af 8-27-91
ORDINANCE No. 115743

COUNCIL BILL No. 108640

AN ORDINANCE relating to Fire Code Enforcement; authorizing implementation of Article 80 of the Code; increasing certain expenditure allowances in the 1991 Budget of the Fire Department by reduction, reappropriation, and transfer from the Department of Finance General, authorizing the Purchasing Agent, with the cooperation of the Director of Administrative Services, to amend a

contract, and increasing an expenditure allowance in the 1991 Budget of the Department of Administrative Services by appropriation and transfer from the Administrative Services Fund, all by three-fourths vote of the City Council.

Introduced: JUL 8 1991 By: NOLAND To: Public Safety

Referred: 7-8-91	To: Public Safety
Reported: AUG 1 2 1991	Second Reading: AUG 1 2 1991
Third Reading: AUG 1 2 1991	Signed: AUG 1 2 1991
Presented to Mayor: AUG 1 3 1991	Approved: AUG 2 1 1991
Returned to City Clerk: AUG 2 1 1991	Published:
Vetoed by Mayor:	Veto Published:
Passed over Veto:	Veto Sustained:

US5047

Law Department

The City of Seattle--Legislat

REPORT OF COMMITT

Honorable President:

Your Committee on PS&E

to which was referred the within Council Bill No. 10964
report that we have considered the same and respectfully recomme

Passed PS&E Committee 7/23/
Full Council vote 9-0

Committee Chair

Law Department

The City of Seattle--Legislative Department

Date Reported and Adopted

REPORT OF COMMITTEE

Honorable President:

Your Committee on PS&E

to which was referred the within Council Bill No. 109640

report that we have considered the same and respectfully recommend that the same:

Passed PS&E Committee 7/2/91 2-0, Chow, Nlland

Full Council vote 9-0 (Sundin absent)

Committee Chair

OK

ORDINANCE 115743

AN ORDINANCE relating to Fire Code Enforcement; authorizing implementation of Article 80 of the Code; increasing certain expenditure allowances in the 1991 Budget of the Fire Department by reduction, reappropriation, and transfer from the Department of Finance General, authorizing the Purchasing Agent, with the cooperation of the Director of Administrative Services, to amend a contract, and increasing an expenditure allowance in the 1991 Budget of the Department of Administrative Services by appropriation and transfer from the Administrative Services Fund, all by three-fourths vote of the City Council.

Whereas, on October 29, 1990, the City Council adopted the 1988 Uniform Fire Code by Ordinance 115405, mandating that the Seattle Fire Department enforce provisions set forth in Article 80 of said Code for the prevention, control, and mitigation of dangerous conditions related to hazardous materials; and

Whereas, during the 1991 budget process, the City Council directed the Fire Department by Statement of Legislative Intent to develop a comprehensive plan to implement Article 80 requirements, and to develop a permit fee schedule pursuant to which all program and development costs will be recovered; and

Whereas, after examining other options it is the finding of the Fire Department, the Department of Administrative Services, and the Office of Management and Budget that the data management needs of Article 80 implementation can best and most efficiently be met by customizing and enhancing the Record Management System already purchased by the City with the Computer Aided Dispatch (CAD) system; Now, Therefore,

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. In accordance with the 1991 Statement of Legislative Intent adopted by the City Council, the Fire Department is authorized to implement the Article 80 Final Plan as described in Attachment A hereto.

Section 2. To support implementation of the Article 80 Final Plan, the expenditure allowances for the following Objects of Expenditure in Program Category F50, Fire Prevention, in the 1991 Budget of the Fire Department, are increased by the amounts indicated:

Object of expenditure:

Personal Services	$29,738
Other Charges	$15,633
Capital Outlay	$ 4,629

by reappropriation and transfer, hereby made and authorized, of the sum of Fifty Thousand ($50,000), from unexpended and unencumbered funds in Account Q5917001, "Article 80 Implementation," in the 1991 Budget of the Department of Finance General to the appropriate expenditure accounts in the General Fund. The City Comptroller is authorized to draw and the City Treasurer to pay the necessary warrants and make the necessary transfers.

Section 3. To accomplish administrative, inspection, and permitting tasks associated with the Article 80 program requirements, the following positions are hereby established in the Fire Department, effective November 1, 1991, at the indicated salary range, and the Chief of the Fire Department is authorized to fill said positions in accordance with Personnel ordinances and rules:

No. of Positions	Title	Salary Range
1	Data Entry Operator	$9.75-10.50
1	Administrative Specialist I	20.5
2	Fire Fighter - Prevention Inspector I	$16.01-19.61

Section 4. Consistent with the implementation of Article 80 and with Ordinance 115158, the Purchasing Agent, with the assistance and cooperation of the Director of Administrative Services, is hereby authorized to amend the existing contract with PRC Public Management Systems, for acquisition of a Fire Department computer-aided

dispatch system, to include additional equipment and software requirements associated with the Article 80 Hazardous Materials Program, as set forth in the Article 80 Final Plan (Attachment A hereto).

Section 5. To provide for the acquisition of the equipment and software necessary to implement Article 80, the expenditure allowance for Capital Outlay in Program Category A55, Communications and General Services, in the 1991 Budget of the Department of Administrative Services is hereby increased by the amount indicated:

Object of Expenditure:

Capital Outlay $261,765

by appropriation and transfer, hereby made and authorized, of the sum of Two Hundred Sixty-One Thousand Seven Hundred Sixty-Five Dollars ($261,765) from unexpended and unencumbered balances accumulating in the Administrative Services Fund to the appropriate expenditure accounts therein.

The appropriations herein shall be carried forward until project completion and shall not lapse as otherwise required by RCW 35.32A.080. The City Comptroller is authorized to draw and the City Treasurer to pay the necessary warrants and make the necessary transfers.

Section 6. Any acts consistent with the authority and prior to the effective date of this ordinance are hereby ratified and confirmed.

Section 7. The foregoing appropriations are made to meet actual necessary expenditures of the City for which insufficient appropriations have been made due to causes which could not reasonably have been foreseen at the time of the adoption of the 1991 Budget; Now, Therefore, in accordance with RCW 35.32A.060, by reason of the facts above stated, this ordinance shall take effect and be in force thirty days from and

after its passage and approval, if approved by the Mayor; otherwise it shall take effect at the time it shall become a law under provisions of the City Charter.

PASSED by three-fourths vote of all the members of the City Council the 12th day of August, 1991, and signed by me in open session in authentication of its passage this 12th day of August, 1991.

President of the City Council

Approved by me this 21st day of August, 1991.

Mayor

DP\lkb
June 20, 1991

Attest: Norward J. Brooks
City Comptroller and City Clerk

By Margaret Carter
Deputy Clerk

CS 19.45 REV 2/91

MEMORANDUM

Date: July 22, 1991

To: Public Safety Committee Members

From: Virginia Beas, Council Central Staff

Subject: **C.B. 108640: Implementation of Article 80**

Background:

Council Staff has reviewed the proposed plan to implement Article 80. The plan addresses four issues: staffing, data management, training, and permit fee schedule details. In staff's opinion the plans for staffing, data management, and training seem reasonable. However, staff has concerns regarding the time in which program costs will be recovered.

Under the proposed plan, the Article 80 program is to be self-supporting and all program start-up, development and maintenance costs are expected to be recovered by the end of Year 4 (1995). The program will be implemented in four phases. The program will require facilities that handle materials that pose the greatest risk to come into compliance with Article 80 in 1992, while those facilities handling materials that pose the least risk will come into compliance during the following three years. In 1992 about 30 facilities will be required to come into compliance. This approach will allow the Fire Department to develop its computer, staff, and training programs incrementally while posing the least risk. However, because only 30 facilities will have to be in compliance in the first year and the majority of facilities will not have to be in compliance until the second, third, and fourth years, the General Fund will pay the cost of the program until the Fire Department assesses the facilities under the new fee structure. Consequently, for 1991 - 1993 the General Fund will have to advance about $600,000 for the Article 80 program.

Staff Recommendation:

Staff is recommending that C.B. 108640 be approved; however, in light of the City's budget constraints and in order to minimize the burden on the General Fund in 1992 and 1993, staff further recommends that the issue of imposing an additional fee to offset start-up costs be addressed during the budget process. At that time, the Fire Department should submit with the budget a proposal to impose a fee to all facilities that would at least offset a greater portion of the start-up costs in years 1992 and 1993.

SUMMARY OF ARTICLE 80 PROGRAM AND LEGISLATION

BACKGROUND

Article 80 is that section of the Fire Code which establishes regulations for the transportation, storage and use of hazardous materials.

Its purpose is to provide requirements for the prevention, control and mitigation of dangerous conditions related to hazardous materials and to provide information for emergency response personnel.

At this time, the Fire Department does not have the personnel, computer support or the level of training required to adequately enforce Article 80. To implement Article 80, the Fire Department has based its staffing, data management and training needs on a five-year plan that the Department estimates will make the program self-supporting by 1995. The revenue projections for the program assume that there are approximately 5,500 businesses in Seattle which store and handle hazardous materials, and that permit fees will be assessed based on the quantity and relative risk posed by the materials stored or handled at each facility.

IMPACT ON COMMUNITY

Under this program, hazardous material permit fees will be unique to each facility and will be based on the type and quantity of material stored at each facility. The minimum fee will increase from the current $60.00 to $90.00, and it is estimated that the average hazardous material permit fee will be $318. Annual permit renewal fees will be one-half of the original permit fee, if the facility is in compliance with original permit conditions.

FISCAL IMPACT

The implementation plan submitted bases program costs on a July 1, 1991 effective hire date for additional staff. The legislation accompanying the plan establishes a November 1, 1991 hire date, therefore, the actual program costs will vary somewhat from the costs presented here due to the four month program start delay.

For 1991, the legislation under consideration transfers $50,000 from Finance General to the Fire Department, establishes four positions in the Fire Department, and increases DAS' 1991 budget by $261,765 to enable the Department to purchase the additional data management hardware and software to support the program.

Estimated subsequent year program costs and revenues:

	Costs($)	Revenues($)
1992:	482,083	159,300
1993:	501,226	294,650
1994:	554,028	637,150
1995:	567,513	1,400,00
1996:	567,513	857,150

Committee Chair Recommendation: PASS

IMPLEMENTATION OF ARTICLE 80

FINAL PLAN

Prepared For: Seattle City Council
Prepared By: Seattle Fire Department
Date: June 10, 1991

TABLE OF CONTENTS

IMPLEMENTATION OF ARTICLE 80
FINAL PLAN

INTRODUCTION

In the 1988 Uniform Fire Code, Article 80 has been extensively revised and expanded to include numerous detailed technical requirements governing the storage and use of hazardous materials. These requirements can be complex and vary depending on the degree of hazard presented by the material. Additional background information relating to Article 80 can be found in Appendix A of this plan.

Shortly after publication of the 1988 Uniform Fire Code, the Seattle Fire Department began alerting City Council members of the pending legislation. Prior to formal adoption of the 1988 Seattle Fire Code, the Fire Department assessed the impact that Article 80 was likely to have on this Department and on the regulated community. At that time, the Department determined the level of expertise required to adequately ensure compliance with the code provisions was unsurpassed and would require additional computer support, personnel and specialized training of inspectors.

In December 1989, the Fire Department submitted preliminary projections to Council members on the cost to implement Article 80 over a four year program period, as well as projections on anticipated program revenues. The initial cost estimate for start-up and development of the program in 1991 was $504,000. That estimate included the purchase of a stand alone mini-computer that was to be used exclusively by the Fire Prevention Division for permitting purposes and salary and benefits for a full-time programmer to maintain the system. In addition, that estimate included the salaries of existing personnel that would be involved in the program.

During the November 1990 budget round, the Fire Department submitted revised program cost estimates and requested $347,375 for start-up and development of the program in 1991. That revised estimate did not include salaries of existing personnel, but rather reflected only new costs to the City. The Office of Management and Budget (OMB) reviewed initial cost estimates and recommended a $200,000 allocation of funds in Finance General for Article 80 program development, rather than the $347,375 that was requested.

At the conclusion of the November 1990 budget round, City Council requested the Fire Department submit a Final Plan detailing the program costs and implementation methods. Subsequent to that request, the Fire Prevention Division consulted with the Management Information/Communication Systems (MI/CS) Division of the Fire Department to finalize data management requirements and costs. At that time, MI/CS determined that rather than purchase a stand alone mini-computer and hire a permanent programmer, the Department would be better served by using a private consulting firm (PRC), specializing in development of record management systems (RMS) for enforcement agencies, and customizing the RMS previously purchased by the City in conjunction with the Computer Aided Dispatching (CAD) system.

As a consequence, the data management cost presented in this plan for 1991 is significantly greater than the data management cost previously submitted and reflects the total cost for DAS to purchase all necessary hardware, software and consulting services to customize the RMS.

Data management costs submitted in this plan for subsequent program years reflect the annual cost that will be incurred by the Fire Department to lease the equipment from DAS for the life of the program. Program costs for years 1996, 1997 and 1998 are not included in this Plan because those costs are expected to be similar to the 1995 costs presented.

Article 80 program implementation time lines are highly dependent on the successful completion of the software development requirements that are outlined in Appendix C, and are based on the development times provided to the Fire Prevention Division.

This Plan was developed by the Seattle Fire Department in fulfillment of the request made by City Council and presents Article 80 program details as well as the Department's cost estimates by program year.

PROGRAM REQUIREMENTS

Staff

Our best estimate of the Article 80 staffing needs includes the addition of four uniformed inspectors, an administrative specialist and a data technician. Two inspectors, the administrative specialist and the data technician are being requested in 1991. One inspector would be added in each of the two consecutive program years (1993 and 1994).

With the addition of the proposed staff, the City's hazardous materials inspection program will consist of a total of one supervising civilian code specialist, six uniformed occupancy inspectors, one uniformed tank inspector, one data technician and one administrative specialist.

Details of the staffing requirements and the method used to determine the needs are presented in Appendix B of this Plan.

Data Management

The data management requirements to support this program are extensive. The Department proposes to customize the Record Management System (RMS) purchased by the City in conjunction with the Computer Aided Dispatching (CAD) system. Data management development personnel will be provided by a private consulting firm, PRC, which is currently being used to develop the CAD system.

It is desirable to have facility inventories and permitting information on the same platform as the City's CAD system so that this information can be readily available to first responders in the event of an accident or fire involving a hazardous material occupancy.

The RMS hardware and software development must be purchased up front by DAS. It will then be leased by the Fire Department from DAS. The system is anticipated to come on-line no later than March 1, 1992, providing the contract with PRC is signed immediately and the current PRC design development schedule can accomodate the workload. A delay will require that PRC proceed with detailed design development of the RMS without the Article 80 program. PRC and the Fire Department have estimated that the Article 80 programming and RMS training costs set forth in this plan will increase by approximately $97,000 if such a delay should occur.

The March 1, 1992 deadline still enables our Department to enter inventory data, notify facilities of their anticipated compliance date and begin enforcement of Article 80 as scheduled in February 1992. However, the paperwork requirements for the program will increase two-fold until the RMS is functional.

Details of the data management requirements and costs are provided as Appendix C of this Plan.

Training

Article 80 requires that the Fire Department perform complex inspections and permit facilities and operations that utilize hazardous materials. The complexity of today's Article 80 provisions relative to previous hazardous material regulation is comparable to Seattle's present zoning ordinances and the building codes of the 1920's.

Because Article 80 is a newly developed piece of legislation, there are currently few courses or training programs available specifically for inspectors. This is likely to change in the next several years as the fire service scrambles to cope with the enforcement of Article 80 provisions.

The bulk of the proposed first year training for the new inspectors, as well as for the two existing hazardous material inspectors, is anticipated to be in-house training. This will require contracting with local experts, private consultants well versed in Article 80 and individuals with specialized knowledge (e.g. industrial hygienists). Training in subsequent program years is expected to be a combination of in-house training and formal training courses.

Details on the proposed training program are provided as Appendix D of this Plan.

Permit Fees

The cost-recovery program that the Fire Department has developed requires restructuring of the permit fee schedule relating to hazardous materials and subsequently an increase in hazardous material permit fees.

The permit fee will be based on the quantity of material at each facility as well as the relative risk posed by the material. Facilities with a large quantity and/or variety of chemicals and materials that pose a higher risk generally require a complex inspection. These facilities require more code research time, time spent generating correspondence, identifying unique permit conditions and evaluating requests for code alternates than facilities that handle a relatively few number of materials. Thus, permit fees will be generated from facility inventories and will be unique to each facility.

Proposed permit fee schedule details are presented in Appendix E of this Plan.

COSTS

a. 1991 Costs

Estimated start-up/development costs for 1991 are broken out as follows:

Personnel

2 Uniformed Inspectors @ 6 months salary	$ 49,858.
1 Data Entry Operator @ 6 months salary	$11,127.
1 Administrative Specialist I @ 6 months salary	$ 12,219.
Personnel Sub-Total:	**$ 73,204.**

Training

Uniformed Inspector Training	$ 33,200.
Technical Reference Material	$ 3,000.
Training Sub-Total:	**$ 36,200.**

Vehicles

2 Ford Escort @ 6 month lease	$ 2,640.
Parking @ $92./mon ' per car	$ 1,104.
Vehicle Sub-Total:	**$ 3,744.**

Office Furniture & Equipment

4 Desks @ $ 954. each	$ 3,816.
4 Chairs @ $ 475. each	$ 1,900.
3 Bookcases @ $ 243. each	$ 729.
2 Calculators	$ 229.
2 File Cabinets @ $ 663. each	$ 1,325.
1 Cannon Typewriter	$ 475.
4 Computer Workstations @ $ 531. each	$ 2,124.
4 Service Modules @ $ 776. each	$ 3,104.
4 Phones	$32.
Minor Equipment for Inspectors	$ 2,000.
Operating Supplies	$ 1,000.
Printing (16,500 docs)	$130.
Postage (5,500 docs @ $0.30/each)	$ 1,650.
Office Furniture & Equipment Sub-Total:	**$ 18,514.**

Data Management

Cost to lease from DAS:	
Non-PRC Hardware/Software @ 3 month lease	$ 5,820.

Interest on Lease from DAS:	
3-year lease life equipment @ $275/mo	$ 825.
Lotus Software (3 single user licenses @ $300 each)	$ 900.
ACT Software (5 single user licenses @ $350 each)	$ 1,750.
Graphics Software Package	$ 300.
HMEx Software	$ 5,000.

Data Management Sub-Total: $ 14,595.

TOTAL 1991 FIRE DEPT. COSTS: $ 146,257.

TOTAL 1991 DAS COSTS: $ 261,765.

b. 1992 Costs

Estimated costs for program year 1992 are broken out as follows:

Personnel

2 Uniformed Inspectors @ 12 months salary	$ 99,716.
1 Data Entry Operator @ 12 months salary	$ 26,269.
1 Administrative Specialist @ 12 months salary	$ 28,660.
Personnel Sub-Total:	**$ 154,645.**

Training

Uniformed Inspector Training	$ 8,000.
Training on RMS	$ 21,739.
Technical Reference Material	$ 3,000.
Training Sub-Total:	**$ 32,739.**

Vehicles

2 Ford Escort @ 12 months lease	$ 5,280.
Parking @ $92./month per car	$ 2,208.
Vehicle Sub-Total:	**$ 7,488.**

Office Furniture & Equipment

1 Bookcase	$ 243.
1 File Cabinet	$ 663.
Operating Supplies	$ 1,000.
Inspectors Equipment	$ 2,000.
Microfilm (100,000 docs @ $0.05 per frame)	$ 5,000.
Printing	$ 135.
Postage (5,500 docs @ $0.30 each)	$ 1,650.
Office Furniture Sub-Total:	**$ 10,691.**

Data Management

Cost to lease from DAS:	
PRC-provided Hardware/Software @ 10 month lease	$ 39,200.
Non-PRC Hardware/Software @ 12 month lease	$ 23,280.
Interest on Lease from DAS:	
3-year lease life equipment @ $220/mo	$ 2,640.
7-year lease life equipment @ $1250/mo for 10 mo	$ 12,500.
HMEx Program and Database Updates	$ 1,500.

Data Management Sub-Total: $ 79,120.

TOTAL 1992 FIRE DEPT. COSTS (Not adjusted for inflation): $ 284,683.

c. 1993 Costs

Estimated costs for program year 1993 are broken out as follows:

Personnel

1 Uniformed Inspector @ 6 months salary	$ 24,929.
2 Uniformed Inspectors @ 12 months salary	$ 99,716.
1 Data Entry Operator @ 12 months salary	$ 26,269.
1 Administrative Specialist @ 12 months salary	$ 28,660.
Personnel Sub-Total:	**$ 179,574.**

Training

Uniformed Inspector Training	$ 16,000.
Technical Reference Material	$ 3,000.
Training Sub-Total:	**$ 19,000.**

Vehicles

1 Ford Escort @ 6 months lease	$ 1,320.
2 Ford Escort @ 12 months lease	$ 5,280.
Parking @ $92./month per car	$ 2,760.
Vehicle Sub-Total:	**$ 9,360.**

Office Furniture & Equipment

1 Desk	$ 954.
1 Chair	$ 475.
1 File Cabinet	$ 663.
1 Computer Workstation	$ 531.
1 Service Module	$ 776.
1 Bookcase	$ 243.
Operating Supplies	$ 1,000.
Printing	$ 100.
Inspectors Equipment	$ 2,000.
Microfilm (55,000 docs @ $0.05 per frame)	$ 2,750.
Office Furniture Sub-Total:	**$ 9,492.**

Data Management

Cost to Lease from DAS:	
PRC provided Hardware/Software @ 12 mo lease	$ 47,040.
Non-PRC Hardware/Software @ 12 mo lease	$ 23,280.
Interest on Lease from DAS:	
3-year lease life equipment @ $130/mo	$ 1,560.
7-year lease life equipment @ $1085/mo	$ 13,020.
HMEx Program and Database Updates	$ 1,500.

Data Management Sub-Total: $ 86,400.

TOTAL 1993 FIRE DEPT. COSTS (Not adjusted for inflation): $ 303,826.

d. 1994 Costs

Estimated costs for program year 1994 are broken out as follows:

Personnel

1 Uniformed Inspector @ 6 months salary	$ 24,929.
3 Uniformed Inspectors @ 12 months salary	$ 149,574.
1 Data Entry Operator @ 12 months salary	$ 26,269.
1 Administrative Specialist @ 12 months salary	$ 28,660.
Personnel Sub-Total:	**$ 229,432.**

Training

Uniformed Inspector Training	$ 18,000.
Technical Reference Material	$ 3,000.
Training Sub-Total:	**$ 21,000.**

Vehicles

1 Ford Escort @ 6 months lease	$ 1,320.
3 Ford Escort @ 12 months lease	$ 7,920.
Parking @ $92./month per car	$ 3,864.
Vehicle Sub-Total:	**$ 13,104.**

Office Furniture & Equipment

1 Desk	$ 954.
1 Chair	$ 475.
1 Bookcase	$ 243.
1 File Cabinet	$ 663.
1 Computer Workstation	$ 531.
1 Service Module	$ 776.
Operating Supplies	$ 1,500.
Printing	$ 100.
Inspectors Equipment	$ 2,000.
Microfilm	$ 2,750.
Office Furniture Sub-Total:	**$ 9,992.**

Data Management

Cost to lease from DAS:	
PRC provided Hardware/Software @ 12 mo lease	$ 47,040.
Non-PRC Hardware/Software @ 12 mo lease	$ 23,280.
Interest on Lease from DAS:	
3-year lease life equipment @ $40/mo	$ 360.
7-year lease life equipment @ $910/mo	$ 10,920.
HMEx Program and Database Updates	$ 1,500.
Data Management Sub-Total:	**$ 83,100.**

TOTAL 1994 FIRE DEPT. COSTS (Not adjusted for inflation): $ 356,628.

e. 1995 Costs

Estimated costs for program year 1995 are broken out as follows:

Personnel

4 Uniformed Inspectors @ 12 months salary	$ 199,432.
1 Data Entry Operator @ 12 months salary	$ 26,269.
1 Administrative Specialist @ 12 months salary	$ 28,660.
Personnel Sub-Total:	**$ 254,361.**

Training

Inspector Training	$ 12,000.
Technical Reference Material	$ 3,000.
Training Sub-Total:	**$ 15,000.**

Vehicles

4 Ford Escort @ 12 months lease	$ 10,560.
Parking @ $92./month per car	$ 4,416.
Vehicle Sub-Total:	**$ 14,976.**

Office Furniture & Equipment

Operating Supplies	$ 1,500.
1 File Cabinet	$ 663.
1 Bookcase	$ 243.
Printing	$ 100.
Microfilm	$ 2,750.
Office Furniture Sub-Total:	**$ 5,256.**

Data Management

Cost to Lease from DAS:	
PRC provided Hardware/Software @ 12 mo lease	$ 47,040.
Non-PRC Hardware/Software @ 12 mo lease	$ 23,280.
Interest on Lease from DAS:	
7-year lease life equipment @ $725/mo	$ 8,700.
HMEx Program and Database Updates	$ 1,500.
Data Management Sub-Total:	**$ 80,520.**

TOTAL 1995 FIRE DEPT. COSTS (Not adjusted for inflation): $ 370,113.

Seattle Fire Department

SUMMARY OF ARTICLE 80
Program Costs vs Revenue

	Program Year					
	START-UP *(1991)*	**YEAR 1** *(1992)*	**YEAR 2**[4] *(1993)*	**YEAR 3** *(1994)*	**YEAR 4**[5] *(1995)*	**YEAR 5** *(1996)*
Costs[1] ***($)***	244,957[2]	482,083	501,226	554,023	567,513	567,513
Revenue ***($)***	150,000[3]	159,300	294,650	637,150	1,400,000	857,150
Running Total of Program Status ***($)***	-94,957	-417,740	-624,316	-541,194	291,293	580,930

1. *Costs are adjusted for inflation and include salaries and benefits of existing staff.*
2. *Cost in 1991 does not include direct costs to DAS.*
3. *Revenue in 1991 consists only of renewal fees ($30.00) for existing 5,000 "Haz Mat" permits.*
4. *Program review scheduled the end of 1993.*
5. *All program development costs recovered by end of 1995.*

APPENDIX A

ARTICLE 80 BACKGROUND

BACKGROUND

Article 80 is that section of the Fire Code that establishes regulations for the transportation, storage and use of hazardous materials.

Its purpose is to provide requirements for the prevention, control and mitigation of dangerous conditions related to hazardous materials and to provide information for emergency response personnel.

In previous editions of the Fire Code, this Article has been very brief and provided only general guidelines for the handling of hazardous materials. It did not establish detailed technical requirements and did not consider the varying degrees of hazard posed by these materials.

Based on the number of existing hazardous material permits, it is estimated that there are 5,500 occupancies within the City of Seattle that handle hazardous materials.

At this time, the Fire Department does not have the personnel, computer support or the level of training required to adequately enforce Article 80. The result of attempting to enforce Article 80 and the intent of its provisions with too few inspectors and inspectors who are not well trained and conversant with code requirements, will result in inadequate inspections, an inconsistency in the level of compliance and unequal treatment of businesses. Inspection errors will ultimately prove costly to the regulated community since many code provisions specify controls that will require expensive modification of existing structures.

The cost-recovery program that the Fire Department has developed allows for a four-year phased-in enforcement period. This program will allow facilities handling materials that pose the least hazard four years to come into compliance with Article 80; while those facilities that handle materials with the greatest risk will have one year to meet the code requirements. We feel that this approach minimizes the impact on the regulated community and also allows the Fire Department time to develop computer support requirements and acquire necessary staff and training to enforce the provisions.

The program calls for a restructuring of the permit fee schedule relating to hazardous materials. The permit fee will be based on the quantity of material at each facility as well as the relative risk posed by the material. Thus, the permit fee will be unique to that facility. The annual renewal fee will be one-half of the original permit fee, if the facility is found to be in compliance with its original permit. Based on revenue projections, the program will be self sufficient by the third year. Because projected revenues greatly exceed program costs in years three and four, we strongly recommend that a thorough program review be conducted at the end of the second year. If at that time the projections are found to be on target, an adjustment in the permit fee structure may be necessary.

Article 80 reflects the dramatic growth in the development and use of hazardous materials. In response to this growth, the Fire Department is proposing a program that attempts to assure the establishment of safeguards for environmental protection and life safety in the event of a spill or accident involving hazardous materials.

APPENDIX B

STAFFING DETAILS

STAFFING DETAILS

The number of inspectors that will be required to enforce Article 80 was determined based on:

1. The estimated total number of hazardous materials occupancies scheduled to be in compliance by program year,

2. The estimated average time to conduct an inspection of an occupancy required to meet the provisions of Article 80 and,

3. The average number of hours worked per year per inspector.

The projections indicate that:

In 1992, four (4) inspectors are needed to inspect and permit the estimated 30 Class 4 facilities. Class 4 facilities are those facilities that handle the most hazardous materials, for example hydrogen cyanide gas. It was estimated that each of the 30 Class 4 facilities would require one month of man hours to ensure code compliance and issue necessary permits.

In addition to the inspectors, a full-time data entry operator and a full-time administrative specialist are required to process inventory statements, compliance paperwork, and permits.

In 1993, four (4) inspectors are required to inspect and permit an estimated 500 Class 3 facilities and renew 30 Class 4 facility permits.

In 1994, five (5) inspectors are needed to inspect and permit an estimated 1500 Class 2 facilities and renew 530 Class 3 and 4 facility permits.

In 1995, nine (9) inspectors are needed to inspect and permit an estimated 3500 Class 1 facilities and to renew 2030 Class 2, 3 and 4 facility permits.

In 1996, it is anticipated that all hazardous material occupancies will be in compliance or well on their way to achieving code compliance, and new permit issuance will be minimal compared to renewal activity. In 1996, six (6) inspectors are needed to meet the labor demands of the program.

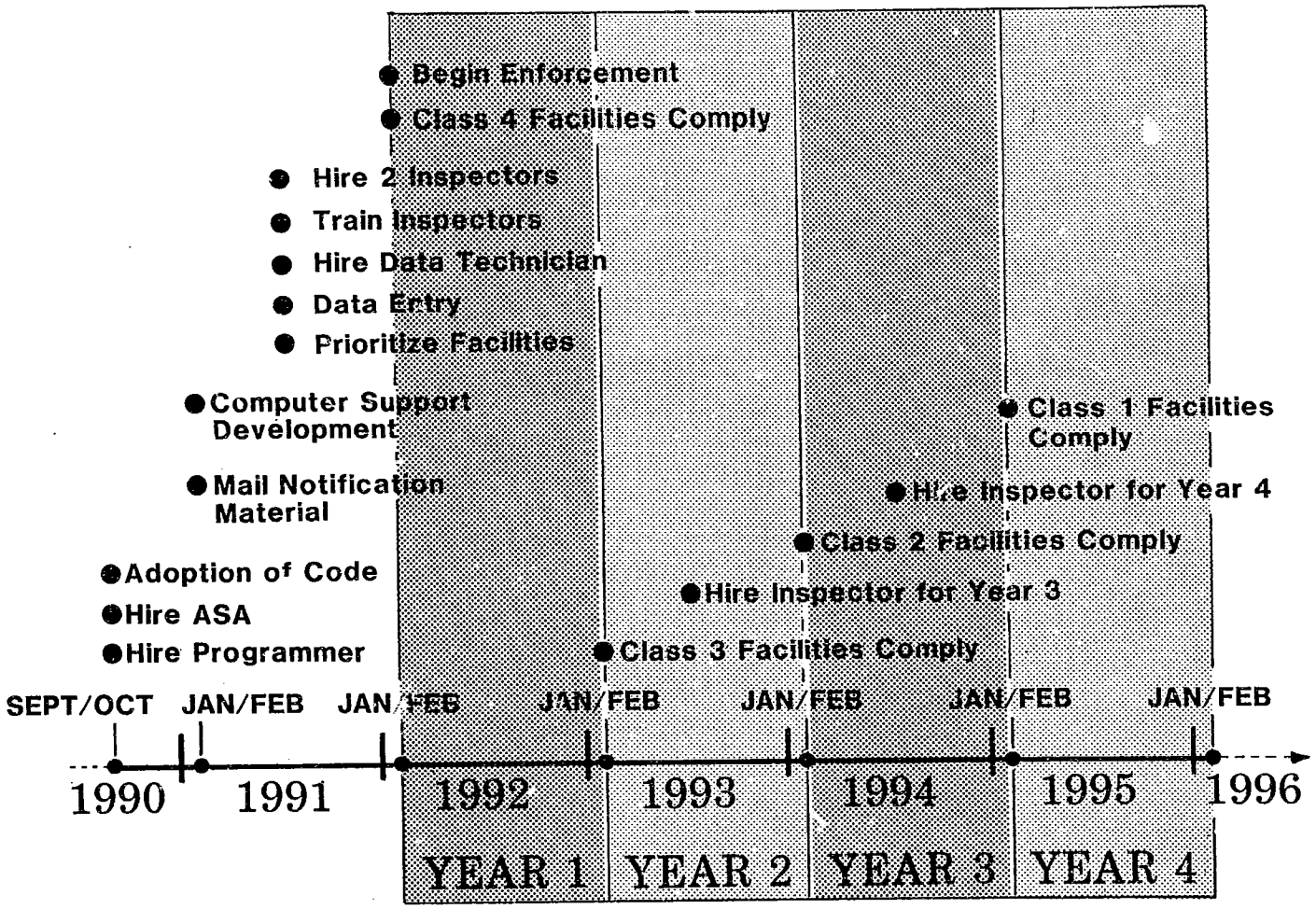
The attached implementation and staff hiring time line illustrates that the Fire Department is requesting to add two (2) inspectors to the two that already exist in the Fire Prevention Division in 1991 in order to adequately train inspectors prior to the start of the 1992 enforcement date.

Two additional inspectors are requested later in the program; one in 1993 and one in 1994. These inspectors are also being requested approximately seven months prior to actual code enforcement dates in order to adequately train and orient each inspector.

With the addition of the four inspectors over the four year program, the City's hazardous material inspection program will consist of a total of one supervising civilian code specialist, six uniformed occupancy inspectors, one data entry operator and one administrative specialist to inspect and permit an estimated 5500 hazardous material occupancies. One existing uniformed tank vehicle inspector will also be included in the program, but because that inspector issues permits for tank vehicles, cutting and welding operations, and underground storage tank removals, the inspector is not included in calculations determining staffing needs.

ARTICLE 80 PROGRAM

IMPLEMENTATION AND STAFF HIRING
PROPOSED TIMELINE



APPENDIX C

DATA MANAGEMENT DETAILS

DATA MANAGEMENT DETAILS

In October 1989, the Fire Department began exploring solutions to the data management needs associated with the Article 80 program. At that time, cost estimates were obtained to implement the program on a Xenix mini-computer system which would be compatible with the Department's Computer Aided Dispatching (CAD) system and on the City's mainframe computer. Both options were considered to accommodate the long-range plan developed for the Fire Prevention Division.

The initial cost estimate for the Xenix system, including design, was $181,000 with annual maintenance costs of $5,000 per year. The cost to utilize the City's mainframe system was estimated to range from $250,000 to $355,000 with annual maintenance costs of $30,000 per year. Both options required that a permanent full-time programmer for the Fire Prevention Division be hired to maintain the system.

At a later date, the Office of Management and Budget proposed a third option. That option considered customization and enhancement of the Record Management System (RMS) already purchased by the City with the CAD system. The option was explored and ultimately recommended by this Department's Management Information/Communication System (MI/CS) Division.

This option also meets the long-range goals of the Fire Prevention Division and has several advantages over the other two systems. The primary advantage of the RMS version is that the hazardous materials permitting information will be on the same platform as the CAD. This will allow field units to readily access facility inventories and alert them to special hazards that could be encountered at a hazardous material occupancy. This option also reduces the need for double entry of information, allows for instantaneous consolidation of information relating to permit activity initiated by either the Fire Marshal's Office or an outlying fire station, and would eliminate the need for as well as the complexity involved in interfacing disparate computing systems.

It should also be noted that this option conforms to the goals and objectives of the Department's on-going information system planning process through which all information needs of the Department are being examined to enable proper development of an integrated information system based on a single computing platform for the entire Department.

It is important to realize that in 1991 the permit program of the Fire Department will be divided into two separate categories. One category will be the permits which involve hazardous materials (the Article 80 permits). The second category will be all other permits (approximately 25-30 categories of permits including such activities as cutting and welding, public assembly, outdoor events, etc.) This second category of permits will total approximately 5,000 (about the same number as Article 80).

The computer program must be able to perform the following functions for Article 80 permits and similar functions for all other types of permits.

1. Accept and store general facility information and inventory statements for approximately 5500 hazardous material occupancies.

   Each facility requiring a hazardous material permit (estimated to be 5500) will be

required to submit an extensive inventory of the hazardous materials that are stored or used at the site. Some of those inventories will be small, listing only a several chemicals, but others including the University of Washington and some laboratories will be very lengthy and may include **thousands of chemicals**. The system must be able to store and access the inventories submitted.

2. Print inventory statements.

   There will be a need to obtain a hard copy of the inventory statements, therefore the system should be able to printout the inventories in the predetermined format.

3. Calculate the facility specific permit fee utilizing the inventory statement data and the developed permit fee structure.

   The permit fees will be based on the quantity and type of material stored or used at the facility. The system must be able to identify all of the materials in a given hazard class from the inventory and apply the appropriate equations to calculate the facility specific permit fee.

4. Print the base permit fee on an invoice for the facility.

   Because the permit fee is generated from the quantity and type of material handled at the site, the permit fee will not be determined until the inspection is complete or until the inspector has verified that the inventory reported is appropriate. This requires that each permit fee be documented for this Department and for the permit holder.

5. Prioritize or sort facilities based on the classes of materials on site.

   In order to prioritize the inspection it will be necessary to identify all of the facilities in the City that store or handle a specific class of material (e.g. Class 4 oxidizers). Therefore, the system must be able to generate a list of facilities by address that store or handle any specified class of chemical.

6. Obtain a list of all permits issued for a facility.

   Because multiple permits (not necessarily hazardous material permits) may be issued to a facility based on the different types of activities conducted there, it will be necessary to obtain a list of all permits issued to the facility by the Seattle Fire Department. For example, a single facility may be issued a cutting and welding permit as well as a hazardous materials permit.

7. Generate a list of facilities by permit type.

   It will be necessary to obtain a list of all facilities that have been issued a specific type of permit, for instance, a hazardous material permit, a chemical laboratory permit, a cutting and welding permit or a public assembly permit.

8. Obtain a list of all permits issued by Battalion sorted by address.

Some hazardous material permits may be issued by the engine companies during their annual inspections. This office must have access to permit information when permits are issued by staff other than Fire Marshal's Office staff. The list generated should be an address list, identifying the type of permit and the Battalion that issued the permit.

9. Generate renewal notices; list delinquent permits.

Facility operators must be notified that the permits they hold are in need of renewal. The renewal notice should also include the anticipated renewal fee. If the inventory at the facility remains constant, then the permit renewal fee is calculated to be one half of the original permit fee.

It will also be necessary to obtain a list of delinquent permits. Therefore, the system must be able to scan the permit renewal dates and determine whether that date has passed.

10. Print permits with standard permit conditions and allow for entry of special permit conditions and code alternates.

Each inspector will determine the standard permit conditions that will apply to each facility. A list of those standard conditions should be in the system and retrievable on command. In addition, there may be special permit conditions or code alternates that must be entered from the keyboard prior to issuance of the permit.

The system should be able to print a multiple page permit in a specified format.

11. Communicate with CAD system.

This function should allow a responding engine company or hazardous materials response team to access the facility inventory and other pertinent permit information. It will be necessary for the company to obtain a "primary inventory list" rather than the detailed inventory statement. That is, the system should be able to summarize and report the inventory statement by major hazard category.

12. Communicate with the Hazardous Materials Expert (HMEx) software.

A private consultant has developed a software package (HMEx) that contains a substantial chemical database that may be used to appropriately classify chemicals based on the Uniform Fire Code definitions. The system should be able to communicate with this software so that inventory statements may be entered into and materials classified by HMEx and then transferred into the operating system.

13. Print code alternates.

It will be imperative that this Department be consistent when approving code alternates and establishing the necessary conditions for those code alternates. Therefore, the system should be able to retain and retrieve all code alternate information.

14. Define building occupancy type.

There will be a need to have access to the occupancy classification of each building based on DCLU criteria. (See the discussion below regarding building information files.)

15. Accounting and revenue projections.

We have identified the need to review the program costs and revenues on an ongoing basis for reporting purposes and in order to determine whether the fee structure developed is appropriate. Therefore, the computer must be able to access and report the permit fee information and summarize revenues by permit type. There will also be the need to compare permit fees based on industry type and compare permit fees with reported inspection time.

Additionally, the computer must be able to retain permit fee receipt information, including receipt number, check number and NSF information.

This function should include tracking inspectors time for invoice production if the facility remains out-of-compliance after two reinspections.

16. Produce reports on demand of the type and number of permits issued.

In order to adequately monitor the program, it will be necessary to produce reports that detail the number and type of permits issued over a given time period (weekly, monthly, quarterly). The report should be able to detail the number of permits issued by the type of permit issued.

17. Produce reports on demand of the type and number of permits processed by individual inspector.

In order to evaluate the work distribution, it will be necessary to produce reports that detail the number and type of permits processed by each inspector over a given time period (weekly, monthly, quarterly).

18. Access confidence testing information.

Fire protection systems required under Article 80, such as gas detectors, limit controls, scrubbers and automatic alarms will be required to be confidence tested on an annual basis. It will be necessary to have access to facility confidence testing information.

19. Allow for generation of a chemical inventory database with classifications if communication with the HMEx system is not feasible.

It is imperative that the system have access to a chemical database in order to classify materials appropriately and consistently. If it is determined that the system cannot interface with the HMEx system as needed, then it will be necessary for us to develop a substantial database that the system can access. The database should be able to retain information and classifications for the 70,000 chemicals that are routinely manufactured.

20. Retain inspection history information.

The system should be able to retain a detailed account of inspection history, including all code violations and compliance dates. In addition, there should be an account of other regulatory issues that may be pertinent.

This list itemizes the minimum system capabilities that the FMO has been able to identify to date. As the Article 80 program gets further off the ground, we will be better able to define all of the necessary functions.

The long range plan for the FMO includes utilizing this computer system in a variety of applications for each section. When considering the capacity and type of system that will be appropriate, the following applications should also be addressed.

PROPOSED HARDWARE AND SOFTWARE PURCHASES FOR ARTICLE 80 PROGRAM

	Unit	Price	Extension
PRC-PROVIDED HARDWARE/SOFTWARE:			
32MB Q-bus Memory, VAX 4000	2	25,200.	50,400.
1GB Disk Storage	1	15,000.	15,000.
DECMux 300, 16-channel, RS-232	1	7,710.	7,710.
PCCOM Communication Software	12	350.	4,200.
Print Inventory Statements	1	11,250.	11,250.
Calculate Permit Fees	1	15,000.	15,000.
Print Invoices	1	11,250.	11,250.
Generate Renewal Notices	1	15,000.	15,000.
Print Permits	1	22,500.	22,500.
Interface with HMEx	1	15,000.	15,000.
Print Code Alternate	1	15,000.	15,000.
Print Reports on Type/No. of Permits	1	7,500.	7,500.
Shipping/Insurance			1,983.
Installation			8,634.
Taxes			16,435.
		Sub-Total:	216,862
NON-PRC HARDWARE/SOFTWARE:			
386SX PC Workstations	12	2,500.	30,000.
Laser Printer	3	2,500.	7,500.
WordPerfect 5.1 Multi-user License	1	4,000.	4,000.
Taxes			3,403.
		Sub-Total:	44,903.
DIRECT COST to DAS IN 1991:		**GRAND TOTAL:**	**$ 261,765.**

HARDWARE/SOFTWARE LEASE COST TO SFD FROM DAS:

PRC-provided Hardware/Software (7-yr lease life)	$3,920./month
Non-PRC Hardware/Software (3-yr lease life)	$1,940./month
Total:	$5,860./month ($70,320./yr)

APPENDIX D

TRAINING DETAILS

TRAINING DETAILS

Hazardous Material Inspection Training Program

Goals

1. It is our primary goal that new inspectors without previous Fire Prevention Division experience will be 100 percent productive within approximately seven months.

2. To condense an equivalent 2 year college level chemistry training program into seven months.

3. To include existing senior level fire prevention inspectors in the Article 80 training program.

4. To initiate formal Article 80 building inspections seven months after new staff hiring.

Objectives

1. To provide a comprehensive inspector training program which will include a review of inspection techniques and procedures, formalized code study, and the effective use of the HMIS software package as well as other code compliance resources.

2. To expose new inspectors to a variety of inspection situations by working with senior inspectors during the training period.

3. To enable new inspectors to conduct reinspections independently by their fifth month of training.

4. To enable new inspectors to conduct initial inspections independently by their seventh month of training.

5. To provide on-going monitoring and guidance of new inspectors field work through joint inspections and a regularly scheduled open forum for new inspectors to discuss code application and interpretation.

PROPOSED IN-HOUSE HAZMAT INSPECTOR TRAINING COURSES
(YEAR 1)

TITLE: CHEMISTRY OF HAZARDOUS MATERIALS

HOURS: 40

PREREQUISITE: None

DESCRIPTION: This course is designed to introduce the hazardous material inspector to the basic chemistry of hazardous materials. The course is developed for individuals with limited chemistry background and addresses identification and classification of chemicals per the 1988 SFC, the incompatibility of selected materials and identifies available reference materials.

INSTRUCTOR: Outside Consultant

ESTIMATED COST: $ 9,200. (5 days @ $ 185./hr plus travel expenses*)

TITLE: THE PERMIT PROCESS

HOURS: 8

PREREQUISITE: None

DESCRIPTION: This course is designed to introduce the hazardous materials inspector to the SFD hazardous material permitting process. The course addresses who needs a hazardous material permit, inventory statements, verifying appropriate chemical classifications, permit fee worksheets and fee calculations. Each inspector will be required to complete each standardized for at least one mock facility. Standard and facility specific permit conditions are also discussed.

INSTRUCTOR: Staff

ESTIMATED COST: None

TITLE: HMEx SOFTWARE WORKSHOP

HOURS: 8

PREREQUISITE: The Permit Process

DESCRIPTION: This course is designed to introduce the hazardous materials inspector to the HMEx (Hazardous Material Expert) software capabilities. The inspector will learn to use the software for appropriately classifying chemicals and identifying H occupancy requirements based on the materials stored or used. Mock facility information developed in the prerequisite course will be used in the application of the software.

INSTRUCTOR: Outside Consultant

ESTIMATED COST: $ 2,500. (1 day @ $ 185./hr plus travel expenses)

TITLE: OVERVIEW OF ARTICLE 80 AND CHAPTER 9

HOURS: 40

PREREQUISITE: None

DESCRIPTION: This course is designed to introduce the hazardous material inspector to the construction and requirements of the 1988 SFC version of Article 80 and Chapter 9 of the SBC. Exempt amounts and control areas are addressed in addition to how Article 80 relates to other Articles. The inspector is introduced to significant Washington State amendments to the Article and is instructed in the use of inspection guidelines developed for each general hazard category.

INSTRUCTOR: Outside Consultant

ESTIMATED COST: $ 9,200. (5 days @ $ 185./hr plus travel expenses)

TITLE: ARTICLE 80 GENERAL STORAGE REQUIREMENT HOW-TO'S

HOURS: 40

PREREQUISITE: Overview of Article 80 and Chapter 9

DESCRIPTION: This course is designed to assist the hazardous material inspector in verifying compliance with selected general storage requirement provisions (e.g. piping, valves and fittings, spill control, drainage and containment, explosion venting and suppression and limit controls). The course addresses what to look for and acceptable standards for each provision.

INSTRUCTOR: Local Experts, Outside Consultants and Staff

ESTIMATED COST: $ 9,900. (4 days @ $ 185/hr plus travel expenses for 4 people)

TITLE: HEALTH HAZARDS

HOURS: 8

PREREQUISITE: Overview of Article 80 and Chapter 9

DESCRIPTION: This course was developed in conjunction with the Department of Labor and Industries and introduces the hazardous material inspector to issues related to health hazards as defined in the SFC, including terminology, classifications and related Article 80 provisions.

INSTRUCTOR: Labor and Industries representative and staff

ESTIMATED COST: None

TITLE: COMPRESSED GASES

HOURS: 8

PREREQUISITE: Overview of Article 80 and Chapter 9

DESCRIPTION: This course is designed to introduce the hazardous materials inspector to the principles of compressed gases, fixed gas systems and related components. Code provisions for toxic and highly toxic gases are discussed and the principles and standards for exhaust scrubbers are presented.

INSTRUCTOR: Local experts

ESTIMATED COST: $ 800. @ $100./hour

TITLE: BIOMEDICAL RESEARCH FACILITIES

HOURS: 4

PREREQUISITE: Health Hazards

DESCRIPTION: This course will identify the hazards generally associated with biomedical research facilities. Biohazards as a unique hazard category are introduced and areas of emphasis at biomedical research facilities are presented.

INSTRUCTOR: Local expert

ESTIMATED COST: $ 400. @ 100./hour

TITLE: FLAMMABLE LIQUID ROOMS

HOURS: 8

PREREQUISITE: Overview of Article 80 and Chapter 9

DESCRIPTION: This course is designed to emphasize the code requirements for flammable liquid storage rooms, inside storage rooms, liquid storage warehouses and inside use, dispensing and mixing rooms, and spray booths.

INSTRUCTOR: Staff

ESTIMATED COST: None

TITLE: RADIOACTIVE MATERIALS

HOURS: 8

PREREQUISITE: Overview of Article 80 and Chapter 9, Chemistry of Hazardous Materials

DESCRIPTION: This course is designed as an introductory course that addresses terminology and code provisions related specifically to radioactive materials. Regulations other than the fire code regulations that also apply will be presented.

INSTRUCTOR: Local expert and Staff

ESTIMATED COST: $ 800. @ $ 100./hour

TITLE: CHEMICAL LABORATORIES

HOURS: 4

PREREQUISITE: Overview of Article 80 and Chapter 9, Chemistry of Hazardous Materials

DESCRIPTION: Due to the large variety and density but small quantities of hazardous materials encountered in chemical laboratories, laboratories often fall outside the scope of Article 80. This course identifies for the hazardous material inspector areas of emphasis when inspecting chemical laboratories.

INSTRUCTOR: Staff

ESTIMATED COST: None

TITLE: CHLORINE AND AMMONIA INSTALLATIONS

HOURS: 4

PREREQUISITE: Chemistry of Hazardous Materials, Overview of Article 80 and Chapter 9

DESCRIPTION: This course addresses code provisions, specifically as they relate to chlorine and ammonia gas installations such as those encountered at swimming pools and reprographic facilities.

INSTRUCTOR: Local expert and staff

ESTIMATED COST: $ 400. @ $ 100./hour

TOTAL ESTIMATED COST OF YEAR 1 TRAINING = $ 33,200.

- Travel Expense Cost Breakdown:

  $ 800. roundtrip airfare from CA
  $ 200./day lodging and meals

APPENDIX E

PERMIT FEE SCHEDULE DETAILS

PERMIT FEE SCHEDULE DETAILS

The Fire Department proposes that the hazardous material permit fee schedule be restructured in order to recover all costs associated with the start-up and maintenance of the City's hazardous material inspection program.

Currently, the cost to obtain a hazardous material permit fee from the Seattle Fire Department is $60.00. The Seattle Fire Department is proposing a fee schedule for hazardous materials that is based on the quantity of material stored or handled on site and the relative risk associated with the specific products on site. The annual permit renewal fee will be one-half of the original permit fee, if the facility is found to be in compliance with its original permit.

The facility specific permit fee will be determined as follows:

PERMIT FEE = TOTAL RISK UNIT x FIXED PERMIT COST

The total risk unit is calculated based on the quantity and type of material stored or handled at the facility, and the fixed permit cost is the minimum cost for the Fire Department to issue a hazardous material permit. The fixed permit cost has been determined, using the program costs outlined in this Plan, to be $88.

Documents previously submitted to Council delineate the methodology used by the Fire Department to obtain the fixed permit cost and to project program revenues. Based on the fixed permit cost of $88, the average hazardous permit fee is expected to be approximately $310 after the program goes into effect. However, fees for some facilities with large inventories could exceed several thousand dollars.

Based on projected revenues, all program start-up, development and maintenance costs are expected to be recovered by the end of Year 4 (1995). Because projected program revenues exceed program costs in years three and four (1994 and 1995), we strongly recommend that a thorough program review be conducted at the end of the second year. If at that time the projections are found to be on target, an adjustment in the permit fee structure may be necessary.

APPENDIX F

GANTT CHART

JOB COLUMN REPORT
PROJECT: ART80

CURRENT DATE: 05/03/91
AS OF DATE: 03/06/91

JOB#	WBS CODE	JOB NAME	DURATION	% COMPLETE	DEPENDENCY DATE
1	A	BEGIN PROJECT	0d	0%	
2	A1	Obtain Funding	0d	0%	07/01/91 12:00am
3	B	HIRE ADMIN SPEC !	0d	0%	02/28/91 12:00am
4	B1	Develop Job Description	0d	0%	
5	B1A	Determine Min Job Requirements	1w	100%	
6	B1B	Determine Job Classification	4h	100%	
7	B1C	Write Job Description	4h	0%	
8	B1D	Review/Approve Job Description	1h	0%	
9	B2	Get Position Number	3d	0%	
10	B3	Internal Personnel Review	2d	0%	
11	B4	Prepare Job Advertisement	2w	0%	
12	B5	Advertise Job	2w	0%	
13	B6	Evaluate Resumes/Set Up Interv	1w	0%	
14	B7	Conduct 1st Interviews	1w	0%	
15	B8	Conduct Final Interviews	2d	0%	
16	B9	Hire Candidate	3w	0%	
17	C	COMPUTER SUPPORT DEVELOPMENT	0d	0%	01/31/91 12:00am
18	C1	Develop Program Requirements	2w	100%	
19	C1A	Develop Prelim Requirements	0d	100%	
20	C1B	Review Prelim Req. w/FMO	0h	100%	
21	C1C	Review Prelim Req. w/MIS	0d	100%	
22	C1D	Develop Final Req.	0d	100%	01/31/91 12:00am
23	C1E	Review Final Req. w/FMO	0h	100%	
24	C1F	Review Final Req. w/MIS	0d	100%	01/31/91 12:00am
25	C2	Determine Hardware Req.	0d	100%	01/31/91 12:00am
26	C2A	Ident. Prelim. Req.	0d	100%	
27	C2B	Review Prelim Req w/FMO	0d	100%	
28	C2C	Review Prelim Req w/ MIS	0d	100%	
29	C2D	Develop Final Req	0d	100%	
30	C2E	Review Final Req w/ FMO	0d	100%	
31	C2F	Review Final Req w/MIS	0d	100%	
32	C3	Procure Consultants Service	1w	0%	07/01/91 12:00am
33	C4	Assist in Detailed Devlop	2d	0%	
34	C5	Review DP Manuals	2d	0%	
35	C6	Ongoing Communic w/PRC	32w	0%	
36	C7	Complete Development	32w	0%	
37	C8	Training on RMS	1d	0%	
38	D	DEVELOP INFORMATION BULLETINS	5d	0%	07/01/91 12:00am

39	D1	Determine Objective & Content	4h	0%
40	D2	Develop Text	5d	0%
41	D3	Review Text	2d	0%
42	D4	Design Layout	3d	0%
43	D5	Review Layout W/FMO	1d	0%
44	D6	Finalize Text and Layout	1d	0%
45	D7	Print Bulletins	2w	0%
46	E	DEVELOP INSPECTION GUIDELINES	0d	0%
47	E1	Finalize Level I Outline	0h	0%

JOB#	WBS CODE	JOB NAME	DURATION	% COMPLETE	DEPENDENCY DATE
48	E1A	Prepare Example Guideline	1h	100%	
49	E1B	Internal Review of Guideline	2h	100%	
50	E2	Finalize Level II Outline	0h	0%	
51	E2A	Prepare Example Guideline	4h	100%	
52	E2B	Internal Review of Guideline	1d	100%	
53	E3	Identify Required Guidelines	3d	90%	
54	E4	Identify Level I Guidelines	4h	100%	
55	E5	Write Inspection Guidelines	187d	70%	
56	E6	Review Inspection Guidelines	62d	10%	
57	E7	Finalize Guidelines	60d	50%	
58	E8	Print Guidelines	3w	50%	
59	F	ACQUIRE SPACE & OFFICE EQUIP	0d	0%	
60	F1	Determine Space Requirements	0d	0%	
61	F1A	Acquire Selected Space	1w	0%	
62	F1B	Move HM Unit to Space	2d	0%	
63	F2	Determine Off.Equip.Req.	0d	0%	
64	F2A	Ident Equip Req. for Ea. Pos.	1h	100%	
65	F2B	Determine Off. Furn. Needs	1h	100%	
66	F2C	Determine Off. Machine Needs	1h	100%	
67	F2D	Ident Commun. Equip Needs	1d	100%	
68	F2E	Ident. Equip. Costs	4h	100%	
69	F2F	Review Equip. List	2h	100%	
70	F2G	Prepare Equip. Requisition	8h	0%	
71	F2H	Install Equip. on Receipt	2d	0%	
72	G	DEVELOP PERMIT WORKSHEETS	0d	0%	
73	G1	Finalize Permit Fee Structure	2h	95%	
74	G2	Prepare Permit Fee Worksheets	0h	0%	

75	G2A	Draft Layout	1d	100%	
76	G2B	Review Layout w/FMO	2h	0%	
77	G2C	Finalize Worksheet Layout	4h	0%	07/01/91 12:00am
78	G2D	Print Worksheets	2w	0%	
79	G3	Prepare Instr. for Worksheet	0d	75%	
80	G3A	Draft Instr. for Worksheet	2h	100%	
81	G3B	Review Instr. w/FMO	2h	0%	
82	G3C	Finalize Instructions	2h	0%	07/01/91 12:00am
83	G3D	Print Instructions	2w	0%	
84	G4	Prepare Example Worksheet	2h	0%	
85	G5	Prepare HMIS Form	0h	0%	
86	G5A	Develop format for HMIS	4h	100%	
87	G5B	Review format w/FMO	1h	0%	
88	G5C	Finalize HMIS	2h	0%	07/01/91 12:00am
89	G5D	Print HMIS'	2w	0%	
90	G6	Prepare Instr. for HMIS	0d	0%	
91	G6A	Draft Instr. for HMIS	8h	100%	
92	G6B	Review Instr. w/FMO	1h	0%	
93	G6C	Finalize Instructions	2h	0%	07/01/91 12:00am
94	G6D	Print HMIS Instructions	2w	0%	
95	H	ACQUIRE INSPECTORS EQUIPMENT	0d	0%	
96	H1	Determine Equipment Requimnts	2d	0%	
97	H2	Identify Equipment Available	4d	0%	
98	H3	Determine Equipment Costs	1d	0%	

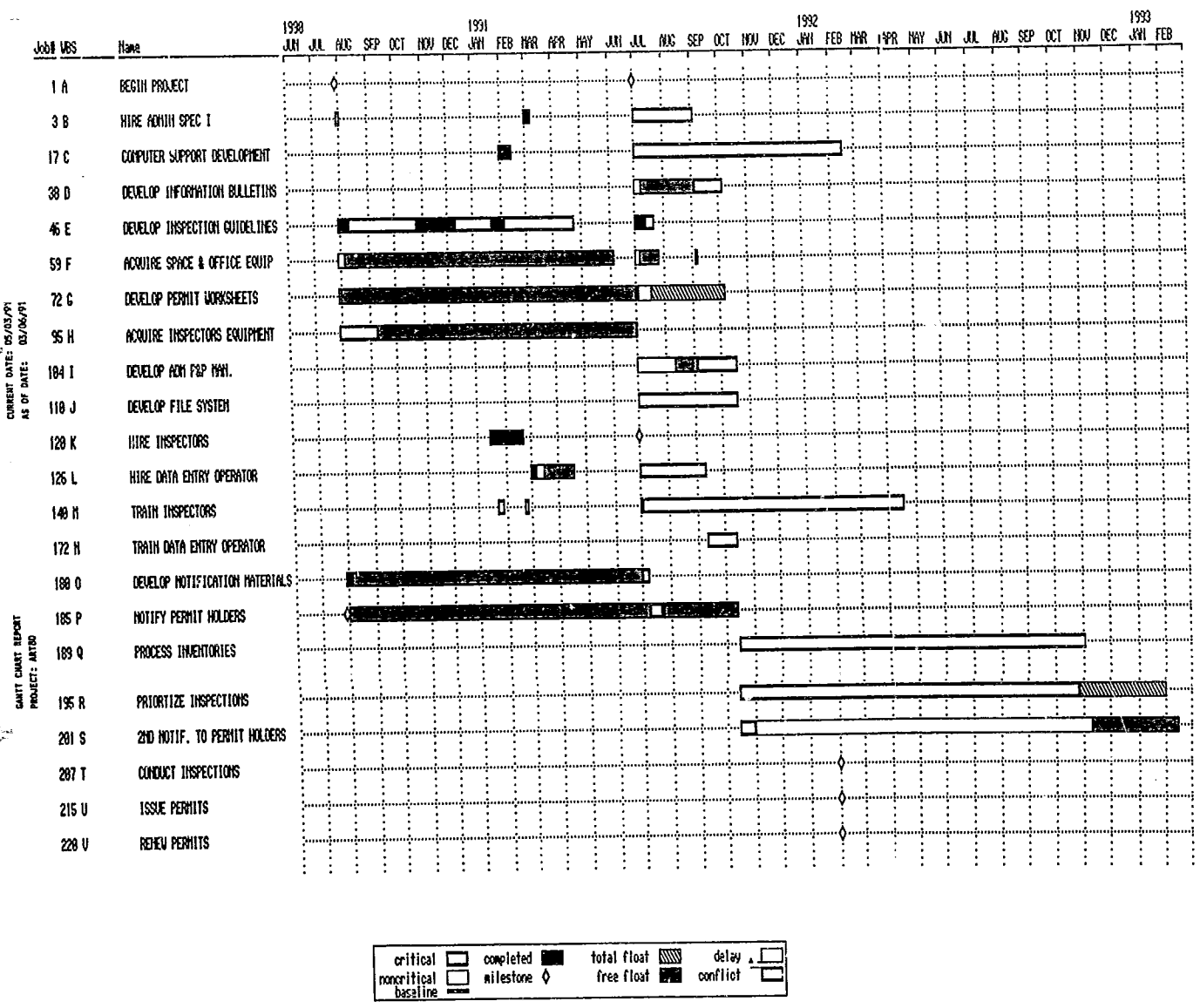
JOB#	WBS CODE	JOB NAME	DURATION	% COMPLETE	DEPENDENCY DATE
99	H4	Analyze Costs/Benefits	2d	0%	
100	H5	Prepare Report w/Recomm.	2d	0%	
101	H6	Review Report w/FMO	1d	0%	
102	H7	Prepare Equip. Requisition	2h	0%	
103	H8	Receive Equipment	6w	0%	
104	I	DEVELOP ADM P&P MAN	30d	0%	07/01/91 12:00am
105	I1	Develop Outline	1d	0%	
106	I2	Review Outline	1h	0%	
107	I3	Generate Text	21d	0%	
108	I4	Review of Text	5d	0%	
109	I5	Finalize Text & Manual	1w	0%	
110	J	DEVELOP FILE SYSTEM	0d	0%	07/01/91 12:00am

111	J1	Determine Filing Needs	0d	0%	
112	J1A	Review Code Req. Re: Documents	2h	0%	
113	J1B	Review Operational Needs	2d	0%	
114	J1C	Develop List of File Goals	4h	0%	
115	J1D	Develop File Procedures	3w	0%	
116	J2	Obtain Filing Supplies	6w	0%	
117	J2A	Determine Supply Needs	2d	0%	
118	J2B	Requisition Supplies	4h	0%	
119	J3	Set Up Files	60d	0%	
120	K	HIRE INSPECTORS	0d	100%	01/15/91 12:00am
121	K1	Solicit Resumes	3w	100%	
122	K2	Review Resumes	1w	100%	
123	K3	Conduct Interviews	2w	100%	
124	K4	Select Candidates	1d	100%	
125	K5	Notify Candidates	0d	0%	
126	L	HIRE DATA ENTRY OPERATOR	0d	0%	02/28/91 12:00am
127	L1	Develop Job Description	0d	100%	
128	L1A	Determine Min. Job Req.	1w	100%	
129	L1B	Determine Job Classification	1w	0%	
130	L1C	Write Job Description	4h	0%	
131	L1D	Review/Approve Job Descript	2h	0%	
132	L2	Get Position Number	3d	0%	
133	L3	Internal Personnel Review	2d	0%	
134	L4	Prepare Job Advertisement	2w	0%	
135	L5	Advertise Job	2w	0%	
136	L6	Evaluate Resumes/Set Up Interv	1w	0%	
137	L7	Conduct 1st Interviews	1w	0%	
138	L8	Conduct Final Interviews	2d	0%	
139	L9	Hire Canidate	3w	0%	
140	M	TRAIN INSPECTORS	0d	0%	
141	M1	Identify Training Requirements	0d	0%	
142	M1A	Review Inspection Guidelines	5d	0%	
143	M1B	Brainstorm Training Topics	4h	90%	
144	M1C	Contact Other Depts. For Ideas	3d	0%	
145	M2	Develop Training Program	0d	0%	
146	M2A	Identify Format	3d	10%	
147	M2B	Review Proposed Format w/FMO	4h	0%	
148	M2C	Finalize Format	3d	0%	
149	M2D	Ident. Courses/Staff Instr.	1d	0%	

JOB#	WBS CODE	JOB NAME	DURATION	% COMPLETE	DEPENDENCY DATE
150	M2E	Ident. Courses/Local Expert	1d	0%	
151	M2F	Ident. Courses/Consultant	1d	0%	
152	M2G	Draft Course Outlines	36d	0%	
153	M2H	Review Course Outlines w/FMO	5d	0%	
154	M2I	Contact Local Experts	1w	0%	
155	M2J	Procure Local Expert Instruct.	6w	0%	
156	M2K	Contact Consultants	2w	0%	
157	M2L	Procure Consultant Services	6w	0%	
158	M2M	Finalize Outlines w/Instructor	8w	0%	
159	M2N	Set Course Dates	5d	0%	
160	M2O	Locate Classrooms	5d	0%	
161	M2P	Identify Equipment Needs	1d	0%	
162	M2Q	Notify Course Participants	4h	0%	
163	M3	Develop Training Manual	0d	0%	
164	M3A	Draft Manual Outline	2d	0%	
165	M3B	Review Outline w/FMO	4h	0%	
166	M3C	Finalize Outline	4h	0%	
167	M3D	Draft Manual Text	11d	0%	
168	M3E	Review Text w/FMO	5d	0%	
169	M3F	Finalize Text	1w	0%	
170	M3G	Print Training Manual	15d	0%	
171	M4	Conduct Training	30w	0%	
172	N	TRAIN DATA ENTRY OPERATOR	0d	0%	
173	N1	Develop Procedure Manual	0d	0%	
174	N1A	Develop Manual Outline	1d	0%	
175	N1B	Review/Approve Outline	1d	0%	
176	N1C	Develop Draft Manual	1w	0%	
177	N1D	Review/Approve Manual	2d	0%	
178	N1E	Print Manual	2w	0%	
179	N3	Conduct Training	1w	0%	
180	O	DEVELOP NOTIFICATION MATERIALS	0d	0%	
181	O1	Determine Notification Needs	2d	50%	
182	O2	Draft Notif. text and layout	3d	50%	
183	O3	Review Notif. text w/FMO	1w	0%	07/01/91 12:00am
184	O4	Finalize text and layout	4h	0%	
185	P	NOTIFY PERMIT HOLDERS	0d	0%	
186	P1	Identify Receipiants	4h	0%	
187	P2	Print Material	2w	0%	
188	P3	Distribute Material	1w	0%	
189	Q	PROCESS INVENTORIES	0d	0%	
190	Q1	Receive HMIS'	26w	0%	
191	Q2	Review HMIS for Approp. Class.	54w	0%	

192	Q3	Contact submitter to assist	54w	0%
193	Q4	Enter Info into Database	54w	0%
194	Q5	Microfiche and File HMIS	6d	0%
195	R	PRIORTIZE INSPECTIONS	0d	0%
196	R1	Identify Class 4 Facilities	54w	0%
197	R2	Identify Class 3 Facilities	54w	0%
198	R3	Identify Class 2 Facilities	54w	0%
199	R4	Identify Level I Inspections	54w	0%
200	R5	Distribute Level I's to Comp.	54w	0%

JOB#	WBS CODE	JOR NAME	DURATION	% COMPLETE	DEPENDENCY DATE
201	S	2ND NOTIF. TO PERMIT HOLDERS	0d	0%	
202	S1	Draft Notices for Dif Classes	2w	0%	
203	S2	Finalize Notices	2d	0%	
204	S3	Identify Recipients	1w	0%	
205	S4	Print Notices	2w	0%	
206	S5	Mail Notices	54w	0%	
207	T	CONDUCT INSPECTIONS	0d	0%	02/01/92 12:00am
208	T1	Review permit application info	0d	0%	
209	T2	Verify Quantities > Exempt Amt	0d	0%	
210	T3	Determine Occupancy Class	0d	0%	
211	T4	Apply General Requirements	0d	0%	
212	T5	Apply Specific Requirements	0d	0%	
213	T6	Generate NOV/F6A	0d	0%	
214	T7	Reinspect for Compliance	0d	0%	
215	U	ISSUE PERMITS	0d	0%	
216	U1	Identify Unique Permit Cond.	0d	0%	
217	U2	Identify Std. Premit Cond.	0d	0%	
218	U3	Print Permit	0d	0%	
219	U4	Generate Invoice if Necessary	0d	0%	
220	V	RENEW PERMITS	0d	0%	
221	V1	Review Permit Allowances	0d	0%	
222	V2	Inspect Facility	0d	0%	
223	V3	Generate NOV/F6A	0d	0%	
224	V4	Reinspect if Necess.	0d	0%	
225	V5	Update Permit Cond.	0d	0%	
226	V6	Reissue Permit	0d	0%	
227	V7	Generate Invoice	0d	0%	


Job# WBS Name
1990 JUN JUL AUG SEP OCT NOV DEC
1991 JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
1992 JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
1993 JAN FEB
1 A BEGIN PROJECT
3 B HIRE ADMIN SPEC I
17 C COMPUTER SUPPORT DEVELOPMENT
38 D DEVELOP INFORMATION BULLETINS
46 E DEVELOP INSPECTION GUIDELINES
59 F ACQUIRE SPACE & OFFICE EQUIP
72 G DEVELOP PERMIT WORKSHEETS
95 H ACQUIRE INSPECTORS EQUIPMENT
104 I DEVELOP ADM P&P MAN.
110 J DEVELOP FILE SYSTEM
120 K HIRE INSPECTORS
126 L HIRE DATA ENTRY OPERATOR
140 M TRAIN INSPECTORS
172 N TRAIN DATA ENTRY OPERATOR
180 O DEVELOP NOTIFICATION MATERIALS
185 P NOTIFY PERMIT HOLDERS
189 Q PROCESS INVENTORIES
195 R PRIORTIZE INSPECTIONS
201 S 2ND NOTIF. TO PERMIT HOLDERS
207 T CONDUCT INSPECTIONS
215 U ISSUE PERMITS
220 V RENEW PERMITS
CURRENT DATE: 05/03/91
AS OF DATE: 03/06/91
GANTT CHART REPORT
PROJECT: ARTMO
critical
noncritical
baseline
completed
milestone
total float
free float
delay
conflict

Your
Seattle
Fire Department

Claude Harris, Chief
Norman B. Rice, Mayor

June 12, 1991

The Honorable Paul Kraabel
President
Seattle City Council

Dear President Kraabel:

Attached for Council consideration is an ordinance authorizing implementation of Article 80 of the Seattle Fire Code and responding to the 1991 Budget statement of legislative intent relating to Article 80. As you may recall, in the 1988 Uniform Fire Code, the technical requirements of Article 80 governing the storage and handling of hazardous materials were expanded and revised to recognize recent growth in the development and use of hazardous materials.

The City Council adoption of the 1988 Uniform Fire Code in October, 1990 (Ordinance 115405) included a mandate that the Fire Department enforce the provisions of the Code. During the 1991 budget process, the Council, in a Statement of Legislative Intent, directed the Fire Department to report to the Public Safety Committee on a plan to implement Article 80 and recover the costs of the program. The City Council appropriated $200,000 to Finance General to pay the 1991 costs.

The attached ordinance authorizes several actions:

1. Implementation of Article 80;
2. Transfers $50,000 from Finance General to the Fire Department;
3. Establishes four positions in the Fire Department, effective November 1, 1991;
4. Authorizes DAS and Purchasing Departments to amend the CAD contract to customize the record management system to accommodate Article 80 data;
5. Increases DAS' 1991 budget to enable the Department to purchase the additional data management hardware and software.

To implement Article 80, the Fire Department has based its staffing, data management, training needs and costs on a five-year plan. The Department has developed a cost recovery plan that would make the program self-supporting by 1995. The plan assumes that there are approximately 5,500 businesses in Seattle which store and handle hazardous materials. For the purpose of inspection and issuing permits to each business, the Department divided facilities into "classes" based on the quantity and type of material they handle.

The facilities with the largest amounts of especially risky materials will be inspected and brought into compliance with Article 80 during the first year of the program (1992). Facilities handling materials that pose less risk will be inspected and brought into compliance by 1995. All facilities will be reinspected annually.

To estimate the number of inspectors needed to bring all 5,500 facilities into initial compliance with Article 80 by 1995 and to provide ongoing annual reinspections of all facilities, the Department used data that includes the estimated total number of facilities scheduled to be in compliance by program year, the estimated average time to conduct an inspection of a facility (based on estimated time for each inspection task and the number of inspection tasks for various classes), and the average number of hours worked per year per inspector. (Please see Appendix B of the Final Plan document.)

For 1991, the Office of Management and Budget proposes the addition of two Fire Fighter Prevention Inspectors I, one Data Entry Operator, and one Administrative Specialist I, effective November 1, and associated costs. This proposal was made after completion of the Final Plan which reflects a July 1 start date. In response to budget constraints, a November 1, 1991 start date is being proposed in the legislation.

The result of delaying the hiring of staff until November 1, 1991 will cause a delay in enforcement of the Fire Code provisions, a delay in revenue generated due to increased permit fees and subsequently, a delay in the recovery of program costs until 1996 and an increase in permit application backlogs.

To support the data management needs of the program, the Fire Department and the Office of Management and Budget propose customizing the Record Management System (RMS) already purchased as a component of the Computer Aided Dispatch (CAD) system. The Department believes that to have facility inventory and permit information readily available on the system will expedite the work of first responders in accidents or fires involving hazardous materials. This involves amending the DAS contract with PRC, the firm developing the CAD system, and buying additional hardware, software and PRC expertise.

The training the Department proposes is, at the outset, a complete seven-month training for new inspectors (because Article 80 is relatively new, there are few developed programs for inspectors). Training will cover the chemistry of hazardous materials, inspection techniques and procedures, and code study; training costs will drop substantially as inspectors develop expertise.

The Department is in the process of developing a fee schedule for initial Article 80 inspections based on the type and quantity of material stored and/or handled at each of Seattle's approximately 5,500 facilities. Each facility's permit fee, based on the assessed risk and the fixed cost will be unique. The Department must go through a notification process and request detailed information regarding facility inventories in order to establish actual permit fees. All hazardous materials storage and use permit fees are now $60.

The Department estimates that initial permit fees, which will cost a minimum of $90, could cost as much as several thousand dollars, and will likely average $318. Renewal fees will increase from the current $30 to one-half the original permit fee. Though the costs are high, they are not out of line with fees other cities with similar population bases are charging.

Thank you for your consideration of this legislation. Fire Department and OMB staff are available to answer questions Council members may have on the implementation of the Article 80 program. For more information, please call Lynne Kilpatrick-Howard at 386-1373.

Very truly yours,

Claude Harris, Chief
Seattle Fire Department

CH:LKH:mm

Enclosures

cc: Chief B. L. Hansen, Fire Marshal
Chief Dale Miller, MI/CS
Andrew J. Lofton, Budget Director

City of Seattle

Executive Department-Office of Management and Budget

Andrew J. Lofton, Director
Norman B. Rice, Mayor

May 22, 1991

12.051

The Honorable Mark Sidran
City Attorney
City of Seattle

Dear Mr. Sidran:

The Mayor is proposing to the City Council that the enclosed legislation be adopted.

REQUESTING DEPARTMENT: Fire

SUBJECT: AN ORDINANCE relating to Fire Code Enforcement; authorizing implementation of Article 80 of the Code; increasing certain expenditure allowances in the 1991 Budget of the Fire Department by reduction, reappropriation, and transfer from the Department of Finance General, authorizing the Purchasing Agent, with the cooperation of the Director of Administrative Services, to amend a contract, and increasing an expenditure allowance in the 1991 Budget of the Department of Administrative Services by appropriation and transfer from the Administrative Services Fund, all by three-fourths vote of the City Council.

Pursuant to the City Council's S.O.P. 100-014, the Executive Department is forwarding this request for legislation to your office for review and drafting.

After reviewing this request and any necessary redrafting of the enclosed legislation, return the legislation to OMB. Any specific questions regarding the legislation can be directed to Dewey Potter, at 684-8048.

Sincerely,

Norman B. Rice
Mayor

by

Dewey Potter for

ANDREW J. LOFTON
Budget Director

AL\dp\lkc

Enclosure

cc: Fire Department, Chief

TIME AND DATE STAMP

SPONSORSHIP

THE ATTACHED DOCUMENT IS SPONSORED FOR FILING WITH THE CITY COUNCIL BY THE MEMBER(S) OF THE CITY COUNCIL WHOSE SIGNATURE(S) ARE SHOWN BELOW:

Jane Noland

FOR CITY COUNCIL PRESIDENT USE ONLY

COMMITTEE(S) REFERRED TO:

PRESIDENT'S SIGNATURE

C.S. 20.28

NOTICE: IF THE DOCUMENT IN THIS FRAME IS LESS CLEAR THAN THIS NOTICE IT IS DUE TO THE QUALITY OF THE DOCUMENT.