

CERTIFIED
COPY

BEFORE THE
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

IN THE MATTER OF THE:)
)
PUBLIC HEARING ON AND)
CONSIDERATION OF IRONCLAD'S)
PETITION FOR VARIANCE FROM)
THE RECYCLED CONTENT TRASH)
BAG PROGRAM REQUIREMENTS FOR)
HEAT-AFFIXED STRAP BAGS)
)

DATE AND TIME: THURSDAY, JULY 24, 1997
9:30 A.M.

PLACE: BOARD ROOM
8800 CAL CENTER DRIVE
SACRAMENTO, CALIFORNIA

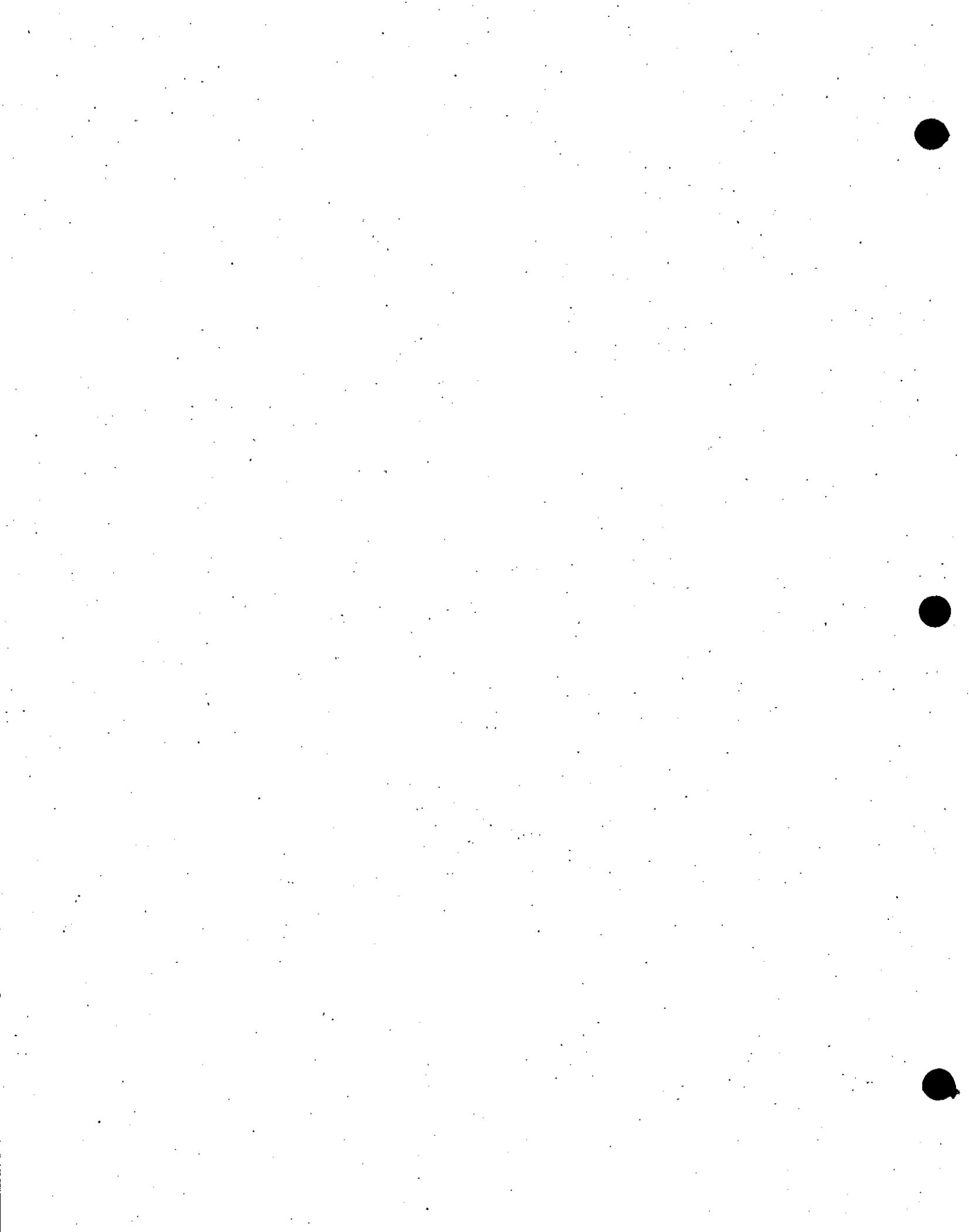
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APPEARANCES

MR. DANIEL G. PENNINGTON, CHAIRMAN
MR. ROBERT C. FRAZEE, VICE CHAIRMAN
MR. WESLEY CHESBRO, MEMBER
MS. JANET GOTCH, MEMBER
MR. STEVEN R. JONES, MEMBER
MR. PAUL RELIS, MEMBER

STAFF PRESENT

MR. RALPH CHANDLER, CHIEF EXECUTIVE OFFICER
MS. DEBORAH BORZELLERI, LEGAL COUNSEL
MS. MARLENE KELLY, BOARD SECRETARY
MS. CAREN TRGOVCICH, DEPUTY DIRECTOR, WASTE
PREVENTION AND MARKETING DEVELOPMENT



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ITEM 60: PUBLIC HEARING ON AND CONSIDERATION OF IRONCLAD'S PETITION FOR VARIANCE FROM THE RECYCLED CONTENT TRASH BAG PROGRAM REQUIREMENTS FOR HEAT-AFFIXED STRAP BAGS

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SACRAMENTO, CALIFORNIA; THURSDAY, JULY 24, 1997
9:30 A.M.

CHAIRMAN PENNINGTON: MORNING AND WELCOME
TO THE SECOND DAY OF THE JULY MEETING OF THE
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD.
WOULD THE SECRETARY PLEASE CALL THE ROLL.

BOARD SECRETARY: BOARD MEMBER CHESBRO.
FRAZEE.

BOARD MEMBER FRAZEE: HERE.

BOARD SECRETARY: GOTCH.

BOARD MEMBER GOTCH: HERE.

BOARD SECRETARY: JONES.

BOARD MEMBER JONES: HERE.

BOARD SECRETARY: RELIS.

BOARD MEMBER RELIS: HERE.

BOARD SECRETARY: CHAIRMAN PENNINGTON.

CHAIRMAN PENNINGTON: HERE. QUORUM IS
PRESENT.

FOR THE BOARD'S OFFICIAL RECORD, I
WANT TO ASK ANYBODY WHO WISHES TO SPEAK, AND I
ALREADY HAVE SEVEN PEOPLE, IF YOU WISH TO SPEAK ON
THIS MATTER, PLEASE FILL OUT A SPEAKER SLIP IN THE
REAR OF THE -- THAT ARE ON THE TABLE IN THE REAR
OF THE ROOM AND GET IT TO MS. KELLY.



1 ALSO, IF ANY OF THE PEOPLE --
2 WITNESSES OR ANYBODY SPEAKING, IF YOU HAVE ANY
3 WRITTEN MATERIAL THAT YOU WANT TO BE MADE A PART
4 OF THE RECORD, WE'D LIKE TO MAKE SURE YOU GIVE A
5 COPY TO MS. KELLY SO THAT THE COURT REPORTER CAN
6 MAKE SURE THAT IT'S INCLUDED IN THE REPORT -- IN
7 THE RECORD.

8 ALSO, JUST TO LET YOU KNOW WHAT THE
9 PROCEDURE IS GOING TO BE ON THE HEARING ON THE
10 FAST BACK VARIANCE HEARING, THE STAFF WILL MAKE AN
11 INTRODUCTION AND THEIR PRESENTATION TO THE PANEL.
12 WE WILL THEN ASK THE PETITIONER TO ADDRESS THE
13 PANEL, FOLLOWED BY PUBLIC TESTIMONY, AND THEN THE
14 PETITIONER WILL HAVE AN OPPORTUNITY TO REBUT
15 ANYTHING THEY WISH TO REBUT.

16 ALSO, THE BOARD HAS RECEIVED THREE
17 LETTERS RELATING TO THE PETITION FOR VARIANCE TO
18 BE ENTERED INTO THE BOARD'S RECORD OF TODAY'S
19 HEARING. COPIES HAVE BEEN GIVEN TO ALL BOARD
20 MEMBERS AS WELL AS THE PETITIONER. THE LETTERS
21 ARE A LETTER DATED JULY 7, 1997, FROM NANCY VOS
22 REPRESENTING POLY-AMERICA OF GRAND PRAIRIE, TEXAS;
23 A LETTER DATED JULY 14, 1997, FROM GARY S.
24 KERLAGON PRESIDENT AND CEO, NORTHERN AMERICAN
25 PLASTIC CORPORATION, AURORA, ILLINOIS; AND THE



1 THIRD LETTER IS A LETTER DATED JULY 22, 1997, FROM
2 KIM KRAMER, ENVIRONMENTAL MANAGER OF TENNECO
3 PACKAGING, DEERFIELD, ILLINOIS.

4 NOW, ALL OF THOSE WHO --

5 MR. LIVINGSTON: MR. CHAIRMAN, WOULD IT
6 BE APPROPRIATE TO INTERPOSE AN OBJECTION AT THIS
7 TIME TO THOSE LETTERS BEING MADE PART OF THE
8 RECORD? THE BASIS FOR MY OBJECTION IS THAT THE
9 REGULATIONS CALL FOR THE EVIDENCE THAT'S PRESENTED
10 TO THE BOARD TO BE SWORN, PRESENTED UNDER PENALTY
11 OF PERJURY, AND THESE LETTERS, OF COURSE, DO NOT
12 HAVE THOSE SAFEGUARDS. SO AT LEAST FOR THE RECORD
13 I'D LIKE TO OBJECT TO THOSE BEING MADE PART OF THE
14 RECORD.

15 CHAIRMAN PENNINGTON: DOES COUNSEL HAVE
16 ANY COMMENT TO THAT?

17 MS. BORZELLERI: WE DETERMINED THAT THE
18 BOARD CAN TAKE THAT INFORMATION OR NOT TAKE THAT
19 INFORMATION, BUT WE DID WANT TO GO AHEAD AND
20 INCLUDE THEM IN THE RECORD. CERTAINLY I HOPE THAT
21 THE PEOPLE WHO HAVE SUBMITTED LETTERS WOULD BE
22 HERE TO SUPPORT THEM TO GIVE MORE WEIGHT TO THEIR
23 EVIDENCE, BUT WE DID NOT WANT TO EXCLUDE THEM FROM
24 THE RECORD AT THIS TIME.

25 CHAIRMAN PENNINGTON: ONE OF THEM, I



1 THINK. IS HERE. MS. VOS IS HERE, I BELIEVE. THE
2 OTHER TWO I DON'T BELIEVE -- I DON'T KNOW. IS
3 THERE ANYBODY HERE FROM NORTH AMERICA PLASTICS
4 CORPORATION?

5 MS. VOS: NO. THEY REQUESTED THAT I READ
6 THEIR LETTER, THOUGH. I HAVE A LETTER REQUESTING
7 THAT.

8 CHAIRMAN PENNINGTON: OKAY. AND WHAT
9 ABOUT KIM KRAMER FROM TENNECO PACKAGING? OKAY.
10 WELL, WHAT'S THE BOARD'S PLEASURE? DO YOU WANT TO
11 MAKE THESE LETTERS PART OF THE RECORD?

12 BOARD MEMBER CHESBRO: REGARDLESS OF WHAT
13 THE LEGAL PROCEDURE IS, WE'RE A BOARD IN ORDER TO
14 ACCEPT PUBLIC INPUT. AND CERTAINLY THERE'S AN
15 OPPORTUNITY TO CHALLENGE THE VERACITY ON ANY OTHER
16 PARTY'S PART, BUT I THINK WE CAN'T REFUSE TO ALLOW
17 SOMEBODY TO GIVE WRITTEN INFORMATION OR TESTIMONY,
18 HOWEVER ACCURATE OR INACCURATE IT MAY TURN OUT TO
19 BE.

20 BOARD MEMBER RELIS: I WOULD AGREE WITH
21 THAT.

22 CHAIRMAN PENNINGTON: OKAY. IT SEEMS AS
23 THOUGH THE BOARD WOULD LIKE TO MAKE IT A PART OF
24 THE PUBLIC RECORD. THE CHAIR WILL RULE THAT THESE
25 THREE LETTERS CAN BE OFFERED AS PART OF THE PUBLIC



1 RECORD.

2 (WHEREUPON EXHIBIT 1 WAS MARKED FOR
3 IDENTIFICATION.)

4 CHAIRMAN PENNINGTON: BEFORE WE GET
5 STARTED, WE'D LIKE TO HAVE ALL OF THE PEOPLE WHO
6 INTEND TO ADDRESS THE BOARD TO STAND AND BE SWORN
7 IN BY THE COURT REPORTER.

8 BOARD MEMBER CHESBRO: MR. CHAIRMAN, I
9 JUST WANT TO MAKE SURE THE RECORD REFLECTS THE
10 FACT THAT I CAME IN. I GUESS YOU CALLED THE ROLL
11 BEFORE I CAME. SO I'M HERE.

12 CHAIRMAN PENNINGTON: DO I NEED TO CALL
13 EVERYBODY BY NAME, OR DO YOU ALL KNOW WHO'S GOING
14 TO TESTIFY? WELL, LET ME JUST GO THROUGH THE
15 NAMES AND THEY CAN SAY IF THEY'RE HERE:
16 GENE LIVINGSTON, GARY RUTLEDGE, JERRY SMITH, JOHN
17 VIBOCH, STEVEN PICKELMAN, NANCY VOS, AND WILLIAM
18 O'GRADY.

19
20 ALL PROSPECTIVE WITNESSES,
21 HAVING BEEN FIRST DULY SWORN BY THE CERTIFIED
22 COURT REPORTER, TESTIFIED AS FOLLOWS:

23
24 MR. LIVINGSTON: MR. CHAIRMAN, WOULD IT
25 BE APPROPRIATE TO READ THOSE NAMES AGAIN SO THAT



1 THE COURT REPORTER CAN GET THOSE IN THE
2 TRANSCRIPT?

3 CHAIRMAN PENNINGTON: CERTAINLY. WE'LL
4 CALL THEM UP, AND I'LL REPEAT THEIR NAMES WHEN WE
5 CALL THEM UP. IS THAT SUFFICIENT FOR THE COURT
6 REPORTER, OR DO YOU NEED THEM FOR YOUR SWEARING
7 IN?

8 THE REPORTER: THEY'LL BE PART OF THE
9 INDEX AS HAVING BEEN SWORN.

10 CHAIRMAN PENNINGTON: OKAY. PUBLIC
11 HEARING ON AND CONSIDERATION OF IRONCLAD'S
12 PETITION FOR VARIANCE FROM THE RECYCLED CONTENT
13 TRASH BAG PROGRAM REQUIREMENTS FOR HEAT-AFFIXED
14 STRAPPED BAGS. MS. TRGOVCICH.

15 MS. TRGOVCICH: GOOD MORNING, MR.
16 CHAIRMAN AND MEMBERS. THE STAFF PRESENTATION THIS
17 MORNING WILL BE VERY BRIEF IN ORDER THAT WE CAN
18 GET ON WITH THE PRESENTATION OF THE EVIDENCE BY
19 THE PETITIONER. THIS MORNING JERRY HART OF THE
20 WASTE PREVENTION AND MARKET DEVELOPMENT DIVISION
21 WILL BE PROVIDING A BRIEF BACKGROUND IN ORDER TO
22 PROVIDE CONTEXT, ONE, FOR THE STATUTORY AUTHORITY
23 BEHIND THE PETITION FOR VARIANCE AND THE EXEMPTION
24 THAT PRECEDED IT, AS WELL AS SETTING THE CONTEXT
25 AROUND THE REGULATIONS THAT WERE SUBSEQUENTLY



1 ADOPTED BY THE BOARD.

2 THOSE REGULATIONS ARE BEING USED AS
3 THE BASIS FOR, ONE, THE STAFF ITEM THAT WAS
4 PREPARED IN PREPARATION FOR TODAY'S HEARING AND,
5 TWO, ARE BEING USED AS THE BASIS FOR THE BOARD'S
6 DECISION TODAY. WITH THAT, I'D LIKE TO TURN THE
7 PRESENTATION OVER TO JERRY.

8 CHAIRMAN PENNINGTON: MR. HART.

9 MR. HART: THANK YOU, CAREN. GOOD
10 MORNING, MEMBERS. MY NAME IS JERRY HART. I'VE
11 BEEN THE LEAD STAFF ON THE RECYCLED-CONTENT TRASH
12 BAG PROGRAM, AND I'M GOING TO GIVE A BRIEF
13 CHRONOLOGY OF HOW WE GOT FROM THERE TO HERE.

14 THE ORIGINAL TRASH BAG PROGRAM WAS
15 PASSED BY STATUTE IN 1990, REQUIRING THE FIRST
16 CERTIFICATION IN 1994. THAT ORIGINAL VERSION OF
17 THE STATUTE HAD THE 10-PERCENT CONTENT REQUIREMENT
18 IN 1993 AND 1994, AND THAT WAS RATCHETED UP TO 30
19 PERCENT CONTENT IN 1995.

20 SUBSEQUENT VERSIONS OF THE LAW HAVE
21 REDUCED THE CONTENT IN '96 AND THEN BACK UP IN
22 '97, BUT THE ORIGINAL VERSION OF THE BILL IN 19 --
23 THE LAW IN 1990 HAS THIS INCREASED CONTENT TO '95.
24 THE MOST RECENT EDITION OF THE LAW CAME FROM
25 REVISIONS IN 1995 WITH ASSEMBLY BILL 1851. THAT



1 VERSION OF THE STATUTE INCLUDED THE EXEMPTION FOR
2 HEAT-AFFIXED STRAP BAGS FOR 1996.

3 THE STATUTE ALSO HAD THE PROCESS BY
4 WHICH ANY COMPANY THAT RECEIVED THAT EXEMPTION FOR
5 1996 MAY COME TO THE BOARD PRIOR TO 1-1-97 TO
6 PETITION FOR A VARIANCE WHICH WOULD EXTEND THE
7 EXEMPTION FOR UP TO TWO YEARS. THAT ADDITIONAL
8 SECTION OF THE STATUTE, 42298 OF THE PUBLIC
9 RESOURCES CODE, SUNSET AS OF 1-1-97.

10 THE SUCCESSOR, 42298, SPELLED OUT
11 THE PROCESS FOR THE PETITION, THE PUBLIC HEARING,
12 HOW THE BOARD WAS TO LOOK AT THE EVIDENCE, AND
13 COME TO A DECISION ON THE VARIANCE. THAT'S THE
14 SECTION 42298 THAT WE'RE FOLLOWING AND ADHERING TO
15 TODAY.

16 SEPTEMBER 9TH OF '96, STAFF BROUGHT
17 THE LIST OF EVIDENCE AND CRITERIA BEFORE THE
18 MARKET DEVELOPMENT COMMITTEE TO ADOPT THOSE
19 PROVISIONS FOR USE TO HAVE THE PUBLIC HEARING AND
20 HEAR A PETITION REQUEST. THE STAFF RECOMMENDATION
21 WAS TO APPROVE THE LIST OF EVIDENCE AND CRITERIA
22 SO THAT WE COULD MOVE FORWARD WITH THE PUBLIC
23 HEARING ON THE PETITION, AS WELL AS TO
24 SIMULTANEOUSLY MOVE FORWARD WITH ADOPTION OF THOSE
25 LISTS INTO EXISTING TRASH BAG REGULATIONS.



1 SEPTMBER 10TH WE FILED A
2 PUBLICATION OF NOTICE WITH THE OFFICE OF
3 ADMINISTRATIVE LAW TO BEGIN THAT RULEMAKING
4 PROCESS.

5 AT THE SEPTEMBER 25, '96, BOARD
6 ITEM, THE CONSENT CALENDAR ITEM WAS TAKEN OFF THE
7 CONSENT AND A DECISION WAS MADE TO GO AHEAD WITH
8 IRONCLAD'S REQUEST THAT WE ONLY DO A RULEMAKING TO
9 INCLUDE THE LIST OF EVIDENCE AND CRITERIA IN THE
10 EXISTING REGULATIONS AND NOT MOVE FORWARD WITH THE
11 APPROVAL OF THE LIST SO THAT WE'D HAVE A POLICY TO
12 FOLLOW TO MOVE AHEAD AGAIN WITH THE PETITION
13 PROCESS.

14 NOVEMBER 20TH, AFTER SEVERAL PUBLIC
15 COMMENT PERIODS ON THE REGULATIONS, WE HAD THE
16 BOARD ITEM ON CONFIDENTIALITY OF INFORMATION THAT
17 COULD BE PRESENTED DURING THIS PUBLIC HEARING.
18 THE ISSUE WAS RAISED, BECAUSE OF THE STATUTE WITH
19 THE GUIDELINES ON THE PUBLIC HEARING, THAT ALL
20 INFORMATION MUST BE ENTERED INTO THE PUBLIC
21 RECORD. THE ISSUE OF CONFIDENTIAL INFORMATION WAS
22 BROUGHT FORWARD, AND THE BOARD MADE A DECISION ON
23 WHAT INFORMATION COULD AND COULD NOT BE USED IN
24 THEIR DETERMINATION ON THE PETITION.

25 THE VERY NEXT DAY, NOVEMBER 21ST, WE



1 HAD A LETTER FROM GENE LIVINGSTON REGARDING
2 COMPLIANCE WITH THE 1997 CALENDAR YEAR SINCE WE
3 WERE GETTING FURTHER AND FURTHER INTO THE YEAR,
4 THAT WE WERE SUPPOSED TO HAVE THIS PUBLIC HEARING
5 AND HAVE A DECISION MADE ON THE VARIANCE. MR.
6 LIVINGSTON SOUGHT SOME GUIDANCE ON HOW COMPLIANCE
7 WOULD BE VIEWED FOR THE '97 CALENDAR.

8 VERY NEXT DAY, NOVEMBER 22D, WE HAD
9 A RESPONSE FROM OUR LEGAL DEPARTMENT TO THAT
10 LETTER LAYING OUT THE FACT THAT THE CERTIFICATIONS
11 FOR THE CALENDAR YEARS DON'T -- AREN'T RECEIVED BY
12 THE BOARD UNTIL MARCH OF THE FOLLOWING YEAR. FOR
13 INSTANCE, THE '97 CERTIFICATIONS ARE DUE TO THE
14 BOARD BY MARCH 1ST OF '98. SO, THEREFORE, WE
15 REALLY CAN'T MAKE ANY DETERMINATION ON COMPLIANCE
16 FOR '97 UNTIL WE SEE THOSE CERTIFICATIONS.

17 AT THE JANUARY 22D BOARD MEETING,
18 THE BOARD ADOPTED THE EVIDENCE AND THE CRITERIA
19 INTO THE REGULATIONS. THOSE WERE -- THE
20 REGULATIONS -- REGULATORY RULE FILE WAS SUBMITTED
21 TO OAL ON APRIL 4TH. ON MAY 16TH WE HAD APPROVAL
22 BY THE OFFICE OF ADMINISTRATIVE LAW ON THE RULE
23 FILE, AND THOSE REGULATIONS BECAME EFFECTIVE ON
24 THAT DATE.

25 MAY 22D STAFF SUBMITTED TO IRONCLAD



1 A LETTER REQUESTING THE EVIDENCE TO BE RECEIVED BY
2 JUNE 12TH. ON JUNE 23D THE EVIDENCE FROM IRONCLAD
3 WAS RECEIVED BY STAFF, AND WE BEGAN THE ANALYSIS
4 OF THAT INFORMATION.

5 AT THE MAY 28TH BOARD MEETING, THE
6 BOARD MEMBERS ASKED FOR A COMPLETE AGENDA ITEM,
7 INCLUDING ANALYSIS OF THE EVIDENCE SUBMITTED BY
8 IRONCLAD, AT LEAST TEN DAYS PRIOR TO THE PUBLIC
9 HEARING. ON JULY 9TH STAFF MET THE DEADLINE,
10 PROVIDED THE ITEMS TO THE BOARD MEMBERS, MAILED
11 THE ITEM TO INTERESTED PARTIES, AND THAT KIND OF
12 SET THE STAGE FOR TODAY'S PUBLIC HEARING.

13 BECAUSE WE HOPE THAT THE MEMBERS HAD
14 ADEQUATE TIME TO REVIEW THE ANALYSIS CONTAINED IN
15 THE ITEM, WE HOPE THAT IRONCLAD AND THEIR
16 REPRESENTATIVES AND THE PUBLIC HAD PLENTY OF TIME
17 TO REVIEW THAT INFORMATION AS WELL, WE DON'T SEE
18 THE NEED TO REVIEW OUR INTERPRETATION, OUR
19 ANALYSIS OF THAT EVIDENCE. SO AT THAT, I'D LIKE
20 TO CONCLUDE OUR STAFF PRESENTATION.

21 CHAIRMAN PENNINGTON: ANY QUESTIONS OF
22 MR. HART? BEING NONE, I'LL CALL MR. GENE
23 LIVINGSTON, MR. GARY RUTLEDGE, AND MR. JERRY
24 SMITH.

25 MR. LIVINGSTON: THANK YOU, MR. CHAIRMAN.



1 MEMBERS. HOW WE'D LIKE TO PROCEED IS I'D LIKE TO
2 MAKE SOME BRIEF OPENING COMMENTS, AND THEN WE'LL
3 HAVE MR. RUTLEDGE PROCEED WITH INFORMATION ABOUT
4 THE BACKGROUND ON THE DEVELOPMENT OF THE STRAP AND
5 THE EQUIPMENT THAT MANUFACTURES THAT AND THE
6 TECHNOLOGICAL ISSUES THAT ARE INVOLVED IN THIS
7 MATTER, AND THEN MR. SMITH WILL TESTIFY ABOUT
8 IRONCLAD AND ABOUT ITS PLANS FOR THE FUTURE AND
9 HOW IT INTENDS TO BE ABLE TO MEET THE 30-PERCENT
10 POSTCONSUMER RECYCLED-CONTENT REQUIREMENTS IN
11 FUTURE YEARS.

12 IRONCLAD IS HERE TODAY ASKING YOU
13 FOR A VARIANCE FROM THOSE MINIMUM CONTENT
14 REQUIREMENTS FOR A PORTION OF THE TRASH BAGS THAT
15 IT MANUFACTURES, ALBEIT A SIGNIFICANT PORTION.
16 IT'S HERE BECAUSE IT CANNOT, BECAUSE OF
17 TECHNOLOGICAL LIMITATIONS, ATTACH A STRAP TO TRASH
18 BAGS THAT CONTAIN POSTCONSUMER RECYCLED MATERIAL.
19 IT'S HERE ALSO BECAUSE, WITHOUT BEING ABLE TO SELL
20 THESE STRAP TRASH BAGS FREE OF POSTCONSUMER
21 RECYCLED MATERIAL, IT HAS NO ABILITY TO MAINTAIN
22 ITS ECONOMIC VIABILITY, HAS NO ABILITY TO MAINTAIN
23 ITS CALIFORNIA FACILITY, NO ABILITY TO MAINTAIN
24 THE EMPLOYMENT OF THOSE PEOPLE WHO WORK IN THAT
25 FACILITY, AND THE COMPANY IS IN DIRE FINANCIAL --



1 WOULD BE IN DIRE FINANCIAL STRAITS.

2 NOW, I KNOW THAT SOME OF YOU HAVE
3 UNDOUBTEDLY HEARD PREDICTIONS OF DIRE CONSEQUENCES
4 IN THE PAST, AND PERHAPS SOME OF YOU HAVE BECOME
5 NUMB TO THOSE NOTIONS THAT GOVERNMENTAL ACTION
6 ACTUALLY PUTS BUSINESSES OUT OF BUSINESS. I'VE
7 BEEN REPRESENTING CLIENTS BEFORE GOVERNMENTAL
8 AGENCIES, THE LEGISLATURE, AND CHALLENGING SOME OF
9 THOSE DECISIONS IN COURT NOW FOR 17 YEARS. AND
10 IT'S MY UNFORTUNATE EXPERIENCE TO HAVE SEEN
11 GOVERNMENTAL ACTION ELIMINATE BUSINESSES,
12 ELIMINATE JOBS, REMOVE PRODUCTS AND SERVICES FROM
13 THE STATE OF CALIFORNIA. AND IF I DID NOT BELIEVE
14 FERVENTLY THAT THAT WAS THE SITUATION WITH
15 IRONCLAD, I WOULDN'T BE MAKING THOSE STATEMENTS TO
16 YOU TODAY. SO THIS IS A VERY IMPORTANT VARIANCE,
17 A VERY IMPORTANT HEARING FOR IRONCLAD.

18 WHO IS IRONCLAD? WELL, IT'S A
19 SMALL, CALIFORNIA BASED, PRIVATELY HELD
20 CORPORATION. IT MANUFACTURES TRASH BAGS. THAT'S
21 IT. IT DOESN'T PRODUCE ANYTHING ELSE. THAT'S ITS
22 ECONOMIC BASE.

23 IT RECOGNIZED MORE THAN A DECADE
24 AGO, IN 1985, THAT IT WAS GOING TO HAVE TROUBLE IN
25 THE FUTURE COMPETING WITH THE GIANTS, THE GLADS



1 AND THE HEFTYS, IN THE INDUSTRY UNLESS IT DID
2 SOMETHING UNIQUE, UNLESS IT CAME UP WITH A TRASH
3 BAG THAT HAD A SPECIAL BENEFIT TO CONSUMERS.

4 SO IN 1985, ABOUT 12 YEARS AGO,
5 THERE WAS A MEETING IN CHICAGO THAT GARY RUTLEDGE
6 ATTENDED. AND THE IDEA WAS WHAT CAN WE DO TO
7 DISTINGUISH IRONCLAD'S TRASH BAGS FROM ITS
8 COMPETITORS? AND WHAT YOU WILL HEAR FROM GARY
9 RUTLEDGE WILL BE THE DEVELOPMENT OF THE GENERAL
10 CONCEPT, THE SPECIFIC CONCEPT, AND THEN IN TIME
11 THE TESTING, AND THEN EVEN THE DEVELOPMENT OF THE
12 EQUIPMENT TO MANUFACTURE THE STRAP TRASH BAG, AS
13 WELL AS THE FACT THAT WE HAD 22 ENGINEERS AND
14 OTHER RESEARCH AND DEVELOPMENT PERSONNEL WORKING
15 IN DALLAS, TEXAS, TRYING TO FIGURE OUT HOW TO MAKE
16 THIS WORK AT A COST OF OVER \$10 MILLION.

17 THE STRAP IS OBVIOUSLY IRONCLAD'S
18 MARKETING NICHE. IT'S WHAT DISTINGUISHES ITS BAGS
19 FROM THE OTHER TRASH BAGS ON THE MARKET. AND IN
20 RECENT YEARS THAT STRAP HAS BEEN SUCCESSFUL FOR
21 IRONCLAD. IT'S NOT A THREAT TODAY TO GLAD AND
22 HEFTY. RECENT PUBLICATION INDICATES THAT IRONCLAD
23 NATIONWIDE HAS LESS THAN 1 PERCENT OF THE TRASH
24 BAG MARKET. IN CALIFORNIA THAT TRANSLATES TO
25 SOMETHING BETWEEN 2 AND 4 PERCENT. NOT A BIG



1 SHARE ADMITTEDLY, BUT IT'S AN IMPORTANT BUSINESS,
2 AND IT'S IMPORTANT TO MAINTAIN THAT BUSINESS HERE
3 IN CALIFORNIA.

4 THE STRAP WAS THE THING THAT IS
5 KEEPING IRONCLAD GOING, AND IT HELD GREAT PROMISE
6 REALLY UNTIL THE MINIMUM CONTENT REQUIREMENT
7 STARTED IMPACTING IRONCLAD AND THE STRAP BAG. AND
8 THAT HAPPENED WHEN THE MINIMUM CONTENT WENT FROM
9 10 PERCENT TO 30 PERCENT AND WHEN THE REGULATED
10 BAGS DROPPED FROM 1 MIL TO .75 MIL, ALSO BECAUSE
11 OF SOME MARKETING BREAKTHROUGHS THAT IRONCLAD
12 ACHIEVED THAT BECAME EFFECTIVE IN 1996.

13 NOW, AT THE SAME TIME THAT IRONCLAD
14 WAS PURSUING WAYS OF INCORPORATING POSTCONSUMER
15 RECYCLED MATERIAL IN ITS TRASH BAGS, IT ALSO
16 RECOGNIZED THAT COME 1996, IT WAS NOT GOING TO BE
17 ABLE TO COMPLY WITH THE MINIMUM CONTENT REQUIRE-
18 MENTS BECAUSE OF ITS PROPORTION OF SALES OF STRAP
19 TRASH BAGS VIS-A-VIS ITS OTHER NONSTRAP REGULATED
20 TRASH BAGS. SO IT WENT TO THE LEGISLATURE AND
21 BASICALLY LAID OUT, ADMITTEDLY IN MUCH LESS DETAIL
22 THAN WE'RE PRESENTING TO YOU HERE TODAY, THE
23 TECHNOLOGY AND THE LIMITATIONS OF THAT TECHNOLOGY
24 THAT PREVENT IT FROM BEING ABLE TO ATTACH A STRAP
25 TO TRASH BAGS CONTAINING POSTCONSUMER RECYCLED



1 CONTENT.

2 AND AS MR. HART INDICATED, THE
3 LEGISLATURE PASSED A LAW THAT PROVIDED AN
4 EXEMPTION TO IRONCLAD IN 1996 FROM HAVING TO
5 COMPLY WITH THE MINIMUM CONTENT REQUIREMENTS.
6 THAT STATUTE ALSO PROVIDED THAT THIS BOARD WOULD
7 SET UP A VARIANCE PROCESS, THAT IRONCLAD COULD
8 APPLY FOR A VARIANCE AND PRESENT EVIDENCE ABOUT
9 THE TECHNOLOGICAL CONSIDERATIONS THAT EITHER
10 PREVENT OR ENABLE IT TO ATTACH THE STRAP. AND
11 UNFORTUNATELY OUR EVIDENCE TODAY WILL DEMONSTRATE
12 TO YOU WHY WE ARE STILL UNABLE TO ATTACH A STRAP
13 TO TRASH BAGS CONTAINING POSTCONSUMER RECYCLED
14 MATERIAL.

15 I ALSO WANT YOU TO BE AWARE THAT, AS
16 MR. HART SAID, WE APPLIED FOR THIS VARIANCE IN MAY
17 OF 1996 IN HOPES THAT BY THE END OF 1996 WE WOULD
18 HAVE OUR VARIANCE IN PLACE. HERE WE ARE IN JULY,
19 AND IT'S NOT MY INTENT TO TRY TO CHARACTERIZE WHY
20 WE'RE HERE IN JULY, BUT I WANT YOU TO BE AWARE
21 THAT IRONCLAD HAD TO CONTINUE WITH ITS BUSINESS.

22 IT HAS A \$10 MILLION LOAN TO FUND
23 THE DEVELOPMENT OF THAT EQUIPMENT THAT IT HAS AN
24 OBLIGATION TO REPAY. IT EXTENDED A LEASE AT ITS
25 CALIFORNIA FACILITY TO PRODUCE THE STRAP TRASH



1 BAGS, AND IT HAS ENTERED INTO CONTRACTS WITH
2 CUSTOMERS TO SELL THE STRAP TRASH BAGS THROUGH
3 1998. AND I DON'T WANT YOU TO THINK THAT WE WERE
4 BEING PRESUMPTUOUS, BUT WE COULD NOT SIMPLY CLOSE
5 DOWN OUR OPERATION AND WAIT FOR THIS BOARD TO TAKE
6 SOME ACTION ON THE VARIANCE APPLICATION. WE HAD
7 TO CONTINUE, AND OBVIOUSLY WE CONTINUED WITH THE
8 EXPECTATION THAT THE VARIANCE WOULD BE GRANTED.

9 WHAT I'D LIKE TO DO, MR. CHAIRMAN,
10 AT THIS TIME, IF I MIGHT, IS WE HAVE SUBMITTED
11 THREE DECLARATIONS TO THE STAFF AND ATTACHED TO
12 THOSE DECLARATIONS WERE A NUMBER OF EXHIBITS. I'D
13 LIKE TO MAKE THOSE PART OF THE RECORD AT THIS TIME
14 AS WELL.

15 CHAIRMAN PENNINGTON: OKAY.

16 (WHEREUPON EXHIBITS 2, 3, AND 4 WERE
17 MARKED FOR IDENTIFICATION.)

18 MR. LIVINGSTON: THE DECLARATIONS AND THE
19 TESTIMONY THAT YOU WILL HEAR TODAY, AS THE STAFF
20 INDICATED, THEY FOLLOW -- IN THEIR ANALYSIS WILL
21 FOLLOW THE REGULATIONS THAT YOU ADOPTED IN SETTING
22 OUT THE KINDS OF EVIDENCE THAT WE SHOULD PRESENT.
23 THE FIRST EVIDENCE, OF COURSE, WAS THAT WE SHOULD
24 DEMONSTRATE THAT WE MANUFACTURED ADHESIVE
25 HEAT-AFFIXED STRAP TRASH BAGS PRIOR TO JANUARY 1,



1 1995.

2 AND THE REASON FOR THAT IS THAT ONLY
3 THE PEOPLE WHO WERE ENTITLED TO EXEMPTION IN 1996
4 HAVE THE ABILITY TO APPLY FOR A VARIANCE. AND TO
5 BE ELIGIBLE FOR THE EXEMPTION IN 1996, A COMPANY
6 HAD TO HAVE MANUFACTURED THOSE KINDS OF STRAP
7 TRASH BAGS PRIOR TO JANUARY 1, 1995. SO YOUR
8 REGULATIONS CALL FOR US TO ESTABLISH THAT, IN
9 FACT, WE DID MANUFACTURE THOSE BAGS PRIOR TO
10 JANUARY 1, 1995.

11 AND IN THE DECLARATIONS, AND YOU
12 WILL HEAR IN THE TESTIMONY, THAT BEGINNING IN
13 AUGUST OF 1989, WE MANUFACTURED HEAT-AFFIXED STRAP
14 TRASH BAGS, THAT WE DEVELOPED THE TECHNOLOGY FOR
15 THE ADHESIVE BACK IN 1993. WE APPLIED FOR A
16 PATENT FOR THAT ADHESIVE BACK IN JANUARY OF 1994.
17 WE THEN MANUFACTURED ADHESIVE HEAT-AFFIXED STRAP
18 TRASH BAGS BEGINNING IN FEBRUARY 1994, CONDUCTED
19 SOME CONSUMER SURVEYS, GOT RESPONSES BACK FROM
20 CONSUMERS ABOUT THOSE, AND THEN ALSO MANUFACTURED
21 THOSE THROUGHOUT 1994.

22 WHAT I WOULD LIKE TO ALSO OFFER AT
23 THIS TIME AS AN ADDITIONAL EXHIBIT WOULD BE FOUR
24 RESPONSES FROM CONSUMERS SETTING OUT THEIR
25 REACTION TO THE ADHESIVE HEAT-AFFIXED STRAP TRASH



1 BAGS TO FURTHER DOCUMENT THAT WE MANUFACTURED
2 THOSE PRIOR TO JANUARY 1, 1995.

3 AND I -- WE ALSO THEN PICKED A DATE
4 OF DECEMBER 20, 1994. IT IS A PRODUCTION LOG THAT
5 INDICATES WHAT KINDS OF TRASH BAGS WE MANUFACTURED
6 ON THAT PARTICULAR DAY ON WHICH LINE AND SO ON.
7 AND THE STRAP TRASH BAGS ARE SET OUT HERE IN CODE
8 WITH THE INITIALS SL, AND THE WEIGHT OF THOSE BAGS
9 ARE SET OUT AS WELL. I'D LIKE, MR. CHAIRMAN, TO
10 OFFER THESE DOCUMENTS AS EXHIBITS AND MAKE IT PART
11 OF THE RECORD AS WELL.

12 CHAIRMAN PENNINGTON: FINE. THANK YOU.

13 (WHEREUPON EXHIBITS 5 AND 6 WERE
14 MARKED FOR IDENTIFICATION.)

15 MR. LIVINGSTON: THE SECOND REGULATION
16 PERTAINING TO THE EVIDENCE ASKS FOR THE PERCENTAGE
17 OF THE TOTAL REGULATED TRASH BAGS REPRESENTED BY
18 THE TRASH BAGS FOR WHICH A VARIANCE IS SOUGHT.
19 AND AS YOU WILL RECALL, WE HAD EXTENSIVE
20 DISCUSSIONS ABOUT PROPRIETARY INFORMATION. AND
21 THE REGULATIONS RECOGNIZE THE DIFFICULTY OF
22 PRESENTING MARKETING INFORMATION IN FRONT OF
23 COMPETITORS; AND AS YOU NOTICE, WE HAVE A FEW HERE
24 TODAY. AND THE REGULATIONS PROVIDED THAT WE COULD
25 INSTEAD PROVIDE OTHER KINDS OF INFORMATION THAT



1 WOULD GIVE YOU AN INDICATION AND ALLOW YOU TO
2 ASSESS THE EVIDENCE IN THE SAME WAY AS IF WE HAD
3 BEEN ABLE TO PROVIDE THE EVIDENCE THAT IS
4 PROPRIETARY.

5 WHAT I'D LIKE TO SAY AT THE OUTSET
6 IS THAT IN 1996 AND 1997, THAT A SIGNIFICANT
7 MAJORITY OF OUR TRASH BAGS THAT WE SELL ARE
8 REGULATED TRASH BAGS; THAT IS, THEY ARE THICKER
9 THAN .75 MIL. AND THAT IS COMPLETELY CONTRARY TO
10 A LETTER THAT YOU HAVE FROM POLY-AMERICA SAYING
11 THAT 91 PERCENT OF OUR TRASH BAGS ARE LESS THAN
12 .75 MIL.

13 I JUST WILL REMIND YOU THAT IRONCLAD
14 IS A PRIVATELY HELD CORPORATION. IT DOES NOT SEND
15 OUT ANNUAL REPORTS TO SHAREHOLDERS AS A
16 CONSEQUENCE. IT DOES NOT MAKE PUBLIC THIS KIND OF
17 INFORMATION. AND FOR ANYONE TO MAKE THAT
18 ASSERTION, THEY'RE EITHER BASING IT ON PURE
19 SPECULATION OR THE SHODDIEST KIND OF DATA. I
20 DON'T KNOW WHICH THE SITUATION IS, AND PERHAPS
21 WHEN MS. VOS TESTIFIES, WE WILL FIND OUT.

22 BUT A STRONG MAJORITY, SIGNIFICANT
23 MAJORITY OF OUR BAGS ARE REGULATED TRASH BAGS, AND
24 A SIGNIFICANT PORTION OF THE REGULATED TRASH BAGS
25 ARE THE STRAP BAGS. NOW, HOW CAN I INDICATE TO



1 YOU WHAT PERCENT OF THE TOTAL REGULATED TRASH BAGS
2 ARE REPRESENTED BY THE STRAP BAGS? WHAT WE SAID
3 IN THE DECLARATIONS IS THAT WE COULD NOT ACHIEVE
4 THE ANNUAL AVERAGE AGGREGATE RATE OF 30 PERCENT
5 EVEN BY PUTTING A HUNDRED PERCENT PCRM IN OUR
6 NONSTRAP REGULATED TRASH BAGS.

7 NOW, THERE IS A FAIRLY SIMPLE WAY OF
8 CALCULATING THAT FROM A FORMULA PERSPECTIVE TO
9 GIVE YOU AN INDICATION OF THE PERCENT OR AT LEAST
10 A MINIMUM PERCENT OF OUR REGULATED TRASH BAGS THAT
11 ARE REPRESENTED BY THE STRAP TRASH BAG. AND I HAD
12 HOPED THAT MR. HART WOULD HAVE RECEIVED THAT. HE
13 TOLD ME SUBSEQUENTLY THAT I WAS BEING TOO SUBTLE,
14 AND HIS ANALYSIS INDICATES THAT WE DID NOT PROVIDE
15 THAT INFORMATION, BUT I FEEL THAT, IN FACT, WE
16 DID.

17 BUT THE REASON THAT YOU ASKED FOR
18 THAT EVIDENCE IN YOUR REGULATION IS TO FIND OUT IF
19 WE COULD ADD ADDITIONAL PCRM, POSTCONSUMER
20 RECYCLED MATERIAL, TO OUR NONSTRAP REGULATED TRASH
21 BAGS TO BRING US UP TO THE 30-PERCENT ANNUAL
22 AVERAGE AGGREGATE. AND OUR TESTIMONY IS AND THE
23 EVIDENCE IS THAT WE COULD NOT DO THAT. IT WOULD
24 TAKE MORE THAN A HUNDRED PERCENT PCRM TO ACHIEVE
25 THAT. SO IT'S A FISCAL -- IT'S A PHYSICAL



1 IMPOSSIBILITY.

2 MOREOVER, WE DON'T HAVE CUSTOMERS
3 WHO WOULD BUY A TRASH BAG WITH HIGH PERCENTAGES OF
4 PCRM. WE'RE SELLING TRASH BAGS -- OUR NONSTRAP
5 REGULATED TRASH BAGS CONTAIN 30 PERCENT PCRM THIS
6 YEAR. WE'RE SELLING THOSE. WE HAVE NO MARKET
7 CERTAINLY FOR 100 PERCENT PCRM TRASH BAG.

8 NOW, THE STAFF ALSO RAISED THE
9 QUESTION THAT IN 1995 WE REPORTED THAT 28 PERCENT
10 OF OUR TRASH BAGS CONTAINED -- OR THAT 28 PERCENT
11 OF THE POUNDS INVOLVED IN MANUFACTURING OUR TRASH
12 BAGS WAS PCRM. AND IT'S A LEGITIMATE QUESTION.
13 IN 1996 WE REPORTED A LOWER PERCENTAGE THAN THAT.
14 IN 1996 THE PERCENTAGE THE LAW REQUIRED WAS 20
15 PERCENT.

16 WHAT HAPPENED IN 1995 IS WE PUT 30
17 PERCENT PCRM, WHICH IS WHAT THE LAW REQUIRED AT
18 THE BEGINNING OF 1995, INTO ALL OF OUR NONSTRAP
19 REGULATED TRASH BAGS. WHEN YOU DIVIDE BY THE
20 REGULATED STRAP AND NONSTRAP TRASH BAGS, THE
21 RESULTING PERCENT WAS 28 PERCENT. AND WHAT THAT
22 SIMPLY MEANS IS THAT THE PERCENT OF OUR TOTAL
23 REGULATED TRASH BAGS IN 1995 THAT WERE STRAPPED
24 WAS NOT VERY HIGH.

25 AND I MENTIONED TO YOU EARLIER THAT



1 WE HAD SOME BREAKTHROUGHS IN 1995 THAT RESULTED IN
2 SIGNIFICANT INCREASES IN SALES IN 1996 AND 1997
3 AND REALLY THROUGH 1998. AND SO BASICALLY THE
4 SITUATION HAS FLIP-FLOPPED FROM 1995 TO 1996, AND
5 THAT'S WHY THE 28 PERCENT DOES NOT GIVE AN
6 INDICATION ABOUT WHAT WE CAN ACHIEVE IN 1997 AND
7 IN 1998.

8 AS I INDICATED, IN 1996 IRONCLAD PUT
9 20 PERCENT PCRM IN ITS NONSTRAP REGULATED TRASH
10 BAGS. ITS STRAP TRASH BAGS WERE EXEMPT FROM THE
11 REQUIREMENT IN 1996. AND IN 1997 IRONCLAD IS
12 PUTTING 30 PERCENT PCRM IN ITS NONSTRAP TRASH
13 BAGS.

14 THE THIRD REGULATION REQUIRED US TO
15 PRESENT EVIDENCE -- PRESENT SAMPLES OF TRASH BAGS
16 MANUFACTURED WITH ADHESIVE HEAT-AFFIXED STRAPS
17 ATTACHED DURING THE MANUFACTURING PROCESS, AND
18 THERE WERE A SIGNIFICANT NUMBER, I DON'T KNOW THE
19 PRECISE NUMBER, ATTACHED TO THE DECLARATION
20 SUBMITTED BY JERRY SMITH, AND MR. HART HAS THOSE
21 BAGS.

22 I HAVE ANOTHER BAG HERE WITH ME IF
23 YOU WOULD LIKE TO TAKE A LOOK AT THAT. THE STAFF
24 ACKNOWLEDGED IN ITS ANALYSIS THAT, IN FACT, WE DID
25 PROVIDE SAMPLES, BUT SAID THAT IT WOULD LIKE TO



1 HAVE ADDITIONAL INFORMATION ABOUT OTHER KINDS OF
2 REGULATED NONSTRAP TRASH BAGS THAT WE MANUFACTURE.
3 AND SO IRONCLAD HAS PUT TOGETHER A LIST OF THE
4 BAGS BY SIZE, BY GALLONS, BY PURPOSE, AND THE
5 MIL'S. AND THESE ARE ALL NONSTRAP REGULATED TRASH
6 BAGS. AND, MR. CHAIRMAN, I'D LIKE TO MAKE THIS
7 LIST A PART OF THE RECORD AS WELL.

8 CHAIRMAN PENNINGTON: FINE.

9 (WHEREUPON EXHIBIT 7 WAS MARKED FOR
10 IDENTIFICATION.)

11 MR. LIVINGSTON: SO BASICALLY WHAT'S
12 BEFORE YOU WOULD BE BOTH THE SAMPLES THAT WE
13 PROVIDED AND THEN THIS LIST OF THE SIZE, PURPOSE,
14 AND MIL'S OF THE NONSTRAP REGULATED TRASH BAGS.

15 THE NEXT ITEM REQUESTED BY THE
16 REGULATION IS A DETAILED EXPLANATION OF THE
17 DIFFERENCES IN THE PRODUCTS AND IN THE
18 MANUFACTURING PROCESS BETWEEN TRASH BAGS FOR WHICH
19 A VARIANCE IS SOUGHT AND OTHER REGULATED TRASH
20 BAGS. NOW, THE OBVIOUS DIFFERENCE, OF COURSE, IS
21 THE BAG THAT MR. RELIS NOW HAS HAS THE STRAP
22 AFFIXED TO IT. OTHER TRASH BAGS THAT WE REPRESENT
23 THERE ARE TIES THAT ARE INCLUDED IN THE BOX, AND
24 THAT'S THE PRINCIPAL DIFFERENCE IN THE BAGS.

25 THE STRAP IS HEAT-AFFIXED DURING THE



1 MANUFACTURING PROCESS AS REQUIRED BY THE STATUTE,
2 AND IT IS DONE SO BY THE ADDITION OF A FOURTH
3 MACHINE ADDED TO THE MANUFACTURING PROCESS. AND
4 WHAT I'D LIKE TO DO AT THIS TIME IS JUST RUN THE
5 VIDEOTAPE THAT SHOWS YOU HOW THE STRAP IS AFFIXED
6 AND THAT MANUFACTURING PROCESS.

7 CAREN, OF COURSE, TOLD ME SHE'D BE
8 THERE TO RUN THE VCR.

9 (VIDEOTAPE WAS THEN SHOWN.)

10 (WHEREUPON EXHIBIT 8 WAS MARKED FOR
11 IDENTIFICATION.)

12 MR. LIVINGSTON: THAT VIDEOTAPE WAS
13 PRODUCED IN 1990 AS A MARKETING DEVICE. THANK YOU
14 FOR LISTENING TO OUR COMMERCIAL.

15 THE -- I THINK THAT YOUR AUDIO/VIDEO
16 EQUIPMENT IS ALMOST AS COMPLICATED AS THE STRAP
17 MACHINE.

18 THE THING THAT I'D LIKE TO EMPHASIZE
19 THERE IS THAT THOSE BAGS FLOW THROUGH THAT PROCESS
20 THAT SPEEDS UP TO 400 FEET PER MINUTE. I DON'T
21 KNOW WHETHER YOU NOTICED, BUT WHEN THAT HEAT STAMP
22 COMES DOWN, THE FLOW OF BAGS HAS TO STOP
23 MOMENTARILY FOR THE STRAP TO BE AFFIXED TO THE
24 BAGS.

25 NOW, THE HEAT SEAL IS SET AT A



1 CONSTANT TEMPERATURE. IT'S COMPUTER DRIVEN, AND
2 IT WILL FLUCTUATE A LITTLE BIT, BUT IT CANNOT
3 FLUCTUATE MORE THAN TWO DEGREES PLUS OR MINUS IN
4 ORDER TO GET A GOOD SEAL. WHENEVER THE STAMP
5 COMES DOWN AND PRESSES THE STRAP INTO THE TRASH
6 BAG MATERIAL, IT MELTS THROUGH THE STRAP INTO THE
7 TRASH BAG, MELTING THE TRASH BAG MATERIAL. SO
8 THEN THAT'S HOW YOU GET THE SEAL. AND YOU SAW ON
9 THE TRASH BAG THAT WE SENT AROUND THE OVAL THAT
10 WAS USED TO AFFIX THE STRAP TO THE BAG.

11 NOW, WHAT HAPPENS IS THAT WE HAVE
12 VERY NARROW TOLERANCES THERE IN THAT HEAT
13 TEMPERATURE, AND A HEAT -- A TEMPERATURE VARIATION
14 OF MORE THAN PLUS OR MINUS TWO DEGREES CAN RESULT
15 IN EITHER ONE OR TWO THINGS. EITHER YOU BURN
16 THROUGH THE TRASH BAG, IN WHICH CASE THE STRAP
17 DOES NOT ADHERE, OR YOU FAIL TO GET AN ADEQUATE
18 MELT, IN WHICH CASE THE STRAP ALSO DOES NOT
19 ADEQUATELY ADHERE.

20 NOW, THE PROBLEM THAT WE HAVE IS
21 THAT THE VIRGIN RESIN WE USE IS A SPECIAL TYPE OF
22 LLDPE. NOW, IT'S NOT NECESSARILY SPECIAL TO
23 IRONCLAD. OTHER TRASH BAG MANUFACTURERS USE IT AS
24 WELL. BUT THE LLDPE RESINS USED FOR MANUFACTURING
25 TRASH BAGS IS A DIFFERENT KIND OF RESIN, DIFFERENT



1 KIND OF LLDPE RESIN THAT'S USED FOR OTHER
2 PURPOSES, SUCH AS MAKING FILMS, SHRINK AND STRETCH
3 WRAP, AND SO ON. AND, OF COURSE, THAT'S THE
4 SOURCE OF POST CONSUMER RECYCLED MATERIAL FOR THE
5 MANUFACTURE OF TRASH BAGS.

6 NOW, THOSE CHARACTERISTICS INCLUDE A
7 DIFFERENCE IN MELT TEMPERATURE. AND THEN WHENEVER
8 YOU ADD THE FACT THAT THE RECYCLED LLDPE HAS GONE
9 THROUGH THE RECYCLING PROCESS, OXIDIZATION, AND A
10 NUMBER OF OTHER CHEMICAL CHANGES THAT OCCUR AS A
11 CONSEQUENCE OF THAT, THEN YOU END UP WITH EVEN
12 FURTHER DIFFERENCES IN YOUR MELT TEMPERATURE. AND
13 THEN INHERENT BASICALLY IN RECYCLED MATERIAL IS
14 THE ADDITION OF OTHER KINDS OF RESINS, SUCH AS
15 HDPE AND LDPE, AND THOSE ALSO HAVE DIFFERENT MELT
16 TEMPERATURES.

17 AND WHAT HAPPENS IS YOU DO NOT GET A
18 CONSISTENT MELT. AS THE RESINS FLOW THROUGH THE
19 EXTRUDER AND ARE MELTED, YOU GET VARIATIONS IN HOW
20 MUCH OF PCRM YOU HAVE VERSUS HOW MUCH VIRGIN YOU
21 HAVE, AND YOU WILL GET DIFFERENT KINDS OF MIXES OF
22 PELLETS FROM TIME TO TIME, SO THAT YOU GET A
23 VARIANCE THROUGHOUT THAT FLOW OF TRASH BAGS THAT
24 GO THROUGH THOSE MACHINES. AND THERE IS NO WAY
25 THAT THAT HEAT STAMP CAN SENSE WHAT KIND OF RESIN



1 IT'S DEALING WITH AND WHAT ITS MELT TEMPERATURE
2 IS. IT'S SET AT A CERTAIN DEGREE; AND IF THE
3 VARIABILITY IS A HIGHER MELT TEMPERATURE, THEN IT
4 FAILS TO MELT. IF THE VARIABILITY IS A LOWER
5 TEMPERATURE, THEN IT MELTS THROUGH. SO THAT'S THE
6 TECHNOLOGICAL PROBLEM, AND GARY RUTLEDGE WILL
7 DESCRIBE THAT IN MUCH MORE DETAIL.

8 NOW, STAFF RAISED SOME ADDITIONAL
9 CONCERNS AND ISSUES WITH RESPECT TO THIS DATA AS
10 WELL, AND I WANTED TO RESPOND TO THAT. STAFF
11 ASKED WHETHER WE COULD DOWNGAUGE ALL OF OUR TRASH
12 BAGS, ALL OF OUR STRAP TRASH BAGS TO LESS THAN .75
13 AND AVOID THE MINIMUM CONTENT REQUIREMENT AND
14 THEREBY ELIMINATE THE NEED FOR A VARIANCE.

15 THE ANSWER TO THAT IS, NO, WE
16 CANNOT. WE DON'T DICTATE WHAT OUR CUSTOMERS BUY.
17 THE CUSTOMERS DICTATE TO US WHAT THEY WANT TO
18 SELL. AND WHEN THEY WANT TRASH BAGS HEAVIER THAN
19 .75



1 IT'S DEALING WITH AND WHAT ITS MELT TEMPERATURE
2 IS. IT'S SET AT A CERTAIN DEGREE; AND IF THE
3 VARIABILITY IS A HIGHER MELT TEMPERATURE, THEN IT
4 FAILS TO MELT. IF THE VARIABILITY IS A LOWER
5 TEMPERATURE, THEN IT MELTS THROUGH. SO THAT'S THE
6 TECHNOLOGICAL PROBLEM, AND GARY RUTLEDGE WILL
7 DESCRIBE THAT IN MUCH MORE DETAIL.

8 NOW, STAFF RAISED SOME ADDITIONAL
9 CONCERNS AND ISSUES WITH RESPECT TO THIS DATA AS
10 WELL, AND I WANTED TO RESPOND TO THAT. STAFF
11 ASKED WHETHER WE COULD DOWNGAUGE ALL OF OUR TRASH
12 BAGS, ALL OF OUR STRAP TRASH BAGS TO LESS THAN .75
13 AND AVOID THE MINIMUM CONTENT REQUIREMENT AND
14 THEREBY ELIMINATE THE NEED FOR A VARIANCE.

15 THE ANSWER TO THAT IS, NO, WE
16 CANNOT. WE DON'T DICTATE WHAT OUR CUSTOMERS BUY.
17 THE CUSTOMERS DICTATE TO US WHAT THEY WANT TO
18 SELL. AND WHEN THEY WANT TRASH BAGS HEAVIER THAN
19 .75, WE MANUFACTURE TRASH BAGS HEAVIER THAN .75
20 FOR THEM. MOREOVER, THERE WAS JUST A POLICY
21 QUESTION IN MY MIND ABOUT WHETHER THAT'S THE
22 DIRECTION THE BOARD WANTS TO GO.

23 I KNOW THAT THE INDUSTRY HAS BEEN
24 SOMEWHAT CRITICIZED IN THE LEGISLATURE THIS YEAR
25 IN THE DISCUSSION ON SB 698 BECAUSE IT HAS BEEN



1 DOWNGAUGING IN WHAT APPEARS TO BE AN ATTEMPT TO
2 AVOID BUYING POSTCONSUMER RECYCLED MATERIAL. AND,
3 OF COURSE, IF WE ALL DOWNGAUGED TO LESS THAN .75,
4 THERE WOULD BE NO MARKET FOR THE RECYCLED
5 MATERIAL, WHICH I THINK WOULD BE COUNTER TO THE
6 INTEREST OF THIS BOARD.

7 SECONDLY, THE STAFF TALKED ABOUT THE
8 NARROW TOLERANCES AND SAID THAT OTHER TRASH BAG
9 MANUFACTURERS HAVE WORKED WITH NARROW SPECIFICA-
10 TIONS IN THEIR EXTRUDING AND BLOWING PROCESSES AND
11 HAVE BEEN ABLE TO USE POSTCONSUMER RECYCLED
12 MATERIAL. WELL, WE'RE NOT TALKING ABOUT THE
13 EXTRUDING AND BLOWING PROCESS. SURE, WE
14 MANUFACTURE NONSTRAP TRASH BAGS USING 30-PERCENT
15 PCRM. WE DEAL WITH THOSE NARROW SPECIFICATIONS
16 THAT MR. HART ALLUDED TO, BUT THE NARROW
17 TOLERANCES THAT WE'RE TALKING ABOUT RELATE TO THAT
18 THIRD MACHINE, THE STRAP SEAL MACHINE. AND
19 THERE'S NO OTHER MANUFACTURER WHO CONTENTS WITH
20 THAT KIND OF SITUATION. IRONCLAD IS UNIQUE IN
21 THAT REGARD.

22 STAFF ALSO RAISED A QUESTION ABOUT
23 THE TECHNOLOGICAL DIFFERENCES BETWEEN IRONCLAD'S
24 HEAT-AFFIXED STRAP TRASH BAG AND THE DRAWSTRING
25 BAGS. AND GARY RUTLEDGE WILL EXPLAIN THAT IN



1 DETAIL DURING HIS TESTIMONY.

2 THE NEXT REGULATION ASKED FOR
3 INDEPENDENT TEST RESULTS DEMONSTRATING THE
4 TECHNOLOGICAL CONSIDERATIONS IN ATTACHING ADHESIVE
5 INDEPENDENT -- ADHESIVE HEAT-AFFIXED STRAPS TO
6 TRASH BAGS CONTAINING POSTCONSUMER RECYCLED
7 MATERIAL. AND AS YOU KNOW FROM THE DECLARATIONS,
8 IRONCLAD NOT ONLY RELIED ON ITS OWN ANALYSIS ABOUT
9 THE STRAPS FAILING TO WORK WITH TRASH BAGS
10 CONTAINING RECYCLED MATERIAL TO CONCLUDE THAT THIS
11 CANNOT BE DONE, BUT IT ALSO SENT SAMPLES OF THE
12 TRASH BAGS THAT IT MANUFACTURED TO AN INDEPENDENT
13 LAB, ADVANCED MATERIAL CENTER.

14 AND ON TWO DIFFERENT OCCASIONS THE
15 PERSONNEL AT THAT CENTER TESTED THE STRAP TRASH
16 BAGS AND AT NO TIME DID THE STRAP HAVE SUFFICIENT
17 TENSILE STRENGTH, SUFFICIENT PULL STRENGTH, TO
18 MEET CONSUMER EXPECTATIONS. WE HAVE DETERMINED
19 THAT YOU HAVE TO HAVE PULL STRENGTH OF 2.5 POUNDS.
20 THAT'S NOT A LOT, BUT AT LEAST IT'S WHAT'S
21 REQUIRED FOR CONSUMERS TO TAKE THAT STRAP AND WRAP
22 AROUND THE NECK OF A FILLED TRASH BAG, PICK THE
23 TRASH BAG UP, AND CARRY IT OUT TO THE STREET FOR
24 THE GARBAGE PEOPLE TO PICK IT UP.

25 IN ADDITION, ADVANCED MATERIAL



1 CENTER ALSO HEAT TESTED THE TRASH BAGS THAT WE HAD
2 SUBMITTED AND FOUND THE PRESENCE OF RESINS OTHER
3 THAN LLDPE. SO THAT EVEN THOUGH WE WERE TOLD THAT
4 THESE WERE A HUNDRED PERCENT LLDPE, IN FACT, THERE
5 WERE OTHER RESINS PRESENT. AND AS I INDICATED,
6 THAT'S AN INHERENT FEATURE OF POSTCONSUMER
7 RECYCLED MATERIAL.

8 THE DECLARATIONS WE'VE SUBMITTED AND
9 THE TESTIMONY THAT YOU WILL ALSO HEAR WILL
10 INDICATE THAT IRONCLAD HAS NOT JUST SET STILL AND
11 DONE NOTHING DURING THIS TIME. WE HAVE SOUGHT
12 INITIALLY TO FIND SOME SUPPLY THAT WOULD BE
13 COMPATIBLE WITH THE VIRGIN LLDPE RESINS THAT WE
14 USE.

15 IRONCLAD CONTACTED 60 DIFFERENT
16 COMPANIES THAT IT WAS TOLD PRODUCED OR SOLD
17 POSTCONSUMER RECYCLED MATERIAL. FORTY-ONE OF
18 THOSE WERE ON A LIST PROVIDED THIS BOARD. WHAT
19 HAPPENED IS THAT MANY OF THOSE COMPANIES WERE OUT
20 OF BUSINESS; MANY OF THEM DID NOT PRODUCE LLDPE
21 RESINS. MANY OF THEM WERE PRODUCING IT ONLY FOR
22 THEIR OWN USES. AND MANY OF THEM CANNOT PRODUCE
23 ADEQUATE SUPPLIES FOR IRONCLAD TO MEET ITS NEEDS.

24 BUT THERE WERE SOME WHO SAID THAT,
25 YES, WE CAN PROVIDE LLDPE RESINS IN THE QUANTITIES



1 THAT YOU NEED, AND IRONCLAD WENT THROUGH THOSE TO
2 TRY TO FIND A SUPPLY THAT WOULD BE COMPATIBLE.
3 AND GARY RUTLEDGE WILL DETAIL THAT IN HIS
4 TESTIMONY.

5 BUT RUNNING THOSE SAMPLES IS THEN
6 WHAT GAVE US THE EVIDENCE THAT THERE WAS JUST NO
7 WAY TO ADJUST THE PROCESS TO ATTACH THE STRAP TO
8 TRASH BAGS CONTAINING POSTCONSUMER RECYCLED
9 MATERIAL. THE HEAT VARIATION WAS JUST TOO GREAT
10 BECAUSE OF THE INHERENT NATURES OF THE POST-
11 CONSUMER LLDPE MATERIALS.

12 IRONCLAD RAN THOSE TESTS IN 1996 AND
13 AGAIN IN 1997, AND ADVANCE MATERIALS CENTER REPORT
14 IS PART OF RON WALLING'S DECLARATION, WHICH IS
15 PART OF THIS RECORD.

16 THE FINAL REGULATION BASICALLY IS
17 KIND OF A CATCHALL, EVIDENCE DESCRIBING WHY
18 IRONCLAD CANNOT ATTAIN THE ANNUAL AGGREGATE PCRM
19 USE REQUIREMENT. WELL, WE INDICATED THAT WE'D
20 HAVE TO PUT MORE THAN A HUNDRED PERCENT IN OUR
21 NONSTRAP TRASH BAGS TO ACHIEVE 30 PERCENT. AND,
22 OF COURSE, THAT'S A PHYSICAL IMPOSSIBILITY; AND AS
23 I INDICATED, IRONCLAD HAS NO MARKET FOR THOSE
24 KINDS OF BAGS.

25 I GUESS THE THOUGHT AT THIS POINT



1 THAT I'D LIKE TO LEAVE YOU WITH IS THAT IRONCLAD
2 IS PUTTING 30 PERCENT POSTCONSUMER MATERIAL IN ITS
3 NONSTRAP TRASH BAGS. IT WILL CONTINUE TO BUY THAT
4 SUPPLY OF WHAT OTHERWISE WOULD BE WASTE AS LONG AS
5 IT HAS THE ECONOMIC VIABILITY TO CONTINUE TO
6 FUNCTION AS A COMPANY. ITS ECONOMIC VIABILITY,
7 HOWEVER, IS TIED TO THE SALE OF THE STRAP TRASH
8 BAGS. AND IRONCLAD WILL CREATE MORE OF A MARKET
9 FOR POSTCONSUMER RECYCLED MATERIAL IF IT'S IN
10 BUSINESS, EVEN WITH THE VARIANCE AND THE EXEMPTION
11 FOR THE STRAP BAGS, THAN IT WILL IF IT'S OUT OF
12 BUSINESS.

13 THE FINAL POINT IS THAT STAFF RAISED
14 THE QUESTION ABOUT IS THERE AN ALTERNATIVE TO THE
15 VARIANCE? MR. HART POINTED OUT THAT WE SEEM TO BE
16 RAISING QUESTIONS ABOUT THE QUALITY OF THE
17 POSTCONSUMER RECYCLED MATERIAL. BASICALLY I DON'T
18 KNOW HOW YOU CHARACTERIZE IT. WHAT WE'RE SAYING
19 IS THAT THERE'S HEAT VARIATIONS AND WE HAVE TOO
20 NARROW A TOLERANCE TO ACCOMMODATE THOSE HEAT
21 VARIATIONS. BUT THE QUESTION WAS RAISED, WELL,
22 CAN -- IS IRONCLAD ENTITLED TO AN EXEMPTION UNDER
23 THE BOARD'S REGULATIONS BECAUSE ITS SUPPLY DOESN'T
24 MEET THE QUALITY STANDARDS?

25 YOUR REGULATIONS PROVIDE A



1 15-PERCENT VARIATION IN MELT TEMPERATURE. WE'RE
2 TALKING ABOUT MELT TEMPERATURES 340 TO 370
3 DEGREES. WE'RE TALKING ABOUT, THEREFORE, MELT
4 VARIATIONS PERMITTED BY YOUR REGULATIONS OF 45 TO
5 50 DEGREES, WELL BEYOND THE TWO-DEGREE VARIATION
6 THAT WE HAVE WITH OUR EQUIPMENT. SO IRONCLAD
7 WOULD NOT BE ENTITLED TO AN EXEMPTION UNDER YOUR
8 REGULATIONS, AND ESSENTIALLY THE ONLY REAL OUTCOME
9 HERE FOR IRONCLAD TO CONTINUE TO OPERATE IS THE
10 VARIANCE THAT IT HAS BEFORE YOU AT THIS TIME.

11 THANK YOU. AND GARY RUTLEDGE WILL
12 NOW PRESENT HIS TESTIMONY.

13 CHAIRMAN PENNINGTON: THANK YOU, MR.
14 LIVINGSTON. MR. RUTLEDGE.

15 MR. RUTLEDGE: THANK YOU. GOOD MORNING.
16 I'M GARY RUTLEDGE. I'M VICE PRESIDENT OF RESEARCH
17 AND DEVELOPMENT FOR IRONCLAD. I AM RESPONSIBLE
18 FOR ALL R & D EFFORTS FOR IRONCLAD AND HAVE BEEN
19 FOR THE LAST 11, 12 YEARS. AND THAT INCLUDED THE
20 DEVELOPMENT OF THE PROJECT THAT WE'RE TALKING
21 ABOUT AT THE MOMENT, AND THAT'S STRAP BAGS.

22 YOU'VE SEEN A LITTLE BIT ON THE
23 VIDEO THAT GIVES YOU A BRIEF DEMONSTRATION OF HOW
24 THE PROCESS WORKS IN OUR PLANT. I'D LIKE TO
25 PROVIDE A LITTLE BIT MORE DETAIL AS TO WHAT THAT



1 REALLY MEANS AS FAR AS THE DEVELOPMENT AND THE
2 PROCESS STAGE THAT WE'VE HAD TO GO THROUGH AND FOR
3 HOW WE GOT TO WHERE WE ARE TODAY.

4 THIS CONCEPT -- WELL, IT WAS A
5 CONCEPT BECAUSE I HAD ATTENDED A MEETING AT ONE OF
6 THE HOUSEWARES HARDWARE SHOWS IN CHICAGO IN 1985.
7 I WAS ASKED THERE BY THE PRESIDENT/CHAIRMAN OF
8 IRONCLAD, AND HE AT THE TIME SAID THAT THEY WOULD
9 LIKE TO FIND SOME OTHER POSSIBILITIES OF
10 DEVELOPING A DIFFERENT TYPE OF TRASH BAG OR SOME
11 FEATURES INTO THE EXISTING TRASH BAGS THAT WOULD
12 ALLOW THEM TO HAVE SOMETHING THAT NOBODY ELSE IN
13 THE INDUSTRY MIGHT HAVE.

14 I WAS HIRED AS A CONSULTANT AT THAT
15 TIME INITIALLY TO HELP DEVELOP SOME IDEAS. WE
16 WORKED ON THAT, NOT ONLY FROM THE OUTSET OF THAT
17 MEETING, BUT THEN FOR A COUPLE MORE MONTHS AND
18 CAME UP WITH A VARIETY OF DIFFERENT THINGS THAT
19 YOU MIGHT BE ABLE TO DO TO A TRASH BAG THAT MAYBE
20 HADN'T BEEN DONE. AND BELIEVE ME, THERE ARE A LOT
21 OF THINGS THAT HAD ALREADY BEEN DONE THAT WE
22 DIDN'T EVEN KNOW ABOUT.

23 WE NARROWED IT DOWN TO THE FACT THAT
24 IT NOT ONLY HAD TO BE SOMETHING THAT WOULD BE
25 UNIQUE FOR THE COMPANY, FOR IRONCLAD TO



1 MANUFACTURE, BUT IT REALLY NEEDED TO ALSO BE
2 SOMETHING THAT WAS BENEFICIAL TO THE CONSUMER WHEN
3 THEY USED IT SO THAT IT PROVIDED SOME VALUE ADDED.
4 IF THAT WASN'T THERE, JUST BEING UNIQUE WASN'T
5 GOING TO ESTABLISH A MARKET AND WASN'T GOING TO
6 SELL BAGS. SO WE HAD TO TAKE THAT INTO
7 CONSIDERATION.

8 IN DOING THESE EVALUATIONS AT THE
9 TIME, WE SETTLED ON THE IDEA THAT THERE SHOULD BE
10 A WAY TO COME UP WITH A BETTER MEANS FOR CLOSING
11 OR SEALING OFF THE TOP OF A TRASH BAG. WE HAD
12 ALSO LOOKED AT COMPLAINTS THAT EVERYBODY GETS. I
13 THINK ALL COMPANIES GET THEM. I KNOW THAT WE GET
14 THEM IN THE MAIL OR CUSTOMERS ARE SUGGESTING WHAT
15 ELSE WE COULD DO TO MAKE OUR BAGS BETTER. AND
16 OCCASIONALLY THE COMPLAINTS COME DOWN TO, WELL,
17 THE WIRE TIES ARE EITHER TOO SMALL OR SLIPPED OFF
18 THE BAG, GARBAGE SPILLED OUT ON THE FLOOR, OR EVEN
19 THOUGH I TIED IT, I THOUGHT IT WAS TIGHT, IT
20 LEAKED LIQUIDS OUT.

21 SO WE FELT THAT THERE WAS AN
22 OPPORTUNITY AND THERE WAS A NARROW NICHE THAT WE
23 MIGHT BE ABLE TO PROVIDE SOMETHING FOR. SO THE
24 WHOLE IDEA WAS THAT WE WOULD COME UP WITH A
25 CLOSURE FOR A TRASH BAG THAT WOULD PROVIDE AN



1 AIRTIGHT AND LIQUID-TIGHT, ODOR-TIGHT SEAL. IT
2 NEEDED TO BE EASY TO USE FOR THE CONSUMER, NOT
3 JUST FOR US. IT NEEDED TO PREVENT LEAKS AND
4 SPILLS. IT NEEDED TO BE MANUFACTURED IN OUR
5 IN-LINE PROCESS.

6 THERE ARE A COUPLE OF DIFFERENT
7 PROCESSES IN MANUFACTURING BAGS. ONE IS THAT YOU
8 DO EVERY PART OF THE BAG IN LINE, AND OTHER PEOPLE
9 THAT DO SOME OF IT IN A SECOND LINE. YOU MAKE
10 FIRST STEPS OVER HERE, AND YOU DO THE SECOND STEPS
11 OVER HERE. ALL OF OURS, AS YOU SAW ON THE VIDEO,
12 ARE DONE IN ONE SINGLE LINE FROM THE TIME IT
13 STARTS TO THE TIME IT FINISHES. THAT WAS
14 IMPORTANT WITH THIS. IT WAS IMPORTANT BECAUSE IT
15 BECOMES A COST CONSIDERATION.

16 WE ALSO LOOKED AT HOW MUCH WAS IT
17 GOING TO COST TO DO THIS. IT NEEDED TO BE VERY,
18 VERY INEXPENSIVE BECAUSE IT NEEDED TO COMPETE WITH
19 THE WIRE TIE. IT NEEDED TO BE BETTER AND IT
20 NEEDED TO NOT COST ANY MORE IF WE COULD DO THAT.
21 IT NEEDED TO BE VALUE ADDED FOR THE CONSUMER FOR
22 THEM TO HAVE A REASON TO BUY IT.

23 AND THEN THE FINAL STEP THAT WE FELT
24 WAS PROBABLY AS IMPORTANT AS ANYTHING ELSE IN THAT
25 LIST WAS THAT WE NEEDED TO BE ABLE TO PROTECT IT.



1 IRONCLAD NEEDED TO BE ABLE TO DEVELOP SOMETHING IN
2 A MANNER THAT IT COULD BE PROTECTED; AND IF THERE
3 WAS GOING TO BE A LOT OF MONEY INVESTED, WHICH BY
4 THAT TIME WE HAD ALREADY DECIDED IT WAS GOING TO
5 TAKE A CONSIDERABLE SUM, WITH THAT KIND OF MONEY
6 AND INVESTMENT TO DO THIS AND THE AMOUNT OF TIME
7 IT WOULD TAKE, IT HAD TO BE PROTECTED; THEREFORE,
8 IT NEEDED TO BE PROPRIETARY AND, MORE PREFERABLY,
9 IT NEEDED TO BE PATENTABLE.

10 SO THOSE ARE THE THINGS THAT WE CAME
11 UP WITH THAT WOULD LAY OUT THE CRITERIA FOR
12 DEVELOPING THIS WIRE TIE. IN ORDER TO START THIS,
13 WE DID A LITTLE BIT OF RESEARCH INTO WHAT HAD
14 ALREADY BEEN DONE. OUR FIRST BASIC RESEARCH AND A
15 PATENT SEARCH CAME UP WITH ABOUT 75 TO 85
16 DIFFERENT PATENTS THROUGHOUT THE COUNTRY AND SOME
17 OF THEM FROM FOREIGN COUNTRIES THAT GAVE DIFFERENT
18 METHODS OF TYING OR CLOSING A BAG.

19 WE TOOK ANOTHER STEP FURTHER THAN
20 THAT AND WENT INTO IT IN MORE DETAIL AND FOUND OUT
21 THERE WAS OVER 300 PATENTS SINCE EARLY 1900S THAT
22 HAD SOMETHING TO DO WITH CLOSING BAGS. NOW, THEY
23 WEREN'T ALL TRASH BAGS, AND THEY WEREN'T ALL
24 HAVING TO DO WITH CONSUMERS BUYING THEM. A LOT OF
25 THEM WERE COMMERCIAL. BUT THE FACT REMAINED THAT



1 SOMEBODY OR A LOT OF PEOPLE HAD SPENT A LOT OF
2 TIME TRYING TO DO THIS BEFORE. AND THEY ALREADY
3 EITHER HAD PATENTS THAT THEY WERE MANUFACTURING
4 PRODUCTS FOR, OR MANY OF THEM THEY NEVER EVEN GOT
5 OFF THE SHELF, BUT THEY WERE PATENTED. WE HAD TO
6 WORK AROUND THAT.

7 IN DOING SO, WE STARTED TESTING WHAT
8 WOULD IT TAKE TO SEAL SOMETHING TO A BAG THAT
9 WOULD REPRESENT A TIE MECHANISM. WE TRIED A
10 VARIETY OF MATERIALS. WE TRIED FOIL, WE TRIED
11 DIFFERENT PLASTICS, WE TRIED NYLON MATERIALS. WE
12 TRIED A LOT OF DIFFERENT THINGS. WE PROBABLY
13 SPENT BETWEEN 10 TO 12 MONTHS OVER 1985 AND 1986
14 JUST TRYING TO FIND OUT WHAT COULD YOU USE THAT
15 COULD REPRESENT A TIE MECHANISM.

16 WE THEN TRIED TO FIGURE OUT HOW DO
17 YOU PUT IT ON. WE TRIED GLUE. WE TRIED SONIC
18 WELDING. WE TRIED MECHANICAL MEANS SIMILAR TO
19 RIVETING, AND WE TRIED HEAT SEALING. AFTER DOING
20 ALL THESE THINGS, IT EVOLVED TO THE FACT THAT HEAT
21 SEALING WAS A KNOWN TECHNOLOGY. IT HAD BEEN
22 AROUND FOR A LONG TIME, NOT ONLY IN MANUFACTURING
23 TRASH BAGS, BUT IN A LOT OF OTHER AREAS DEALING
24 WITH PLASTICS. SO THAT SEEMED TO BE THE MOST
25 FEASIBLE, AND THAT WAS THE DIRECTION WE TOOK.



1 UP UNTIL THIS TIME WE REALLY HADN'T
2 NOT ONLY PRODUCED A BAG OR A SAMPLE, WE REALLY
3 HADN'T DESIGNED OR FIGURED OUT HOW WE WERE GOING
4 TO MAKE IT EVEN IF WE FIGURED OUT WHAT WE WANTED.

5 SO THE NEXT STEP WAS WE HAD TO
6 RESEARCH HOW DO WE PUT IT ON. WE SPENT A FEW
7 MONTHS DECIDING THAT, YES, WE COULD HEAT SEAL IT,
8 AND WE CAME UP WITH SOME IDEAS AS TO HOW IT COULD
9 BE DONE. BUT THEN THE HARD PART WAS HOW DO WE
10 BUILD EQUIPMENT OR HOW DO WE BUY THE EQUIPMENT, OR
11 WHO HAS THE EQUIPMENT TO DO IT BECAUSE WE DIDN'T
12 HAVE IT AND WE DIDN'T HAVE THE CAPABILITIES TO
13 BUILD IT. THERE WERE A LOT OF PROBLEMS THAT HAD
14 TO BE SOLVED. MOST OF THEM WERE UNKNOWN TO US AT
15 THE TIME.

16 THE ONLY THING WE KNEW IS WE FELT WE
17 COULD HEAT SEAL IT, AND WE ENDED UP DECIDING THAT
18 IT COULD BE A PIECE OF PLASTIC EITHER THE SAME OR
19 SIMILAR TO THE FILM THE BAGS WERE MADE OUT OF. SO
20 THOSE WERE THE TWO THINGS THAT WE KNEW. NOW WE
21 HAD TO DETERMINE HOW DO WE PUT IT ON.

22 IT HAD TO SEAL EFFICIENTLY. IT HAD
23 TO BE A GOOD MATERIAL. IT HAD TO CONTEND WITH ALL
24 THE DIFFERENT VARIABLES IN MAKING TRASH BAGS ON
25 THE LINE THAT ALREADY EXISTS. HOW DO WE PUT



1 SOMETHING IN THERE THAT MAKES THIS WORK WHEN WE
2 ALREADY HAVE THE EQUIPMENT BECAUSE WE CAN'T
3 REPLACE WHAT WE HAVE.

4 SO WE STARTED LOOKING AT DESIGNING A
5 PIECE OF EQUIPMENT THAT WOULD ADD ONTO ONE OF THE
6 MACHINES THAT YOU SAW THERE. SO AS THIS PROCESS
7 EVOLVED, IT CAME DOWN TO THE FACT THAT WE HAD TO
8 COME UP WITH A MACHINE THAT WOULD DO IT BY ITSELF.
9 IT WAS GOING TO BE ANOTHER MACHINE IN A LINE OF
10 THREE MACHINES THAT ALREADY EXISTED, AND SOMEBODY
11 WAS GOING TO HAVE TO BUILD IT.

12 WE TALKED TO A LOT OF COMPANIES, A
13 COUPLE OF COMPANIES IN PARTICULAR THAT MANUFACTURE
14 BAG-MAKING EQUIPMENT. AS A MATTER OF FACT, SOME
15 OF THE EQUIPMENT THAT YOU SAW IN THE VIDEO, WE
16 CONTACTED ONE OF THOSE COMPANIES TO SEE IF THEY
17 COULD DO IT FOR US. WE COULD GIVE THEM THE IDEA
18 AND WE COULD HELP THEM WITH IT, BUT WE WERE NOT IN
19 THE BUSINESS OF BUILDING EQUIPMENT. AND WE LOOKED
20 AT IT.

21 WE WENT THROUGH THIS PROCESS FOR A
22 FEW MONTHS, AND IT EVOLVED TO THE POINT THAT THEY
23 EITHER FELT THAT IT COULDN'T BE DONE FROM AN
24 ENGINEERING STANDPOINT. THEY EITHER DIDN'T FEEL
25 THAT IT WAS FEASIBLE AND ECONOMICAL FOR THEM TO



1 BUILD IT, OR THEY DIDN'T THINK THAT THEY WANTED TO
2 HAVE ANYTHING TO DO WITH IT BECAUSE IT DIDN'T FIT
3 IN WITH THE EQUIPMENT THEY ALREADY BUILT, AND WE
4 WERE ONLY ONE PERSON THAT WANTED IT, ONLY ONE
5 COMPANY.

6 THE DECISION WAS MADE THAT WE WOULD
7 HAVE TO BUILD IT OURSELVES. THAT'S A BIG
8 UNDERTAKING FOR A COMPANY THAT DOESN'T BUILD
9 EQUIPMENT. WE HAVE A MAINTENANCE DEPARTMENT FOR
10 ALL THE EQUIPMENT YOU SEE, BUT WE DON'T BUILD IT.

11 SO WE SET UP A RESEARCH AND
12 DEVELOPMENT ARM IN DALLAS THAT WAS NOT WITHIN
13 EITHER ONE OF THE PLANT FACILITIES. AND AFTER WE
14 WORKED ON THE INITIAL DESIGN, I HIRED THE FIRST
15 ENGINEER, ANOTHER ENGINEER TO HELP ME WITH IT.
16 AND FROM THERE, IN A PERIOD OF APPROXIMATELY A
17 YEAR AND A HALF TO TWO YEARS, WE GREW TO A STAFF
18 OF BETWEEN 20 AND 25 ENGINEERS, DESIGNERS,
19 TECHNICIANS, COMPUTER EXPERTS, ELECTRONICS
20 EXPERTS. WE HAD ALL THOSE DIFFERENT DISCIPLINES
21 OF ENGINEERING AND TECHNOLOGY THAT WERE ON A STAFF
22 FULL TIME IN DALLAS TO DEVELOP, DESIGN, AND BUILD
23 THIS MACHINE. WE STILL DIDN'T KNOW IF WE COULD
24 BUILD IT, BUT THAT WAS THE ONLY CHOICE WE HAD
25 BECAUSE WE FELT IT WAS WORTH IT.



1 FIRST, WE HAD TO ESTABLISH WHAT ARE
2 THE DESIGN PARAMETERS. AND JUST TO DIGRESS A
3 LITTLE BIT, THIS WAS NOT REAL EASY TO DO BECAUSE
4 YOU HAVE TO KNOW WE WERE WORKING OUT OF SOMEBODY'S
5 GARAGE AT THE TIME. WE DIDN'T HAVE A RENTED
6 FACILITY. WE WORKED OUT OF OUR HOMES, AND THEN
7 ONE OF THE GENTLEMEN THAT WAS AN ENGINEER, HE HAD
8 A LARGE GARAGE, AND HE SAID, WELL, LET'S BUILD IT
9 THERE. SO THAT'S HOW WE STARTED.

10 WE HAD TO TAKE INTO CONSIDERATION
11 THAT THE MACHINE HAD TO ADAPT TO ALL DIFFERENT BAG
12 SIZES, IT HAD TO OPERATE UP TO 400 FEET A MINUTE,
13 IT HAD TO PERMANENTLY HEAT SEAL A STRAP TO EVERY
14 SINGLE BAG A HUNDRED PERCENT OF THE TIME THAT CAME
15 THROUGH THAT LINE. WHEN YOU PUT WIRE TIES IN AS
16 CLOSURES FOR A BAG, YOU GRAB A BUNDLE AT THE END
17 OF THE LINE, AND THEY GO INTO THE BOX. AND THERE
18 ARE GENERALLY MORE WIRE TIES THAT GO IN THAN THERE
19 ARE BAGS IN THE BOX. SO THERE'S A LITTLE MARGIN
20 FOR SAFETY. WE CAN'T DO THAT WITH THE STRAPS. IT
21 HAS TO BE ON EVERY BAG.

22 WE HAD TO CONTEND WITH A VARIETY OF
23 SPEEDS AND GAUGES, DIFFERENT SPEEDS FOR DIFFERENT
24 BAGS FOR DIFFERENT SIZES. THEY WERE ALL DIFFERENT
25 GAUGES. THE STRAP HAD TO BE STRONG ENOUGH THAT



1 WHEN IT WAS WRAPPED AROUND, WHICH WAS THE PURPOSE,
2 IT HAD TO BE WRAPPED AROUND TIGHT ENOUGH TO SEAL
3 OFF THE TOP SO THAT WE COULD SAY IN OUR MARKETING
4 PROGRAMS THAT IT WAS AIRTIGHT AND LIQUID-TIGHT.
5 SO THE STRAP HAD TO ADHERE SUFFICIENTLY AND IT HAD
6 TO BE STRONG.

7 BY 1988 WE HAD BUILT THE FIRST TWO
8 PROTOTYPES. AND I DON'T KNOW HOW MANY OF YOU HAVE
9 SEEN WHAT YOU WOULD CALL A FIRST ENGINEERING
10 PROTOTYPE, BUT YOU USUALLY DON'T RECOGNIZE IT BY
11 THE TIME YOU END UP BUILDING THE PROPER MACHINE.
12 IT LOOKS LIKE A JIGSAW PUZZLE, BUT THAT'S WHAT WE
13 DID AND THAT'S HOW WE STARTED. WE BUILT TWO OF
14 THEM. THE SECOND ONE WAS A LITTLE BETTER THAN THE
15 FIRST. IT TOOK TWO YEARS TO DO IT WITH THIS
16 STAFF. AND THE SECOND ONE WAS FINALLY THE ONE
17 THAT WAS WORKABLE ENOUGH THAT WE COULD TAKE IT TO
18 ONE OF OUR PLANTS AND START DOING SOME IN-PLANT
19 TESTING TO SEE IF IT, IN FACT, COULD BE PUT IN
20 LINE AND IF WE COULD RUN BAGS THROUGH IT.

21 THE SECOND MACHINE THAT WE DID THIS
22 WITH, WE TOOK IT TO OUR SHREVEPORT PLANT. WE HAD
23 A LOT OF LINES THERE, AND WE COULD SACRIFICE ONE
24 LINE IN ORDER TO TRY THIS MACHINE OUT. WE ALSO
25 HAD AT THE TIME FULL TIME SIX TO EIGHT ENGINEERS



1 OUT OF THE DALLAS OFFICE IN THE SHREVEPORT PLANT
2 FOR UP TO A YEAR MONITORING AND MAKING DESIGN
3 CHANGES CONTINUOUSLY ON THIS MACHINE.

4 AND THIS WENT THROUGH ALL OF 1988;
5 AND BY THE END OF 1988, WE FELT THAT WE WERE REAL
6 CLOSE TO HAVING A MACHINE THAT WE COULD ACTUALLY
7 CALL A PRODUCTION MACHINE. THAT'S A FOUR-YEAR
8 PROCESS JUST IN TRYING TO DESIGN SOMETHING FROM
9 SCRATCH THAT WE ALREADY KNEW WHAT WE WANTED IT TO
10 DO. WE JUST COULDN'T FIGURE OUT HOW TO DO IT.

11 WHEN WE HAD IT -- WHEN WE HAD IT IN
12 THE SHREVEPORT PLANT, WE MADE -- WE MADE IT
13 PRODUCE BAGS. IT WASN'T GREAT, AND IT WASN'T WHAT
14 WE WANTED, BUT WE KNEW WE COULD MAKE IT BETTER.
15 SO BY 1989 WE BUILT THE FIRST TWO WHAT WE WOULD
16 CALL FULL PRODUCTION MACHINES, STRAP MACHINES,
17 STRAP SEAL MACHINES, THAT WOULD PUT STRAPS ON BAGS
18 IN LINE, INSERT IT IN BETWEEN THE OTHER MACHINES
19 THAT YOU SAW IN THE VIDEO THAT WOULD DO THIS
20 CONSISTENTLY BAG AFTER BAG AFTER BAG.

21 WE, OF COURSE, CONTINUED WITH THE
22 STRAP IMPROVEMENTS. I THINK WE PROBABLY BETWEEN
23 1989 AND 1994, THERE PROBABLY HAVE BEEN SIX TO
24 EIGHT MAJOR CHANGES JUST IN THE STRAP DESIGN
25 ITSELF. AND MOST OF THOSE CHANGES WERE



1 IMPLEMENTED BECAUSE OF WHAT WE FOUND OUT IN
2 FEEDBACK FROM CONSUMERS AND BUYERS, WHAT THEY
3 LIKED, WHAT THEY DIDN'T LIKE ABOUT IT, WHAT THEY
4 FELT WOULD BE BETTER. SO EVERYTHING THAT WE TRIED
5 TO DO WAS TO IMPROVE IT, AGAIN FOR THE END RESULT
6 TO BE BETTER ACCEPTANCE AND GREATER SALES FOR THAT
7 PRODUCT.

8 WE INITIALLY SHOWED THE FIRST STRAP
9 BAG PRODUCT AT THE JANUARY HOUSEWARES SHOW IN
10 1989. BEFORE WE DID THIS, WE HAD -- WE HAD TO RUN
11 A LOT OF PATENT APPLICATIONS THROUGH. WE ENDED
12 UP -- WE ENDED UP PUTTING IN A PATENT APPLICATION
13 IN 1987, WHICH WAS THE FIRST ONE, AND THAT PATENT
14 APPLICATION WAS ISSUED AS A PATENT GRANTED TO
15 IRONCLAD IN 1989, I BELIEVE. SINCE THAT TIME
16 WE'VE FILED AND RECEIVED GRANTS ON ANOTHER 16
17 PATENTS, BOTH U.S. AND WORLDWIDE.

18 NOW, THESE PATENTS INCLUDE NOT JUST
19 THE PRODUCT, WHAT WE CALL A STRAP BAG, BUT IT ALSO
20 INCLUDED THE PROCESS TO DO IT, AND IT INCLUDED THE
21 EQUIPMENT. SO ALL THREE OF THOSE AREAS HAVE BEEN
22 PROTECTED BY THIS TREMENDOUS AMOUNT OF PATENTS,
23 AND WE STILL HAVE AT LEAST 15 THAT ARE PENDING
24 WORLDWIDE ON DIFFERENT VARIATIONS ON WHAT YOU'VE
25 SEEN AND WHAT WE'RE TALKING ABOUT.



1 NOW, ONE OF THE THINGS THAT WE -- IN
2 THE IMPROVEMENTS THAT WE DID, THIS HAD EVOLVED FOR
3 SEVERAL YEARS, BY 1993 SOMEBODY CAME UP WITH THE
4 SUGGESTION, IT WAS TESTED AND DECIDED THAT THIS
5 COULD BE THE ULTIMATE CLOSURE SYSTEM THAT YOU
6 COULD PUT ON A TRASH BAG. AND IT WAS AN EVOLUTION
7 OF THE CLOSURE SYSTEMS WE HAD ALREADY DONE. THIS
8 WAS WHAT WE HAVE TODAY, AND THAT'S THE ADHESIVE
9 PEEL-OFF BACKING FOR A HEAT-AFFIXED STRAP.

10 WE WORKED ON THAT. IT STARTED IN
11 LATE '92. WE STARTED DEVELOPING IT IN '93. WE
12 EVEN LOOKED AT OTHER MEANS OF DOING THAT,
13 INCLUDING VELCRO. WE ACTUALLY LOOKED AT HOW TO
14 ATTACH A VELCRO STRAP TO A BAG, AND WE TALKED TO
15 THE VELCRO PEOPLE. UNFORTUNATELY, IT WASN'T AS
16 COST-EFFECTIVE AS WE'D LIKE IT TO BE.

17 SO THE ADHESIVE PEEL-OFF BACKING,
18 PEOPLE WERE SOMEWHAT FAMILIAR WITH THIS. PEOPLE
19 THAT HAVE KIDS, THEY'D SEEN IT FOR A FEW YEAR'S
20 BECAUSE THEY'RE ON MOST DIAPERS TODAY. WE WORKED
21 ON THE DEVELOPMENT. WE HAD TO MODIFY THE
22 EQUIPMENT THAT WE'RE TALKING ABOUT. THE STRAP
23 MACHINE HAD ALREADY BEEN BUILT, AND AT THAT TIME
24 WE HAD BUILT 38 OF THESE MACHINES. WE HAD TO
25 MODIFY THEM SO THAT NOW WE COULD PUT AN ADHESIVE



1 BAG STRAP INTO THE PROCESS AND COME OUT WITH WHAT
2 WE FELT WAS A BETTER PRODUCT.

3 PRIOR TO DOING IT, BECAUSE, AS YOU
4 KNOW, IN PUBLIC DISCLOSURE, ONCE YOU DISCLOSE IT,
5 IT'S NOT PROTECTABLE. SO THE LATTER PART OF '93,
6 THE PATENT APPLICATION FOR AN ADHESIVE BAG STRAP,
7 THAT PATENT APPLICATION WAS SUBMITTED THE FIRST
8 PART OF JANUARY '94 BECAUSE WE WERE ATTENDING THE
9 JANUARY HOUSEWARES SHOW, AND WE WANTED TO SHOW IT
10 AT THAT TIME AND DISCLOSE IT TO ALL THE BUYERS
11 THAT CAME THROUGH.

12 WE -- AS SOON AS WE FILED THE PATENT
13 APPLICATION AND IT WAS ON RECORD, WE THEN DID A
14 NUMBER OF CONSUMER TESTS AND SURVEYS, WHICH GENE
15 HAD MENTIONED A FEW MOMENTS AGO, AND I THINK HE
16 PUT THOSE INTO EVIDENCE, IN ORDER TO GET A
17 RESPONSE BACK FROM THE GENERAL PUBLIC THAT BUYS
18 BAGS, WHAT DO YOU THINK OF THIS NEW PRODUCT THAT
19 WE'VE DEVELOPED? AND THE MAJORITY OF THE
20 RESPONSES WERE SO GOOD, THERE WAS NO QUESTION THAT
21 WE WEREN'T GOING FORWARD WITH THIS.

22 BY JUNE OR JULY OF '94, WE HAD
23 ALREADY STARTED THE PROCESS. WE WERE
24 MANUFACTURING ON A VERY SMALL VOLUME BASIS AT THE
25 TIME AND INITIATED PRODUCTION -- SALES PRODUCTION



1 FOR THE ADHESIVE HEAT-AFFIXED STRAP IN AUGUST OF
2 '94, MIDDLE OF AUGUST; AND BY THE END OF NOVEMBER,
3 WE ACTUALLY PURCHASED EQUIPMENT THAT MAKES THE
4 HEAT OR THE ADHESIVE STRAP FOR US.

5 IN THE BEGINNING WE PURCHASED
6 ADHESIVE TAPE FROM SEVERAL COMPANIES, INCLUDING
7 3M. AND THAT WAS HOW WE STARTED OUT MAKING THE
8 ADHESIVE BAG STRAP. BUT THEN TO BE MORE
9 COST-EFFECTIVE, WE DECIDED WE NEEDED TO BUY THE
10 EQUIPMENT, BRING IT IN HOUSE, MAKE THAT TAPE
11 OURSELVES, SO THEN WE COULD ATTACH TO THE STRAP,
12 AND THAT'S HOW WE DID IT.

13 I THINK AT THIS TIME WHAT I'D LIKE
14 TO DO -- GENE, COULD YOU HELP ME? -- I'D LIKE TO
15 BRIEFLY GO THROUGH THE PROCESS THAT -- EVERYTHING
16 I'VE JUST DESCRIBED, HOW IT'S DONE AND HOW IT
17 REPRESENTS OUR BAG-MAKING PROCESS.

18 THE FIRST PIECE OF EQUIPMENT THAT WE
19 START OUT WITH, OF COURSE, IS THE EXTRUDER, WHICH
20 YOU SAW WHERE THE PELLETS WERE GOING IN THE BACK
21 END OF THE EXTRUDER. THERE IS A SCREW INSIDE THE
22 EXTRUDER WHICH IS HEATED. THE EXTRUDER ITSELF IS
23 HEATED. AS THOSE PELLETS GO IN, THE SCREWS TURN.
24 THOSE PELLETS ARE MOVING FORWARD THROUGH THE OTHER
25 END OF THE EXTRUDER. AS THEY DO, THEY BECOME MORE



1 LIQUID. THEY EVENTUALLY MELT. AND PRIOR TO
2 EXITING AND -- EXCUSE ME -- BUT I'VE GOT A LITTLE
3 TOY HERE, AND I HAVEN'T TRIED THIS BEFORE, BUT IT
4 MIGHT HELP IF IT WORKS. IT WORKS IF I HOLD MY
5 HAND STEADY.

6 ONCE WE GET TO THIS POINT, THE
7 OPPOSITE END OF THE EXTRUDER, THE MATERIAL -- THE
8 PELLETS, AS YOU SAW THEM GOING IN, THEY'RE SOLID
9 PELLETS. NOW, THEY'RE VERY FLUID, VERY LIQUID.
10 ONCE THEY GET TO THAT STAGE, AS THEY EXIT THE
11 SCREW, THEY GO THROUGH WHAT'S CALLED A SCREEN
12 MECHANISM. AND THIS SCREEN IS PRIMARILY USED TO
13 SCREEN OUT -- IT'S JUST SMALL HOLES IN PIECES OF
14 METAL AND IT'S USED TO STRAIN, IF YOU WANT TO USE
15 A DIFFERENT TERM, OUT CONTAMINANTS, PARTICLES,
16 DIRT, WHATEVER MIGHT GET IN THE WAY OF MAKING GOOD
17 BAGS. IT DOESN'T GET EVERYTHING, BUT IT CERTAINLY
18 HELPS.

19 ONCE IT GOES THROUGH THIS SCREEN
20 PROCESS, THE MATERIAL THEN GOES UP THROUGH WHAT WE
21 CALL A DIE. IT'S AN EXTRUSION, I.E., IT'S ROUND
22 IN APPEARANCE, AND IT HAS A SLOT, CIRCULAR SLOT,
23 360 DEGREES AROUND THE TOP. THAT SLOT CAN BE
24 ANYWHERE FROM 30 THOUSANDTHS TO A HUNDRED
25 THOUSANDTHS THICK. SO IT FORCES THAT PLASTIC,



1 THAT MOLTEN PLASTIC, OUT THROUGH THAT SLOT. AND
2 THAT'S WHERE IT STARTS ESTABLISHING THE PROCESS OF
3 THE BAG ITSELF.

4 IT MAY BE -- IT MAY BE UP TO A
5 HUNDRED THOUSANDTHS THICK WHEN IT COMES OUT RIGHT
6 THERE; BUT THEN WHAT'S DONE IS THAT YOU BLOW AIR
7 INSIDE AND THAT PRODUCES A BUBBLE. YOU'RE BLOWING
8 AIR IN THAT TUBE. AND A GOOD ANALOGY IS BLOWING
9 SOAP BUBBLES. KIDS PUT SOAP IN THE WATER. WHEN
10 YOU BLOW A BUBBLE, THAT'S THE SAME EFFECT YOU GET
11 HERE. YOU'RE BLOWING A BUBBLE. WHEN YOU BLOW THE
12 BUBBLE, YOU'RE PUTTING AIR INSIDE TO EXPAND IT.

13 THAT DOES TWO THINGS. IT
14 ESTABLISHES THE WIDTH OF THE BAG, WHAT YOU WANT IT
15 TO BE AS FAR AS THE FINAL DIMENSION OF THAT
16 PARTICULAR BAG THAT YOU ARE MAKING, AND IT ALSO
17 THINS IT OUT FROM COMING OUT OF THE DIE AS A VERY
18 THICK MATERIAL. IT THINS IT OUT TO THE THICKNESS
19 THAT YOU WANT IT TO BE WHEN IT ENDS UP TO BE A
20 FINISHED BAG. SO THAT'S THE PRIMARY EFFECT OF THE
21 EXTRUDER IS THAT IT MELTS THE MATERIAL, THE
22 INITIAL PORTION OF THE BAG, AND THEN IT GOES TO
23 THE COOLING TOWER. AND THE COOLING TOWER IS JUST
24 WHAT IT SAYS.

25 MOST OF TIME -- AND IT VARIES FROM



1 MANUFACTURER TO MANUFACTURER. MOST OF THE TIME
2 THEY'RE 35 TO 40 FEET TALL OR UP INTO THE AIR.
3 AND THAT'S TO COOL IT, GIVE IT SOME TIME TO COOL.
4 YOU BLOW SOME AIR ON IT, SOME CHILLED AIR TO HELP
5 COOL IT. THAT SETS THE MATERIAL SO THAT IT'S NOT
6 REAL TACKY; AND WHEN YOU THEN COLLAPSE IT AND
7 FLATTEN IT AGAINST ITSELF, IT WON'T STICK OR IT
8 WON'T MELT TO IT.

9 ONCE IT'S BEEN IN THE COOLING TOWER,
10 THEN YOU BRING IT BACK ON DOWN THROUGH A SERIES OF
11 ROLLERS. IT'S FLATTENED OUT. THERE ARE ROLLERS
12 UP AT THE TOP OF THE COOLING TOWER THAT FLATTEN IT
13 OUT ENOUGH THAT IT KEEPS ALL THE AIR THAT YOU'VE
14 BEEN BLOWING INTO BACK DOWN IN THAT BUBBLE. YOU
15 DON'T WANT AIR BETWEEN THOSE LAYERS.

16 AS IT COMES OUT OF THE COOLING TOWER
17 BACK DOWN TO THE FLOOR, IT GOES THROUGH THE NEXT
18 MACHINE, WHICH IS CALLED A BAG MACHINE. AND A BAG
19 MACHINE IS JUST WHAT IT SAYS. IT MAKES THE
20 MAJORITY OF THE BAG AS THE BAG IS REALLY
21 REPRESENTED IN A FINE PRODUCT. THIS DOES THREE
22 THINGS. AND THERE ARE DIFFERENT TYPES OF BAG
23 MACHINES. THIS IS THE TYPE THAT WE USE. A LOT OF
24 PEOPLE USE THIS TYPE. THERE ARE OTHER PEOPLE THAT
25 USE A LITTLE BIT DIFFERENT CONFIGURATION OF



1 MACHINE.

2 ESSENTIALLY WHAT IT DOES IS THAT IT
3 PUTS -- FIRST OF ALL, RIGHT HERE IN THIS ROTARY
4 MECHANISM THERE IS A SEAL BAR. THAT GOES
5 ACROSS -- THAT EXTENDS ACROSS THE FULL WIDTH OF
6 YOUR BAG AS YOU'RE BRINGING THE FILM DOWN. THAT
7 SEAL BAR COMES AROUND AT A PREDETERMINED
8 REVOLUTION AND PUTS THE HEAT SEAL ACROSS WHAT WILL
9 BECOME THE BOTTOM OF THE BAG.

10 AS IT EXITS THAT ROTARY HEAT SEALER,
11 IT GOES UP THROUGH SOME OTHER ROLLERS AND STARTS
12 THROUGH HERE WHAT WE CALL FOLDING BARS. THE
13 FOLDING BARS DO EXACTLY THAT. IT STARTS OUT WITH
14 A BAG OR A FILM THAT'S THIS WIDE. AS IT COMES OUT
15 OF THE TOWER, YOU HEAT SEAL IT. THEN WHEN YOU
16 FOLD IT, IT MAY FOLD IN TWO, THREE PLACES IN ORDER
17 TO ACHIEVE THE FINAL WIDTH THAT YOU ARE GOING TO
18 END UP WITH WHEN IT'S ON A ROLL AND PUTTING IT
19 INTO A PACKAGE. THAT'S THE ONLY THINGS THAT THE
20 FOLDING BARS DO.

21 AFTER IT EXITS THE FOLDING BARS AND
22 IT BECOMES A SMALLER WIDTH, IT NOW GOES THROUGH A
23 ROLLER AND WHAT WE CALL A PERFORATING BLADE,
24 NOTHING MORE THAN A KNIFE, REVOLVING KNIFE, THAT'S
25 TIMED SO THAT THE DISTANCE FROM THE SEAL TO HERE



1 IS CALCULATED SO THAT THE TIMING PUTS THE
2 PERFORATION RIGHT NEXT TO THAT SEAL THAT YOU
3 ALREADY PUT IN AT THE OTHER END OF THE MACHINE.

4 AT THIS POINT YOU HAVE A COMPLETE
5 BAG FOR ALL PRACTICAL PURPOSES. AS IT EXITS THAT
6 THAT'S A BAG. THEY'RE JUST ALL STRUNG TOGETHER
7 WITH PERFORATIONS HOLDING THEM TOGETHER SIMPLE
8 WHERE YOU PULL APART TO USE ONE BAG AT A TIME.

9 THE DIFFERENCE HERE, OF COURSE, IS
10 NOW WE GO INTO THE STRAP MACHINE. NORMALLY WE
11 WOULD GO INTO OUR WINDERS. BEFORE WE HAD A STRAP
12 MACHINE, AND LIKE A LOT OF OTHER PEOPLE, WE USED A
13 WINDER. YOU WIND IT ON A ROLL, PULL THE LAST ONE
14 APART, WHATEVER THE COUNT IS GOING TO BE, THAT
15 GOES IN THE BOX. THAT'S A FINAL LINE THAT MAKES A
16 WHOLE BAG.

17 IN INSERTING A DIFFERENT STRAP ON,
18 WE BRING THE WEB INTO THE STRAP MACHINE. FIRST OF
19 ALL, IT GOES INTO WHAT'S CALLED A WEB GUIDE. PART
20 OF OUR PROCESS REQUIRED SUCH PRECISION THAT ONE OF
21 THE PROBLEMS WAS THAT WE HAD TO PUT THE STRAP ON
22 THE EDGE OF THE BAG BECAUSE YOU'RE SEALING TWO
23 LAYERS OF BAG TOGETHER. IF YOU PUT IT ANYPLACE
24 ELSE, IT WILL SEAL ALL THE WAY THROUGH. YOU CAN
25 OPEN THE BAG AND YET IT WILL BE SEALED TO TWO



1 LAYERS, AND YOU COULDN'T OPEN IT ALL THE WAY. WE
2 HAD TO KEEP THE SEAL ON THE EDGE, AS CLOSE TO THE
3 EDGE AS POSSIBLE, IN ORDER TO DO THAT BECAUSE --
4 YOU CAN'T SEE IT IN THIS FILM -- WHEN THIS
5 MATERIAL IS RUNNING, IT'S SLIPPING AND SLIDING ALL
6 OVER THE PLACE. AND IT HAS A TENDENCY TO KIND OF
7 WEAVE DOWN THROUGH THE MACHINES.

8 NOW, IT MIGHT NOT MOVE MORE THAN
9 HALF INCH OR SO EITHER DIRECTION, BUT IT DOES
10 MOVE. WE DON'T ALLOW THAT. IT HAD TO BE MORE
11 PRECISE. SO WE PUT AN EDGE GUIDE OR WEB GUIDE ON
12 THE FRONT, AND THAT'S DESIGNED TO CONTINUALLY,
13 JUST AS THIS IS RUNNING THROUGH THE MACHINE, TO
14 MAINTAIN A POSITION OF THIS EDGE AT THE EXACT SAME
15 SPOT EVERY TIME WE BRING A SEAL DOWN OR EVERY TIME
16 WE BRING THE STRAP DOWN TO SEAL IT. AND THAT WE
17 TRY TO MAINTAIN PLUS OR MINUS 50 THOUSANDTHS. YOU
18 GET ANY FURTHER OUT, YOU GET THE STRAP TOO FAR,
19 CLOSING OFF SOME OF THE BAGS, AND CUSTOMERS
20 COMPLAIN.

21 ONCE WE ESTABLISHED THE SIDE
22 REGISTRATION ON IT, THE NEXT STEP IS THAT IT GOES
23 INTO THIS ROLLER RIGHT HERE, AND THAT'S TORQUE OR
24 TENSION CONTROL. ONE OF THE PROBLEMS THAT WE
25 FACED THAT WE HAD TO SOLVE IN THE BEGINNING IN



1 PUTTING THIS MACHINE IN THE LINE WAS THAT WE
2 ALREADY HAD OTHER MACHINES. THOSE OTHER MACHINES
3 HAVE THEIR OWN IDIOSYNCRASIES, WHICH MEANS THAT
4 THEY MOVE. THEY HAVE -- THE WEB MOVES FROM ONE
5 POINT TO ANOTHER. MAYBE SOMETIMES TOO MUCH FOR
6 OUR PROCESS.

7 THIS ROLLER RIGHT HERE HAS A MOTOR
8 ON IT. IT'S DESIGNED TO HELP COMPENSATE FOR SOME
9 OF THAT SLIPPAGE ON THAT WEB AS COMES IT OUT OF
10 THE BAG MACHINE. IF THERE'S ANY DEVIATION TO IT
11 COMING OUT OF THERE, WE FIX IT RIGHT HERE. WE FIX
12 IT THERE BECAUSE WE HAVE TO HAVE THE BAG IN AN
13 EXACT SPECIFIC LOCATION WHEN WE PUT THIS STRAP ON.

14 NOW, ONCE AGAIN, THE MATERIAL IS
15 WEAVING THROUGH THAT ROLLER, AND THIS WEB IS
16 CONSTANTLY MOVING -- GENE SAID IT DID STOP. YOU
17 NEVER STOP THE FILM IN THE LINE WHEN YOU'RE
18 PRODUCING BAGS. YOU REALLY CAN'T. THE EXTRUDER
19 DOESN'T STOP. IT KEEPS SPITTING THAT STUFF OUT.
20 SAME THING. COULDN'T STOP THE WHOLE WEB. HOW
21 COULD WE STOP IT AT ONE INSTANCE WHEN WE PUT THAT
22 STRAP ON OR WHEN WE WANT TO PUT THAT STRAP ON AND
23 ONLY THAT INSTANCE, BUT YET EVERY PLACE ELSE THE
24 FILM IS MOVING?

25 USUALLY THERE'S EASY METHODS OF



1 DOING THAT. ONE WE JUST SIMPLY CALL A MECHANICAL
2 ACCUMULATOR. YOU STOP THE WEB IN THIS POSITION
3 HERE, BUT IT KEEPS COMING IN AND IT KEEPS GOING
4 OUT. WE COULDN'T DO IT WITH MECHANICAL MEANS
5 BECAUSE IT ALREADY HAD PERFORATIONS, AND IT WOULD
6 TEAR THEM APART BECAUSE THERE WAS TOO MUCH TENSION
7 ON THE BAGS.

8 WHAT WE DID WAS WE CAME UP WITH A
9 UNIQUE DESIGN OF VACUUM CHAMBERS THAT WE'RE
10 PULLING AIR THROUGH HERE. AS THIS PORTION OF THE
11 BAG STARTS IN, IT'S PULLED DOWN BY VACUUM AND THAT
12 KEEPS IT TAUGHT. WHEN THE EXACT MOMENT COMES UP,
13 IT'S COMPUTER CONTROLLED, THAT WE WANT TO STOP THE
14 BAG, IT STOPS ON THIS ROLLER RIGHT HERE, THE
15 CENTER ROLLER. ALL THE REST OF THE FILM IS STILL
16 MOVING, BUT THAT ONE POSITION STOPS.

17 AT THAT POINT, AND THAT'S WHAT YOU
18 SAW IN THE VIDEO, THAT'S WHERE THE STRAP SEAL HEAD
19 COMES DOWN, HEATS THE STRAP SEAL HEAD AND PUTS THE
20 STRAP ON THE BAG PERMANENTLY. AS IT EXITS, IT
21 GOES THROUGH ANOTHER TENSION CONTROLLER, AND THAT
22 TENSION CONTROLLER THEN TAKES IT INTO THE WINDER.
23 THIS IS PROBABLY THE MOST DIFFICULT PART OF THE
24 WHOLE PROCESS, AND THAT WAS RIGHT HERE PUTTING THE
25 HEAT SEAL ON BECAUSE WE HAVE TO DO A COUPLE OF



1 THINGS.

2 ONE IS THAT WE HAVE A SUPPLY ROLL OF
3 STRAP MATERIAL. THE SUPPLY ROLL OF STRAP MATERIAL
4 IS MOUNTED ON TOP OF THE MACHINE. THAT MATERIAL
5 IS ALREADY MADE UP ON A LARGE ROLL, WHATEVER THE
6 WIDTH OF THE STRAP IS GOING TO BE. WE BRING THAT
7 MATERIAL DOWN INTO THE TOP PORTION OF THE MACHINE,
8 AND WE HAVE A SHEAR OR A KNIFE BLADE RIGHT HERE,
9 AND THAT KNIFE BLADE COMES DOWN AND CUTS THAT
10 STRAP ROLL OFF IN ONE-INCH WIDTH OR THREE-QUARTER
11 WIDE, I THINK IT IS. AND THEN IT TAKES EACH ONE
12 OF THESE AND MOVES THEM INTO A POSITION RIGHT
13 BELOW THE HEAT SEAL HEAD.

14 IT STAGES THIS AND IT HAS TO BE
15 STAGED AT THE EXACT MOMENT THAT WE'RE STOPPING THE
16 FILM ON THAT ROLLER SO THAT AT THAT INSTANCE FOR
17 120 MILLISECONDS, WHICH IS THAT LONG, THE HEAT --
18 THIS STOPS AND THE HEAT SEAL HEAD COMES DOWN, WE
19 PUT THE STRAP ON, AND THEN IMMEDIATELY HAS TO
20 ACCELERATE THE FILM UP TO 3800 RPM IN ORDER TO
21 MOVE IT OUT FAST ENOUGH THAT THE NEXT BAG CAN COME
22 INTO PLACE. SAME PROCESS AGAIN SO THAT WE CAN
23 STOP IT AT THE EXACT SPOT AND STILL PUT THE HEAT
24 SEAL ON.

25 IT TOOK A YEAR AND A HALF FOR OUR



1 COMPUTER EXPERT JUST TO WRITE THE PROGRAM TO DO
2 ALL OF THESE THINGS. AND THAT ISN'T EVEN ALL OF
3 IT BECAUSE THERE'S THINGS BEHIND THE SCENES THAT
4 YOU CAN'T SEE HE HAS TO ACCOMPLISH. SO WE'RE
5 BRINGING THE STRAP MATERIAL IN AS A SEPARATE
6 SOURCE. IT HAS TO BE TIMED PERFECTLY IN AN EXACT
7 POSITION WITH A CUTOFF, REPEAT, AND THEN WE SEAL
8 IT. AND WE ONLY HAVE THAT LONG TO SEAL IT. IT
9 HAS TO SPEED UP FAST ENOUGH TO CATCH UP WITH THE
10 REST OF THE FILM THAT MAY BE RUNNING 400 FEET A
11 MINUTE.

12 YOU KNOW, ONE OF THE THINGS YOU
13 MIGHT BE INTERESTED IN, AND I'D LIKE TO SHOW YOU
14 IF YOU DON'T MIND. THIS IS HEAT SEAL. IT'S --
15 THIS IS WHAT WE HEAT. WE HEAT THESE HEADS UP, AND
16 THESE HEADS THEN ARE WHAT IS IN THAT MECHANISM
17 THAT COMES DOWN TO PUT THAT SEAL ON. ONE OF THE
18 DIFFICULTIES WITH THIS AND THE PRECISION THAT'S
19 REQUIRED IS WHERE THAT ROLLER IS RIGHT THERE,
20 THAT'S A 4-INCH DIAMETER ROLLER. THAT MEANS THAT
21 IT'S CURVED. NORMALLY WHEN HE HEAT SEAL A BAG,
22 WHETHER YOU DO AT THE BOTTOM OR ANYPLACE ELSE, YOU
23 DO IT ON A FLAT SURFACE. WE COULDN'T DO THAT. WE
24 HAVE TO DO IT ON A ROLLER.

25 SO WHEN I PASS THIS AROUND, YOU'LL



1 SEE THAT IT'S WHAT YOU CALL A COMPOUND CURVE. AND
2 HERE AGAIN IS ONE OF THE DIFFICULTIES IN THAT THE
3 MACHINING OF THIS HAS TO BE SO PRECISE THAT IT
4 CAN'T BE OFF MORE THAN FIVE TO EIGHT THOUSANDTHS
5 ALL THE WAY AROUND THIS SURFACE BECAUSE WE ONLY
6 HAVE THE THICKNESS OF THIS, AS YOU SAW IN THAT
7 BAG, WHICH IS ABOUT 60 THOUSANDTHS. WE ONLY HAVE
8 THAT AMOUNT TO SEAL WITH.

9 IF ANY PORTION OF THAT MISSES BEING
10 SEALED, IT DESTROYS THE INTEGRITY OF THE SEAL AND
11 WILL EASILY PULL OFF THE BAG. WE CAN'T HAVE IT
12 MISS. IT HAS TO SEAL EVERY TIME.

13 NOW, WE HAVE MORE SEAL IN THIS THAT
14 I DIDN'T MENTION. ONE OF THE PROBLEMS, THE FIRST
15 PROBLEM WE HAD, IS HOW DO WE KEEP THE STRAP INSIDE
16 THE BAG UNTIL IT'S WOUND UP. WE ENDED UP HAVING
17 TO PUT ANOTHER SEALER IN THE SAME PLACE EXCEPT AT
18 THE OPPOSITE END OF THE BAG. AND I PASSED AROUND
19 AN EXAMPLE OF ONE OF THOSE. IT HAS SEVERAL POINTS
20 THAT ARE STICKING UP. NOW THAT'S A BIGGER PROBLEM
21 BECAUSE THE FIRST PART IS ENOUGH OF A PROBLEM IN
22 TRYING TO SEAL THROUGH TWO LAYERS OF DIFFERENT
23 GAUGES. DIFFERENT THICKNESS, WITHOUT MELTING
24 THROUGH AND MAKING HOLES.

25 BUT IN ORDER TO KEEP THAT STRAP DOWN



1 SO THAT IT WOULDN'T COME UP, IF IT COMES UP AND
2 GOES THROUGH REST OF THE MECHANISM, IT LAYS OUT,
3 GETS CAUGHT IN THE MACHINERY, AND PULLS IT OFF.
4 SO WE HAD TO LIGHTLY SEAL THIS AT THE OTHER END
5 JUST LONG ENOUGH SO IT WOULD STAY THERE WHILE THE
6 BAG'S BEING WOUND UP. BUT WE COULDN'T GO THROUGH
7 TWO LAYERS. IT CAN ONLY HIT ONE. THAT'S THE
8 PRECISION THAT'S REQUIRED. WE COULD ONLY LIGHTLY
9 HEAT SEAL TO ONE LAYER IN ORDER TO MAKE THAT
10 HAPPEN.

11 A COUPLE OTHER -- SOME OF THE
12 CRITICAL ELEMENTS THAT ARE INVOLVED HERE, YOU
13 CAN'T ALLOW WRINKLES. CAN'T BE ANY CRINKLES IN
14 THE BAG. AS IT STOPS AT THAT ROLLER, IF THERE
15 ARE, IT WON'T SEAL. CAN'T BE ANY AIR IN IT. IF
16 THERE IS, IT WON'T SEAL. IF THERE'S DIRT
17 PARTICLES IN THE MATERIAL AT THE TIME THAT SEAL
18 MECHANISM OR THAT SEAL HEAD THAT I SENT AROUND,
19 THE LEAST LITTLE BIT THAT INTERRUPTS THAT SEAL
20 WILL THEN PRODUCE A HOLE, WHICH THEN WILL PRODUCE
21 A FAILURE IN THE STRAP WHEN IT'S PULLED TIGHT AND
22 THEN STRETCHED AROUND.

23 WE ALSO HAVE TO USE NONCONDUCTIVE
24 MATERIALS THERE SO THAT IT DOESN'T HEAT --
25 OVERHEAT WHAT'S SUPPOSED TO BE SO PRECISE WHEN



1 YOU'RE DEALING WITH GAUGES THAT ARE THAT SMALL,
2 THAT THIN. IT REQUIRES NOT ONLY TOTAL COMPUTER
3 CONTROL, BUT IT CAN'T ALLOW ANY VARIATION IN THE
4 FILM THAT GOES THROUGH IT. THAT'S THE REASON
5 WE'VE ALWAYS USED A VIRGIN FILM THAT'S A HUNDRED
6 PERCENT FROM ONE SOURCE TOTAL VIRGIN. THERE WAS
7 NO CONTAMINATION OR OTHER MATERIALS IN IT. WE
8 ALREADY KNOW WHAT THE MELT TEMPERATURES ARE OF
9 THAT MATERIAL. WE HAVE EVEN TRIED TO BLEND IT
10 WITH OTHER MATERIALS, AND IT CHANGES IT JUST
11 ENOUGH SLIGHTLY THAT IT STILL WILL NOT WORK AND WE
12 CANNOT SEAL THE BAG.

13 ONE OF THE -- ONE OF THE COMPARISONS
14 THAT OR ONE OF THE QUESTIONS THAT CAME UP WAS
15 ABOUT THE DRAWSTRING. I THINK GENE MENTIONED THE
16 DRAWSTRINGS. THERE'S A SEAL MECHANISM THERE IN
17 THAT. I'D LIKE TO SHOW YOU A LITTLE BIT ABOUT THE
18 DRAWSTRING AND HOW IT DOES COMPARE TO THIS
19 PROCESS.

20 DRAWSTRING BAG, THIS IS A TYPICAL
21 DRAWSTRING BAG. A LOT OF PEOPLE MAKE THEM. WE
22 EVEN MADE THEM ONE TIME OURSELVES. WE MADE THESE
23 UNTIL WE DEVELOPED THE STRAP TO BECOME A SALABLE
24 PRODUCT BECAUSE WE FELT, IN OUR OPINION, IT WAS A
25 BETTER PRODUCT THAN THIS ONE WAS AND, THEREFORE,



1 AT THAT TIME THEN WE STOPPED MAKING THESE.
2 WHEN THIS DRAWSTRING OR STRAP
3 MATERIAL HERE IS SEALED INTO THE BAG, THESE BAGS
4 RUN THROUGH THAT PRODUCTION LINE A LITTLE BIT
5 DIFFERENT. THEY RUN THROUGH WHAT I CALL SIDWAYS
6 BECAUSE THEY'RE SEALING ACROSS THE SIDES OF THE
7 BAG AND WE'RE SEALING ACROSS THE BOTTOM. IN THIS
8 PROCESS THE STRAP IS PUT IN BACK PRIOR TO THE BAG
9 MACHINE, AND IT'S DONE BY A MACHINE THAT'S CALLED
10 A DRAWSTRING MACHINE. WHEN IT GOES THROUGH THE
11 SAME HEAT SEAL MECHANISM THAT SEALS THE SIDES OF
12 THE BAG TO CLOSE THEM OFF, THIS STRAP OR THE
13 DRAWSTRING MATERIAL IS TRAPPED BETWEEN THOSE
14 LAYERS OF BAGS AND SEALED THROUGH AT THE SAME
15 TIME. IT'S A CONTINUOUS RUNNING LENGTH OF
16 DRAWSTRING TAPE, AND IT GETS SEALED AT THE SAME
17 TIME IN THE SAME PROCESS THAT YOU'RE SEALING THE
18 WHOLE BAG.

19 NOW, SOMETHING REAL INTERESTING
20 ABOUT THIS. WE LOOKED AT THIS IN, I THINK, ABOUT
21 1993 WHEN WE WERE STARTING TO GET INTO THE
22 ADHESIVE STRAP PROGRAM. WE THOUGHT MAYBE THERE
23 WAS A BETTER WAY OF PUTTING THAT STRAP ON SO THAT
24 IT WOULD BE STRONGER BECAUSE WE STILL GOT
25 COMPLAINTS THAT ON THINNER BAGS, IT WAS EASIER TO



1 PULL IT OFF. WE FELT THAT THE BEST WAY THAT YOU
2 COULD DO IT WOULD BE TO TRAP THE BAG BETWEEN THE
3 STRAP, NOT HAVE THE STRAP JUST ON ONE SIDE. IF
4 YOU TRAPPED IT BETWEEN THE STRAP, TRAP THE BAG
5 BETWEEN IT SO YOU HAD A STRAP ON ONE SIDE AND A
6 STRAP ON THE OTHER, IT WAS PERFECT TO SEAL THROUGH
7 BECAUSE IT WAS MUCH EASIER TO DO. IT WOULD THEN
8 MELT THROUGH BOTH LAYERS OF STRAP, NOT JUST THE
9 BAGS, AND IT WOULD HOLD IT MUCH TIGHTER AND IT'D
10 BE VERY DIFFICULT TO PULL OFF.

11 WELL, THAT'S THE CONCEPT BEHIND
12 DRAWSTRING BAGS. IT TRAPS THE STRING BETWEEN THE
13 LAYERS. AND AS YOU WILL SEE, IF I CAN QUIT
14 FUMBLING AROUND HERE, EVEN IF -- EVEN IF YOU TEAR
15 THE BAG MATERIAL AWAY FROM THE STRAP WHERE IT'S
16 HEAT SEALED, IT STILL HOLDS TIGHT. THAT'S THE
17 INTEGRITY OF IT BECAUSE IT'S STILL SEALED TO
18 ITSELF.

19 IF WE COULD HAVE MADE THAT HAPPEN,
20 WE'D HAVE BEEN -- WE'D HAVE HAD EVEN A BETTER
21 PRODUCT THAN WE THINK WE HAVE TODAY. WE TRIED TO
22 WORK ON THE DESIGN TO DO THAT. IT WAS NOT
23 POSSIBLE WITH THE CURRENT EQUIPMENT. AND AT THAT
24 TIME WE HAD ALMOST 40 MACHINES ALREADY IN
25 PRODUCTION. WE COULD NOT COME UP WITH A WAY OF



1 TRAPPING THE STRAP AROUND THE BAG WITHOUT
2 COMPLETELY REDESIGNING AND BUILDING A NEW PIECE OF
3 EQUIPMENT. IF WE COULD HAVE DONE IT, WE'D HAVE
4 DONE BECAUSE THAT HELPS -- MAKES A BIG DIFFERENCE.

5 WHEN -- GENE, YOU MIGHT WANT TO,
6 PLEASE. THIS IS THE LAST MACHINE IN THE LINE IN
7 THE PROCESS. NOW INSTEAD OF THREE MACHINES, WE
8 HAVE FOUR BECAUSE OF THE STRAP MACHINE. AS SOON
9 AS THE BAGS EXIT THE STRAP MACHINE, THEY NOW ARE
10 NOT ONLY A BAG, BUT THEY HAVE A STRAP ON THEM.
11 THEY GO INTO THE WINDER, AND THIS IS A SIMPLE
12 PROCESS OF JUST WINDING THE ROLLS TO WHATEVER THE
13 COUNT IS THAT YOU WANT. IT PULLS THEM APART, THE
14 OPERATOR TAKES THEM OFF AND DROPS THEM INTO A BOX,
15 AND NOW WE HAVE A FULL STRAP BAG.

16 THE ONLY THING THAT WE DO A LITTLE
17 DIFFERENT IS WE ADJUST FOR, AGAIN, THE BAG MACHINE
18 VARIATIONS AND THE WINDER VARIATIONS. STRAP BAG
19 MAKING IS A VERY, VERY PRECISE PROCESS. WE DIDN'T
20 HOPE FOR IT TO BE DESIGNED IN THE MANNER THAT IT
21 WAS THAT PRECISE. THAT'S JUST THE WAY IT WORKED
22 OUT, AND THAT'S THE BEST WE COULD DO WITH IT AT
23 THE TIME, AND WE HAVE CONTINUED TO DEVELOP IT
24 FURTHER.

25 THE PRECISION, OF COURSE, MAKES IT



1 MORE DIFFICULT BECAUSE WE'D LOVE TO RUN LESSER
2 EXPENSIVE MATERIALS THAN WHAT WE CURRENTLY RUN TO
3 MAKE STRAP BAGS WITH. IT WOULD CUT OUR COST DOWN
4 AND IT'D CUT THE PRICE DOWN ON STRAP BAGS. BUT
5 BECAUSE OF THESE DETAILS AND THE PRECISION WITH
6 HOW THAT'S PUT ON AND THE IDIOSYNCRASIES OF THE
7 HEAT SEAL IN THAT IT CAN'T ALLOW ANYTHING TO
8 DISRUPT IT, IT MAKES IT EXTREMELY DIFFICULT TO DO
9 THAT.

10 WE'VE TRIED BLENDING EVEN DIFFERENT
11 VIRGIN RESINS THAT WE BUY FROM VARIOUS SUPPLIERS
12 BECAUSE WE ARE ALWAYS TESTING RESINS. WE'RE
13 ALWAYS TRYING TO COME UP WITH A BETTER ONE, A
14 DIFFERENT ONE, SOMETHING THAT WILL GIVE US MORE
15 BENEFIT, MORE VALUE, LOWER COST. WE'VE TRIED
16 DIFFERENT ADDITIVES. WHEN WE'VE TRIED RUNNING
17 PCR, WHICH WE HAVE RUN A CONSIDERABLE AMOUNT OF
18 DIFFERENT TYPES OF PCR FROM A NUMBER OF DIFFERENT
19 SOURCES, WE'VE ALWAYS TRIED BLENDING THEM. WE'VE
20 TRIED USING THEM JUST STRAIGHT AS THEY COME FROM
21 THE PCR MANUFACTURER, BUT WE'VE NOT BEEN ABLE TO
22 ACCOMPLISH IT WITH A STRAP BAG. WE CANNOT PUT A
23 STRAP BAG ON USING A DIFFERENT MATERIAL THAN WHAT
24 WE'RE USING IN THE VIRGIN RESIN.

25 THE TOLERANCES ARE NARROW, THE MELT



1 TEMPERATURES ARE DIFFERENT BETWEEN HIGH DENSITY,
2 LOW DENSITY, LINEAR LOW, THEY'RE ALL DIFFERENT.
3 WE USE, AS I'M SURE YOU ALREADY KNOW, WE USE A
4 LINEAR LOW HUNDRED PERCENT VIRGIN.

5 THE -- DURING THE LAST THREE YEARS,
6 AT LEAST THE LAST THREE, WE HAVE MADE CONTINUOUS
7 EFFORTS, AND I THINK WE'VE MADE EVEN SOME EXTREME
8 EFFORTS, IN TRYING TO DEVELOP A WAY TO PUT PCR IN
9 A STRAP BAG, NOT ONLY BECAUSE OF THE NUMBER OF
10 SOURCES THAT WE'VE SOLICITED SAMPLES AND
11 INFORMATION FROM -- GENE HAD MENTIONED IT WAS
12 SOMEPLACE IN EXCESS OF 50 SOME DIFFERENT
13 SOURCES -- WE'VE EITHER TESTED OR TALKED TO OR
14 TRIED TO GET SUPPLIES FROM OVER THE LAST FIVE
15 YEARS. NOW, THAT'S NOT TO SAY THAT WE'VE HAD TO
16 GO THROUGH ALL THOSE PEOPLE JUST TO FIND PCR THAT
17 WILL GO INTO OUR OTHER BAGS, NONSTRAP BAGS.
18 THAT'S NOT THE PROBLEM.

19 THE PROBLEM IS FINDING ONE THAT'S
20 COMPATIBLE WITH THE STRAP. WE ARE -- WE'VE MADE
21 CONTINUED EFFORTS, NOT ONLY THE LAST THREE YEARS,
22 BUT WE'RE STILL TODAY. WE HAVE AN ONGOING R & D
23 PROGRAM THAT THE CONTINUATION OF THAT, ONE OF THE
24 GOALS IS TO TRY TO FIGURE OUT IS THERE A WAY, CAN
25 WE COME UP WITH A DIFFERENT ADDITIVE TO PUT INTO



1 OUR VIRGIN RESINS, IS THERE ANOTHER KIND OF A
2 BLEND WITH A VIRGIN RESIN?

3 WE WORK WITH THE SUPPLIERS THAT WE
4 HAVE BEEN BUYING FROM FOR A NUMBER OF YEARS, AND
5 THEY PROVIDE A LOT OF HELP. BUT TO THIS DAY WE
6 STILL DON'T HAVE THAT SOLUTION. AS OF NOW WE
7 SIMPLY CAN'T DO. WE'RE STILL TRYING. WE THINK WE
8 CAN. I'M NOT SURE WHEN THAT'S GOING TO BE. RIGHT
9 NOW IT'S NOT IN THE NEAR FUTURE.

10 THE -- YOU KNOW, WE'VE ALREADY
11 DISCUSSED MOST OF THE REASONS. PRIMARILY IS IT'S
12 A DIFFERENCE IN THE BASE RESINS THAT ARE USED IN
13 MAKING UP PCR THAT BECOME INCOMPATIBLE WITH OUR
14 STRAP PROCESS. THEY'RE NOT INCOMPATIBLE
15 NECESSARILY WITH OUR FILM OR OUR RESIN. WE'RE NOT
16 SAYING THAT. IT'S INCOMPATIBLE IN TRYING TO PUT A
17 STRAP ON BECAUSE OF THIS PROCESS THAT WE GO
18 THROUGH TO DO THIS.

19 THIS MACHINE REPRESENTS -- WE
20 STARTED IN '85. IT'S '97. WE FINISHED BUILDING
21 THE LAST MACHINES IN EARLY '95. WE'VE CONTINUED
22 TO MODIFY THEM. WE STILL DO TODAY. IT'S A HIGHLY
23 PRECISE COMPUTER CONTROLLED PIECE OF EQUIPMENT.
24 AS A MATTER OF FACT, IT'S PROBABLY ONE OF THE
25 LOWEST MAINTENANCE PIECES OF EQUIPMENT THAT WE



1 HAVE IN BOTH OF OUR PLANTS BECAUSE OF THE WAY IT
2 WAS PUT TOGETHER. IT ACTUALLY TROUBLESHOTS
3 ITSELF AND AUTOMATICALLY ADJUSTS FOR DIFFERENT
4 CIRCUMSTANCES. THE ONLY ONE WE HAVEN'T BEEN ABLE
5 TO MAKE IT ADJUST FOR IS PCR. WE'RE WORKING ON
6 IT, AND WE'RE TRYING TO COME UP WITH A WAY OF
7 DOING IT.

8 I REALLY APPRECIATE YOUR TIME, AND I
9 APPRECIATE YOUR PATIENCE IN LISTENING TO OUR
10 DESCRIPTION OF WHAT WE DO AND HOW WE TRY TO DO IT.
11 THANK YOU.

12 CHAIRMAN PENNINGTON: THANK YOU, MR.
13 RUTLEDGE. WE'RE GOING TO TAKE A FIVE-MINUTE BREAK
14 HERE WHILE WE CHANGE THE PAPER.

15 (RECESS TAKEN.)

16 CHAIRMAN PENNINGTON: WE'RE BACK IN
17 SESSION HERE. NOW WE'RE GOING TO HEAR FROM JERRY
18 SMITH.

19 MR. SMITH: GOOD MORNING. FORTUNATELY I
20 DON'T HAVE TO PASS A TEST ON THE STRAP TECHNOLOGY
21 IN ORDER TO KEEP MY JOB. MY NAME IS JERRY SMITH.

22 CHAIRMAN PENNINGTON: ME NEITHER.

23 MR. SMITH: I WON'T TELL YOU WHAT WE DO
24 WITH DISCIPLINED EMPLOYEES AT THE COMPANY.

25 MY NAME IS JERRY SMITH, AND I'M THE



1 EXECUTIVE VICE PRESIDENT AND CHIEF OPERATING
2 OFFICER OF IRONCLAD. I WANT TO THANK THE BOARD
3 FOR GIVING ME THE OPPORTUNITY TO TESTIFY REGARDING
4 IRONCLAD'S APPLICATION FOR AN ADMINISTRATIVE
5 VARIANCE FOR OUR BAGS WITH ADHESIVE HEAT-AFFIXED
6 STRAPS. MY TESTIMONY, ALONG WITH THE OTHER
7 EVIDENCE WHICH HAS BEEN INTRODUCED, CLEARLY
8 DEMONSTRATES, WE BELIEVE, THAT IRONCLAD IS LEGALLY
9 ENTITLED TO AN ADMINISTRATIVE VARIANCE FOR THE
10 PERIOD JANUARY 1, 1997, THROUGH DECEMBER 31, 1998,
11 BECAUSE OF FACTUAL, PRACTICAL, AND TECHNOLOGICAL
12 REASONS, AND ALSO BECAUSE OF REASONS OF FAIRNESS
13 AND EQUITY.

14 I FIRST WANT TO TELL YOU A LITTLE
15 BIT MORE ABOUT IRONCLAD. IT IS A SMALL CALIFORNIA
16 COMPANY WHICH IS PRIVATELY OWNED. IT HAS BEEN
17 UNDER THE SAME OWNERSHIP SINCE 1984. IT IS NOT
18 OWNED BY A BIGGER COMPANY. WE HAVE MANUFACTURING
19 PLANTS IN BOTH TUSTIN IN ORANGE COUNTY,
20 CALIFORNIA, AND IN SHREVEPORT, LOUISIANA. THE
21 COMPANY EMPLOYS APPROXIMATELY 50 PEOPLE IN TUSTIN.
22 SOME OF THOSE EMPLOYEES HAVE BEEN WITH US SINCE
23 1984.

24 SINCE IT IS PRIVATELY HELD, IT DOES
25 NOT RELEASE REVENUES OR SALES FIGURES OR OTHER



1 INFORMATION ABOUT ITS SALES OR MANUFACTURING
2 PROCESSES. HOWEVER, ACCORDING TO THE LATEST
3 PUBLIC MARKETING SURVEYS -- I HAVE A COPY OF ONE
4 IF IT BECOMES RELEVANT -- IRONCLAD'S TOTAL PERCENT
5 OF THE NATIONAL MARKET FOR PLASTIC TRASH BAGS IS
6 LESS THAN 1 PERCENT. BASED ON THAT, WE WOULD
7 ESTIMATE THAT WE ARE AT MOST 2 TO 4 PERCENT OF THE
8 TOTAL MARKET IN CALIFORNIA.

9 OF OUR SALES, THE OVERWHELMING
10 MAJORITY ARE OF REGULATED BAGS, ABOVE .75, THAT
11 IS, AND WITH ADHESIVE HEAT-AFFIXED STRAPS. I CAN
12 FURTHER TELL YOU THAT THE COMPANY IS VERY UNLIKELY
13 TO SURVIVE AS AN ONGOING BUSINESS ENTITY IF WE ARE
14 NOT ABLE TO SELL OUR BAGS WITH STRAPS IN THE STATE
15 OF CALIFORNIA. AND WITHOUT THIS VARIANCE, WE WILL
16 BE IN EXACTLY THAT SITUATION.

17 WE ARE HERE BECAUSE WHEN THE PRC LAW
18 WAS AMENDED IN 1995, THE LEGISLATURE WROTE IN A
19 SPECIFIC PROVISION TO THE LAW WHICH PROVIDED FOR
20 AN ADMINISTRATIVE VARIANCE FOR ANY COMPANIES THAT
21 MANUFACTURED BAGS WITH ADHESIVE HEAT-AFFIXED
22 STRAPS. THE VARIANCE PROCEDURE WOULD COMMENCE
23 AFTER SUCH BAGS WERE EXEMPTED FROM THE PCR
24 REQUIREMENTS IN 1996.

25 AT THE TIME THE LAW WAS AMENDED, IT



1 WAS CERTAINLY IRONCLAD'S REASONABLE OPINION THAT
2 THE INTENT OF THE LAW WAS THAT IF WE WERE STILL
3 NOT ABLE, DUE TO TECHNOLOGICAL REASONS, TO PUT PCR
4 IN A STRAP BAG, THAT WE WOULD OBTAIN A VARIANCE AT
5 LEAST THROUGH 1998. AND WE'VE RELIED ON THAT IN
6 CONDUCTING OUR BUSINESS SINCE THAT TIME. THAT IS
7 WHY WE APPLIED FOR THIS VARIANCE OVER A YEAR AGO
8 IN MAY 1996.

9 I'M NOW GOING TO DISCUSS SEVERAL OF
10 THE MOST IMPORTANT ASPECTS OF THIS ENTIRE ISSUE.
11 IN SO DOING, I HAVE DECIDED TO BE MORE REVEALING
12 ABOUT IRONCLAD'S BUSINESS THAN I HAD INITIALLY
13 PLANNED. BECAUSE IRONCLAD IS PRIVATELY HELD, WE
14 DO NOT GENERALLY LIKE DISCUSSING OUR BUSINESS IN A
15 PUBLIC FORUM, ESPECIALLY ONE IN FRONT OF OUR
16 COMPETITORS.

17 WE ARE PRIVATE PEOPLE, AND WE WANT
18 TO STAY THAT WAY. HOWEVER, BECAUSE OF THE LIFE OR
19 DEATH NATURE OF THIS MATTER, I HAVE NO CHOICE BUT
20 TO BE MORE FORTHCOMING THAN I WOULD LIKE TO BE
21 THAN WE EVER HAVE IN THE PAST. AT THE OUTSET I
22 WANT TO CLARIFY SEVERAL FUNDAMENTAL UNDERLYING
23 ISSUES SO THERE'S NO CONFUSION IN THE BOARD'S
24 MIND.

25 THE FIRST IS THAT WITH RESPECT TO



1 ANY REGULATED BAGS THAT DO NOT CONTAIN A STRAP,
2 IRONCLAD HAS ALWAYS BEEN, IS TODAY, AND WILL
3 CONTINUE TO BE IN COMPLIANCE WITH THE PCR MINIMUM
4 CONTENT LAWS. PRIOR TO 1995 THE REQUIREMENT WAS
5 10 PERCENT, AND IN EACH YEAR IRONCLAD WAS IN
6 COMPLIANCE.

7 IN 1995 THE MINIMUM REQUIREMENT WAS
8 INITIALLY 30 PERCENT, AND IT WAS THEN AMENDED AND
9 REDUCED TO 10 PERCENT. THERE WAS NO EXEMPTION FOR
10 STRAP BAGS IN 1995. IRONCLAD PUT 30 PERCENT PCR
11 IN ITS NONSTRAP REGULATED PRODUCT IN 1995.

12 OUR FINAL PERCENTAGE IN 1995 WAS 28
13 PERCENT, AND THAT REDUCTION REFLECTS THE FACT THAT
14 WE HAD RELATIVELY SMALL SALES OF STRAP BAGS IN
15 CALIFORNIA, AND THOSE STRAP BAGS COULD NOT CONTAIN
16 PCR. BUT I AGAIN EMPHASIZE THAT THE NONSTRAP BAG
17 REGULATED BAGS IN 1995 MET THE LEGAL REQUIREMENTS.

18 IN 1996 IRONCLAD ALSO MET THE
19 MINIMUM PCR REQUIREMENT FOR ITS NONSTRAP REGULATED
20 BAGS. AND WE ARE PRESENTLY MEETING THOSE LEGAL
21 REQUIREMENTS TODAY FOR PCR CONTENT FOR OUR
22 NONSTRAP REGULATED BAGS.

23 THIS VARIANCE ONLY APPLIES TO THOSE
24 BAGS WHICH CONTAIN A STRAP AND, AS IT HAS BEEN
25 SHOWN, WE ARE NOT ABLE TECHNOLOGICALLY TO PUT PCR



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IN THOSE BAGS.

THE SECOND ISSUE WHICH I WOULD LIKE TO CLARIFY IS SOME POSSIBLE BELIEF THAT IRONCLAD CAME UP WITH THE STRAP IDEA AS A WAY AROUND THE PCR LAWS. THAT IS CATEGORICALLY NOT TRUE, AND I HOPE THAT THE TESTIMONY YOU HAVE HEARD FROM GARY HAS PUT THAT ISSUE TO REST. IT IS CLEAR THAT WE DEVELOPED -- STARTED DEVELOPING THE PREDECESSOR TO THE CURRENT STRAP IN MID TO LATE 1980S. WE SPENT MILLIONS OF DOLLARS AT THAT TIME AND IN THE 1990S DEVELOPING THE PATENTED STRAP.

WE HAD AN R & D DEPARTMENT WITH MANY EMPLOYEES. WE OBTAINED PATENTS FOR THE STRAP ITSELF, FOR THE PROCESS BY WHICH THE STRAP IS APPLIED, AND FOR THE MACHINERY WHICH APPLIES THE STRAP. IRONCLAD MADE THIS DECISION IN THE MID TO LATE 1980S TO ATTEMPT TO DEVELOP A UNIQUE, PATENTED STRAP CLOSURE SYSTEM IN ORDER FOR US TO DEVELOP A MARKETING NICHE AND TO HAVE SOME PRODUCT DIFFERENTIATION AND ATTEMPT TO DEVELOP A SMALL POSITION IN THE TRASH BAG MARKETPLACE.

OVER THE YEARS WE HAVE PERFECTED THE STRAP TO ITS CURRENT FORM. WE DID NOT DESIGN IT OR DEVELOP IT SO THAT IT WOULD BE INCOMPATIBLE WITH PCR USAGE. AS WE DEVELOPED THE STRAP THROUGH



1 A TRIAL AND ERROR AND EXPERIMENTATION PROCESS, WE
2 DISCOVERED THE STRAP COULD ONLY WORK ON A BAG WITH
3 VIRGIN RESIN. THAT MEANS THE BAG CANNOT CONTAIN
4 PCR.

5 I WANT ALL OF YOU TO UNDERSTAND THE
6 ECONOMIC REALITIES OF THAT FACT. VIRGIN RESIN IS
7 TYPICALLY 50 TO 100 PERCENT HIGHER IN COST THAN
8 PCR. I WOULD BE MORE ECONOMICAL AND MORE
9 PROFITABLE IF I COULD PUT PCR IN MY STRAP BAGS,
10 BUT I CAN'T. SO FOR THAT REASON IN 1995, AFTER WE
11 HAD ALREADY BEGUN SELLING OUR STRAP BAGS IN
12 CALIFORNIA AND ELSEWHERE, AND AFTER WE HAD SPENT
13 THOSE MANY MILLIONS OF DOLLARS, WE SOUGHT AN
14 EXEMPTION FOR OUR BAGS WITH ADHESIVE HEAT-AFFIXED
15 STRAPS.

16 THE EXEMPTION WAS GRANTED BECAUSE WE
17 PRESENTED EVIDENCE TO THE LEGISLATURE THAT WE
18 COULD NOT AFFIX THE STRAP TO A BAG WITH PCR AND
19 BECAUSE OF THE MONEY WE HAD ALREADY SPENT. IT WAS
20 AN ISSUE OF BASIC FAIRNESS. THE LEGISLATURE DID
21 NOT WANT TO PUT US OUT OF BUSINESS. AT NO TIME
22 HAS IRONCLAD MARKETED THE FACT THAT ITS STRAP BAGS
23 DO NOT CONTAIN PCR. NO ONE HAS PRODUCED ANY
24 EVIDENCE THAT WE MARKET THE FACT THAT OUR BAGS DO
25 NOT CONTAIN PCR.



1 THAT IS NOT OUR MARKETING NICHE.
2 OUR MARKETING NICHE, WHICH HAS BEEN DEVELOPED OVER
3 THESE YEARS, IS OUR UNIQUE STRAP CLOSURE SYSTEM.
4 THAT IS IRONCLAD'S ONLY REASON FOR EXISTING. THAT
5 HAS BEEN OUR ONLY ABILITY TO COMPETE FOR OUR SMALL
6 SHARE OF THE MARKETPLACE AND TO GET IN THE MAJOR
7 ACCOUNTS.

8 A STRONG MAJORITY OF IRONCLAD'S BAGS
9 PRESENTLY SOLD IN CALIFORNIA ARE REGULATED BAGS,
10 AND THE OVERWHELMING MAJORITY OF THOSE BAGS ARE
11 STRAP BAGS. THAT IS ALSO TRUE THROUGHOUT THE
12 UNITED STATES. ANY STATEMENTS BY OUR COMPETITORS
13 TO THE CONTRARY ARE SIMPLY NOT TRUE, AND I WILL
14 CHALLENGE ANY OF THEM TO STATE UNDER PENALTY OF
15 PERJURY WHAT MY PERCENTAGE OF SALES ARE AND HOW
16 THEY KNOW THAT. THEY ARE NOT PRIVY TO MY
17 CONFIDENTIAL SALES INFORMATION.

18 IF IRONCLAD IS NOT ABLE TO PRODUCE
19 AND SELL STRAP BAGS, ITS CONTINUED ECONOMIC
20 EXISTENCE IS SERIOUSLY IN DOUBT. THAT IS WHY OUR
21 COMPETITORS ARE OPPOSING THIS VARIANCE REQUEST, OR
22 SOME OF THEM ARE. A VERY HIGH PERCENTAGE OF
23 IRONCLAD'S SALES ARE IN CALIFORNIA. THAT IS
24 DIFFERENT THAN MOST OTHER TRASH BAG COMPANIES, WE
25 BELIEVE. IRONCLAD'S CONTINUED VIABILITY DEPENDS



1 ON BEING ABLE TO SELL STRAP BAGS IN THE STATE OF
2 CALIFORNIA.

3 IN 1995 WHEN STRAP BAGS WERE
4 EXEMPTED, THE LEGISLATURE RECOGNIZED AND ACCEPTED
5 IRONCLAD'S EVIDENCE THAT IT WAS NOT
6 TECHNOLOGICALLY POSSIBLE FOR IRONCLAD TO AFFIX ITS
7 STRAP TO A BAG WITH PCR. AT THIS TIME NOTHING HAS
8 CHANGED. THOSE FACTS CANNOT BE LEGITIMATELY
9 CONTROVERTED. IRONCLAD HAS SPENT CONSIDERABLE
10 AMOUNTS OF MONEY, TIME, AND EFFORT TRYING TO
11 MANUFACTURE A STRAP BAG WITH PCR, BUT IT HAS BEEN
12 UNSUCCESSFUL.

13 IT HAS SPENT CONSIDERABLE SUMS OF
14 MONEY TRYING TO FIND PCR FROM SUPPLIERS. OVER 60
15 WERE CONTACTED WHERE THE PCR WOULD BE COMPATIBLE
16 WITH OUR STRAP BAG, BUT WE WERE UNSUCCESSFUL. THE
17 PRESENT TECHNOLOGY AND OUR MACHINERY AND EQUIPMENT
18 AND THE NARROW HEAT TEMPERATURE REQUIREMENTS FOR
19 AFFIXING OUR STRAP DO NOT ALLOW IT.

20 BUT AS HAS BEEN INDICATED, IRONCLAD
21 COMMITS TO CONTINUE ITS RESEARCH AND DEVELOPMENT
22 EFFORTS TO TRY TO SOLVE THE PROBLEM, BUT WE CANNOT
23 DO IT INSTANTANEOUSLY.

24 I ALSO WANT ALL OF YOU TO UNDERSTAND
25 THAT IRONCLAD IS CURRENTLY MAKING EFFORTS TO



1 DEVELOP NEW BUSINESS AND NEW CUSTOMERS FOR
2 NONSTRAP TRASH BAGS, ALL OF WHICH WOULD, OF
3 COURSE, COMPLY WITH THE MINIMUM CONTENT PCR LAW.
4 I CANNOT VERY WELL GO TO A CUSTOMER WITH WHOM IT
5 TOOK ME TWO OR THREE YEARS TO CONVINCED TO BUY A
6 STRAP BAG AND NOW TELL THEM THAT THEY SHOULDN'T
7 BUY MY STRAP BAG. THEY SHOULD BUY WHAT EVERYONE
8 ELSE HAS TO OFFER. MY HOPE IS TO BE ABLE TO
9 COMPETE AND GET NEW BUSINESS THAT WE HAVEN'T HAD
10 FOR THIS DIFFERENT KIND OF PRODUCT.

11 BUT THIS PROCESS CANNOT OCCUR
12 OVERNIGHT. IT TAKES TIME. WE SIMPLY DO NOT
13 PRESENTLY HAVE THE CUSTOMER BASE TO COMPETE AND
14 SELL NONSTRAP BAG PRODUCTS. BUT AS I SAID, WE ARE
15 TRYING TO DEVELOP THAT. WITHIN THE LAST SIX
16 MONTHS TO A YEAR, IRONCLAD HAS INVESTED OVER
17 ONE-HALF MILLION DOLLARS IN HIRING A NEW SALES
18 FORCE, IN BUYING NEW EQUIPMENT, AND IN PURCHASING
19 NEW PACKAGING TO TRY TO SELL NONSTRAP BAGS. BUT
20 IT CANNOT HAPPEN INSTANTANEOUSLY.

21 IT TAKES TIME TO CALL ON THOSE
22 CUSTOMERS. THE CUSTOMERS MAKE THEIR DECISIONS
23 MANY MONTHS, SOMETIMES A YEAR IN ADVANCE, AND WE
24 CANNOT MAKE THAT CHANGE OR DEVELOP THAT BUSINESS
25 INSTANTANEOUSLY. BUT WE ARE TRYING SO THAT OUR



1 SITUATION, IF WE WERE TO GET THIS VARIANCE AND
2 COME BACK HERE IN 1999, SO WE HOPE THAT OUR
3 SITUATION WOULD BE DIFFERENT AT THAT TIME.

4 FOR THESE REASONS, WE ALSO CANNOT
5 PRESENTLY ACHIEVE THE ANNUAL AGGREGATE AMOUNT OF
6 PCR USAGE FOR PRACTICAL REASONS. AS I SAID AND AS
7 MY DECLARATION STATES, IF WE WERE TO ATTEMPT TO
8 TAKE ALL OF THE PCR THAT WE DO NOT USE IN OUR
9 STRAP BAGS AND PUT THAT PCR IN OTHER REGULATED
10 PRODUCT, THAT OTHER REGULATED PRODUCT WOULD NEED
11 TO CONSIST OF MORE THAN 100 PERCENT PCR. WE
12 SIMPLY DO NOT SELL ENOUGH OTHER REGULATED PRODUCT
13 TO MAKE UP FOR OUR NONUSAGE OF PCR IN THE STRAP
14 BAG PRODUCTS.

15 AND EVEN IF WE DID MAKE A BAG THAT
16 WAS 100 PERCENT PCR, WE DO NOT CURRENTLY HAVE THE
17 MARKET OR CUSTOMERS TO WHOM TO SELL THOSE BAGS.
18 THEREFORE, FOR PRACTICAL REASONS, WE DO NOT HAVE
19 AN ABILITY AT THIS TIME TO MAKE UP FOR ANY NON-PCR
20 USAGE IN OTHER PRODUCTS IN ORDER TO ACHIEVE THE
21 ANNUAL AGGREGATE MINIMUM AMOUNT.

22 IF WE ARE GRANTED A VARIANCE THROUGH
23 AT LEAST 1998, WE WILL BE ATTEMPTING TO DEVELOP
24 FURTHER NONSTRAP BUSINESS, WHICH, OF COURSE, WILL
25 COMPLY WITH AND CONTAIN THE MINIMUM AMOUNTS OF PCR



1 REQUIRED UNDER THE LAW. AND, THUS, WE'LL BE
2 HELPING TO SUPPORT THE PCR INDUSTRY. WE WILL ALSO
3 CONTINUE TO CONSIDER FURTHER MACHINERY AND
4 MANUFACTURING PROCESS CHANGES TO SEE IF IT IS
5 POSSIBLE IN AN ECONOMICALLY REASONABLE WAY TO MAKE
6 A STRAP BAG WITH PCR. BUT WE NEED MORE TIME, AND
7 WE CAN DO NONE OF THESE THINGS IF WE ARE OUT OF
8 BUSINESS.

9 AND I REALLY WANT EVERYONE TO
10 UNDERSTAND THAT I'M NOT CRYING WOLF WHEN I SAY
11 THAT DENYING IRONCLAD THIS VARIANCE WILL RAISE
12 SERIOUS QUESTIONS AS TO WHETHER OR NOT WE CAN
13 REMAIN IN BUSINESS. AND I WANT TO TELL YOU WHY.
14 AN OVERWHELMING MAJORITY OF OUR SALES ARE OF STRAP
15 BAGS. WE HAVE ALREADY MADE OUTSTANDING
16 COMMITMENTS TO CUSTOMERS WHO ARE RETAIL MASS
17 MERCHANDISERS, HOME DISCOUNT CENTERS, AND CLUB
18 STORES, WHO PLAN THEIR PROGRAMS IN SOME CASES MORE
19 THAN A YEAR IN ADVANCE, TO CONTINUE TO SELL THEM
20 STRAP BAGS. WE HAVE MADE COMMITMENTS TO
21 SUPPLIERS. WE HAVE MADE COMMITMENTS TO VENDORS.
22 WE ARE CURRENTLY REPAYING OVER \$10 MILLION -- \$10
23 MILLION TO A LENDER FOR A LOAN THAT WE OBTAINED TO
24 FINANCE OUR STRAP BAG TECHNOLOGY AND EQUIPMENT.

25 WE HAVE MORE THAN A YEAR LEFT, TO



1 ALMOST THE END OF 1998 ON OUR LEASE IN OUR
2 CALIFORNIA PLANT, WHICH WE SIGNED IN 1995 BASED ON
3 THE PRODUCTION OF STRAP BAGS IN CALIFORNIA. WE
4 ALSO HAVE MANY MONTHS OF EXISTING INVENTORY OF
5 STRAP BAGS THAT MUST BE SOLD. IF WE CANNOT
6 FULFILL THESE COMMITMENTS, OUR CUSTOMERS WILL
7 SURELY SEEK TO BUY NONSTRAP BAG PRODUCTS FROM
8 COMPANIES OTHER THAN IRONCLAD, ASSUMING IRONCLAD
9 WERE EVEN IN EXISTENCE.

10 WHILE IRONCLAD COULD THEORETICALLY
11 CONTINUE TO SELL A STRAP BAG WHICH WAS BELOW .75,
12 WHICH AT THE PRESENT TIME IS A NONREGULATED BAG,
13 AS A PRACTICAL BUSINESS MATTER, CUSTOMERS WILL NOT
14 WANT TO BUY A STRAP BAG FOR BELOW .75 AND NONSTRAP
15 BAGS FOR EVERYTHING ABOVE .75. THE RETAILERS WANT
16 AN INTEGRATED LINE OF PRODUCT. IF WE HAVE
17 CONVINCED THEM THAT THE STRAP BAG IS THEIR
18 MARKETING NICHE, THEY ARE NOT GOING TO BUY THAT IF
19 THEY CAN ONLY HAVE IT FOR BAGS BELOW .75.

20 WE CANNOT REMAIN A VIABLE COMPANY IF
21 THE ONLY STRAP BAGS WE CAN SELL ARE BELOW .75.
22 AND WITH SB 698 PENDING, THERE'S A POSSIBILITY
23 THAT THOSE WILL ALSO BECOME REGULATED BAGS, SO
24 THAT IS SIMPLY NOT A VIABLE OPTION.

25 FURTHERMORE, THE MAJOR CUSTOMERS WHO



1 ARE BUYING STRAP BAGS WILL NOT BUY A STRAP BAG
2 THAT CAN BE SOLD EVERY PLACE EXCEPT IN THE STATE
3 OF CALIFORNIA. OUR ACCOUNTS ARE NATIONAL, WITH
4 NATIONAL PROMOTIONS AND ADVERTISING, AND THEY WILL
5 NOT ACCEPT A PRODUCT LINE THAT CAN BE SOLD EVERY
6 PLACE EXCEPT IN THE STATE OF CALIFORNIA. IF WE
7 CANNOT SELL STRAP BAGS IN CALIFORNIA, WE CANNOT
8 SELL THEM ANYWHERE.

9 THERE'S ANOTHER ISSUE WHICH I WANT
10 TO ADDRESS, AND THAT IS THE ISSUE OF FAIRNESS. IS
11 IT FAIR FOR IRONCLAD TO BE GRANTED A VARIANCE?
12 IRONCLAD IS THE ONLY COMPANY THAT HAS APPLIED FOR
13 A VARIANCE. I WOULD SAY THIS: IT MUST BE
14 REMEMBERED THAT THE 1995 LAW WHICH CREATED THE
15 EXEMPTION AND CREATED THE VARIANCE PROCESS WAS A
16 RESULT OF A COMPROMISE BETWEEN NUMEROUS BAG
17 MANUFACTURERS, PCR MANUFACTURERS, AND
18 ENVIRONMENTAL CONCERNS.

19 EVERYBODY HAD A CHANCE TO STATE AND
20 CONVINCED THE LEGISLATURE OF THEIR POSITIONS. FOR
21 EXAMPLE, CERTAIN COMPANIES MANUFACTURE A TYPE OF
22 DRAWSTRING BAG THAT THEY CONTENDED WAS AN ADHESIVE
23 HEAT-AFFIXED STRAP. THOSE COMPANIES HAD THE
24 OPPORTUNITY TO COME TO THIS BOARD AND APPLY FOR A
25 VARIANCE IF THEY DID SO BEFORE JANUARY 1ST OF



1 1997. THAT DEADLINE HAS PASSED. THEY CHOSE NOT
2 TO FOR WHATEVER REASONS.

3 THE FACT THAT NO ONE ELSE HAS
4 APPLIED FOR A VARIANCE SHOULD NOT, HOWEVER,
5 PREJUDICE IRONCLAD. THE LEGISLATURE HAS DECIDED
6 THAT UNDER CERTAIN CONDITIONS A VARIANCE SHOULD BE
7 GRANTED. THE ISSUE IS NOT WHETHER THE LEGISLATURE
8 SHOULD HAVE CREATED SUCH A VARIANCE PROCEDURE, BUT
9 WHETHER UNDER THE CURRENT EVIDENCE IN FRONT OF YOU
10 IRONCLAD IS ENTITLED TO RECEIVE SUCH A VARIANCE.

11 FINALLY, THERE'S A FUNDAMENTAL ISSUE
12 OF FAIRNESS AND, I THINK, A BALANCING TEST THAT,
13 IF EMPLOYED, REQUIRES THAT IRONCLAD BE GRANTED ITS
14 VARIANCE. ON THE ONE HAND, THERE IS THE INTEREST
15 IN PROMOTING THE DEVELOPMENT OF THE PCR MARKET.
16 ON THE OTHER HAND, THERE IS THE INTEREST IN
17 ALLOWING THE SMALL COMPANY TO REMAIN A VIABLE
18 ECONOMIC ENTITY.

19 AS I SAID, A RECENT MARKET SURVEY
20 SHOWS THAT IRONCLAD HAS 1 PERCENT OF THE TOTAL
21 MARKET. TWO TO FOUR PERCENT WE ESTIMATE IN
22 CALIFORNIA. THEREFORE, GRANTING THIS VARIANCE
23 WILL HAVE A VERY, VERY MINIMAL ADVERSE EFFECT ON
24 THE PCR MARKET OR ON WASTE DIVERSION IN THE STATE
25 OF CALIFORNIA. HOWEVER, GRANTING THE VARIANCE



1 WILL ALLOW US TO REMAIN IN BUSINESS AND TO ALLOW
2 US TO DEVELOP NEW NONSTRAP CUSTOMERS WHOSE BAGS
3 WILL CONTAIN PCR, AND SO IN THAT RESPECT GRANTING
4 THE VARIANCE WILL HELP THE PCR MARKET.

5 ON THE OTHER HAND, IF THE VARIANCE
6 IS DENIED, AS I HAVE TOLD YOU, IT WILL HAVE A
7 MONUMENTAL EFFECT ON THIS SMALL COMPANY. I'VE
8 TOLD YOU OUR CONTINUED EXISTENCE IS DOUBTFUL.
9 SURELY THE 50 JOBS IN OUR CALIFORNIA PLANT IS
10 UNLIKELY TO REMAIN. THOSE ARE REAL ISSUES. AND
11 SO FROM A BALANCING POINT OF VIEW, I BELIEVE THE
12 EQUITY STRONGLY FAVORS IRONCLAD BEING GRANTED THIS
13 VARIANCE.

14 IN CONCLUSION, IRONCLAD APPLIED FOR
15 THIS VARIANCE OVER A YEAR AGO, IN MAY 1996. IT
16 PRESENTED AT THAT TIME THE TECHNOLOGICAL REASONS
17 IN OUR WRITTEN REQUEST WHY WE COULD NOT PUT PCR IN
18 A STRAP BAG. THOSE SAME TECHNOLOGICAL REASONS
19 WHICH EXISTED IN 1995, WHEN WE RECEIVED THE
20 EXEMPTION, ALSO EXIST TODAY. NOTHING HAS CHANGED
21 TO THE PRESENT TIME.

22 WE HAVE RELIED ON THE '95 LAW AND
23 OUR APPLICATION IN MAY OF 1996 TO MAKE OUTSTANDING
24 COMMITMENTS ON AN ONGOING BASIS TO CONTINUE TO
25 SELL STRAP BAGS. WE CANNOT SIMPLY REVERSE THE



1 ENTIRE DIRECTION OF OUR COMPANY OVERNIGHT. IN
2 ORDER TO FULFILL THESE COMMITMENTS, WE MUST BE
3 ABLE TO CONTINUE TO SELL STRAP BAGS AT LEAST
4 THROUGH 1998.

5 FOR ALL THE ABOVE REASONS, I BELIEVE
6 WE'RE LEGALLY ENTITLED TO RECEIVE THIS VARIANCE,
7 AND I WOULD URGE THE BOARD TO GRANT IT.

8 AND FINALLY, I WOULD ASK YOU THIS
9 QUESTION: IF AFTER HEARING ALL OF THIS EVIDENCE
10 ABOUT WHY WE ARE ENTITLED TO A VARIANCE, YOU STILL
11 HAVE A DOUBT, I WOULD RESPECTFULLY ASK YOU THE
12 QUESTION: WHAT ELSE COULD I HAVE DONE IN RUNNING
13 THIS COMPANY OVER THE LAST YEAR AND A HALF TO BE
14 IN A BETTER POSITION TO GET A VARIANCE? I HAVE
15 DONE EVERYTHING THE LAW, THE REGULATIONS HAVE
16 REQUIRED. I HAVE MADE EVERY GOOD FAITH EFFORT
17 POSSIBLE TO MAKE PCR WORK WITH MY STRAP BAG. WE
18 HAVE APPLIED IN A TIMELY MANNER. WE HAVE
19 SUBMITTED THE EVIDENCE. WE HAVE BARED OUR SOUL.
20 WE HAVE MET THE EVALUATION CRITERIA THAT ARE IN
21 YOUR REGULATIONS. THERE IS NOTHING MORE THAT I
22 COULD HAVE DONE. I BELIEVE WE ARE LEGALLY
23 ENTITLED TO THIS VARIANCE. IRONCLAD WANTS TO STAY
24 IN BUSINESS. THANK YOU VERY MUCH.

25 CHAIRMAN PENNINGTON: THANK YOU. NEXT



1 WE'LL HAVE -- I UNDERSTAND THAT THE ORDER THAT
2 THEY ARE GIVEN TO ME IS THE ORDER YOU WANTED TO
3 GO. NANCY VOS, MR. VIBOCH, MR. PICKELMAN, AND MR.
4 O'GRADY. IS THAT CORRECT?

5 UNIDENTIFIED SPEAKER: MR. O'GRADY WAS
6 SECOND IN THAT SEQUENCE.

7 CHAIRMAN PENNINGTON: MS. VOS AND THEN
8 O'GRADY.

9 MS. VOS: BILL O'GRADY WILL GO FIRST.

10 CHAIRMAN PENNINGTON: O'GRADY, THEN VOS,
11 THEN VIBOCH AND PICKELMAN. DOES THAT MEET WITH
12 YOUR -- OKAY. MR. O'GRADY REPRESENTING TALCO
13 PLASTICS.

14 MR. O'GRADY: MR. CHANDLER, MEMBERS OF
15 THE BOARD, AND STAFF, GOOD AFTERNOON. MY NAME IS
16 BILL O'GRADY, GENERAL MANAGER OF TALCO PLASTICS,
17 POSTCONSUMER DIVISION OF POSTCONSUMER PRODUCTS
18 DIVISION LOCATED IN LONG BEACH, CALIFORNIA. JOHN
19 SHEDD HAS ALWAYS BEEN BETTER AT THIS THAN I AM.
20 I'LL TRY TO BE AS BRIEF AS POSSIBLE.

21 THE INDENT OF PUBLIC RESOURCES CODE
22 42298 REGARDING THE IRONCLAD VARIANCE WAS TO
23 PROVIDE TEMPORARY EXEMPTION FOR THE EXPRESS
24 PURPOSE OF ALLOWING A PARTICULAR COMPANY MORE TIME
25 TO COMPLY WITH THE ORIGINAL TRASH BAG LAW. IT WAS



1 NOT INTENDED TO PROVIDE AN AVENUE FOR PERMANENT
2 EXEMPTION.

3 JERRY HART'S ANALYSIS PRESENTED TO
4 THE BOARD PRIOR TO TODAY'S HEARING STATES THAT IN
5 1996 IRONCLAD REPORTED 1995 PCR USAGE AT A LEVEL
6 OF 28 PERCENT. ALTHOUGH IRONCLAD HAS OUTLINED IN
7 GREAT DETAIL THEIR TECHNOLOGICAL INNOVATIONS, AS
8 WELL AS THE REASONS WHY THEY CANNOT INCORPORATE
9 PCR INTO THIS PARTICULAR PRODUCT LINE, THERE IS
10 LITTLE EVIDENCE TO SUPPORT THOSE MEASURES IRONCLAD
11 IMPLEMENTED OVER THE PAST TWO YEARS IN AN EFFORT
12 TO CAPTURE THE REMAINING 2 PERCENT PCR CONTENT
13 NECESSARY FOR COMPLIANCE UNDER CURRENT LAW.

14 AGAIN, MR. HART STATES THAT CURRENT
15 LAW AFFORDS ALL BAG MANUFACTURERS THE OPPORTUNITY
16 TO APPLY FOR A VARIANCE, CITING QUALITY AND
17 AVAILABILITY AS A BASIS FOR EXEMPTION. IN
18 ADDITION, UNFORTUNATELY FOR THE PCR -- FOR PCR
19 MARKETS, BAG MANUFACTURERS CAN CIRCUMVENT CURRENT
20 LAW BY DOWNGAUGING THEIR PRODUCTS, THUS
21 ELIMINATING THE NEED FOR ANY EXEMPTION.

22 IN LIGHT OF THE FACT THAT IRONCLAD
23 REPORTED 28 PERCENT PCR USAGE IN 1995, COUPLED
24 WITH THE PROVISION FOR EXEMPTION BASED ON QUALITY
25 AND QUANTITY, IT APPEARS THAT IRONCLAD'S INTEREST



1 IN PURSUING THIS PARTICULAR VARIANCE STEMS FROM
2 OTHER REASONS UNRELATED TO THE USE OF PRC AT ANY
3 PERCENTAGE.

4 MR. LIVINGSTON ALLUDED EARLIER THAT
5 IT MAY BE CUSTOMER DRIVEN WHEN HE INDICATED THAT
6 DOWNGAUGING WAS NOT WHAT THE CUSTOMER WANTED.
7 AND, GENE, PLEASE CORRECT ME IF I MISINTERPRETED
8 YOUR REFERENCE.

9 RELATIVE TO THE EVIDENCE IN SUPPORT
10 OF THE VARIANCE, I ASK THE BOARD TO WEIGH THE
11 FOLLOWING: HAS THE BOARD RECEIVED EVIDENCE THAT
12 SUBSTANTIATE IRONCLAD'S INABILITY TO MODIFY OR
13 ADAPT THEIR EXISTING HEAT-AFFIXED STRAP SEAL BAG
14 MAKING EQUIPMENT TO INCORPORATE PCR? AND EQUALLY
15 IMPORTANT, HAS THE BOARD HEARD SUFFICIENT EVIDENCE
16 OF IRONCLAD'S EFFORT OVER THE PAST TWO YEARS TO
17 INCREASE THE USE OF PCR IN THEIR NONHEAT-AFFIXED
18 STRAP SEAL BAGS?

19 THE INTEGRATED WASTE MANAGEMENT
20 BOARD WAS CREATED TO MANDATE EFFECTIVE WASTE
21 PREVENTION PRACTICES AND FACILITATE THE
22 DEVELOPMENT OF SUSTAINABLE MARKETS FOR RECYCLED
23 GOODS. CLEARLY THE BOARD RECOGNIZES THAT THIS
24 VARIANCE DOES NOT HAVE A POSITIVE EFFECT ON
25 MARKETS FOR PCR OR WASTE DIVERSION IN CALIFORNIA.



1 TO MY KNOWLEDGE, THERE IS NO
2 PROVISION UNDER CURRENT LAW THAT REQUIRES IRONCLAD
3 TO USE PCR IN THEIR HEAT-AFFIXED STRAP SEAL BAG.
4 GRANTING THIS SPECIAL VARIANCE, IN MY OPINION,
5 SENDS THE WRONG MESSAGE. THANKS VERY MUCH FOR
6 THIS OPPORTUNITY.

7 CHAIRMAN PENNINGTON: THANK YOU, MR.
8 O'GRADY. NEXT IS NANCY VOS.

9 MS. VOS: MY NAME IS NANCY VOS, AND I
10 REPRESENT POLY-AMERICA. I HAVE WORKED FOR THEM
11 ALMOST 12 YEARS, AND I HANDLE THE WESTERN REGION
12 FOR THEM.

13 BASED ON ALL OF IRONCLAD'S
14 TESTIMONY, THEY WOULD LIKE YOU TO BELIEVE THAT
15 TECHNOLOGICAL DIFFICULTY SHOULD BE THE ONLY
16 CONSIDERATION IN YOUR DECISION TO GRANT THIS
17 VARIANCE. THE LAW DOES NOT STATE, HOWEVER, THAT
18 YOU SHOULD GRANT THIS VARIANCE SIMPLY BECAUSE
19 IRONCLAD CANNOT AFFIX A STRAP TO A BAG WITH
20 RECYCLED CONTENT. THE CURRENT LAW ASKS YOU TO
21 CONSIDER ALL EVIDENCE RELATING TO THE PETITIONER'S
22 ABILITY TO COMPLY.

23 PLEASE DON'T LET ALL THE
24 TECHNOLOGICAL DATA DISTRACT YOU FROM THE SIMPLE
25 FACT, WHICH IS IRONCLAD CAN COMPLY WITH THE



1 CURRENT LAW WITHOUT SPECIAL EXEMPTION. I WILL
2 SHOW YOU IN JUST A FEW MOMENTS WHY THIS VARIANCE
3 SHOULD NOT BE GRANTED. IT IS BECAUSE IRONCLAD
4 PROVES EVERY DAY THAT THEY CAN MEET THE ANNUAL USE
5 REQUIREMENTS. I HAVE A SHOPPING CART FULL OF
6 MERCHANDISE OVER HERE THAT I PURCHASED IN
7 SACRAMENTO YESTERDAY, THAT I'LL GET TO IN A FEW
8 MOMENTS, THAT SHOULD PROVE THAT.

9 I'M HERE TODAY REPRESENTING NOT ONLY
10 POLY-AMERICA, WHO'S BOTH A TRASH BAG MANUFACTURER
11 AND RECYCLER OF PLASTICS, BUT SEVERAL OTHER
12 MANUFACTURERS AND RECYCLERS. ALTHOUGH IRONCLAD
13 STATES THAT THEY ONLY SELL 2 TO 4 PERCENT OF THE
14 NATIONAL TRASH BAG MARKET, PLEASE UNDERSTAND THAT
15 THIS IS NOT A DAVID VERSUS GOLIATH. THIS IS A
16 DAVID VERSUS DAVID, AND THE EXEMPTION WOULD GIVE
17 ONE DAVID A WEAPON.

18 I HAVE BEEN ASKED TO PRESENT INTO
19 EVIDENCE LETTERS URGING A NO VOTE ON THIS
20 EXEMPTION FROM TWO OTHER MANUFACTURERS. ONE IS
21 NORTH AMERICAN, AND I THINK YOU GUYS ALREADY HAVE
22 THAT ONE, RIGHT?

23 CHAIRMAN PENNINGTON: YES.

24 MS. VOS: I WON'T READ THAT. YOU GUYS
25 CAN LOOK AT THAT IN YOUR OWN TIME. BUT I DO HAVE



1 A LETTER FROM PRESTO PRODUCTS THAT I'D LIKE TO
2 READ REAL BRIEFLY.

3 THIS IS FROM WAYNE WEGNER, THE VICE
4 PRESIDENT OF MANUFACTURING.

5 BOARD MEMBER RELIS: EXCUSE ME. WE DON'T
6 HAVE A LETTER.

7 MS. VOS: NO. HE SENT IT TO ME, AND HE
8 ASKED ME TO -- YEAH, I HAVE A COPY THAT I CAN TO
9 GIVE TO YOU GUYS IF YOU WANT IT ALSO. HE ASKED ME
10 TO READ IT AT THE PUBLIC HEARING.

11 CHAIRMAN PENNINGTON: WE'D LIKE TO SEE IT
12 IF YOU ARE GOING TO ENTER IT INTO THE RECORD.

13 MS. VOS: ABSOLUTELY. I WAS GOING TO
14 SEND IT OVER THERE. I HAVE PLENTY OF COPIES. I
15 CAN REAL BRIEFLY READ IT.

16 (WHEREUPON EXHIBIT 9 WAS MARKED FOR
17 IDENTIFICATION BY THE REPORTER.)

18 MS. VOS: "PRESTO PRODUCTS IS OPPOSED TO
19 IRONCLAD INCORPORATED'S APPLICATION FOR A VARIANCE
20 PURSUANT TO PUBLIC RESOURCES CODE SECTION 42298.
21 WE BELIEVE THE ARGUMENTS IRONCLAD REPRESENTATIVES
22 HAVE PRESENTED IN SEEKING AN EXTENSION OF THE
23 VARIANCE ARE NO MORE VALID FOR ADHESIVE
24 HEAT-AFFIXED STRAP BAG THAN THEY ARE FOR OTHER
25 TRASH BAGS WITH DRAWSTRINGS, HANDLES, PRINTING.



1 ETC.

2 "PRESTO PRODUCTS COMPANY HAS
3 COMPLIED WITH ALL FORMS OF THE CALIFORNIA RECYCLED
4 CONTENT TRASH BAG PROGRAM SINCE ITS INCEPTION. WE
5 ARE ONE OF THE LARGEST PRIVATE LABEL MANUFACTURERS
6 OF TRASH BAGS IN THE UNITED STATES. WHILE IT HAS
7 BEEN EASY TO INCORPORATE THE REQUIRED AMOUNTS OF
8 RPPCM INTO OUR PRODUCTS, WE HAVE ADHERED TO THE
9 REGULATIONS AS SET FORTH BY THE CALIFORNIA
10 INTEGRATED WASTE MANAGEMENT BOARD.

11 "NANCY, WHEN YOU TESTIFY AT THE
12 HEARING ON JULY 24TH REGARDING THIS SUBJECT,
13 PLEASE USE OUR SUPPORT IN OPPOSITION TO IRONCLAD'S
14 REQUEST."

15 FROM A BUSINESS STANDPOINT, THE
16 WHOLE CONCEPT OF THIS VARIANCE SEEMS COMPLETELY
17 UNFAIR AND CREATES AN UNLEVEL PLAYING FIELD.
18 GRANTING THIS VARIANCE WILL PROVIDE ONE COMPANY
19 WITH A DRAMATIC PERFORMANCE ADVANTAGE OVER ALL
20 OTHER MANUFACTURERS.

21 AN ANALOGY THAT I THINK SORT OF
22 TELLS THIS IS IT WOULD BE ALMOST LIKE RELEASING
23 ONE HIGH SCHOOL FOOTBALL TEAM FROM THE REQUIRED
24 DRUG TESTING PROCEDURE BECAUSE THEIR STAR
25 QUARTERBACK IS KNOWN TO PERFORM BETTER ON



1 STEROIDS. WHY SHOULD ONE COMPANY BE GIVEN AN
2 EXCLUSIVE RIGHT TO SELL UNLIMITED QUANTITIES OF
3 TRASH BAGS WITH NO RECYCLED CONTENT IN ANY
4 THICKNESS? EVERY MANUFACTURER HAD TO MAKE
5 MODIFICATIONS TO MEET THE REQUIREMENTS OF THE LAW.
6 WHY SHOULD IRONCLAD BE GIVEN SPECIAL TREATMENT?

7 GENE STATED THAT THEY CAN'T MAKE
8 MODIFICATIONS SUCH AS DOWNGAUGING BECAUSE HE SAYS
9 THAT THE CUSTOMERS DON'T WANT THAT. I'LL SHOW YOU
10 IN A MOMENT THAT MANY OF THEM DO. AND I GUESS IN
11 THEORY, TOO, I JUST WANTED TO SAY THAT WE ALWAYS
12 THOUGHT IT WAS THE LAW THAT DICTATED WHAT HAPPENED
13 AND THEN THE CUSTOMERS HAD TO FALL IN LINE. WE
14 DIDN'T THINK THAT JUST BECAUSE A CUSTOMER DIDN'T
15 WANT A THINNER BAG, THAT THEY SHOULD GET A SPECIAL
16 PROVISION.

17 WITH RESPECT TO THE ENVIRONMENT AND
18 THE GOALS SET FORTH BY THE BOARD, GRANTING THIS
19 VARIANCE SEEMS LIKE IT WOULD HAVE A POTENTIAL
20 ADVERSE EFFECT ON WASTE DIVERSION. THE VARIANCE
21 WOULD PENALIZE THE MANUFACTURERS WHO SPENT THEIR
22 RESEARCH AND DEVELOPMENT MONEY ON RECYCLING AND
23 ARE PRESENTLY COMPLYING WITH THE LAW. IT WOULD
24 REWARD A COMPANY WHO HAS SPENT QUITE EXTENSIVE
25 AMOUNTS OF MONEY ON AFFIXING STRAPS ON BAGS.



1 GIVEN THIS RIGHT, IRONCLAD MAY
2 CONTINUE TO CONVERT MORE AND MORE RETAILERS TO A
3 NONRECYCLED, HIGHER PERFORMANCE, THICK BAG. THIS
4 CAPABILITY COULD LEAD TO A DECREASE IN BOTH SOURCE
5 REDUCTION AND THE USE OF PCR.

6 SOMETHING ELSE THAT HE SAID, ALL MY
7 LITTLE NOTES HERE, BOTH GENE AND JERRY MENTIONED
8 THAT THERE WAS A SIZABLE INCREASE IN SALES OF THE
9 STRAP PRODUCT IN 1996. IF IRONCLAD MOSTLY NOW
10 SELLS OVER .75 STRAP SEALS, DOES THAT MEAN THAT
11 IT'S NECESSARY TO KEEP ALL THOSE ITEMS OVER .75
12 MIL, OR DOES THAT MEAN THAT THEY ARE NOW SELLING
13 MORE THICKER NONRECYCLED BAGS WITH STRAPS AS A
14 RESULT OF HAVING THIS EXEMPTION?

15 THE SINGLE GREATEST REASON, HOWEVER,
16 THAT I BELIEVE THAT THIS VARIANCE SHOULD NOT BE
17 GRANTED IS WHAT I BELIEVE TO BE THE FACT THAT IT'S
18 UNNECESSARY. IRONCLAD VOLUNTARILY BY THEIR OWN
19 CHOICE ALREADY SELLS A TREMENDOUS AMOUNT OF TRASH
20 BAGS THAT ARE UNDER .75 MIL AND, THEREFORE,
21 UNREGULATED.

22 FOR BAGS UNDER .75 MIL, THE
23 TECHNOLOGICAL DIFFICULTY OR EVEN IMPOSSIBILITY OF
24 AFFIXING A STRAP BECOMES COMPLETELY IRRELEVANT.
25 SAYING NO TO THIS EXEMPTION IS NOT BY ANY MEANS



1 SAYING NO TO IRONCLAD'S ABILITY TO PRODUCE AND
2 SELL STRAP SEALED PRODUCT IN CALIFORNIA.

3 WITHOUT THIS VARIANCE, I BELIEVE
4 IRONCLAD CAN CONDUCT BUSINESS AS USUAL WITH ALMOST
5 ALL RETAILERS. TO DEMONSTRATE THIS, I'VE GONE
6 SHOPPING, AND I WOULD LIKE TO PRESENT ACTUAL
7 IRONCLAD TRASH BAGS PURCHASED HERE, ALL IN THE
8 SACRAMENTO AREA, ALL OF WHICH COMPLY WITH CURRENT
9 LAW WITHOUT THE EXEMPTION. I HAVE PRODUCTS FROM
10 HOME DEPOT, ORCHARD SUPPLY, LUCKY, YARD BIRDS, AND
11 CANNED FOODS OUTLET. AND I'D LIKE TO PRESENT THEM
12 AS EXHIBIT WHATEVER YOU WANT TO CALL IT.

13 THESE ARE CANNED FOODS OUTLET. THEY
14 ARE NOT STRAP SEALED PRODUCT. THEY'RE .6 MIL AND
15 .7 MIL. SHOULD I --

16 CHAIRMAN PENNINGTON: NO, I DON'T THINK
17 IT'S -- UNLESS EVERYBODY WANTS TO SEE THEM.

18 BOARD MEMBER JONES: THEY'RE NONHEAT-
19 AFFIXED BAGS.

20 (WHEREUPON EXHIBIT 10 WAS MARKED FOR
21 IDENTIFICATION BY THE REPORTER.)

22 MS. VOS: THEY'RE NONHEAT-AFFIXED, YEAH.
23 LET ME JUST -- I GUESS AT THIS TIME, I TOLD JERRY
24 I'D DO IT, AND IN GOOD CONSCIOUS I WANT TO MAKE
25 SURE THAT YOU GUYS UNDERSTAND. I DON'T PROFESS TO





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1 KNOW IRONCLAD'S EXACT SALES PER ANY ITEM. I DON'T
2 KNOW -- ALL I CAN DO AND THE ONLY THING I FIGURED
3 I COULD DO TO TRY TO ILLUSTRATE MY POINT WAS TO GO
4 IN LIKE A CONSUMER AND PERFORM MY OWN MARKETING
5 SURVEYS AND LOOK ON A SHELF AND SEE WHAT IRONCLAD
6 TENDS TO SELL.

7 WHEN I GO IN A STORE, SOME STORES I
8 WENT INTO DIDN'T HAVE ANY IRONCLAD PRODUCT. THE
9 ONES THAT DID, I PULLED OFF THE SHELF. I KNOW
10 I'VE SHOWN A LOT OF YOUR MARKETING SURVEYS. THOSE
11 WERE MY PERSONAL MARKETING SURVEYS BASED ON WHEN I
12 WALKED INTO A GROCERY STORE OR A HOME IMPROVEMENT
13 CENTER, WHAT I SAW ON THE SHELF. SO IT MAY BE
14 THAT THE PRODUCT OVER .75 MIL WAS THEIR BIGGEST
15 SELLING ITEMS. I DON'T PROFESS TO KNOW ANYTHING
16 LIKE THAT. ALL I CAN TELL YOU IS CLEARLY IRONCLAD
17 DOES ALREADY MARKET AND SELL A TREMENDOUS AMOUNT
18 OF PRODUCT THAT IS UNDER .74 MIL BASED ON THE
19 NUMBER OF ITEMS THAT I SEE ON A SHELF.

20 MS. TRGOVCICH: MR. CHAIRMAN, IF I COULD
21 JUST POINT OUT, MS. VOS HAS JUST DISPLAYED A ROLL
22 OF BAGS FOR YOU. THEY ARE .6 AND .7 MIL, YOU SAY?

23 MS. VOS: CORRECT.

24 MS. TRGOVCICH: THOSE BAGS WOULD BE
25 UNREGULATED. WHILE THEY MAY COMPLY IN THE TRUE



1

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1 SENSE OF THE WORD, THEY ARE NOT REQUIRED TO
2 COMPLY. SO, THEREFORE, THEY'RE IN COMPLIANCE.

3 MS. VOS: RIGHT. THEY'RE IN COMPLIANCE
4 BECAUSE THEY ARE UNREGULATED.

5 MY CONTENTION IS THAT IRONCLAD MAKES
6 A DARN GOOD UNREGULATED BAG. AND WE WOULD HAVE
7 COMPLETE COMPASSION WITH THEIR SITUATION IF, FOR
8 EXAMPLE, THEY COULDN'T PRODUCE A .74 MIL THAT WAS
9 GOOD AND MARKETABLE. OR IF THEY ONLY SOLD STRAP
10 SEAL. BUT THE BOTTOM LINE IS NEITHER OF THOSE
11 THINGS IS TRUE. THEY SELL A TREMENDOUS AMOUNT
12 THAT ARE UNREGULATED ALREADY.

13 I DON'T KNOW IF YOU WANT ME JUST TO
14 LEAVE THIS AS EVIDENCE. EVERYTHING IS LABELED
15 HERE. I DON'T NEED TO GO THROUGH ONE BY ONE, BUT
16 ESSENTIALLY I HAVE BOTH NONSTRAP SEAL AS WELL AS
17 STRAP SEAL PRODUCT. EVERYTHING WITH THE EXCEPTION
18 OF ONE, WHICH I'LL NEED TO GET TO, EVERYTHING IN
19 HERE WAS TAKEN OFF A SHELF AND IS ALREADY IN
20 COMPLIANCE WITHOUT THE EXEMPTION. SO THE
21 EXEMPTION IS NOT NECESSARY FOR ANY OF THESE
22 PRODUCTS TO BE IN COMPLIANCE.

23 MS. TRGOVCICH: SO ARE YOU SAYING THAT
24 THEY ARE OVER OR UNDER -- IS EVERYTHING IN THAT
25 BASKET UNDER .75?



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1 MS. VOS: EVERYTHING WITH THE EXCEPTION
2 OF ONE THING THAT I HAVE TO GET TO IS UNDER .74
3 MIL, PREDOMINANTLY STRAP SEAL, BUT SOME NONSTRAP
4 SEAL AS WELL, SO THAT YOU CAN KIND OF DEMONSTRATE
5 THAT EVEN ON A LOT OF THE NONSTRAP SEAL, THEY MAKE
6 THEM THIN ANYWAYS. THEY MAKE A DARN GOOD THIN
7 BAG.

8 I'M GOING TO TAKE A MOMENT AND GET
9 TO MY ONE LAST PROP. ONE MORE THING, THIS IS WHAT
10 I FOUND IN SACRAMENTO. IRONCLAD ALSO DOES SELL A
11 LOT OF CHAINS THAT ARE JUST BASED IN SOUTHERN
12 CALIFORNIA. AND I HAD MADE A STATEMENT ABOUT
13 APPROXIMATELY 90 PERCENT OF ALL PRODUCTS THAT I
14 FOUND ON THE STORE SHELVES WAS UNDER .75 MIL
15 ALREADY. AND IN THE REST OF SOUTHERN CALIFORNIA
16 CHAINS THAT I'M NOT PRESENTING ANY PRODUCT ON,
17 MOST OF THEM GENERALLY, IF YOU LOOKED AT THE
18 NUMBER OF ITEMS, NINE OUT OF TEN OF THEM WAS UNDER
19 .75 MIL THAT WAS AVAILABLE ON THE SHELF RIGHT NOW
20 WITH ONE EXCEPTION. OKAY.

21 THERE IS, HOWEVER, ONE RETAILER,
22 PRICE COSTCO, WHO CARRIES PRIVATE LABEL TRASH BAGS
23 MANUFACTURED IN PART BY IRONCLAD THAT ARE
24 PREDOMINANTLY OVER .75 MIL. THE REQUEST FOR THIS
25 EXEMPTION REPRESENTS THE DESIRE TO, IN OUR





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1 OPINION, LOCK UP ONE RETAILER WHO PREFERS A THICK,
2 HIGH PERFORMANCE, NONRECYCLED TRASH BAG.

3 UNLIKE ALL THE OTHER RETAILERS THAT
4 I WENT INTO, GOING INTO PRICE COSTCO TWO OF THE
5 NINE ITEMS AVAILABLE FOR SALE ON THE SHELF ARE
6 OVER -- TWO OF THE NINE ARE UNDER AND THE
7 ADDITIONAL PRODUCT, SEVEN OF THE NINE PRODUCTS ARE
8 OVER .75 MIL.

9 IRONCLAD REPRESENTED TO YOU THAT
10 THEIR WHOLE ECONOMIC VIABILITY WAS TIED TO BEING
11 ABLE TO SELL STRAP SEAL. OUR CONTENTION IS THAT
12 THEY WERE IN BUSINESS LONG BEFORE THEY DEVELOPED
13 STRAP SEAL, AND THEY WERE SELLING PRETTY MUCH THE
14 SAME RETAILERS, INCLUDING PRICE COSTCO, PRIOR TO
15 THIS HEAT-AFFIXED SEAL AND PRIOR TO THIS EXEMPTION
16 FOR MANY, MANY YEARS.

17 I EVEN HAVE AN ANCIENT BOX HERE.
18 THIS IS FROM PRICE COSTCO BEFORE THE DAYS OF STRAP
19 SEAL WHEN IRONCLAD WAS SELLING THE PRODUCT JUST
20 BECAUSE THEY MADE A GREAT QUALITY PRODUCT. THIS
21 IS PREEXEMPTION. THERE'S NO STRAP. THEY WERE
22 ALREADY SELLING PRICE COSTCO.

23 HERE'S ONE OF PRICE COSTCO'S ITEMS
24 RIGHT NOW. THIS IS A 13-GALLON -- I THINK IT'S
25 .85. YEAH. .85 MIL.



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TO: [illegible]
FROM: [illegible]
SUBJECT: [illegible]

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1 WHAT WOULD THAT HAPPEN IF THE
2 VARIANCE IS NOT GRANTED? IRONCLAD MAKES IT SOUND
3 LIKE THEY WOULD ABSOLUTELY GO OUT OF BUSINESS.
4 AND WHAT I THINK WOULD HAPPEN BY DISAPPROVING THE
5 EXEMPTION, IT WOULD NOT PRECLUDE THEM FROM DOING
6 BUSINESS WITH ANY OF THEIR EXISTING CUSTOMERS,
7 INCLUDING PRICE COSTCO. PRICE COSTCO WOULD BE
8 FORCED TO DECIDE WHETHER TO DOWNGAUGE, AS MOST ALL
9 OTHER RETAILERS HAVE, OR TO REMOVE THE STRAP AND
10 TO ADD THE APPROPRIATE RECYCLED CONTENT. IN OUR
11 OPINION, TO DENY THIS EXEMPTION WOULD HAVE VERY
12 LITTLE OR NO IMPACT AT ALL ON IRONCLAD.

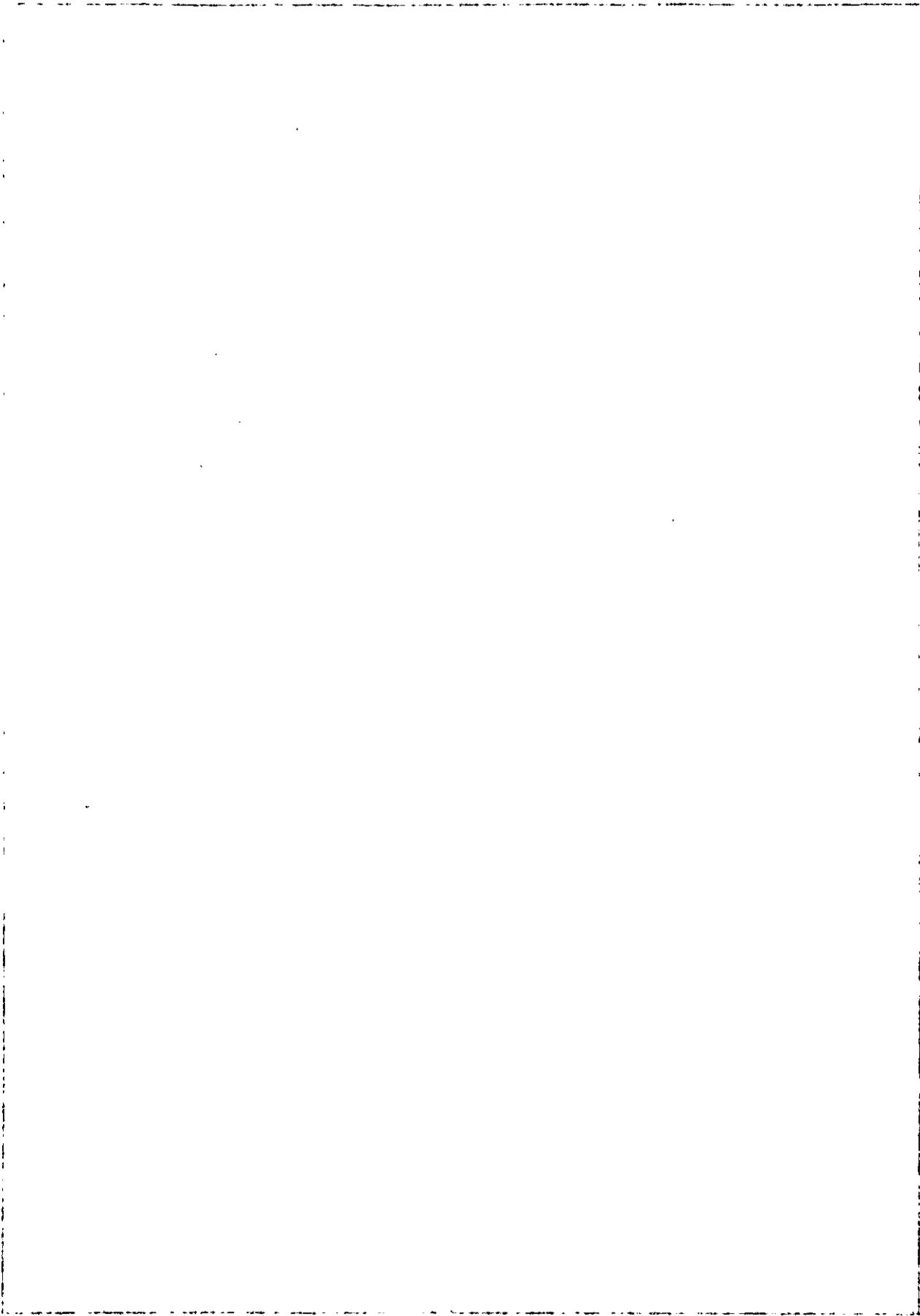
13 I THINK THAT'S PRETTY MUCH IT. IN
14 SUMMARY, GRANTING THIS EXEMPTION IS IN DIRECT
15 CONTRADICTION TO WHAT WE BELIEVE TO BE THE GOALS
16 OF THIS BOARD. THE EXEMPTION IS UNFAIR AND, MOST
17 IMPORTANTLY, UNNECESSARY. THANK YOU.

18 CHAIRMAN PENNINGTON: THANK YOU, MS. VOS.
19 NEXT WE HAVE MR. VIBOCH.

20 MR. VIBOCH: THE PRIOR TWO SPEAKERS
21 REALLY COVERED THE THOUGHTS I WANTED TO EXPRESS.
22 I HAVE REALLY NOTHING ELSE TO ADD TO WHAT THEY
23 HAVE SAID.

24 CHAIRMAN PENNINGTON: THANK YOU. THAT'S
25 APPRECIATED. WE'RE RUNNING OUT OF TIME HERE A





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1 LITTLE BIT. MR. PICKELMAN.

2 MR. PICKELMAN: SAME SITUATION.

3 ELOQUENTLY COVERED AT THIS POINT.

4 BOARD MEMBER GOTCH: MAY I ASK WHO THE
5 TWO SPEAKERS WHO ARE NOT SPEAKING, WHO YOU
6 REPRESENT OR --

7 CHAIRMAN PENNINGTON: SURE. ONE
8 REPRESENTS -- MR. VIBOCH REPRESENTS
9 TRANSAMERICAN -- TRANSWESTERN POLYMERS AND SO DOES
10 MR. PICKELMAN.

11 BOARD MEMBER GOTCH: THANK YOU.

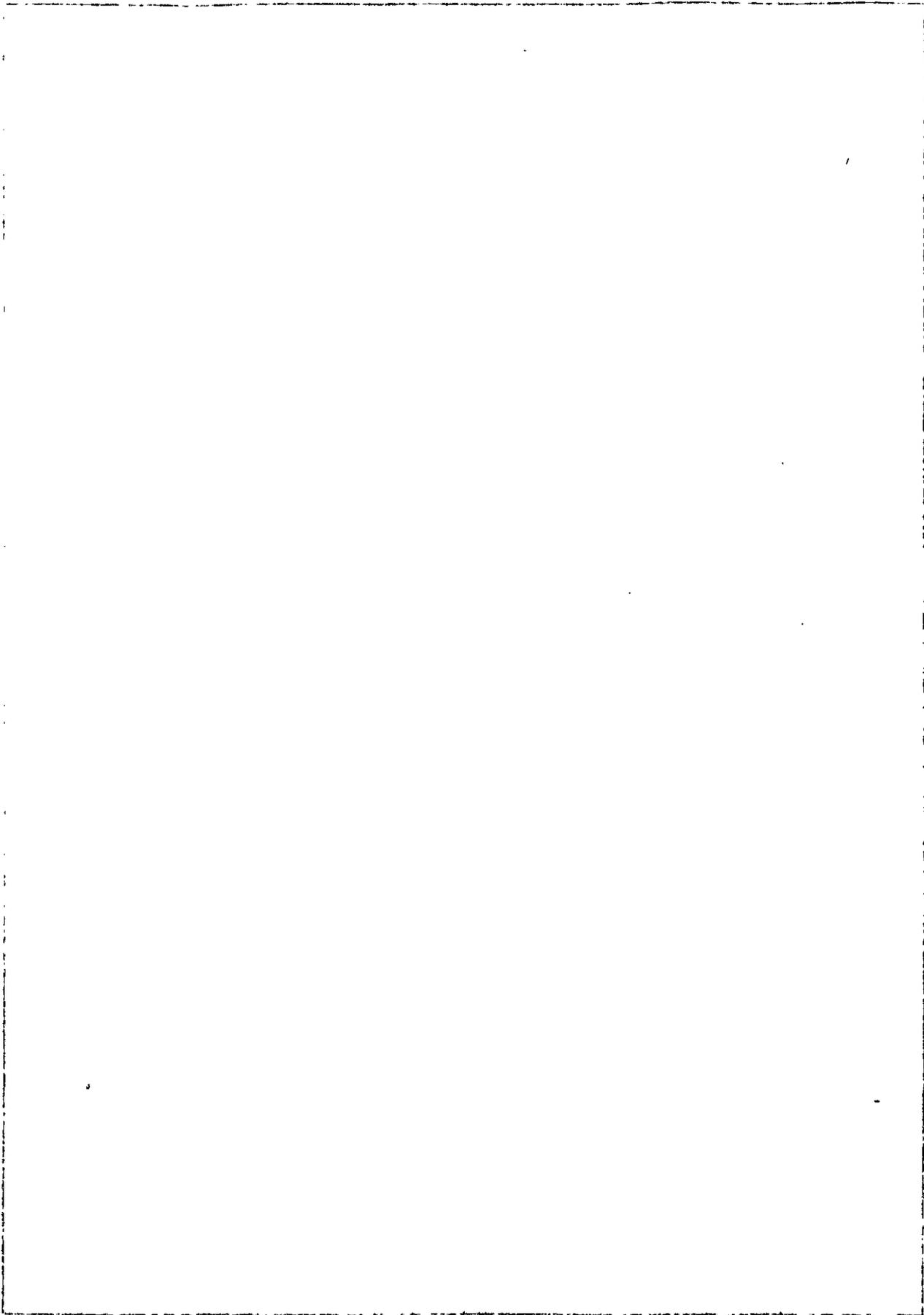
12 BOARD MEMBER FRAZEE: ARE THEY BAG
13 MANUFACTURERS?

14 MR. VIBOCH: YES.

15 CHAIRMAN PENNINGTON: MR. LIVINGSTON.

16 MR. LIVINGSTON: THANK YOU, MR. CHAIRMAN..
17 JUST QUICKLY TO RESPOND TO SOME OF THE POINTS THAT
18 WERE MADE. FIRST TO MR. O'GRADY. HE GOES BACK TO
19 THE 28 PERCENT THAT WE REPORTED PCR MATERIAL IN
20 OUR BAGS IN 1995. AND I HOPE THAT I ADDRESSED
21 THAT REALLY IN ADVANCE OF HIS COMMENT, THAT
22 ESSENTIALLY WE HAD A FEW STRAP TRASH BAG SALES IN
23 CALIFORNIA IN 1995, THAT THOSE SALES TOOK OFF IN
24 1996. AND SO BASICALLY OUR SITUATION FLIPPED
25 FLOPPED FROM 1995 TO 1996. AND SO RATHER THAN





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1 GETTING CLOSER TO THE 30 PERCENT, WE ACTUALLY GOT
2 FARTHER AWAY BECAUSE OF THOSE SALES.

3 HE ALSO RAISED THE ISSUE THAT STAFF
4 HAD RAISED ABOUT WHY ARE WE SEEKING THE VARIANCE?
5 WHY NOT APPLY FOR A QUALITY EXEMPTION? I THINK I
6 COVERED THAT IN MY OPENING STATEMENT AS WELL, THAT
7 WE'RE NOT ELIGIBLE UNDER YOUR REGULATION BECAUSE
8 OF THE WIDE TEMPERATURE VARIANCE THAT YOUR
9 REGULATION PERMITS WE CAN'T ACCOMMODATE.

10 I THINK THAT I AGREE WITH WHAT AT
11 LEAST I UNDERSTOOD MR. O'GRADY TO BE SAYING, THAT
12 DOWNGAUGING ELIMINATES THE MARKET FOR POSTCONSUMER
13 WASTE. AND I DON'T THINK THAT'S WHAT THIS BOARD
14 IS ABOUT. AND OUR COMMITMENT IS TO DO OUR SHARE
15 IN BUYING THAT AND USING THAT IN OUR NONSTRAP
16 TRASH BAGS. AND THE IDEA THAT SOMEHOW WE CAN
17 FORCE CUSTOMERS TO ACCEPT THINNER BAGS BECAUSE
18 WE'RE NOT ABLE THEN TO SELL OUR STRAP BAGS AND
19 HAVE NO OPTION BUT TO DOWNGAUGE IGNORES THE
20 REALITIES IN THE MARKETPLACE, IGNORES WHAT
21 ULTIMATE CONSUMERS WANT, IT CERTAINLY IGNORES WHAT
22 BUYERS OF LARGE CHAINS WANT, AND IT IGNORES WHAT'S
23 GOING ON IN THE MARKETPLACE.

24 OTHER MANUFACTURERS ARE PRODUCING
25 THICKER, HIGH PERFORMANCE TRASH BAGS WITH WHOM



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1 IRONCLAD IS COMPETING. AND THE LARGE GIANTS,
2 PARTICULARLY THE GLAD AND HEFTY AND MAYBE PRESTO
3 PROBABLY AS WELL, ARE ABLE TO LOAD UP IN SOME OF
4 THEIR LOWER PERFORMING BAGS WITH POSTCONSUMER
5 RECYCLED CONTENT AND PROVIDE A VIRGIN, HIGH
6 PERFORMING BAG. AND IF IRONCLAD IS NOT ABLE TO
7 PROVIDE ITS STRAP BAG TO THESE RETAILERS, THAT'S
8 THE KIND OF BAG THAT YOU WILL SEE REPLACING
9 IRONCLAD PRODUCTS IN THE -- ON THE SHELVES.
10 THAT'S AN ECONOMIC AND COMMERCIAL REALITY.

11 WITH RESPECT TO MS. VOS' TESTIMONY,
12 I APPRECIATE HER TELLING YOU THAT SHE DOESN'T
13 REALLY KNOW WHAT OUR MARKET SHARE IS, WHAT KINDS
14 OF PRODUCTS WE SELL, AND WHAT PERCENTAGES. AND I
15 DON'T THINK I NEED TO SAY MUCH MORE ABOUT HER
16 MARKET SURVEY IN FINDING NINE OF TEN PRODUCTS ON
17 THE SHELF BEING BELOW .75. IT DOES NOT REPRESENT
18 AND CANNOT REPRESENT THE TOTALITY OF THE PRODUCTS
19 THAT IRONCLAD SELLS AND, IN FACT, DOES NOT
20 REPRESENT THE TOTALITY. MR. SMITH TOLD YOU THAT
21 BY FAR AND AWAY A SIGNIFICANT MAJORITY OF THE
22 TRASH BAGS WE SELL ARE REGULATED OR .75.

23 BOARD MEMBER CHESBRO: DO YOU HAVE ANY
24 MORE DETAILED OR SCIENTIFIC A SURVEY TO BACK UP
25 THE ASSERTION THAN WHAT SHE HAS PRESENTED?



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1 MR. LIVINGSTON: WE HAVE OUR SALES
2 FIGURES. WE KNOW WHAT WE SELL.

3 BOARD MEMBER CHESBRO: BUT YOU HAVEN'T
4 SUBMITTED ANYTHING TO US TO DETAIL THAT.

5 MR. LIVINGSTON: WELL, MR. CHESBRO, WE'RE
6 RELUCTANT TO TELL YOU WHAT THE PRECISE PERCENTAGE
7 IS. I CAN CERTAINLY TELL YOU WHEN WE SAY THAT
8 IT'S A SIGNIFICANT MAJORITY, IT'S MUCH MORE THAN
9 HALF. CERTAINLY INDICATE THAT.

10 MS. VOS ALSO --

11 CHAIRMAN PENNINGTON: YOU'RE RELUCTANT TO
12 GIVE US THOSE BECAUSE OF THE PUBLIC NATURE OF WHAT
13 YOU GIVE US?

14 MR. LIVINGSTON: YES, MR. CHAIRMAN. IT
15 MAKES IT A LITTLE COMPLEX. I APPRECIATE THAT.
16 BUT I CAN TELL YOU THAT IT'S ABOUT AS FAR AWAY
17 FROM THE 90 PERCENT THAT SHE ESTIMATES IN THE
18 OTHER DIRECTION AS -- YOU KNOW, WHAT SHE IS
19 INDICATING IS COMPLETELY BACKWARDS FROM BASICALLY
20 FROM THE REALITY.

21 MR. SMITH: GENE, IF I CAN, I'LL ALLOW
22 YOU TO SAY -- I'LL TELL YOU MORE THAN 70 PERCENT
23 OF THE BAGS WE SELL IN CALIFORNIA ARE ABOVE .75
24 MIL. I CAN'T -- I DON'T WISH TO GO FURTHER IN
25 TERMS OF RELEASING PROPRIETARY INFORMATION, BUT



1 MORE THAN 70 PERCENT OF THE BAGS WE SELL IN
2 CALIFORNIA ARE ABOVE .75.

3 CHAIRMAN PENNINGTON: SO WE CAN ASSUME
4 THAT IT'S LESS THAN 90, BUT MORE THAN 70.

5 MR. SMITH: IT IS CERTAINLY MORE THAN 70
6 PERCENT ARE ABOVE 70 PERCENT ABOVE .75.

7 MR. LIVINGSTON: YOU COULD PROBABLY
8 ASSUME THAT.

9 MR. SMITH: I'M NOT SMART ENOUGH TO
10 FIGURE OUT WHAT YOU JUST SAID. MORE THAN 70
11 PERCENT ARE ABOVE .75.

12 MR. LIVINGSTON: AND IT'S BIGGER THAN A
13 BREAD BOX.

14 MS. TRGOVCICH: ARE YOU REFERRING TO
15 STRAP MORE THAN 70 PERCENT?

16 MR. SMITH: NO. MORE THAN 70 PERCENT OF
17 OUR BAGS SOLD IN CALIFORNIA ARE ABOVE .75 MIL.

18 MS. TRGOVCICH: STRAP AND NONSTRAP.

19 MR. SMITH: YES. AND THE OVERWHELMING
20 MAJORITY OF THOSE, AND I DO NOT WISH TO GIVE THE
21 PERCENTAGE, BUT I CAN TELL YOU THE OVERWHELMING
22 MAJORITY OF THOSE ARE STRAP BAGS. THANK YOU.

23 MR. LIVINGSTON: IT WAS ALSO PLEASING TO
24 ME TO HEAR MS. VOS TELL YOU THAT IRONCLAD MAKES A
25 DARN GOOD TRASH BAG. I THINK WE'LL PROBABLY GET A



1 COPY OF THE TRANSCRIPT AND USE THAT.

2 SHE MENTIONS PRICE COSTCO, AND I
3 THINK THIS IS A SERIOUS ISSUE THAT WE SHOULD PUT
4 IN PERSPECTIVE. SHE TALKED ABOUT SEVEN OF THE
5 NINE PRODUCTS THAT SHE FOUND ON PRICE COSTCO'S
6 SHELF TO BE ABOVE .75 MIL. YOU SHOULD KNOW THAT
7 IRONCLAD IS ONLY ONE OF THREE OR FOUR
8 MANUFACTURERS WHO SUPPLY PRICE COSTCO. AND I
9 THINK THAT OTHER PEOPLE HERE IN THE ROOM PROBABLY
10 ALSO PROVIDE TRASH BAGS TO PRICE COSTCO.

11 MR. SMITH: AND AGAIN, WHILE I DON'T WISH
12 TO DIVULGE PROPRIETARY INFORMATION ABOUT AN
13 ACCOUNT THAT MS. VOS IS CURRENTLY GOING TO AND
14 ATTEMPTING TO TELL THAT THEY SHOULD BE BUYING
15 POLY-AMERICA BAGS AND NOT IRONCLAD BAGS, BUT I CAN
16 TELL YOU THAT POLY-AMERICA OFFERS A 100-PERCENT
17 VIRGIN BAG TO PRICE COSTCO. AND THE ONLY
18 DIFFERENCE IS THAT THEY HAVE THE OTHER SALES TO
19 LAY OFF THE PCR REQUIREMENTS.

20 SO PLEASE DON'T THINK IF YOU GRANT
21 THIS VARIANCE, WE ARE THE ONLY COMPANY THAT CAN
22 OFFER ANYONE A HUNDRED PERCENT VIRGIN BAG. WE
23 WILL OFFER A STRAP BAG THAT HAS TO CONTAIN THE
24 VIRGIN MATERIAL. COMPETITORS ARE OUT THERE EVERY
25 DAY OFFERING 100 PERCENT VIRGIN PRODUCT AND USING



1 THE ANNUAL AGGREGATE CONCEPT AND MAKING UP THAT
2 USAGE.

3 MR. LIVINGSTON: FINALLY, MS. VOS ALSO
4 SAYS THAT THE TECHNOLOGICAL LIMITATIONS SHOULD NOT
5 BE THE ONLY CONSIDERATION. AND I HOPE THAT THAT'S
6 NOT THE ONLY CONSIDERATION YOU HEARD HERE TODAY.
7 IT'S PHYSICALLY IMPOSSIBLE FOR US TO ACHIEVE 30
8 PERCENT ANNUAL AGGREGATE AVERAGE. AND WE'RE ALSO
9 TELLING YOU FROM AN ECONOMIC VIABILITY PERSPECTIVE
10 THIS VARIANCE IS ALSO ESSENTIAL FOR IRONCLAD.

11 WHAT I'D LIKE TO DO, THEN, IS JUST,
12 IN CONCLUDING, JUST GO THROUGH YOUR CRITERIA.
13 THESE ARE THE ONES THAT ARE SET UP IN YOUR
14 REGULATIONS.

15 THE FIRST CRITERIA UNDER 1(A) IS
16 WHETHER THE EVIDENCE PRESENTED DEMONSTRATES THAT
17 THE PETITIONER CANNOT FOR TECHNOLOGICAL OR OTHER
18 REASONS ACHIEVE THE ANNUAL AGGREGATE USE
19 REQUIREMENT. AND YOU HEARD THE TESTIMONY. WE
20 DON'T HAVE ENOUGH NONSTRAP TRASH BAGS TO ACHIEVE
21 THE 30 PERCENT.

22 YOU HEARD THE TESTIMONY ABOUT THE
23 TECHNOLOGICAL LIMITATIONS. BECAUSE OF THE MELT
24 TEMPERATURE VARIATION IN TRASH BAGS CONTAINING
25 POSTCONSUMER RECYCLED MATERIAL, WE DO NOT, AGAIN



1 BECAUSE OF THE NARROW TOLERANCES OF OUR STRAP SEAL
2 MACHINE, CANNOT ATTACH A STRAP TO THAT KIND OF A
3 TRASH BAG.

4 IT'S NOT THAT WE HAVEN'T TRIED TO
5 FIND A COMPATIBLE POSTCONSUMER RECYCLED MATERIAL.
6 YOU HEARD GARY RUTLEDGE TALK ABOUT CHECKING WITH
7 OVER 60 SUPPLIERS AND CHOOSING THE BEST THAT THEY
8 COULD PROVIDE, AND IT WAS STILL INCOMPATIBLE.
9 GARY ALSO SAID SOMETHING ELSE THAT I THOUGHT WAS
10 INTERESTING AND THAT WAS NEW TO ME. USING THE
11 DRAWSTRING CONCEPT, WHERE THE DRAWSTRING ITSELF IS
12 SEALED TO ITSELF, CREATES GREATER TOLERANCES,
13 WIDER TOLERANCES. AND IF SOMEHOW IRONCLAD COULD
14 HAVE FIGURED OUT HOW TO PUT THE STRAP ON BOTH
15 SIDES OF THE TRASH BAG, IT TOO THEN COULD HAVE
16 EMPLOYED THE BROADER VARIANCES.

17 BUT IN AN EFFORT TO TRY TO ACHIEVE
18 THAT, WE WERE UNABLE TO DO THAT. HAD WE BEEN ABLE
19 TO DO THAT, THEORETICALLY, AT LEAST, IT SEEMS
20 POSSIBLE THAT WE COULD HAVE USED POSTCONSUMER
21 RECYCLED MATERIAL BECAUSE THEN IT'S LESS CRITICAL
22 ABOUT WHETHER YOU BURN THROUGH THE TRASH BAG
23 ITSELF BECAUSE THEN YOU'RE ATTACHING THE STRAP TO
24 ITSELF, BUT WE WERE NOT ABLE TO DO THAT.

25 THE SECOND CRITERIA IS WHETHER THE



1 EVIDENCE PRESENTED DEMONSTRATES THAT WE
2 MANUFACTURED THE ADHESIVE HEAT-AFFIXED STRAP BAGS
3 PRIOR TO JANUARY 1, 1995. I HOPE THERE IS NO
4 QUESTION ABOUT THAT. YOU HEARD TESTIMONY FROM
5 BOTH GARY, JERRY, AND ALSO THE DOCUMENTS THAT WE
6 PUT INTO EVIDENCE.

7 THEN THE NEXT ONE IS WHETHER THE
8 EVIDENCE PRESENTED DEMONSTRATES THAT THE
9 PETITIONER CANNOT FOR TECHNOLOGICAL REASONS ATTACH
10 HEAT-AFFIXED STRAPS TO TRASH BAGS. AND AGAIN YOU
11 HEARD GARY'S TESTIMONY, THE NARROWS TOLERANCES OF
12 THE STRAP SEAL MACHINE.

13 THE NEXT CRITERIA IS WHETHER THE
14 EVIDENCE PRESENTED DEMONSTRATED THAT THE
15 PETITIONER CANNOT ADJUST THE MANUFACTURING
16 PROCESS. AND THE IDEA OF ATTACHING THAT STRAP TO
17 BOTH SIDES AND ATTACHING IT TO ITSELF WAS ONE OF
18 THE MANUFACTURING PROCESSES THAT WE SOUGHT TO
19 PURSUE, BUT WE WERE UNABLE TO MAKE THAT WORK. AND
20 WE CANNOT, AS WE TALKED ABOUT BEFORE, INCREASE THE
21 LEVEL IN OUR NONSTRAP TRASH BAGS TO ACHIEVE THE
22 AVERAGE AGGREGATE AMOUNT.

23 THE FINAL CRITERIA, AND THIS IS THE
24 BALANCING TEST THAT JERRY SMITH TALKED ABOUT, THIS
25 IS THAT THE BOARD SHOULD ALSO CONSIDER TESTIMONY



1 INDICATING WHAT IMPACT GRANTING THE VARIANCE WILL
2 HAVE ON WASTE DIVERSION IN CALIFORNIA AND THE
3 MARKET FOR POSTCONSUMER RECYCLED MATERIAL.

4 GIVEN THE FACT THAT IRONCLAD HAS 2
5 TO 4 PERCENT OF THE MARKET AND THAT SOME PORTION
6 OF ITS PRODUCTS IS USING POSTCONSUMER RECYCLED
7 MATERIAL, THE IMPACT ON THE MARKET FOR
8 POSTCONSUMER RECYCLED MATERIAL WILL BE VERY, VERY
9 MINOR. AND CONTRAST THAT WITH THE IMPACT WHAT
10 DENYING THE VARIANCE WOULD HAVE ON IRONCLAD, WE
11 WOULD URGE YOU TO GRANT THE VARIANCE. THANK YOU
12 VERY MUCH FOR YOUR TIME.

13 CHAIRMAN PENNINGTON: THANK YOU, MR.
14 LIVINGSTON. OKAY. QUESTIONS? ANY QUESTIONS?

15 BOARD MEMBER RELIS: I HAVE A QUESTION
16 BACK TO THE 28-PERCENT FIGURE, IF WE COULD PURSUE
17 THAT A MOMENT. OKAY. IN 1995 -- I BELIEVE IT WAS
18 '95 -- IT WAS 28 PERCENT. THEN YOU SAID THAT
19 THE -- I BELIEVE ALL OF YOU SAID OR BOTH OF YOU
20 SAID THIS, THAT THE HEAT-AFFIXED LABEL APPROACH
21 CAME INTO EFFECT AND THE GAP GREW.

22 DOES -- DO WE HAVE SOME IDEA FROM
23 STAFF AND IN YOUR -- I DON'T WANT YOU TO DIVULGE A
24 NUMBER HERE -- BUT WHAT 28 PERCENT REPRESENTED IN
25 TONNAGE?



1 MR. SMITH: YOU DO HAVE IN OUR '95
2 CERTIFICATION FORM, WE INDICATED THE TOTAL TONS OF
3 PCR THAT WE USED. AND ALSO IN THE '96 REPORT,
4 THEY WERE ACTUALLY FAIRLY CLOSE, EVEN THOUGH WE
5 WERE SUCCESSFUL IN INTRODUCING STRAP BAGS INTO
6 CALIFORNIA. WE STILL WERE ABLE TO PUT IN SOME PCR
7 IN OUR NONSTRAP.

8 BOARD MEMBER RELIS: SO WOULD I DERIVE
9 FROM THAT, IF I WERE TO FOLLOW THIS LOGIC OUT,
10 THAT THE TONNAGE IS GOING DOWN FROM THAT '95 DATE?

11 MR. SMITH: IT WAS LESS.

12 BOARD MEMBER RELIS: IT WAS INVERSE.

13 MR. SMITH: IN '96 -- IN '96 IT WAS
14 ABOUT -- AGAIN, THE CERTIFICATION FORM SHOWS THE
15 NUMBERS. IT WAS A LITTLE BIT -- I'M NOT REAL GOOD
16 AT MATH, BUT IT LOOKS LIKE TO ME, I HAVE THE
17 NUMBERS IN FRONT OF ME, MAYBE 10 PERCENT LESS IN
18 '96 THAN IT WAS IN '95, THE TONS OF PCR THAT WE
19 USED. MAYBE -- IT LOOKS LIKE, JUST FROM QUICKLY
20 LOOKING AT THESE NUMBERS, ABOUT 10 PERCENT LESS IN
21 '96 THAN IT WAS IN '95.

22 AND AGAIN, IT'S OUR HOPE THAT IF
23 WE'RE SUCCESSFUL IN DEVELOPING NONSTRAP BUSINESS,
24 THAT WE'LL BE ABLE TO CONTINUE TO -- OUR GOAL IS
25 NOT TO TAKE SOMEONE THAT'S BUYING THE STRAP AND IS



1 REAL HAPPY WITH IT AND IT TOOK US TWO OR THREE
2 YEARS TO GET THEM TO BUY THE STRAP, OUR GOAL IS
3 NOT NOW TO GO TO THEM AND SAY, "WE DIDN'T REALLY
4 MEAN IT A COUPLE YEARS AGO WHEN WE TOLD YOU THIS
5 WAS MUCH BETTER. GO BUY THIS OTHER." OUR HOPE,
6 CANDIDLY, AS I INDICATED, IS WE WERE TRYING TO
7 DEVELOP NEW NONSTRAP BUSINESS BY OFFERING A TYPE
8 OF BAG THAT WE'VE NEVER OFFERED BEFORE.

9 BOARD MEMBER RELIS: ON THAT POINT, I'VE
10 HEARD TWO DIRECTIONS, THEN, THAT YOU ARE SAYING
11 YOU INTEND TO GO IN. ONE IS TO CONTINUE THE
12 NONGROWTH OF THE NONSTRAP BUSINESS, WHICH WOULD
13 GIVE YOU, PRESUMABLY, AN ABILITY TO DO WHAT THE
14 OTHER MANUFACTURERS HAVE SAID THEY'RE DOING OR HOW
15 THE MARKETPLACE IS CHARACTERIZED.

16 AND I WANT TO STAY AS FAR AS AWAY
17 FROM THE MARKETPLACE CONSIDERATIONS AS POSSIBLE
18 BECAUSE I DON'T THINK THAT'S OUR BUSINESS HERE.
19 OKAY.

20 GIVEN THAT, THEN YOU'VE ALSO SAID
21 THAT YOU'RE INTERESTED IN PURSUING STILL THE
22 RESEARCH FOR YOUR ABILITY TO USE PCR IN THE
23 HEAT-AFFIXED LABEL FRAMEWORK. BUT I HAVE NOT
24 HEARD ANY INDICATION THAT THAT'S JUST AN UNENDING
25 PROBLEM. I MEAN THE WAY IT'S BEEN CHARACTERIZED



1 IS YOU'VE BEEN WORKING ON IT SEVERAL YEARS. BUT
2 THERE'S BEEN NO BREAKTHROUGH. THERE'S NO PROGRESS
3 IN THAT FRONT. AND SO THERE'S NO LIGHT AT THE END
4 OF THAT TUNNEL THAT YOU CAN GIVE US HERE. IS THAT
5 A FAIR CHARACTERIZATION?

6 MR. LIVINGSTON: I THINK THAT IS, MR.
7 RELIS, WITH RESPECT TO FINDING A POSTCONSUMER
8 MATERIAL THAT CAN WORK. I THINK THAT WHERE THERE
9 IS SOME POTENTIAL HOPE IS IN SOME MODIFICATIONS TO
10 THE PROCESS, TO THE EQUIPMENT, AND THAT WOULD BE
11 THE THING THAT WE'D PURSUE WITH ADDITIONAL
12 RESEARCH AND DEVELOPMENT.

13 MR. SMITH: LET ME TRY TO TAKE A CRACK
14 ALSO. LET ME BE BLUNT. MY GOAL IS TO CONTINUE TO
15 BE ABLE TO SELL STRAP BAGS. I AM A REALIST TO
16 KNOW THAT IF I GET THIS VARIANCE THROUGH THE END
17 OF '98, IT WILL, LET US SAY, NOT BE AN EASY
18 PROCESS TO GET IT EXTENDED BEYOND THAT TIME. THIS
19 HASN'T BEEN AN EASY PROCESS SO FAR. SO I KNOW
20 THAT I WANT TO SELL STRAP BAGS, BUT I ALSO KNOW
21 THAT I HAVE TO CONTINUE TO FIND A WAY TO SEE IF
22 THERE'S SOMETHING CAN BE DONE WHERE WE CAN
23 INTRODUCE PCR INTO THE STRAP BAG BAG.

24 SO I'M GOING TO CONTINUE. SO IF YOU
25 ARE ASKING ME DO I KNOW THAT I CAN DO THAT AT THIS



1 TIME, I DON'T. HAVE WE BEEN UNSUCCESSFUL SO FAR?
2 YES. ARE WE GOING TO CONTINUE TO TRY? THE ANSWER
3 IS YES.

4 AT THE SAME TIME, ON A PARALLEL
5 TRACK, I'M GOING TO TRY TO DEVELOP MORE NONSTRAP
6 BUSINESS SO THAT IF I AM -- IF I DO GET THIS
7 VARIANCE THIS TIME, AND WE HAVE TO TALK ABOUT THIS
8 AGAIN, MAYBE I'M GOING TO HAVE AN ABILITY AT THAT
9 TIME TO USE MORE PCR THAT I'M NOT NOW ABLE TO USE
10 IN THE STRAP BAGS, BUT TAKE SOME OF THAT PCR AND
11 USE IT IN MY NONSTRAP. I'LL HAVE MORE NONSTRAP
12 PRODUCT IN THAT MATHEMATICAL DILEMMA THAT WE TODAY
13 FACE. I DON'T KNOW IF IT WILL BE ELIMINATED, BUT
14 IT WILL BE LESSENER.

15 HAVE I ANSWERED YOUR QUESTION, MR.
16 RELIS? I'M TRYING TO PROCEED ON TWO TRACKS.

17 BOARD MEMBER RELIS: YOU ANSWERED IT AS
18 BEST YOU CAN, YES.

19 CHAIRMAN PENNINGTON: ANY OTHER
20 QUESTIONS? IF NOT, I'D LIKE TO --

21 BOARD MEMBER FRAZEE: JUST BASED ON THE
22 NO OTHER QUESTIONS, I WAS GOING TO MAKE A MOTION.

23 CHAIRMAN PENNINGTON: I'VE GOT ONE TOO.

24 BOARD MEMBER FRAZEE: I WAS GOING TO MOVE
25 THE ADOPTION OF RESOLUTION 97-336, AND UNDER THE



1 RESOLVED CLAUSE, OPTION 1, WHICH APPROVES
2 IRONCLAD'S PETITION FOR A VARIANCE FOR THE MAXIMUM
3 OF TWO YEARS TO BE EFFECTIVE JANUARY 1, '97,
4 THROUGH DECEMBER 1, '98, AND THEN STRIKING 2, 3,
5 AND 4.

6 CHAIRMAN PENNINGTON: OKAY. I WONDER --

7 COMMITTEE SECRETARY: WHAT ARE YOU
8 READING FROM, BOB?

9 BOARD MEMBER FRAZEE: FROM THE RESOLUTION
10 ITSELF THAT'S IN THE PACKET.

11 MS. TRGOVCICH: PAGE 391 OF THE PACKET.

12 CHAIRMAN PENNINGTON: I WONDER IF YOU
13 WOULD ACCEPT ADDING TO THAT THAT THE VARIANCE
14 WOULD BE EFFECTIVE JANUARY 1, '97, THROUGH
15 DECEMBER 31, '98, WITH A REVIEW OF THE VARIANCE
16 UNDER PRC CODE 42298(B)(4) IN JUNE OF '98. IN
17 OTHER WORDS, WE'D COME BACK AND LOOK AT IT. WE'D
18 SET A HEARING DATE IN DECEMBER, COME BACK AND LOOK
19 AT IT NEXT JUNE, BUT THEY'D BE ABLE TO RUN THROUGH
20 THE YEAR.

21 BOARD MEMBER FRAZEE: YES, I WOULD ACCEPT
22 THAT. JUST A THOUGHT ON THAT IS IF THEY WERE
23 GOING TO APPLY FOR ANOTHER VARIANCE, THEY WOULD
24 HAVE TO BE APPLYING BY THAT TIME ANYWAY.

25 CHAIRMAN PENNINGTON: FINE:



1 BOARD MEMBER FRAZEE: SO THAT MIGHT
2 COINCIDE WITH THAT.

3 CHAIRMAN PENNINGTON: I'LL SECOND YOUR
4 MOTION.

5 BOARD MEMBER CHESBRO: MR. CHAIRMAN, I'M
6 OPPOSED TO GRANTING A VARIANCE AND FOR SEVERAL
7 REASONS. FIRST OF ALL, I DON'T BELIEVE THAT
8 ADEQUATE EVIDENCE HAS BEEN SUBMITTED, IN SPITE OF
9 ALL THE TECHNICAL DESCRIPTION OF THEIR PROCESSES,
10 THAT THEY ARE UNABLE TO COMPLY. EVEN IF THEY'RE
11 UNABLE TO COMPLY BY MEETING THE RECYCLED-CONTENT
12 REQUIREMENT, IRONCLAD COULD MEET THE REQUIREMENT
13 BY DOWNSIZING TO .74 MIL, WHICH, WHILE IT'S NOT
14 RECYCLED CONTENT, IT'S BETTER THAN NEITHER OF THE
15 TWO CHOICES THAT ARE IN THE LAW, WHICH IS RECYCLED
16 CONTENT OR DOWNSIZING, WHICH IS A FORM OF SOURCE
17 REDUCTION.

18 SO IT'S THE LEAST DESIRABLE OF THE
19 THREE ALTERNATIVES. I WILL NOT DISAGREE WITH MR.
20 LIVINGSTON'S CONTENTION THAT RECYCLED CONTENT IS
21 THE GOAL OF THE LAW, BUT I THINK THE LEGISLATURE
22 CLEARLY SAID THAT IF YOU SOURCE REDUCE, THAT
23 THAT'S A WAY OF COMPLYING. AND I DO THINK THAT'S
24 A METHOD OF COMPLIANCE THAT THEY'RE CAPABLE OF
25 ACHIEVING.



1 AND I WOULD DISAGREE WITH THE
2 EARLIER STATEMENT THAT THE QUESTION OF COMPETITIVE
3 ADVANTAGE OR DISADVANTAGE IS NOT AN ISSUE. I KNOW
4 IT'S A DANGEROUS AREA FOR US TO GET INTO, BUT I
5 BELIEVE THE GRANTING OF THIS VARIANCE GIVES
6 IRONCLAD AN UNFAIR COMPETITIVE ADVANTAGE IN THE
7 MARKETPLACE, WHICH IS NOT NEUTRAL WITH REGARDS --
8 THE GRANTING OF THE VARIANCE WOULD NOT BE NEUTRAL
9 WITH REGARDS TO THE COMPETITIVE ISSUE. IT IS, IN
10 FACT, THE GRANTING OF A COMPETITIVE ADVANTAGE,
11 WHICH -- AND THAT INTRODUCES TO ME THE ISSUE OF
12 WHETHER OR NOT THERE'S A LEVEL PLAYING FIELD. SO
13 I'M GOING TO BE VOTING AGAINST THE MOTION.

14 BOARD MEMBER RELIS: MR. CHAIR, I HAVE A
15 COUPLE THINGS TO SAY. I'VE GOT A PROBLEM WITH THE
16 EXEMPTION BASED ON WHAT I'VE HEARD. AND I WANTED
17 TO PERHAPS, AFTER WE VOTE THIS OUT, MAYBE
18 INTRODUCE ANOTHER IDEA.

19 BUT I GO DOWN THE LIST OF THE
20 REASONS FOR OUR FINDINGS, AND I FIND ON MATTER A,
21 WHETHER THE EVIDENCE PRESENTED DEMONSTRATES THE
22 PETITIONER CANNOT FOR TECHNICAL REASONS OR OTHERS
23 USE -- MEET THE REQUIREMENTS. I PROBABLY AGREE
24 WITH THAT ONE. I PROBABLY AGREE WITH B, C,
25 UNDETERMINED ABOUT D. I REALLY CAN'T MAKE THAT



1 EVALUATION.

2 IT'S NO. 2 -- I'M SORRY. YES, IT'S
3 NO. 2 THAT I FIND THE LARGEST PROBLEM WITH. AND
4 THAT IS WHAT THIS SIGNALS FOR POSTCONSUMER USE IN
5 THE STATE. WE'VE GOT A LOT OF PROBLEMS IN
6 MAINTAINING THE PROGRESS WE'VE MADE IN SUPPORTING
7 THE POSTCONSUMER INDUSTRY THAT HAS BEEN BUILT UP
8 HERE. AND I SEE CONTINUING EROSION IN THAT. SO I
9 HAVE A PROBLEM THERE.

10 SO I'M JUST STATING THAT. WE ALSO
11 HAVE FIVE MANUFACTURERS HERE WHO ARE TESTIFYING
12 EITHER DIRECTLY OR INDIRECTLY AGAINST THIS MEASURE
13 AND ONE RESIN PRODUCER. SO THAT TROUBLES ME, THAT
14 WE'VE HAD MANY INSTANCES BEFORE THE BOARD WHERE
15 WE'VE HAD REGULATORY ISSUES THAT -- WHERE WE'VE
16 BEEN ABLE TO RESOLVE THE DIFFERENCES BETWEEN THE
17 DIFFERENT PARTIES, AND IT DOESN'T SEEM LIKE WE'VE
18 BEEN ABLE TO DO THAT HERE.

19 BOARD MEMBER JONES: MR. CHAIRMAN.

20 CHAIRMAN PENNINGTON: LET ME SAY ONE
21 THING HERE, THAT I CERTAINLY WOULD DISCOUNT THE
22 LETTER FROM PRESTO PRODUCTS. THEY SAY THEY
23 DISAGREE WITH WHAT THE ARGUMENTS ARE. THEY'RE NOT
24 EVEN HERE TO HEAR THEM.

25 MS. VOS: THEY'RE TALKING ABOUT THE



1 MAILED TESTIMONY.

2 CHAIRMAN PENNINGTON: WELL, THEY SHOULD
3 SAY THAT. GO AHEAD.

4 BOARD MEMBER JONES: I THINK IT'S REALLY
5 IMPORTANT. I AGREE WITH MR. RELIS, THAT WE'VE GOT
6 TO GO DOWN THIS LIST OF CRITERIA AND BASE THIS ON
7 THE EVIDENCE THAT IS PRESENTED. I THINK THE
8 EVIDENCE IS PRESENTED TODAY ON THIS STRAP MACHINE,
9 AND THE TIMING OF THAT. YOU KNOW, WE'VE GOT A
10 REAL ISSUE WITH WHEN THE LAW BECAME -- WHEN THE
11 LAW WENT INTO EFFECT. THAT'S PART OF THE
12 EVIDENCE.

13 THE OTHER THING IS THAT'S A PRETTY
14 INCREDIBLE MACHINE TO DEVELOP BY IN HOUSE TO BE
15 ABLE TO START A PRODUCT LINE. TO END UP WITH \$10
16 MILLION IN DEBT IN RESEARCH AND DEVELOPMENT, TO GO
17 DOWN A ROAD TO BE ABLE TO COMPETE BEFORE THE LAW
18 WAS EVER ENACTED OR EVER THOUGHT OF BEING ENACTED,
19 AND TRY TO PAY THAT LOAN OFF, PAY THAT STUFF OFF
20 IN ANY SMALLER TIME, WHILE WE MAY NOT WANT TO SEND
21 OUT A MESSAGE TO -- ON PCR, WHAT KIND OF MESSAGE
22 DO WE SEND OUT TO EVERYBODY THAT YOU CAN INVEST
23 \$10 MILLION, THE LEGISLATURE CREATES A LAW,
24 LEGISLATURE AT THE SAME TIME CREATES A VARIANCE
25 BASED ON TESTIMONY AND EVIDENCE, AND WE DISCOUNT



1 THAT. WE LET 50 PEOPLE GO OUT OF WORK IN TUSTIN.
2 WE INCREASE THE VIABILITY OF OTHER COMPANIES, WHO
3 BY THE NATURE OF THEIR SIZE, AND IT WAS PART OF
4 THE TESTIMONY WAS THERE ARE VIRGIN MIL BAGS OVER
5 .75 THAT WERE BEING MARKETED, BUT BECAUSE OF THE
6 SIZE OF THE COMPANY, IT'S NOT A BIG DEAL.

7 THEY'RE STILL OUT MARKETING VIRGIN
8 MATERIAL EVERY DAY. THIS COMPANY IS SAYING,
9 THROUGH TESTIMONY, THAT THE ONLY WAY THAT THEY CAN
10 CONTINUE IN BUSINESS, KEEP THESE PEOPLE WORKING,
11 IS TO HAVE THIS LEGAL VARIANCE AND TO DEVELOP THE
12 LINES AND DEVELOP THE SALES IN PCR CONTENT BAGS
13 THAT ARE NOT STRAP ATTACHED.

14 I THINK THAT'S -- I MEAN WE CAN -- I
15 JUST REALLY HOPE WE DEAL WITH THE EVIDENCE BECAUSE
16 THE EVIDENCE THAT -- I MEAN I HEARD ONE TESTIMONY
17 SAY, "GEEZ, THIS IS JUST NOT FAIR," YOU KNOW.
18 WELL, I DON'T KNOW HOW -- FAIR TO WHO? YOU KNOW,
19 I MEAN IT'S NOT FAIR.

20 THEY CAME UP WITH A TREMENDOUS ITEM.
21 I MEAN IF THERE WAS NO PRC CODE INTENT, THAT'S A
22 HELL OF A -- THAT'S INCREDIBLE THAT SOMEBODY COULD
23 THINK OF THAT MACHINE IN HOUSE TO BE ABLE TO
24 MARKET A PRODUCT. THAT -- THAT'S WHAT THIS IS ALL
25 ABOUT.



1 THEY WERE ALL -- I MEAN TESTIMONY BY
2 MS. VOS SAYS IRONCLAD WAS ALREADY IN PRICE COSTCO
3 PRIOR TO EVER INVENTING THIS. WHEN THEY INVENTED
4 IT, THEIR MARKET SHARE WENT UP. THAT'S WHAT
5 EVERYTHING IS ABOUT. GIVE THEM TWO YEARS TO END
6 UP SELLING MORE BAGS WITH PRC IN IT -- PCR IN IT
7 SO THAT THEY CAN COME INTO COMPLIANCE, BUT ALL
8 WE'RE DOING IS -- \$10 MILLION IN DEBT AND NO TIME
9 TO SELL IT OFF AND PUTTING 50 PEOPLE OUT OF WORK
10 ON A PRODUCT THAT'S OBVIOUSLY WORKING, PEOPLE WANT
11 THE PRODUCT, AND WE'RE TALKING ABOUT SOMEBODY
12 THAT'S GOT 1 PERCENT OF THE TRASH BAG BUSINESS IN
13 THE UNITED STATES.

14 THE MESSAGE IS IF YOU GET THIS -- IF
15 YOU GET THIS VARIANCE, YOU ARE GOING TO WORK
16 AWFULLY HARD IN DEVELOPING OTHER LINES THAT GET
17 CONTENT OUT THERE. THERE'S PEOPLE -- THERE WAS
18 SOMEBODY FROM APC HERE. THEY KNOW HOW I FEEL
19 ABOUT PLASTIC. I WANT MARKETS FOR IT BECAUSE WE
20 HAD TO COLLECT IT. BUT I MEAN THE TESTIMONY, IN
21 MY MIND, IS REAL OBVIOUS THAT WHAT YOU GUYS HAVE
22 DEVELOPED HERE AND DEVELOPED BEFORE THE LAW EVER
23 CAME INTO EXISTENCE CAN'T COMPLY.

24 IF YOU TRIED 60 RESIN PRODUCERS OF
25 PCR, AND THEY COULD NOT COMPLY WITH YOUR MACHINE,



1 THAT AT LEAST IS AN EFFORT TO TRY TO DO SOMETHING.
2 THERE ARE 60 PEOPLE -- 60 GROUPS THAT CAN'T MEET
3 YOUR SPECIFICATION. SAYS SOMETHING ABOUT HOW
4 TECHNOLOGY EVOLVES. YOU KNOW, IT NEEDS TO
5 CONTINUE TO EVOLVE. WE HAVE TO HAVE A PRODUCT
6 THAT CAN USE THAT PCR. AND I THINK THAT SOME OF
7 THE FOLKS OUT HERE, THE BLENDERS AND THE PEOPLE
8 THAT ARE USING IT, ARE WORKING EVERY DAY TO COME
9 UP WITH A HIGHER QUALITY POSTCONSUMER PRODUCT THAT
10 CAN BE USED. I MEAN I HOPE THEY ARE.

11 BUT I THINK, BASED ON THE EVIDENCE,
12 IT'S PRETTY OBVIOUS THAT THIS MACHINE IS WHAT
13 MAKES -- THAT'S WHAT THE ISSUE IS IS THAT MACHINE.
14 THAT'S WHY THE VARIANCE WAS IN THE LAW, AND I
15 AGREE THAT WE SHOULD GIVE THE VARIANCE.

16 BOARD MEMBER RELIS: I WOULD LIKE TO JUST
17 RESPOND A BIT BECAUSE I THINK THERE ARE A COUPLE
18 OF FACTORS. IF WE'RE SAYING, FIRST OF ALL, THAT
19 THERE WAS NO VARIANCE, THERE HAS BEEN A VARIANCE,
20 AND THE VARIANCE HAS BEEN IN EXISTENCE FOR SEVERAL
21 YEARS.

22 NOW, WHETHER THAT'S ADEQUATE TIME OR
23 NOT TO COME UP WITH AN APPROACH THAT MEETS THE
24 LAW, I DON'T KNOW FOR SURE. I DON'T THINK THAT'S
25 WITHIN OUR KEN REALLY, THE TECHNOLOGICAL



1 BREAKTHROUGHS THAT MIGHT BE NEEDED TO USE IT IN A
2 HEAT-AFFIXED WAY. BUT IN TERMS OF THE PRODUCT MIX
3 THAT IRONCLAD CHOOSES TO OFFER, IT IS POSSIBLE TO
4 COMPLY WITH THE LAW WITHIN THAT MIX. AND THAT'S
5 WHERE MY CONCERN IS.

6 IF WE WERE TO BY EXTENSION, MR.
7 JONES, OF YOUR REASONING APPLY THAT REASONING. WE
8 COULD SAY, WELL, PAPER INDUSTRY INVESTED TEN
9 BILLION IN UTILIZING SECONDARY CONTENT. THEY MADE
10 TECHNOLOGICAL INVESTMENTS IN KEEPING WITH A POLICY
11 DIRECTION THAT THIS STATE AND OTHER STATES WANTED
12 TO GO IN.

13 SO IF WE WERE TO ISOLATE CERTAIN
14 PRODUCTS AND SAY, WELL, THESE WILL BE THE PARADIGM
15 FOR THE AREA IN QUESTION, CALL IT PLASTICS,
16 PLASTIC BAGS, AND THE WHOLE MOVEMENT IS TO
17 NONPOSTCONSUMER USE, I THINK WE'RE GOING IN THE
18 WRONG DIRECTION. SO IT'S NOT THAT I DISBELIEVE
19 IRONCLAD'S ARGUMENT TECHNOLOGICALLY, BUT I'M NOT
20 NARROWING IT TO THAT FACTOR ONLY. THAT'S MY
21 DIFFERENCE. I BELIEVE THEY'VE MADE A GOOD
22 TECHNOLOGICAL ARGUMENT, BUT THAT ISN'T THE SOLE
23 CRITERIA.

24 LET ME -- WELL, I'LL STOP THERE.

25 BOARD MEMBER GOTCH: MR. CHAIR, I WON'T



1 BE VOTING FOR THE VARIANCE EITHER. EXPANDING THE
2 USE OF RECYCLED MATERIALS IN CALIFORNIA IS ONE OF
3 THIS BOARD'S PRIMARY GOALS. AND GRANTING THE
4 VARIANCE WILL SEND A MESSAGE THAT THE BOARD DOES
5 NOT STAND BEHIND MARKETS FOR RECYCLED MATERIALS.

6 CHAIRMAN PENNINGTON: OKAY.

7 BOARD MEMBER FRAZEE: MR. CHAIR, WHAT
8 DRIVES ME TO MY DECISION IS ONE OF ULTIMATE
9 FAIRNESS. THE FACT THAT THIS COMPANY WAS GRANTED
10 A VARIANCE FOR BETTER OR FOR WORSE BY THE
11 LEGISLATURE, AND THE LEGISLATURE SET OUT A
12 PROCEDURE FOR AN EXTENSION OF THAT VARIANCE, THIS
13 COMPANY IN GOOD FAITH APPLIED FOR THAT VARIANCE
14 SOME -- NEARLY A YEAR AGO, WAS THAT CORRECT? AND
15 IT WAS BECAUSE OF OUR OWN INTERNAL PROBLEMS OF NOT
16 HAVING REGULATIONS IN PLACE TO ACCOMMODATE THAT
17 VARIANCE THAT BROUGHT US TO THIS DATE.

18 SO THEY'RE ALREADY SIX MONTHS INTO
19 NONCOMPLIANCE IF WE FAIL TO GRANT THEM THIS. THE
20 SHUTDOWN TIME, THE CHANGING OF METHODS ARE GOING
21 TO REQUIRE THE BALANCE OF THE YEAR OR MORE. AND
22 SO I JUST BELIEVE, FOR ULTIMATE FAIRNESS, THAT
23 THEY NEED THIS EXTENSION, AT LEAST UNTIL THE END
24 OF NEXT YEAR TO WORK OUT THEIR INVENTORY, WORK OUT
25 THEIR PROBLEMS, AND CHANGE THEIR MIX SO THEY CAN



1 BE IN COMPLIANCE. BUT TO CUT THEM OFF MIDSTREAM
2 IS JUST PATENTLY UNFAIR IN MY VIEW.

3 CHAIRMAN PENNINGTON: WELL, I CERTAINLY
4 AGREE. AND I THINK THAT THE LEGISLATURE PUT THE
5 VARIANCE IN THERE AFTER SOME DEBATE AND HAD
6 SOMETHING IN MIND. I WONDER, THOUGH, IF THERE IS
7 NO -- IF IRONCLAD GOES OUT OF BUSINESS, WHO'S
8 GOING TO PICK UP THE LOSS OF THE PCR THAT THEY'RE
9 NOW USING? I MEAN WE'RE GOING TO LOSE -- WHAT
10 THEY'RE USING NOW, WE'RE GOING TO LOSE THAT TOO.

11 BOARD MEMBER FRAZEE: THAT'S THE
12 COMPETITIVE ADVANTAGE THAT SOMEONE TALKED ABOUT
13 AND WORKS IN THE OPPOSITE DIRECTION.

14 CHAIRMAN PENNINGTON: NO, BUT THEY'RE
15 GOING TO GO -- THEY'RE GOING TO HAVE A BAG THAT
16 IS -- DOESN'T USE ANY PCR EITHER. SO WE'RE
17 LOSING -- BY NOT GRANTING THEM THE VARIANCE, WE'RE
18 GOING TO LOSE THEIR PARTICIPATION IN THE PRC
19 MARKET.

20 OKAY. I GUESS THERE'S NO MORE
21 DISCUSSION. EVERYBODY'S GOT THEIR MIND MADE UP.
22 MS. KELLY, WILL YOU CALL THE ROLL, PLEASE.

23 BOARD SECRETARY: BOARD MEMBER CHESBRO.
24 FRAZEE.

25 BOARD MEMBER FRAZEE: AYE.



1 BOARD SECRETARY: GOTCH.
2 BOARD MEMBER GOTCH: NO.
3 BOARD SECRETARY: JONES.
4 BOARD MEMBER JONES: AYE.
5 BOARD SECRETARY: RELIS.
6 BOARD MEMBER RELIS: NO.
7 BOARD SECRETARY: CHAIRMAN PENNINGTON.
8 CHAIRMAN PENNINGTON: AYE. MOTION FAILS.
9 BOARD MEMBER RELIS: MR. CHAIR, I WANT TO
10 TRY SOMETHING AND SEE IF THERE'S ANY INTEREST IN
11 THIS.

12 OUT OF -- LET ME FIRST GO THROUGH A
13 FEW POINTS. AS I INDICATED EARLIER, I ACCEPT
14 IRONCLAD'S ARGUMENTS THAT IT PROBABLY CAN'T REACH
15 30 PERCENT RCP AND STILL GROW ITS STRAP BAG
16 MARKET. BUT I ALSO NOTE THAT IRONCLAD DID USE A
17 CERTAIN PROPRIETARY TONNAGE OF RECYCLED RESIN IN
18 '95. AND IT'S IN OUR OVERALL INTEREST TO SEE THAT
19 TONNAGE AT LEAST MAINTAINED OR INCREASED. I MEAN
20 THAT'S, AS I SEE IT, AN OVERALL BOARD
21 CONSIDERATION.

22 GIVEN THAT, COULD IRONCLAD MAINTAIN
23 THE SAME TONNAGE LEVEL OF RECYCLED RESINS MORE OR
24 LESS IN ITS NONSTRAP REGULATED BAGS TODAY AS IT
25 USED IN '95? COULD WE SET UP A SYSTEM TO COLLECT



1 SUCH TONNAGE DATA; INCLUDING BOTH '95 BASELINE AND
2 SUBSEQUENT YEARS ON A PROPRIETARY BASIS, AND COULD
3 THIS BE DONE QUICKLY? IF SO, I THINK IT WOULD
4 BE -- AND I WOULD OFFER A MOTION TO ISSUE A
5 VARIANCE TO IRONCLAD CONDITIONAL.

6 CHAIRMAN PENNINGTON: MR. RELIS,
7 UNFORTUNATELY YOU CANNOT ISSUE A MOTION. WE'VE
8 DECIDED. AND I THINK IF THE -- THEY TOLD ME THAT
9 WE COULD ONLY TAKE ONE VOTE ON THIS.

10 BOARD MEMBER RELIS: THAT'S NOT TRUE.

11 MS. BORZELLERI: NO.

12 CHAIRMAN PENNINGTON: I'M SORRY.

13 BOARD MEMBER RELIS: WHAT I'M TRYING TO
14 FRAME BY WAY OF A MOTION WOULD BE TO ISSUE A
15 VARIANCE TO IRONCLAD CONDITIONAL UPON IRONCLAD
16 CERTIFYING THAT IT HAS APPROPRIATELY MAINTAINED OR
17 INCREASED THE TONS OF RECYCLED RESIN USED IN ITS
18 NONSTRAP REGULATED BAGS. THAT'S BASICALLY IT. I
19 DON'T HAVE -- THAT'S KIND OF LIKE HOLDING TO A
20 CONTENT LEVEL.

21 BOARD MEMBER FRAZEE: THAT WOULD
22 ESSENTIALLY BE CONDITION NO. 3 IN THE RESOLUTION.

23 BOARD MEMBER RELIS: YES, THAT'S CORRECT.
24 THAT'S CORRECT.

25 NOW, I REALIZE THAT'S NOT A HAPPY



1 PROPOSAL PROBABLY FROM YOUR END, BUT IT SATISFIES
2 MY CONCERN THAT WE'RE NOT BACKSLIDING.

3 MR. LIVINGSTON: SHOULD WE TRY TO RESPOND
4 TO THAT AT THIS TIME? I SUPPOSE YOUR CHARACTERI-
5 ZATION IS ACCURATE IN TERMS OF NOT BEING A HAPPY
6 RESOLUTION. THE -- YOUR MOTION WOULD BE, AS I
7 UNDERSTAND IT, THEN, THAT THE VARIANCE WOULD BE
8 GRANTED THROUGH THE END OF DECEMBER 1998. SINCE
9 WE'RE NEAR THE END OF JULY NOW, WOULD IT BE
10 APPROPRIATE TO LIMIT THAT CONDITION TO SALES IN
11 1998 SINCE WE DON'T HAVE MUCH ABILITY TO IMPACT
12 THAT IN 1997?

13 BOARD MEMBER RELIS: WELL, I'M
14 INTERESTED -- LET ME JUST MAKE SURE I UNDERSTAND
15 WHAT YOU ARE DOING. THE FIGURE, THE BENCHMARK, I
16 WAS USING WAS YOUR '95 FIGURE. YOU HAD A TONNAGE
17 AMOUNT LINE THAT WAS VERY CLOSE TO OUR REQUIRE-
18 MENT.

19 MR. LIVINGSTON: YES.

20 BOARD MEMBER RELIS: THAT'S WHAT I'M
21 INTERESTED IN, BOTTOM LINE.

22 MR. LIVINGSTON: I UNDERSTAND. RIGHT.
23 AS MR. SMITH TESTIFIED, THAT DROPPED SOME IN 1996.

24 BOARD MEMBER RELIS: THAT'S CORRECT. I
25 REALIZE THAT'S PROBABLY WHY IT WOULDN'T BE A HAPPY



1 PROSPECT.

2 MR. LIVINGSTON: I DON'T KNOW WHERE WE
3 ARE IN 1997 ON IT, BUT WHAT I WAS SUGGESTING IS IS
4 THAT WE DON'T HAVE MUCH TIME LEFT IN 1997 TO
5 IMPACT THAT NUMBER.

6 BOARD MEMBER RELIS: OH, I SEE.

7 MR. LIVINGSTON: BUT IF WE COULD MAKE
8 THAT CONDITION APPLICABLE TO 1998, THEN IT SEEMS
9 MORE DOABLE. I NEED TO TALK JUST A LITTLE BIT
10 WITH MR. SMITH ABOUT THAT.

11 BOARD MEMBER RELIS: I MEAN IF THERE WAS
12 INTEREST IN THIS MOTION AT ALL, I WOULD SUGGEST WE
13 TAKE A FEW-MINUTE BREAK AND --

14 MR. LIVINGSTON: I WOULD -- CAN I SECOND
15 THAT MOTION, MR. CHAIRMAN?

16 MR. SMITH: CAN I THIRD IT?

17 CHAIRMAN PENNINGTON: THAT'S FINE. IF
18 THERE'S INTEREST, WE CAN TAKE A BREAK.

19 (RECESS TAKEN.)

20 CHAIRMAN PENNINGTON: OKAY. ARE WE READY
21 NOW, PAUL?

22 BOARD MEMBER RELIS: YES.

23 CHAIRMAN PENNINGTON: BEFORE WE GO BACK
24 TO THIS QUESTION, I DO WANT TO ASK MS. VOS WHERE
25 IN CALIFORNIA IS POLY-AMERICA'S PLANTS?



1 MS. VOS: WE DON'T HAVE A PLANT IN
2 POLY-AMERICA. I'M LOCATED OUT HERE. WE DO NOT
3 HAVE A PLANT IN CALIFORNIA.

4 CHAIRMAN PENNINGTON: YOU BUY PCR FROM
5 CALIFORNIA?

6 MS. VOS: WE ARE A RECYCLER ALSO. IN
7 ADDITION TO BEING A MANUFACTURER, WE'RE A RECYCLER
8 OF PLASTIC. WE RECYCLE 150 TO 200 MILLION POUNDS
9 OF RECYCLED PLASTIC A YEAR.

10 CHAIRMAN PENNINGTON: BUT THAT WHICH YOU
11 PUT IN YOUR BAGS, IT COMES FROM CALIFORNIA?

12 MS. VOS: NO. SOME DOES. ACTUALLY A LOT
13 OF IT, BUT WE DO IT OURSELVES.

14 CHAIRMAN PENNINGTON: HOW MUCH OF IT?

15 MS. VOS: YOU KNOW, I CAN GET THAT. I
16 DON'T KNOW OFF THE TOP OF MY HEAD. I'M NOT WITH
17 OUR RECYCLING DEPARTMENT. WE ARE A RECYCLER. SO,
18 FOR EXAMPLE, WE MIGHT COLLECT AND RECYCLE PRODUCT
19 FROM TARGET OR KMART IN CALIFORNIA AND TAKE THAT
20 AND REPROCESS THAT INTO FINISHED GOOD THAT'S USED
21 IN OUR TRASH BAGS. SO IT MAY BE FROM CALIFORNIA
22 ORIGINALLY.

23 CHAIRMAN PENNINGTON: YOU UNDERSTAND I'M
24 TRYING TO FIGURE HOW PUTTING THEM OUT OF BUSINESS
25 IS GOING TO HELP US GET MORE PCR USED.



1 MS. VOS: WELL, TWO REASONS. NO. 1, MY
2 CONTENTION IS THAT THEY SOLD PLENTY OF BAGS PRIOR
3 TO THEIR STRAP SEAL. THIS WILL NOT PUT IRONCLAD
4 OUT OF BUSINESS. I DON'T SEE WHERE IT WILL DO
5 MUCH OF ANYTHING TO IRONCLAD AT ALL. THEY CAN
6 DOWNGAUGE; THEY CAN TAKE THE STRAP OFF THE BAG. I
7 DON'T BELIEVE IT WILL DO THAT.

8 CHAIRMAN PENNINGTON: THAT'S NOT
9 ANSWERING THE QUESTION.

10 MS. VOS: WHAT WOULD HAPPEN, OBVIOUSLY,
11 WE MAY NOT -- NOTHING MIGHT HAPPEN -- IT'S NOTHING
12 ORIGINALLY TO US. IT WOULD BE OBVIOUSLY THEIR
13 BUSINESS WILL BE SPREAD UP AMONG OTHER
14 MANUFACTURERS WHO WOULD HAVE TO BE COMPLYING WITH
15 THE LAW.

16 CHAIRMAN PENNINGTON: YOU'RE NOT ONE OF
17 THEM BECAUSE YOU DON'T HAVE A PLANT HERE.

18 MS. VOS: I'M SORRY. THE BUSINESS WOULD
19 BE SPREAD TO OTHER COMPANIES, OTHER MANUFACTURERS.
20 OBVIOUSLY, ANYBODY IF WE WENT OUT OF BUSINESS --

21 CHAIRMAN PENNINGTON: OH, I SEE. YOU ARE
22 NOT MANUFACTURING HERE IN THIS STATE.

23 MS. VOS: PARDON ME?

24 CHAIRMAN PENNINGTON: BUT YOU'RE NOT
25 MANUFACTURING HERE IN THIS STATE.



1 MS. VOS: NO.

2 CHAIRMAN PENNINGTON: SO, THEREFORE, YOU
3 ARE NOT USING -- BASICALLY NOT USING PRC FROM THIS
4 STATE.

5 MS. VOS: WELL, WE ARE BECAUSE WE TAKE
6 PRODUCT FROM CALIFORNIA, WE RECYCLE IT, PUT
7 INTO -- POLY-AMERICA WOULDN'T NECESSARILY PICK UP
8 ANY SLACK. OKAY. OTHER COMPANIES, OTHER
9 MANUFACTURERS, WHO MAY BE CALIFORNIA BASED, MAY BE
10 WISCONSIN BASED, WOULD PICK UP THE SLACK.

11 CHAIRMAN PENNINGTON: I NOTICED. BUT I
12 DON'T THINK THEY'LL PICK UP THE SLACK OF THE PRC.
13 THEY'LL TAKE THEIR BUSINESS, SURE. BUT I DON'T
14 KNOW THAT THEY'LL BE TAKING ANY PRODUCT, ANY WASTE
15 PLASTIC OUT OF OUR WASTESTREAM AND PUTTING IT INTO
16 THEIR PRODUCT.

17 MS. VOS: WITHOUT ANY EXEMPTION, YOU
18 WOULD EITHER HAVE SOME -- LIKE THE PEOPLE THAT ARE
19 PRESENTLY BUYING OVER .75 MIL PRODUCT WITH THE
20 STRAP ON IT, THAT HAS NO RECYCLED IN IT, IF, FOR
21 EXAMPLE -- ALL I'M SAYING IS THAT IT WILL BE
22 DIVERTED INTO OTHER BUSINESS. PEOPLE WOULD EITHER
23 HAVE TO SELL THAT SAME CUSTOMER OVER .75 WITH 30
24 PERCENT PCR IN IT, OR THEY WOULD HAVE TO
25 DOWNGAUGE. YOU HAVE SOURCE REDUCTION OR MORE USE



1 OF PCR.

2 CHAIRMAN PENNINGTON: I UNDERSTAND THAT,
3 BUT THE POINT IS THAT IF YOU START SELLING TO
4 IRONCLAD'S CUSTOMERS IN CALIFORNIA, THAT DOES NOT
5 NECESSARILY MEAN THAT THE AMOUNT OF PCR IN
6 CALIFORNIA WILL BE GROWING BECAUSE YOUR PLANT IS
7 NOT HERE IN CALIFORNIA. YOUR PLANT'S IN TEXAS OR
8 SOMEPLACE, RIGHT?

9 MS. VOS: RIGHT. BUT THE PRODUCT ITSELF,
10 THE PCR, COULD BE TAKEN FROM CALIFORNIA,
11 MANUFACTURED BY OUR COMPANY IN TEXAS INTO A
12 PRODUCT THAT'S RESOLD BACK IN CALIFORNIA. OKAY.

13 CHAIRMAN PENNINGTON: MR. PEARLMAN OR
14 PICKELMAN, COULD I ASK YOU THE SAME QUESTION.
15 WHERE IS YOUR PLANT?

16 MR. PICKELMAN: IN LIVERMORE, CALIFORNIA.

17 CHAIRMAN PENNINGTON: LIVERMORE. SO YOU
18 WOULD -- IF YOU PICKED UP THEIR SALES, YOU WOULD
19 INCREASE OUR PRC -- PCR?

20 MR. PICKELMAN: WE DON'T MAKE A STRAP
21 SEAL BAG OBVIOUSLY, SO WE'RE SUBJECT TO THE
22 CURRENT LAWS FOR PCR USAGE, ETC.

23 CHAIRMAN PENNINGTON: SO OKAY. OKAY.
24 THANK YOU.

25 BOARD MEMBER RELIS: ONE POINT OF FURTHER



1 CONSIDERATION. ON THE MOTION I HAVE RELATED TO
2 THE MOTION A QUESTION OF IRONCLAD. NOW, WOULD YOU
3 EXPECT TO BE COMING BACK IF WE WERE TO EXTEND IT
4 UNDER THESE TERMS, OR WOULD THAT BE IT IN TERMS OF
5 THE VARIANCE BECAUSE I'D LIKE TO SEE THAT BE IT?

6 MR. SMITH: I'D OBVIOUSLY BE REAL
7 INFLUENCED BY THAT. I'D LIKE TO AVOID MAKING ANY,
8 QUOTE, IRONCLAD COMMITMENTS AS TO WHAT I MIGHT DO
9 AT THE END OF 1998. BUT I CERTAINLY AM A PRETTY
10 GOOD TEA LEAF READER, AND I -- THIS HAS BEEN A
11 GREAT EXPERIENCE, AND I'M --

12 BOARD MEMBER RELIS: I'M SURE IT HAS.

13 MR. SMITH: SO I WOULD LIKE TO AVOID
14 MAKING A FIRM COMMITMENT AS TO WHAT MY FUTURE --
15 WHETHER I WOULD COME BACK TO SEEK A VARIANCE
16 UNLESS CANDIDLY THAT WERE A CONDITION OF THE
17 MOTION.

18 BOARD MEMBER RELIS: I'LL MAKE THAT A
19 CONDITION.

20 CHAIRMAN PENNINGTON: I DON'T THINK I CAN
21 VOTE FOR IT.

22 MR. SMITH: IT PUTS ME A LITTLE BIT AT A
23 COMPETITIVE DISADVANTAGE TO BE LOCKED INTO THAT
24 SITUATION.

25 I UNDERSTAND WHAT IS GOING ON, BUT I



1 WOULD HATE BY MOTION TO BE FORECLOSED FROM
2 PRESENTING CHANGED CIRCUMSTANCES OR DIFFERENT
3 SITUATIONS IN THE MARKETPLACE. I MIGHT COME TO
4 YOU FOR 1999 AND SHOW SOME DIFFERENT EVIDENCE,
5 DIFFERENT MARKETPLACE CONDITIONS, AND BE ASKING
6 FOR SOMETHING DIFFERENT THAN WHAT I'M ASKING FOR
7 NOW. I HATE TO BE PRECLUDED IN THAT RESPECT.

8 MR. LIVINGSTON: IT SEEMS TO ME, MR.
9 RELIS, YOU'VE GOT THE CONTROL OF WHAT HAPPENS
10 BEYOND THE END OF 1998. WHAT'S HAPPENED HERE
11 TODAY, I THINK WE CAN PROJECT THAT FORWARD INTO
12 BEYOND 1998, AND WE CAN SEE THE HANDWRITING ON THE
13 WALL. BUT I THINK IT'S REAL UNFAIR TO ASK THEM TO
14 PREDICT WHAT THE TECHNOLOGICAL DEVELOPMENT, WHAT
15 THE MARKET DEVELOPMENT IS GOING TO BE IN THE NEXT
16 YEAR AND A HALF.

17 BOARD MEMBER RELIS: I SUPPOSE I COULD BE
18 SATISFIED AS LONG AS WE HAVE A GOOD MEASUREMENT
19 SYSTEM THAT IS INDICATING THAT WHAT I'M IMPLYING
20 IN THE MOTION IS INDEED HAPPENING. THAT'S A
21 REPORTING SYSTEM TO BE WORKED OUT, BUT I WOULD SEE
22 SOMETHING LIKE A QUARTERLY REPORTING OF YOUR
23 PROGRESS ON THIS TONNAGE SIDE.

24 MR. LIVINGSTON: ALL RIGHT. COULD WE
25 JUST MAKE SURE WE UNDERSTAND WHAT THE CONDITION



1 OF -- THE VARIANCE WOULD BE FROM JANUARY 1, 1997,
2 THROUGH THE END OF DECEMBER 1998, SUBJECT TO THE
3 CONDITION THAT WE WOULD USE IN OUR NONSTRAP TRASH
4 BAGS SOLD IN 1998 THE SAME TONNAGE OF POSTCONSUMER
5 RECYCLED CONTENT THAT WE REPORTED --

6 BOARD MEMBER RELIS: IN 1995.

7 MR. LIVINGSTON: -- IN 1995.

8 BOARD MEMBER RELIS: MINIMUM OF THAT,
9 YES. MINIMUM WOULD BE DETERMINED.

10 MS. TRGOVCICH: IS THAT NONSTRAP
11 REGULATED BAGS OR JUST NONSTRAP BAGS?

12 MR. LIVINGSTON: IT WOULD JUST BE -- ANY
13 BAGS. WE COULD PUT IT WHEREVER WE WANTED.

14 MR. SMITH: IS THAT CORRECT?

15 BOARD MEMBER RELIS: THAT'S CORRECT.

16 MR. CHANDLER: I GUESS I NEED TO ASK THE
17 QUESTION. WHAT IS THE MAKER OF THE MOTION'S
18 INTENT IF AFTER THE FIRST QUARTER THE TONNAGES
19 ARE, IN FACT, A BIT OFF THE MARK? ARE WE GOING TO
20 CONTINUE TO SEE THE NEXT QUARTERLY REPORT COME IN,
21 OR IS THERE A PRESUMPTION THAT IF THEY FAIL TO
22 MEET SOME TONNAGE LEVEL, THAT INHERENT IN THIS
23 MOTION IS SOME ACTION? I GUESS I JUST NEED --

24 BOARD MEMBER RELIS: YES. I WOULD NEED
25 AN ACTION RESPONSE, OTHERWISE TWO YEARS DOWN THE



1 LINE WE DON'T HAVE COMPLIANCE AND THERE WE ARE.

2 MR. SMITH: ONE PROBLEM WITH THE
3 QUARTERLY SYSTEM, THOUGH, IS THAT THE DIFFERENT
4 PRODUCTS SELL AT DIFFERENT TIMES OF THE YEAR. AND
5 I HAVE TO FIGURE OUT A WAY TO MAKE SURE I AM ABLE
6 TO USE THE AMOUNT OF PCR IN 1998. AND I CAN'T, AS
7 I SIT HERE TODAY, KNOW THAT IT'S GOING TO BE
8 INTERSPERSED EQUALLY BY QUARTER. IT MAY BE
9 HEAVIER IN THE FIRST QUARTER THAN IN THE THIRD
10 QUARTER. IT MIGHT BE HEAVIER --

11 BOARD MEMBER RELIS: I UNDERSTAND THAT.
12 I DON'T KNOW HOW TO ANSWER THE DETAILS OF THAT
13 CONCERN. I MEAN I'M TRYING TO FIND A WAY TO
14 SUPPORT YOUR DESIRE TO STAY IN BUSINESS AND TO BE
15 A PLAYER IN CALIFORNIA. THAT'S THE CLOSEST I CAN
16 COME.

17 IS THERE A SUGGESTION FROM STAFF ON
18 HOW WE COULD --

19 MR. CHANDLER: CAREN AND I WERE JUST
20 TALKING ABOUT WHAT IS THE EXPECTATION OF STAFF IF
21 AFTER THE FIRST QUARTERLY REPORT COMES IN, THE
22 TONNAGES ARE, LET'S SAY, SLIGHTLY BELOW THE
23 28-PERCENT TONNAGE FIGURE THAT'S BEING USED AS A
24 BASE MARKET FOR '95? AND I GUESS CAREN'S RESPONSE
25 WAS WE WOULD, I GUESS, BRING THIS WHOLE ISSUE BACK



1 TO THE BOARD AND REPORT THAT THE FIRST QUARTERLY
2 REPORT IS SHOWING A SLIGHT SHORTFALL IN THE
3 TONNAGES THAT YOU'RE ATTEMPTING TO HAVE THEM NOT
4 BACKSLIDE FROM, IF I UNDERSTAND YOUR MOTION.

5 CHAIRMAN PENNINGTON: SO WE BLOW OUR
6 POLICE WHISTLE.

7 MR. CHANDLER: WELL, I THINK STAFF NEED
8 CLARITY AS TO WHAT YOU WOULD EXPECT OF US. SO I
9 MEAN I CAN SEE SOME REPORT COME OUT IN THE MIDDLE
10 OF '98, AND YOU'RE ALL OF A DIFFERENT OPINION OF
11 WHAT THAT REPORT IS SUPPOSED TO TRIGGER, IF YOU
12 WILL. JUST MORE REPORTING THE NEXT QUARTER, OR
13 THAT THIS THING HAS TURNED INTO A PUMPKIN AND
14 THEY'VE LOST THE VARIANCE FOREVER. YOU KNOW, I
15 MEAN I THINK WE NEED TO TALK ABOUT WHAT IS YOUR
16 EXPECTATION BASED ON THESE QUARTERLY REPORTS.

17 OBVIOUSLY, IF THEY'RE WELL ABOVE, WE
18 ARE PLEASED; BUT IF THEY BACKSLIDE, DO WE JUST
19 REPORT THAT AND THEY ARE ASKED TO DOUBLE THEIR
20 EFFORTS TO NEXT QUARTER. OR IS THERE A
21 PRESUMPTION BY THE BOARD THAT THEIR BACKSLIDING
22 FOR THE FIRST QUARTER RESULTS IN SOME ACTION?
23 THAT'S ALL I'M ASKING.

24 MR. HART: MY INTERPRETATION OF THE
25 MOTION WOULD BE THAT IF THEY DIDN'T ATTAIN THE 28



1 PERCENT QUARTERLY; THEN THAT WOULD BE THE END OF
2 THE MOTION.

3 BOARD MEMBER JONES: IT'S NOT 28 PERCENT.
4 IT'S THE TONNAGE.

5 MR. LIVINGSTON: THAT IS TOTALLY
6 UNWORKABLE. I MEAN YOU CAN'T TELL A COMPANY THAT
7 YOU ARE GOING TO HAVE A VARIANCE TODAY AND NOT
8 TOMORROW.

9 MR. HART: AND ALSO, THEN, WE HAVE --

10 MR. SMITH: WE HAVE NO PROBLEM COMMITTING
11 TO THAT USAGE OF PCR IN 1998, AND WE WILL CERTIFY.
12 AND WE DO HAVE A PROBLEM.

13 BOARD MEMBER RELIS: MAYBE WHAT WE NEED
14 TO DO IS JUST REPORT ON '98 USAGE, AND AT THAT
15 POINT WE MAKE A DECISION.

16 MR. SMITH: AND IF WE'RE NOT IN
17 COMPLIANCE, YOU HAVE ALL YOUR REMEDIES. BELIEVE
18 ME, WE WILL BE IN COMPLIANCE. I MEAN WE HAVE TO.
19 WE'VE BEEN IN COMPLIANCE EVERY YEAR. WE'LL FIND A
20 WAY.

21 MS. TRGOVCICH: MR. RELIS, JUST SO STAFF
22 UNDERSTAND WHAT WE'RE GOING TO BE REPORTING ON,
23 WHAT THE COMPARISON IS GOING TO BE TO, AND I'M
24 JUST SEEKING CLARIFICATION, IS YOU'RE FOCUSING ON
25 THE PCR LEVEL THAT WAS REPORTED FOR REGULATED BAGS



1 FOR CALENDAR YEAR 1995, AND YOU ARE SAYING -- WHAT
2 WE'RE REPORTING ON OR COMPARING TO IS WHETHER THAT
3 TONNAGE LEVEL WAS USED ACROSS ALL REGULATED AND
4 NONREGULATED BAGS FOR CALENDAR YEAR '98.

5 MR. SMITH: YES. THAT'S MY
6 UNDERSTANDING. IS THAT CORRECT? DO I UNDERSTAND
7 THAT CORRECTLY?

8 BOARD MEMBER RELIS: YES.

9 MR. HART: YOU REALIZE, MR. CHAIRMAN AND
10 BOARD MEMBERS, THAT THAT IS DIFFERENT THAN THE
11 1995 RULES, THAT IN 1995 THEY WERE NOT ALLOWED TO
12 COUNT PCR THAT WAS USED IN NONREGULATED BAGS.
13 THOSE WERE NOT THE RULES FOR THE 1995
14 CERTIFICATION.

15 BOARD MEMBER RELIS: WELL, I GUESS I'M
16 JUST GOING TO HAVE TO ASSUME THAT, YES.

17 MR. HART: ANOTHER QUESTION OF
18 CLARIFICATION.

19 BOARD MEMBER RELIS: MY INTEREST IS THE
20 USE.

21 MR. HART: OKAY. THE PENDING BILL 698,
22 WHICH WE MAY BE DEALING WITH ALSO, HOW WOULD YOU
23 LIKE US TO DEAL WITH THE -- IF THAT PASSES, THEN
24 WOULD THEY STILL BE ALLOWED TO USE THE PCR AMONG
25 ALL NONREGULATED BAGS, OR WOULD WE THEN



1 ACCOMMODATE THE 698 RULE?

2 CHAIRMAN PENNINGTON: I THINK THAT'S
3 CROSSING A BRIDGE BEFORE WE GET THERE. LET'S GET
4 THE LEGISLATION AND THEN WE'LL WORRY ABOUT IT.

5 MS. TRGOVCICH: IT COULD CHANGE
6 SIGNIFICANTLY.

7 CHAIRMAN PENNINGTON: RIGHT.

8 BOARD MEMBER RELIS: SO --

9 CHAIRMAN PENNINGTON: YOU HAVE A MOTION?

10 BOARD MEMBER RELIS: WE NEED TO RESTATE
11 THE MOTION OR IS IT UNDERSTOOD?

12 CHAIRMAN PENNINGTON: NO, WE NEED TO
13 RESTATE IT.

14 BOARD MEMBER RELIS: OKAY. THE BOARD
15 WOULD HEREBY ISSUE A VARIANCE TO IRONCLAD
16 CONDITIONAL UPON IRONCLAD'S CERTIFYING THAT IT HAS
17 MAINTAINED OR INCREASED THE TONS OF RECYCLED RESIN
18 USED IN ITS NONSTRAP REGULATED BAGS USING THE 1995
19 LEVEL AS THE BENCHMARK, AND THAT A REPORT WOULD
20 COME BEFORE THIS BOARD REPORTING THE 1998 TONNAGE,
21 AND AT THAT POINT THIS BOARD HAS ITS DISCRETIONARY
22 ACTION THAT COULD AFFECT THE VARIANCE.

23 CHAIRMAN PENNINGTON: I'LL SECOND THAT.

24 BOARD MEMBER JONES: MAY I ASK THE MAKER
25 OF THE MOTION ONE QUESTION?



1 MR. LIVINGSTON: MR. CHAIRMAN, DID WHAT
2 MR. RELIS READ SAY REGULATED OR JUST SAY ALL
3 NONSTRAP TRASH BAGS? I THINK WHAT YOU READ IS
4 DIFFERENT THAN WHAT WE'VE BEEN TALKING ABOUT.

5 MS. TRGOVCICH: WHAT YOU READ WOULD HAVE
6 TIED THE PCR CONTENT LEVEL REPORTED FOR 1995 TO
7 ONLY THE REGULATED BAGS FOR '98, AND IT'S MY
8 UNDERSTANDING YOU WERE LOOKING TO SPREAD IT
9 ACROSS.

10 BOARD MEMBER RELIS: I NEED TO ADJUST
11 THAT.

12 MR. SMITH: SO IT WOULD BE USAGE IN ALL
13 NONSTRAP BAGS BOTH REGULATED AND NONREGULATED; IS
14 THAT CORRECT?

15 BOARD MEMBER RELIS: THAT'S CORRECT.

16 MR. RELIS: YES.

17 MR. SMITH: AND WE WOULD HAVE TO CERTIFY
18 THAT USAGE FOR 1998, AND WE WOULD HAVE A VARIANCE
19 FOR OUR STRAP BAGS FROM JANUARY 1, 1997, THROUGH
20 DECEMBER 31, 1998.

21 BOARD MEMBER RELIS: CORRECT.

22 MS. TRGOVCICH: BUT THEY WOULD STILL BE
23 SUBJECT TO THE REPORTING REQUIREMENTS UNDER LAW
24 FOR THE NONVARIANCE REGULATED BAGS FOR CALENDAR
25 YEAR '97.



1 BOARD MEMBER RELIS: THAT'S ASSUMED.

2 MR. SMITH: YES, WE UNDERSTAND THAT.

3 MR. HART: IF I MAY, ANOTHER POINT OF
4 CLARIFICATION. WE'RE ALLOWING THE USE OF PCR IN
5 THE USE OF ALL NONSTRAP BAGS. ARE WE LIMITING
6 THAT TO THOSE NONSTRAP BAGS SOLD IN CALIFORNIA OR
7 SOLD NATIONWIDE?

8 BOARD MEMBER RELIS: CONSISTENT WITH THE
9 WAY THE LAW --

10 MS. TRGOVCICH: SOLD IN CALIFORNIA.

11 MR. LIVINGSTON: ANYWHERE. USED.

12 MR. SMITH: IT'S A USE REQUIREMENT.

13 MR. LIVINGSTON: IT'S A USE REQUIREMENT.

14 CHAIRMAN PENNINGTON: IT'S A USE
15 REQUIREMENT.

16 BOARD MEMBER RELIS: IT'S THE TONNAGE USE
17 THAT WE'RE INTERESTED IN.

18 MR. SMITH: DOESN'T MATTER WHERE THE BAGS
19 ARE SOLD. IT'S A USE REQUIREMENT.

20 BOARD MEMBER RELIS: LET ME JUST -- WE
21 WANT TO INCREASE THE POSTCONSUMER USE IN
22 CALIFORNIA.

23 CHAIRMAN PENNINGTON: THEY'RE
24 MANUFACTURED HERE. YOU'RE INCREASING THE NUMBER
25 OF THE PCR. AS LONG AS THEY'RE PRODUCED HERE.



1 THEY'RE GOING TO BE USING HERE. WHERE THEY SELL
2 THEM IS IMMATERIAL.

3 BOARD MEMBER FRAZEE: IT'S THE RESIN
4 YOU'RE INTERESTED IN, NOT THE BAGS.

5 BOARD MEMBER RELIS: I'M GOING TO NEED
6 TO -- I'M SORRY. THIS IS A COMPLICATED MATTER.
7 I'M GOING TO NEED TO TAKE A MINUTE AND JUST
8 CLARIFY MY THOUGHTS ON THIS. IF YOU DON'T ACCEPT
9 IT, THAT'S ONE THING. I MEAN I'M JUST GOING TO
10 NEED TO GET THIS RIGHT.

11 (PAUSE IN PROCEEDINGS)

12 BOARD MEMBER RELIS: AFTER CONFERRING
13 WITH STAFF AND GETTING THEIR ASSISTANCE IN TRYING
14 TO MAKE -- CRAFT WHAT I'M TRYING TO CONTAIN IN
15 THIS MOTION OR ACHIEVE BY THIS MOTION, I'M RAISING
16 THE ISSUE, AND I'LL THROW THIS OUT FOR DISCUSSION,
17 MY INTENT --

18 CHAIRMAN PENNINGTON: MR. RELIS, FIRST,
19 ARE YOU GOING TO OFFER ANOTHER MOTION OR ARE YOU
20 CHANGING THE MOTION?

21 MR. CHANDLER: I THINK HE'S CLARIFYING
22 HIS MOTION.

23 CHAIRMAN PENNINGTON: CLARIFYING OKAY.
24 THAT'S FINE.

25 BOARD MEMBER RELIS: I'M CLEARING MY



1 MOTION TO APPLY TO CALIFORNIA ONLY SALES OF
2 REGULATED BAGS. THE REASON BEING THAT THAT'S THE
3 ONLY WAY I CAN -- I UNDERSTAND THAT THAT TONNAGE
4 FIGURE CAN BE QUANTIFIED, AND YOU DON'T --

5 MR. LIVINGSTON: IT'S NOT TRUE AT ALL.

6 BOARD MEMBER RELIS: WELL, TELL ME
7 THEN --

8 MR. LIVINGSTON: I DON'T KNOW WHY THEY
9 THINK THAT.

10 BOARD MEMBER RELIS: LET'S HAVE A
11 DISCUSSION ON THAT.

12 MR. LIVINGSTON: WE CAN REPORT PCR
13 PURCHASES WE GET, AND WE CAN REPORT THE USAGE THAT
14 WE PUT IN OUR TRASH BAGS REGARDLESS OF WHERE THOSE
15 TRASH BAGS END UP.

16 CHAIRMAN PENNINGTON: IF YOU DO
17 CALIFORNIA ONLY, THEN YOU DO A SYSTEM LIKE THE
18 AUTOMOBILE MANUFACTURERS HAVE WHERE THEY BUILD A
19 49-STATE AUTOMOBILE IN A CALIFORNIA CAR. YOU ARE
20 ASKING THEM TO BUILD A 49-STATE BAG IN A
21 CALIFORNIA BAG.

22 MR. SMITH: AND I DON'T KNOW FOR SURE
23 THAT I WILL HAVE ENOUGH SALES IN CALIFORNIA TO
24 MEET THAT. I WANT TO MEET YOUR REQUIREMENT. WHAT
25 WE TALKED ABOUT WAS A USAGE REQUIREMENT, AND I



1 COULD DO THAT, BUT I CAN'T -- I DON'T THINK IT'S
2 FAIR THAT THAT --

3 BOARD MEMBER RELIS: BUT WE DON'T HAVE
4 THE INFORMATION, AS I UNDERSTAND IT, TO BE ABLE TO
5 TRACK THAT.

6 MR. LIVINGSTON: WE WILL PROVIDE IT TO
7 YOU.

8 MR. SMITH: YOU HAVE OUR '95 TONNAGE AND
9 THE REQUIREMENT IS USE THAT TONNAGE IN 1998, AND
10 WE WILL GIVE YOU THAT INFORMATION.

11 MS. TRGOVCICH: I THINK, MAYBE JUST TO
12 CLARIFY, THE DISCUSSION -- THE QUESTIONS THAT MR.
13 RELIS WERE ASKING OF STAFF WAS HE INDICATED THAT
14 IT WAS HIS GOAL NOT TO SEE USAGE DROP BELOW THE
15 1995 FIGURES. THE 1995 FIGURE THAT WAS REPORTED
16 WAS FOR CALIFORNIA SALES ONLY. SO THE STAFF
17 DISCUSSION WITH MR. RELIS WAS SIMPLY TO CLARIFY
18 THAT THE '95 -- 1995 USAGE FIGURE WAS A CALIFORNIA
19 USAGE FIGURE, AND MR. RELIS THEN TOOK THAT
20 INFORMATION.

21 BOARD MEMBER GOTCH: QUESTION: IS THAT
22 THE WAY THAT WE HAVE TO REPORT IT? IS THAT THE
23 WAY THE LAW READS?

24 MS. TRGOVCICH: JERRY.

25 MR. HART: YES, THAT IS THE WAY THE LAW



1 READS CURRENTLY.

2 MR. LIVINGSTON: BUT LET'S KEEP THINGS
3 STRAIGHT HERE. WE'RE TALKING ABOUT THE STATUTORY
4 LAW RIGHT NOW. WHAT YOU ARE TALKING ABOUT IS
5 GRANTING A VARIANCE AND REQUIRING US TO DO
6 SOMETHING IN ADDITION TO IT. AND THAT HAS
7 NOTHING -- THE STATUTE IMPOSES NO LIMITATION ON
8 WHAT YOU WOULD HAVE US TO DO TO GRANT THE
9 VARIANCE.

10 MR. SMITH: THE DISCUSSION WHICH I WANT
11 TO COMMIT TO DOING THAT WHICH IS POSSIBLE, AND I
12 WANT TO ACHIEVE YOUR GOALS AND THE BOARD'S GOALS.
13 THE DISCUSSIONS WERE TO USE THE AMOUNT OF PCR THAT
14 I USED AND REPORTED ON MY CERTIFICATION FORM FOR
15 1995. AND I CAN DO THAT, BUT I CAN'T BE LIMITED
16 ONLY TO CALIFORNIA BECAUSE IT IGNORES THE FACT
17 THAT I HAVE BEEN SUCCESSFUL IN SELLING STRAP BAGS
18 IN CALIFORNIA TO CUSTOMERS WHO PREVIOUSLY BOUGHT
19 NONSTRAP BAGS. SO I DON'T HAVE ENOUGH ONLY
20 CALIFORNIA BUSINESS TO USE THAT SAME LEVEL, BUT I
21 CAN USE THAT SAME LEVEL OF PCR IN MY 1998
22 MANUFACTURING, BUT IT WILL BE A GREAT DIFFICULTY
23 FOR ME TO LIMIT IT TO ONLY CALIFORNIA.

24 MR. LIVINGSTON: IF YOUR GOAL IS FOR US
25 TO USE A CERTAIN TONNAGE OF POSTCONSUMER RECYCLED



1 MATERIAL, WE WILL COMMIT TO THAT. WE WILL USE THE
2 SAME TONNAGE THAT WE USED IN 1995.

3 BOARD MEMBER GOTCH: QUESTION, MR. CHAIR.
4 I'D LIKE TO ASK STAFF IS '95 A REPORT CALIFORNIA
5 ONLY?

6 MS. TRGOVCICH: CALIFORNIA SALES,
7 CORRECT.

8 BOARD MEMBER FRAZEE: MR. CHAIRMAN,
9 THAT'S NOT WHAT THEY'RE SAYING. THE QUESTION HERE
10 IS RESIN USAGE, AND THAT'S WHAT WE SHOULD BE
11 CONCERNED ABOUT. WE DON'T CARE ABOUT WHERE THE
12 BAGS GO OR WHAT'S IN THEM. IT'S RESIN USAGE.
13 THAT'S THE KEY TO WHAT WE'RE TALKING ABOUT. SO
14 THEY DO HAVE FIGURES -- EXCLUSIVE OF THE
15 CALIFORNIA BAG SALES, THEY HAVE FIGURES OF THE
16 AMOUNT OF RESIN THEY USED. AND THAT'S WHAT'S
17 IMPORTANT IS THE RESIN, NOT --

18 BOARD MEMBER RELIS: I'M BEGINNING TO
19 FEEL THAT MAYBE I HAVEN'T BEEN ABLE TO CRAFT
20 SOMETHING THAT MEETS WITH MY --

21 CHAIRMAN PENNINGTON: IF YOU ARE GOING TO
22 RESTRICT IT TO CALIFORNIA --

23 BOARD MEMBER RELIS: I THINK THIS IS NOT
24 WORKING. SO I'LL -- I THINK I'LL JUST WITHDRAW MY
25 MOTION. I JUST DON'T KNOW WHAT TO DO. IF IT WAS



1 THE PLEASURE OF THE BOARD AND WE WANTED TO WORK ON
2 SOMETHING LIKE THAT AND COULD WE EXTEND THIS TILL
3 NEXT MONTH AND GIVE MYSELF TIME AND OTHER MEMBERS.
4 IF THEY'RE INTERESTED, OTHERWISE, I JUST CAN'T
5 CRAFT WHAT I'M TRYING TO ACCOMPLISH HERE TODAY.

6 CHAIRMAN PENNINGTON: LET'S ANSWER THE
7 QUESTION FIRST AS TO WHETHER WE CAN EXTEND THIS
8 HEARING OR NOT.

9 MS. BORZELLERI: IT'S BEEN THE LEGAL
10 OFFICE INTERPRETATION THAT OTHER HEARINGS OR OTHER
11 PROCEEDINGS BEFORE THE BOARD THAT ALLOW
12 ADDITIONAL -- OTHER APPEALS OR OTHER TYPES OF
13 QUASI ADJUDICATORY PROCEEDINGS LIKE THIS HAVE
14 STATUTORY AUTHORITY TO EXTEND AND GIVE THE BOARD
15 ADDITIONAL DAYS TO CONTEMPLATE, AND HERE WE'RE
16 NOT, IN OUR INTERPRETATION OF THIS STATUTE,
17 READING THAT THE BOARD HAS ADDITIONAL TIME TO MAKE
18 THE CONSIDERATION, BUT, AGAIN, THAT IS ADVICE OF
19 COUNSEL.

20 MR. LIVINGSTON: OUR SITUATION IS THAT
21 POSTPONING IT MAY BE THE SAME AS DENYING IT, AND
22 WE WOULD URGE YOU TO TRY TO RESOLVE IT HERE TODAY.

23 MR. SMITH: WE WANT TO COME UP WITH SOME
24 KIND OF RESOLUTION. I THOUGHT WE WERE MAKING SOME
25 GOOD PROGRESS. AND WE DESPERATELY NEED THAT.



1 THIS IS A QUESTION OF OUR SURVIVAL. IF WE WALK
2 OUT OF HERE WITH NOTHING, WE ARE FINISHED. AND I
3 THOUGHT WE WERE MAKING SOME GOOD PROGRESS IN
4 COMING UP WITH SOMETHING THAT WOULD BE DIFFICULT
5 FOR US, BUT WE COULD ACHIEVE AND LIVE WITH. AND I
6 WOULD CERTAINLY APPRECIATE US TRYING TO CONTINUE
7 TO DO THAT. I KNOW IT'S DIFFICULT; IT'S A COMPLEX
8 ISSUE, BUT I THOUGHT WE WERE PRETTY CLOSE. AND
9 WHAT YOU'RE OUTLINING WOULD BE DIFFICULT FOR US,
10 BUT WE COULD DO IT.

11 MR. CHANDLER: MR. CHAIRMAN, MAYBE WE
12 NEED TO FOCUS BACK ON THE NATIONAL SALES FIGURE
13 WHERE WE WERE PRIOR TO BREAKING FOR MORE
14 DISCUSSION ON WHETHER OR NOT -- OR THE NATIONAL
15 USAGE FIGURES, NOT SALES. I THINK THAT'S WHERE WE
16 WERE EARLIER, THAT I THOUGHT WE WERE MOVING IN A
17 DIRECTION THAT IT MADE SENSE.

18 MR. SMITH: I DON'T HAVE THE FIGURES IN
19 FRONT OF ME, BUT I WOULD GUESS THAT THERE WAS VERY
20 LITTLE PCR USAGE IN 1995 OUTSIDE OF CALIFORNIA
21 BECAUSE IT IS ONLY CALIFORNIA THAT HAS THIS
22 REQUIREMENT. SO WHAT WE REPORTED IN 1995 ON OUR
23 CERTIFICATION FORM AS OUR PCR USAGE, I DON'T KNOW
24 THIS FOR A FACT BECAUSE I DON'T HAVE THOSE FIGURES
25 IN FRONT OF ME, BUT I ASSUME REPRESENTED ALMOST



1 ALL OF OUR PCR USAGE.

2 AND I THOUGHT WHAT WE WERE TALKING
3 ABOUT WAS REQUIRING THAT AMOUNT OF USAGE IN 1998.
4 AND WE CAN -- THAT WILL BE DIFFICULT, BUT WE CAN
5 LIVE WITH THAT. THAT WILL GIVE US A MORE ONEROUS
6 REQUIREMENT THAN IF 698 PASSES OF ANY OTHER
7 MANUFACTURER, BUT WE CAN LIVE WITH THAT BECAUSE
8 THAT'S THE ONLY WAY FOR US TO STAY IN BUSINESS.

9 BOARD MEMBER RELIS: DID YOU USE PCR IN
10 NONREGULATED TRASH BAGS?

11 MR. SMITH: IN '95?

12 BOARD MEMBER RELIS: YEAH.

13 MR. SMITH: I DON'T BELIEVE IN A
14 SIGNIFICANT AMOUNT. I DON'T HAVE THOSE FIGURES
15 BUT --

16 BOARD MEMBER RELIS: BUT YOU WOULD ASSERT
17 HERE THAT YOU DON'T THINK YOU --

18 MR. SMITH: I WOULD ASSERT TO YOU THAT
19 THE INSTRUCTIONS TO THE FACTORY AND THE PRODUCTION
20 PEOPLE WERE TO USE PCR IN REGULATED PRODUCT
21 BECAUSE WE DIDN'T GET ANY CREDIT FOR USING IT IN
22 NONREGULATED PRODUCT. SO I THINK THE ANSWER IS
23 YES, MR. RELIS, TO THE BEST OF MY KNOWLEDGE.

24 BOARD MEMBER RELIS: LET ME UNDERSTAND.
25 THEN WE WOULD HAVE A BASELINE?



1 MR. SMITH: YES. YOUR '95 CERTIFICATION
2 FORM WOULD GIVE YOU A BASELINE.

3 BOARD MEMBER RELIS: I APPRECIATE YOUR
4 COMMENT, BUT I WANT TO HEAR THIS FROM STAFF.

5 MS. TRGOVCICH: IT WOULD BE MY ASSUMPTION
6 THAT IF THERE WAS VERY INSIGNIFICANT PCR USAGE IN
7 THE NONREGULATED BAGS IN 1995, THAT THEIR 1997
8 CERTIFICATION OF USAGE WOULD BE A BASELINE ACROSS
9 THEIR PRODUCT LINES, REGULATED PLUS NONREGULATED.

10 MR. SMITH: THAT WOULD BE MY UNDER-
11 STANDING. BECAUSE WE DIDN'T GET ANY CREDIT FOR
12 USING PCR IN NONREGULATED PRODUCT, SO I WOULDN'T
13 HAVE ANY REASON TO USE IT.

14 MR. CHANDLER: SO THE CONDITION OF THE
15 VARIANCE WOULD BE TO HAVE A REPORTING AT THE END
16 OF 1998 ON RESIN USAGE THAT HOLDS THE GOAL TO BE
17 THAT YOUR RESIN USAGE DOES NOT FALL BACK IN
18 TONNAGE BELOW YOUR 1995 PCR USAGE. THAT'S WHERE
19 WE WERE BEFORE WE BROKE AND THEN WE GOT INTO THIS
20 QUESTION OF SHOULD WE MAKE IT ONLY CALIFORNIA
21 RESIN USAGE AND CALIFORNIA SALES. AND I THINK
22 WE'VE GOTTEN OFF TRACK A BIT.

23 BOARD MEMBER RELIS: AS LONG AS -- IF WE
24 HAVE THIS BASELINE CLEAR, I FEEL MORE COMFORTABLE
25 WITH THAT.



1 CHAIRMAN PENNINGTON: SO YOU WANT TO
2 RESTATE YOUR MOTION?

3 BOARD MEMBER RELIS: I'M AFRAID TO.
4 BOARD WOULD ISSUE A VARIANCE TO IRONCLAD
5 CONDITIONAL UPON IRONCLAD CERTIFYING THAT IT'S
6 APPROXIMATELY MAINTAINED OR INCREASED THE TONS OF
7 RECYCLED RESIN USED IN ITS NONSTRAP -- I'M
8 SORRY -- IN THE NONSTRAP BAGS WITH THE REPORTING
9 IN 1998 OF RESIN USAGE IN TONNAGE.

10 MR. SMITH: YES, THAT'S OUR UNDER-
11 STANDING.

12 CHAIRMAN PENNINGTON: I WILL SECOND THAT.
13 BOARD MEMBER RELIS: AND THE REFERENCE IS
14 1995 FOR THE TONNAGE.

15 MR. SMITH: YES. AND THE VARIANCE IS
16 THROUGH DECEMBER 31, 1998.

17 BOARD MEMBER RELIS: CORRECT.

18 MR. SMITH: IS THAT CORRECT?

19 CHAIRMAN PENNINGTON: CORRECT.

20 UNIDENTIFIED SPEAKER: POSTCONSUMER
21 RESIN.

22 BOARD MEMBER RELIS: POSTCONSUMER RESIN,
23 YES, VERY IMPORTANT.

24 BOARD MEMBER GOTCH: MR. CHAIR, MAY I ASK
25 MR. RELIS IF YOU WOULD INCLUDE IN THAT MOTION AN



1 INTERIM REPORT SO THAT WE KNOW HOW THEY'RE DOING,
2 SAY, AT THE BEGINNING OF THE YEAR?

3 BOARD MEMBER RELIS: I'M FINE WITH THAT,
4 AN INTERIM REPORT, YES. THAT'S A REPORT. IT'S
5 NOT A DECISION. I THINK THAT'S WHAT YOUR CONCERN
6 IS. IF THAT'S --

7 BOARD MEMBER GOTCH: AN UPDATE ON HOW)
8 THEY'RE DOING.

9 MR. SMITH: AN UPDATE HALFWAY THROUGH THE
10 YEAR?

11 BOARD MEMBER RELIS: THAT'S FINE.

12 CHAIRMAN PENNINGTON: OKAY.

13 MR. SMITH: SO I'M CLEAR, IT'S A VARIANCE.....
14 THROUGH DECEMBER 31, 1998. WE HAVE TO USE IN 1998
15 THE SAME TONNAGE OF PCR THAT WE REPORTED THAT WE
16 USED IN 1995 ON OUR CERTIFICATION FORM. WE'LL
17 MAKE THE REPORT OF OUR ACTUAL USAGE AT THE END OF
18 1998, AND WE'LL MAKE AN UPDATE MIDWAY THROUGH THE
19 YEAR OF WHERE WE ARE, SO THE BOARD HAS AN UPDATE.

20 BOARD MEMBER RELIS: THAT'S CORRECT.

21 MR. SMITH: OKAY. THANK YOU.

22 CHAIRMAN PENNINGTON: NO FURTHER
23 DISCUSSION. WILL THE SECRETARY CALL THE ROLL.

24 BOARD SECRETARY: BOARD MEMBER CHESBRO.
25 FRAZEE.



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BOARD MEMBER FRAZEE: AYE.
BOARD SECRETARY: GOTCH.
BOARD MEMBER GOTCH: NO.
BOARD SECRETARY: JONES.
BOARD MEMBER JONES: AYE.
BOARD SECRETARY: RELIS.
BOARD MEMBER RELIS: AYE.
BOARD SECRETARY: CHAIRMAN PENNINGTON.
CHAIRMAN PENNINGTON: AYE. MOTION
CARRIES. THE VARIANCE IS GRANTED UNDER THE
STIPULATIONS. AND THAT ENDS THIS BOARD MEETING.

(END OF PROCEEDINGS AT 1:55 P.M.)



Reporter's Certificate

* * * * *

I, Beth C. Drain hereby certify:

that on the 24th day of
July, 1997, I did report in
shorthand the testimony of the foregoing
proceedings;

that on the conclusion of the above entitled
matter, I did transcribe my shorthand notes into
typewriting;

that the foregoing transcript is a true and correct
record of my shorthand notes thereof.

Beth C. Drain

Certified Shorthand Reporter

Certificate No. 7152

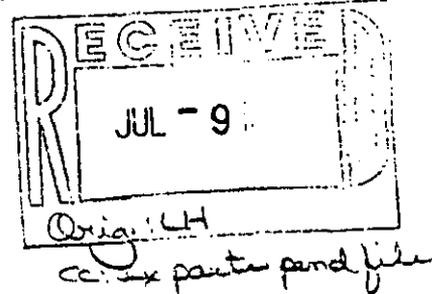




Poly-America

2000 West Marshall Dr. • Grand Prairie, TX 75051
800-527-3322 • 972-647-4374 • FAX 972-647-8061

6869



July 7, 1997

CIWMB
Attn: Daniel Pennington
8800 Cal Center Drive
Sacramento, CA 95826

Dear Dan,

Thank you for taking the time to meet with me on Thursday, June 19th regarding Ironclad's Petition for Administrative Variance. Pursuant to Section 42298, you have been given the authority to grant, maintain, modify or revoke this variance "based upon the board's determination of the ability of a petitioner to comply" with the recycled content law.

I hope that my presentation demonstrated that Ironclad clearly has the ability to comply regardless of the "technological" difficulty they may have affixing a strap to a recycled bag. Ironclad proves they can comply everyday based on what they already sell.

Based on marketing surveys, over 90% of the trash bags offered for sale by Ironclad (with the exception of one retailer) do not require a variance because they are under .75 mil and are unregulated. Without the exemption, less than 10% of Ironclad's product line would need any modification at all to comply. They would have the option of either downgauging, as most manufacturers have done, or removing the heat affixed strap and adding the required PCR. Regardless of technological issues, there is absolutely no reason that Ironclad couldn't reserve their heat affixed strap for bags under .75 mil.

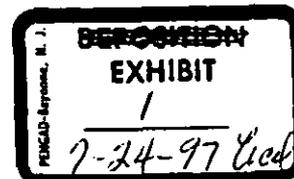
From a business perspective, this law has been difficult to abide by and costly for all manufacturers since every manufacturer has needed to modify their product line in order to comply. One company, Ironclad, has already received an additional two years to adapt to the law.

Given this variance, Ironclad, by affixing a strap, would continue to have the exclusive legal right to use this exemption as a marketing tool and supply any customer with an unlimited amount of non-recycled thick bags. The fact that they have retrofitted perhaps their single largest customer, Price-Costco, to strap bags after this exemption was obtained exposes the potential for abuse. Why should one company be granted an unfair business advantage, especially an unessential exemption which could lead to a substantial decrease in the use of PCR?

We strongly urge you to vote "no" on Ironclad's variance because it is unnecessary and unfair. As difficult as the law is for all manufacturers, it's time for Ironclad to comply and compete in a fair free market environment.

Sincerely,


Nancy Vos





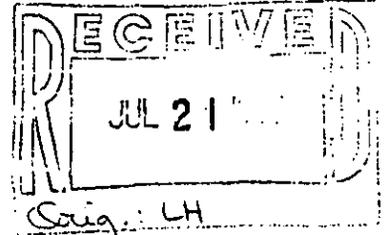
Agenda Item 60
7/24/97

6928

North American Plastics Corporation

1703 Eastwood Drive, Aurora, IL 60506, (630) 896-6200 FAX (630) 896-5127

July 14, 1997



California Integrated Waste Management Board
Chairman Daniel Pennington

Cc: Robert Frazee, Steven Jones, Paul Relis, Janet Gotch, Wesley Chesbro
8800 Cal Center Drive
Sacramento, CA 95826

Saig: LH
cc: DGP
in folder - find file

Dear Board Members:

My company is a manufacturer of plastics trash bags and is in the business of selling bags in California.

I am writing this letter in opposition to Ironclad's petition for variance, which is presently being reviewed by the Board on July 24th.

We believe that this exemption creates an unfair business advantage to one company. In addition, there is no reason that the petitioner, Ironclad, could not produce all bags in compliance with the present law without their exemption.

This is evidenced by the fact that Ironclad produces and sells an overwhelming majority of bags under .75 mil, which do not require this variance, whether they contain a heat affixed strap or not. They also produce and sell non strap seal bags. There is no reason that they can't downgauge to unregulated or reserve the strap seal for bags under .75 mil.

Extending this exemption defeats the entire purpose of the law, which is to expand the use of recycled plastic in California. Why should one manufacturer have the legal right to non-compliance when all other manufacturers must comply with the recycled content law?

Although we are unable to attend the public hearing, please consider this letter as documentation that North American Plastics Corporation strongly urges a "no" vote on Ironclad's petition for Administrative Variance.

Sincerely,

Gary S. Kerlagon
President and C.E.O.

GSK/ckm

Tenneco Packaging
One Parkway Plaza
Suite 300
Deerfield, Illinois 60015 2581
Tel 847 914 1000

TENNECO
Packaging

Mr. Jerry Hart, Manager
Recycled Content Trash Bag Program
Cal/EPA, CIWMB
8800 Cal Center Drive
Sacramento, CA 95826

July 22, 1997

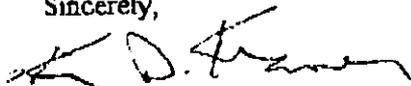
Dear Jerry:

I am writing on behalf of Tenneco Packaging regarding the "Public Hearing on and Consideration of Ironclad's Petition for Variance from the Recycled Content Trash Bag Program Requirements for Heat-Affixed Strap Bags" scheduled for July 24, 1997. As you know, our division, as Tenneco Packaging and under the preceding ownership of Mobil Chemical, has worked to the best of our ability to make this law workable for all parties since it was first enacted. We continue those efforts.

After reading through the Ironclad testimony that you shared with us in your notification of the hearing, I recognize that I do not have enough knowledge of their process to make definitive statements about their ability or inability to run PCR content into their "Strap" bags. I do know that it seems unfair to those of us who are complying with the statute to have a competitor not running the mandated PCR mix in their "flagship" product line while our company continues to suffer the economic burden of running "California only" inventory of our *Hefty Cinch Sak* bags with PCR content. Some items in Tenneco's trash bag product line cannot accommodate PCR such as our clear and white bags. Therefore, we have to run up to 45% PCR into our black and brown bags to average our 30% into bags .75 mils and greater in thickness. Is Ironclad doing that? I also wondered if Ironclad would be successful heat sealing the straps to their bags if they ran PCR into the bag but made the strap out of a consistent virgin material. Tenneco also produces and sells PCR. I don't know if Ironclad has tried our material. Our plants seem to run it very well.

Good luck on the hearing. Hopefully, you can come up with a solution that will be fair to all concerned. Please let me know if you have additional questions.

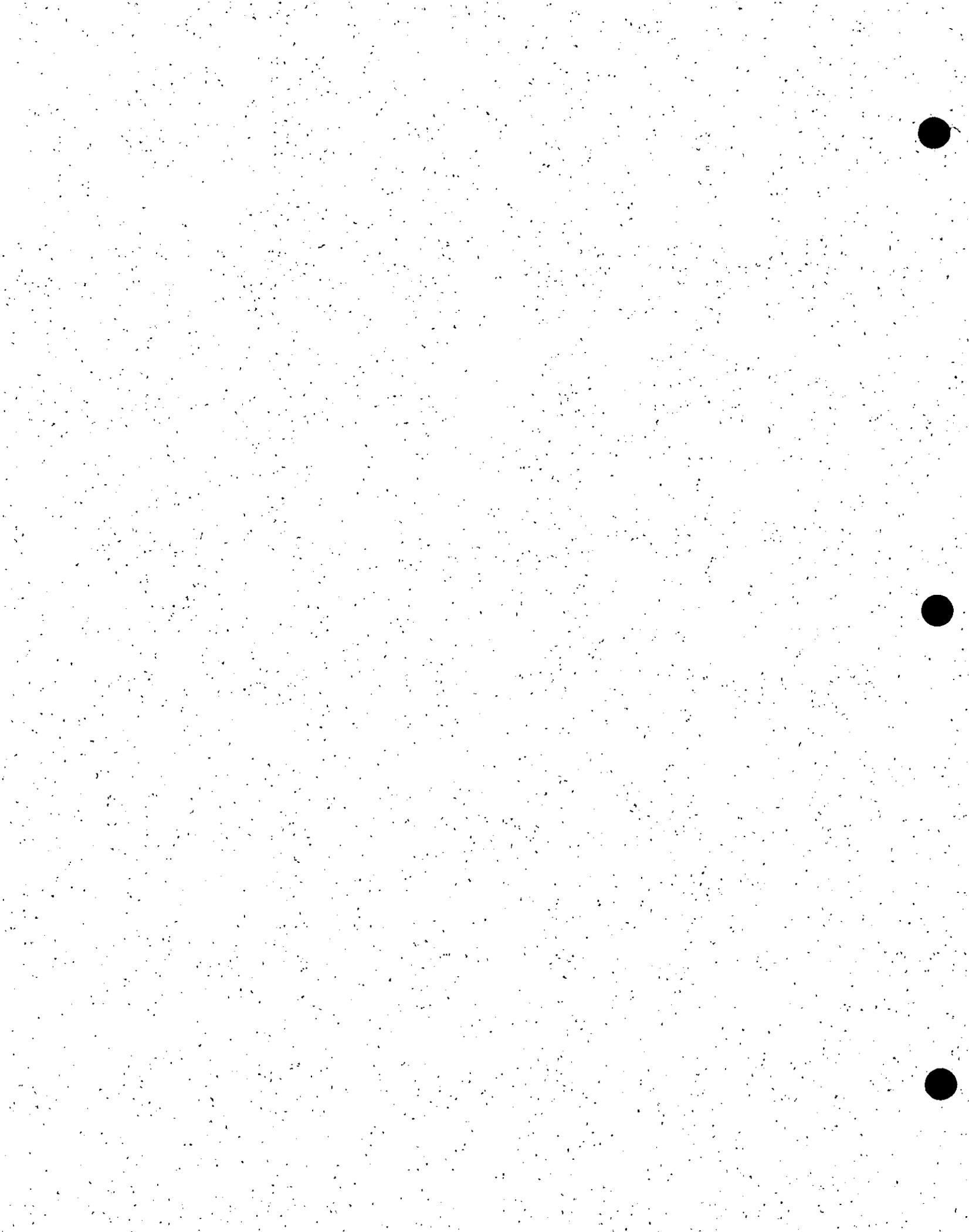
Sincerely,

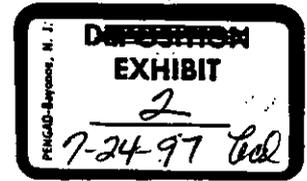


Kim D. Kramer
Environmental Manager

CC: Deborah Borzelleri







1 GENE LIVINGSTON - State Bar No. 44280
2 LIVINGSTON & MATTESICH LAW CORPORATION
3 1201 K Street, Suite 1100
4 Sacramento, CA 95814
5 (916) 442-1111
6 (916) 448-1709 FAX

7 Attorneys for Applicant Ironclad, Inc.

8 BEFORE THE CALIFORNIA INTEGRATED
9 WASTE MANAGEMENT BOARD

10
11 In re:) DECLARATION OF JERRY SMITH
12 Variance Application of Ironclad, Inc.) IN SUPPORT OF THE VARIANCE
13) APPLICATION

14 I, Jerry Smith, declare:

15 1. I am Executive Vice President and Chief Operating Officer for Ironclad, Inc. I
16 have personal knowledge of the matters set forth below and, if called, could and would
17 competently testify thereto.

18 2. As Gary Rutledge states in his declaration, Ironclad began manufacturing strap
19 trash bags in August, 1989. It added the adhesive strap in 1994 and was definitely
20 manufacturing adhesive, heat-affixed strap trash bags prior to January 1, 1995. Ironclad's
21 adhesive, heat-affixed strap trash bags were exempt from the post-consumer recycled content
22 requirement during 1996, pursuant to Public Resources Code section 42298 as that section
23 read immediately prior to January 1, 1997. Representative samples of Ironclad's strap trash
24 bags are attached as Exhibit A.

25 3. Since developing the strap trash bag, Ironclad's principal marketing strategy has
26 been to promote its strap trash bag. As a small trash bag manufacturer, Ironclad's ability to
27 compete with the major trash bag manufacturers depends on its ability to capture a market
28 niche by, among other things, product differentiation. The strap trash bag provided that

1 opportunity to Ironclad and, as you can see from the marketing materials attached as Exhibit B
2 and incorporated by reference, Ironclad has promoted aggressively the benefits of the
3 permanently attached strap.

4 4. The regulations setting out the evidence that the Board can consider in deciding
5 to grant Ironclad's application for a variance includes identification of the percentage of the
6 total regulated trash bags represented by the trash bags for which a variance is sought. The
7 regulations also provide that if Ironclad believes that any documentation in the list would
8 constitute confidential, trade secret, or proprietary information, then Ironclad may submit
9 alternative evidence which would enable the Board to evaluate the petition for variance in
10 accordance with the criteria set out in subsection (e). The regulation goes on to say that
11 Ironclad is not restricted to presenting evidence or testimony that specifically addresses one of
12 the items listed below, however, the evidence presented must relate to the variance. The
13 Board has decided that the issue of whether Ironclad can achieve the annual aggregate content
14 requirement by adding post-consumer recycled material only to its non-strap trash bags relates
15 to Ironclad's variance application. The Board's decision is reflected in both the regulation
16 requiring identification of the percentage of the total regulated trash bags represented by the
17 trash bags for which a variance is sought and by the regulation requiring evidence describing
18 why Ironclad cannot attain the annual aggregate RPPCM use requirements.

19 5. Ironclad considers the percentage of the total regulated trash bags that it sells in
20 California that is represented by strap trash bags to be proprietary information. Accordingly,
21 as an alternative, Ironclad, without revealing the precise percentage, would state that it is an
22 impossibility to achieve the 30 percent annual aggregate post-consumer recycled content use
23 requirement simply by increasing the amount of post-consumer recycled material in its non-
24 strap trash bags. It is impossible because the percentage of post-consumer recycled material in
25 the non-strap trash bags would have to exceed 100 percent.

26 6. Ironclad commits that it will achieve on an annual average aggregate basis
27 whatever percent of post-consumer recycled material in its regulated non-strap trash bags in
28 1997 and 1998, the years covered by its variance application, that is required by the applicable

1 law.

2 7. As Gary Rutledge demonstrates in his declaration, Ironclad's effort to find a
3 source of post-consumer recycled material that is compatible with the heat-sealing process and
4 equipment has been totally unsuccessful. Recognizing that California law requiring the use of
5 post-consumer recycled material is designed to create a market for what would otherwise be
6 landfilled waste, Ironclad is committed to expanding its use of post-consumer recycled
7 material. It proposes to do that by increasing sales of its non-strap trash bags. This transition
8 will not be easy. Ironclad has spent the last six years marketing the benefits of its exclusive
9 permanently-affixed strap trash bags. In addition, Ironclad is currently dependent on the sales
10 of its strap trash bags to maintain its economic viability. The current and future sales of the
11 strap trash bags will provide Ironclad with the economic resources, the marketing position and
12 contacts to open and expand markets for its non-strap trash bags.

13 8. Ironclad needs to continue selling strap bags if it is to have the economic
14 resources to conduct further research and testing in an effort to find a technological way in
15 which it can attach straps to trash bags containing post-consumer recycled material.

16 9. While precise data is not available, Ironclad's sales of strap trash bags
17 represents a small percent of the total regulated trash bags sold in California. Ironclad is
18 generally recognized as having 2-4 percent of the trash bag market. While Ironclad is
19 committed to expanding its purchases of post-consumer recycled material by expanding its sale
20 of non-strap trash bags, the technological considerations that prevent Ironclad from using post-
21 consumer recycled material in its strap trash bags has a small impact on the overall demand for
22 post-consumer recycled material. The extent to which Ironclad today purchases post-
23 consumer recycled material and the increased extent to which it will in the future hinges on its
24 ability to continue to produce and sell its strap trash bags. In other words, Ironclad's
25 continued operation at its current economic level will result in greater purchases of post-
26 consumer recycled material than will result if Ironclad's economic viability is significantly
27 diminished or destroyed because it is unable to sell strap trash bags in California.

28 I declare under penalty of perjury under the laws of the State of California that the

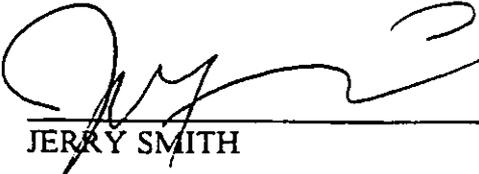
1 foregoing is true and correct.

2 Executed this 17th day of June, 1997, at Shreveport, Louisiana.

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5



JERRY SMITH

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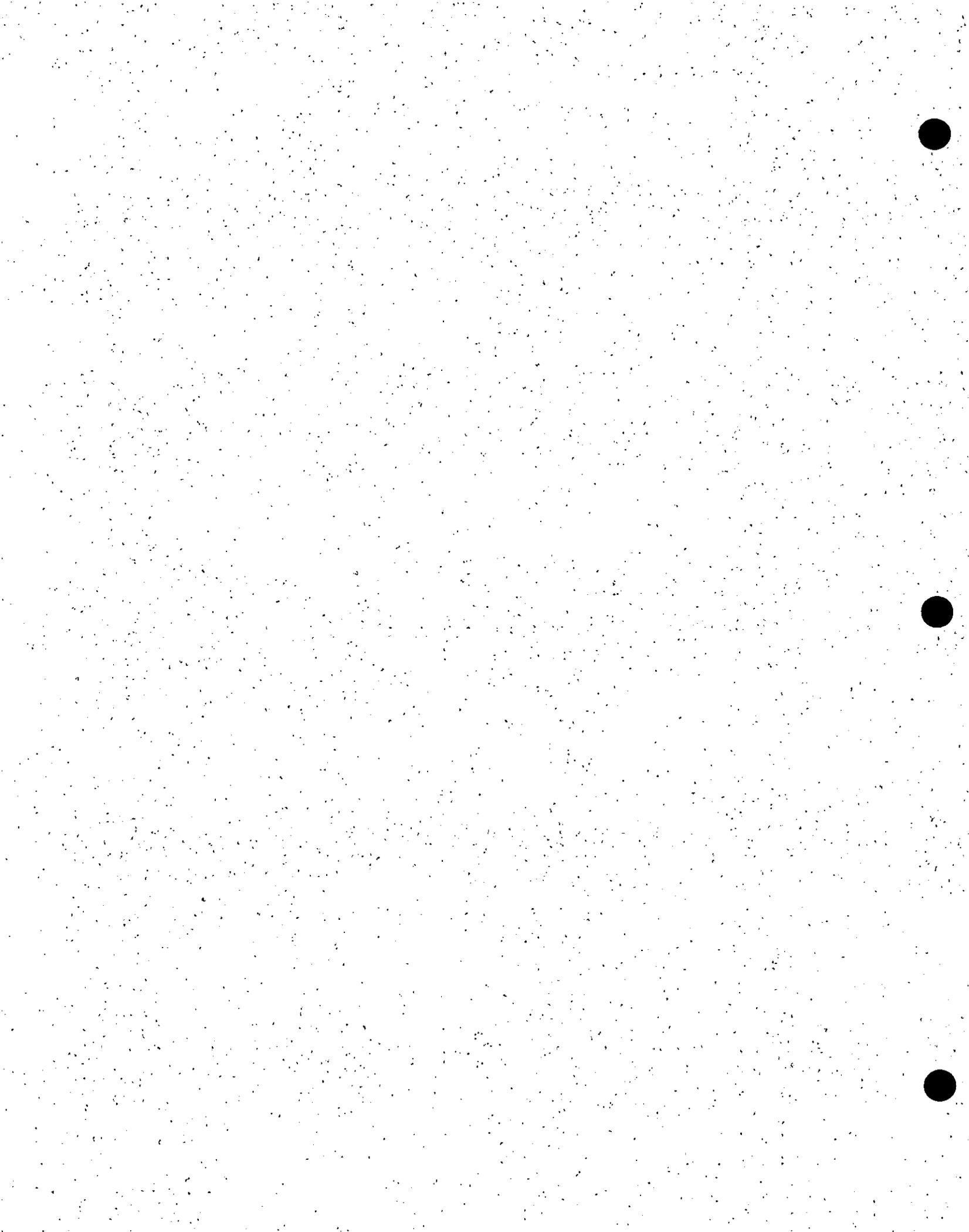
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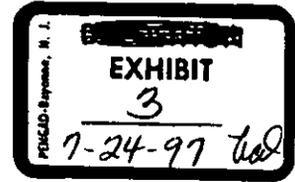
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1 GENE LIVINGSTON - State Bar No. 44280
2 LIVINGSTON & MATTESICH LAW CORPORATION
3 1201 K Street, Suite 1100
4 Sacramento, CA 95814
5 (916) 442-1111
6 (916) 448-1709 FAX

7
8 Attorneys for Applicant Ironclad, Inc.

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10
11 BEFORE THE CALIFORNIA INTEGRATED
12 WASTE MANAGEMENT BOARD

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14 In re:)
15 Variance Application of Ironclad, Inc.)
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I, Gary Rutledge, declare:

1. I am Vice President of Research and Development for Ironclad, Inc. I have personal knowledge of the matters set forth below and, if called, could and would competently testify thereto.

2. I have worked with Ironclad on its heat-affixed strap trash bags from the inception of the strap as a concept to the present time. My training is as a mechanical engineer; I have worked in engineering and manufacturing for my entire career. Most of my work has involved the manufacturing of consumer products. A copy of my resume is attached to this declaration as Exhibit A and incorporated by reference.

HISTORY:

Concept Developed in 1985

3. In 1985, Ironclad's CEO retained me as a consultant to help develop a new product. He asked me to join Ironclad personnel at the 1985 National Hardware Show in Chicago.

4. The objective of the product development was to invent a new trash bag, one

1 that would be proprietary, that we could patent, and one that would provide added value to
2 consumers. A secondary objective was that the new feature would add little or no cost for
3 consumers. Ironclad wanted a new product that would benefit consumers, that would be the
4 premium item in the product line, and that no one else could copy.

5 5. We discussed many ideas at the Hardware Show. Most consumer complaints
6 about trash bags involve their smell and the fact that liquids leak out before the trash bags are
7 hauled away by the garbage service. No satisfactory solution existed at that time to address
8 the consumers' complaints. The existing closure systems, wire ties and drawstrings, were
9 inadequate. Wire ties are often lost or thrown away, and they are difficult to use. Also, wire
10 ties easily slide off of full trash bags. Drawstrings solve the misplaced ties problem, but they
11 do not close the trash bag entirely without tying extra knots. In addition, drawstring bags
12 generally cost 30-40 percent more than wire tie bags. We saw an opportunity to develop a
13 better product.

14 6. After deciding that we would develop a new closure system for trash bags, we
15 then established the following criteria for that system:

- 16 • it must be easy to use;
- 17 • it must provide an efficient seal to prevent leaks and spills
- 18 • its unique feature must be readily apparent;
- 19 • it must be capable of being manufactured using in-line equipment;
- 20 • it must impose no additional cost over wire-tie bags;
- 21 • it must provide added value to consumers;
- 22 • it must be protected through patents and trademarks.

23 Research and Testing

24 7. We began our research by examining over 300 patents relating to trash bags
25 that had been issued, dating back to the early 1900s. To protect Ironclad's future design, we
26 had to be able to patent it. We could not acquire a patent for any design that was the same as
27 or similar to a design that had been previously patented. After reviewing the 300 patents, we
28 decided that we should design a closure system that was permanently attached to each bag.

1 The tie could not be lost or thrown away. To benefit consumers, it would have to be strong
2 enough to hold while being wrapped around the top of the trash bag tightly enough to seal off
3 smells and liquid leaks and spills. It would have to remain secure so it would not accidentally
4 open when consumers were handling full bags.

5 8. We spent a year of researching and testing various materials and methods for
6 attaching a tie closure to a trash bag. We narrowed our focus to three or four different types
7 of tie materials. We then considered the various methods for attaching the ties to the bags.
8 Eventually, we chose heat sealing. It was a known technology, and we considered it the most
9 feasible for working with Ironclad's existing trash bag manufacturing equipment.

10 9. We concluded that the most feasible approach would be to heat seal a strip of
11 compatible plastic material to the side edge of each trash bag near its opening. Deciding to do
12 that was a lot easier than accomplishing it. We had several major problems to resolve,
13 requiring considerable research and laboratory testing. We had to solve each of the following
14 problems:

- 15 • How do we seal efficiently a strap to each bag?
- 16 • How do we find a suitable strap material that is compatible with the
17 trash bag film for heat sealing?
- 18 • How do we address the many variables yet unknown in the sealing
19 process?
- 20 • What equipment will be needed?
- 21 • How do we deal with strap and bag materials of different gauges?
- 22 • How can we avoid disruption to the existing production process?
- 23 • How do we ensure a strap on 100 percent of the trash bags?

24 10. After substantial research and testing in 1986, we concluded that a strap could
25 be permanently heat sealed to a trash bag. We also concluded that the seal could be done in
26 line with the current production equipment by adding another machine to each line, with the
27 additional machine heat sealing the strap to the trash bags. All we needed was someone to
28 design and build this machine.

Strap Machine Design and Testing

11. Our search for someone to design and build a machine to heat seal straps to trash bags was futile. Even manufacturers of trash bag equipment turned us down. Some said that it would be cost prohibitive. Others said that it could not be done at all. It was at this point that I set up a research and development facility in Dallas, Texas, to design a machine to heat seal straps on trash bags. By 1988, we had a staff of 22 technicians, designers, and engineers working on the strap machine.

12. During our work, we realized that the machine we were designing would have to be very precise. Heat sealing the strap to trash bags was complex and forced us to confront many design features with very narrow tolerances. The design work was made even more difficult by the realities of trash bag manufacturing processes. For example, the new machine must meet the following parameters:

- It must accommodate all bag sizes
- It must operate at speeds up to 400 feet per minute
- It must permanently heat seal a strap to 100 percent of the trash bags
- It must ensure that the tail end of the strap remains in place until the bags are rolled
- It must adjust to a variety of speeds and gauges
- It must affix a strap to withstand stress without failing

13. The first prototype strap machine was built and lab tested by early 1987. The second prototype was built during 1988, and extensively tested in the Shreveport plant. After several months of testing and modifications, the first two production machines were built and installed in the Shreveport plant in June, 1989.

14. After building two production machines and installing them in 1989, an engineering group of 6-8 people remained at the plant for a year, working with the two production machines. Continual changes and modifications were required. While the design was meant to account for all anticipated problems, it is impossible to know everything that will arise until a machine is producing for an extended period of time. It took two years of

1 consistent monitoring before highly reliable and production-worthy machines resulted.

2 **Strap Bag Manufacturing Begins 1989**

3 15. The strap trash bag was first introduced at the National Housewares Show in
4 Chicago in January, 1989. We began manufacturing and shipping heat-affixed strap trash bags
5 in August, 1989. Between 1989 and 1995, 38 strap machines were built and are currently
6 operating in the Shreveport and Tustin facilities. Over the years, Ironclad has been granted
7 innovative product design awards in several categories by several associations.

8 **Patent Protection**

9 16. A primary objective was to protect the new closure system from competitors by
10 patenting it. The first patent application was filed in 1987 and granted in 1989. To date,
11 Ironclad has 16 patents in the United States and most foreign countries. An additional 15
12 applications are still pending. These patents cover all aspects of the strap bag product, the
13 means of attaching the straps and the equipment that was designed to attach the straps. More
14 than 25 trademarks relating to strap bags have been registered in the United States and most
15 foreign countries.

16 **ATTACHING STRAPS INVOLVE CRITICAL ELEMENTS WITH NARROW
17 TOLERANCE:**

18 17. It took most of two years to design and build the first prototype strap seal
19 machine. The amount of engineering time was required because of the great number of critical
20 elements that had to be addressed. These elements related to both heat sealing straps to trash
21 bags and integrating the heat seal machine with the existing trash bag manufacturing
22 equipment. The critical elements listed below affected the design of the machine and are
23 critical today for the strap to be sealed to the trash bags:

- 24 a) **Strap Material:** must be heat sealable to bag; gauge cannot vary more than
25 .0005; thicker gauge results in a failure to seal; thinner gauge results in burning
26 through the bag
27 b) **Strap Feed:** strap material must be fed at consistent speed and in the proper
28 tension without slipping
c) **Corona Treat:** printing on the strap is added by a special process and must be

- 1 positioned precisely because the strap will not heat seal over the printing
- 2 d) Strap Position: position of strap material going through strap machine must not
- 3 vary more than plus or minus .050 linearly and laterally
- 4 e) Bag Web Speed: must accommodate speeds of 150 feet per minute to 400 feet
- 5 per minute
- 6 f) Strap Material Speed: must proportionately and precisely match the bag web
- 7 speed
- 8 g) Strap Cutter: a knife must cut the strap material into one-inch wide pieces
- 9 within plus or minus .050
- 10 h) Bag Web: must start and stop within each bag length which requires startup
- 11 acceleration of 3800 RPM or eight feet per second
- 12 i) Web Tension: must prevent perforated bags from breaking apart despite the
- 13 startup acceleration of 3800 RPM
- 14 j) Web Fold: the bags are precisely folded to expose a "window" where one side
- 15 edge has two layers to heat seal the strap through
- 16 k) Wrinkles: the window area must be free of wrinkles in order to heat seal the
- 17 strap
- 18 l) Bag Gauge: must not vary more than plus or minus .0005
- 19 m) Perforation Detector: counts perforation openings to stop bag web at precise
- 20 position
- 21 n) Bag Position: must stop at exact same position every time within plus or minus
- 22 .050
- 23 o) Vacuum: precisely set to maintain nonslip tension on bags without breaking
- 24 perforations
- 25 p) Heat Sealer: requires a precisely machined compound curvature and seal area
- 26 to within plus or minus .0025
- 27 q) Heat Seal Temperature: must be maintained at plus or minus 2 degrees or it
- 28 will either burn through the bag or fail to attach the strap

- 1 r) Dwell Time: can only vary from .120 milliseconds to .170 milliseconds
2 dependent on gauge and speed of bags
- 3 s) Heat Seal Pressure: force of heat sealer on strap and bag must be maintained at
4 plus or minus 3 PSI
- 5 t) Tail Tack: tail end of the strap must be temporarily attached to surface of the
6 bag, without tearing the bag when used and until wound into a roll.

7 18. In addition to the 20 critical elements described above, we determined during
8 the early stages of testing the prototype how critical consistent quality of the strap material and
9 trash bag resin would be. For example, between two tests, someone modified the amount of
10 color concentrate being added to the trash bag resin. However, we were unaware of the
11 change, and for several days during the strap machine test period, we were unable to seal the
12 straps to the bags. At first we thought that the problem was a machine failure. Eventually, we
13 learned about the change to the resin, and we were able to make adjustments that again
14 resulted in the straps being sealed to the bags. On other occasions, the strap material supplier
15 exhausted the specified resin and used a resin that was only slightly different. The supplier did
16 not tell us about the slight changes in the resin and, again, we were unable to affix the straps to
17 the trash bags.

18 19. We could not get consistent strap materials despite trying 14 different suppliers.
19 Accordingly, we decided the only way to maintain precise control over the strap was for
20 Ironclad to make it. Ironclad invested \$1,100,000 to purchase equipment to make the strap
21 material in the Shreveport plant. Similarly, the ability to affix straps to trash bags depends on
22 the type and quality of virgin resin. At the time the machine was being designed and
23 developed, Ironclad had an exclusive supplier of a specially produced resin. Therefore, the
24 heat seal process was specifically designed for that resin. Over the years, we tried various
25 virgin resin blends and suppliers but the quality was inconsistent unless we used a single virgin
26 resin from a single source. Virgin resins from different sources resulted in problems with heat
27 sealing strap to trash bags.

28 ////

1 **MANUFACTURING TRASH BAGS**

2 20. I am setting out in the following paragraphs first the process for manufacturing
3 non-strap bags. Then I am setting out the additional process for heat sealing straps to the
4 manufactured trash bags.

5 21. Extruder: The process starts with the extruder where the raw resin pellets are
6 fed into a hopper at the end of the extruder. Sometimes smaller hoppers or feeders are used to
7 add other materials such as color concentrate, various additives or even post-consumer
8 recycled material. The pellets start to melt due to the heaters in the extruder and are gradually
9 moved through the extruder by a rotating screw. The temperature and speed are set for the
10 type of materials being processed. As the flow of material reaches the opposite end of the
11 extruder it becomes more liquid and flows through a screen chamber which filters as much of
12 the contaminates, such as dirt or unmelted particles, as the holes in the screen allow. Under
13 high pressure the liquefied material is forced through a die head which has a narrow slot in the
14 shape of a circle at the top of the die where the material exists. This slot may be from .030 to
15 .100 wide and from 6" to 12" in diameter. As the material moves up it forms the shape of a
16 cylinder and than at some height above the die head air blown from the inside forces the
17 material sideways increasing the diameter and becoming a large bubble. The diameter of the
18 bubble sets the desired width of the bag and also the gauge of the film. During this phase the
19 material is starting to cool and is pulled up between a wooden A frame to start collapsing the
20 bubble. Once fully collapsed in the tower the flat tube is directed back down towards the floor
21 and into the next machine. A line drawing of the extruder is attached as Exhibit B and
22 incorporated by reference.

23 22. Bag Machine: Fully collapsed and cooled the tube enters the bag machine with
24 the desired width set according to the required dimensions of the finished product. This
25 machine performs three steps in making a bag. The first step is to put a heat seal strip across
26 the width of the bag at set intervals which determine the length of the final product. During
27 the second step the tube moves through several sets of bars and rollers which will fold the tube
28 laterally three or four times to a narrow width. This many layered tube now moves through a

1 notched cutting blade mechanism which makes perforations across the tube width and near the
2 heat seal strip. As the tube exists the bag machine, it becomes a continuous stream of finished
3 bags with a top opening and a closed bottom attached only by small pieces of material allowing
4 the bags to be separated as they are used. A line drawing of the bag machine is attached as
5 Exhibit C and incorporated by reference.

6 23. Winder: The last machine in a normal bag-making line for those manufacturers
7 who sell bags on a roll is the winder. The winder counts each bag and can be set for the
8 desired number of bags to be put on a roll. The bags wind onto a rotating spindle, and once
9 the exact count is reached the last bag is separated at the perforation and the next bag starts
10 winding the next roll. A line drawing of the winder is attached as Exhibit D and incorporated
11 by reference.

12 **ATTACHING THE STRAP:**

13 24. In the paragraphs below, I describe the heat seal and the functions to attach
14 straps to the trash bags. The strap is the obvious difference between strap trash bags and other
15 trash bags. An additional difference is the production process. A strap machine is used to heat
16 seal the straps to the trash bags.

17 25. Strap Machine: The strap machine is placed into the existing production line
18 between the bag machine and the winder. Once the bags leave the bag machine, they enter the
19 web guide on the strap machine. The web guide provides the necessary alignment to maintain
20 the lateral position of the edge of each bag where the strap is to be sealed. The bags then
21 continue over the entrance roller which maintains a consistent tension on the bag web and
22 adjusts for speed variations from the bag machine.

23 26. In order to heat seal a strap to each bag, the bags must stop moving
24 momentarily at the exact position where the strap is attached. To do this an accumulation
25 system must be incorporated to allow the rest of the bag web to keep moving while a very
26 small portion of the web stops. This can only be accomplished by putting minimal stress on the
27 perforations between each bag to avoid breaking the web. Two vacuum chambers are used to
28 accomplish this by maintaining a light tension on the web as it loops through each chamber.

1 While the web is stopped to put a strap on a bag, one chamber fills up with a loop of the web
2 as the loop in the other chamber decreases. This allows the bags to continue into the strap
3 machine without stopping the flow except at the heat seal position. Once a strap is sealed to
4 the bag, the bag web accelerates to the next position, reversing the loops in the vacuum
5 chambers.

6 27. A perforation detector is positioned near the top of the first vacuum chamber
7 and sends out an electronic spark when it sees the perforations between each bag. This tells
8 the computer that the next bag is in position to be stopped long enough to heat seal a strap to
9 it.

10 28. As the bags move through the strap machine, the strap material is processed in
11 a similar manner. A supply roll of strap material is located at the entrance above the bag web
12 of the strap machine. It is threaded through a number of rollers and tension guides and into an
13 automatic cutoff shear. The speed of the strap material flow is coordinated by the computer to
14 match the alignment of each strap with the position of each bag. The shear cuts the strap
15 material into individual 1" wide strips. These strips of material are automatically advanced
16 until they reach the point where they are to be heat sealed to a bag. At this point the stepper
17 roller stops the bag web and signals the heat sealer to come down and attach a strap to the bag.

18 29. A successful strap attachment is determined by three factors: the time the heat
19 seal is applied, the temperature of the heat seal head, and the amount of pressure applied to the
20 heat seal head. At the same time the heat seal comes down to attach the strap, the heated tail
21 tack head comes down to temporarily attach the other end of the strap only to the top layer of
22 the bags without burning through. This requires extremely precise settings of pressure and
23 temperature. The flat position of the strap must be maintained until the bag moves through the
24 last section of the strap machine and through the winder until it is wound onto the roll. If the
25 tail end of the strap is loose it will either catch in the equipment and be torn off the bag or stick
26 out of the end of the roll causing a rejection by the quality control department.

27 30. Once the strap has been permanently heat sealed to the bag, the bags continue
28 to move through the second vacuum chamber. Both vacuum chambers contain position

1 sensors which monitor the bag flow to continuously adjust for any variations in the process.
2 As the bags, now strap bags, leave the second vacuum chamber, they flow over a torque/speed
3 controlled roller which compensates for speed changes and tension between the strap bag
4 machine and the winder. The bags then exit the strap bag machine and enter the winder. A
5 line drawing of the strap machine is attached as Exhibit E and incorporated by reference. A
6 videotape that accurately depicts Ironclad's manufacturing process is attached as Exhibit F.

7 31. Straps must be attached to 100 percent of the trash bags, and Ironclad has
8 determined that each strap must have a minimum 2.5 pounds force of tensile strength to hold
9 while it is wrapped tightly around the neck of a full trash bag, that is, to meet consumers'
10 expectations. These measures of a successful attachment have been incorporated into
11 Ironclad's quality control standards. A copy of Ironclad's quality control standards is
12 attached as Exhibit G and incorporated by reference.

13 **IRONCLAD IS UNABLE TO ATTACH STRAPS TO TRASH BAGS MADE WITH**
14 **RECYCLED PLASTIC POST-CONSUMER MATERIAL DUE TO**
15 **TECHNOLOGICAL CONSIDERATIONS:**

16 Attaching Straps Depends on Many Critical Elements with Narrow Tolerances

17 32. In developing a process and a machine for permanently attaching a strap to a
18 trash bag, Ironclad accomplished something that many experienced engineers told us could not
19 be done. They had a solid basis for their skepticism. The manufacturing process of ordinary
20 trash bags in and of itself involves complex equipment and material that requires precise
21 handling. The tolerances of the factors involved in manufacturing trash bags are fairly narrow.
22 When those narrow tolerances are combined with the critical elements required to attach a
23 strap, the tolerances, that is the ranges for variations, become exceedingly narrow. Those
24 critical elements are set out in paragraph 17 of this declaration

25 33. The narrow tolerances are the technological reasons that Ironclad cannot use
26 post-consumer recycled material in its heat-affixed strap trash bags. As I noted in paragraph
27 18 of this declaration, we found that the slightest variation in the strap material or additives to
28 the trash bag resins or differences in the resins themselves prevented heat sealing straps to the
trash bags. The process and equipment simply cannot tolerate any variation in the

1 characteristics of the resin during a run.

2 34. The unfortunate reality is that even virgin resins of the same type vary from
3 supplier to supplier. Accordingly, Ironclad is limited to purchasing a specific resin , linear low
4 density polyethylene (LLDPE), from a single supplier to produce its strap trash bags. Ironclad
5 cannot even use virgin resins of a different type, such as high density polyethylene (HDPE) or
6 low density polyethylene (LDPE).

7 35. Given the severe limitations of one resin type from a single supplier, the
8 variations presented by post-consumer recycled material render impossible the successful
9 attachment of straps to trash bags containing post-consumer recycled material. We reach this
10 conclusion reluctantly but after substantial experience in trying to find a source of post-
11 consumer recycled material that is compatible with the narrow tolerances of the heat sealing
12 process. We have been unsuccessful to date.

13 Search for Compatible Post-Consumer Recycled Content

14 36. During the last three years, Ironclad has contacted more than 60 different
15 companies identified as suppliers of post-consumer recycled material. Ironclad obtained a list
16 of 41 suppliers from the California Integrated Waste Management Board, and we contacted or
17 attempted to contact every supplier. We learned that many listed suppliers were out of
18 business; others produced post-consumer materials only for their operations. Others could
19 provide only very limited amounts. We pursued all of the suppliers who could provide an
20 adequate amount of post-consumer recycled materials.

21 37. After identifying the suppliers who could provide an adequate supply of post-
22 consumer recycled material, we obtained a sample of their products. We ran each sample
23 separately, producing non-strap trash bags to determine the quality and characteristics of the
24 recycled material. Based on these runs, we then ordered truckload quantities from four
25 suppliers. We then ran these supplies, blending them into virgin resins at the 1995 level of 10
26 percent post-consumer recycled material content. We attempted to attach straps to the trash
27 bags produced during these runs. The quality was so poor that all of the bags failed quality
28 control inspection, and all of the bags were scrapped.

1 38. We tried again in 1996, testing post-consumer recycled content that was
2 reputed to be of a higher quality. Again, the resulting strap trash bags failed quality control
3 inspection.

4 39. Because the requirement for post-consumer recycled material content increased
5 30 percent in 1997, Ironclad made another effort to find compatible recycled material. We
6 contacted nine suppliers of post-consumer recycled material. We asked them if they could
7 guarantee that the recycled material they provided to us would be 100 percent LLDPE. Only
8 four of the nine suppliers offered to make that guarantee. We tested small quantities of post-
9 consumer recycled materials submitted by each of the four suppliers. We then picked the
10 sample having the best qualities, and using it, we produced strap trash bags for additional
11 testing.

12 Independent Test Results Confirm That Straps Are Inadequately Attached To
13 Bags Containing Post-Consumer Recycled Material Due To Technological
14 Considerations

15 40. We delivered samples of the strap trash bags that we ran with the post-
16 consumer recycled material in 1996 to an outside laboratory, Advanced Materials Center, Inc.
17 We selected Advanced Materials Center because it had a great deal of experience in the trash
18 bag industry, and specifically in working with post-consumer recycled material. Advanced
19 Materials Center tested the samples that we sent to it and its report is set out in Exhibit B to
20 the Declaration of Ronald L. Walling, President and Director of Advanced Materials Center.
21 In summary, its results are that the straps are inadequately attached to trash bags containing
22 both 10 and 15 percent post-consumer recycled material, that is, they will not hold during their
intended use.

23 41. The strap trash bags we produced from the 1997 test run were also sent to
24 Advanced Materials Center for testing. In summary, the results are that the straps were
25 inadequately attached to trash bags containing any amount of post-consumer recycled material,
26 even an amount as low as 5 percent. Also, the results demonstrated that while the supplier
27 guaranteed that the post-consumer recycled material would be 100 percent LLDPE, it
28 contained two resin types, creating incompatible variations. In addition, the post-consumer

1 recycled material contained considerable contamination which, in and of itself, was sufficient to
2 prevent the straps from being adequately attached to the trash bags containing post-consumer
3 recycled material. Again, the results of the test are set out in the report attached as Exhibit B
4 to the Declaration of Ronald L. Walling.

5 42. Most post-consumer recycled material is a mixture of bottles, greenhouse film,
6 mulch film, cereal bags, shrink film, stretch film, garment film, furniture bags, and grocery bags
7 (T-shirt). Most of these original materials are HDPE or LDPE, or a combination of both.
8 They generally contain a great deal of contamination, such as dirt, paper labels, food particles,
9 and sticky liquids. As noted in paragraph 33, the strap-affixing equipment does not even
10 permit using more than 2-3 percent virgin LDPE or HDPE. It certainly does not permit the
11 use of post-consumer recycled material consisting principally of these resin types and
12 containing contaminants.

13 43. Candid conversations with post-consumer recycled material suppliers confirm
14 our experiences. It is impossible for a supplier to provide 100 percent LLDPE despite their
15 desire and assurances to do so. Even if they could, the variations in the LLDPE resins would
16 differ from our specific LLDPE resin. Moreover, no supplier can adequately clean post-
17 consumer recycled material to provide post-consumer recycled material pellets with a low
18 enough level of contaminants. The differences in LLDPE resins, the presence of other resin
19 types, and the amount of unavoidable contaminants each cause variations that individually, and
20 certainly collectively, go beyond the narrow tolerances imposed by the heat-sealing process
21 and equipment. At this time, Ironclad is precluded by technological considerations from
22 affixing straps to trash bags containing any amount of post-consumer recycled material.

23 I declare under penalty of perjury under the laws of the State of California that the
24 foregoing is true and correct.

25 Executed this 19th day of June, 1997, at Chicago, Illinois.

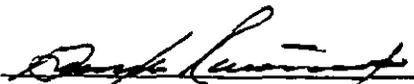
26
27
28 
GARY L. RUTLEDGE

EXHIBIT A

IRONCLAD, INC.
305 Spring Creek Village, Suite 524
Dallas, TX 75248
(214) 238-8981
(214) 238-8983 FAX

RESUME OF GARY L. RUTLEDGE

Education:

University of Washington
Seattle Washington
North Texas State

BS, Mechanical Engineering
Sales and Marketing Inst.
MBA Studies

Professional Associations:

American Manufacturers Association
Society of the Plastics Industry

Experience:

GAF Corporation 1960-1965

Design, engineer, consumer products manufacturing

Sales Consultants, Inc. 1968-1973

Training Director

Pride Industries, Inc. 1973-1979

President, Consumer Products Manufacturing

Garrut Manufacturing Corp. 1980-1986

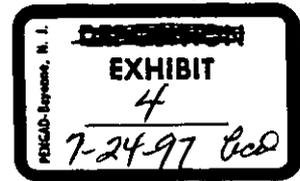
President, Industrial Products Manufacturing

Ironclad, Inc. 1986-present

Vice President, R&D Consumer Products Manufacturing







1 GENE LIVINGSTON - State Bar No. 44280
2 LIVINGSTON & MATTESICH LAW CORPORATION
3 1201 K Street, Suite 1100
4 Sacramento, CA 95814
5 (916) 442-1111
6 (916) 448-1709 FAX

7 Attorneys for Applicant Ironclad, Inc.

8 BEFORE THE CALIFORNIA INTEGRATED
9 WASTE MANAGEMENT BOARD

10
11 In re:) DECLARATION OF RONALD L.
12 Variance Application of Ironclad, Inc.) WALLING IN SUPPORT OF THE
13) VARIANCE APPLICATION)

14 I, Ronald L. Walling, declare:

15 1. I am President and Director of the Advanced Materials Center, Inc. I have
16 personal knowledge of the matters set forth below and, if called, could and would competently
17 testify thereto.

18 2. I am a licensed chemical engineer, and have worked in the field for 30 years. A
19 copy of my resume is attached to this declaration as Exhibit A and incorporated by reference.

20 3. In 1996, and again in May, 1997, Advanced Materials Center, Inc. was asked
21 by Ironclad, Inc. to test a variety of heat-affixed strap trash bags. The tests we conducted and
22 the results of those tests are set out in the attached Report to Ironclad and attached to this
23 declaration as Exhibit B and incorporated by reference.

24 I declare under penalty of perjury under the laws of the State of California that the
25 foregoing is true and correct.

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Executed this 17th day of June, 1997, at Ottawa, Illinois.



RONALD L. WALLING

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EXHIBIT A



Ronald L. Walling, President & Director

Undergraduate Studies: **Illinois Institute of Technology** **BS Chemical Engineering**
Graduate Studies: **Marquette University** **MS Inorganic Chemistry**

Seminars Developed:

Advanced & Beginning seminars in Polymers and Plastics processing, 1965 - present.
Both independently and with SPE, ACS, AIChE and other groups.
Frequent lecturer at society meetings and Universities.

Professional Associations:

American Chemical Society (ACS)

ASTM Member D10 Packaging, D20 Plastics, D20.95 Recycling, D10.33 Refuse Bags
Secretary D20.96 Degradable Materials, Task Group Chairperson Photodegradable

Bio/Environmentally Degradable Polymer Society (BEDPS)

Canadian Standards (CSA) Standards Technical Committee

Degradable Plastics Council (DPC/SPI) Technical Committee Member

Electrostatic Discharge Association (ESD)

Research Directors Association of Chicago (RDAC) President 1994-95, Director

Society of Plastics Engineers (SPE) Chairperson, 1994-95 Director Recycling Division#40

Society of the Plastics Industry (SPI)

Professional History:

Advanced Materials Center, Inc.

1989 - Present Founder, President, Chairman

Sears Roebuck - Sears Laboratories

1976 - 1989 Plastics Consultant, Product Engineer, Manager of Industrial Marketing ; Sears World Trade

Novamont - Montedison

Technical Manager Acrylic and Polypropylene Operations in US

Rexnord, Inc.

Plant Manager and Director of Research, Epoxy, Polyester & Urethane Materials

U.O.P.

Head Plastics Research, Molding operations and tooling, Bostrom Division

Milwaukee School of Engineering (MSOE)

Head Chemical Engineering Technology,, Assistant Professor, Lecturer in Polymers, Chemistry and Chemical Engineering

BF Goodrich Chemical

Product Development Engineer Latex Polymers and applications

Amoco Chemical

Engineer, Development - Polymer Synthesis and testing

EXHIBIT B

CONFIDENTIAL!
Not to be released
without appropriate
authorization!

LABORATORY REPORT

Advanced
Materials
Center, Inc.

125 Swanson Street Ottawa, IL. 61350 (815) 433-1495 Fax (815) 433-1795

Client: Ironclad, Inc.

Date: May 29, 1997

Introduction:

At the request of Ironclad, Inc. we have conducted two series of product and material evaluations during the past twelve months. The specific purpose of the evaluations was to determine through testing on Ironclad's premium Strap Seal product line, what is the effect of adding different percentages (or levels) of PCR (Post Consumer Recycled) polyethylene resin.

Advanced Materials Center Expertise:

The Center has been involved in film and related products testing since its inception in February 1989. The director has been directly involved with this industry since 1977. Clients served include manufacturers: Hefty (Tenneco Packaging), Glad (First Brands), Webster, Ironclad, North American, American Western, Citibag, Presto, Rollpak and Carlisle.

Retailers: Sears, Wal Mart, Sam's, Price Club, Tru-Value and Ace.

Distributors: Topoco and Perseco (McDonald's) to name a few.

The testing and development work conducted by the Center includes both basic and advanced product development, product claims certification and competitive product comparison evaluations. The Center participates as a member of ASTM D 10.33 subcommittee on Refuse Bag testing and aids in the establishment of new methods to test film and bags and D20 on Plastics.

Purpose of Tests:

The testing was comprised of two main series:

The first series, I. (June, 1996):

This series evaluated the strength of the **Strap Seal attachment** under variable times, temperatures and pressures. The level of PCR polyethylene was run at 10 - 15% by weight blended with virgin polyethylene. The testing evaluated sealing time and temperature variation on the ability to reach a minimum strength of 2.5 pounds-force. The test data summaries are attached in Appendix I.

The second series, II. (12 May, 1997):

This series evaluated the effect of PCR polyethylene content at 0, 5, 10, 20 and 30% levels of

PCR polyethylene blended with virgin polyethylene, on the Strap Seal properties such as strap adhesion, integrity of seal and consistency of the strap bag product. Test data summaries are attached in Appendix I. Composition comparison of lots of PCR polyethylene pellets were also made.

Sample sources:

The materials used for sample preparation were obtained from normal supply channels of Ironclad.

Series I samples were 13 gallon Strap Seal bags with a target guage of 0.8 mil thickness with straps attached using variable dwell (contact) time and seal temperatures at a uniform seal pressure. The samples were prepared and submitted by the R & D department of Ironclad.

Series II samples were 30 gallon Strap Seal bags with a target guage of 0.8 mil thickness with straps attached at optimum control settings and normal operating line speeds during regular plant running conditions. These samples were made at Ironclad's facilities under the direction of the Quality Control Laboratory.

Testing Performed:

1. Strength Tests (Tensile & Elongation) per ASTM D 882.

The strength of a material as how resistant it is when pulled and stretched is the tensile strength. The amount of stretch is referred to as per cent elongation. This was run on samples in both series to compare the effect of PCR polyethylene at increasing amounts on the practical strength of the Strap Seal bag film.

2. Seal Strength (Grab Tensile / peel tests):

This modified tensile test "peels" off the strap from the bag film to evaluate the strength of the Strap Seal. A minimum of 2.5 pounds force has been found necessary to ensure a good product.

3. Thermal Analysis Tests:

The temperatures at which changes in a plastic occur need documentation. These include melting and a change in character called the glass transition. These are important to measure to understand how the plastic will behave under manufacturing conditions and its purity. A DSC (differential scanning calorimeter) is used for the measurement.

4. Infrared Analysis (Chemical composition and quality):

The measurement of the chemical signature of a material is very useful to determine the purity, types of contaminants and any degradation (oxidation) that has occurred. A type of infrared spectrophotometer called and FTIR is used for this analysis.

5. Contamination:

The high speed attachment of the Strap Seal to the bag requires the exact application of force at a temperature for a set time. The surfaces of Strap and bag must be clean and uniform to ensure good contact. Visual observation of uniformity of dispersion of additives and contamination (dirt, specks, gels, other particulates) by transmission (looking through the bag film) and surface uniformity analysis (smooth, bumpy, clean or dirty) identify potential ease of bonding the strap to the bag film. PCR polyethylene is usually high in these material contaminants, especially compared to virgin polyethylene.

Criteria:

General: Production of Strap Seal Bags requires high speed attachment of straps to 100% of the bags. The straps need to stay inside of the roll to prevent premature damage and proper fit into consumer packaging.

The bag film must be uniform in quality and have good additive dispersion.

Contaminants are not generally acceptable as they interfere with the attachment of the strap making it impossible for them to pass the quality control specifications.

Specific:

A. The production process specification for heat seal attachment to bag varies between these ranges based on the different bag gauges and production rate (feet per minute).

Dwell Time (Heat Applied):

Min. - 120 ms (milliseconds)

Max. - 140 ms

Temperature:

Min. - 310 °F

Max. - 370 °F

B. The heat sealing strength of the Strap Seal to bag attachment must meet or exceed a 2.5 pound minimum strength requirements:

C. Melt Point (thermal analysis): ± 8 °C

1. Low deviation from virgin resin

D. Chemical Purity (Contamination): Infrared Spectra Plot & visual

1. No unusual absorption peaks in IR spectra.

2. No visual gels, agglomerates or streaking in bag film.

3. Less than 1 gel or agglomerate per four square inches.

The tests outlined above were utilized to determine the effect of PCR polyethylene on these quality criteria for the Strap Seal bags.

Results:

Series I:

The series I testing evaluated two virgin/PCR polyethylene blends containing 10% and 15% PCR respectively to virgin resin samples. The testing varied dwell time (heat applied) and temperature of strap attachment to the bag film. The Specification B, strap seal strength, was measured to rate the samples tested.

The virgin (0%) PCR samples had adequate strength (≥ 2.5 pounds) over the range of test variables. The results ranged from 2.5 to 2.8 pounds as noted in the Series I data attached.

The 10% PCR samples (A) reached top readings of 1.5 - 1.6 pounds only at higher temperatures. All values were well below the 2.5 specification.

The 15% PCR samples (B) attained top reading of 1.5 pounds only at highest temperatures and longest dwell times.

This indicates that not only does the addition of PCR polyethylene lower physical properties but, requires longer seal time at higher temperatures and still results in inadequate strap attachment.

Series II:

The series II testing evaluated virgin and virgin/PCR polyethylene blends from 0% PCR resin to 5, 10, 20 and 30 % PCR (recycled polyethylene) and the effect on meeting production specifications. The PCR used in the samples was supplied by a current IRONCLAD, Inc. Source and specified to be 100% LLDPE (linear low density polyethylene resin). Use of the DSC (differential scanning calorimeter for thermal analysis) shows the PCR to have a two (2) component composition with a wide melt range of 90 °C to 135 °C and two (2) melt peaks of 110.2 °C and 123.4 °C were detected. This means that compared to virgin LLDPE having only one component composition, that is, an original source resin with a narrower melt range of 105 °C to 125 °C, the PCR is not 100% LLDPE in composition. Furthermore the PCR has degraded substantially as shown by oxidation found with the FTIR (infrared) analysis.

The samples were prepared (per Specification A) at optimum dwell time, pressure and temperature. The Strap Seal bags tested were 30 gallon of 0.8 mil nominal thickness for up to 10 % PCR content. The 20 % and 30 % PCR content Strap Seal bags were made at thicker gauges to maintain bubble stability during production.

The Strap Seal weld strength (per Specification B) was met by the virgin bag film samples but was low and quite variable for all the PCR bag film samples.

The Melt Point deviation (per Specification C) was nearly out of range for the blended materials. This is the thermal analysis measured practical range value for the virgin resin used and the similar value determined for PCR resins to be blended. Resins need to be in same range to process into bag film and obtain a working strap seal.

The Chemical Purity or contamination (per Specification D) of the PCR modified samples showed degradation with excessive particulates and agglomerates. The bag film of the 20 % and 30 % PCR material was very poor and showed excessive streaking, agglomeration and incomplete mixing with foreign particles present.

Summary:

The use of Post Consumer Recycled (PCR) polyethylene to manufacture Strap Seal bags prevents adequate attachment of the straps to the resulting bag film material. Longer seal time and higher pressures still result in inadequate seals. Compared to the current product, all are rejects.

The incorporation of higher levels of PCR adds more degraded polymer resulting in increased levels of contamination making it virtually impossible to provide an acceptable strap attachment.

PRODUCT CRITERIA

These definitions are to be used to determine the qualifications to be met when checking the following:

Bag Width

No less than stated width: no more than stated width +1/2".

Bag Length

For USA (including California) - Minimum length as stated measures usable bag area, not including tail/skirt. It is measured from seal to opening. Range is no less than stated length and no more 3/4". "S-F," is the identification for this measurement on schedules and some specification sheets.



Bag Tail

This is the width between the bottom seal and the perforation along the bottom of the bag. Ideally this dimension should be 1/2". Range is no less than 1/4", and no more than 3/4". (Also referred to as "skirt")

Perforation

Should pull apart cleanly, without tearing the bag or opening the seal.

Bottom Seal

Burst test on a pass/fail basis. Doubtful conditions checked using water test. Melts (too hot with seal bar) are considered cosmetic, but should be watched as a potential problem and should be brought to the attention of the shift supervisor. Two sequential bags must be checked.

Bag Weight

For USA (including California) - The range is no less than noted on specification weight and no more than 3% of that weight.



Print

Must be legible and clearly visible. Large blots are unacceptable.

Roll Appearance

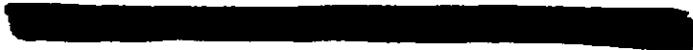
Telescoping (rattail, coning, etc.) Is unacceptable as a packaged product. Telescoped product may be repaired by pushing extended bags inside the roll or removed (no more than two) and added to package (check roll weight). Care should be taken than none of the bags are damaged during this process.

Roll Width

Width should be no more than 9 1/2" for StrapSeal products (to fit dispenser). Exceptions are 46 and 55 gallon StrapSeal products.

Opacity

(As measured by the densitometer)



**StrapSeal Bags
(Wrap 'n peel)**

The following requirements are used only on StrapSeal bags.

Strapwind

No strap should extend more than 1/8" from roll edge.
If more than 3/8" from edge. notify technician.

Roll Appearance

No more than 10% straps may extend out of the roll wind.
10% - push straps back into roll and pack product. More than
10% - is a reject. Notify technician.

Width of Window

Range 1" to 1 1/2" for all lines except line two. Line two range is
1 1/2" to 2".

Heat Seal

Full oval of heatseal must show. A maximum of 25% of the seal
area can be an underseal. Burn-throughs are not acceptable.
Reverse pull test should be performed at each check. Strap pull
Must meet or exceed 2.5 lbs of tension.

Placement of Strap

13 gallon 3 1/2" from top of bag to top of strap +/- 1/4".
All others 4" from top of bag to top of strap +/- 1/4".

Tail Tack

Holes are not acceptable. Tail must adhere to top layer of bag until wound on roll.

Non-StrapSeal Bags

The following procedures should be used to check non-StrapSeal bags.

Twist Ties

Quantity must equal number of bags in case. If box is perforated, ties must be placed near the perforation.

Packaging

Additional Items - UPC, Clear, Blue bag stickers, coupons. Business Reply Cards and dispensers should be noted when the product requires them. All stickers should be checked for proper placement.

Label

Check for correct product number, proper placement and wrinkles. Wrinkles create a defective appearance and are not to be accepted. When in doubt, notify the Supervisor.

Pallet Configuration

Verify pallet type and size, quantity and proper layer design for product.

Case Lot Number

Case lot numbers are placed in the lower right corner of all containers including master boxes of multi-pack items.

Wrap-n-Peel Strap

Width

Master roll must be 30" +/- 0.
Printed roll must be 10: +/- 0"
Wrap-n-Peel roll must be 5" +/- 0"

Gauge

Must be 3.0 mil +/-5%.

Opacity

(To be determined)

Wind

Must be clean and legible

Ink Viscosity

Must be 16 seconds (using specified measuring cup)

Color

Must be correct color and properly positioned.

Registration

Must be properly positioned (color inside black outlined logo)

Treated

Must be treated in the proper area for printing but must not extend into the heat seal area.

Adhesive

- Must contain proper amount (knob setting of 115)
- Must have 1/8" clearance between adhesive and outer edges of liner.

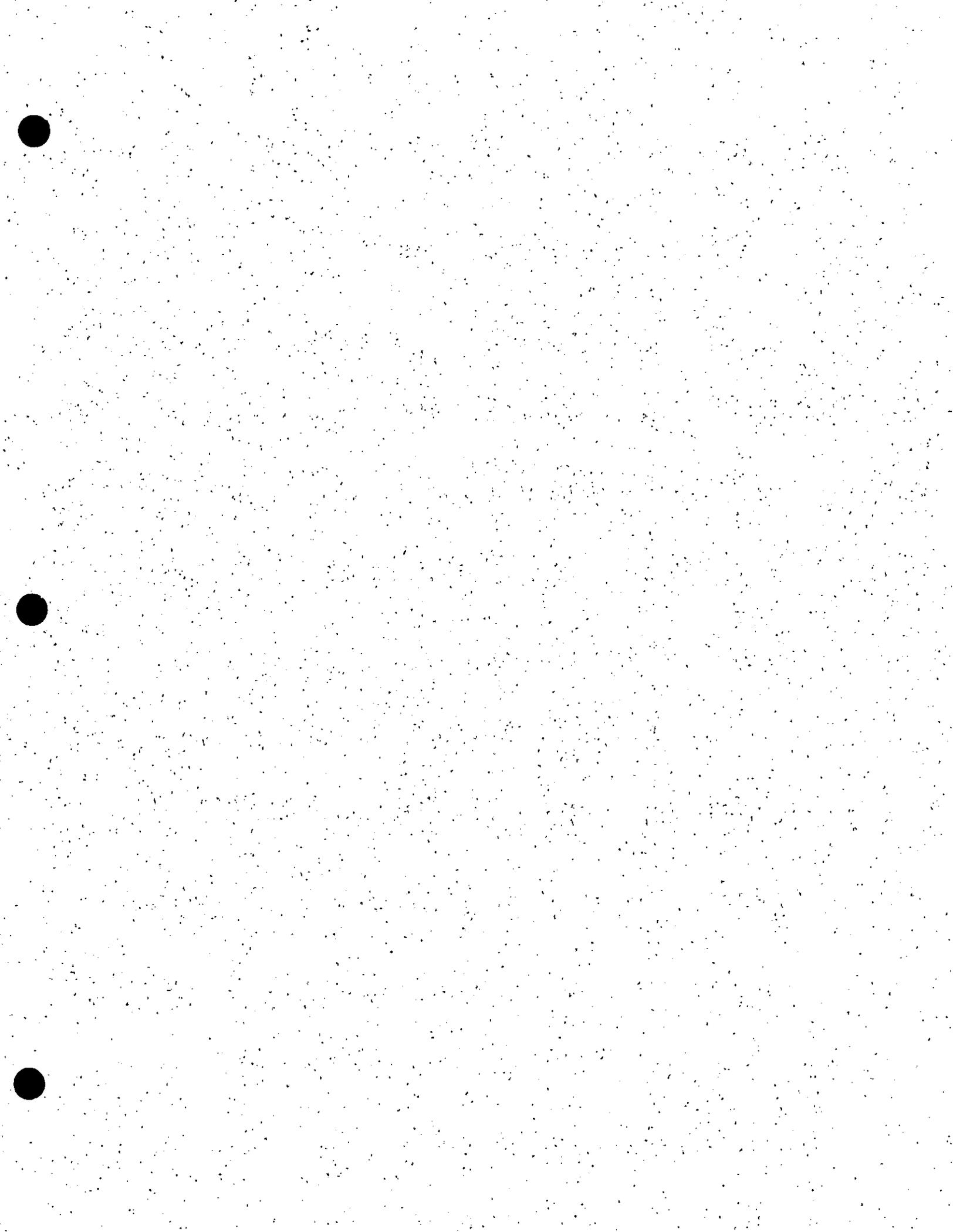
Liner Position

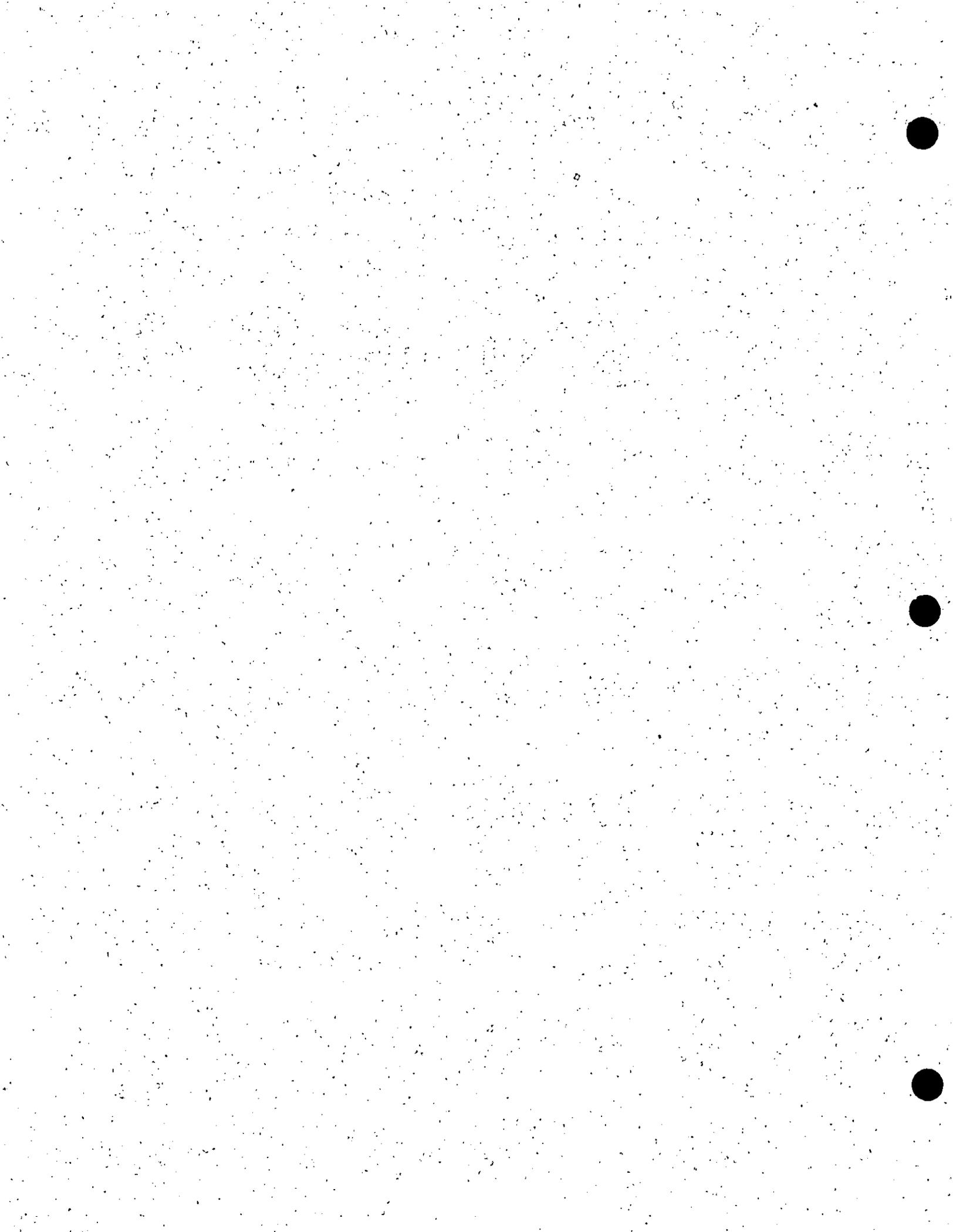
- Must be correctly positioned on printed roll.

**Wrap-n-Peel
QA Procedure**

The following procedure should be used for quality assurance checks for Wrap-n-Peel.

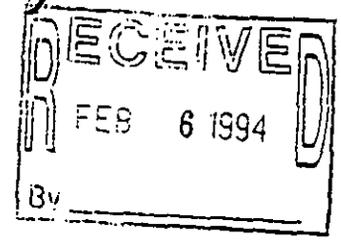
1. Operators will 100% inspect every roll produced during their shift in accordance with the applicable checksheet.
2. Operators will cut a one-inch sample from each roll and place in the designated area for Quality Assurance testing.
3. Each master and printed roll will be identified by date, operator and shift. Each will also be identified using a sequential numbering scheme. The date and sequential number must be stated on the Quality Assurance sample.
4. Quality Assurance technicians will inspect samples every four hours in accordance with the applicable checksheets.
5. All checksheets will be given to the Quality Assurance manager on a daily basis for review.





IRONCLAD[®] INC.

Hand out from
Linn Livingston,
Representing Iron Clad



Dear Friends,

Ironclad is one of the leading companies in its market today. We have always strived to continuously update and innovate our products to the needs of the consumer.

One of our most recent additions to our family of products is the new Wrap-n-Peel attachment to our liners. This, as most of you will notice, is an improved version of our StrapSeal products.

Simply twist the top of the bag closed, peel the liner from the back of the strap (exposing the adhesive) and wrap around to seal the bag.

Since this product is new to the market arena, we would appreciate hearing any comments you may care to share. Enclosed you will find a self addressed stamped envelope for your convenience.

Thank you for selecting an Ironclad product.

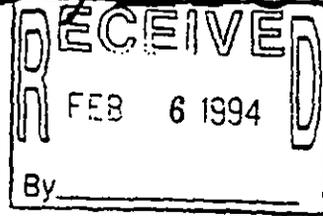
Customer Service Department

I like the adhesive better
than the old way

Mr. John



IRONCLAD[®] INC.



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Thank you for selecting an Ironclad product.

Customer Service Department

*This is one of the best bags you have had.
It is nice not having to try and get the
straps through a little hole.*

RECEIVED
FEB 6 1994

Practical, Inc.
7330 Julie Frances Dr.
Shreveport, La. 71129

Ladies/Gentlemen,

Thank you for such a fast reply to our complaint regarding the missing ties on our trash bags. And thank you, too, for the free box of bags! It makes us feel good to know that there are still some companies who really do care about the product they produce & about the customer who purchases them.

Also want you to know I used the bag that was sent with Wrap n-Peel tag on tie & I really like that! Works much better than the old wrap & is a lot faster to do. Good idea!! Hope the next time we have to purchase a box it will be one with these new tags!

Thank You + Sincerely
Jane C. Shine
C#

IRONCLAD[®], INC.

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Thank you for selecting an Ironclad product.

Customer Service Department

Dear Sir,

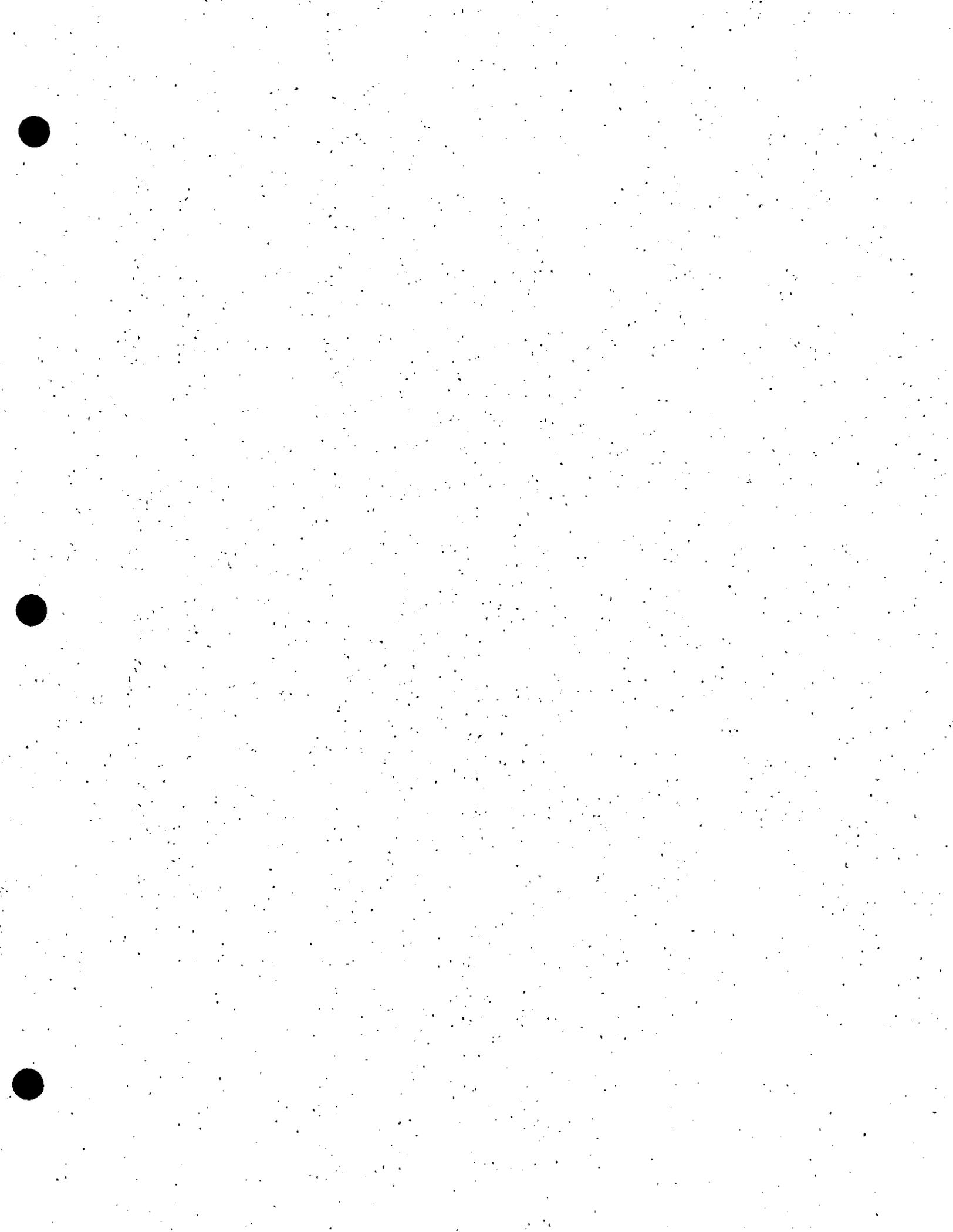
This closure mechanism is a real improvement over the mechanism on the original StrapSeal product. It's much more user friendly. I'll look for this improved version of StrapSeal products in my local stores.

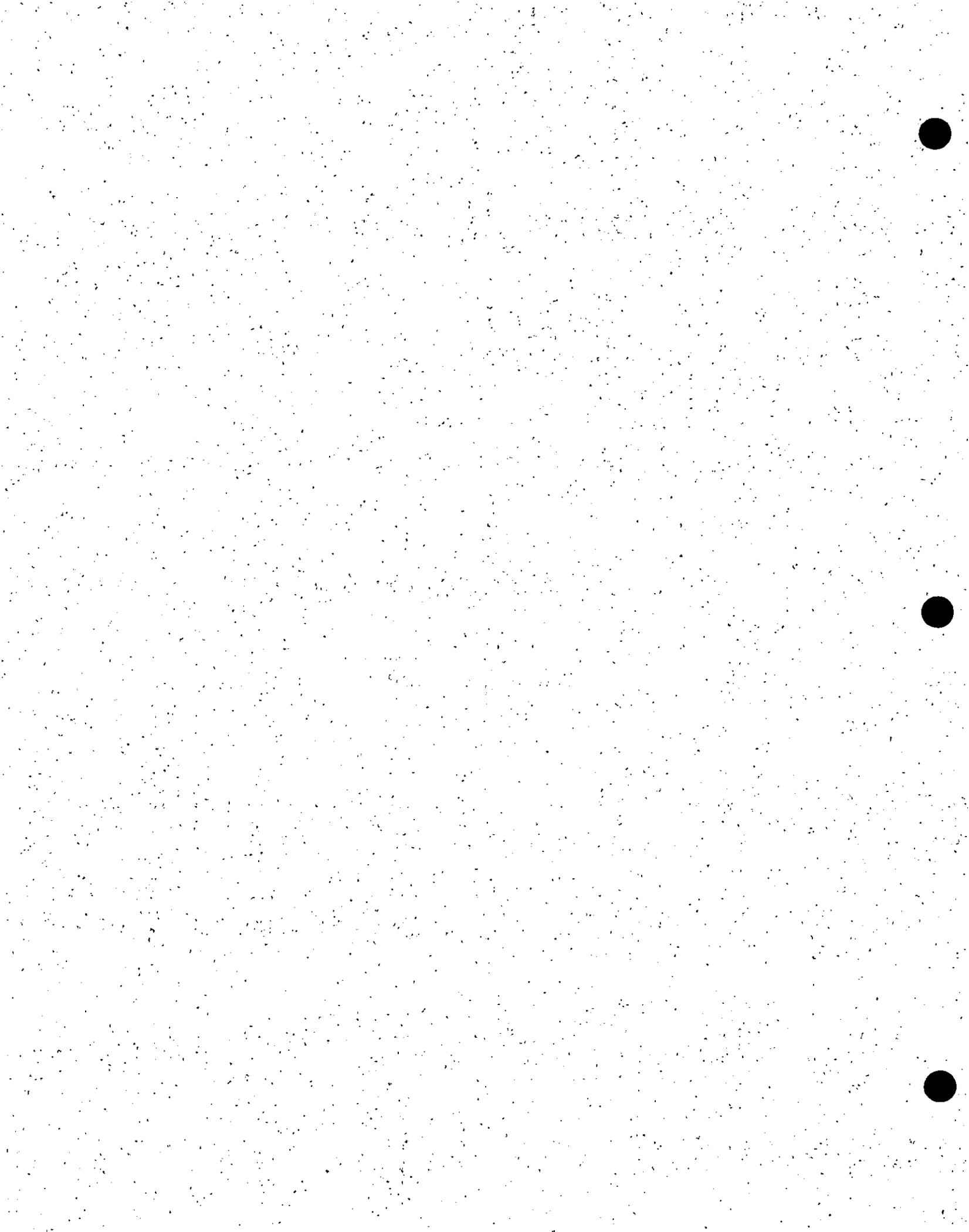
Sincerely,

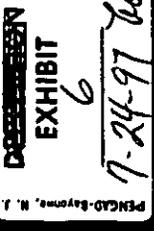
Daniel C. Hill

By the way, I retired from the USAF Reserve (KC10 Flight Engineer) back in 1990. I always enjoyed my Reserve weekends in Shreveport.

7330 JULIE FRANCIS ROAD • SHREVEPORT, LA 71129 • 318-686-8940 • FAX # 318-686-8943







Handout from Ben Downing representing Brown Coal

20 DEC 94 SHIFT A 7:30PM PRODUCTION SUMMARY

Line	Product Code	Total C.S.	Prod. Lbs.	Scrap Lbs.	+/- Pills.	Gross T/P	Scrap %	Run Time	Dwn. Time	T/P Std.	T/P Var.	Std. PPH	Rate PPH	Var. PPH	Act. Std.	Gross T/P Lbs.	Net Prod.	Gross Sep. %	
'1	25013SW(1)	650	5,324	130	21	5,475	2.37%	6.00	0.00	5,280	194	880	912	32	3	11,035	10,394	5.62%	
	SL21013SM	737	5,071	490	0	5,561	8.81%	6.00	0.00	2,880	2881	480	927	447	2				
comments: 7053SW 751 7,743 146 44 7,933 1.84% 12.00 0.00 6,360 1573 530 661 131 1 7,933 7,743 1.84%																			
comments: 13356SLC-6 45 1,007 215 6 1,228 17.51% 3.25 7.00 1,820 -592 560 378 -182 3 3																			
'3	SL9039SM	64	472	106	0	578	18.33%	1.00	0.75	680	-102	680	578	-102	1	1,806	1,479	17.77%	
comments: START UP AFTER LINE #9 WAS SHUT DOWN LOT OF PROBLEMS WITH SSM BOTH SIDES *****THESE ARE BLUE BAGS****																			
'4																0	0	ERR	
comments: DOWN																			
'5																0	0	ERR	
comments: DOWN																			
'6																0	0	ERR	
comments: DOWN																			
'7	P10013SL-6	68	1,167	374	0	1,541	24.27%	4.25	0.00	1,700	-159	400	363	-37	3	2,203	1,565	28.96%	
	11360(B/U)	11	241	64	0	305	20.99%	0.50	0.00	240	65	480	610	130					
	SL13180PC	20	158	200	0	358	55.93%	2.00	5.25	960	-602	480	179	-301	1				
comments: SHUT DOWN TO CLEAN AIR RINGS ALSO MAINT CHANGE OUT PRIMARY NIPS RESTART BLOWING HOLES AND PULLING CARBON																			
'8																0	0	ERR	
comments: DOWN																			
'9	P10013SL-6	129	2,214	300	89	2,603	11.53%	5.75	5.25	2,300	303	400	453	53	3	3,131	2,652	12.46%	
	11360(B/U)	20	438	90	0	528	17.05%	1.00	0.00	480	48	480	528	48					
comments: OUT OF TAPE SHUT DOWN START UP LINE #3																			
'10	SL13180PC	616	4,854	214	96	5,164	4.14%	11.50	0.00	5,520	-356	480	449	-31	1	5,455	5,075	5.21%	
	11360-90	7	221	70		291	24.10%	0.50	0.00	200	91	400	581	181	4				
comments: 1313180PC 681 5,366 318 120 5,804 5.48% 12.00 0.00 5,760 44 480 484 4 1 1 5,804 5,366 5.48%																			
'11																0	0	ERR	
comments: *****PLEASE NOTE THAT THE AMOUNT OF PACKERS LISTED ARE NOT CORRECT*****																			
'12																0	0	ERR	
comments: DOWN																			

Target -- Total Gross Lbs. 34,180 Total Scrap Lbs. 1,709 Total Net Lbs. 32,471
 Actual -- Total Gross Lbs. 37,367 Total Scrap Lbs. 2,717 Total Net Lbs. 34,650
 REGRINC 0
 PCR 0

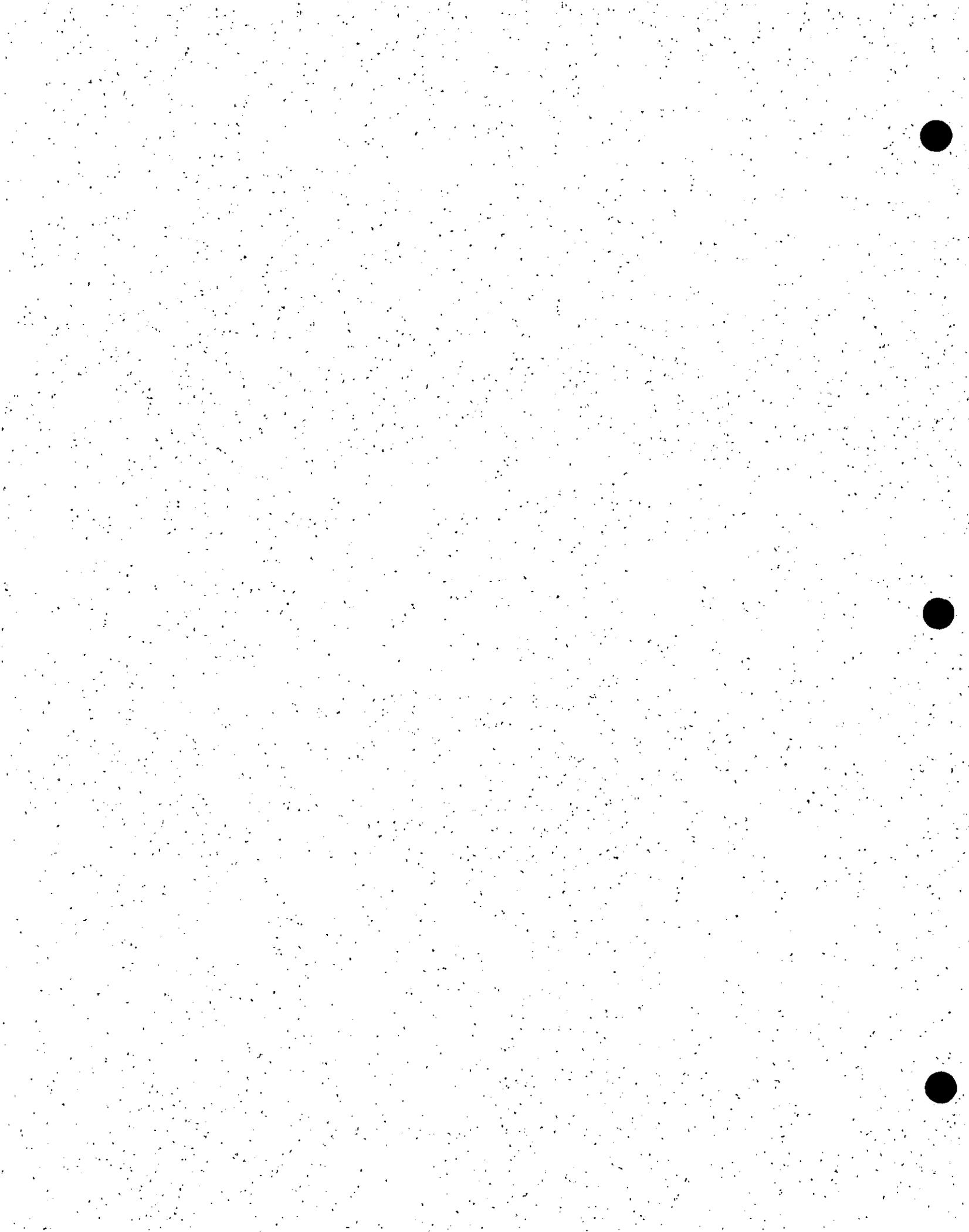
20 DEC 94 SHIFT D 7:30PM PRODUCTION SUMMARY

Line	Product Code	Total Cts.	Prod. Lbs.	Scrap Lbs.	+/- Pkts.	Gross T/P	Scrap %	Run Time	Dwn. Time	T/P Std.	T/P Var.	Std. PPH	PPH Rate	PPH Var.	Pkrs. Act.	Pkrs. Std.	Gross T/P Lbs.	Net Prod.	Gross Scp. %	
'1	25013SW(1)	664	5,438	207	29	5,674	3.65%	6.00	0.00	5,280	394	880	946	66	3	4	10,938	10,433	3.78%	
	SL21013SM	726	4,995	207	62	5,264	3.93%	6.00	0.00	2,880	2,384	480	877	397		2				
Comments: HAD PROBLEMS WITH AIR POCKETS & OUT OF SYNC																				
'2	7055SW	752	7,753	60	3	7,816	0.77%	12.00	0.00	6,360	1,456	530	651	121	1	1	7,816	7,753	0.77%	
Comments: BAN OK																				
'3	SL9039SM	866	6,391	225	100	6,716	3.35%	12.00	0.00	8,160	-1,444	680	560	-120	1	1	6,716	6,391	3.35%	
Comments: WINDER PROBLEMS, ALSO HAD PROBLEMS WITH UNDERSEALS ON 3-8																				
'4																	0	0	ERR	
Comments: DOWN																				
'5																	0	0	ERR	
Comments: DOWN																				
'6																	0	0	ERR	
Comments: DOWN																				
'7	SL13180PC	651	5,130	210	256	5,596	3.75%	11.50	0.00	5,520	-76	480	487	7	1	1	5,690	5,224	3.69%	
	11360-90(B/U)	3	95	0		95	0.00%	0.50	0.00	240	-146	480	189	-291						
Comments: STRAP JAMS, ALSO OUT OF SYNC PROBLEMS																				
'8																	0	0	ERR	
Comments: DOWN																				
'9																	0	0	ERR	
Comments: DOWN																				
'10	SL13180PC	640	5,043	175	197	5,415	3.23%	11.50	0.00	5,520	-105	480	471	-9	1	1	5,604	5,232	3.12%	
	11360-90	6	189	0	0	189	0.00%	0.50	0.00	200	-11	400	378	-22		4				
Comments: OUT OF SYNC PROBLEMS, ALSO HAD PROBLEMS WITH STRAP JAMS																				
'11	SL13180PC	665	5,240	410	200	5,850	7.01%	11.50	0.00	5,520	330	480	509	29	1	1	6,069	5,459	6.76%	
	11360	10	219	0	0	219	0.00%	0.50	0.00	200	19	400	438	38		4				
Comments: NARROW BAGS (SCRAPED OUT) 15 CS.																				
'12																	0	0	ERR	
Comments: DOWN																				

Target - Total Gross Lbs. 39,880 Total Scrap Lbs. 1,994 Total Net Lbs. 37,886 8 9 REGRINC 0

Actual - Total Gross Lbs. 42,834 Total Scrap Lbs. 1,494 Total Net Lbs. 41,340 PCR 0

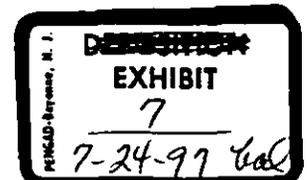




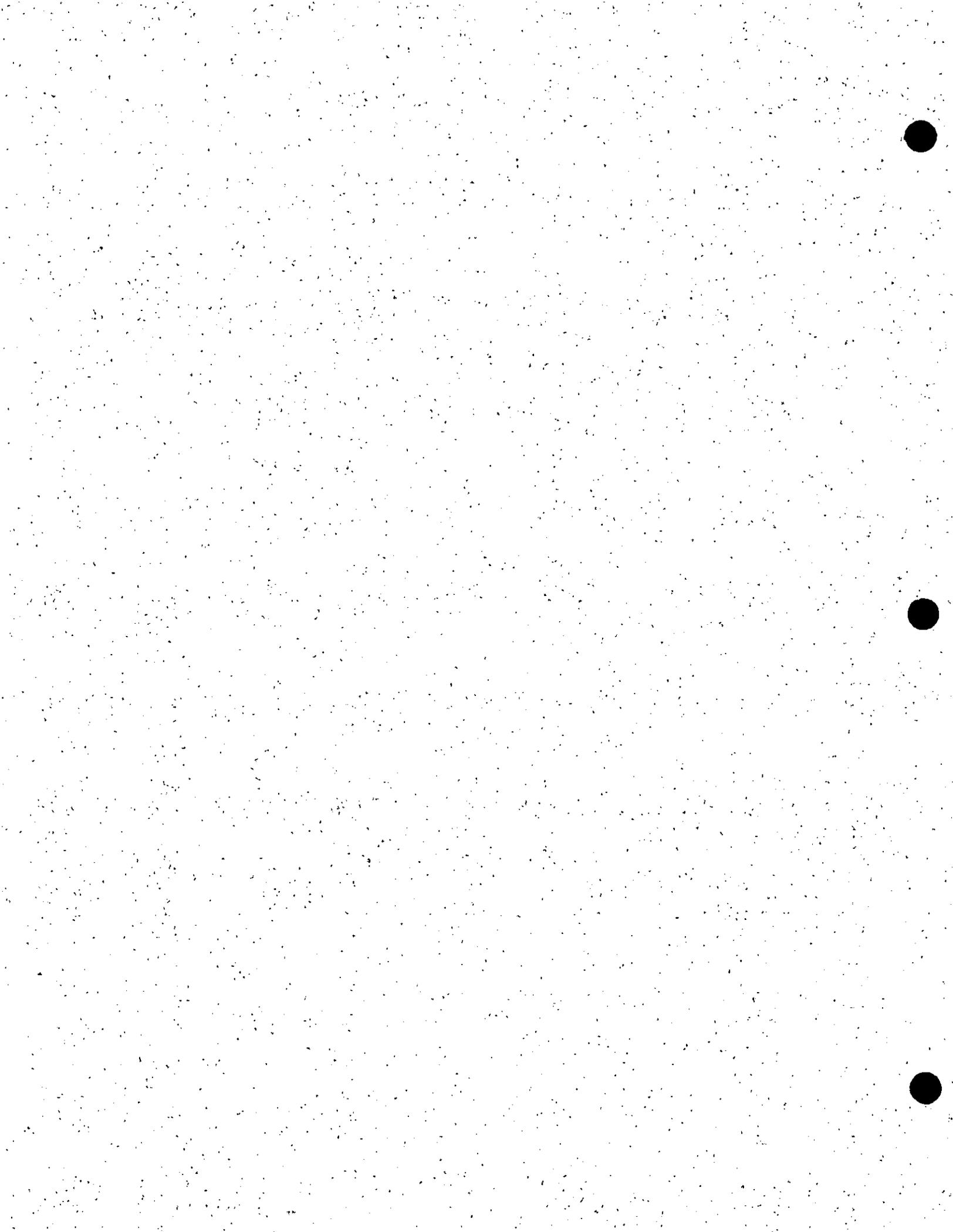
Handout from
Gene Livingston 7/24/97
representing IronClad

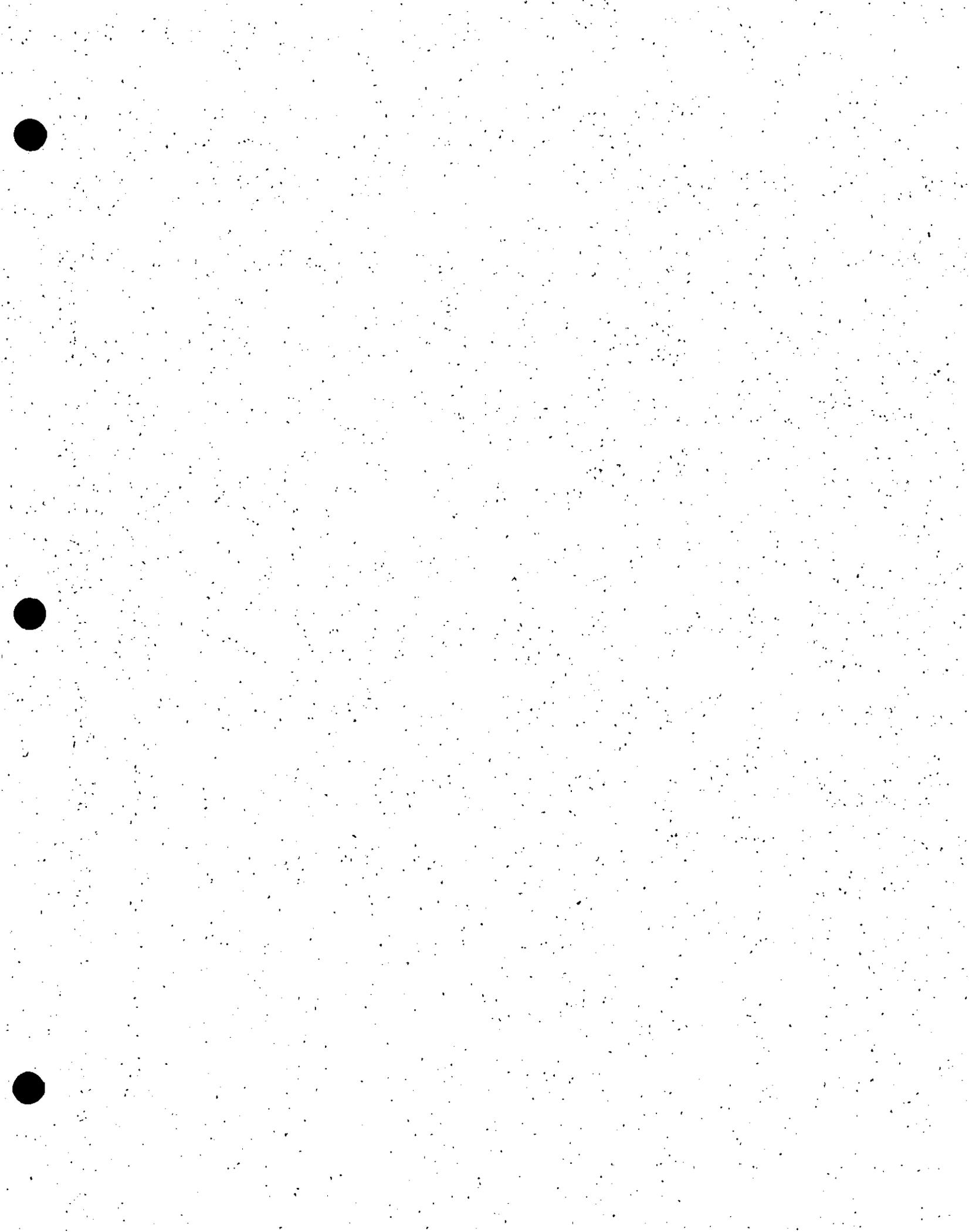
**NON-STRAP REGULATED TRASH BAGS
MANUFACTURED BY IRONCLAD**

Bag Size (Gallons)	Purpose	Gauge (Mil)
13	Kitchen	.80 .85
18	Compactor	2.00, 2.50
30	Lawn and Garden	.80, .95 .85
33	Lawn and Garden	.80, .95, .85, 1.30 .90
39	Lawn and Garden	.85, .95 .90, 1.00
42	Can Liner	2.00, 3.00
45	Can Liner	.90, 1.00, 1.20, 3.00
46	Can Liner	1.50
55	Drum Liner	1.20, 1.40
56	Contractor Bag	.85

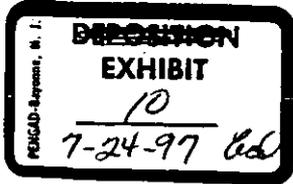












July 24, 1997

Inventory:

1)	Iron Clad	13 Bailon Tall Kit bags	1130	1.42
2)	Iron Clad	Clear Trash Bags	200 count	56 gal.
3)	"	"	250 count	33 gal
4)	"	hawn & leaf Strap Bags	30 count	39 gal
5)	"	Tall Kitchen Strap Bags	90 "	13 gal
6)	"	Trash & hawn Strap Bags	40 "	33 gal
7)	"	Trash & hawn " "	110 "	33 gal
8)	"	Clear Waste Basket	500 "	10 gal
9)	"	hawn & leaf Strap Bags	30 "	39 gal
10)	"	Trash Bags Strap Bags	90 "	39 gal
11)	"	Trash & hawn Strap Bags	100 "	2 ft 9 in x 2 1/2 ft 4 in
12)	"	Tall Kitchen Strap Bags	100 "	13 gal
13)	"	Trash Bags " "	110	33 gal
14)	"	" " " "	108	39 gal
15)	"	Tall Kit. Bags Attached Tie Straps	30 count	13 gal
16)	Quality Choice	hawn & leaf Bags w. twist ties	45 "	39 gal
17)	"	Heavy Duty Clean-up bags	20 "	46 gal
18)	Iron Sides	large Trash & hawn Bags	90 "	33 gal
19)	"	Tall Kit. Can Bags	50 "	13 gal
20)	Iron Clad	Tall kit. Bags (attached tie straps)	90 "	13 gal.
21)	"	Tall Kit. Bags (" ")	30 "	13 gal
22)	1 Iron Clad empty box	Tall Kit. Can trashbags w. ties	140 count	13 gal.
23)	Iron Clad	Tall Kitchen bags (Attached Tie Straps)	90 bags	13 gal