

DPMC will begin to find out with PHA

Can all hazards be reduced?

Just entering the implementation cycle is a seven-year initiative which will be conducted on a Complex-wide scale: Process Hazards Analysis (PHA). Designed to reduce the potential for catastrophic gas releases here at DPMC, PHA got

under way November 1 with members of an interdisciplinary team. The PHA team will be studying process units like they've never been studied before.

Starting with high priority units, engineers, foremen, operators and others will be

looking very closely at their assigned units, asking question after question in order to uncover potential hazards and decide how to eliminate them.

The actual PHA technique Shell will use is HAZOPS, (Hazards & Operability Review), which is "an organized way to generate a tremendous number of questions that the group asks themselves," says CHARLIE GILLARD, superintendent of Process Engineering. "Like what if this variable goes up or down or backward. It's an organized way to create a list of questions that you ask yourself--a longer list than you would ever generate with a less disciplined or organized process or procedure."

HAZOPS also makes good utilization of the expertise of personnel on many levels.

"This is an opportunity to include some key and knowledgeable people within units who will be thinking about nothing else but the safety hazards in that unit," says BILL CARTER, technical manager, Process Hazards Management. "And it's a place where you really get an opportunity to listen to the guy who has his sleeves rolled up out there on the front line--the operator--and involve him in a way he's probably never been involved before."

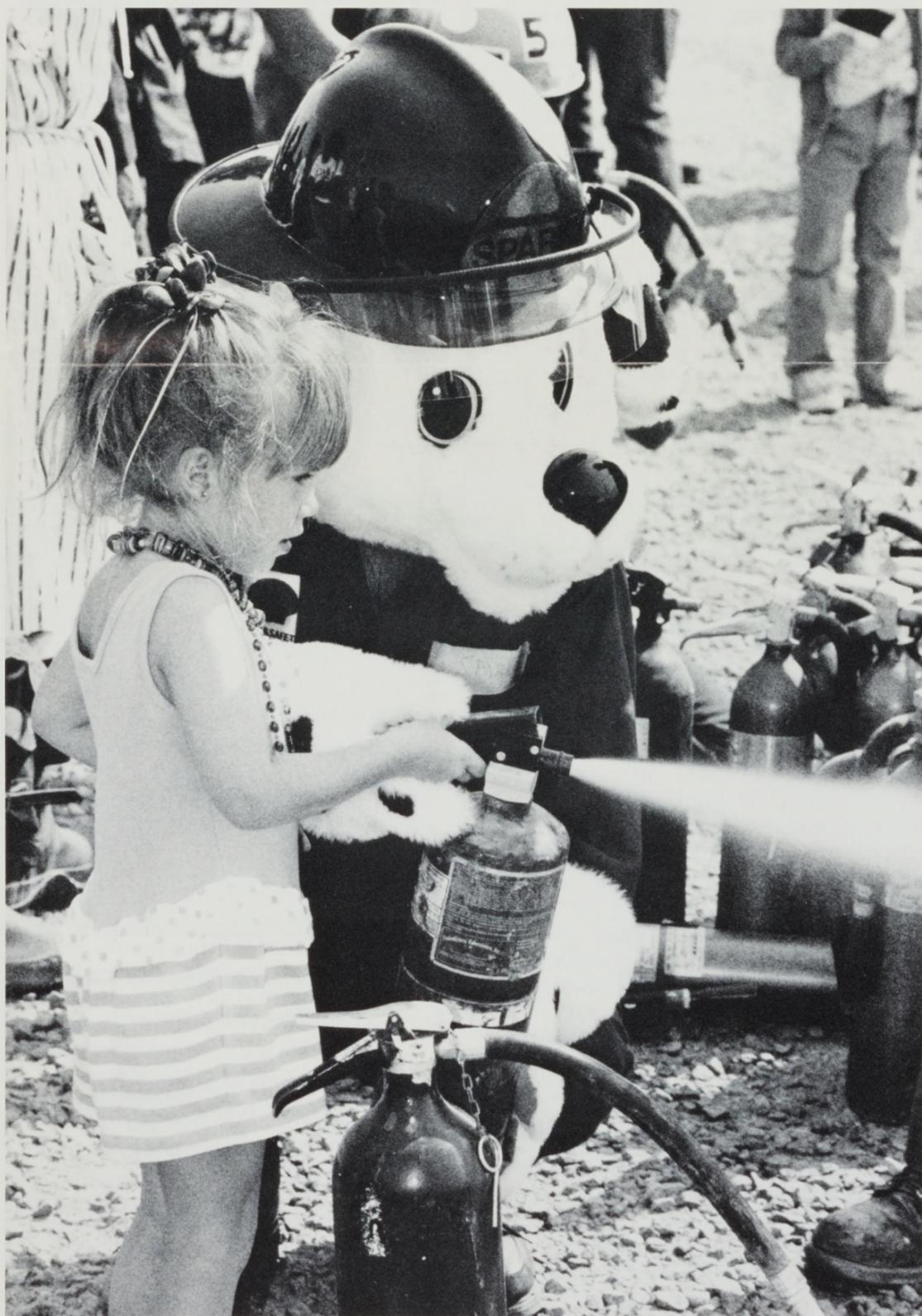
“The goal of the program is to improve the safety of the process units and decrease the chances of a significant safety problem.”

"Most of what we've done in the past has been technical reviews without a lot of involvement of the guy in the field," adds Carter. "In HAZOPS, Shell can have a deep involvement by all people."

The first unit scheduled for HAZOPS is the Propane Storage Facilities in Fuels, closely followed by LHT-2 (LPA), Site III/LPG (Chemical), and LO-III (Olefins). Plans are to complete all the units under study--about 80 of them--over the seven-year period and then start over "with a clean piece of paper each time," says Gillard.

"The goal of the program is to improve the safety of the process units and decrease the chances of a significant safety problem," says Gillard. "The objective is to go through a very organized and thorough analysis of potential hazards and our protection systems against them."

(See "Process Hazards Analysis" on Page 6)



PUTTING OUT FIRES--It's never too early to learn how to fight fires. Employees and their families took lessons from Shell's Sparky during DPMC's Family Home Fire Prevention Day last month.



Agencies to receive over \$235,000 in support

United Way participation reaches all-time high

United Way should make a difference to those in need this year as Shell employees gave their fair share to the tune of over \$235,000.

Contributions were at a record high at the Complex, exceeding the year's campaign goal of \$230,000. The gift represents employee participation of 84 percent, with over 96 percent of the pledge cards returned as of November 14.

"Besides recognizing the wonderful giving spirit of employees, thanks go to the United Way campaign staff, who did an excellent job this year," comments Staff Co-chairperson PAUL HAMILTON, Cat. Cracking/Gas.

Campaigners, who numbered over 200, collected contributions, staffed the DPMC United Way office, visited area agencies, and in general promoted the United Way cause. Recognition dinners were held in their honor earlier this month.

Performing live at the recognition dinners was the Salvation Army's Harbor Light Choir, a

singing group composed of individuals who have received or who are now receiving drug abuse help through the services of United Way agencies. Comments JODY JOHNSTON, North Lab, and DPMC United Way campaign staff co-chairperson, "The performance was outstanding. It's obvious that our dollars certainly work and work well."

In an October 30 recognition reception for Greater Houston area Shell campaign managers, the corporation announced area-wide donations of \$4,182,000 from employees, pensioners and the corporation. Employee contributions totaled \$2,065,000; corporate, \$2,055,000; and pensioner, \$62,000. The pensioners campaign concludes mid-December.

Overall, Shell employee participation in the Greater Houston area was 95 percent, up 1 percent from last year. Shell's combined per capita of corporate and employee gifts is \$347, a 10 percent increase over last year.

Shell illustrated its area total with the delivery of over 4 million red hot cinnamon candies-- one for every dollar collected--to 21 United Way agencies for children's Halloween baskets.



LIGHTING UP--A member of the Salvation Army Harbor Light Choir belts it out for United Way dinner-goers.

Introducing Healthspots

The Health Revolution

The baby boomers defined our last three decades. They gave us "social revolution" in the '60s, "sexual revolution" in the '70s and "health revolution" in the '80s. The health revolution continues into the '90s.

According to Baby Boomers, overzealous fitness routines, improper food combinations

and recurrent absenteeism are "out." Sensible exercise, proper food combinations and perfect attendance are "in."

As Baby Boomers hit their 40s, one of two things often happen: middle-age spread takes over, or the quest for everlasting health (youth) begins.

Research and technology have shown us how to lower our cholesterol, reduce the likelihood of cancer, manage stress, and how aerobic exercise can strengthen our hearts and lungs.

The Health S.A.F.E. Team is dedicated to providing information to DPMC employees and their families regarding healthy lifestyles. Plans are to run health articles like these in the Shellegram three months of the year. During the second quarter of 1990, the team reviewed the

1989 morbidity (illness) statistics for DPMC. These statistics revealed that the top three contributors to non-occupational absences were: respiratory ailments, broken bones and muscular strains.

Focusing on the highest contributor, respiratory ailments, the detailed breakdown revealed that the common cold was the biggest inhibitor of perfect attendance at DPMC in 1989. What can we do to ensure that we do not become one of these statistics this fall and winter? Read on!

The first Healthspots article focuses on the common cold.

--Herb Munks

Health S.A.F.E. Team member

The Nose Woes

by Katherine Moore
Health S.A.F.E. Team member

Overall, your day-to-day health status plays a big part in determining if you "catch" a cold every time you are exposed, or are able to resist the viruses that cause them.

Remember that the common cold, which is really a simple virus infection, usually lasts only a few days. A cold causes the mucous lining of the nose and sinuses to swell from the virus infection and most of us experience a runny nose, congestion, some post-nasal drainage, often accompanied by mild fever, chills and an I-want-to-stay-in-bed feeling.

Prevention is, of course, the best course of action. To help your body resist those cold viruses in the coming months take care of your body all year long. A good time to start is now!

A basic diet including servings from all the food groups and reasonable

amounts of rest and exercise, put you ahead of the game when cold and flu viruses come your way. If your overall health status is good, your body will be much better equipped to resist the common cold virus each time you may come into contact with it.

If you do get a cold, pamper yourself as much as you can. Yes, just like mom always said, the best treatment is still rest and plenty of fluids.

Although a mild decongestant may help reduce swelling of the lining of the nose and improve drainage, be cautious of taking any over-the-counter medicine for more than a few days.

If symptoms persist or you develop the flu, a sore throat, earache or a persistent cough, you probably have more than a cold and may need to see your physician.

If you're contemplating taking a flu shot, discuss it with your personal physi-

cian. Remember that while a flu shot won't stop the common cold, it may help prevent the flu. Flu shots are usually recommended for the very young, elderly, and individuals with chronic health problems.

Remember, Healthspots says:

Don't become a statistic,
Avoid the winter nose woes!
You can help prevent it,
Here's how it goes:
Stay healthy and fit,
From your head to your toes!
And take special care of your nose,
Now that Healthspots has put you
"in the know!"



S.A.F.E. Team profiles

Say hello and good-bye to members

by J.D. JOHNSON, Chemical Operations

S.A.F.E. Teams—they've accomplished much since their inception in 1988. Some of the charter members of S.A.F.E. teams are now leaving the teams—and leaving a strongly established foundation of hard work, determination and accomplishment. In large part because of S.A.F.E. Team efforts, DPMC has been able to realize an improved ... a more safe work environment as indicated by a significant reduction in the OSHA recordable rate.

Members of each team come from all over the Complex and from a diversity of disciplines. Yet, each team has become a cohesive unit, striving to continuously improve safety throughout the Complex and within each employee. Their record of achievement stands on its own.

Newly appointed members to each S.A.F.E. Team bring with them fresh ideas and energy. Many of the new members put their names on lists when the call first went out for volunteers.

Typically, each team consists of about 10 people. Each team has a specific area of responsibility and members for that team are chosen based upon their interest and how well their

abilities and talents match the overall objectives of the team's charter.

There are currently seven S.A.F.E. Teams. Each has a member of the Health and Safety Management Team (HSMT) among its members. Though not the leader of each team, the HSMT member provides an avenue of communication between the HSMT and the S.A.F.E. Team.

Within the next month or so, each of the teams will hold a transition workshop to smoothly pass the baton from outgoing to incoming members. The "retiring" members will return to their normal duties and serve as champions of safety to the rest of the Complex.

Each of these former S.A.F.E. Team members has devoted himself or herself to making DPMC a safer place in which to work. For that we all owe them a debt of gratitude. Their dedication and accomplishment is to be admired and sets a standard each of us should strive to attain.

See next issue for the names of those leaving the S.A.F.E. Teams, those remaining, and those coming on board. A well-done to each of you; for what you have done, are doing and will do! Thank you!

HSIP PHASE II BOX SCORES

MONTH OF SEPTEMBER 1990

Audits	432
APRs/Suggestions	575
Drills	163
% Participation	73.6

**OSHA RECORDABLES, YEAR
THROUGH NOVEMBER 1**

Frequency	2.68
Recordables	56
Lost Time	7

**SAFE WORK HOURS AS
OF NOVEMBER 1**

834,605

Hooking up to health & safety

Learn H&S orders & facts at your desk

Need to learn all about a safety order? Need to find the latest order? This information will be at everyone's fingertips instantly once the Howell Health and Safety Order Training System hooks-up complex-wide.

The safety order system contains all of the Health and Safety orders, color attachments, and a question and answer section.

All you need is a personal computer, a PROFS account and the Howell software loaded on your machine. What the system does is connect you up to the mainframe computer where all the current H&S Orders are stored.

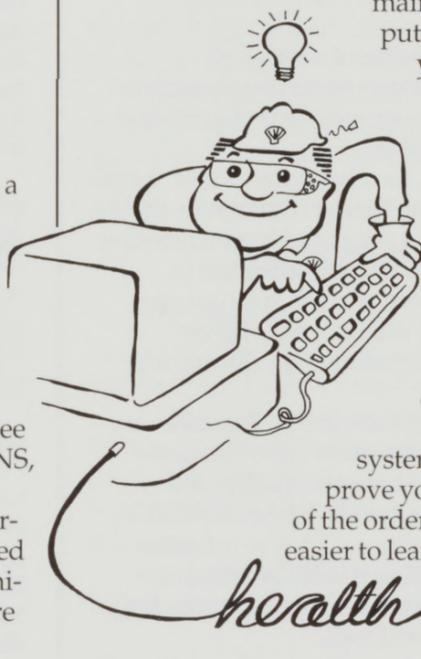
The interactive question and answer section of the Howell Health and Safety Order Training System asks a question three different ways, according to RICH BOURNS, Health & Safety. If you miss that question, you are taken back to the text where the correct answer can be found. Then you're asked a question again. You have three opportunities to answer that question correctly before you are asked to try again the next day.

Or you can use the H&S Order Training system just to look up the latest safety order. Your PC communicates with the mainframe computer to make sure

you always have the most up-to-date order.

The system can also display PC quality drawings of the orders in color.

The Howell system is set up to improve your knowledge of the orders and make it easier to learn them.



"Being able to go through a list of questions interactively really helps people learn and it's a lot more interesting than having someone read to you," says Bourns.

"People like the way the Howell system communicates with them," says GLENN BLANCHARD, Computer Services, who has been providing technical assistance on the project. Blanchard says he sees a good amount of daily activity already, while the program has only limited availability.

The result of a request from the Training Department for some safety order testing software, the Howell system is the culmination of four years of work by Shell and the training company who developed the software and tailored it for DPMC. If you haven't heard about the Howell H&S Training Order System yet, you will soon. By early next year, it should be accessible to all offices here.

Training coordinators are now being trained on the system, and implementation teams set up in each business area.



DPMC's new STAR (Shell Trained Auxiliary Response) Rescue Team completed the first of two training sessions last month, making them close to becoming one more arm of the Complex's volunteer emergency response forces.

The team will provide specialized rescue assistance in situations such as extricating victims from confined spaces or height restrictions. They'll supplement SMART (Shell Medical & Rescue Team) and the Volunteer Fire Crew.

STAR consists of four supplemental teams: SMART II, STAR Fire Crew, the Rescue Team, and HAZMAT. SMART and the Fire Crew will continue their normal on-site response in emergencies. The STAR Rescue Team is the group called in for more complicated rescue situations or where multiple rescues are needed.

A total of 22 employees will have completed the 80-hour rescue training sessions by the end of December. Members will also be participating in monthly drills as ongoing training.

"What's different about the Rescue Team is that it's very specialized," says member TERRY STARK, Financial/Auditing.

"Our work requires a lot of intense teamwork. Everyone is performing a different function and one person is always depending on another person."

To the rescue

New emergency force trains



All team members receive basic Emergency Care Attendant (ECA) training in order to prevent any further injury to the victim during rescue. Some members already have a higher level of emergency medical training and some already have rescue experience, according to Stark.

Rescue Team members are: J.G. WILLIAMS, Chemical Operations Maintenance; T.L. STARK, Financial/Auditing; S.W. HENNINGER, East Maintenance; A. SVOBODA, Health & Safety; S.E. ROUSE, painter; O.T. VEGA, Environmental Operations; R.T. HAYDOCK, Solvents & Treating; H.D. JACKSON, Central Maintenance; M.B. MUJICA, Log./Env./Util.; W.Z. BAKER, Automotive; S.L. PATTERSON, pipefitter; B.E. KELLY, Control Systems; D.W. BOOTH, Chemical Operations Maintenance; F.J. DUMONT, Central Maintenance; P.D. ZAFEREO, ECH/IPA/Deriv.; C.E. JUSTICE, Central Maintenance; G.L. BUCHANAN, H&S; J.P. BOHANNON, Engrg./LPA; J.T. LANGILL, Engrg./Systems Support; J.M. REYES, machinist; K.W. SNIPES, Control Systems; R.M. ADAIR, machinist; and D.C. MCMILLAN, boilermaker.

Be SMART

Join an exciting medical/rescue team

Have you ever considered being part of a team of emergency medical and rescue volunteers? If so, SMART may be just the thing for you.

SMART (Shell Medical & Rescue Team) is looking for new members who can be on call during work hours to respond to medical emergencies. No experience is necessary; training will be provided.

Requirements include approval from

your manager, good health, willingness to answer emergency calls, attend regularly scheduled drills, and a desire to help your fellow employees.

Complete a copy of the SMART application posted on bulletin boards throughout the Complex or call DENISE BACH at X6-7004 or MARIE WILSON at X6-3902 for more information.

Shell "adopts" Deer Park High

DPMC and Deer Park High School have formed a partnership dedicated to working together on projects and activities that will enhance the overall quality of education.

Known as Adopt-A-School, the program is designed to increase educational opportunities available to students, support the efforts of the school faculty and administration, and strengthen the relationship between industry and education.

"Deer Park High School is delighted to have Shell adopt us," says BOBBY GRISHAM, principal of Deer Park High School. "This commitment will thrust us into a new planning cooperative partnership that will benefit all students."

Adopt-A-School committees from Shell and Deer Park High School will meet regularly during the academic year to match the needs of the school with the capabilities of Shell. Potential activities include: student field trips, awards sponsorship, job interview skills, perfect attendance recognition, class speakers, tutor and mentor programs, career days, and teacher/parent appreciation.

"Shell Deer Park is committed to quality education," says DAVE MCKINNEY, manager, Community Relations. "Preparing students for the future--for success in the real world--is everyone's responsibility, not just the school's. We have a wealth of skilled and interested Shell employees and retirees who are eager to make a positive impact."

Adopt-A-School committee members are: JIM CABLER, retiree; CINDY CARTER, Purchasing; DORIS DIAZ, Community Relations and DPHS senior; KIMBERLY GLAUNER, Environmental Compliance; JOHN LYNN, Light Olefins/OP-III; BENNIE MATUSEK, Health & Safety; DAVE MCKINNEY, Community Relations; BRAD PERTL, Maintenance; JIMMY SHELTON, Employee Relations; and DAVID SMITH, Environmental Operations.

Shell answers questions about air, water, land

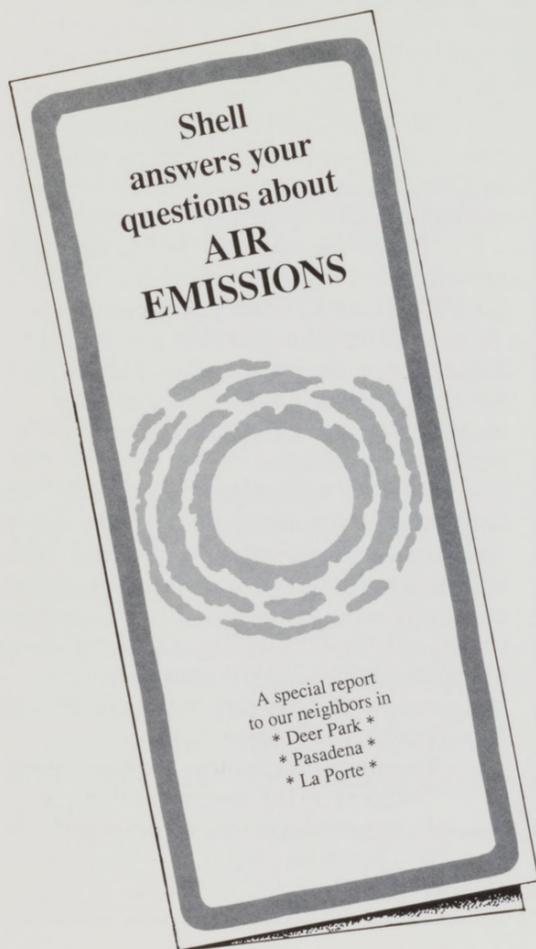
Just out: the first of a series of pamphlets answering some common questions on the environment and what Shell is doing to keep it clean.

Air emissions and how Shell works hard at controlling them is the first in the series. Pamphlets on water and land will follow.

The series is being distributed to community leaders, schools, and government and agency officials and will be available on publication racks throughout the Complex.

"The publications are written in everyday language and answer common questions about environmental quality and Shell's part in it," says DAVE MCKINNEY, Community Relations. "They're informational and educational tools by which we hope to increase the level of understanding about a complicated topic."

For more information on the series call Community Relations, X6-6247.



Good Work...

Dave Coughlen

October's recipient of PAFEC's Individual Quality Recognition Award was DAVE COUGHLEN, TSO-BPA. The PAFEC Quality Group recognized Coughlen for his dedicated work habits, willingness to assist others, and desire to "do it right the first time."

Coughlen was nominated for preparing a spreadsheet for waste disposal in the BPA Recovery and Deer Well areas. The spreadsheet categorized Black Phenol by waste number, pounds burned, date burned, transportation costs and total costs.

Although not a TSO issue, Coughlen eliminated a measurement problem and reduced associated costs by providing a tool to decipher the date for Financial.

PAFEC is a quality group made up of Purchasing, Administrative Services, Economics & Scheduling, Employee Relations and Computer Services Departments.

Robert Hernandez, Gary Foster



QUALITY CRAFTS—Receiving awards for outstanding quality performance among craftsmen are Robert Hernandez, Resins Maintenance; and Gary Foster, I&S Maintenance, who made significant mechanical contributions in their respective areas this past summer. Presenting the award are J.D. Johnson, Superintendent, Chemical; and J.J. Niklas, Maintenance manager, Chemical.

Recycling pilot results are in

Employee support and participation in Phase I of the DPMC Recycling program implemented on July 16 have been excellent, says EUNICE STIGALL, manager, Administrative Services.

Stigall's office, which administered the 16-week pilot project, has overseen the recovery of more than 13.5 tons of recyclable computer paper, white ledger paper and aluminum cans, resulting in reducing Shell's contribution to landfills by 40 cubic yards, and saving 230 trees and 34 barrels of oil.

"What's significant about the project is that it was an all-volunteer effort," says Stigall. "Everyone who participated in coordinating it and working it, asked to do so."

Based on employee participation in the pilot program and the high interest in environmental conservation, the effort is expected to recover over 220 tons of recyclable material annually from DPMC office facilities alone.

The initial pilot group consisted of the two cafeterias and seven major office facilities—North Administration, South Administration, West Operations Building, Resins Distribution Office, Lube/Phenol Acetone, Environmental Conservation Building, and North Lab. The program is expected to expand complex-wide in early 1991.



PADDLEWHEELING—Enjoying their cruise aboard the Clear Lake Queen are emergency responders Randy Pierce, welder; John Buchanan, Alky/Thermal Cracking; Jay Gantenbein, Lube Manufacturing; John Flynt, Health & Safety; Angie Svoboda, Health & Safety; and their guests.



DINING—Emergency responders Richard Young, BD\HT\IP; Larry Allen, Chemical Operations E; Ronnie Barrett, Pyrolysis; Myron Matula, Light Olefins; Jose Martinez, Lube Manufacturing; and their guests await dinner at the South Shore Harbor Hotel.

Emergency responders receive tribute

The Complex said thanks to Emergency Response Teams at recent dinners held in their honor. In attendance were some 350 members of the Fire Crew, SMART, HazMat, Rescue, Response Action Team—RATS (transportation emergencies), Emergency Response Safe

Team, Health and Safety and Medical Departments, along with environmental supervisors.

Besides dinners and paddlewheel boat rides on the Clear Lake Queen, the teams viewed a tribute video and exchanged gifts.

DPMC shares the spirit with toys, food

The spirit of giving is never more alive than it is at Christmastime. Here at the Complex, DPMC will "Share the DPMC Spirit" during the 1990 food and toy drive benefitting Project Head Start.

Beginning December 12 through 19, food and toys will be collected for Project Headstart centers and donated to centers in the Ship Channel area—Pasadena, LaPorte, Baytown, Fidelity and Delmar. Canned goods, non-per-

ishable foods and childrens' toys that are in good working condition will be accepted at drop-off locations at the cafeterias, Complex office buildings, control rooms, zone shops and at employee gates.

"Through the generosity of Shell Deer Park employees, we will help make this holiday season a happier one for local needy families," says Community Relations Manager DAVE MCKINNEY.

Shell Oil receives construction safety award

Shell Oil Company has been awarded the Construction Industry Safety Excellence award by the Business Roundtable, an organization composed of 200 of the largest corporations in the U.S.

Shell's construction safety program was recognized by the Roundtable as "one of the most effective programs in improving construction safety performance and achieving superior safety results."

The award was presented October 31 at the 39th Business Roundtable National Conference in Hilton Head Island, South Carolina.

Elements of Shell's construction safety program include safety during design, contractor prescreening, contractual safety re-

quirements and close management participation at the worksite. The company's OSHA incident rates and severity rates last year were one-tenth the national average.

The Business Roundtable's Construction Industry Safety Excellence award was established in 1988. Shell is the third manufacturing company to receive the award.

"The Shell Engineering & Project Management and Control Engineering & Manufacturing Computer Systems groups have a strong, pro-active safety program," says J.M. BRAUS, general manager, Engineering-Products. "We are proud of this program and its positive results."

Retiree inducted into Hall of Fame

TRAVIS FERGUSON, retiree, was inducted into the First Dragon Athletic Hall of Fame at Paris Junior College last month.

Ferguson was co-captain of his team back in 1942 when the Paris Junior College (Paris, Texas) football team won the first conference of the season, ranking number three in the nation.

In basketball, Ferguson made 1941 basketball all conference, was the team's most

valuable player and was the college favorite as co-captain that same year.

"My most memorable moment was sharing the thrill of victory with teammates and coaches at the end of the 1942 championship game and being selected on the all conference team," says the sports star.

A graduate of Deport High School in Battonville, Texas, Ferguson is from one of the old pioneer families of Lamar County. He retired from Shell Deer Park after 38 years. He and his wife Ann live in Pasadena.





DANCING DUO—R.P. White and wife, Fern, take a turn around the dance floor at DPMC Retirees' Club Fall Barbeque.

SCORANOTES

Something special for Christmas Dance

SCORA had such a great year that members planned a special Christmas Dance. This year it's being held December 21 at the Sylvan Beach Pavilion. Doors open at 8:30 p.m. and you may dance till 1 a.m. SCORA members \$10 per person; guests \$12.50. That includes free beer, wine and wine coolers, soft drinks, set ups, snacks and hors d'oeuvres. Dress in your Sunday finest or casual—whatever suits you.

Music will be provided by The Rhythm Tramps, a rather unique group who have been playing together for years only during the Christmas holidays. Each member has his own separate career but comes home to Houston for the holidays and usually performs at Rockefeller's, Fitzgerald's and the Club Hey Hey. Each has a deep history in rock, rhythm and blues, country western and the oldies.

"We're really excited about our band this year and with good reason," says SCORA's BILLIE DANIEL. The lead singer, TERESA STARR WILSON, appeared on television's "Cop Rock" October 21 episode. Bass guitarist TERRY WILSON has occasionally played with MICK JAGGAR of the Rolling Stones. JERRY MOSS was formerly with the JOHNNY LEE band and is now working in Nashville. Moss will also be bringing his saxophone and harmonica player. TONY BRUNAGLE is the drummer for pop artist BONNIE RAIF and appeared on the Country Pop Awards in March.

"We're sure that everyone who attends will be more than satisfied with the music we'll have for them this year," says Daniel.

Election time

SCORA Board of Directors elections are rolling around again. Any member who wishes to run for a position should call BILLIE DANIEL at X6-6684 so that all interested names are on the ballot. Ballots will be mailed to all SCORA members during the membership drive beginning in February.

Invasion of the Ninja Turtles

Kids Halloween brought out about 155 youngsters, and an invasion of Ninja Turtles, batmen and witches. Lots of good help and record-time set-up and clean-up made it an all-around success. Thanks from SCORA President RUSSELL ADAMS and the Board of Directors to all helpers—board and non-boardmembers.

Literacy volunteer has a lifetime teaching goal

"Teaching someone to read is something I always wanted to do," says BARBARA STANLEY, Distribution Customer Service,

a volunteer with a local literacy organization. Literacy tutoring is something she plans to do on an ongoing basis.

Stanley, an avid reader, had been looking for a way to open up the world of reading to others and was directed to Literacy Advance by SERVE (Shell Employees & Retiree Volunteer Effort), a Shell organization that recruits



Barbara Stanley

volunteers for community projects.

Literacy tutors receive 16 hours of training and are asked to plan on two one-hour sessions each week for a minimum of nine months with their assigned student. Another two hours weekly must be allowed for preparation of lesson plans.

"There's a definite teaching method and instruction materials and tools are standardized," says Stanley. "Class sessions can be greatly enhanced with flash cards, charts, pictures, and creative exercises and assignments that strongly involve the student."

Having recently taken a breather after her first student, Stanley is ready to begin again. In summing up the experience, Stanley says "though the frustration level can be high, the teacher learns patience and is well rewarded by seeing the students' pride in their progress. To me, it's a really important gift to give someone—a gift for a lifetime."

Process Hazards Analysis

(Continued from Page 1)

PHA is by no means a new concept. It and the HAZOPS technique are among industry standards adopted by the American Petroleum Institute and by Shell, corporate-wide. DPMC has been training its Team Leaders since July.

Each team will include a team leader, an expert on the particular process, various engineering specialists, and an operations representative who has a detailed knowledge of the plant and how it runs—critically important for the practical input, according to Gillard.

The PHA procedure is also no small endeavor, but a manpower commitment of significant proportions. Estimates are that about half a man century in engineering personnel will be devoted to it over the next five years.

"It's going to require a fairly significant sacrifice in terms of manpower," says DAVE LITZEN, Process Engineering/Solvents and a

HAZOPS team leader. "Not only the effort itself but also the issues that the PHAs will generate."

Litzen estimates he alone will be devoting 85 percent of his time to the PHA program.

The interdisciplinary teams allow for more participation across job categories, which Gillard says makes for a more complete analysis. It's also expected to have a carry-over effect.

"And when those people go back to their normal jobs, they'll be more sensitive and more aware of potential problems and the way to avoid them. That's a big contribution," says Gillard.

Litzen likens the HAZOPS process to spring cleaning. The units, like our houses, have "collected things" over the years. "The PHAs should turn up some items that we didn't think we had as far as its original design."

WILLY GLAVE, Process Engineering/Olefins, and HAZOPS team leader, thinks

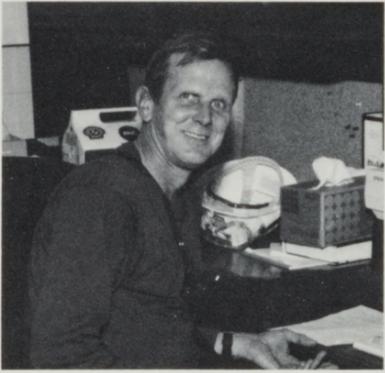
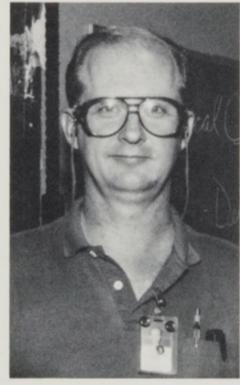
PHAs are a very good idea. "On the one hand it's going to show us what potential problems we may have, and on the other, we will gain experience in OSHA's suggested PHA approach for the petro-chemical industry."

For TOM STUS, Process Engineering/Fuels, who leads the first team to set out on HAZOPS, some improvements will result but no surprises are expected. "We're going to learn how to apply the HAZOPS methodology in the review but I think the results are going to confirm that the way we've done things in the past have been pretty good."

"This is not a panacea," cautions Carter. "This is just a good, strong management tool."

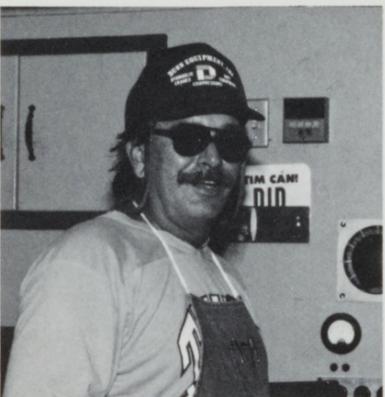
Other HAZOPS team leaders are: RICH BOURNS, Health & Safety; DAVE DAUM, Resins; NARAYAN HOSPETI, LPA; RON MADSEN, Fuels; DARREN MARTIN, Health & Safety; and LOYD MILLER, L/E/U.





Seasons Greetings

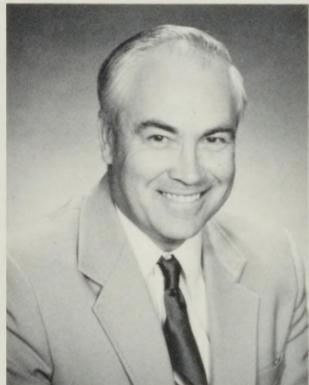
And A Safe New Year



MILESTONES

Service Anniversaries

25 YEARS



W. FOSTER
Control Systems
(above, August)



L.F. KUNKEL
Lube Logistics
(above, July)

20 YEARS

B.D. BAKER
Major Resins
J.E. BROUSSARD
Machinist
T.W. BURTON
Chem. Oprns. E.
J.M. DURHAM
P&AS/Chem. Oprns.
R.H. FORTUNE
Chem. Oprns. Maint.
T.P. HELMCAMP
Log./Env./Util.
C.L. HILTON
Chem. Oprns. E.
K.R. LATIMER
Control Systems
V.T. LITTLE
Health & Safety
A. PEUGH
Chem. Oprns. Maint.
G.N. PUSTEJOVSKY
East Maintenance
T.L. THOMAS
BPA-4
B.F. YARBROUGH
BPA Manufac.

15 YEARS

K.F. HUDSON
Log./Env./Util.
J.E. QUINBY
ECH/IPA/Deriv.
H.W. RANDLE
Chemical Oprns E.
G.L. ROBERTS
BPA-4
G.D. ROBERTSON
Log./Env./Util.

10 YEARS

T.H. BROUILLARD, JR.
Lube Logistics
L.J. BUSTILLOZ
Env. Compliance
D.L. COFFER
Aromatics
B.J. FONES
Lube Logistics
P.W. KOPYAR
Lube Manufac.
E.T. MACDONALD
Control Systems
B.K. WISER
BPA-4
J.M. WOLF
Central Maint.

DPMC WELCOMES

D.K. BELL
Engrg. Support
J.D. BOYETT
General Help
R.N. DANIEL
General Help
R.L. DAVIS
General Help
J.B. DYSON
General Help
J.M. FOX
Control Systems
T.L. HERRINGTON
South Lab
J.C. HUGHES
General Help
C.D. IDLEBIRD
South Lab
T.R. LUNSFORD
General Help
S.F. MILLER
General Help
J.T. PEARCE
General Help
E.M. PEREZ
General Help
P.R. PHILLIPS
General Help
R.W. RANDALL
General Help
A.J. REDDY
General Help
D.P. RENNIE
Engrg./Chemical
R.L. ROGERS
General Help

J.A. ROSSI
General Help
R.S. SEAGROVES
General Help
R.J. STARKS, III
Financial
P.W. SUBTELNY
General Help
S.K. SUTHERLAND
P&AS

RETIREMENTS



B.J. DOBBS
Chem. Maint.
(above, July)



S.A. GRANT
Pyrolysis III
(above, August)
R.A. HUGHES
Medical
D.E. WIGGINS
Phenol Acetone

MEMORIAM

C.R. (POPS) HAGLEPT,
retiree, died October 13 in
Deer Park.
M.L. COX, retiree, died Octo-
ber 16 in Dallas.



Brown & Root keeps it safe at Shell

Brown & Root is committed to safety and it shows. Two divisions of Brown & Root together have accomplished a safety milestone at DPMC--5 million work hours without a lost time accident.

Approximately 1,700 employees of Brown & Root Industrial Services and Instrument Technology International are responsible for the feat.

"Safety is our highest priority and that applies to both our own employees and those of our contractors," says RON KINGSBURY, general manager. "Brown & Root's commitment to safety is commendable--its record speaks for itself."



by Maurine Bishop, retiree

This item was making news in the December 23, 1932, the date of the premier issue of Shell Shock, Shell's Houston Refinery newsletter:

• Employees of the Houston Refinery were granted permission by the Management at St. Louis to edit and publish a refinery newsletter. Immediately a staff was appointed and work was begun.

This closing paragraph from the editorial page:

"As we work side by side at our respective jobs, let there be a feeling of comradeship and a desire to make each day more enjoyable. To promote this good will is our aim, and the Christmas Season lends its approval. May the New Year find us much happier in our surroundings."

• • • • •

And with these thoughts in mind, the Shell Historical Society membership wishes each of you a happy and memorable Christmas.

CLASSIFIEDS

FOR SALE: Fireplace Inserts. Solve the problem of loose, broken firebricks with a metal liner fabricated for your box. Contact Mark Ott at 472-4727.

HOUSE FOR SALE: 4-bedroom, all decked back with spa and fish pond, fireplace, 2-car garage, 2-1/2 baths, 2,010 sq. ft. Also vaulted family room and many trees. Kingwood. Contact T.L. Stark at 358-1711 or X6-6543 (246-6543).

FOR SALE: 1/2 acre lot, utilities, excellent for garden. Golden Acres, Pasadena. CONTACT M.K. Davis at 470-0228 or X6-7858 (246-7858).



Deer Park Manufacturing Complex

Published monthly by Shell's Deer Park Manufacturing Complex for its employees and pensioners. All inquiries should be addressed to SHELLEGRAM, Shell Oil Company, P.O. Box 100, Deer Park, Texas 77536.

Editor

Alayne Merenstein

BULK RATE
U.S. POSTAGE
PAID
PERMIT 1
HOUSTON, TEXAS