

SPECIFIER NOTE: THIS DOCUMENT IS INTENDED TO BE A GUIDE FOR RESEARCHING ENVIRONMENTAL ISSUES RELATIVE TO BUILDING PRODUCTS. ISSUES ARE ORGANIZED UNDER THREE PRIMARY CATEGORIES: RESOURCE MANAGEMENT, TOXICITY, AND PERFORMANCE.

ENVIRONMENTAL IMPACT QUESTIONNAIRE (EIQ)

II. IDENTIFICATION

A. Material/Product: [Concrete Sealant](#)

Brand Name: [Sonocrete Kure-N-Seal 30](#)

Manufacturer: [ChemRex Inc.](#)

What is the primary use or application for this product?

[Water resistant Concrete Sealer](#)

B. Contact for EIQ:

Name: [ChemRex Us](#) Title: [Unknown](#) _____

Address: [_ 889 Valley Park Drive Shokopee, MN](#) _____ Zip Code: [55379](#) _____

Telephone: [952-496-6000](#) _____ FAX: [_ Unknown](#) _____ Date: [3/26/02](#)

III. RESOURCE MANAGEMENT

A. Renewable Resources:

1. List renewable resources used as product raw materials. Provide percentage amounts in relation to complete (100 percent) product.

<u>Renewable Resource</u>	<u>Percentage</u>
_ Unknown _____	_____

2. Does manufacturer obtain raw materials or fabricate this product outside of the United States:

___Y ___N? [Unknown](#)

a. If yes, are United States environmental standards or more strict standards followed in these countries: ___Y ___N? [Unknown](#)

b. List countries involved.

B. Managed Resources:

1. Does extraction of product raw materials or fabrication of this product affect endangered specie(s): ___Y ___N? [Unknown](#)

a. If yes, list species and describe effect, including methods for negative effects.

Endangered Species

Effect

___ Unknown _____

2. Products Containing Wood: Are wood materials obtained from certified sustainable forestry operations: ___Y ___N? Unknown

a. If yes, provide name of certification organization for each wood species being used in this project.

Species

Certification Organization

___ Unknown _____

b. If no, state where the product resources are produced and describe forestry operations.

Product Resources

Forestry Operations

___ Unknown _____

C. Recycled Content:

1. List recycled materials used as product raw materials; distinguish pre-consumer and post-consumer materials. Provide percentage amounts in relation to complete (100 percent) product.

Recycled Material

% Pre-Consumer

% Post-Consumer

___ Unknown _____

D. Embodied Energy:

1. Product Transport:

a. Where are raw materials acquired? Identify state and country.

Raw Material

Source (State and Country)

___ Unknown _____

b. Describe means of transporting raw materials to the manufacturing plant.

Raw Material

Transportation

___ Unknown _____

c. Where is product manufactured/fabricated? Identify state and country.

___ Shokapee, MN, USA and Brampton, ON, Canada _____

d. Is the product warehoused locally, regionally, or nationally?

___ nationally _____

e. Describe means of transporting product to distribution facilities.

_____ Unknown _____

2. Production Energy: List energy sources used in production process; indicate which are renewable energy sources (e.g. wind, solar). Provide percentage amounts in relation to complete (100 percent) product.

<u>Energy Sources</u>	<u>Renewable</u>	<u>Percentage</u>
_____ <u>Unknown</u> _____	_____ Y _____ N	_____

3. Provide an embodied energy study of the product from extraction of raw materials through production and assembly. Include an estimate for the total number of BTU's required per pound of finished products. Identify parameters for study.

_____ Unknown _____

4. Describe measures the manufacturer has taken to minimize energy usage in the production process.

_____ Unknown _____

E. Reuse/Recyclability/Disposal:

1. Reuse:

- a. Can product be reused directly (in same or similar use): _____ Y No _____ N?
- b. If yes, discuss the possibility of direct reuse of the product after project demolition.

2. Recycling:

- a. Can product be recycled: _____ Y no _____ N?
- b. If yes, list the parts of the product which can be post-consumer recycled into raw materials for the product and the parts which can be post-consumer recycled into other types of items. Provide percentage amounts in relation to complete (100 percent) product.

<u>Post-Consumer - Raw</u>	<u>Post-Consumer - Other</u>	<u>Percentage</u>
_____	_____	_____

- c. If yes, describe the process of separation of the parts for post-consumer recycling from the product.

- d. If yes, list current markets using recycled materials from the product.

- e. If yes, estimate the practical number of times this item can be recycled. _____
3. Describe the manufacturer's policy and program to facilitate the recycling or reuse of its product by accepting product returns at the end of their "useful life".

_____ Unknown _____

IV. TOXICITY/HAZARDOUS MATERIALS

A. Toxic/Hazardous By-Products:

1. List the production wastes involved with the manufacture of this item. Distinguish the production wastes between toxic and non-toxic. Provide percentage amounts in relation to complete (100 percent) product.

<u>Toxic</u>	<u>Non-Toxic</u>	<u>Percentage</u>
Xylene		5%
Naphtha-light aromatic		50%
1,2,4 Trimethyl Benzene		25%
Cumene		5%

2. Estimate the quantity of production waste produced per unit of finished product.

_____ Unknown _____

3. Is reclamation of production waste done on site: ___Y ___N? With outside services:

___Y ___N? Unknown

- a. If outside services are used, list companies involved.

4. Is waste water reclaimed by manufacturer: ___Y ___N? Unknown

- a. If yes, describe the process of recycling/reuse of waste water.

5. Describe the manufacturer's active steps to minimize or eliminate production wastes; include process of liquid and solid waste material treatment or reclamation if performed at manufacturing site. Unknown _____

6. Describe the manufacturing procedures and chemicals involved that would be considered better than industry standard. Unknown _____

B. Toxic/Hazardous Contents (carcinogens and other hazards inherent in product/material):

1. Provide a complete chemical profile of the item; include all chemical components and provide percentage amounts in relation to complete (100 percent) product; identify biocides (mildewcides or in-can preservatives) and carcinogens listed by any of the following:
 - a. United States Environmental Protection Agency (EPA) Carcinogen Assessment Group (CAG) list of carcinogens.
 - b. Clean Air Act Sections 109, 111, and 112.
 - c. The National Toxicology Program's latest published "Annual Report on Carcinogens".
 - d. IARC Human Carcinogens (Group 1, 2A, and 2B).
 - e. California Proposition 65.

<u>Chemical</u>	<u>Carcinogen</u>	<u>Percentage</u>
__ Trimethyl Benzene _____	_ Yes _ Y ____ N	_ 25% _____

C. Material Safety Data Sheet (MSDS):

1. Provide Material Safety Data Sheet (MSDS).
 - a. Articles: Finished products which are manufactured off-site and shipped to the project for installation while conforming to Title 29 of the Code of Federal Regulations, OSHA Hazard Communication Regulation 29CFR 1910.1200, Section (b)5 and Section (c) are defined as articles. If by being defined as an article, a MSDS has not been developed for a particular product, then provide MSDS on raw materials, goods, and items used in the fabrication of that article.

D. Outgassing/Reactivity:

1. Chlorofluorocarbon (CFC):
 - a. Are CFC's or HCFC's used in the manufacture and/or content of the item specified:
 ____ Y _ no _ N?
 - b. If CFC's or HCFC's were previously used in the product and/or its manufacture, describe measures taken by manufacturer to eliminate their use.
 _____ Unknown _____

2. Indoor Air Quality:

- a. Does the product outgas (emit) carcinogens or other hazardous substances into the air after installation, including final curing/drying: _ Yes _ Y ____ N?
- b. If yes, submit IAQ test report.

E. Electromagnetic Radiation:

1. Does the product emit electromagnetic radiation: ___Y ___no___N?
 2. If yes, at what rate per hour? _____
 3. If yes, describe methods for installation, use, and maintenance of product to minimize generation of and occupant exposure to electromagnetic radiation.
-

F. Compliance with Regulations (Environmental Statutory Compliance):

1. Does the manufacturer meet all federal, state, and local environmental laws, including laws governing air emissions, waste water treatment, and solid waste disposal/treatment: ___Y ___N? **Unknown**
2. Has the manufacturer met the above criteria for the previous five years: ___Y ___N? **Unknown**
3. List the applicable standard.
_____ **Unknown** _____
4. Does the product meet applicable industry standards, such as ASTM, Green Seal, manufacturing standards, LA or NY research report numbers, and UL approvals: ___Y ___N? List these standards.
_____ **Unknown** _____

V. **PERFORMANCE - INSTALLATION**

A. Environmental Procedures/Precautions:

1. Describe special procedures and precautions to be used while handling and installing the product:
Handling: Use only in a well ventilated area. Keep out of reach of children.
Storage: Do not store in direct sunlight. Keep away from heat, sparks and flame. Keep container closed when not in use.
Engineering controls: local exhaust ventilation may be necessary to control any air contaminants to within their TVLs during the use of this product.
Respiratory Protection: Wear NIOSH/MSHA approved respiratory protection when the product is mixed or applied in a poorly ventilated area or if workplace levels of ingredients exceed the TLV. Follow applicable federal, state and local regulations.
Other: Where contact is likely, wear chemical resistant gloves, chemical safety goggles with a face shield, and clean protective clothing to cover arms and legs to keep exposure to a minimum.
2. Identify accessories, such as fasteners, sealers, and adhesives that are non-toxic (or less toxic than industry standard), energy efficient, or recycled or recyclable products? **Unknown**

B. Installation Energy:

1. Product Transport: List the means to transport the finished product to the construction site.
_____ Ground and bound material when transferring._____
2. Installation: List energy means and describe energy requirements for installation of the product.

Dampen surface to be treated (do not saturate

C. Construction Waste:

1. List the recommended method(s) for proper products disposal; stipulate preferred method and restrictions which might apply.
_____ Use absorbent material and dispose of according to local or federal laws.
2. Comment on the environmental impact of the product as a waste material.
_____ This product is generally bad for the environment because it cannot be reused or recycled. It has one life and one cycle. This product is highly reactive with many products, including oxidizing agents. It cannot be exposed to heat or flame, it combusts easily.
3. Packaging:
 - a. Describe packaging for the product.
_____ Plastic Bucket_____
 - b. Does manufacturer accept return of used packaging for reuse: ___Y ___no___N?
 - c. If yes, state limitations and procedures for packaging return.

VI. PERFORMANCE - OPERATIONS

A. Maintenance

1. Describe the recommended cleaning and maintenance for the product using products which have minimal VOC emission.
_____ None provided_____
2. Estimate the "useful life" expectancy for this product.
_____ 1 year shelf life_____
3. Are replacement parts available: ___Y ___N? Not applicable
 - a. If yes, can replacement parts be installed in the field: ___Y ___N?
4. Provide a copy of the life cycle analysis for this product.
5. Provide a copy of the manufacturer's warranty for this product. No warranty whatsoever. The buyer assumes the risk in its use of the material.

- B. Energy Efficiency (energy required to operate/maintain):
1. Estimate BTU's required to operate the product when new? ___ **Unknown** ___; after five years? ___ **Unknown** ___; after ten years? ___ **Unknown** ___
- C. Compliance with Regulations (Environmental Statutory Compliance):
1. Does the product meet all federal, state, and local environmental laws, including laws governing energy efficiency and air emissions: **_yes_**Y ___N?
 2. Has the product met the above criteria for the previous five years: **_yes_**Y ___N?
 3. List the applicable standards. **Unknown**

VII. CORPORATE COMMITMENT

- A. Corporate Environmental Policy:
1. Provide copy of manufacturer's stated environmental policies.
Not provided.

END OF ENVIRONMENTAL IMPACT QUESTIONNAIRE

SPECIFIER NOTE: THIS DOCUMENT IS INTENDED TO BE A GUIDE FOR RESEARCHING ENVIRONMENTAL ISSUES RELATIVE TO BUILDING PRODUCTS. ISSUES ARE ORGANIZED UNDER THREE PRIMARY CATEGORIES: RESOURCE MANAGEMENT, TOXICITY, AND PERFORMANCE.

ENVIRONMENTAL IMPACT QUESTIONNAIRE (EIQ)

II. IDENTIFICATION

A. Material/Product: [Radon/Concrete Sealant](#)

Brand Name: [1000 Conseal](#)

Manufacturer: [Waterproofing Engineering & Technologies](#)

What is the primary use or application for this product?

[Concrete Sealer, Concrete block sealer, mortar sealer, radon blocker, concrete waterproofing, vapor barrier, concrete densifier. Resists acids, alkali and salt and oil attacks.](#)

B. Contact for EIQ:

Name: [Waterproofing Engineering & Technologies](#) Title: [Unknown](#) _____

Address: [_ 10709 Tube Drive 100 Fort Worth, TX](#) _____ Zip Code: [76053](#) _____

Telephone: [Not provided](#) _____ FAX: [_ Unknown](#) _____ Date: [Unknown](#)

III. RESOURCE MANAGEMENT

A. Renewable Resources:

1. List renewable resources used as product raw materials. Provide percentage amounts in relation to complete (100 percent) product.

Renewable Resource

Percentage

[_ Unknown](#) _____

2. Does manufacturer obtain raw materials or fabricate this product outside of the United States:

[___Y ___N?](#) [Unknown](#)

a. If yes, are United States environmental standards or more strict standards followed in these countries: [___Y ___N?](#) [Unknown](#)

b. List countries involved.

B. Managed Resources:

1. Does extraction of product raw materials or fabrication of this product affect endangered specie(s): ___Y ___N? [Unknown](#)

a. If yes, list species and describe effect, including methods for negative effects.

<u>Endangered Species</u>	<u>Effect</u>
Unknown	

2. Products Containing Wood: Are wood materials obtained from certified sustainable forestry operations: ___Y ___N? [Unknown](#)

a. If yes, provide name of certification organization for each wood species being used in this project.

<u>Species</u>	<u>Certification Organization</u>
Unknown	

b. If no, state where the product resources are produced and describe forestry operations.

<u>Product Resources</u>	<u>Forestry Operations</u>
Unknown	

C. Recycled Content:

1. List recycled materials used as product raw materials; distinguish pre-consumer and post-consumer materials. Provide percentage amounts in relation to complete (100 percent) product.

<u>Recycled Material</u>	<u>% Pre-Consumer</u>	<u>% Post-Consumer</u>
Unknown		

D. Embodied Energy:

1. Product Transport:

a. Where are raw materials acquired? Identify state and country.

<u>Raw Material</u>	<u>Source (State and Country)</u>
Unknown	

b. Describe means of transporting raw materials to the manufacturing plant.

<u>Raw Material</u>	<u>Transportation</u>
Unknown	

c. Where is product manufactured/fabricated? Identify state and country.

[Fort Worth, Texas. United States](#)

d. Is the product warehoused locally, regionally, or nationally?

_____ Unknown _____

e. Describe means of transporting product to distribution facilities.

_____ Unknown _____

2. Production Energy: List energy sources used in production process; indicate which are renewable energy sources (e.g. wind, solar). Provide percentage amounts in relation to complete (100 percent) product.

<u>Energy Sources</u>	<u>Renewable</u>	<u>Percentage</u>
_____ <u>Unknown</u> _____	_____Y _____N	_____

3. Provide an embodied energy study of the product from extraction of raw materials through production and assembly. Include an estimate for the total number of BTU's required per pound of finished products. Identify parameters for study.

_____ Unknown _____

4. Describe measures the manufacturer has taken to minimize energy usage in the production process.

_____ Unknown _____

E. Reuse/Recyclability/Disposal:

1. Reuse:

a. Can product be reused directly (in same or similar use): _____Y No_____N?

b. If yes, discuss the possibility of direct reuse of the product after project demolition.

2. Recycling:

a. Can product be recycled: _____Y no_____N?

b. If yes, list the parts of the product which can be post-consumer recycled into raw materials for the product and the parts which can be post-consumer recycled into other types of items. Provide percentage amounts in relation to complete (100 percent) product.

<u>Post-Consumer - Raw</u>	<u>Post-Consumer - Other</u>	<u>Percentage</u>
_____	_____	_____

c. If yes, describe the process of separation of the parts for post-consumer recycling from the product.

d. If yes, list current markets using recycled materials from the product.

e. If yes, estimate the practical number of times this item can be recycled. _____

3. Describe the manufacturer's policy and program to facilitate the recycling or reuse of its product by accepting product returns at the end of their "useful life".

IV. TOXICITY/HAZARDOUS MATERIALS

A. Toxic/Hazardous By-Products:

1. List the production wastes involved with the manufacture of this item. Distinguish the production wastes between toxic and non-toxic. Provide percentage amounts in relation to complete (100 percent) product.

<u>Toxic</u>	<u>Non-Toxic</u>	<u>Percentage</u>
Not Provided.	_____	_____

2. Estimate the quantity of production waste produced per unit of finished product.

_____ Unknown _____

3. Is reclamation of production waste done on site: ___Y ___N? With outside services:

___Y ___N? Unknown

a. If outside services are used, list companies involved.

4. Is waste water reclaimed by manufacturer: ___Y ___N? Unknown

a. If yes, describe the process of recycling/reuse of waste water.

5. Describe the manufacturer's active steps to minimize or eliminate production wastes; include process of liquid and solid waste material treatment or reclamation if performed at manufacturing site. Unknown _____

6. Describe the manufacturing procedures and chemicals involved that would be considered better than industry standard. Unknown _____

B. Toxic/Hazardous Contents (carcinogens and other hazards inherent in product/material):

1. Provide a complete chemical profile of the item; include all chemical components and provide percentage amounts in relation to complete (100 percent) product; identify biocides (mildewcides or in-can preservatives) and carcinogens listed by any of the following:
 - a. United States Environmental Protection Agency (EPA) Carcinogen Assessment Group (CAG) list of carcinogens.
 - b. Clean Air Act Sections 109, 111, and 112.
 - c. The National Toxicology Program's latest published "Annual Report on Carcinogens".
 - d. IARC Human Carcinogens (Group 1, 2A, and 2B).
 - e. California Proposition 65.

<u>Chemical</u>	<u>Carcinogen</u>	<u>Percentage</u>
_ <u>Unknown</u> _____	___ Y ___ N	_____

C. Material Safety Data Sheet (MSDS):

1. Provide Material Safety Data Sheet (MSDS).
 - a. Articles: Finished products which are manufactured off-site and shipped to the project for installation while conforming to Title 29 of the Code of Federal Regulations, OSHA Hazard Communication Regulation 29CFR 1910.1200, Section (b)5 and Section (c) are defined as articles. If by being defined as an article, a MSDS has not been developed for a particular product, then provide MSDS on raw materials, goods, and items used in the fabrication of that article.

D. Outgassing/Reactivity:

1. Chlorofluorocarbon (CFC):
 - a. Are CFC's or HCFC's used in the manufacture and/or content of the item specified:
___ Y _no_ N?
 - b. If CFC's or HCFC's were previously used in the product and/or its manufacture, describe measures taken by manufacturer to eliminate their use.

_____ Unknown _____
2. Indoor Air Quality:
 - a. Does the product outgas (emit) carcinogens or other hazardous substances into the air after installation, including final curing/drying: _Yes_ Y ___ N?
 - b. If yes, submit IAQ test report.

E. Electromagnetic Radiation:

1. Does the product emit electromagnetic radiation: ___Y ___no___N?
 2. If yes, at what rate per hour? _____
 3. If yes, describe methods for installation, use, and maintenance of product to minimize generation of and occupant exposure to electromagnetic radiation.
-

F. Compliance with Regulations (Environmental Statutory Compliance):

1. Does the manufacturer meet all federal, state, and local environmental laws, including laws governing air emissions, waste water treatment, and solid waste disposal/treatment: ___Y ___N? [Unknown](#)
2. Has the manufacturer met the above criteria for the previous five years: ___Y ___N? [Unknown](#)
3. List the applicable standard.
[Unknown](#) _____
4. Does the product meet applicable industry standards, such as ASTM, Green Seal, manufacturing standards, LA or NY research report numbers, and UL approvals: ___Y ___N? List these standards.
[Unknown](#) _____

V. **PERFORMANCE - INSTALLATION**

A. Environmental Procedures/Precautions:

1. Describe special procedures and precautions to be used while handling and installing the product:

[CONSEAL should not be allowed to remain on glass or aluminum. In the event of contact, wipe off immediately with a wet cloth or sponge. CONSEAL should not be applied to glazed floor or wall tile, or glazed or hard fired brick where the glaze will prevent the penetration of the material. However, CONSEAL may be applied over these materials if the intent is to seal the grout joints. In such cases, after the CONSEAL has sufficiently soaked into the grout, remove all excess material from the surface with a wet vac, squeegee or mop. This will greatly minimize the possibility of a white deposit or film from forming on the tile or brick. When in doubt, apply CONSEAL to a small test area. CONSEAL is not recommended for use on porous brick, pavers or tile as there is not sufficient alkali \(lime\) in these materials for the CONSEAL to react with. In most cases, white discoloration will occur on such surfaces. CONSEAL should not be applied to masonry structures having a mortar or grout containing a latex binder. CONSEAL should not be applied or stored at freezing temperatures. 45 degree minimum surface temperature. If freezing occurs during storage, agitate the thawed material thoroughly to assure uniform solution. During outside applications, care should be taken to protect vegetation and adjacent areas from direct spray or overspray.](#)

2. Identify accessories, such as fasteners, sealers, and adhesives that are non-toxic (or less toxic than industry standard), energy efficient, or recycled or recyclable products? [Unknown](#)

B. Installation Energy:

1. Product Transport: List the means to transport the finished product to the construction site.

 Unknown

2. Installation: List energy means and describe energy requirements for installation of the product.

Dampen surface to be treated (do not saturate) using a fine mist water spray. Saturate the surface thoroughly with CONSEAL at an approximate rate of 100 – 150 square feet per gallon, depending upon porosity of the concrete. Low pressure spray equipment, such as a hand pumped garden type sprayer works well for medium sized areas. For large areas, airless spray equipment is very efficient. Small areas can be effectively treated using a spray bottle. Brushes or rollers are not recommended because of the low viscosity of the CONSEAL. Do not allow the CONSEAL to pond or puddle, as a white residue will likely form on the surface of the concrete. Move the excess material from the low spots on the floor to the high spots with a squeegee, mop or broom. Any remaining material should be picked up with a wet vac or mop. The time for additional applications can be judged by observing the time it takes for the CONSEAL to soak into the concrete. If the CONSEAL soaks in quickly, generally less than fifteen minutes after application, additional material should be applied. **IMPORTANT:** Approximately 3 hours after application of the CONSEAL, water dampen the treated surface using a fine water spray mist. **CAUTION:** Do not flush with water as some of the CONSEAL still on the surface may be washed away by this action. 24 hours after application, flush or mop the surface thoroughly with water. Surface should be kept continually damp for 48 hours. Painted surfaces: CONSEAL will penetrate through most oil and water based paints. Generally, it will not affect the existing color; however, a small area should first be tested before applying CONSEAL to any expansive areas. CONSEAL will not penetrate latex, polyvinyl or acrylic based paints. Unpainted surfaces: Generally, no surface preparation is necessary. Before painting over CONSEAL treated areas, the surfaces should be flushed with clear water until the surface no longer exhibits leaching of alkali or foreign matter. For surfaces such as basement and outside walls, follow standard procedures as described above. CONSEAL will seal against hydrostatic pressure; however, flowing water must be stopped before application. Oil, grease or acid conditions: Preliminary cleaning of the surface is necessary before CONSEAL is applied. Heavy deposits may require scraping, followed by thorough cleaning with a commercial degreaser. After the surface has been cleaned, apply CONSEAL 1010. Flush the area with cold water when the CONSEAL 1010 has penetrated and the area feels tacky or slippery. A floor brush or squeegee will help float oils and grease off when flushing. Deep stains will not be removed entirely at the time of treatment, but will disappear progressively as the CONSEAL penetrates, emulsifies and ejects the oil or grease. Curing new concrete: Apply CONSEAL to the surface as soon as the concrete finishing operations have been completed, or when the forms have been removed, saturating the surface thoroughly. Concrete will cure slowly, producing a hardened waterproof surface. CONSEAL is excellent in hot or windy weather, since it promotes uniform curing, increases density, resists hairline shrinkage cracking and stops surface dusting.

C. Construction Waste:

1. List the recommended method(s) for proper products disposal; stipulate preferred method and restrictions which might apply.

 Use absorbent material and dispose of according to local or federal laws.

2. Comment on the environmental impact of the product as a waste material.
 ____ This product is generally bad for the environment because it cannot be reused or recycled.
 It has one life and one cycle.
3. Packaging:
 - a. Describe packaging for the product.
 ____ Plastic Bucket _____
 - b. Does manufacturer accept return of used packaging for reuse: ____Y __no__N?
 - c. If yes, state limitations and procedures for packaging return.

VI. PERFORMANCE - OPERATIONS

A. Maintenance

1. Describe the recommended cleaning and maintenance for the product using products which have minimal VOC emission.
 ____ None provided _____
2. Estimate the "useful life" expectancy for this product.
 ____ Unknown _____
3. Are replacement parts available: ____Y ____N? Not applicable
 - a. If yes, can replacement parts be installed in the field: ____Y ____N?
4. Provide a copy of the life cycle analysis for this product. Not provided.
5. Provide a copy of the manufacturer's warranty for this product. No warranty whatsoever

B. Energy Efficiency (energy required to operate/maintain):

1. Estimate BTU's required to operate the product when new? ____ Unknown ____; after five years?
 ____ Unknown ____; after ten years? ____ Unknown _____

C. Compliance with Regulations (Environmental Statutory Compliance):

1. Does the product meet all federal, state, and local environmental laws, including laws governing energy efficiency and air emissions: ____Y ____N? Unknown
2. Has the product met the above criteria for the previous five years: ____Y ____N? Unknown
3. List the applicable standards. Unknown

VII. CORPORATE COMMITMENT

A. Corporate Environmental Policy:

1. Provide copy of manufacturer's stated environmental policies.

Not provided.

END OF ENVIRONMENTAL IMPACT QUESTIONNAIRE

SPECIFIER NOTE: THIS DOCUMENT IS INTENDED TO BE A GUIDE FOR RESEARCHING ENVIRONMENTAL ISSUES RELATIVE TO BUILDING PRODUCTS. ISSUES ARE ORGANIZED UNDER THREE PRIMARY CATEGORIES: RESOURCE MANAGEMENT, TOXICITY, AND PERFORMANCE.

ENVIRONMENTAL IMPACT QUESTIONNAIRE (EIQ)

II. IDENTIFICATION

A. Material/Product: [Radon/Concrete Sealant](#)

Brand Name: [Radon Seal](#)

Manufacturer: [Novion Inc.](#)

What is the primary use or application for this product?

[Concrete Sealer, Concrete block sealer, mortar sealer, radon blocker, concrete waterproofing, vapor barrier, concrete densifier.](#)

B. Contact for EIQ:

Name: [Novion Inc.](#) _____ Title: [Unknown](#) _____

Address: [18 L'Hermage Drive Shelton, CT](#) _____ Zip Code: [06484](#) _____

Telephone: [1-203-225-0366](#) _____ FAX: [Unknown](#) _____ Date: [11/12/2001](#)

III. RESOURCE MANAGEMENT

A. Renewable Resources:

1. List renewable resources used as product raw materials. Provide percentage amounts in relation to complete (100 percent) product.

<u>Renewable Resource</u>	<u>Percentage</u>
Unknown _____	_____
_____	_____

2. Does manufacturer obtain raw materials or fabricate this product outside of the United States:

___Y ___N? [Unknown](#)

a. If yes, are United States environmental standards or more strict standards followed in these countries: ___Y ___N? [Unknown](#)

b. List countries involved.

B. Managed Resources:

1. Does extraction of product raw materials or fabrication of this product affect endangered specie(s): ___Y ___N? **Unknown**

a. If yes, list species and describe effect, including methods for negative effects.

<u>Endangered Species</u>	<u>Effect</u>
___ Unknown _____	_____

2. Products Containing Wood: Are wood materials obtained from certified sustainable forestry operations: ___Y ___N? **Unknown**

a. If yes, provide name of certification organization for each wood species being used in this project.

<u>Species</u>	<u>Certification Organization</u>
___ Unknown _____	_____

b. If no, state where the product resources are produced and describe forestry operations.

<u>Product Resources</u>	<u>Forestry Operations</u>
___ Unknown _____	_____

C. Recycled Content:

1. List recycled materials used as product raw materials; distinguish pre-consumer and post-consumer materials. Provide percentage amounts in relation to complete (100 percent) product.

<u>Recycled Material</u>	<u>% Pre-Consumer</u>	<u>% Post-Consumer</u>
___ Unknown _____	_____	_____

D. Embodied Energy:

1. Product Transport:

a. Where are raw materials acquired? Identify state and country.

<u>Raw Material</u>	<u>Source (State and Country)</u>
___ Unknown _____	_____

b. Describe means of transporting raw materials to the manufacturing plant.

<u>Raw Material</u>	<u>Transportation</u>
___ Unknown _____	_____

c. Where is product manufactured/fabricated? Identify state and country.

___ **Connecticut, United States** _____

d. Is the product warehoused locally, regionally, or nationally?

Regionally

e. Describe means of transporting product to distribution facilities.

Unknown

2. Production Energy: List energy sources used in production process; indicate which are renewable energy sources (e.g. wind, solar). Provide percentage amounts in relation to complete (100 percent) product.

<u>Energy Sources</u>	<u>Renewable</u>	<u>Percentage</u>
<u>Unknown</u>	<u>Y</u> <u>N</u>	

3. Provide an embodied energy study of the product from extraction of raw materials through production and assembly. Include an estimate for the total number of BTU's required per pound of finished products. Identify parameters for study.

Unknown

4. Describe measures the manufacturer has taken to minimize energy usage in the production process.

Unknown

E. Reuse/Recyclability/Disposal:

1. Reuse:

a. Can product be reused directly (in same or similar use): Y No N?

b. If yes, discuss the possibility of direct reuse of the product after project demolition.

2. Recycling:

a. Can product be recycled: Y no N?

b. If yes, list the parts of the product which can be post-consumer recycled into raw materials for the product and the parts which can be post-consumer recycled into other types of items. Provide percentage amounts in relation to complete (100 percent) product.

<u>Post-Consumer - Raw</u>	<u>Post-Consumer - Other</u>	<u>Percentage</u>

c. If yes, describe the process of separation of the parts for post-consumer recycling from the product.

d. If yes, list current markets using recycled materials from the product.

e. If yes, estimate the practical number of times this item can be recycled. _____

3. Describe the manufacturer's policy and program to facilitate the recycling or reuse of its product by accepting product returns at the end of their "useful life".

IV. TOXICITY/HAZARDOUS MATERIALS

A. Toxic/Hazardous By-Products:

1. List the production wastes involved with the manufacture of this item. Distinguish the production wastes between toxic and non-toxic. Provide percentage amounts in relation to complete (100 percent) product.

<u>Toxic</u>	<u>Non-Toxic</u>	<u>Percentage</u>
Silicates, Bonding Agents, Gelling Agents, wetting agents, defoaming Agents, stabilizing agents.		18-34%

2. Estimate the quantity of production waste produced per unit of finished product.

_____ Unknown _____

3. Is reclamation of production waste done on site: ___Y ___N? With outside services:

___Y ___N? Unknown

a. If outside services are used, list companies involved.

4. Is waste water reclaimed by manufacturer: ___Y ___N? Unknown

a. If yes, describe the process of recycling/reuse of waste water.

5. Describe the manufacturer's active steps to minimize or eliminate production wastes; include process of liquid and solid waste material treatment or reclamation if performed at manufacturing site. Unknown _____

6. Describe the manufacturing procedures and chemicals involved that would be considered better than industry standard. Unknown _____

B. Toxic/Hazardous Contents (carcinogens and other hazards inherent in product/material):

1. Provide a complete chemical profile of the item; include all chemical components and provide percentage amounts in relation to complete (100 percent) product; identify biocides (mildewcides or in-can preservatives) and carcinogens listed by any of the following:

- a. United States Environmental Protection Agency (EPA) Carcinogen Assessment Group (CAG) list of carcinogens.
- b. Clean Air Act Sections 109, 111, and 112.
- c. The National Toxicology Program's latest published "Annual Report on Carcinogens".
- d. IARC Human Carcinogens (Group 1, 2A, and 2B).
- e. California Proposition 65.

<u>Chemical</u>	<u>Carcinogen</u>	<u>Percentage</u>
<u> Unknown </u>	<u> Y </u> <u> N </u>	<u> </u>

C. Material Safety Data Sheet (MSDS):

1. Provide Material Safety Data Sheet (MSDS).

- a. Articles: Finished products which are manufactured off-site and shipped to the project for installation while conforming to Title 29 of the Code of Federal Regulations, OSHA Hazard Communication Regulation 29CFR 1910.1200, Section (b)5 and Section (c) are defined as articles. If by being defined as an article, a MSDS has not been developed for a particular product, then provide MSDS on raw materials, goods, and items used in the fabrication of that article.

D. Outgassing/Reactivity:

1. Chlorofluorocarbon (CFC):

- a. Are CFC's or HCFC's used in the manufacture and/or content of the item specified:
 Y no N ?

- b. If CFC's or HCFC's were previously used in the product and/or its manufacture, describe measures taken by manufacturer to eliminate their use.

 Unknown

2. Indoor Air Quality:

- a. Does the product outgas (emit) carcinogens or other hazardous substances into the air after installation, including final curing/drying: Yes Y N ?

b. If yes, submit IAQ test report.

E. Electromagnetic Radiation:

1. Does the product emit electromagnetic radiation: ___Y ___no___N?
2. If yes, at what rate per hour? _____
3. If yes, describe methods for installation, use, and maintenance of product to minimize generation of and occupant exposure to electromagnetic radiation.

F. Compliance with Regulations (Environmental Statutory Compliance):

1. Does the manufacturer meet all federal, state, and local environmental laws, including laws governing air emissions, waste water treatment, and solid waste disposal/treatment: ___Y ___N? **Unknown**
2. Has the manufacturer met the above criteria for the previous five years: ___Y ___N? **Unknown**
3. List the applicable standard.
_____ **Unknown** _____
4. Does the product meet applicable industry standards, such as ASTM, Green Seal, manufacturing standards, LA or NY research report numbers, and UL approvals: ___Y ___N? List these standards.

_____ **Unknown** _____

V. PERFORMANCE - INSTALLATION

A. Environmental Procedures/Precautions:

1. Describe special procedures and precautions to be used while handling and installing the product:
Use NIOSH/MSHA approved respirator, particularly if spraying overhead. Use safety goggles for eye protection. Rubber gloves and standard work clothing and shoes. Use adequate local exhaust ventilation.
2. Identify accessories, such as fasteners, sealers, and adhesives that are non-toxic (or less toxic than industry standard), energy efficient, or recycled or recyclable products? **Unknown**

B. Installation Energy:

1. Product Transport: List the means to transport the finished product to the construction site.

_____ **Unknown** _____

2. Installation: List energy means and describe energy requirements for installation of the product.

____ Man power. Spray pump. _____

C. Construction Waste:

1. List the recommended method(s) for proper products disposal; stipulate preferred method and restrictions which might apply.

____ Use absorbent material and dispose of according to local or federal laws.

2. Comment on the environmental impact of the product as a waste material.

____ This product is generally bad for the environment because it cannot be reused or recycled. It has one life and one cycle.

3. Packaging:

a. Describe packaging for the product.

____ Plastic Bucket _____

b. Does manufacturer accept return of used packaging for reuse: ____Y ____no__N?

c. If yes, state limitations and procedures for packaging return.

VI. PERFORMANCE - OPERATIONS

A. Maintenance

1. Describe the recommended cleaning and maintenance for the product using products which have minimal VOC emission.

____ None provided _____

2. Estimate the "useful life" expectancy for this product.

____ Unknown _____

3. Are replacement parts available: ____Y ____N? Not applicable

a. If yes, can replacement parts be installed in the field: ____Y ____N?

4. Provide a copy of the life cycle analysis for this product. Not provided.

5. Provide a copy of the manufacturer's warranty for this product. Not provided

B. Energy Efficiency (energy required to operate/maintain):

1. Estimate BTU's required to operate the product when new? ____ Unknown ____; after five years?

____ Unknown ____; after ten years? ____ Unknown _____

C. Compliance with Regulations (Environmental Statutory Compliance):

1. Does the product meet all federal, state, and local environmental laws, including laws governing energy efficiency and air emissions: ____Y ____N? [Unknown](#)
2. Has the product met the above criteria for the previous five years: ____Y ____N? [Unknown](#)
3. List the applicable standards. [Unknown](#)

VII. CORPORATE COMMITMENT

A. Corporate Environmental Policy:

1. Provide copy of manufacturer's stated environmental policies.

[Not provided.](#)

END OF ENVIRONMENTAL IMPACT QUESTIONNAIRE

SPECIFIER NOTE: THIS DOCUMENT IS INTENDED TO BE A GUIDE FOR RESEARCHING ENVIRONMENTAL ISSUES RELATIVE TO BUILDING PRODUCTS. ISSUES ARE ORGANIZED UNDER THREE PRIMARY CATEGORIES: RESOURCE MANAGEMENT, TOXICITY, AND PERFORMANCE.

ENVIRONMENTAL IMPACT QUESTIONNAIRE (EIQ)

II. IDENTIFICATION

A. Material/Product: [Concrete sealant](#)

Brand Name: [Radon Loc](#)

Manufacturer: [Endur-O-Seal, North East](#)

What is the primary use or application for this product?

[Concrete Sealant. Prevents Radon emissions into lower level living areas. Concrete Block Sealer, Radon Mitigation, Vapor Barrier, Mortar Sealer, Concrete Densifier.](#)

B. Contact for EIQ:

Name: [Endur-O-Seal, North East](#) Title: [N/A](#)

Address: [516 Route 12A Surry, NH](#) Zip Code: [03431](#)

Telephone: [1-603-358-0075](#) FAX: [N/A](#) Date: [1/15/01](#)

III. RESOURCE MANAGEMENT

A. Renewable Resources:

1. List renewable resources used as product raw materials. Provide percentage amounts in relation to complete (100 percent) product.

<u>Renewable Resource</u>	<u>Percentage</u>
Unknown	
_____	_____
_____	_____

2. Does manufacturer obtain raw materials or fabricate this product outside of the United States:

___Y ___No___N?

a. If yes, are United States environmental standards or more strict standards followed in these countries: ___Y ___N?

b. List countries involved.

N/A

B. Managed Resources:

1. Does extraction of product raw materials or fabrication of this product affect endangered specie(s): ___Y ___N? **Unknown**

a. If yes, list species and describe effect, including methods for negative effects.

Endangered Species

Effect

2. Products Containing Wood: Are wood materials obtained from certified sustainable forestry operations: ___Y ___NO___N?

a. If yes, provide name of certification organization for each wood species being used in this project.

Species

Certification Organization

N/A

b. If no, state where the product resources are produced and describe forestry operations.

Product Resources

Forestry Operations

N/A

C. Recycled Content:

1. List recycled materials used as product raw materials; distinguish pre-consumer and post-consumer materials. Provide percentage amounts in relation to complete (100 percent) product.

Recycled Material

% Pre-Consumer

% Post-Consumer

N/A

D. Embodied Energy:

1. Product Transport:

a. Where are raw materials acquired? Identify state and country.

Raw Material

Source (State and Country)

N/A

b. Describe means of transporting raw materials to the manufacturing plant.

Raw Material

Transportation

N/A

c. Where is product manufactured/fabricated? Identify state and country.

New Hampshire, USA

d. Is the product warehoused locally, regionally, or nationally?

Regionally, United States North East

e. Describe means of transporting product to distribution facilities.

N/A

2. Production Energy: List energy sources used in production process; indicate which are renewable energy sources (e.g. wind, solar). Provide percentage amounts in relation to complete (100 percent) product.

<u>Energy Sources</u>	<u>Renewable</u>	<u>Percentage</u>
<u>N/A</u>	<u>Y</u> <u>N</u>	

3. Provide an embodied energy study of the product from extraction of raw materials through production and assembly. Include an estimate for the total number of BTU's required per pound of finished products. Identify parameters for study.

N/A

4. Describe measures the manufacturer has taken to minimize energy usage in the production process.

N/A

E. Reuse/Recyclability/Disposal:

1. Reuse:

a. Can product be reused directly (in same or similar use): Y No N?

b. If yes, discuss the possibility of direct reuse of the product after project demolition.

2. Recycling:

a. Can product be recycled: Y No N?

b. If yes, list the parts of the product which can be post-consumer recycled into raw materials for the product and the parts which can be post-consumer recycled into other types of items. Provide percentage amounts in relation to complete (100 percent) product.

<u>Post-Consumer - Raw</u>	<u>Post-Consumer - Other</u>	<u>Percentage</u>
----------------------------	------------------------------	-------------------

_____ N/A _____

c. If yes, describe the process of separation of the parts for post-consumer recycling from the product.

_____ N/A _____

d. If yes, list current markets using recycled materials from the product.

_____ N/A _____

e. If yes, estimate the practical number of times this item can be recycled. N/A

3. Describe the manufacturer's policy and program to facilitate the recycling or reuse of its product by accepting product returns at the end of their "useful life".

_____ N/A _____

IV. TOXICITY/HAZARDOUS MATERIALS

A. Toxic/Hazardous By-Products:

1. List the production wastes involved with the manufacture of this item. Distinguish the production wastes between toxic and non-toxic. Provide percentage amounts in relation to complete (100 percent) product.

<u>Toxic</u>	<u>Non-Toxic</u>	<u>Percentage</u>
<u>Silicates/ Bonding Agents</u>	_____	<u>10-20</u>
<u>Penetrants/Gelling Agents</u>	_____	<u>1-5</u>

2. Estimate the quantity of production waste produced per unit of finished product.

_____ The bucket cannot be reused. And it depends on how much of the bucket you use that will be wasted. _____

3. Is reclamation of production waste done on site: N/A ___Y ___N? With outside services: ___Y ___N?

a. If outside services are used, list companies involved.

_____ N/A _____

4. Is waste water reclaimed by manufacturer: ___Y ___N? N/A

a. If yes, describe the process of recycling/reuse of waste water.

_____ N/A _____

- a. Are CFC's or HCFC's used in the manufacture and/or content of the item specified:
____Y __No__N?
- b. If CFC's or HCFC's were previously used in the product and/or its manufacture, describe measures taken by manufacturer to eliminate their use.

____N/A____

2. Indoor Air Quality:

- a. Does the product outgas (emit) carcinogens or other hazardous substances into the air after installation, including final curing/drying: _Yes__Y ____N?

b. If yes, submit IAQ test report.

E. Electromagnetic Radiation:

1. Does the product emit electromagnetic radiation: ____Y __No__N?
2. If yes, at what rate per hour? ____N/A____
3. If yes, describe methods for installation, use, and maintenance of product to minimize generation of and occupant exposure to electromagnetic radiation.

____N/A____

F. Compliance with Regulations (Environmental Statutory Compliance):

1. Does the manufacturer meet all federal, state, and local environmental laws, including laws governing air emissions, waste water treatment, and solid waste disposal/treatment:

____Y ____N? N/A

2. Has the manufacturer met the above criteria for the previous five years: ____Y ____N?

3. List the applicable standard.

____N/A____

4. Does the product meet applicable industry standards, such as ASTM, Green Seal, manufacturing standards, LA or NY research report numbers, and UL approvals: ____Y ____N? List these standards.

V. PERFORMANCE - INSTALLATION

A. Environmental Procedures/Precautions:

1. Describe special procedures and precautions to be used while handling and installing the product:

_____ Use NIOSH/MSHA approved respirator if spraying as standard safety operating practice.
Use safety goggles for eye protection. Rubber gloves and standard work clothing and shoes.
Use adequate local exhaust ventilation. Use normal handling procedures for liquid products. _____

2. Identify accessories, such as fasteners, sealers, and adhesives that are non-toxic (or less toxic than industry standard), energy efficient, or recycled or recyclable products?

_____ N/A _____

B. Installation Energy:

1. Product Transport: List the means to transport the finished product to the construction site.

_____ N/A _____

2. Installation: List energy means and describe energy requirements for installation of the product.

_____ Man power _____

C. Construction Waste:

1. List the recommended method(s) for proper products disposal; stipulate preferred method and restrictions which might apply.

_____ Use absorbent materials and dispose of according to local or federal laws. _____

2. Comment on the environmental impact of the product as a waste material.

_____ It is not good, the stuff does not break down in the environment. _____

3. Packaging:

a. Describe packaging for the product.

_____ Plastic Bucket _____

b. Does manufacturer accept return of used packaging for reuse: ___Y ___No___N?

c. If yes, state limitations and procedures for packaging return.

_____ N/A _____

VI. PERFORMANCE - OPERATIONS

A. Maintenance

1. Describe the recommended cleaning and maintenance for the product using products which have minimal VOC emission.

_____ Water spray or CO2, or foam may be used in areas where product is stored. _____

2. Estimate the “useful life” expectancy for this product.

_____ Unknown _____

3. Are replacement parts available: ___Y ___N? Unknown

a. If yes, can replacement parts be installed in the field: ___Y ___N? Unknown

4. Provide a copy of the life cycle analysis for this product. Not available

5. Provide a copy of the manufacturer’s warranty for this product. Not available

B. Energy Efficiency (energy required to operate/maintain): Unknown

1. Estimate BTU’s required to operate the product when new? _____ Unknown _____; after five years? ___ Unknown _____; after ten years? _____ Unknown _____

C. Compliance with Regulations (Environmental Statutory Compliance):

1. Does the product meet all federal, state, and local environmental laws, including laws governing energy efficiency and air emissions: ___Y ___N?

2. Has the product met the above criteria for the previous five years: ___Y ___N?

3. List the applicable standards.

_____ Unknown _____

VII. CORPORATE COMMITMENT

A. Corporate Environmental Policy:

1. Provide copy of manufacturer’s stated environmental policies.

N/A

END OF ENVIRONMENTAL IMPACT QUESTIONNAIRE