

**YORK COUNTY
SHERIFF DEPARTMENT**

**MICHAEL E. BEMIS, SHERIFF
ALFRED, MAINE
N.I.C T.A. 92- J1241**

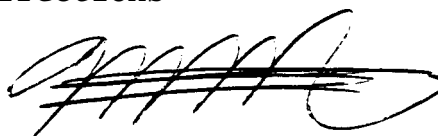
**HARRY LICHY
DAVID VOSS
JUNE 14 - 17, 1992**

Route 4
Alfred, Maine

September 21, 1992

To: Mr. Jim T. Barbee
Correctional Program Specialist
u. s. Department of Justice
National Institute of Corrections
Jail Center

From: Sheriff Michael E. Bemis
York County, Maine



Re: Permission To Release Technical Assistance Report NIC TA
92-J1241

This correspondence serves to authorize your agency to release and use Technical Assistance Report NIC TA 92-J1241.

The focus of this report is jail industry recycling. It was funded by your agency and prepared for this department by independent consultants Harry J. Lichy and David R. Voss.

If any person making authorized use of the report has any questions or requires additional information concerning the report or has interest in what this department has done or plans to do concerning jail industry recycling please inform them they are welcome to contact me directly.

Thank you for helping us establish and expand jail industry recycling in York County.

MEB/bms
cc: File/nicjirepuseaut

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N.I.C. STATEMENT:

This technical assistance activity was funded by the N.I.C. Jail Division of the National Institute of Corrections. The Institute is a federal agency that provides assistance to state and local correctional agencies in their effort to improve their operations by making them more effective, humane and safe and just correctional services.

The consultants who provided the on site technical assistance did so on a contractual basis at the request of the York County Sheriff's Office Alfred, Maine and through the coordination of the National Institute of Corrections. The direct on-site assistance and this subsequent report are intended to assist the York County Sheriff's Office in addressing the issues outlined in the original request. The contents of this document reflect the views of Harry J. Lichy and David Voss. The contents do not necessarily reflect the official views or policies of the National Institute of Corrections.

PURPOSE OF T.A. TO York County, Maine:

To visit and to meet with York County sheriff, staff and community leaders in order to review the jail operation and identify options available to develop a jail industry program. To explore possible options and growth possibilities for the development of a recycling program, and to make recommendations regarding the establishment of a recycling program.

SCHEDULE

Arrive in Portland Maine

Meet with Sheriff Bemis

Introduction to Staff

Tour of Institution

Meetings with :

Michael E. Bemis: Sheriff York County

R. M. Celeste: York County Recycling Taskforce Chairperson

David Adjant: County Administrator York County

James P. Upham: Executive Director Southern Main Regional
Planning Commission

Robert A. Daigle: Environmental Manager CYRO Industries

Rod Miller: President C.R.S. Kent Hills, Maine

Donna Woodsome: Director Community Based Programs

Jody Harris: Maine Waste Mangement Agency

ACKNOWLEDGMENT:

I would like to acknowledge and thank the staff of the York County Sheriff's Department and the community persons committed to recycling in York County. To have a stranger come into their system and to ask questions, for what ever reason, can be disconcerting. Each person we met greeted us with warmth and was open to our inquiries.

I would especially like to thank Sheriff Bemis for his time, for his contribution to this process and for arranging for us to meet with community leaders. Also Robert Celeste Chair of the York County Recycling Task force for his enthusiasm and for helping us understand the the task that they have assumed. I would like to thank David Adjant, County Administrator, for his commitment to recycling and for allowing us to come into York County and to ask questions.

DESCRIPTION OF COMMUNITY:

York County is located south of Portland, Maine and is the southern most county in Maine and borders on New Hampshire. York County is made up of twenty nine towns, cities and municipalities and covers 989 square miles. The county seat is Alfred. Alfred is located central to the county and is mid way between Portland, Maine and Portsmouth, N.H.

Because of the extensive ocean communities and Interstate 95 that traverses the county, the eastern part of the county is influenced by tourist while the western part of the county is rural with smalltowns and light manufacturing. The population of the county is approximately 165,000 which increases significantly due to tourism. It is estimated that the population increases by as many as 124,000 each summer. The population of the county is concentrated in the coastal communities and the town of Sanford. The four largest towns of Biddeford, Kittery, Saco and Sanford account for 67,273 or 37% of the population. The other coastal communities account for 47,849 or 26% of the population. The inland communities account for another 26% and the foothill towns 10% of the population.

The county plays a limited roll in governing the area. There is a County Administrator and three commissioners with a budget of \$5,000,000. The sheriffs department and jail operation accounts for over half of the county budget.

DESCRIPTION OF THE CRIMINAL JUSTICE SYSTEM :

York County has not been spared the increase growth in numbers that has burdened the criminal justice systems thought out Maine and the United States. There is an average of 1210 probationers. (1000 Adults - 200 Juveniles - 10 Intensive Supervisions)

The jail facility was constructed in 1979 with 33 units. In 1986 additional bed space was added that increased the capacity to 65. However, the core space was not increased. The D.O.C. variance has permitted the capacity to be increased to 85.

The York County Jail process 4390 intakes per year or an average of 365 per month. This is a 126% increase over 1989. The facility is rated for 65 beds. (58 long term beds and 7 short term beds.) A variance has been granted by the State Department of Corrections. The variance allows for an increase in bed capacity to 85; however, the faculty is operating at 163% over the rated capacity.

A March 16, 1992 report reveals the following facts. The average daily number of inmates is 115.57. (106.78 males, 7.2 females, 1.5 juveniles). Of these 115.57 there were 69.14 pretrial and 46.43 sentenced inmates. Since 1983 York County has experienced a 126% increase. It is reported that the growth is the result of tourism, drugs and the proximity to Massachusetts and New Hampshire.

To manage the increased numbers several alternatives are employed. Inmates are house in a community program called "The Shelter" and through a "Bed tracking system" beds in other counties are being utilized. Without alternative programs the system would not be able to handle the increased numbers. Donna Woodsome is Director of the Community Baised program. The following options are in place :

 Maine Pretrial Services - The county of York has contracted for one full time case worker that handled eleven (11) offenders From September 1, thru December 31, 1992.

Post Trial Options - York County Sheriffs Department

OUI Offender Program - 631 offenders were involved in 1991

Week End program : The program is held on week ends at a school building. As many as 85 at a time will participate in the week end Educational program.

Seven Day Program 2nd Offence OUI - Educational Program and community service with non profit organization.

Community Service Program - Offenders will be sentence to complete community service as an alternate to jail time.

Multi - Offender Program - Implemented April 1, 1992

Non violent substance abuse violators are sentenced to spend up to 90 days in Community Shelter where the participate in a substance abuse program.

Work Release - Home Monitoring

Offenders who spend 1/2 to 2/3 of their sentence in custody may be eligible to participate in the Work Release or Electric Monitoring Program.

DESCRIPTION OF THE RECYCLING EFFORT IN YORK COUNTY :

In 1998 the State of Maine passed a very progressive Solid Waste Management Law to “protect the health, safety, and welfare of the citizens, enhance and maintain the quality of the environment, conserve natural resources, and prevent air, water, and land pollution.” The law also establishes an integrated waste reduction, recycling, and management program for the state. The 1989 law established recycling goals for the state of Maine. The Maine people are to recycle 25% of the waste stream by 1992 and 50% by 1994.

The primary method of disposal in the region is incineration. As of October 1990, twenty communities sent their waste to the Maine Energy Recovery Company (MERC) waste-to-energy facility in Biddeford. Others to the Regional Waste System (RWS) incineration in Portland. The remaining to landfills at Turnkey in Rochester, N.H.

Communities through York County have initiated comprehensive recycling programs. For example: Kennebunk, Kennebunkport, and Arundel budgets \$160,000 for waste management. The City of Biddeford and Sanford with populations of 21,000 have municipal programs. Inmate labor is being used at the Biddeford drop off site to sort and process recyclables for the regional incinerator. Several methods have been initiated to collect recyclable materials. Curb side pick up and centralized containers and drop off sites are being used to collect recyclable materials.

The York County Commissioners on April 6, 1992 created The York County Recycling Task Force: to reduce the cost of recycling to the tax payers of the county, to create a jail industry program, and to create private business and manufacturing position in York County, and to create new and a variety end users and products. Sheriff Michael Bemis was named Director and R. M. Celeste of Economics Study Group as Chairman.

The initial plan suggested by the task force is to establish a number of assigned zones throughout the county where trailers will be assigned to receive drop off recyclable materials. They will accept co mingled recyclables from both county and non county residents. The trailers will be staffed by inmates serving

workfare sentences. The collected materials would be transported to a central point where they would be sorted by prison labor. Because of the involvement of Sheriff Bemis and the support of and the enabling action of the county commissioners, the use of county inmates will be possible.

The Task force is looking upon trash not as a trash that they must dispose of by incineration or land fill, but as a trash source of raw materials. Just as a manufacturing company looks upon their mining operation. The recyclable materials are viewed as rough mining materials 'that are to be converted into product. One of the major task will be to develop an end product or a source that will receive the materials that are sorted and prepared for shipment.

It is through the process of reclaiming the materials that the recycling process will become a source of revenue to the county rather than a burden to the tax payers. It is estimated that over a \$1,000,000 of gross income can be generated with a 25% gross profit of \$250,000. It is estimated that it now costs \$168.00 a ton to dispose of waste. Where as recyclables may be reclaimed and produce an income of \$27.00 a ton thus producing a gross saving to the community of \$195.00 a ton. The efforts will initially focus on recyclable materials such as: plastics, glass, tires, cans and paper.

Additionally it is hoped to produce 35 to 85 new manufacturing jobs in York County in supporting the recycling efforts. Most of these jobs will be inmates; however, more than fifteen would be private or public sector staff. The job presently identified are: supervisors at transfer sites, sales personal, teachers to teach recycling, technical persons such as engineers at recycling processing plant, correctional staff, clerical support, etc.

Additional information regarding recycling can be found in a comprehensive report prepared by The Southern Maine Regional Planning Commission entitled, A REPORT ON THE FEASIBILITY OF COOPERATIVE RECYCLING IN THE SOUTHERN MAINE REGION, May, 1991.

OBSERVATIONS AND ANALYSIS:

The York County Jail does not have an organized industry program, although, inmates are used within the facility for traditional tasks. Inmates, as part of their community service sentence are being used at the Biddeford recycling collection site. An important element in the development of the recycling effort is the establishment of an industry program that uses inmate labor in the collection, the sorting of the recyclable materials and the production of recyclable products. The county commissioners have passed an enabling resolution to use inmate labor.

The Recycling Task force has secured a donated plant in the town of Sanford to use for the sorting of materials. The plant is a former cement block factory and contains 7400 sq. feet. Approximately \$140,000 worth of improvements will be put into the building by the owner. The county is seeking to have the property properly zoned. The availability of the building in Sanford for the recyclable processing center is a major factor toward the success of the program. It is well suited for initial plant set-up with minimal capital investment, and is large enough to potentially handle all materials brought in area wide.

It is apparent that the only industry program that York County is interested in or is prepared to undertake is a recycling program. There is no history of an industry program; therefore, the basic elements will have to be put in place. For example: What positions will be established? What level of production will be expected? How will the positions be defined, supervised, compensated? How will the work be structured? How will the work place be designed? To establish the Industry program, Foundation Decisions have been defined in the workbook, Developing A Jail Industry Program. The completion of the Foundation Decisions are important to the success of the program.

York County public officials and volunteers are approaching the implementation of a recycling centered jail industries program with a good balance of optimism and caution. Their knowledge of local and area recycling plans and activities is extensive and the steps already taken to enlist the support of private industries are exceptional.

The values of a regionalized system are recognized and planning is being pursued with the knowledge that participation by all, or even most communities, may be unlikely. This need not be considered as a deterrent, as an economically viable program with “pull in” marginal operations.

Public education to instill the “recycling ethic” has been undertaken and will be a key factor. The creativity expressed by officials in plans to encourage public participation will give the county a positive start in the recycling venture.

I am impressed by the commitment of the staff to the development of an industry program. The staff, expressed a commitment to the concept. There is a good spirit among the staff. The staff has the skills and commitment to develop an industry program once the direction is set. There is the need to reorganize and to approach the development in a business manner and to incorporate business practices.

RECOMMENDATIONS:

Establishment of Industry Program

1) Foundations Decisions:

Complete the Foundation Decisions and Involve Jail Personnel and others in understanding the decisions that must be made.

The Sheriff and the administrative and operations staff need to understand what decisions must be made in order to have a successful Industry program. The foundations decisions if worked through now will put the industry on a strong basis. Others should be involved in understanding the foundation decisions. Sharing and completing the decision making process will assure more stake holders.

Establish a planning process for the development of the Industry Program.

The Industry Program decisions must be informed decisions. I have no question about the ability of the staff to make the program a success; however, these decision are internal decision that must be faced by the Sheriff and administrative staff in light of budget restraints and other priorities. A planning process would establish priorities, goals and a time table for the development. It would look at some of the basic needs of the institution, budget, staff allocation, inmates and assignments, time table, etc. Take time to allow the detail planning to catch up with the global concepts that all being considered.

2) Allocation of staff.

To examine the present priorities, staff assignments and allocation in order to better utilizing staff.

For a Industry Program to succeed the staff and the program must hold a high priority. The staff must be assigned, trained and utilized in the development of the program.

I would recommend that a position of Industry Coordinator be created. That the position be at a high level in the organizational structure such as Deputy Assistant of Industry.

The sole responsibility of the position should be the industry program. The person in that position would be responsible for supervising production as well as the development of the industry program. To be successful the program needs to be seen by everyone in the institution as a program that the sheriff and the administration views as important. The structure indicates symbolically and in actuality, the importance of the program.

3) Maintain control of who is placed in the industry program

I would recommend that the placing of inmates into the Industry or-oar-am be an administrative decision of the sheriff or sheriffs staff and not a sentencing option.

It is important that those who work in the industry program are selected and placed in there job. Particularly if the are going to be in the community. Make the program a elite program that inmates request to become part of rather than being forced into the program. The sheriff should keep control and not abdicate the selection of personal to the courts.

4) Involve others outside the criminal justice family:

Analyze where opposition may originate and invite representatives on to the advisory council. Not every one in the community, particularly unions, will understand or be supportive of using inmates in productive work particularly if they fell they may be displacing others. It is important that they are consulted early in the planing process.

5) Certification:

Seek Certification under the Certification of the D.O.C of the State of Maine.

The Task force is seeking to produce recyclable products that may be sold across state lines. This makes it necessary to receive certification by the Department of Justice. This can be accomplished by sharing the certification of the state of Maine. However; one of the conditions of certification is to pay inmates "comparative wages". This will necessitate rethinking how inmates will be compensated and how to structure the industry program.

6) Enterprise fund:

Establish an enterprise fund for the Industry / Recycling Program.

In order to function as a business and to keep funds from returning to the counties general fund an enterprise fund should be established. It allows for flexibility and for the dedication of fund to a particular program and to carry over fund beyond year end.

7) Capital Grants:

Seek Capital Grant from the Maine Waste Management Agency or E.P.A.

The Waste Management Agency is planning to distribute a second round of grants for communities engaged in establishing recycling programs. Programs that include multiple communities such as York County will be looked upon favorably. The Fund of \$5,000,000 will allow for grants of as much as \$300 to \$400,000.

The Federal E.P.A. awards grants for creative and innovative ideas for recycling. An industry program using county inmates may be vied as fitting the E.P.A. criteria.

8) Request for N.I.C. Technical Assistance

Request N.I.C. Jail Resource Center for Technical ////////////// Assistance.

There is a need for additional Technical Assistant. The T.A. can take two forms.

1) A Hosted T.A. to the Nashville, Tenn. area where persons from York County can visit several recycling sites.

2) Additional T.A. on sites visits to assist in the establishing of the industry program.

Establishment of Recycling Program

- 1) Continue planning and organizing in the present direction with emphasis on regional participation.
- 2) Investigate the possibility of contracting with Waste Management, Inc. or other private firms for providing containers, hauling to processing center, and transporting to market in exchange for a percentage of the receipts, based on current market prices. A minimum return to the county could be specified, but as demand and prices fluctuate, it could be advantageous to have low/zero value materials hauled away, and consider avoided tipping fees as "profit." This approach has worked well for the State of Tennessee.
- 3) Promote the environmental and social benefits in public relations and education efforts, not the economics. If the use of offenders in recycling is novel to your area/state, take advantage of press releases. Continue research on the proposed manufacturing of plastic lumber from commingled plastics, but do not "play it up" until the profit is a fact.
- 4) Place a priority on getting the plant into production. Even minimal output at first will show positive action that can sway adjoining communities into joining the program. Take advantage of the volunteered labor, materials and enthusiasm, while it's there.
- 5) Make contact with buyers of recyclables, both local and major transporters, that may be interested in picking up material while passing through your area in route to distant end users. Inquire into packaging requirements, quantities of "contaminants" acceptable, and suggestions to guarantee quality and to secure highest prices.

SPECIFIC RECOMMENDATIONS ON PLANT SET-UP AND OPERATIONS

LAYOUT:

There can be considerable flexibility in the configuration of a basically non-mechanized recyclable processing operation. However, as with any manufacturing system, a basic line-of-flow should be planned. The attached sketch will show a simple plan that can be easily revised as conditions dictate.

EQUIPMENT:

The following equipment is basic to your proposed operation:

- 1) One vertical downstroke baler similar to the "economy" model 60. This machine makes standard 60" X 30" X 48" bales with weights of 500+ pounds for plastic or aluminum and up to 1400 pounds for paper and cardboard. Hand fed bales can be produced at the rate of one per 30-45 minutes, utilizing two persons feeding. Maximum output is 6-8 tons per day. These machines cost approximately \$10,000 new; however, it should be possible to pick up used ones. Starting up with one baler, then adding a second when needed will likely be sufficient for the first stages of production. When the collection program is fully established and there are more than 15 tons per day, it will be necessary to trade the two downstroke balers in for a basic horizontal baler which will provide the required capacity.
- 2) One set of platform scales; 4' X 4' is the ideal size for weighing palletized bales. Necessary capacity is 2,000 pounds. A new unit with digital readout with cost \$2,000-2,500. A used mechanical grain scale could likely be purchased for a minimal sum that will serve until the operation is showing revenue.
- 3) One Bobcat Loader is very useful in recycling operations. Prices will range from \$5,000 reconditioned to \$15,000 new. Dieset-engined models can be operated indoors if not in constant use.

- 4) One Fork Lift with a 2,000 pound capacity. Electric is preferred. Attachments are available for loading scoops and self dumping hoppers that will enable the machine to also serve to some extent as the Bobcat would, and possibly eliminate the need for both units. In either event, a serviceable used machine could likely be acquired at nominal cost through your state surplus property agency.
- 5) One basic glass bottle crusher with a conveyor feeder can be purchased for \$1,200- \$1,500 new.
- 6) Pallet jacks are useful for manually moving material between sorting and storage areas and the balers. It will be advantageous to have at least one and preferable two. New cost is approximately \$250 each.
- 7) Containers such as "Gaylords" (4' X 4' X 4' heavy duty cardboard boxes), wooden boxes, 55 gallon drums with the tops removed, open top steel "boxes" made with angle iron and heavy screening material -- almost anything can be utilized and often acquired at little or no cost.
- 8) Grain shovels are very useful for manual handling of materials plastic scoops best.

SUPPLIES

- 1) "Flourogucinal" - test solution for groundwood (low quality) paper. This will be necessary if paper sorting is undertaken. Available at \$30/gallon from American Chemical Supply, St. Louis, Missouri.
- 2) Bale tie wire or strapping - will vary depending on recyclable buyer preference. Baler distributors can supply it.
- 3) Duct tape - to keep cardboard "Gaylords" serviceable.
already taken to enlist the support of private industries are exceptional.
- 4) Ivory soap flakes - if bees or wasps are a problem during warm weather, flakes scattered around soft drink cans and bottles storage areas will help.

MANPOWER

A basic crew of 5-6 workers will be necessary for plant operation during the initial stages:

- 1 baler operator
- 1 baler tender
- 2 operators for downstroke baler. For quantity production
- 1 equipment operator
 - Bobcat and/or forklift; constant operation non necessary, free to perform miscellaneous duties.
- 2 or 3 sorters, general labor to break down boxes, sort mixed materials, move containers, housekeeping, Miscellaneous.
 - Additional sorters will be needed if paper sorting by grade is undertaken in quantity.

If appreciable numbers of citizens bring recyclables to the plant in private vehicles, laborers can be stationed up front to assist in unloading.

The total number of offenders to be worked in the plant, of course, will be a function of the quantity of recyclables to be processed. It is conceivable that up to 25 people could be kept busy if county-wide participation is enlisted in the program.

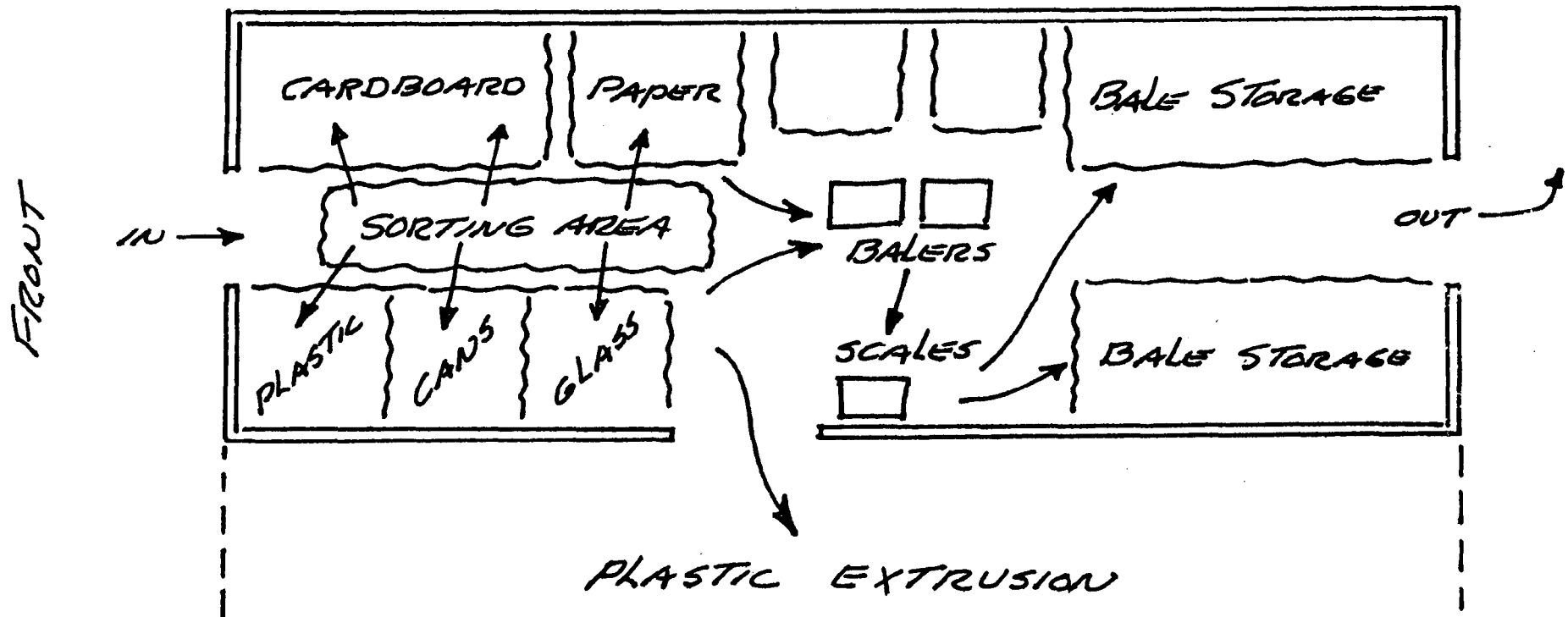
Another 5-6 could be assigned to the proposed plastic lumber manufacturing process.

COMMENTS

The proceeding information on recycling is based upon research and implementation of the State of Tennessee's recycling program utilizing inmate workers and the experience of other public agencies using free-world labor. Some concepts may work well for York County, and experience may show ways more suitable to the area. Keeping flexible will be important for long range success.

SIMPLIFIED RECYCLE PLANT LAYOUT - NOT TO SCALE

- BALER(S) LOCATED CENTER TO 2/3 FROM ENTRANCE
- LARGEST PROCESSING AREA FOR CARDBOARD
- MOVABLE PARTITIONS TO SEPARATE MATERIALS
- BALES STACKED 2 HIGH
- OPTIMUM ARRANGEMENT TO BE DETERMINED BY EXPERIENCE



NIC T.A. 92 - J1241
D. VOSS 6-29-92

NIC T.A. 92-J1241
YORK COUNTY SHERIFF'S DEPARTMENT
ALFRED, MAINE

REFERENCE MATERIAL AND CONTACTS PROVIDED

Solid Waste Management Guidelines; study by University of Tennessee County Technical Assistance Service.

Integrated Solid Waste Management and Centralized Recycling; report by Michael L. Hedges, P.E., Sumner County Resource Authority.

Tennessee Solid Waste Management Act of 1991; Summary.

Tennessee State Government Pilot Recycling Program; report.

Data and Contact - Tennessee Tech University developmental studies on plastic extrusion equipment and products.

Data and Contact - Tennessee Department of General Services, waste oil burning for recycle plant heating.

Vendor brochures on appropriate recycle plant equipment.

Photos - miscellaneous aspects of recycle plant at Tennessee State Penitentiary.

Contacts - successful Tennessee county recyclable recovery programs and facilities:

Williamson County
Amy Depp, Recycling Coordinator
1320 West Main St., Suite 414
Franklin, TN 37064
(Most advanced in State)

Robertson County Recycling Center
Danny Atchley, Director
2916 West Co. Farm Road
Springfield, TN 37172
615/384-0683
(One of first "MRF's" in State,
process waste completely to fuel pellet and compost.)