


Learning Objectives

After digesting this session, you should be able to understand:

- ❁ Importance of scrap and surplus materials disposal.
- ❁ Factors that generate surplus materials.
- ❁ Means to control surplus materials.
- ❁ Methods to obtain maximum returns from surplus materials.

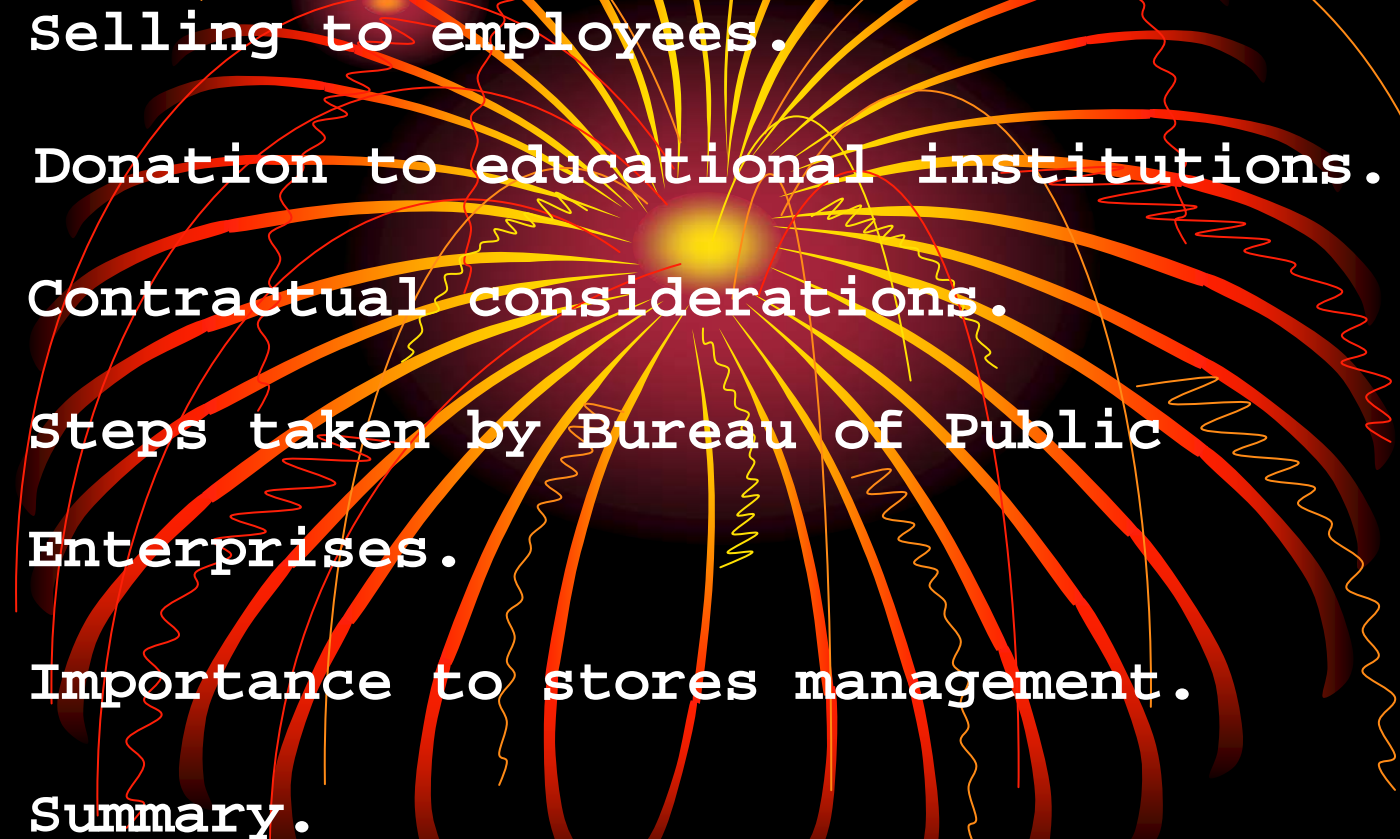
Structure

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- ❁ 9.1 Surplus materials disposal.
 - ❁ 9.2 The concepts for disposal.
 - ❁ 9.3 Idle equipment.
 - ❁ 9.4 Transferring equipment.
 - ❁ 9.5 Sales strategies and tactics.
 - ❁ 9.6 Donation.
 - ❁ 9.7 Disposal of parts and scrap metal.

Structure

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- ❁ 9.8 Scrap and waste materials.
 - ❁ 9.9 Scrap considerations.
 - ❁ 9.10 Disposing of surplus profitably.
 - ❁ 9.11 Use within firm.
 - ❁ 9.12 Return to suppliers.
 - ❁ 9.13 Selling to other firms
 - ❁ 9.14 Selling to dealers and brokers.

Structure

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- ❁ 9.15 Selling to employees.
 - ❁ 9.16 Donation to educational institutions.
 - ❁ 9.17 Contractual considerations.
 - ❁ 9.18 Steps taken by Bureau of Public Enterprises.
 - ❁ 9.19 Importance to stores management.
 - ❁ 9.20 Summary.

9.1 Surplus Materials Disposal

Industrial surplus materials are those in excess of the reasonable operational requirements of the organization.

Generally materials that have not moved over a period of three years and not required in near future are treated as excess materials.

Causes for generation of surplus materials include:

1. Curtailment of production program.
2. Purchase of huge quantities more than required.
3. Purchase of materials with wrong specifications.



9.1 Surplus Materials Disposal

4. Materials are obsolete due to change in processing and or methods of production.
5. Materials are obsolete due to change in design or specifications of materials.
6. Materials are left over after the project has been completed.
7. Goods are damaged either in storage or while handling.
8. Undetected errors in bin cards.
9. Materials stored at wrong location and lost sight of.



9.1 Surplus Materials Disposal



10. Spares are not usable as equipment for which they were bought is now obsolete and not in operation.
11. Surplus, obsolete and damaged equipment.
12. Surplus spares as equipment for which they were bought itself has been declared surplus.

In multi unit organizations surplus materials in one unit might be in use in others. Hence a proper system for communication with adequate details of surplus materials to rest of the units is essential.

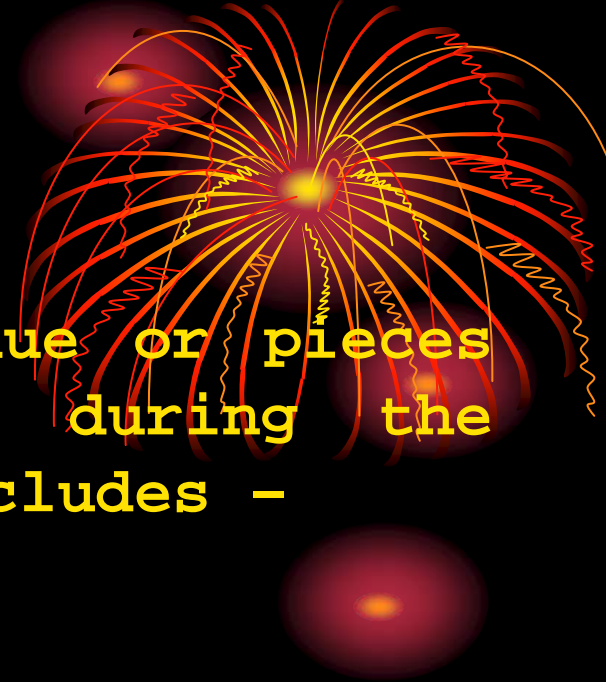
9.1 Surplus Materials Disposal

Scrap:

Scrap consists of the residue or pieces cut out of raw materials during the manufacturing process and includes -

- a] worn out materials.
- b] spoiled raw materials.
- c] defective and worn out parts.
- d] rejected components.
- e] non-returnable containers.
- f] packing cases.

The scrap materials have commercial value as they can be reclaimed and used in other industry.



9.1 Surplus Materials Disposal

Scrap:

If these types of materials have no commercial value then they are termed waste and the waste is to be immediately disposed off.

If finished goods do not meet customer's acceptance standards they may be sold at a discounted price as seconds or also as scrap.

To control generation of scrap technical standards be set up like say 5% of inputs. Actual scrap be measured and if it crosses 5% , reasons for excess scrap be investigated.



9.1 Surplus Materials Disposal

Disposal of surplus and scrap:

Before commencing disposal, it is necessary to verify that attempts were made to use materials with some modification or as they are at other units of the Company.

When such use is not possible, the following actions be arranged for disposal

a] explore if it is of use to sister organizations or associates.

b] return to the supplier at original or discounted price.

9.1 Surplus Materials Disposal

Disposal of surplus and scrap:

- c] arrange direct sale to other firm, preferably in the same industry.
- d] sell to dealers, brokers or other middlemen.
- e] directly sell to consumers of scrap like foundries.
- f] invite offers from purchase at quarterly intervals and enter into contract with the highest offerer.
- g] dispose on annual contract basis.
- h] sell to employees.
- i] donate to charities or educational institutes.
- j] arrange a public auction.



9.1 Surplus Materials Disposal

Obsolescent Materials:

are materials on the way to be obsolete. If company decides to discontinue purchase of machines A by replacing it by purchase of machines B, spares for machine A become obsolescent because when machines A become uneconomic to operate their spares will have no use.

Replenishment of obsolescent machines be stopped and attempts be made to exhaust the stock. After stock is consumed items to be procured on case to case basis.



9.1 Surplus Materials Disposal

Obsolete Materials:

are materials no longer of any use to the organization. This can be due to change in the method of production or in material specifications.

While arranging for quantity purchases dangers of obsolescence be reviewed.

Consumption pattern of materials be watched and slow and non moving materials be identified to minimize loss from obsolescence.

9.1 Surplus Materials Disposal

Essential precautions for scrap disposal:

1. Too less scrap could be a result of theft or pilferage.

2. Too high scrap indicates use of incorrect materials or inefficient methods of manufacture / processing.

3. Regular collection and segregation of scrap assure better realization.

4. explore if scrap can be salvaged for use later.



9.1 Surplus Materials Disposal

Essential precautions for scrap disposal:

5. If scrap cannot be sold dispose it on payment to contractor.

6. If scrap is excessive , find out if any byproduct can be obtained from it.

7. Find out best remunerative policy or method of disposal: annual contract, ad hoc auctions, sale to actual users etc.

9.1 Surplus Materials Disposal

Scrap disposal - a Summary



Salvage, process	for reuse stand by use resale	use for byproduct manufacture	get better price for scrap through better policy or method of disposal	pay to get rid of scrap
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9.1 Surplus Materials Disposal

Essential precautions for surplus disposal:

1. Examine again possibility of use of surplus by change in design or specification. Try using it for a special end product or end product of an earlier version.
2. Ask sister firms if they have use for it.
3. Consider a sale to an actual user of the materials.
4. Send back or resale to original supplier.



9.1 Surplus Materials Disposal

5. Sell to others , select best method policy.

6. Set deadlines for sale at a reasonable price after that at discounted price, scrap value, free give away and removal by paying someone to do so.

It is necessary that responsibility for wastage control is determined usually with an officer under Materials Manager. First the quantity generated be minimized and then realization from quantity available be maximized.



9.2 Three Concepts for Disposal



1. Reorganizing secondary value:

Machines used in developed countries can be transferred to less developed countries after refurbishing. Similar transfer can be from a large firm to the smaller one.

2. Timings:

Time is required by production, engineering or purchase to find alternative use or best price for surplus items.

9.2 Three Concepts for Disposal

3. Finding a new user:

Unneeded materials will be worth very little until some one is found who has use for them.

Some secondary values are obvious and for these user is not hard to find. Machine unsuitable for precision dies & tools can be good for routine production jobs.

Returns obtained from surplus material disposal is measurable. Hence the person responsible, to be successful should use these concepts effectively and with some sales flair.



9.3 Idle Equipment



Here are four options for using equipment that is lying idle and hence declared surplus:-

1. Reuse in the same plant on a different job or in a different department.
 2. Save in the plant for a future project.
- Both these options must be based on facts and not on a hope. Otherwise plant will become a godown for idle equipment.*
3. Transfer to another plant.
 4. Sell to outside company or donate to non-profit organization.

9.4 Transferring Equipment



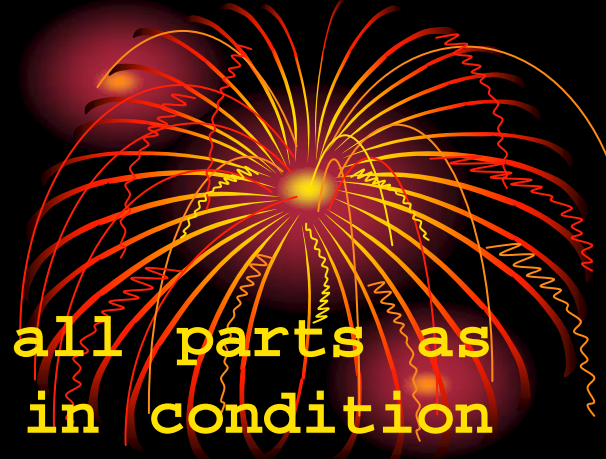
Multi-plant locations offer opportunities to use idle equipment in one location at any other where it has use.

A small amount of reconditioning can do wonders for equipment [like furniture] to become attractive for other locations.

A catalog of surplus equipment be handy with Purchase department for use while processing requests for fresh equipment from all units.

The arrangement for a sale to affiliated company is an alternative almost as valuable.

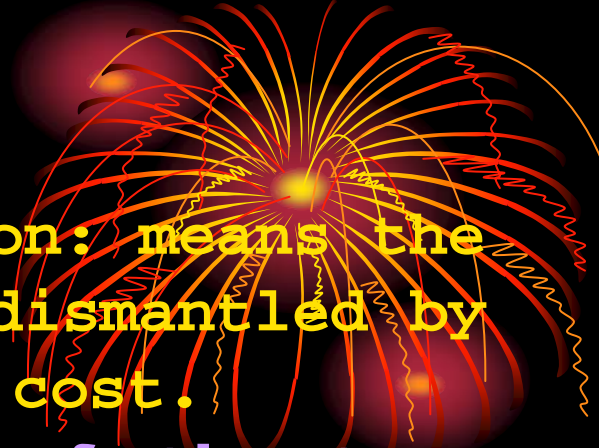
9.5 Sales Strategies and Tactics



- 1." As is " condition: means all parts as advertised or inspected and in condition reported. There is no warranty other than that of title.
2. Inspection by buyers: when the value justifies the expense, a personal inspection by the buyer can prevent many mis-understandings.
3. Packing and shipping: equipment is usually sold fob plant site. Who pays the cost of packing and shipping must be settled in negotiations.

9.5 Sales Strategies and Tactics

4. Sale on "where is " condition: means the installed machine has to be dismantled by the buyer and removed at his cost.
5. Specifications: Avoid use of the term 'complete' or 'with all parts and accessories' or similar wording else you might commit for something you do not have.
6. Terms of payment: can full with order or at least before delivery.
7. Price: The real price is known only after equipment is advertised and put up for sale. The ultimate price is a matter of bargain between buyer & seller.



9.6 Donations



Donations to non-profit organizations are frequently made by many industrial firms. There is social assistance value in providing equipment no longer suitable to industry as training aids for schools. There is goodwill and of course opportunity for income tax deduction.

Donations are sensitive and precedent setting. Company procedures and policies should be carefully designed and followed.

9.7 Disposal as Parts and Scrap Metal



When selling or donating equipment is not possible , there is still an option for a practical value.

Items of machinery have motors, bearings, controls, tooling, parts and accessories that are valuable but relatively inexpensive to remove and reuse.

The balance that is left out is to be sold as scrap.

9.8 Scrap and Waste Materials

Scrap along with other waste materials can be valuable income producing products of any company system. Care must be exercised to ensure that amounts and efforts expended in converting these materials into useful form must not exceed income.

The secondary materials industry is well organized and is prepared to buy any scrap if plants are organized for collection.

A company [in metal industry] can have a reclamation section to recondition scrap & waste. Here again cost benefit analysis is a must.

9.9 Scrap Considerations

To obtain highest net return, stores management needs to

1. Segregate scrap at the point of origin.
2. Organize scrap collection and disposal efficiently to ensure time spent is minimum and there are safe guards against pilferage and incorrect weighing.
3. Encourage competition among scrap buyers.
4. Investigate cost of transportation and keep it at optimum levels.

Close cooperation between purchase and stores is necessary.



9.9 Scrap Considerations

Stores arranges physical aspects of collection, segregation and disposal and purchase arranges best timing and prices.

Skills required for profitable disposal of scrap are found in in a competent purchase manager. He knows the inputs, their properties, alternative uses and has contacts with representatives from the industry.

In most cases, sale of scrap materials therefore, is the responsibility of purchase department.

9.10 Disposing Surplus Profitably

When materials are declared surplus, it is disposed in one of the following methods.

1. Use within the firm.
2. Return to the supplier.
3. Direct sale to other firm.
4. Sale to a dealer or broker.
5. Sale to employees.
6. Donations to schools & educational institutions.
7. Some combination of above methods.

9.11 Use Within Firm

Use within firm is always most profitable form of surplus disposal.

This type of disposal realizes 100% of the original cost, whereas returns to suppliers typically yield 80 to 90 % of original cost and sales to dealers and brokers only 10 to 40 %

9.12 Return to Suppliers

If the surplus materials cannot be used within the firm, the return to supplier method of disposal is generally the next best.

Suppliers generally allow the return of both new and used surpluses as a courtesy to good accounts.

Saleable materials returned from inventory are traditionally accepted at original cost , less a nominal restocking charge. Since all firms do not progress technically at the same rate, suppliers can at times sell obsolete inventory items at full price.



9.13 Selling to Other Firms

Some companies sell surplus materials and equipment directly to other firms. Sales of equipment to other firms primarily depend upon the condition of the equipment, the economics of price and the availability of similar equipment from other sources.

Equipment sales made directly to a user typically result in a better price than sales made to dealers and brokers.

9.14 Selling to Dealers and Brokers

Surplus dealers and brokers constitute an excellent outlet for disposal of surplus materials. When a firm advertises surplus materials for sale, dealers often respond.

Transactions with dealers are on "as is where is" basis and most of the time against cash.

Surplus machine tool dealers operate in two ways. Either they auction firm's entire equipment inventory, in which case they show the equipment to bidders and receive commission. Alternatively they sell in small lots, often after reconditioning.

9.15 Selling to Employees



Many firms make it a practice to sell both the products they manufacture and their surpluses to employees.

If the surplus is because of overstocking, or obsolescence, materials are in good condition or new or consist of odds and ends desired by do it yourself employees, the method works satisfactorily both ways. .

If this is not the case, such sales [especially of company used cars] can result in employee resentment, regardless of attractive prices.

9.16 Donations to Educational Institutions



At the present time, colleges and schools acutely need machine tools and other types of industrial materials for instructional use.

Because the applicable tax laws and regulations are complicated, before making large gifts potential donors should consult their tax advisors to determine exactly what benefits are available.

9.17 Contractual Considerations



Following considerations apply to the three major categories of materials that are sold as surplus.

Scrap Metals: better to dispose by either a short or long term contract entered with a local dealer. Local dealers have operating and transportation advantage over more distant competitors. It is advisable to enter into negotiations with at least three major dealers. Prices for major variety of scrap are published and can be used as guidelines.

9.17 Contractual Considerations

Surplus Stock: that cannot be returned to suppliers is best disposed of by sale to jobbers or second hand dealers. Such sales are most frequently made on competitive bid basis and competition for these materials is usually keen.

Surplus Equipment: better dispose through competitive bids from dealers. On occasion negotiations are used after a firm acquires a select group dealers who are interested in bidding on a continuous basis. Auction is also a suitable option.

9.18 Steps Taken by Bureau of Public Enterprise [BPE]



1. Depth Studies – expert committees study materials management system and inventory levels.
2. Inventory Analysis: annual report on inventory management received from enterprises are analyzed and steps for improvement recommended.
3. Norms for Inventory Holdings: Ceilings for holding different types inventory have to be fixed and enterprises strive to maintain inventory levels within those norms.

9.18 Steps Taken by Bureau of Public Enterprise [BPE]

4. Surplus and non-moving: enterprises to review the surplus and nonmoving and arrange immediate steps for quick disposal of high value items. If good prices not obtainable sale below book value is also allowed.
5. Computerization of Inventory Control: A committee was constituted to examine the use of computers in PSEs where computers are already installed with a view to ensure their fullest utilization and also to see if inventory management applications can be increased.

9.19 Importance to Stores Management



1. Public enterprises are giving due importance to stores and inventory management & adopting the latest techniques for making further improvements.
2. Work in progress is high in mining organizations like Hindustan Copper or NMDC. The units are taking corrective steps to reduce the levels.
3. Finished goods in certain units like REC, Ranchi, Hindustan Steel are high and here also managements are engaged in reducing levels of stocks held.

9.20 Summary



Industrial surplus materials are those in excess of the reasonable operational requirements, They include slow moving and obsolete materials, scrap, defectives and rejected materials as well as equipment and its parts.

Management needs to establish a system for their identification, segregation, disposal in a scientific manner.

9.20 Summary

Surplus materials and equipment can be reused within company with modification or sold to scrap dealers, other firms in the industry or donated to eligible educational or medical institutes. Public enterprises have their own system for disposal of surplus materials.

Sale of surplus materials is the responsibility of purchase department which has maximum knowledge of markets for these items.



We are now at the end of this session 09 on
"Stores Management"

In the next session 10

We shall cover chapter 10 on
"Safety & Security"

Good Luck !