 149°C) without tearing, cracking or becoming brittle.
- Fast dry—tack free in ten minutes; road can be opened to traffic almost immediately after sealing in most applications.
- Elastic—meets the requirements of good joint design of ± 25 percent (50 percent total) movement. This extension/compression characteristic can be repeated many times and sealant will resume its original shape without splits or cracks.
- Good weatherability—nitrile rubber sealant is virtually unaffected by salts, chemicals, oils, grease, transmission fluids, gasoline, jet fuel, sunlight, rain, snow, ozone or temperature extremes.
- Performance requirements—exceeds Federal Specification TT-S-00230C Type I, Class A, except for 3.5.5, weight loss.
- Superior Adhesion—will adhere to concrete when dry or damp; no loss of adhesion.

USES

RUSCOE PERMANENT SEALER 983 nitrile rubber highway joint sealant is especially effective for sealing transverse and longitudinal contraction and expansion joints, center line and shoulder (edge) joints. These joints can be on a bridge or roadway. It can be used as the original sealant in new concrete construction or as a remedial or repair sealant in old construction.

TYPICAL PRODUCT PROPERTIES (As Supplied)

Type	Nitrile Rubber
Color	Gray
Flow, Sag or Slump	Self Leveling
Cure time, at 77°F. (25°C), days	21-28
Full adhesion, days	21-28
Tack free time at 77°F. (25°C), minutes	10

COE 983 Highway Joint
ant is uniquely effective
joint sealant between a
rete roadway and an as-
tic concrete shoulder. It
bond to both materials to
re no intrusion of water
the joint.

MANENT SEALER 983
ides additional assurance
w construction during the
al curing of the concrete
ts when the slabs create
ss greater than the design
ensions or movement.

use in maintenance appli-
ons, resealing old joints,
MANENT SEALER 983
be used to seal irregular
ed or spalled joints. Elim-
es need for reshaping be-
sealing.

projects require sawing of
ts as well as cleaning out
l old sealing compounds.

ardless of type of appli-
on for sealant, the joints
uld be cleaned and free of
sealant. Some dampness
not deter the performance
e sealant.

LIMITATIONS

RUSCOE'S PERMANENT SEALER 983 nitrile rubber highway joint sealant can be used for constant water immersion; however, the sealant should be allowed to cure the full 28 days prior to immersion.

RUSCOE'S 983 should not be used on vertical sealing applications. The self leveling product would flow down. For vertical curb sealing on bridge decks, use PERMANENT SEALER CURB SEALANT 965.

The sealant bead should not be above the road surface to minimize traffic noise and abrasion from snow removal equipment.

WHERE TO USE IT

PERMANENT SEALER 983 nitrile highway joint sealant is ideal for use in joints that experience high degrees of movement such as expansion and contraction joints in highways, bridges, parking deck structures and airports. Also used for longitudinal and shoulder joints whether the shoulder is concrete or asphalt.

RUSCOE 983 works exceptionally well in areas of occasional or continuous water immersion conditions.

PERMANENT SEALER 983 exceeds requirements for sealing joints that are exposed to jet fuel, gasoline, chemicals, grease, oils or transmission fluids.

RUSCOE'S 983 nitrile highway joint sealant never requires a primer, whether it will be totally immersed in water or exposed to fuels or chemicals. It is resealable to itself.

The RUSCOE 983 nitrile joint sealant is a self leveling material that Does Not require tooling. Since it is self leveling, use in vertical curb joint should be avoided.

RUSCOE PERMANENT SEALER CURB SEALANT 965 should be used in any vertical installation. CURB SEALANT 965 is a non-sag formulation of nitrile sealant. See HP-2 for further information.

TABLE I: RECOMMENDED BACKER ROD INSTALLATION

JOINT WIDTH	1/4"	3/8"	1/2"	3/4"	1"
Recessed Below Surface	1/4"	1/4"	1/4"	1/4"	1/2"
Sealant Thickness	1/4"	1/4"	1/4"	3/8"	1/2"
Backer Rod Diameter	3/8"	1/2"	5/8"	7/8"	1-1/4"
Total Joint Depth	7/8-1"	1-1-1/8"	1-1/8-1-1/4"	1-1/2-1-5/8"	2-1/4-2-3/8"

HOW TO USE IT

Being a self leveling sealant, RUSCOE'S 983 Highway Joint Sealant never needs "tooling." The sealant will seek its own level and flow even into areas which may be spalled or have irregular shapes. The solvent evaporation cure takes effect almost immediately by "skinning" over within 10 minutes to a tack free substance.

PERMANENT SEALER 983 is an adhesive formulated sealant and adheres to virtually any substrate with which it comes into contact, with the exception of expanded polyethylene foam backer rod. This backer should be used in all sealant work, whether new construction or repair. The backer rod should be a minimum of 1/8" larger than the width of the joint.

The PERMANENT SEALER 983 Highway Joint Sealant, the proper backer rod (expanded closed cell polyethylene foam) and proper installation are all part of a successful joint system.

INSTALLATION

1. Clean all joints of contaminants and debris to the depth at which the sealant and backer rod are to be installed, by grinding, sawing, water or sandblasting, mechanical abrading or a combination of these methods. This will provide a sound, clean surface for sealant application.
2. Blow out dust and loose particles from joints with oil free compressed air. Surfaces should be clean and dust free.
3. Install proper size expanded closed cell polyethylene foam backer rod in the joint. This material permits the application of a thin bead and acts as a bond breaker allowing the RUSCOE 983 nitrile joint sealant to stretch freely with the joint movement.
4. Apply PERMANENT SEALER 983 in a continuous operation to properly fill and seal the joint to within 1/16" of the road surface.
5. No tooling is required. The self leveling allows product to flow and upon cure will produce the desired concave configuration.
6. The RUSCOE 983 nitrile joint sealant will begin to "skin" over as soon as it is applied. Traffic can resume within 10 minutes.

STORAGE & SHELF LIFE

When stored in original unopened container at or below 90°F. (32°C), RUSCOE PERMANENT SEALER 983 nitrile highway joint sealant has a shelf life of one year from date of shipment. Keep containers tightly closed.

TABLE II: ESTIMATING REQUIREMENTS

Joint Width, Inches	Joint Depth, Inches	Linear Feet/Gallon
1/4	1/4	308
3/8	1/4	205
1/2	1/4	154
5/8	5/16	98.7
3/4	3/8	68.4
7/8	7/16	50.3
1	1/2	38.5
1-1/8	9/16	30.4
1-1/4	5/8	24.6
1-3/8	11/16	20.4
1-3/4	7/8	12.6
1-7/8	15/16	11.0
2	1	9.6

PACKAGING

RUSCOE PERMANENT SEALER 983 nitrile highway joint sealant is supplied in 29 fl. oz. (850 ml) cartridges, 5-gallon pails (18.9 Liters) and 55-gallon drums (207.9 Liters). All weights are net.

CAUTION

Avoid prolonged skin contact with RUSCOE 983 Highway Joint Sealant. May cause skin irritation.

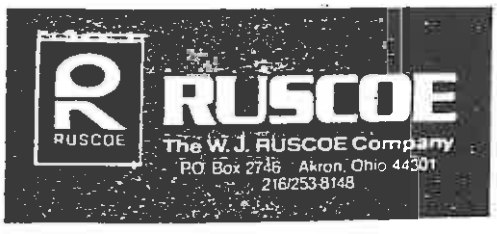
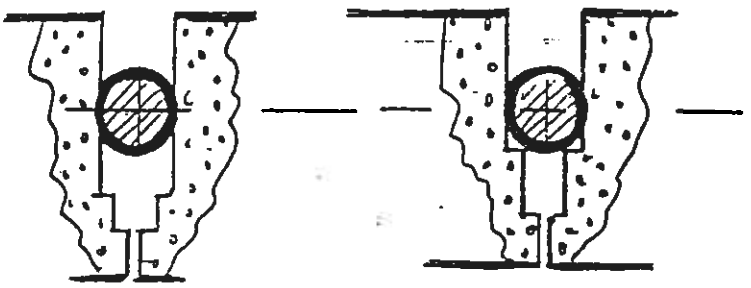


FIGURE I: JOINT DESIGNS



REPAIRED JOINT NEW CONSTRUCTION

a. Joint wide enough to accommodate movement.

b. Repaired joint sawed deep enough for rod/ sealant placement and space for pumping old compounds. Not needed in new construction.

c. Proper backer rod placement.

d. Sealant properly installed.

WARNING: FLAMMABLE HARMFUL OR FATAL IF INHALED OR SWALLOWED DO NOT USE NEAR FIRE, FLAME OR SOURCE OF IGNITION.

Avoid prolonged breathing of vapor or repeated contact with skin. Use with adequate ventilation. If swallowed, do not induce vomiting. Call physician immediately. Contains Petroleum Distillates and Ketones.

KEEP OUT OF THE REACH OF CHILDREN

NOTICE TO CUSTOMER

The information and data contained herein are based on information we believe reliable. You should thoroughly test on any application and independently conclude satisfactory performance before commercialization. Suggestions of uses should not be taken as inducements to infringe any particular patent.

PLASITE®

WISCONSIN PROTECTIVE COATINGS CORP.
MANUFACTURERS
HI-RESISTANT PROTECTIVE COATINGS
P.O. BOX 8147
GREEN BAY, WISCONSIN 54308-8147
PHONE: AREA CODE 414 - 437-6561
ORDER ENTRY FAX: 414 - 437-8546 LAB AND MARKETING FAX: 414 - 437-8083

TECHNICAL BULLETIN
5201
BASE COAT/SEALER

NOVEMBER 1992
(Replaces August 1992)

PLASITE 5201 BASE COAT/SEALER

TYPE: A 100% solids epoxy monolithic floor surfacer formulated for corrosion and erosion protection while providing a tough wear-resistant surface. When used with a #30 mesh silica sand will produce a tough skid-resistant surface with a thickness of 1/16".

ADVANTAGES: A floor system that can easily be applied and cured at temperatures as low as 40°F.

CHEMICAL RESISTANCE: Chemically resistant to the entire range of CCA solutions, water, brine, most acids and alkalines.

USES: A chemically resistant flooring system designed for concrete drip pads found in the wood treating industry. **CAUTION:** Not to be used on concrete surfaces that have deteriorated to the degree of having the aggregate exposed.

COLOR: Neutral color when using #30 mesh silica sand.
A gray sealer is available from manufacturer.

PACKAGING: Part A - Resin
Part B - Hardener

NOTE: The Part A (Resin) and Part B (Hardener) for the base coat and the sealer are the same and are used interchangeably.

SURFACE PREPARATION

NEW CONCRETE: New concrete must have a minimum of 28 days cure, and no curing agents or sealers shall be used.

Remove oil, grease or other loose or foreign materials and contaminants.

A good bonding tooth, the texture of rough sandpaper, is desired with the removal of all laitance. To provide the foregoing bonding tooth, it is necessary to prepare the surface using one of the following methods:

A. Abrasive blast.
B. Scarify.
C. Acid etch.

OLD CONCRETE: Remove all powdery, weak concrete, paint, wax, oil, grease or other contaminants.

Once the concrete has been cleaned and neutralized, one of the following methods shall be used to provide a good bonding tooth, a surface with the texture of rough sandpaper, with the removal of all laitance:

A. Abrasive blast.
B. Scarify.
C. Acid etch.

NOTE: HOLES AND DEPRESSIONS 1/2" DEEP OR DEEPER SHOULD BE FILLED WITH PLASITE 5400 SERIES GROUT PRIOR TO APPLICATION OF PLASITE 5201 BASE COAT/SEALER. ALL SURFACES MUST BE DRY BEFORE APPLICATION.

APPLICATION INSTRUCTIONS

CAUTION!! Application in direct sunlight and rising surface temperature may result in blistering of the materials due to expansion of entrapped air or moisture in the concrete.

Concrete surfaces that have been in direct sunlight must be shaded for 24 hours prior to application and remain shaded until the initial set has taken place. When the surface temperatures are rising, it may be necessary to postpone the application or apply during the cooler evening hours.

MINIMUM APPLICATION TEMPERATURE: Do not apply when surface temperature is below 40°F.

IMPORTANT!

FOR APPLICATION, THE 5201 BASE COAT/SEALER RESIN-HARDENER SHOULD BE AT A MINIMUM TEMPERATURE OF 70°F.

ALWAYS POUR THE MATERIAL AS SOON AS BLENDED. IN THE CONTAINER THE POT LIFE IS APPROXIMATELY 10 MINUTES. THE WORKING LIFE ONCE POURED IS APPROXIMATELY 30 MINUTES.

ALWAYS SPREAD IMMEDIATELY AFTER POURING. COLD CONCRETE TEMPERATURES WILL CAUSE A VISCOSITY INCREASE; THEREFORE, THE LONGER THE COOL SURFACE CONTACT BEFORE SPREADING TO 15 MILS THE MORE INCREASINGLY DIFFICULT IT BECOMES.

BASE COAT: Add Part B to Part A and mix thoroughly. Spread the Part A and B mixture with a medium (3/8") nap roller at a rate of 106 sq. ft. per gallon (15 mils).

NOTE: Additional material will be required if surface is rough.

SEED COAT: Immediately broadcast a good, clean, graded #30 mesh silica sand or comparable aggregate (not supplied) into the base coat at a rate of approximately .62 lbs. per sq. ft. or until the base coat is completely covered without any visible wet or shiny spots.

Allow to cure until the loose sand can be removed without disturbing the base coat. This time period may vary from 1 hour to 48 hours, depending on temperatures.

Lightly sweep off the loose sand.

SEALER COAT: Add Part B into Part A and mix thoroughly. Spread the Part A and B mixture with a medium (3/8") nap roller at a rate of 106 sq. ft. per gallon (15 mils) covering the entire base coat.

CURE: The cure is directly related to the temperature.

35°F - 7 Days	60°F - 48 Hours
40°F - 5 Days	70°F - 36 Hours
45°F - 4 Days	80°F - 24 Hours
50°F - 3 Days	90°F - 16 Hours

R E A D T H I S N O T I C E !!
SAFETY AND MISCELLANEOUS EQUIPMENT

It is recommended that the operator provide himself with clean coveralls and rubber soled shoes and observe good personal hygiene. Certain personnel may be sensitive to various types of resins which may cause dermatitis.

Department of Environmental Protection

FILE

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

May 30, 1995

Mr. T. Cecchini, Supervisor
Tangible Personal Property
Lee County Property Appraiser
Post Office Box 1546
Fort Myers, Florida 33902

Re: Robbins Manufacturing Co.

Dear Mr. Cecchini:

I have reviewed the material submitted by Robbins Manufacturing Co. in support of their request for relief from ad valorem taxes. The material provided does not satisfy the requirements of Chapter 62-8, Florida Administrative Code. There is no statement from an engineer registered in the State of Florida that the primary purpose of the equipment is for pollution control. There is no description of the equipment claimed. Absent the required information, there is no way the Department can determine the eligibility with ss. 193.621, Florida Statutes.

For your information I am enclosing a copy of Chapter 62-8, F.A.C. You may wish to forward a copy to Robbins with a copy of this letter. If you have any questions, I may be contacted at (904) 487-0472, or via Suncom 277-0472.

Sincerely,

Hamilton S. Oven

Hamilton S. Oven, P.E.

Encl:

cc: Mike Harley

STATE OF FLORIDA
LEE COUNTY
PROPERTY APPRAISER

KENNETH M. WILKINSON, C.F.A.

MEMBER
International Association of Assessing Officers

May 19, 1995

Department of Environmental Regulation
2600 Blair Stone Rd.
Tallahassee, FL. 32399-2400

Lee County Property Appraiser
P. O. Box 1546
Ft. Myers, FL. 33902
Attn: T. Cecchini

Re: Pollution Control Device Approval for Robbins Manufacturing Co.

Dear Sir,

Robbins Manufacturing has requested the attached list of equipment to be approved for pollution control. We ask for your approval and consideration in this matter as specified in the statue.

Sincerely,

T. Cecchini

T. Cecchini
Supervisor Tangible Personal Property

STUDDARD, GLISSON & SMITH, INC.
16 NORCROSS ST., SUITE 100
ROSWELL, GEORGIA 30075
(404) 642-6711

Robbins manufacturing co.

TIME 13:45 FIXED ASSET - ASSET STATUS REPORT

PROCESS LEVEL : LFP - LUMBER FT. MYERS - PRODUCTION

ASSET TYPE/SUBTYPE : EQUIP / POLLU

ASSET NUMBER	COMP NBR	ASSET STATUS	IN-SERV DATE	ASSET LIFE	REM LIFE	DEPR METH	SALVAGE VALUE	ASSET COST(BASIS)	BOOK VALUE	CURRENT PER DEPRECIATION	YEAR TO DATE DEPRECIATION	ASSET TO DATE DEPRECIATION
821-000		A	QTY: 1									
TREAT EQUIP ENVIRONMNTL UPDATE												
	*BOOK	BASIS	11/01/93	84	66.0	STL	0.00	181521.81	142624.27	0.00	25931.69	38897.54
	*FED	BASIS	11/01/93	84	66.0	ACR	0.00	181521.81	111135.80	0.00	44454.32	70386.01
	*AMT	BASIS	11/01/93	120	102.0	ACR	0.00	181521.81	130695.70	0.00	32673.93	50826.11
854-000		A	QTY: 1									
TREAT ENVIRNMNTL UPDATE												
	*BOOK	BASIS	06/01/94	84	78.0	STL	0.00	12754.78	11843.72	0.00	911.06	911.06
	*FED	BASIS	06/01/94	84	76.5	ACR	0.00	12754.78	10477.14	0.00	2277.64	2277.64
	*AMT	BASIS	06/01/94	120	114.0	ACR	0.00	12754.78	11479.30	0.00	1275.48	1275.48
*** ASSET STATUS ACTIVE TOTALS												
	*BOOK	BASIS					0.00	194276.59	154467.99	0.00	26842.75	39808.60
	*FED	BASIS					0.00	194276.59	121612.94	0.00	46731.96	72663.65
	*AMT	BASIS					0.00	194276.59	142175.00	0.00	33949.41	52101.59
*** ASSET SUBTYPE EQUIP/POLLU TOTALS												
	*BOOK	BASIS					0.00	194276.59	154467.99	0.00	26842.75	39808.60
	*FED	BASIS					0.00	194276.59	121612.94	0.00	46731.96	72663.65
	*AMT	BASIS					0.00	194276.59	142175.00	0.00	33949.41	52101.59