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TO: Distribution

FROM: W. S. Call

DATE: June 15, 1989

Interoffice
Communication

SUBJECT: MINUTES OF 1989 ENVIRONMENTAL MEETING -
APRIL 27 AND 28

VISTA

Attached are the minutes of the 1989 Environmental Meeting. Action steps are listed in Attachment 1. A list of the persons who attended is listed in Attachment 2.

Wendy S. Call

W. S. Call
Process Engineer
PED - Houston

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Aberdeen - FGJ RBN RWS
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Engineering - GEH TWH MTW WSC
Public Relations - DLT JCB
Operations - RDG
Manufacturing - THH JAD BRBM
Administration - GGD PG

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1989 ENVIRONMENTAL MEETING
MINUTES

The agenda for the meeting is in Attachment 3.

Opening Statements - Debs Gamblin, Houston

Vista has been in a reactive mode until recently; now Vista is trying to be more proactive in environmental issues. As a result of last year's meeting, two teams were formed to study environmental issues: the environmental manpower team and the environmental careers team. Their progress will be reported later in these minutes.

Historically, environmental issues were the realm of the plants only, but Vista is moving toward environmental awareness throughout Vista. The Environmental Policy Statement is a step in that direction.

Vista joined the Chemical Manufacturers Association (CMA) mainly for environmental reasons. The CMA has started a national initiative in the environmental area. The CMA developed a set of principles called Responsible Care and requires all of its members to sign a pledge to abide by the Responsible Care principles. John Burns has signed the pledge for Vista. The Responsible Care principles are in Attachment 4. Now Vista must develop a Vista environmental policy statement.

Responsible Care/Environmental Policy - Tom Grumbles, Houston

The Vista environmental policy was presented. A draft of the policy is in Attachment 5. This policy has been reviewed by several Vista management, environmental, and plant management personnel and has been generally accepted. The policy will go to the Board of Directors in July 1989. The main idea of the policy is to make environmental issues an integral part of our daily business evaluation, strategies, and operation.

Waste Minimization - Joe Ledvina, Houston

Waste minimization used to be a rarity in the chemicals industry; now waste minimization is business as usual. For waste min to work, the efforts must be in line organization and must have goals. Vista must 1) define wastes to be reduced and 2) set goals for reduction.

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Community Relations - Dave Mahler, Baltimore and Mike Hayes,
LCCP

Baltimore

The Baltimore plant began a community relations effort. The plant developed a "Citizen's Guide to Vista Baltimore," which presented information about the plant's environmental improvements. The plant sent this literature to legislative leaders and invited the legislative leaders, Baltimore City PR persons, and environmental leaders to tour the plant. Even those persons who did not accept the invitation to tour were impressed with Vista's approach.

The City of Baltimore wants 1) continuous improvement and 2) emission levels based on hard numbers and actual measurements.

The Baltimore plant began the community relations effort independent of other companies in the community. The other companies in the community have the attitude that they do not need to do anything more than what they are doing because they are safe enough. The other companies are afraid of Vista's progress because they feel that they will be expected to follow suit.

LCCP

The Chemical plant looks for community relation actions that it can take to benefit both the community and the plant. One such action is the "Adopt a School" program.

In the 1990's Louisiana chemical plants will have to make environmental decisions jointly with the community in public forums, and both the plant and community will share ownership of the decision.

Fugitive Emission Bagging - Frank Jeanson, Aberdeen, Harry Garrison, OKC, Karl Taylor, VCM

Fugitive emissions bagging will provide lower actual amounts of emissions for SARA 313 reporting than using regulatory factor methods. Vista conducted bagging at the Aberdeen, OKC, and VCM plants. The results of the bagging show that "zero discharger" equipment really discharges less emissions than the default zero value that the regulations use. The results also show that leaking valves and fittings are not leaking as much as the SOCFI and other factors show.

Environmental Project Justification - Debs Gamblin, Houston

The problems here are:

- 1) What to do to get approval for environmental projects which are not required by the regulations?
- 2) How to keep the Vista capital budget above the acceptable IRR point if all environmental projects are rolled into the budget?
- 3) How to keep employees interested in environmental work?

Environmental Careers Team - Joe Ledvina, Houston

The team was developed in July 1988. The problems relative to environmental careers that the team uncovered were:

- 1) lack of advancement opportunities,
- 2) underutilization of environmental expertise, and
- 3) too reactive, not proactive enough.

Team recommendations for solving these problems are:

- 1) make an environmental steering team,
- 2) establish technician positions,
- 3) make a technical ladder, and
- 4) train employees for succession.

Management is evaluating these recommendations.

Environmental Manpower Team - Tom Grumbles, Houston

The team was developed after last year's environmental meeting. The team studied Vista's environmental manpower needs and issued their recommendations in a report. Their recommendations involve adding regular and temporary employees to certain plants, R&D, and S&T.

Organic Toxicity Characteristic - Joe Ledvina, Houston

The organic toxicity characteristic is a test to measure if a waste is hazardous. It will replace the EP toxicity test. The proposal for the regulation specifying OTC is expected in 8/89, and the final regulation is expected in 12/89.

If you have an OTC waste, you will have six months to comply with all hazardous waste management requirements. Exceptions are that you will have one year to comply if 1) you have been

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managing the OTC waste in surface impoundments or 2) you generate < 1000 kg/month of both new OTC waste and other hazardous waste.

This is the time for the plants to decide if they have OTC wastes and if their treatment system is a hazardous waste facility. If they have an OTC waste, a form must be completed and filed with the regulators. After filing the form, the plant has 2 to 3 years to remove the OTC waste or retrofit the waste treatment facility.

LCCC Black Box - Jim Shamburger, LCCP

The background, results and next major steps of the project were reviewed.

Enforcement Tracking - Bill McClain, Houston

Bill proposed that Vista keep track of penalties and document them. The group agreed. Bill will compile data for fiscal years 1989 and 1988. In 1990 the plants will start documenting and give the data to Bill.

Aquatic Toxicology - Allen Nielsen, R&D

Allen discussed the bioassay procedures from sample collection to data interpretation. Attachment 6 contains figures of two of the test organisms and descriptions of the test methods.

The existing Biototoxicity Team will share its information about bioassay labs with the plants.

Training Project - Bill McClain, Houston

The results of the survey on the necessity of environmental training were:

3%	-	training not needed
37%	-	training would be helpful
60%	-	training would be essential.

Everyone surveyed felt they should attend the training and that everyone else should also.

The goal of the training program would be to measurably increase environmental issue identification and proficiency

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throughout the company. Each course will be tailored to its audience -- plant, engineering, S&T, and R&D.

The first class will be Engineering in Houston. A pre-training and post-training test will be given. The public relation and training departments may be able to help develop the classes.

Bill McClain and Joe Ledvina will build a library of recommended environmental reading in Houston and will distribute a list of the books to all non Houston locations.

Inspections - Dave Cohen, Houston

The EPA or State eventually inspects all facilities. Before an inspection, a plant should practice good housekeeping and record keeping. Dave Cohen discussed the dos and don'ts during an inspection.

Resources, White Books - Joe Ledvina, Houston

The white books received mixed reviews on usefulness. Jackie O'Connell and Carla Musico will assess the needs of the plants for environmental regulatory resources.

Other Business, Open Discussion

Audits

The group discussed the need for more audits. The Environmental Manpower Team recommendation includes a full-time environmental position responsible for audits.

Vista Corporate or Contract Environmental Lab

Sue Rey had heard chief chemists in Lake Charles comment that Vista needs its own environmental lab in order to have the capability and capacity for the new tests that will be required in the future.

Sue Rey and Dave Mahler will define the potential need of a Vista internal or contract environmental lab and will gather data from the chief chemists regarding the chief chemists' future environmental testing needs.

The 1990 Environmental Meeting

Next year's meeting will be held in Austin, Texas. Joe Ledvina and Mike Hayes will work on developing the 1990 agenda.

ATTACHMENT 1

Interoffice
Communication

TO: 1989 Environmental Meeting Attendees

FROM: Wendy S. Call, Houston

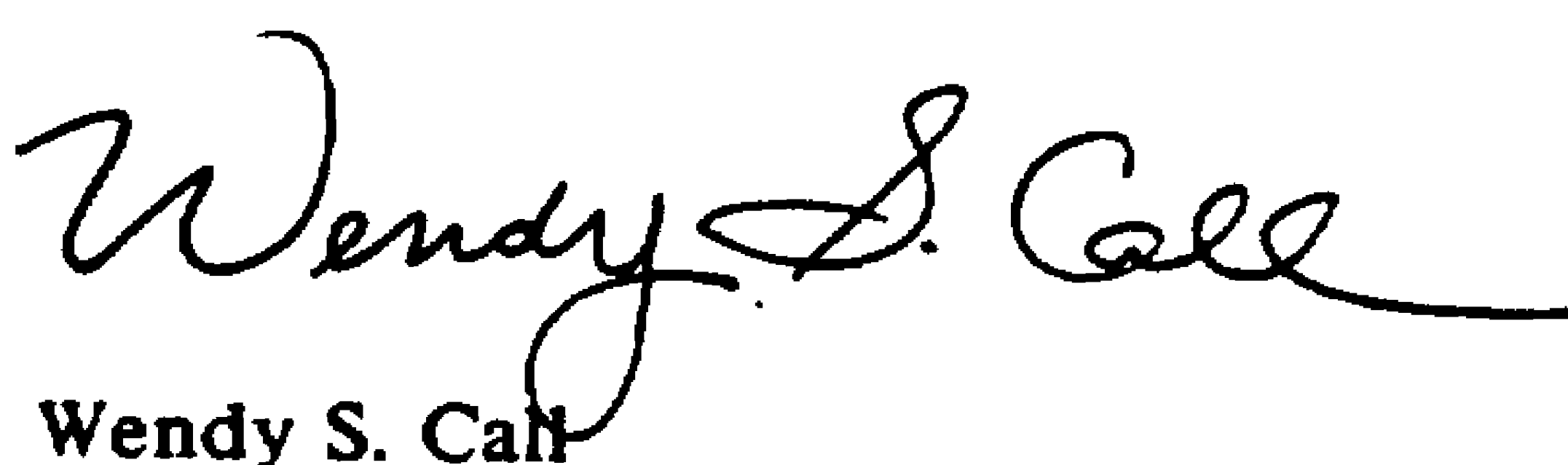
DATE: May 2, 1989

SUBJECT: ACTION STEPS OF THE ENVIRONMENTAL MEETING IN
SAN ANTONIO -- APRIL 27 AND 28

VISTA

The following are the action steps that were developed in the environmental meeting. The minutes of the meeting will be distributed at a later date.

ACTION STEP	RESPONSIBILITY
1. Vista Environmental Policy Statement. Provide comments to Tom Grumbles by May 26 regarding these three issues of the policy statement: 1) quantitative financial impact, 2) manpower and other resources, and 3) interpretive guidelines or boundaries around the policy statements.	EVERYONE
2. Enforcement Tracking. Bill will compile data for fiscal years 1988 and 1989 and put the program in place in 1990.	WLM
3. Biotoxicity Team Lab Recommendations. The biotoxicity team will share its recommendation of bioassay labs with the plants.	SAR
4. Library of Environmental Reading. Bill and Joe will build a library of recommended reading in the Houston Legal/Env. depts. and then distribute the list of books to all plants and R&D.	WLM/JCL
5. Regulatory Resources. Jackie and Carla will assess the needs of the plants for regulatory resources.	AJO/CDM
6. Agenda for the 1990 Environmental Meeting. Joe will head the effort to develop the 1990 agenda with assistance from Mike.	JCL/MGH
7. Internal or Contract Environmental Lab. Sue and Dave will define the potential need of a Vista internal or contract environmental lab and will gather data from the chief chemists regarding the chief chemists' future environmental testing needs.	SAR/DLM



Wendy S. Call
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ATTACHMENT 2
PERSONS WHO ATTENDED

Aberdeen

Frank Jeanson
Rendall Newton
Bob Seymour

Baltimore

Dave Mahler
Ron Bauer

Blane

George Williams

Hammond

Matt Tonkovich
Gina Lakich
John Maher

LCCP

Rusty Arnold
Mike Hayes
Julie Peterson
Jim Shamburger
Karl Taylor
John Friend

LAB

Tony Salah
Mike McHugh
Joe Ware

VCM

Sue Rey
Ed Taylor
Dick Conrad

OKC

Andy Wiles
Harry Garrison

Premiere

Paul Gowan

R&D

Sheila Edgmon
Allen Nielsen
Robert Martin

HOUSTON

Environmental

Tom Grumbles
Joe Ledvina
Jackie O'Connell

Legal

Bill McClain
Dave Cohen

Engineering

George Hopkins
Tom Heller
Wendy Call

Public Relations
Diana Thomas
Chris Bozman
Operations
Debs Gamblin
Manufacturing
Tom Huffman
Jim DeBernardi
Betsy Meyer
Administration
Gary Draper

ATTACHMENT 3

THURSDAY, APRIL 27, 1989
AGENDA

7:30	Continental Breakfast	
8:15	Introduction, Announcements	JCL
8:30	Environmental Policy/Responsible Care	RDG/TGG
9:30	Waste Minimization: Discuss Goals for Each Plant	ALL
10:00	Break	
10:15	Community Relations	DLM/MGH
10:45	Fugitive Emission Bagging	OKC/ABER/LCVCM
11:30	Environmental Project Justification	RDG/ALL
12:00	Lunch	
1:00	Review of Careers and Manpower Team Reports	JCL/TGG
1:30	Organic Toxicity Characteristic	JCL/ALL
2:00	LCCC Black Box	JCS
2:30	Break	
3:00	Enforcement Tracking	WLM
3:30	Aquatic Toxicology/Biomonitoring	AMN
4:30	Adjourn	
6:00	Cocktails	
7:00	Dinner - Speaker: Jim Ball	

ATTACHMENT 3 CONT.

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FRIDAY, APRIL 28, 1989
AGENDA

7:30	Continental Breakfast	
8:15	Review 1988 Environmental Meeting Action Items	JCL
8:30	Training Project	JCL/WLM
9:00	Inspections	DLC/WLM
9:30	Break	
10:00	Resources, White Books	ALL
10:30	Other Business - Open Discussion	
11:30	Adjourn	

Guiding Principles for

RESPONSIBLE CARE

A Public Commitment

As a member of the Chemical Manufacturers Association, this company is committed to support a continuing effort to improve the industry's responsible management of chemicals. We pledge to manage our business according to these principles:

- To recognize and respond to community concerns about chemicals and our operations.
- To develop and produce chemicals that can be manufactured, transported, used and disposed of safely.
- To make health, safety and environmental considerations a priority in our planning for all existing and new products and processes.
- To report promptly to officials, employees, customers and the public, information on chemical-related health or environmental hazards and to recommend protective measures.
- To counsel customers on the safe use, transportation and disposal of chemical products.
- To operate our plants and facilities in a manner that protects the environment and the health and safety of our employees and the public.
- To extend knowledge by conducting or supporting research on the health, safety and environmental effects of our products, processes and waste materials.
- To work with others to resolve problems created by past handling and disposal of hazardous substances.
- To participate with government and others in creating responsible laws, regulations and standards to safeguard the community, workplace and environment.
- To promote the principles and practices of Responsible Care by sharing experiences and offering assistance to others who produce, handle, use, transport or dispose of chemicals.



RESPONSIBLE CARE

A Public Commitment

SUMMARY DESCRIPTION

Responsible Care Program Elements

The *Guiding Principles for Responsible Care of Chemicals* is a statement of commitment by each member company to fully support a continuous effort to improve the industry's responsible management of chemicals. Each member company will pledge to operate according to the principles statement and will sign to that effect. This signed statement will be considered an obligation of membership in CMA. These guiding principles are based on CMA's 1983 policy statement on health, safety and the environment and on the Canadian Responsible Care principles. They also incorporate guidance received from member company executive contacts.

Following association adoption of the guiding principles, various CMA committees will begin development of *Codes of Management Practices*. Each set of management practices will focus on a different concern. Impetus for developing an individual Code of Management Practices will come from either an industry belief that there exists a substantive need to take voluntary action or a substantial public concern to which the industry should be responsive, or both. Initially, code packages will be considered for CAER, transportation, release reduction and management, and plant operations. Based upon the implicit obligations of the guiding principles, the Codes of Management Practices will be designed by identifying expected management practices as objectives rather than prescribing any absolute or quantitative standard. Since the codes are intended to serve as objectives, they will complement any existing member company programs or practices that achieve the same goals. Responsible Care will therefore become an integral part of the existing company program, not a replacement or another duplicative overlay. Each Code of Management Practices will be approved by the board after the opportunity for comment by all member companies.

Another important element in the Responsible Care initiative is a *Public Advisory Panel*, which will be composed of a cross-section of environmental, health and safety thought leaders. The panel will be an industry (CMA) effort, not a company responsibility. It will be assembled and moderated by an experienced facilitator working at the association's direction and will serve to assist the industry in identifying and developing programs and actions that are responsive to public concerns and viewed as proactive by key policy groups. Meeting several times a year, the panel will review issues on which CMA requires comment and advice as well as to discuss subjects that panel members believe require industry response. The panel will critique (but not approve) all proposed Codes of Management Practices and is expected to provide early definition of public concerns involving the chemical industry. *Community Advisory Panels* at the local or regional level can serve companies and the industry in a similar manner. They will be called for as a milestone of a "CAER Code of Management Practices" and CMA will offer support to facilitate companies' formation and operation of these local panels.

Effective performance evaluation is a critical element of Responsible Care. *Member Company Self-Evaluations of Management Practices*, as well as compilation of quantitative results, will be necessary to meet three vital objectives. In order to build a collective record of tangible improvement in the responsible management of chemicals, specific management practice codes may call for CMA to collect and maintain statistical trends from data that members currently make available to governmental organizations. Details of quantitative trend statistics programs will be defined by task forces developing the respective management practice code package.

SUMMARY DESCRIPTION

(Continued)

Two additional objectives are served by Member Company Self-Evaluations of Management Practices. The first is to provide feedback from the membership on the value and relevance of codes of management practices and on any additional CMA support activities that may be needed. Second, such evaluations, along with quantitative trend data, will build CMA credibility and confidence on behalf of its members in dealing with government, the public and other external groups.

Each management practice code will contain definition of management practice "progress mileposts" that member companies will use to measure and evaluate their performance versus the commitment. Details of the member management practice evaluation program will be developed by a designated work group for the board of directors' consideration and approval. The work group will be requested to define the mechanics of a practical system based on member company self-evaluation of their progress. Evaluations will be coordinated through the member companies' executive contacts and will be designed to maximize the value to companies' efforts to improve their performance.

Due to their varying size and circumstances, member companies will not be expected to be at the same level of performance for each Code of Management Practices at the same time. However, it will be expected that each member company will be able to report continued progress.

To facilitate and support each member company's continual improvement in responsible management of chemicals, *Executive Leadership Groups* will be formed to provide an opportunity for executive contacts to periodically discuss progress and share experiences with each other that have been successful. These regional groups of ten to twenty executive contacts will meet several times a year to review Codes of Management Practices under development, discuss members' progress on existing codes, identify areas where individual companies need assistance from CMA or other companies, and to address other priority industry issues. Understandings developed during these meetings will be reviewed and acted on by the association's officers, executive committee and board of directors.

Endorsement of the Responsible Care initiative will be an *Obligation of Membership* in the association. Each member company's executive contact is expected to make a commitment to Responsible Care by:

- a) signing the Guiding Principles for Responsible Care of Chemicals statement;
- b) communicating the commitment to Responsible Care to employees; and
- c) instructing management to make good-faith efforts to implement the Codes of Management Practices, participate in the self-evaluation process, and meet the expectations of the Responsible Care Program.

A member company's obligation to Responsible Care applies to those segments of the company's operations included in the CMA dues base (CMA Definition of Chemical Sales).

Member companies are also expected to participate in the development of the codes and programs. The Codes of Management Practices are intended to include mileposts that provide a road map for responding to industry priorities and the public's concerns. Member companies are expected to make good-faith efforts to move up the milepost ladder and meet the expectations of the Responsible Care initiative.

In an extreme case, where a member company has consistently not conducted its operations in accordance with the guiding principles and program elements of Responsible Care, association representatives will meet with the member company's executive contact to seek the company's positive involvement in the program.

If this fails to produce a commitment to pursue the objectives of Responsible Care, the executive committee and board could take appropriate actions including the disassociation of the company from membership after due process requirements have been met.

RESPONSIBLE CARE

A Public Commitment

QUESTIONS AND ANSWERS

All About Responsible Care

Q. Who had the idea for the Responsible Care initiative?

A. Executives of the Canadian Chemical Producers Association (CCPA) began developing the concept in 1984. CMA became aware of Responsible Care in 1986 when adopted by CCPA. It was brought to the attention of CMA's Public Perception Committee by executives of companies with Canadian operations. The Public Perception Committee investigated its potential for the U.S. industry.

Q. How is this different from what we are doing now?

A. In many ways it is not. CMA's Community Awareness and Emergency Response program, Air Quality, Waste Minimization, National Chemical Response and Information Center and other programs are vital parts of the Responsible Care concept. The difference comes in pulling them all together in one initiative subscribed to by every CMA member company and supported by well-researched and developed instructional materials. This results in a broad chemical industry commitment to improve performance through a process that ensures responsiveness to the public's concerns.

Q. Why do we need to do anything?

A. Because in spite of past efforts there still are too many incidents involving chemical operations. Politicians and government regulators will respond to the public's concerns about chemicals and our industry if we do not respond first. Indeed, the potential for a web of legislation and regulation that, in effect, licenses the industry — much like the nuclear power industry — is quite possible unless the chemical industry takes action on its own behalf.

Q. Isn't there some other way? We are already doing a lot; can't we just communicate this?

A. The Public Perception Committee has considered a variety of options and has concluded that we don't have a public relations problem; we have a performance problem. Public concerns are genuine. We have to effectively respond to them through improved performance. It is clear that the public's expectations are not being met on a performance basis. Until we truly understand public concerns and begin to address them from a performance standpoint, we can't possibly improve the general public's perception of our industry.

Q. Who prepared the draft principles and what are they based on?

A. The draft principles are based on CMA's 1983 board-approved policy on "Health, Safety and the Environment" and the Canadian Responsible Care principles. They are consistent with both. They were prepared by representatives of CMA member companies and approved by the board of directors.

Q. Why do we think Responsible Care will work?

A. Since Responsible Care is based on concepts proven in both the Canadian experience and CMA's CAER and other programs, we have confidence that it can achieve improved industry performance. Once we demonstrate and document improving performance, we can look forward to improved public perception and a better regulatory climate.

QUESTIONS AND ANSWERS (Continued)

Q. How much will Responsible Care cost CMA and the member companies to implement?

A. There will be some additional costs to the association to administer the initiative and to carry out some of the proposed program elements such as the public advisory panel, self-assessment process, Codes of Management Practices development, and the support program of workshops and publications. Some of these costs can be offset against revenue from workshops and the sale of material. But there is no doubt that costs to the association will increase by some significant level.

More significant than CMA dues are the resources needed from member companies, both in terms of the "sweat equity" of participants in the development and support of the program and in the people and dollars necessary to make the initiative "live" in each company. These costs have not been quantified, but they are likely to be small compared to uncontrolled regulatory burdens that appear to be the alternative. In addition, these costs, whatever they are, will be incurred over an extended period of time.

Q. Who will develop the Codes of Management Practices? How will companies have input?

A. Codes of Management Practices will be developed through CMA's existing committee structure, using the best resources of the industry. The committees will seek broad membership participation, review and input, as well as that of the public advisory panel. Each Code of Management Practices will receive careful review by CMA's executive committee and the full 49-member board of directors prior to its adoption. Member companies will also have the opportunity to review the Codes of Management Practices and express their views to the board before consideration.

Q. Why should a commitment to Responsible Care be an obligation of membership?

A. Public concerns about chemicals and the industry are the result of collective experience with the entire industry. If we are to be effectively responsive to public concerns, we must act as a total industry. Responsible Care must be visibly working throughout the industry and, therefore, must be both a commitment and a membership obligation of every company in the association. It is critical to achieve the cultural change needed for the industry to improve performance in a responsive manner. The public must perceive that we are living up to our commitment.

Q. Can we legally make Responsible Care a condition of membership? When and how would we enforce that condition?

A. Membership removal would be contemplated only in an extreme situation where a member was simply not demonstrating good-faith efforts to make progress in the program. But in such a case, and as long as that member was given "due process" — an opportunity to rebut charges and a hearing — the association could lawfully eject a member.

The Office of General Counsel, with guidance from outside counsel, is developing suggested criteria and procedures that could lawfully be employed in the unlikely event the association would need them.

Q. Is there danger that we are forming a model for future legislation and regulation?

A. Increased regulation is spurred by poor performance — not improvement. A very positive result of our adopting Responsible Care should be for its meaningful and workable practices to be reflected in any legislation or regulation that the public endorses through government action.

QUESTIONS AND ANSWERS

(Continued)

Q. Isn't it likely that Codes of Management Practices will be characterized as industry standards and used against individual companies in litigation?

A. In today's climate it is not possible to predict for certain that someone *will not* try to use these practices as "standards." But there are a number of things that make that very unlikely.

First, these practices are *not* standards; they are objectives toward which all members will be striving, from different starting points and inevitably at different paces. The documents describing the practices themselves will make that clear.

Second, the practices will have been developed carefully with broad-based input from CMA members. This will help ensure that they embrace the broadest range of activities appropriate to practice, while still serving to encourage a continual improvement of performance.

Third, counsel from member companies, outside firms or CMA staff will participate at the concept development, drafting and implementation phases of each management code. This will help ensure that potential legal problems are avoided and that useful, appropriate options are identified.

Fourth, the use of citizen panels in the development of these practices will be extremely valuable before-the-fact indicators of the expectations potential plaintiffs might have of particular practices. We can factor their reactions into the development of each practice.

Fifth, in many cases, these practices will involve activities prudent companies *should* be undertaking for the very purpose of *minimizing* their liability.

And finally, this program does not represent the first time the association has decided to accept *some* legal risks in the larger public interest. Our CHEMTREC program, the Chemical Referral Center, many of our technical resource manuals, Clean Sites, and our special programs all represent choices we have made to further the public interest even while accepting some legal risks. The excellent record we

have had in developing and maintaining these programs with few if any adverse legal consequences demonstrates our ability to protect ourselves even while being progressive.

In order to be certain that any legal risks posed by Responsible Care — to CMA or our member companies — were manageable and acceptable, the CMA Office of General Counsel obtained a legal review of the project by outside counsel. The following is a quote from the opinion letter provided:

"Almost any new activity undertaken by an organization will result in additional potential liability, especially an activity as ambitious and precedent-setting as the Responsible Care program. However, (identifying areas of potential legal risk) in no way do we mean to imply that the risks are too great. On the contrary, we believe that the Responsible Care program is an extremely laudable project and, if successful, will stand out as one of the most innovative and publicly beneficial activities ever undertaken by a trade association. The decision to follow through with the Responsible Care program is of course a business decision to be made by CMA after consideration of all factors, including potential liability. We have provided (the legal review) to help make that business decision a more reasoned one, but, again, we do not intend to discourage CMA from sponsoring the Responsible Care program nor do we believe the potential liability should be a discouraging factor."

Q. Why have a public advisory panel?

A. It is a key step to regaining public trust. The panel will help the industry identify and develop programs and actions that are responsive to public concerns about specific performance problems. It will show us if we're doing what the public wants us to do.

QUESTIONS AND ANSWERS

(Continued)

Q. Who will be on the public advisory panel? Who sets it up? Can panel members be replaced?

A. As envisioned, the public advisory panel will be established by CMA and managed through a consultant experienced in this field.

With CMA oversight, the consultants will recruit members to form a cross section of community, health, safety and environmental thought leaders. Representation of geographic areas and stakeholders important to the industry would also be reflected in the panel.

Members will be selected by the consultant, subject to CMA approval. It is expected that members will change from time to time in response to changing needs of CMA and/or performance of individual members. The consultant will handle such changes. Participation on the panel will be defined by an understanding with each panelist, ensuring confidentiality on the important elements essential to make it a worthwhile understanding.

Q. How will performance against the practice codes be measured? Who does the measuring and how are the results reported?

A. Individual company managements will evaluate their own performance against the Codes of Management Practices mileposts and measurement criteria. Companies will feed this information back to CMA. Primary use of such feedback would be to direct the association's support work to areas of the greatest need and highest potential. Over the longer term, these aggregate reports should establish a record of improvement that will give us the ability to communicate our performance to key publics such as the government, the media, our plant communities and others.

Q. What will CMA do to help companies address the Codes of Management Practices?

A. CMA will develop support programs to meet needs identified by the membership and by the appropriate committees. In general, programs and aids (videotapes, guide-

books, educational meetings, etc.) will be similar to the support provided for Title III and CAER.

Q. How will we publicize this program to improve public perception of the industry?

A. Responsible Care is not and must not be perceived as a public relations program. It must be an industrywide effort to improve our performance in line with the public's concerns and expectations. We will respond to media inquiries, but we are more interested in reporting the improvements that will come.

Reporting on these *improvements*, however, will become a critical part of the initiative. CMA committees are developing ways to separate data about industry performance that can be used to demonstrate improvement.

Q. Given the kind of data we are reporting under Title III, will the public accept the Responsible Care initiative now?

A. Disclosures under Title III raise the level of public concern — significantly in some cases. But the only effective response would seem to be to deal with the concerns through company and industrywide improvements. This is the essence of Responsible Care. The experience in Canada as well as our own in the United States suggests it can work.

Q. Will we apply the initiative outside the United States?

A. CMA represents North American manufacturers and can best assist its members in implementing Responsible Care here. However, the initiative is already international in scope. We learned from a two-year-old Canadian effort.

Our experience with CAER suggests that good initiatives spread rapidly. The United Nations, with U.S. chemical industry assistance, has already developed an international emergency response program modeled on CAER.

We have already shared Responsible Care materials with counterpart organizations in Australia, Europe and Japan.

ATTACHMENT 5

Vista Environmental Policy
March 27, 1989

DRAFT 4

VISTA CHEMICAL COMPANY ENVIRONMENTAL POLICY

Vista Chemical Company produces and transports chemical products that can potentially impact the environment in the communities in which we conduct business. Vista believes that compliance with all laws and regulations related to environmental quality and public health protection is a *minimum* standard of acceptable practice. Vista Chemical Company is committed to improving Vista's environmental protection efforts to achieve performance levels exceeding those required by law.

Vista recognizes the responsibility we have to our employees, the surrounding communities, customers, carriers, contractors and government agencies to conduct our business activities according to the following environmental principles:

- Vista will inform and educate employees, surrounding communities, customers, carriers, contractors and government agencies of the health and environmental hazards of the chemicals we make, use and sell. These activities will involve recognizing and responding to community concerns regarding environmental issues.
- Vista will continually reduce the risk to employees and neighboring communities posed by chemical substances used, produced and transported within our communities.
- Vista will continue to reduce the potential for emergencies involving chemical releases that would impact the environment and surrounding communities.
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- Vista will maintain an environmental quality assurance program to ensure that operations are in full compliance with Company policies and procedures, governmental permit limitations and regulatory requirements.
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- Vista will make safety, health, environmental control and waste minimization essential and integral parts of process and facility design, construction and operation.
- Vista will reduce waste generation in the air, water and soil through employee involvement and the pursuit of source-control technology to reduce emissions from both the manufacturing process and equipment.
- Vista will work with the government and other parties in developing responsible laws, regulations and standards to protect employees, surrounding communities and the environment.

March 27, 1989

ATTACHMENT 6

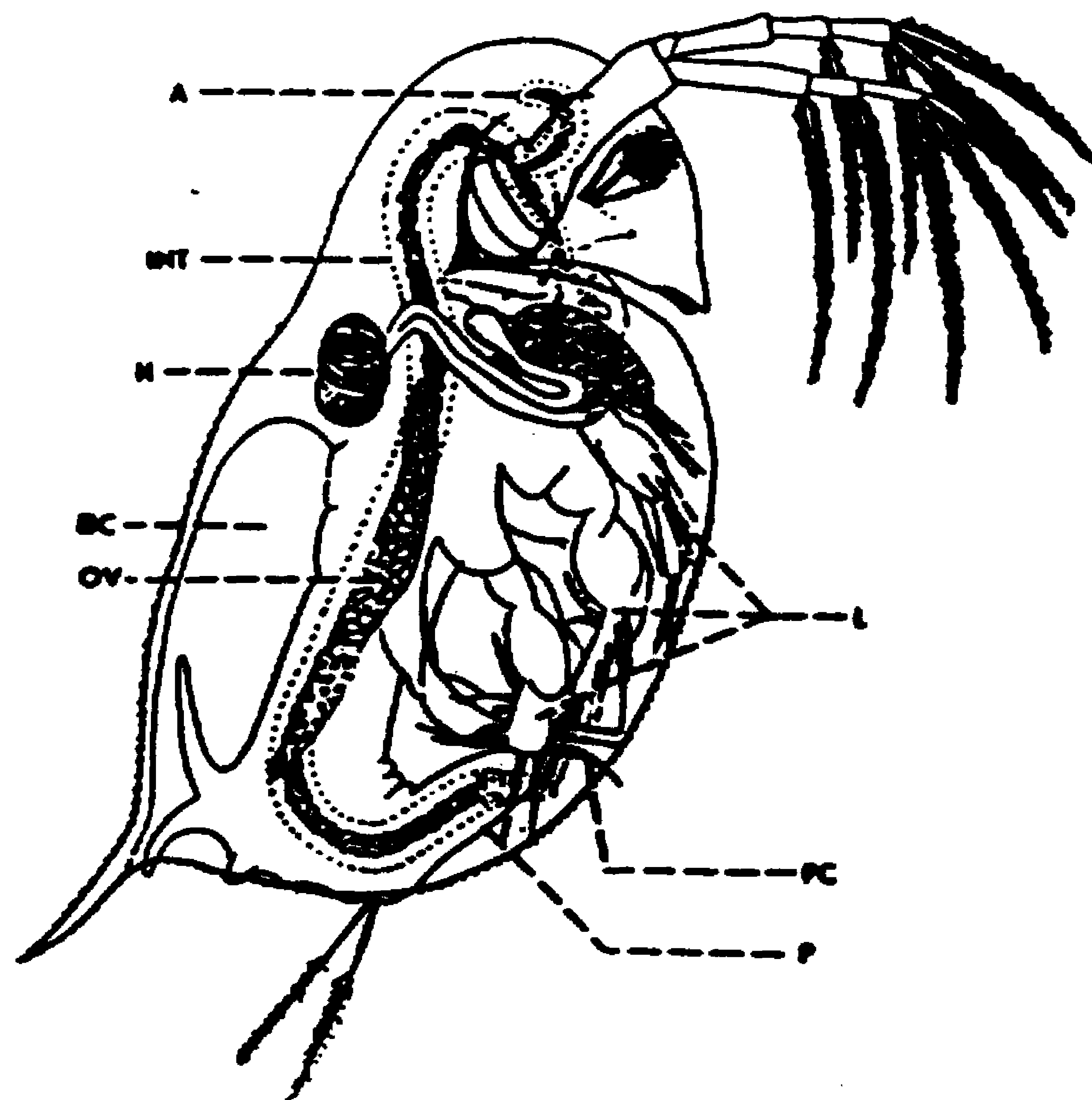


Figure 14. Anatomy of female *Daphnia pulex* (De Geer), X70; A, antenna; BC, brood chamber; H, heart; INT, intestine; L, legs; OV, ovary; P, postabdomen; PC, postabdominal claw. (From Pennak, 1978).

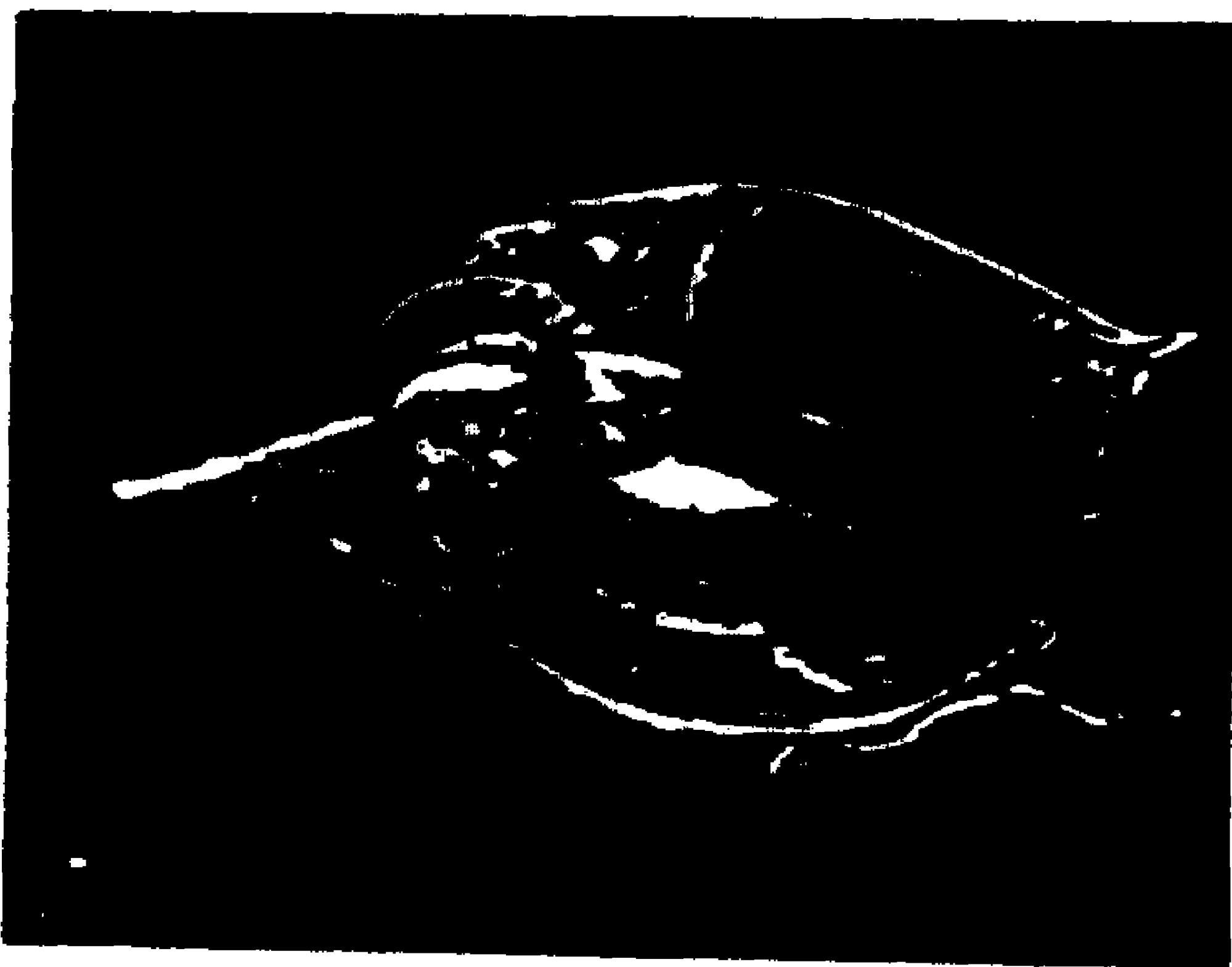


Figure 15. *Daphnia magna* with ephippium (sexual egg case). (From Doma, 1979).

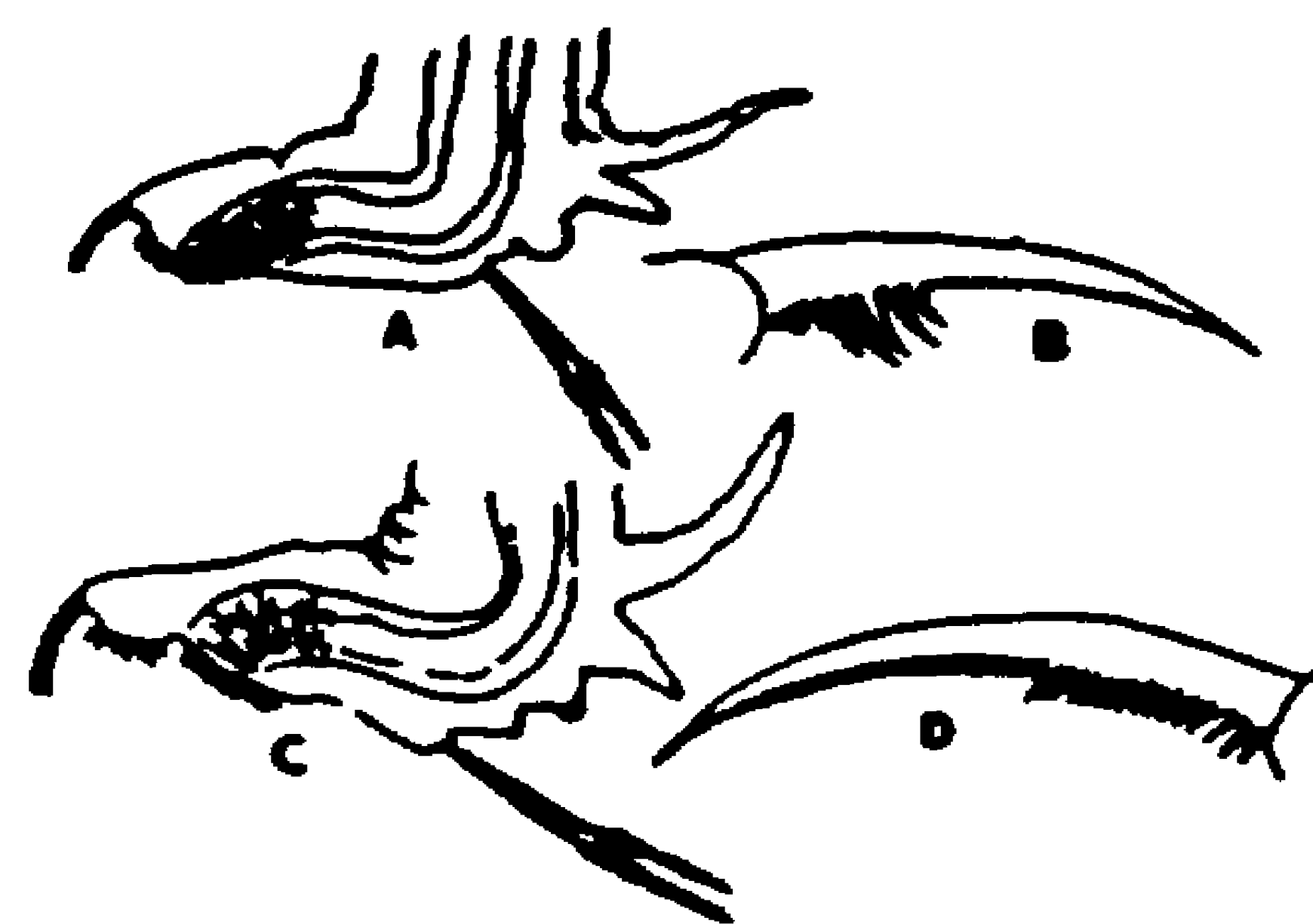


Figure 16. *Daphnia* postabdomin. *Daphnia pulex*: A, postabdomen; B, postabdominal claw. *Daphnia magna*: C, postabdomen; D, postabdominal claw. (From Pennak, 1978)

Typical Daphnia Protocol

(Either Magna or Pulex)

Sample Collection:

. Clean Containers

New: Rinsed with sample before use.

Reused: Clean with detergent solution.

Tap water rinse.

Acid rinse HNO_3 or HCl .

Tap water rinse.

Acetone rinse.

Tap water rinse.

Dilution water rinse.

. Ship Fastest Possible

Ship iced to laboratory.

Stored in refrigerator until use.

Must not exceed 72 hours before test is initiated.

Daphnia Protocol (con't.)

Sampling Handling:

- . Sample received, logged in, identified.
- . Sample warmed to test conditions.
- . pH, D.O., temperature, specific conductivity, hardness, alkalinity measured.

Test Set-Up:

- . Five concentrations (100, 50, 25, 12, 6 %) effluent tested. Effluent is diluted with dilution water.
- . Dilution water - reconstituted water (hard for Daphnia magna 160-180 mg/L Ca CO₃).
(moderately hard for Daphnia pulex 80-100 mg/L Ca CO₃.)
- or Receiving water collected upstream from discharge point.
- or Nearby tributaries, groundwaters may also be used.

Daphnia Protocol (con't.)

- . At least 20 young (< 24-hour old) Daphnia are exposed to each test concentration.
- . Test systems are incubated at 20°C under 16 hour photo period at specified light intensity.
- . Renewal (transferred to fresh preparations of test concentrations after 24 hours).
- . Non-renewal (remain in original test systems for entire test).
- . Temperature, D.O., pH, hardness, alkalinity measured at beginning and end. Preferably before neonates are added.
- . End Point:

Mortality is measured by loss of movement of body or appendages on gentle prodding.

(Battelle seems to believe that even if appendages have minor activity, the organisms are dead.)

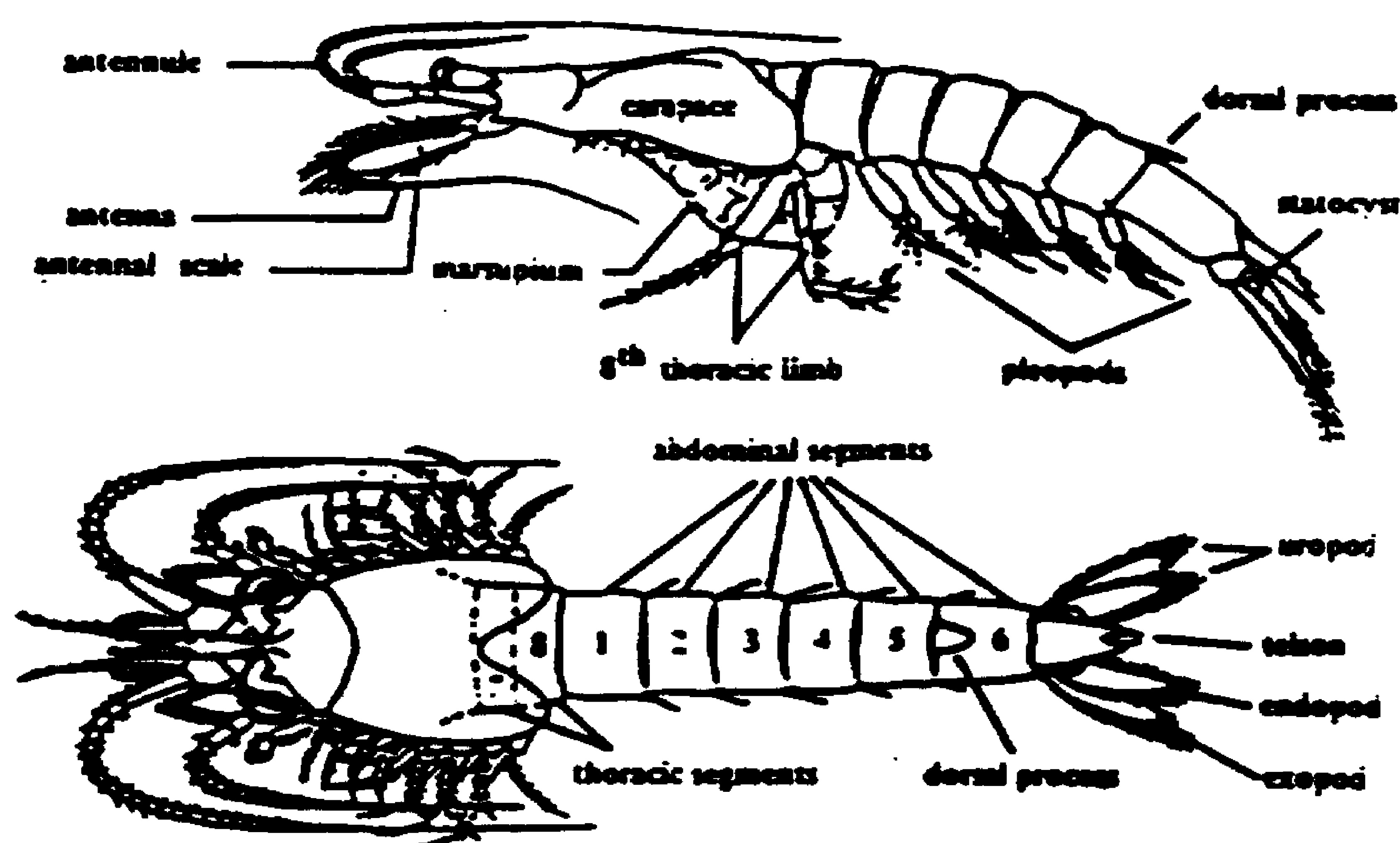


Figure 17. Lateral and dorsal view of a typical mysid. (From Stuck et al., 1979).

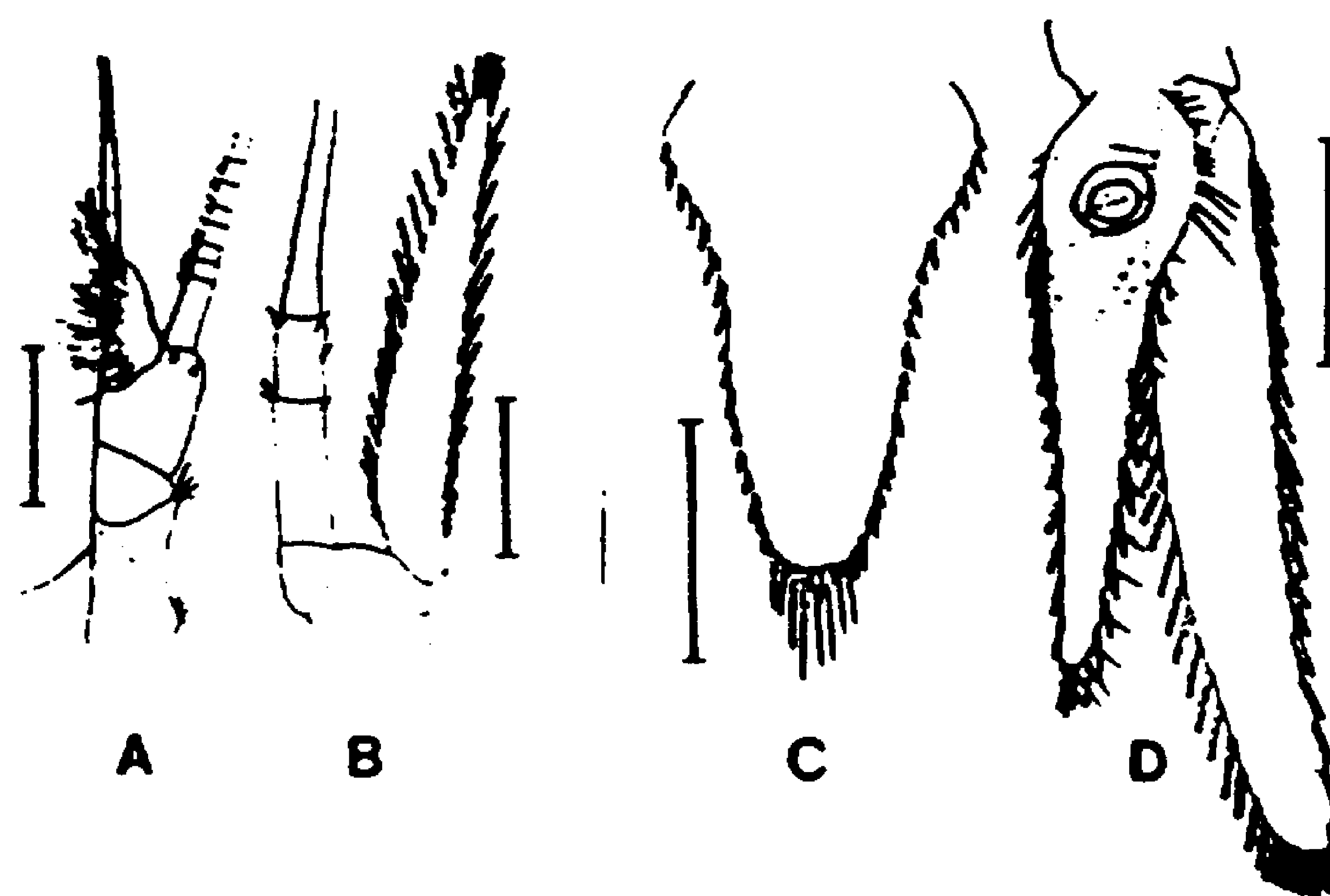


Figure 18. Morphological characteristics used in mysid identification (*Mysidopsis bahia*). A, antenna 1, ventral male; B, antenna 2; C, telson; D, right uropod, dorsal. Scale lines 0.5 mm in length. (From Molenock, 1969).

Mysid Shrimp Protocol

Collect Sample:

- . Clean container.
- . Ship iced down.
- . Must be used within 72 hours.

Sample Handling:

- . Receive and log in.
- . Warm to test conditions.
- . Measure water quality parameters - includes salinity.

Test Set-Up:

- . Five concentrations (100, 50, 25, 12, 6 %) effluent tested. Effluent diluted with dilution water.
- . Dilution water is natural seawater, or synthetic salt water adjusted to 20 ppt salinity.

Mysid Shrimp Protocol (con't.)

- . At least 20 (1-5) day old shrimp exposed to each concentration.
- . Incubate at 20°C, feed daily with brine shrimp nauplii.
- . Renewal (transferred to fresh preparations of test concentrations after 24 hours.
- . Non-renewal (remain in original test media).
- . Beginning and end of test measure pH, temperature, D.O., specific conductivity and salinity.
- . End Point:

Mortality - no movement of body or appendages on gentle prodding.

Mysid Shrimp Protocol (con't.)

- . At least 20 (1-5) day old shrimp exposed to each concentration.
- . Incubate at 20°C, feed daily with brine shrimp nauplii.
- . Renewal (transferred to fresh preparations of test concentrations after 24 hours).
- . Non-renewal (remain in original test media).
- . Beginning and end of test measure pH, temperature, D.O., specific conductivity and salinity.
- . End Point:

Mortality - no movement of body or appendages on gentle prodding.

Vista Chemical Company

ENVIRONMENTAL POLICY

Vista Chemical Company produces and transports chemical products that can potentially impact the environment in the communities in which we conduct business. Vista believes that compliance with all laws and regulations related to environmental quality and public health protection is a minimum standard of acceptable practice. Vista Chemical Company is committed to improving Vista's environmental protection efforts to achieve performance levels exceeding those required by law.

Vista recognizes the responsibility we have to our employees, the surrounding communities, customers, carriers, contractors and government agencies to conduct our business activities according to the following environmental principles:

- Vista will inform and educate employees, surrounding communities, customers, carriers, contractors and government agencies of the health and environmental hazards of the chemicals we make, use and sell. These activities will involve recognizing and responding to community concerns regarding environmental issues.
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