EARTHSHELL CORP
Form S-3
December 28, 2001

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As filed with the Securities and Exchange Commission on December 28, 2001

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-3

REGISTRATION STATEMENT
Under
THE SECURITIES ACT OF 1933

EARTHSHELL CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

Delaware	77-0322379
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

800 Miramonte Drive
Santa Barbara, California 93109
(805) 897-2248

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Simon K. Hodson
Chief Executive Officer
800 Miramonte Drive
Santa Barbara, California 93109
(805) 897-2248
(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

With copies to:
Robert K. Montgomery, Esq.
Laura B. Davidov, Esq.
Gibson, Dunn & Crutcher LLP
2029 Century Park East
Los Angeles, California 90067
(310) 552-8500

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. / /

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. /x/

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. / /

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. / /

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. / /

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered(1)	Proposed maximum offering price per unit(1)	Proposed maximum aggregate offering price(1)	Amount of registration fee
Debt Securities	(2), (3), (7)	(2)	(2)	see below
Preferred Stock	(2), (4), (7)	(2)	(2)	see below
Common Stock	(2), (5), (7)	(2)	(2)	see below
Warrants	(2), (6), (7)	(2)	(2)	see below
Total	$50,000,000 (2)	(2)	$50,000,000 (2)	$11,950

(1) Exclusive of accrued interest and dividends, if any. Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o).

(2) In no event will the aggregate maximum offering price of all securities issued, from time to time, pursuant to this Registration Statement exceed $50,000,000. Such amount represents the offering price of any preferred stock and common stock, the principal amount of any debt securities issued at their stated principal amount, the issue price rather than the principal amount of any debt securities issued at an original issue discount, and the issue price of any warrants to purchase common stock. The proposed maximum offering price per unit will be determined from time to time by the Registrant in connection with the issuance by the Registrant of the securities registered hereunder. Any securities registered hereunder may be sold separately or as units with other securities registered hereunder.

(3) Subject to footnote (2), there is being registered hereunder an indeterminate principal amount of debt securities as may be sold, from time to time, for the account of the Registrant. If any debt securities are being issued at an original issue discount, then the offering price may be in such greater principal amount as shall result in the aggregate initial offering price not to exceed $50,000,000, less the dollar amount of any securities previously issued hereunder.

(4) Subject to footnote (2), there is being registered hereunder an indeterminate number of shares of the Registrant's preferred stock as may be sold, from time to time, for the account of the Registrant, including sales upon exercise of warrants.

(5) Subject to footnote (2), there is being registered hereunder an indeterminate number of shares of the Registrant's common stock as may be sold from time to time by the Registrant, including shares of other classes or series of the Registrant's stock that may be issued upon reclassification of unissued, authorized stock of the Registrant. There is also being registered hereunder an indeterminate number of shares of the Registrant's common stock, including shares of other classes or series of the Registrant's stock that may be issued upon reclassification of unissued, authorized stock of the Registrant, as shall be issuable upon conversion of the preferred stock or debt securities or exercise of warrants registered hereby.

(6) Subject to footnote (2), there is being registered hereunder an indeterminate number of warrants representing rights to purchase debt securities and shares of preferred stock or common stock of the Registrant, including shares of other classes or series of the Registrant's common stock that may be issued upon reclassification of the unissued, authorized stock of the Registrant registered pursuant to this Registration Statement.

(7) Subject to footnote (2), there is also being registered hereunder such indeterminate amount of securities (including shares or other classes of the Registrant's stock that may be issued upon reclassification of unissued, authorized stock of the Registrant) as may be issued in exchange for or upon conversion of, as the case may be, the debt securities or preferred stock registered hereunder. No separate consideration will be received for any securities registered hereunder that are issued in exchange for, or upon conversion of, as the case may be, the debt securities or preferred stock.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed without notice. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED DECEMBER 28, 2001

PRELIMINARY PROSPECTUS

$50,000,000

EARTHSHELL CORPORATION

Debt Securities, Preferred Stock, Common Stock and Warrants

This prospectus provides a general description of the debt securities, preferred stock, common stock and warrants that we may offer from time to time. Each time we sell securities, we will provide a supplement to this prospectus that will contain specific information about the offering and the specific terms about the securities offered. You should read this prospectus and the applicable prospectus supplement carefully before you invest in our securities. This prospectus may not be used to consummate a sale of securities unless accompanied by the applicable prospectus supplement.

The aggregate initial offering price of all securities sold under this prospectus will not exceed $50,000,000.

Our common stock is listed on the NASDAQ National Market under the symbol "ERTH"

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 5.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus is December 28, 2001

No person is authorized to give any information or to make any representations other than those contained or incorporated by reference in this prospectus, and, if given or made, such information or representations must not be relied upon as having been authorized. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in this prospectus or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. Neither the delivery of this prospectus, nor any sale made hereunder, shall, under any circumstances, create any implication that there has been no change in our affairs since the date hereof or that the information contained or incorporated by reference herein is correct as of any time subsequent to the date of such information.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement we filed with the SEC pursuant to a "shelf" registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus up to a total dollar amount of $50,000,000. We may sell these securities either separately or in combination with other securities as units.

The types of securities that we may offer and sell by this prospectus are:

- debt securities, which we may issue in one or more series and which may be unsubordinated or subordinated in ranking;
- preferred stock, which we may issue in one or more series;
- common stock; and
- warrants entitling the holders thereof to purchase common stock, preferred stock, or debt securities.

We may issue debt securities convertible into or exchangeable for shares of our common stock or our preferred stock. We also may issue preferred stock convertible into or exchangeable for shares of our common stock, another series of our preferred stock or another class of our preferred stock.

This prospectus provides a general description of the securities we may offer. Each time we sell securities, we will describe in a prospectus supplement, which we will deliver with this prospectus, specific information about the offering and the terms of the particular securities offered. In each prospectus supplement we will include the following information:

- the type and amount of securities which we propose to sell;
- the initial public offering price of the securities;
- the names of the underwriters or agents, if any, through or to which we will sell the securities;
- any compensation of those underwriters or agents;
- information about any securities exchanges or automated quotation systems on which the securities will be listed or traded;

any material United States federal income tax considerations applicable to the securities; and

any other material information about the offering and sale of the securities.

In addition, the prospectus supplement may add, update or change the information continued in this prospectus.

THE COMPANY

EarthShell was organized in November 1992 as a Delaware corporation and is a development stage company engaged in the commercialization of a proprietary composite material, designed with the environment in mind, for the manufacture of disposable packaging for the foodservice industry, such as hinged-lid containers, plates, bowls, sandwich wraps, and cups.

We have an exclusive, worldwide, royalty-free license from E. Khashoggi Industries LLC ("EKI"), our principal stockholder, to use and license the EKI technology to manufacture and sell disposable, single-use containers for packaging or serving food or beverages intended for consumption within a short period of time ("EarthShell Products"). We do not have the right to use the EKI technology for other purposes. EKI or its predecessors has been involved since July 1985 in the development of various new material technologies including the EarthShell composite material.

We have licensed or joint ventured, and we will continue to license or joint venture with existing manufacturers of foodservice disposables for the manufacture and distribution of EarthShell Products. We expect to derive revenues primarily from license royalties and profit distributions from joint ventures that are licensed to manufacture EarthShell Products.

We have experienced aggregate net losses of approximately $222 million from our inception on November 1, 1992 through September 30, 2001, and we expect to continue to incur operating losses until our products are more broadly used and have achieved greater market acceptance and market penetration. We have not recorded any revenues from operations since our inception, and proceeds received by Sweetheart Cup Company, Inc. ("Sweetheart") from sales of hinged-lid containers to date are credited as an offset to the cost of startup manufacturing operations. Successful future operations will depend upon the our ability and the ability of our licensees and joint venture partners to commercialize multiple EarthShell Products.

The new EarthShell composite material is made from commonly available raw materials such as limestone, natural potato, corn and other starch binders, natural fibers and functional coatings. We believe that foodservice disposables made of this material will have comparable or superior performance characteristics, such as greater strength and rigidity, and can be commercially produced and sold at prices that are competitive with comparable conventional paper and polystyrene foodservice disposables, and have been designed with the environment in mind.

Our objective is to establish EarthShell Products as the preferred disposable packaging material for the foodservice industry throughout the world based on their performance, price and environmental characteristics. Our strategy for achieving this objective is to: (i) attain customer acceptance through key market leaders; (ii) demonstrate the manufacturability and improved economics with initial strategic partners, and (iii) enter into licenses or joint ventures with existing manufacturers of disposable packaging to market, produce and distribute EarthShell Products. We believe that this approach aligns key market segments with select industry partners, minimizes potential direct competition from these producers, enables effective brand management, captures the value of manufacturing process improvements, and creates income streams beyond the life of the patents.

Our principal executive offices are located at 800 Miramonte Drive, Santa Barbara, California 93109. Our telephone number is (805) 897-2294.

RISK FACTORS

Before you invest in our securities, you should be aware of various risks associated with such an investment, including those described below. You should consider carefully these risk factors together with all of the other information included in this prospectus and in the documents incorporated by reference before you decide to purchase our securities.

EarthShell® is a registered trademark of EarthShell Corporation. Aliite® is a registered trademark of E. Khashoggi Industries, LLC. Big Mac® is a registered trademark of the McDonald's Corporation.

Because we are a development stage company subject to the inherent risks of establishing a new business, we cannot assure you that our operations will ultimately be successful and generate a profit in the future.

To date, we have primarily focused on developing products. Because we are a development stage company with very little commercial operating history, we are subject to the inherent risks of establishing a new business enterprise. Although we have built our first production manufacturing lines to produce Big Mac® sandwich containers, which containers are being sold by, and we anticipate will continue to be sold by, our licensee Sweetheart to Perseco, who is the primary packaging purchaser for the McDonald's Corporation, the production manufacturing lines have not yet achieved full-scale commercial operations. In addition, although we have developed a number of prototype products in addition to the Big Mac® container, including bowls, plates, sandwich wraps, cups, and other hinged-lid containers, these products remain subject to further development and customer-specific modification. Among other things, we must:

optimize our products for specific commercial applications and develop additional products;

develop commercially viable manufacturing processes and capacity;

attract, retain and motivate qualified personnel;

achieve market acceptance of our products;

respond to competitive developments; and

develop systems to manage our growth effectively.

At this stage in our development, we cannot assure you that we will achieve these goals and that our operations will be successful and generate a profit in the future. As of September 30, 2001, we had not yet reported any operating revenues.

We expect to continue to experience operating losses until we are able to commercially produce and sell our products in quantities necessary to generate a profit.

During the first quarter of 2001, EarthShell completed the product validation process with Perseco with respect to the EarthShell Big Mac® sandwich container. We are currently engaged in performing certain modifications and improvements to the production manufacturing lines at Sweetheart in order to accommodate the recently approved design change and to achieve commercial capacity of the production manufacturing lines. We expect to continue to incur substantial operating losses until we can commercially produce our products in quantities necessary to generate a profit and our products achieve broad market acceptance and penetration. We experienced aggregate net losses of approximately $222 million from our inception on November 1, 1992 through September 30, 2001. The EarthShell Big Mac® sandwich container has been in daily use in 128 McDonald's stores since late April 2000 and as of December 2001 we increased delivery to 465 stores. The success of our future operations depends upon our ability and the ability of our licensees and joint venture partners to commercialize various types of EarthShell Products. Due to the uncertainties inherent in product

development, market acceptance of newly-developed products and our need to rely on our licensees and joint venture partners to manufacture, distribute and sell EarthShell Products, we are unable to predict when our products will be introduced nationally or when we will receive significant revenues from any EarthShell Product.

We may need to obtain additional financing in order to fund our operations until EarthShell Products achieve commercial viability and generate significant revenues, which could potentially be dilutive to existing stockholders.

Although we believe the proceeds we anticipate receiving from further offerings will provide EarthShell with the capital it needs for the foreseeable future, we may need to seek additional third party financing in the future to meet our operating and working capital needs and to fund the further expansion of our business. We may not be able to obtain that capital or that capital may not be available on terms satisfactory to us. If additional funds are raised through the issuance of stock, dilution to existing stockholders may result. If additional funds are raised through the incurrence of debt, these debt instruments will likely contain restrictive financial, maintenance and security covenants, which could restrict our ability to conduct our business as we would prefer in the absence of those covenants.

We may continue to incur financial losses as a result of funding obligations under our agreements with some of our licensees and joint venture partners, one of which requires us to fund negative cash flows until our manufacturing facilities meet efficiency criteria set forth in that agreement.

We have refined our business strategy as the feasibility of the EarthShell technology has been demonstrated over time. Although our most recent license agreement with Green Earth Packaging is a straight licensing arrangement with a royalty, and Green Earth Packaging is responsible for all capital and equipment, previously we have used a joint venture structure in which our joint venture partners generally share equally in the cost of manufacturing facilities and will assume equally the risks of any failure of the manufacturing facilities to meet targeted efficiencies. The joint venture agreements we entered into with Finland-based Huhtamaki Oyj and with Prairie Packaging, Inc. contain this type of risk-sharing arrangement. By contrast, our earlier agreement with Sweetheart is structured so that we license or contribute manufacturing equipment to Sweetheart and guarantee the performance of the equipment. This was done in an effort to induce Sweetheart to begin to produce EarthShell Products during their initial commercial introduction. In addition, under our operating agreement with Sweetheart, we are obligated to fund negative operating cash flows until the date upon which the turnkey manufacturing lines first meet specified efficiency criteria. We are also obligated to fund additional costs incurred if the equipment does not continue to satisfy these criteria for a two-year period following that date. Our obligations to guarantee performance of these manufacturing lines and to fund negative operating cash flows under this agreement, and the possibility that we might ultimately fail to receive a return on our investment in the equipment, may cause us to continue to incur losses for a period of time and significantly impair our profitability.

Though we are producing a limited amount of our products on an integrated production line on a commercial scale, we are not yet sure that they can be produced at a competitive cost. Our failure to do so would adversely affect our ability to compete with conventional disposable foodservice packagers.

Our success depends, in substantial part, on our ability to produce EarthShell Products at a competitive cost. While we have been successful at producing the EarthShell Big Mac® sandwich container on commercial scale equipment, production volumes to date have been low relative to the intended capacity of the manufacturing lines. Until production volumes approach design capacity levels, actual costs and profitability will not be certain. Further, all our other products are currently in various stages of development and we have not yet produced them on a fully integrated production line or on a

commercial scale. We have not, therefore, proven the actual cost of manufacturing EarthShell Products, and we cannot assure you that we will be able to manufacture them at a competitive cost. As licensees and joint ventures begin to commercially produce EarthShell Products, they may encounter difficulties that cause costs of production to exceed what we currently anticipate. The failure to manufacture EarthShell Products at commercially competitive costs would make it difficult to compete with other foodservice disposables manufacturers. Under the terms of existing and contemplated joint venture agreements, EarthShell and its partners will invest jointly in commercial facilities based on projected economic returns. EarthShell and its joint venture partners, Huhtamaki and Prairie Packaging, do not intend to commit to the next series of commercial plant investments until they have demonstrated, using commercial scale equipment in integrated demonstration lines, that the products can be manufactured at a cost that will produce returns acceptable to both EarthShell and its partners.

Because we are not yet producing our products on a commercial scale, we do not know whether we will be able to construct sufficient manufacturing capacity that will permit a timely roll-out and market acceptance of our products.

Because of our inexperience in manufacturing, we cannot assure you that we will be successful in producing quantities of EarthShell Products sufficient to permit a timely commercial roll-out of EarthShell Products. Moreover, it may require greater time and effort than we anticipate to achieve the production volumes and efficiencies required. We cannot assure you that we will be successful in building sufficient manufacturing capacity on a timely basis or that we will have adequate manufacturing equipment available when necessary to permit a timely roll-out of EarthShell Products. The failure to produce sufficient quantities of EarthShell Products or construct adequate manufacturing equipment that is properly working in an integrated manner when necessary to permit a timely roll-out of EarthShell Products could adversely affect market acceptance of EarthShell Products.

Consumers may not perceive EarthShell Products as being better for the environment than conventional disposable foodservice containers, which would adversely affect market acceptance of our products.

Our success depends substantially on our ability to design, develop and manufacture foodservice disposables that are not as harmful to the environment as conventional disposable foodservice containers made from paper, plastic and polystyrene. EarthShell has used a life cycle inventory methodology in its environmental assessment of EarthShell Products and in the development of associated environmental claims and we have received support for the EarthShell concept from a number of environmental groups. Although we believe that EarthShell Products offer a number of environmental advantages over conventional packaging products, our products may also possess characteristics that consumers or some environmental groups could perceive as negative for the environment. In particular, EarthShell Products may result in more solid waste by weight and, in a dry environment, by volume, and manufacturing and distributing them may release greater amounts of some pollutants, and lesser amounts of other pollutants, than occurs with conventional packaging. Whether, on balance, EarthShell Products are better for the environment than conventional packaging products is a somewhat subjective judgment and we believe that we have addressed the major concerns of environmental groups with respect to the EarthShell Big Mac® sandwich container and have goals in place to:

reduce the weight of the container;

use reclaimed starch from sources not currently being reclaimed for commercial uses; and

continue our efforts to reduce the environmental impact of the EarthShell Big Mac® sandwich container.

We cannot assure you that environmental groups, regulators, customers or consumers will agree that EarthShell Products have an environmental advantage over conventional packaging. Nor can we assure you that all future EarthShell Products, some of which may require unique material formulations and coatings, will have, or that the market will recognize them as having, a reduced environmental impact. If EarthShell Products do not have, or are not recognized by others as having, a reduced environmental impact, this could adversely affect market acceptance of these products.

We have not yet fully evaluated all of the EarthShell Products and it is possible that some of the products may not perform as well as conventional packaging products, which would adversely affect market acceptance of these products.

Although we believe that we can engineer EarthShell Products to meet many of the critical performance requirements for specific applications, individual products may not perform as well as conventional foodservice disposables; for example, some consumers may prefer clear cups and clear lids on take-home containers, which are not available with our foam technology. We are still developing many of our EarthShell Products and we have not yet evaluated the performance of all of them. If we fail to develop EarthShell Products that perform comparably with conventional foodservice disposables, this could cause consumers to prefer our competitors' products.

We are exposed to risks of delay that could delay the introduction or market acceptance of one or more of our products and obligate us financially under one of our operating agreements.

There are substantial risks of delay, some of which are beyond our control, associated with:

developing our products and related manufacturing processes;

market acceptance of and demand for our products; and

developing sufficient production capacity to produce our products.

For example, we have experienced significant delays in the initial commercial production of the EarthShell Big Mac® sandwich container for McDonald's. These delays resulted from, among other things, difficulties in integrating manufacturing equipment and persistent, but typical, problems debugging our manufacturing lines at Sweetheart's Owings Mills, Maryland facility. The manufacturing process includes various stages of operation, such as mixing, forming, trimming, sanding, coating, printing and stacking, all of which are integrated and computer

controlled along an assembly line. We believe we will be successful in the debugging process going forward as we ramp up production lines to produce at higher levels, but we cannot assure you that this process will not result in further delays.

Future delays will obligate us financially under our operating agreement with Sweetheart. In addition, we cannot assure you that we or our licensees or joint venture partners will not experience similar or other problems in start-up or ongoing operations. Delays in the introduction or market acceptance of one or more EarthShell Products would delay our ability to realize any revenues from sales of those products.

If McDonald's or any other of our anticipated initial purchasers of our products do not purchase significant quantities of our products, it could delay the introduction and market acceptance of our products.

We intend McDonald's to be the first foodservice operator to use EarthShell Products, although there can be no assurance of minimum purchase commitments going forward. If McDonald's or any other anticipated initial purchasers of our products do not ultimately purchase significant quantities of our products, it could delay the introduction and market acceptance of one or more of our products and delay our ability to realize any revenues from sales of those products. The fact that EarthShell Products are being developed for use in McDonald's restaurants does not represent a binding

development obligation on the part of McDonald's, and McDonald's is therefore under no obligation to initiate or continue any further development or procurement relationship with us.

An unexpected unavailability of raw materials used to manufacture our products, increases in the price of the raw materials, or the necessity of finding alternative raw materials to use in our products could delay the introduction and market acceptance of our products.

Although we believe that sufficient quantities of all raw materials used in EarthShell Products are generally available, if any raw materials become unavailable it could delay the commercial introduction and hinder market acceptance of EarthShell Products. In addition, we and our licensees may become significant consumers of certain key raw materials, such as starch, and if such consumption is substantial in relation to the available resources, raw material prices may increase which in turn may increase the cost of EarthShell Products and impair our profitability. In addition, we may need to seek alternative sources of raw materials or modify our product formulations if the cost or availability of the raw materials that we currently use become prohibitive.

We cannot assure you that our licensees and joint venture partners will devote sufficient resources to our products or successfully manufacture, distribute or market our products because many of them have products that will compete with our products and our licensee manufacturers are not obligated to achieve minimum sales quotas.

We have no experience in commercially manufacturing, distributing and marketing foodservice disposables. We will depend on our licensees and joint venture partners to manufacture and distribute EarthShell Products. We have entered into agreements with Sweetheart, Finland-based Huhtamaki Oyj and Prairie Packaging, Inc., but these agreements permit those licensees to manufacture and sell other foodservice disposable packaging products that are not based on the EarthShell material. We intend to enter into additional license agreements and joint venture relationships in the future. Although we have produced EarthShell Products at a low volume level at Sweetheart's facilities, none of our other licensees has commercially produced or distributed any EarthShell Products. Our licensee manufacturers are not obligated to achieve minimum sales quotas. Our licensees and joint venture partners also manufacture paper or polystyrene packaging which will compete with EarthShell Products. We cannot assure you that our licensees and joint venture partners will devote sufficient resources or otherwise be able successfully to manufacture, distribute or market EarthShell Products. Their failure to do so would inhibit our ability to distribute our products into the marketplace.

Our dependence on E. Khashoggi Industries, LLC ("EKI") for the rights to technology necessary to manufacture EarthShell Products means that a disruption in the operations or financial condition of EKI may expose us to risks that could affect our ability to maintain a competitive advantage for the technology license.

We do not own the technology necessary to manufacture EarthShell Products and we are dependent upon our world-wide, royalty-free, exclusive license pursuant to an Amended and Restated License Agreement with EKI (the "License Agreement") to use that technology. We may only use the technology to develop, manufacture and sell specified foodservice disposables for use in the foodservice industry and we have no right to exploit opportunities to apply this technology or improve it outside this field of use. EKI may cancel the license if we are in breach of any material obligations under the License Agreement and do not cure the breach within a specified period. If EKI were to file for bankruptcy or be declared bankrupt, we would likely be able to retain our rights under the License Agreement with respect to U.S. patents. However, in such an event, it is possible that EKI could take steps to terminate our rights under the License Agreement with respect to international patents.

Because one majority shareholder controls both EKI and EarthShell, conflicts may arise between the companies with respect to corporate opportunities and we cannot assure you that these conflicts will always be resolved in EarthShell's favor.

Mr. Essam Khashoggi is the indirect majority equity owner of and therefore controls both EarthShell and EKI, which means that Mr. Khashoggi owns a majority interest in both EarthShell and EKI through other entities which he controls. Mr. Khashoggi is the beneficial owner of approximately 54% of the outstanding shares of EarthShell's common stock directly or indirectly through various entities that he controls, including EKI, as of September 30, 2001. As a result, Mr. Khashoggi is able to:

- elect all of the directors of EarthShell;
- control the direction and policies of EarthShell;
- determine the outcome of corporate transactions requiring the approval of EarthShell's stockholders, including mergers, consolidations and the sale of all or substantially all of the assets of EarthShell; and
- prevent or cause a change in control of EarthShell.

Mr. Khashoggi also has the power to control our relationship with EKI, which he also controls. We cannot assure you that we will always agree with Mr. Khashoggi's decisions regarding our business.

Conflicts may arise between EKI and EarthShell, particularly with respect to corporate opportunities, including:

- developing new markets and uses for products based on the EarthShell Products;
- the time that the common directors and officers devote to EarthShell and EKI; and
- how each of EKI and EarthShell performs its obligations under the License Agreement and the Amended and Restated Agreement for the Allocation of Patent Costs (the "Patent Allocation Agreement").

Effective January 1, 2001, EarthShell assumed direct responsibility for managing the maintenance of the patent portfolio underlying its license with EKI. EarthShell will control the costs and expenses incurred in connection with these patents and patent applications. Any patents granted will be the property of EKI, and EKI may obtain benefits from those patents other than under the License Agreement, including using and/or licensing the patents and related technology in a manner or for uses unrelated to the license which EKI granted to EarthShell in the foodservice disposables field of use. We cannot assure that conflicts of interest that arise between EKI and EarthShell will always be resolved in EarthShell's favor.

Despite our attempts to protect our patented technology, it is possible that third parties will infringe our patents, that new products that we develop will not be covered by our existing patents or that we could suffer an adverse determination in a patent infringement proceeding, any and all of which could allow our competitors to duplicate our products without having had to incur the research and development costs we have incurred and therefore allow them to produce and market those products more profitably than EarthShell.

Our ability to compete effectively with conventional packaging will depend, in part, on our ability to protect our proprietary rights to the licensed technology. Although EKI and EarthShell endeavor to protect the licensed technology through, among other things, U.S. and foreign patents, the duration of these patents is limited and we cannot assure you that the patents and patent applications licensed to us are sufficient to protect our technology. We also cannot assure you that any patent that EKI obtains and licenses to us will be held valid, or that others will not circumvent or infringe those patents. We

also rely on trade secrets and proprietary know-how that we try to protect in part by confidentiality agreements with our licensee manufacturers, proposed joint venture partners, employees and consultants. These agreements have limited terms and we cannot assure you that these agreements will not be breached, that we will have adequate remedies for any breach or that our competitors will not learn our trade secrets or independently develop them. It is necessary for us to litigate from time to time to enforce patents issued or licensed to us, to protect our trade secrets or know-how and to determine the enforceability, scope and validity of the proprietary rights of others.

We believe that we own or have the rights to use all of the technology that we expect to incorporate into EarthShell Products, but an adverse determination in litigation or infringement proceedings to which we are or may become a party could subject us to significant liabilities and costs to third parties or require us to seek licenses from third parties. Although patent and intellectual property disputes are often settled through licensing or similar arrangements, costs associated with those arrangements could be substantial and could include ongoing royalties. Furthermore, we cannot assure you that we could obtain the necessary licenses on satisfactory terms or at all. We could incur substantial costs attempting to enforce our licensed patents against third party infringement, or the unauthorized use of our trade secrets and proprietary know-how or in defending ourselves against claims of infringement by others. Accordingly, if we suffered an adverse determination in a judicial or administrative proceeding or failed to obtain necessary licenses, it would prevent us from manufacturing or licensing others to manufacture some of our products.

Established competitors in the foodservice disposables industry could improve the ability to recycle their existing products or develop new environmentally preferable, disposable foodservice containers which could render our technology obsolete and could negatively impact our ability to compete.

Competition among existing food and beverage container manufacturers in the foodservice industry is intense. At present, most of our competitors have substantially greater financial and marketing resources at their disposal than we do, and many have well-established supply, production and distribution relationships and channels. Companies producing products utilizing competitive materials such as paper, plastic or polystyrene may reduce their prices or engage in advertising or marketing campaigns designed to protect their respective market shares and impede market acceptance of EarthShell Products. Recently, a number of paper and plastic disposable packaging manufacturers and converters have tried to increase recycling of their products. Increased recycling of paper and plastic products could reduce their negative environmental impact, which is one significant basis upon which we intend to compete. A number of companies have introduced starch-based materials or are attempting to develop plastics that they claim are biodegradable and other specialty polymers as potential environmentally superior packaging alternatives. We expect that many existing packaging manufacturers may actively seek competitive alternatives to our products and processes. The development of competitive, environmentally preferable, disposable foodservice containers, whether or not based on our products and technology, could render our technology obsolete and could impair our ability to compete.

Our loss of key technical and management personnel could be highly disruptive to our business operations.

We depend upon obtaining and retaining the services of qualified scientific and technical personnel. We are highly dependent on our Vice Chairman of the Board and Chief Executive Officer, Simon K. Hodson, who has been involved with EarthShell since its inception. We do not hold "key man" insurance on any of our personnel. If we lost the services of any of our key employees, it could be highly disruptive to our business operations.

If the U.S. Food and Drug Administration (the "FDA") were to determine that our products did not comply with FDA regulations, they could ask us to voluntarily withdraw our products from the marketplace or seek legal remedies and sanctions to force us to withdraw our products, either of which would prevent us from realizing future revenues from those products.

The FDA regulates the manufacture, sale and use of EarthShell Products. The FDA's regulations are concerned with substances used in food packaging materials, not with specific finished food packaging products. Thus, food or beverage containers will comply with FDA regulations if the components used in the food and beverage containers:

- are approved by the FDA as indirect food additives for their intended uses and comply with the applicable FDA indirect food additive regulations; or

- are generally recognized as safe for their intended uses and are of suitable purity for those intended uses.

Each of the components of the EarthShell Big Mac® sandwich container and all other current prototype products is either approved by the FDA as an indirect food additive for its intended use, codified in the FDA's regulations as generally recognized as safe for its intended use, or a

commonly recognized food ingredient that we and our consultants regard as generally recognized as safe for its intended use. However, we have not asked the FDA whether it concurs with our determination. We intend to ensure that the raw materials used in the EarthShell Big Mac® sandwich container are of suitable purity for their intended uses by specifying standards to be met by suppliers of raw materials and by material and product testing. The FDA does not require that manufacturers of EarthShell Products seek FDA concurrence that components are generally recognized as safe for their intended uses or that the raw materials are of suitable purity for their intended uses. As a result, we believe that the EarthShell Big Mac® sandwich container and other current prototype EarthShell Products will comply with all requirements of the FDA and do not require FDA approval. We cannot assure you, however, that the FDA would agree with these conclusions.

If the FDA were to disagree with our determinations with respect to the EarthShell sandwich container or future products, the FDA could ask us to voluntarily withdraw the products from the marketplace. They could also institute legal action to remove the products from the marketplace and, if appropriate, pursue additional sanctions against us and our management. Such actions by the FDA would prevent us from realizing future revenues from those products.

Fluctuations or decreases in the trading price of our common stock may adversely affect the liquidity of the stock's trading market and our ability to raise capital through future offerings of capital stock.

The stock market from time to time experiences extreme price and volume fluctuations which are often unrelated to the operating performance of particular companies. Since our initial public offering in March 1998, the market price of our common stock has been volatile, and it may continue to be volatile in the future. Factors that may significantly impact the market price and marketability of our common stock include, but are not limited to:

- insufficient cash to finance our business;
- changes in our technological innovations or new commercial products or those of our competitors;
- unacceptable economics of manufacturing our products;
- inability to license the technology to third parties;
- development or disputes concerning proprietary rights;
- failure to meet analysts' earnings estimates;

- loss of key management;
- adverse regulatory actions or decisions;
- general economic and other external factors; and
- period-to-period fluctuations in our financial results.

Fluctuations or decreases in the trading price of our common stock may adversely affect the liquidity of the stock's trading market and our ability to raise capital through future offerings of capital stock.

Recently, when the market price of a stock has been volatile, holders of that stock have often instituted securities class action litigation against the company that issued the stock. If any of our stockholders brought such a class action lawsuit against us, we could incur substantial costs defending the lawsuit. Such a lawsuit could also divert the time and attention of our management.

A significant number of our total outstanding shares may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

Approximately 63 million of EarthShell's approximately 116 million outstanding shares of common stock are "restricted securities" within the meaning of Rule 144 ("Rule 144") promulgated under the Securities Act of 1933. This means that they may not be sold without first being registered under the Securities Act unless an exemption from registration is available, including the exemptions contained in Rule 144. These approximately 63 million shares, which are held by current stockholders, are eligible for sale pursuant to Rule 144, subject to the volume and manner of sale limitations under Rule 144. In addition, we granted "demand" and "piggy-back" registration rights to all of our stockholders who owned our preferred stock and common stock before our initial public offering, including EKI. We cannot predict the effect, if any, that public sales of these shares or the availability of shares for sale will have on the market price of our common stock from time to time. Nevertheless, if our stockholders, and particularly our directors and officers, sell substantial amounts of our common stock in the public market, or if the public perceives that such sales could occur, this could have an adverse impact on the market price of our common stock, even if there is no relationship between such sales and the performance of our business.

Our charter documents and Delaware law include provisions that may discourage a potential takeover, even if it would be beneficial to our stockholders.

Our Certificate of Incorporation and Bylaws and the Delaware General Corporation Law include provisions that may discourage persons from pursuing a non-negotiated takeover of EarthShell and prevent changes of control under some circumstances, even if doing so would be beneficial to our stockholders.

Our projected international revenues are subject to risks inherent in international business activities.

We expect sales of our products and services in foreign countries to account for a material portion of our revenues. These sales are subject to risks inherent in international business activities, including:

- any adverse change in the political or economic environments in these countries;
- economic instability;
- any adverse change in tax, tariff and trade or other regulations;
- the absence or significant lack of legal protection for intellectual property rights;

- exposure to exchange rate risk for revenues which are denominated in currencies other than U.S. dollars; and
- difficulties in managing joint venture businesses spread over various jurisdictions.

Our revenues could be substantially less than we expect if these risks affect our ability to successfully sell our products in the international market.

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities under one or more indentures between us and a trustee chosen by us that is qualified to act as such under the Trust Indenture Act of 1939, as amended. The debt securities will be either unsubordinated debt securities or subordinated debt securities. Unsubordinated debt securities will be issued under one or more unsubordinated indentures and subordinated debt securities will be issued under one or more subordinated indentures, in each case between us and a trustee chosen by us to act as such. References in this prospectus to an indenture are references to the applicable indenture under which a particular series of debt securities is issued. The indentures may be amended or supplemented from time to time and will be governed by the Trust Indenture Act.

We will describe the particular terms of each series of debt securities in the prospectus supplement or prospectus supplements relating to such series.

Terms of the Debt Securities

The debt securities will be our secured or unsecured obligations. We may issue them in one or more series. The debt securities may be convertible into shares of our common stock or our preferred stock.

A prospectus supplement relating to a series of debt securities being offered will include specific terms relating to the offering. These terms will include some or all of the following:

- the title of the series of debt securities;
- the aggregate principal amount (or any limit on the aggregate principal amount) of the series of debt securities and, if any debt securities of a series are to be issued at a discount from their face amount, the method of computing the accretion of such discount;
- the interest rate or method of calculation of the interest rate;
- the date from which interest will accrue;
- the record dates for interest payable on debt securities of the series;
- the dates when, places where and manner in which principal and interest are payable;
- the securities registrar if other than the trustee;
- the terms of any mandatory (including any sinking fund requirements) or optional redemption by us;
- the terms of any repurchase or remarketing rights of third parties;
- the terms of any redemption at the option of holders of debt securities of a series;
- the denominations in which debt securities are issuable;
- whether debt securities will be issued in registered or bearer form and the terms of any such forms of debt securities;

- whether any debt securities will be represented by a global security and the terms of any such global security;
- the currency or currencies (including any composite currency) in which principal or interest or both may be paid;

if payments of principal or interest may be made in a currency other than that in which debt securities are denominated, the manner for determining such payments;

provisions for electronic issuance of debt securities or issuance of debt securities in uncertificated form;

any events of default, covenants and/or defined terms;

whether and upon what terms debt securities may be defeased;

the form of the debt securities;

any terms that may be required by or advisable under applicable law;

the percentage of the principal amount of the debt securities which is payable if the maturity of the debt securities is accelerated in the case of debt securities issued at a discount from their face amount; and

whether any debt securities will have guarantees.

The debt securities will bear interest at a fixed rate or a floating rate. Debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate may be sold or deemed to be sold at a discount below their stated principal amount. With respect to any debt securities as to which we have the right to defer interest, the holders of such debt securities may be allocated interest income for federal and state income tax purposes without receiving equivalent, or any, interest payments. Any material federal income tax considerations applicable to any such discounted debt securities or to certain debt securities issued at par that are treated as having been issued at a discount for federal income tax purposes will be described in a prospectus supplement.

Conversion or Exchange Rights

The terms, if any, on which a series of debt securities may be convertible or exchangeable for any of our other securities will be described in a prospectus supplement. Such terms will include provisions relating to:

the type of securities into which they may be converted or exchanged;

the conversion price or exchange ratio, or its method of calculation;

how and when the conversion price or exchange ratio may be adjusted;

the conversion or exchange period;

whether conversion or exchange is mandatory, at the option of the holder, or at our option;

whether and under what circumstances the number of shares of common stock or other securities to be received by the holders of such series of debt securities will be subject to adjustment.

Global Securities

If the debt securities are represented by one or more global securities, the applicable prospectus supplement will describe the terms of the depository arrangement with respect to such securities.

Redemption

If described in the applicable prospectus supplement, we will have the right to redeem the debt securities, from time to time, in whole or in part, on the terms set forth in such prospectus supplement. Such terms will include the date after which we may redeem the debt securities and the price at which we may redeem the debt securities.

Transfer and Exchange

A holder will be able to transfer or exchange debt securities only in accordance with the applicable indenture. The registrar may require a holder, among other things, to furnish appropriate endorsements and transfer documents, and to pay any taxes and fees required by law or permitted by the indenture.

Information Concerning the Trustee

In case an event of default occurs and is not cured, the trustee will be required, in the exercise of its power, to use the degree of care of a prudent person in similar circumstances in the conduct of its own affairs. The trustee may refuse to perform any duty or exercise any right or power under the indenture unless it receives an indemnity satisfactory to it against any loss, liability or expense.

Governing Law

Unless stated otherwise in the applicable prospectus supplement, the laws of the State of New York will govern the indenture and the debt securities.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of debt securities, preferred stock, common stock or other securities issued by us or another issuer or units of two or more of these types of securities. Warrants may be issued independently or together with debt securities, preferred stock or common stock and may be attached to or separate from these securities. Each series of warrants will be issued under a separate warrant agreement. We will distribute a prospectus supplement with regard to each issue or series of warrants issued pursuant to this prospectus.

Warrants to Purchase Debt Securities

Each prospectus supplement for warrants to purchase debt securities will describe:

- the title of the debt warrants;
- the aggregate number of the debt warrants;
- the price or prices at which the debt warrants will be issued;
- the designation, aggregate principal amount and terms of the debt securities purchasable upon exercise of the debt warrants, and the procedures and conditions relating to the exercise of the debt warrants;
- if applicable, the number of the warrants issued with a specified principal amount of our debt securities or each share of our preferred stock or common stock;
- if applicable, the date on and after which the debt warrants and the related securities will be separately transferable;

the principal amount of and exercise price for debt securities that may be purchased upon exercise of each debt warrant;

the maximum or minimum number of the debt warrants which may be exercised at any time;

if applicable, a discussion of any material federal income tax considerations; and

any other material terms of the debt warrants and terms, procedures and limitations relating to the exercise of the debt warrants.

Certificates for warrants to purchase debt securities may be exchangeable for new debt warrant certificates of different denominations. Warrants may be exercised at the corporate trust office of the warrant agent or any other office indicated in the prospectus supplement.

Warrants to Purchase Preferred Stock, Common Stock and Other Securities

Each prospectus supplement for warrants to purchase preferred stock, common stock or other securities will describe:

the title of the warrants;

the securities for which the warrants are exercisable;

the price or prices at which the warrants will be issued;

if applicable, the number of the warrants issued with a specified principal amount of our debt securities or each share of our preferred stock or common stock;

if applicable, the date on and after which such warrants and the related securities will be separately transferable;

any provisions for adjustment of the number or amount of shares of our preferred stock or common stock receivable upon exercise of the warrants or the exercise price of the warrants;

if applicable, a discussion of material federal income tax considerations; and

any other material terms of such warrants, including terms, procedures and limitations relating to the exchange and exercise of such warrants.

Exercise of Warrants

Each warrant will entitle the holder thereof to purchase the principal amount of debt securities, shares of preferred stock or common stock, or amounts of other securities at the exercise price as shall in each case be set forth, or be determinable as set forth, in the prospectus supplement relating to the warrants offered in the applicable prospectus supplement. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Upon receipt of payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the debt securities, shares of preferred stock or common stock or other securities to be purchased upon such exercise. If less than all of the warrants represented by a warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

Prior to the exercise of any warrants to purchase debt securities, preferred stock or common stock, holders of warrants will not have any of the rights of holders of the debt securities, preferred stock or common stock purchaseable upon exercise of the warrants, including:

in the case of warrants for the purchase of debt securities, the right to receive payments of principal of, or any premium or interest on, the debt securities purchaseable upon the exercise or to enforce covenants in the applicable indenture; or

in the case of warrants for the purchase of preferred stock or common stock, the right to vote or to receive any payments of dividends on the preferred stock or common stock purchaseable upon exercise.

DESCRIPTION OF THE CAPITAL STOCK

The following description of our capital stock sets forth general terms and provisions of our common stock and preferred stock to which a prospectus supplement may relate, including a prospectus supplement providing that our common stock or preferred stock will be issued upon conversion of or exchange for debt securities convertible into or exchangeable for common stock or preferred stock, upon conversion of or exchange for preferred stock convertible into or exchangeable for common stock or another class or series of preferred stock. The following summary of our amended and restated certificate of incorporation ("Certificate") and bylaws does not describe the Certificate and bylaws entirely. We urge you to read our Certificate and bylaws which are incorporated by reference as exhibits to the registration statement of which this prospectus is a part. See "Where You Can Find More Information" on page 21. On the date of this prospectus, our authorized capital stock consists of 200,000,000 shares of common stock, $0.01 par value, and 10,000,000 shares of preferred stock, $0.01 par value. Our Certificate does not authorize any other classes of capital stock.

Preferred Stock

The Board of Directors has the authority, without further action by stockholders, to issue up to 10,000,000 shares of Preferred Stock in one or more series and to fix the powers, designations, rights, preferences, privileges, qualifications and restrictions thereof, including dividend rights, conversion rights, voting rights, rights and terms of redemption, liquidation preferences and sinking fund terms, any or all of which may be greater than the rights of the Common Stock. The Board of Directors, without stockholder approval, can issue Preferred Stock with voting, conversion, and other rights which could adversely affect the voting power and other rights of the holders of Common Stock. The issuance of Preferred Stock in certain circumstances may have the effect of delaying, deferring or preventing a change of control of the Company without further action by the stockholders, may discourage bids for the Company's Common Stock at a premium over the market price of the Common Stock, and may adversely affect the market price of the Common Stock. At present, the Company has no shares of Preferred Stock outstanding.

If we offer any series of preferred stock, certain terms of that series of preferred stock will be described in the applicable prospectus supplement, including, without limitation, the following:

the designation;

the number of authorized shares of the series in question;

the dividend rate (or method of calculation);

any voting rights, conversion rights, anti-dilution protections, exchangeability provisions and terms of any debt securities that are exchangeable for preferred stock;

any redemption provisions;

any liquidation preferences;

any sinking fund provisions; and

any other specific terms, preferences, rights, limitations or restrictions of the preferred stock.

Common Stock

The holders of Common Stock are entitled to one vote per share on all matters submitted to a vote of stockholders. Holders of Common Stock are entitled to receive ratably such dividends as may be declared by the Board of Directors out of funds legally available therefor. In the event of liquidation, dissolution or winding up of the Company, holders of Common Stock would be entitled to share ratably in the Company's assets remaining after payment of liabilities, and after provision is made for each class of stock, if any, having preference over the Common Stock. Holders of Common Stock have no preemptive, subscription, redemption or conversion rights. All of the outstanding shares of Common Stock are, and the Common Stock offered by the Company hereby, when issued for the consideration set forth in this Prospectus or a prospectus supplement will be fully paid and nonassessable.

USE OF PROCEEDS

We intend to use the net proceeds that we receive from the sale of the securities offered by this prospectus for general corporate purposes or as may be stated in a supplement or supplements to this prospectus.

PLAN OF DISTRIBUTION

The securities which may be offered pursuant to this prospectus and any prospectus supplement may be offered by us to one or more underwriters for public offering and sale by them or to investors directly or through agents. Any such underwriter or agent involved in the offer and sale of such securities will be named in the applicable prospectus supplement. Sales of such securities may be effected by us from time to time in one or more types of transactions (which may include block transactions) on the Nasdaq National Market or other securities exchange, in the over-the-counter market, in negotiated transactions, through put or call options transactions relating to the securities, through short sales of the securities, or a combination of such methods of sale. Such transactions may or may not involve brokers or dealers.

Underwriters may offer and sell the securities at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. We also may offer and sell the securities in exchange for one or more of our outstanding debt securities or other securities.

In connection with the sale of the securities, underwriters may receive compensation in the form of underwriting discounts, concessions or commissions from us and may also receive commissions from purchasers of the securities for whom they may act as agent. Underwriters may sell the securities to or through dealers, and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agents.

Direct sales of securities may be made on a national securities exchange or otherwise.

Dealers and agents participating in the distribution of the securities may be deemed to be underwriters, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions under the

Securities Act of 1933, as amended. Underwriters, dealers and agents may be entitled, under agreements entered into with us, to indemnification against and contribution toward certain civil liabilities.

Certain of the underwriters, dealers, agents and remarketing firms described below and their associates may engage in transactions with, and perform services for us in the ordinary course of business.

Unless otherwise specified in the applicable prospectus supplement, each class or series of securities will be a new issue with no established trading market, other than our common stock, which is listed on the Nasdaq National Market. We may elect to list any other class or series of securities on any exchange, but we are not obligated to do so. It is possible that one or more underwriters may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the securities.

Offered securities may also be offered and sold, if so indicated in the applicable prospectus supplement, in connection with a remarketing upon their purchase, in accordance with a redemption or repayment pursuant to their terms, or otherwise, by one or more remarketing firms, acting as principals for their own accounts or as agents for us. Any remarketing firm will be identified and the terms of its agreements, if any, with us and its compensation will be described in the applicable prospectus supplement.

If we so indicate in the prospectus supplement, we may authorize agents, underwriters or dealers to solicit offers to purchase securities from us pursuant to contracts providing for payment and delivery on a specified date in the future. The contracts would be subject only to those conditions described in the applicable prospectus supplement. The applicable prospectus supplement will describe the commission payable for solicitation of those contracts.

Certain persons participating in the offering may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short-covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. The persons engaging in these activities may discontinue any of these activities at any time.

LEGAL MATTERS

Gibson, Dunn & Crutcher LLP of Los Angeles, California, will issue an opinion with respect to the validity of the securities being offered by this prospectus. If counsel for any underwriters passes on legal matters in connection with an offering of the securities described in this prospectus, we will name that counsel in the accompanying prospectus supplement relating to that offering.

EXPERTS

The financial statements incorporated in this prospectus by reference from EarthShell's Annual Report on Form 10-K for the period ended December 31, 2000 have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report, which is incorporated herein by reference, and have been so incorporated in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

FORWARD-LOOKING STATEMENTS

This prospectus contains or incorporates by reference forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that involve risks and uncertainties. Forward-looking statements can typically be identified by the use of forward-looking words, such as "may," "will," "could," "project," "believe," anticipate," "expect," "estimate," "continue," "potential," "plan," "forecasts," and the like. These statements appear in a number of places in this prospectus and include statements regarding our intentions, plans, strategies, beliefs or current expectations and those of our directors or our officers with respect to, among other things:

our financial prospects;

our financing plans;

trends affecting our financial condition or operating results;

our strategies for growth, operations, and product development and commercialization; and

conditions or trends in or factors affecting the foodservice disposables industry.

Forward-looking statements do not guarantee future performance and involve risks and uncertainties that could cause actual results to differ materially from those anticipated. The information contained in this prospectus, or incorporated by reference, identifies important factors that could cause such differences.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission (the "SEC"). You may read and copy any document we file at the SEC's public reference room in Washington, D.C., at 450 Fifth Street, N.W., Washington, D.C. 20549. You may also obtain copies from the SEC's public reference room by mail at prescribed rates. Please call the SEC at 1-800-732-0330 for further information on the public reference room. Our SEC filings are also available to the public from the SEC's web site at *http://www.sec.gov*. Information about our company is also available to the public from our website at *http://www.earthshell.com*.

We have filed a registration statement on Form S-3 with the SEC under the Securities Act of 1933, as amended. This prospectus does not contain all of the information set forth in the registration statement. You should read the registration statement for further information about us and the securities. You may inspect the registration statement and its exhibits without charge at the office of the SEC at 450 Fifth Street, N.W., Washington, D.C. 20549, and you may obtain copies from the SEC at prescribed rates.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" the information that we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, except for any information that is superseded by information that is included directly in this prospectus. The information filed by us with the SEC in the future will update and supersede this information. We incorporate by reference the documents listed below and any future filings made by us with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, until we sell all the securities:

1. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2000;

2. Our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2001, June 30, 2001 and September 30, 2001;

3. The description of our capital stock which is set forth in full in our Registration Statement on Form S-1, under the caption "Description of Capital Stock," as filed with the Commission on March 23, 1998 (File No. 333-13287), and any amendments or reports filed for the purpose of updating that description

You should rely on the information provided in this prospectus. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume the information in this prospectus is accurate as of any date other than the date on the front cover of this prospectus.

All documents that we file with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this prospectus and before the termination of the offering of the shares of common stock shall be deemed incorporated by reference into this prospectus and to be a part of this prospectus from the respective filing dates of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus shall be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus or in any subsequently filed document that also is or is deemed to be incorporated by reference in this prospectus modifies, supersedes or replaces such statement. Any statement so modified, superseded or replaced shall not be deemed, except as so modified, superseded or replaced, to constitute a part of this prospectus.

You may request a copy of any and all of the information incorporated by reference in this prospectus, including exhibits to such documents that are specifically incorporated by reference, at no cost, by writing or calling us at the following address or telephone number:

Investor Relations
800 Miramonte Drive
Santa Barbara, California 93109
(805) 897-2294

Statements contained in this prospectus as to the contents of any contract or other documents are not necessarily complete, and in each instance investors are referred to the copy of the contract or other document filed as an exhibit to the registration statement, each such statement being qualified in all respects by such reference and the exhibits and schedules thereto.

$50,000,000

EARTHSHELL CORPORATION

Debt Securities
Preferred Stock
Common Stock
Warrants

PROSPECTUS

December 28, 2001

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth all expenses payable by EarthShell in connection with the offering of our securities being registered hereby. All amounts are estimated except the SEC registration fee:

Expenses	Amount
SEC Registration Fee	$ 11,950
Printing and Engraving Expenses	$ 6,500
Legal Fees and Expenses	$ 10,000
Accounting Fees and Expenses	$ 5,000
Miscellaneous Expenses	$ 0
TOTAL	$ 33,450

Item 15. Indemnification of Officers and Directors.

EarthShell is a Delaware corporation. Section 145 of the Delaware General Corporation Law (the "DGCL") makes provision for the indemnification of officers and directors in terms sufficiently broad to indemnify officers and directors of EarthShell Corporation (the "Company") under certain circumstances from liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933. The Company's Charter and Bylaws provide, in effect, that, to the fullest extent and under the circumstances permitted by Section 145 of the DGCL, the Company will indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is a director or officer of the Company or is or was serving at the request of the Company as a director or officer of another corporation or enterprise. The Company may, in its discretion, similarly indemnify its employees and agents. The Charter relieves its directors from monetary damages to the Company or its stockholders for breach of such director's fiduciary duty as directors to the fullest extent permitted by the DGCL. Under Section 102(b)(7) of the DGCL, a corporation may relieve its directors from personal liability to such corporation or its stockholders for monetary damages for any breach of their fiduciary duty as directors except (i) for a breach of the duty of loyalty, (ii) for failure to act in good faith, (iii) for intentional misconduct or knowing violation of law, (iv) for willful or negligent violation of certain provisions in the DGCL imposing certain requirements with respect to stock repurchases, redemption and dividends, or (v) for any transactions from which the director derived an improper personal benefit. Depending upon the character of the proceeding, under Delaware law, the Company may indemnify against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with any action, suit or proceeding if the person indemnified acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interest of the Company, and, with respect to any criminal action or proceeding, had no cause to believe his or her conduct was unlawful. To the extent that a director or officer of the Company has been successful in the defense of any action, suit or proceeding referred to above, the Company will be obligated to indemnify him or her against expenses (including attorneys' fees) actually and reasonably incurred in connection therewith.

Item 16. Exhibits.

See Exhibit Index attached hereto following the signature pages and incorporated herein by reference.

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of

securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (1)(i) and (1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial bona fide offering thereof; and

(3) To remove from Registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(5) To deliver or cause to be delivered with the prospectus, to each person to whom the prospectus is sent or given, the latest annual report to security holders that is incorporated by reference in the prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Securities Exchange Act of 1934; and, where interim financial information required to be presented by Article 3 of Regulation S-X is not set forth in the prospectus, to deliver, or cause to be delivered to each person to whom the prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the prospectus to provide such interim financial information.

(6) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and

Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES AND POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Santa Barbara, State of California, on December 28, 2001.

EARTHSHELL CORPORATION

By: /s/ Simon K. Hodson

Simon K. Hodson
Vice Chairman of the Board and
Chief Executive Officer

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Simon K. Hodson and D. Scott Houston his or her true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Registration Statement, and to file the same, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ ESSAM KHASHOGGI Essam Khashoggi	Chairman of the Board	December 28, 2001
/s/ SIMON K. HODSON Simon K. Hodson	Vice Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	December 28, 2001
/s/ D. SCOTT HOUSTON D. Scott Houston	Chief Financial Officer and Secretary (Principal Financial and Accounting Officer)	December 28, 2001
/s/ JOHN DAOUD John Daoud	Director	December 28, 2001
/s/ LAYLA KHASHOGGI Layla Khashoggi	Director	December 28, 2001
/s/ HOWARD J. MARSH Howard J. Marsh	Director	December 28, 2001
/s/ GEORGE ROLAND George Roland	Director	December 28, 2001
/s/ MICHAEL S. NOLING Michael S. Noling	Director	December 28, 2001

EXHIBIT INDEX

Exhibit Number	Description
4.1	Certificate of Incorporation of the Company**
4.2	Bylaws of the Company**
4.3	Specimen certificate of common stock**
5.1	Opinion and consent of Gibson, Dunn & Crutcher LLP*
23.1	Consent of Gibson, Dunn & Crutcher LLP (included in Exhibit 5.1)
23.2	Consent of Deloitte & Touche LLP
24.1	Power of Attorney (included as part of signature page)

*
To be filed by amendment hereto or by a Current Report on Form 8-K to be incorporated herein by reference in connection with the offering of securities hereunder.

**
Previously filed, as an exhibit to the Company's Registration Statement on Form S-1 and amendments thereto (Registration No. 333-13287), and incorporated herein by reference.

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