

**ENVIRONMENTAL ASSESSMENT
REGISTRATION DOCUMENT**

NAME OF UNDERTAKING:

Seal and Fish Processing Plant

PROPONENT:

<u>Name of Corporate Body</u>	Sea Water Products Inc. General Delivery Fleur de Lys, Newfoundland Canada A0K 2M0
<u>Chief Executive Officer</u>	George Walsh (President) Fleur de Lys, Newfoundland Tel: (709) 253-3474 Fax: (709) 253-3475
<u>Principal Contact Person</u>	George Walsh

THE UNDERTAKING:

Nature of the Undertaking

The construction and operation of a seal and fish processing plant in Fleur de Lys, Newfoundland.

Purpose of the Undertaking

The purpose of the undertaking is to process seal and ground fish by way of total utilization in order to produce seal oil, seal meat, seal hides, fish oils, and fish products. The seal and ground fish will be acquired from landsmen seal hunters and fishers in the Province of Newfoundland and Labrador.

DESCRIPTION OF THE UNDERTAKING:

Geographic Location

The proposed site for the undertaking is located within the town limits of the Town of Fleur de Lys on the northeast coast of the insular portion of the Province of Newfoundland and Labrador. The site can be accessed via Route 410 from the Trans Canada Highway and is situated on harbour-front property on Stage Road off Route 410.

Maps outlining the location of the proposed facility are appended. A seal-pelt processing plant currently operates within this vicinity.

Physical Features

The undertaking will consist of a seal and fish processing facility that will include a plant, marine-oil storage area, parking lot, and storage yard. The marine-oil storage area will hold barrels of oil destined for further processing. Plastic barrels will be used for storing the crude and refined oils.

Construction

It is anticipated that the construction of the facility will take place over a six-month period from the initial groundbreaking.

There are no potential sources of pollution during the construction period with the possible exception of sediment-laden runoff during wet weather. Appropriate mitigation will be employed, if necessary, to ensure that there are no environmental impacts during the construction phase.

The first phase of construction will involve construction of a building measuring 62 feet by 76 feet (see attached Plant Floor Plan). The construction will commence as soon as possible and will be completed by early fall of 2005. The second phase will consist of equipment installation and construction of an oil storage area. It is anticipated that this second phase will be completed by early spring of 2006.

There are no resource conflicts anticipated during either the construction or operational phases of this project.

Operation

The facility will have the capability of processing the whole seal by the utilization of oil, fat, meat, and hides. Seals purchased during the yearly seal harvests and ground fish purchased from fishers will account for the majority of the plant's raw materials supply, however some raw oils will be delivered from outside sources.

The processing plant will be designed to process raw seal and fish oils for the world market and will be designed to process 200 tonnes of marine oils per year. The oil-refining process to be employed at this facility has been specifically developed for Sea Water Products Inc. and is the sole proprietary property of the company.

The raw oils will be stored and processed in an area where the concrete floors will have a three-inch lip around all the edges. Drains in the storage, processing, and shipping areas will be directed to an oil-water separator tank before being transferred to an approved ocean-dumping barge system (see attached Oil-Water Separator Tank Schematic). Oils will be stored in 200-litre plastic containers secured on pallets with four containers to a

pallet. The maximum accidental spill would therefore consist of 800 litres of oil. The proponent is committed to the development of a contingency plan designed to contain and clean up a spill of this size.

No pollutants will enter the aquatic environment from this facility. The effluents resulting from the various production processes will pass through an oil-water separator tank and will be directed to a fish-offal barge (see attached Processing Flowcharts). In addition, no large amounts of water will be used in this facility.

Oil-Refining Process (see Process Flow Charts #1 and #2)

Upon receipt of seal oil and/or fish livers at the facility an aliquot will be removed and tested for quality. The oil and livers will then be cleaned, blended, and placed in plastic barrels for further processing. The oil will be filtered to remove unwanted organic material such as membranes, blood, and tissue particles. Purification of the oil will be completed by percolation through a column of approved silica. The oil will then be collected in sterilized plastic containers that are then sealed and stored ready for markets.

Seal Meat / Ground Fish Process (see Process Flow Charts #3 and #4)

The seal / ground fish will be delivered to the plant and stored in large fish tubs. The product will then proceed to the product line to be washed, cut, graded, weighed, frozen, and packaged in cardboard cartons.

Seal Hide Process (see Process Flow Chart #5)

The seal hides will be delivered to the plant in large fish tubs, iced, and stored until production. The hides will be put through a splitter and flesher to separate the fat and then dried by drumming in sawdust. They will then be placed in a 100% brine solution in plastic containers for shipping.

Plant-Waste Disposal and Effluent Treatment

There are two possible sources of waste / effluent from this facility, namely plant operations and domestic sewage.

Domestic Sewage: The domestic sewage from toilets and washrooms will be routed to a sewer outfall approved by the Town. The existing town water supply will be accessed as the source of potable water at this facility. Demands on this supply will be much less than that previously used by the now closed local fish plant.

Plant Clean Up: The water used for clean up will be directed to a fish-offal barge after passing through an oil-water separator tank. Solids associated with the cleaning such as membranes, tissue particles, and hair will be collected and ocean-dumped.

Process Effluent:	All effluent generated by product processing as with plant clean up will be directed to a fish-offal barge after passing through an oil-water separator tank.
Waste Silica:	The silica used in the purification column becomes saturated with organic material after repeated uses and must be discarded – it can only be used a maximum of 4 to 5 times. When the oil-laden silica can no longer be used it will be removed from the column and either transported to a landfill, burned in an incinerator designed for that purpose (see attached Incinerator Schematic), or mixed with animal feed to be sold to fur farmers. If the silica is disposed of at an approved landfill site within the town dump it will not pose any environmental hazard. It is anticipated that 5 to 10 tonnes of silica per year will be disposed of in this manner.
Waste Sawdust:	The sawdust used in the drying of hides by drumming becomes saturated with oil and can no longer be used. It will be discarded by being placed in an approved landfill site or by being burned in an incinerator.
Packing Waste:	The packing waste from the process (i.e. cardboard, empty salt and silica bags, etc.) will be recycled if possible, placed in an approved landfill, or incinerated at the town dump. All plastic barrels and containers will be recycled.
Odour:	Odour generated during the process will be vented to the outside via fume hoods. As the site is not adjacent to any private residences it is not anticipated that odour will be an issue of environmental concern.

Occupations

General Manager	1
Office Workers	2
Supervisors	2
Laboratory	1
Quality Control	1
Maintenance	2
Truckers	2
Plant Workers	<u>12</u>
Total:	23

Project-Related Documents

A registration document was submitted by and approved for Caboto Seafoods Limited in Baie Verte, Newfoundland for a similar undertaking in 1998. This resulted in a Certificate of Approval being issued to Caboto Seafood Limited for a Seal Oil Processing Facility on April 22, 1998 (approval number: AA98-045346).

As the present undertaking is similar to the one approved in 1998 for the Baie Verte operation, the Proponent feels that this particular project should in all fairness be ultimately approved given all other approval requirements are met.

Attachments

Find attached copies of the following:

- Property Location Maps.
- Processing-Plant Floor Plan.
- Processing Flow Charts for seal oil, fish livers, ground fish, seal meat, seal hides.
- Oil-Water Separator Tank and Incinerator Schematics.

APPROVAL OF THE UNDERTAKING:

The following is a listing of permit applications and approvals that have been submitted or received regarding the undertaking:

- *Application for Environmental Permit to Alter a Body of Water:*
Department of Environment and Conservation - Government of Newfoundland and Labrador
- *General Application for Water Use License (Various Purposes):*
Department of Environment and Conservation - Government of Newfoundland and Labrador
- *Application for Grant of Land:*
Department of Environment and Conservation – Government of Newfoundland and Labrador
- *Request for Project Review (Re: Navigable Waters Protection Act):*
Fisheries and Oceans Canada
- *Request for Project Review (Re: Fish Habitat):*
Fisheries and Oceans Canada
- *Letter of Support (June 01, 2005):*
Town of Fleur de Lys

SCHEDULE:

The start date for project construction is dependent on the company receiving a Seal and Ground-Fish Processing License. Construction would then proceed immediately assuming all the required approvals and permits are in place. The project would require approximately six months for completion.

FUNDING:

Funding for the facility will come from private investors.

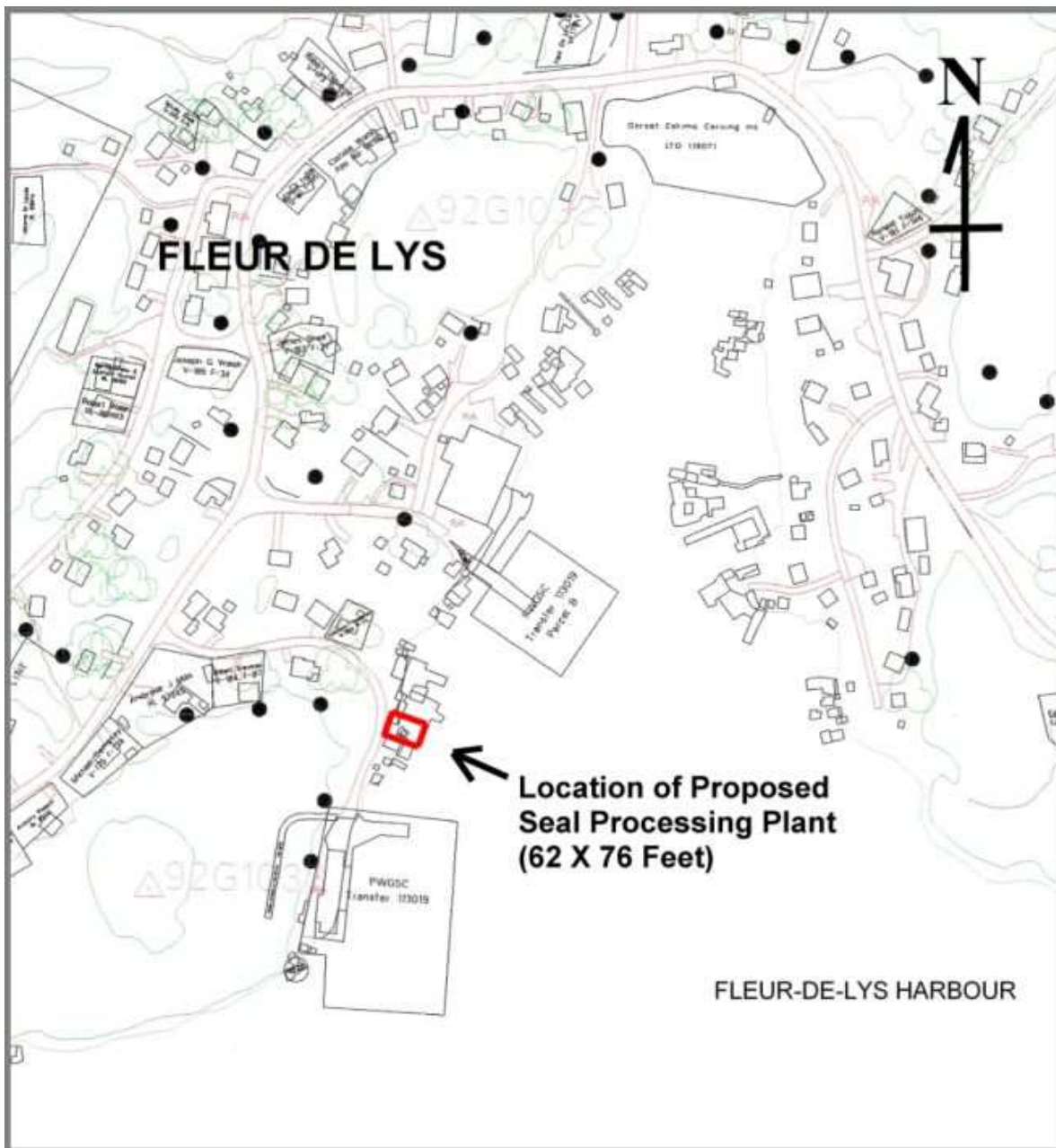
Date

Signature of President

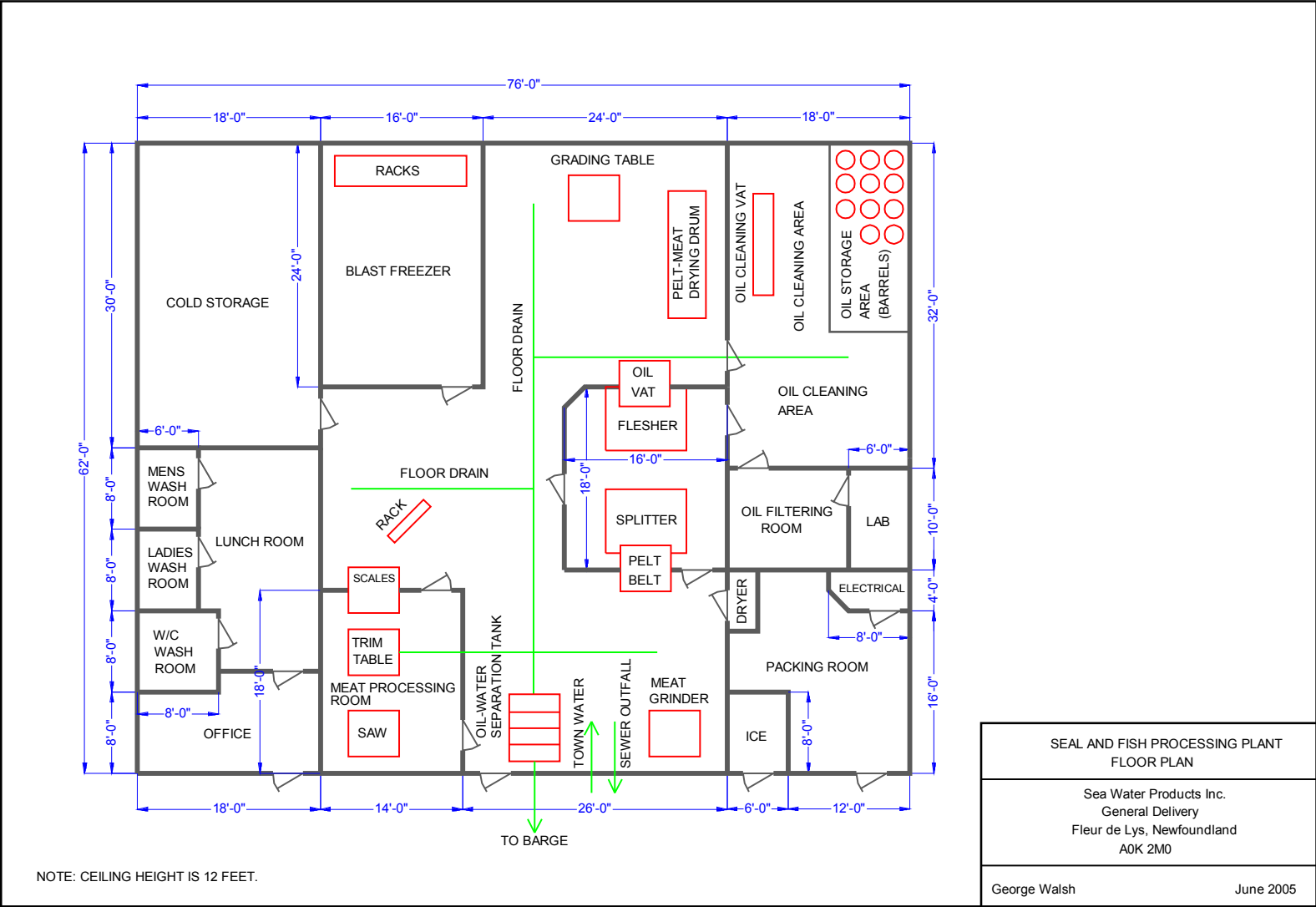
LOCATION MAP #1

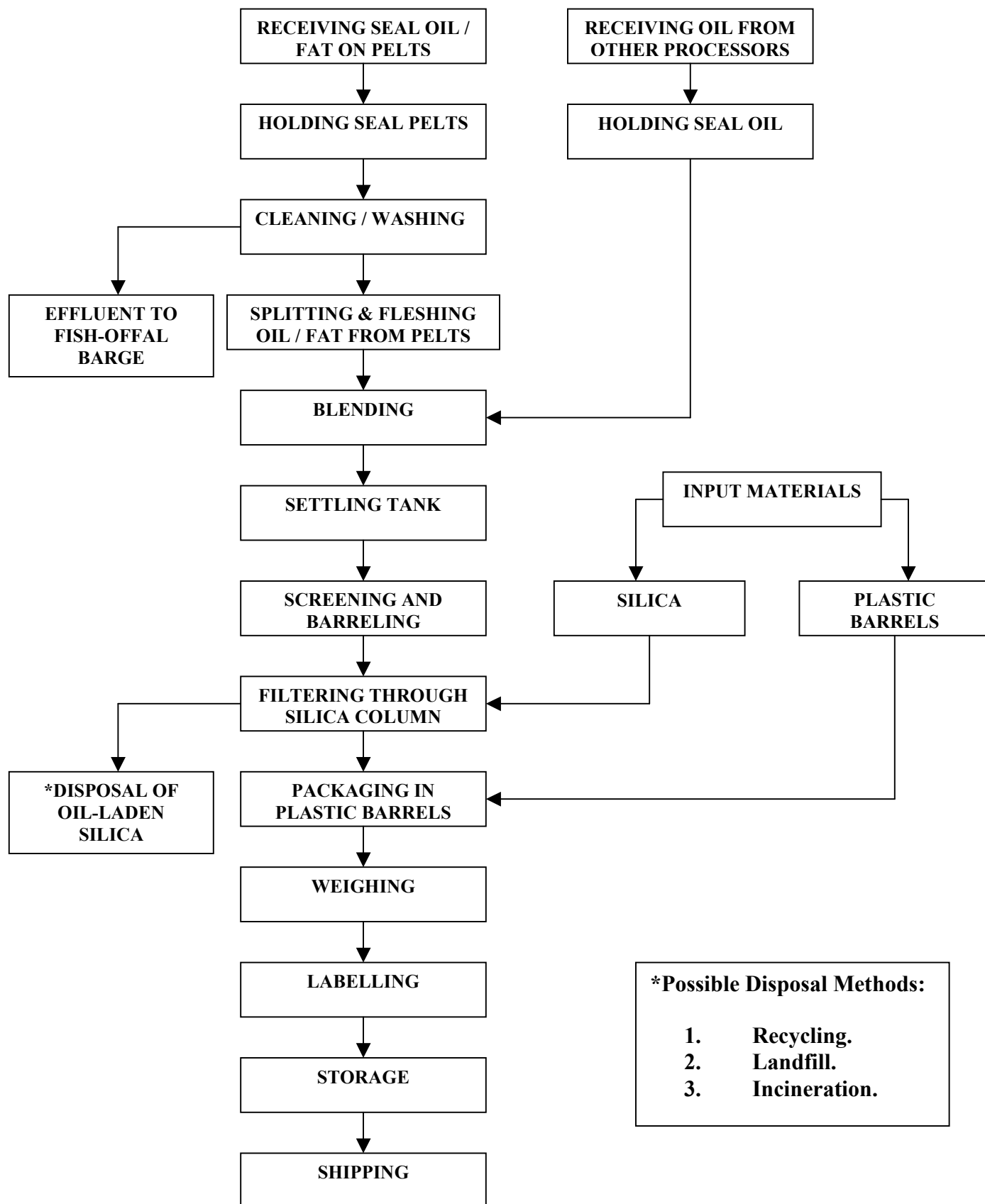


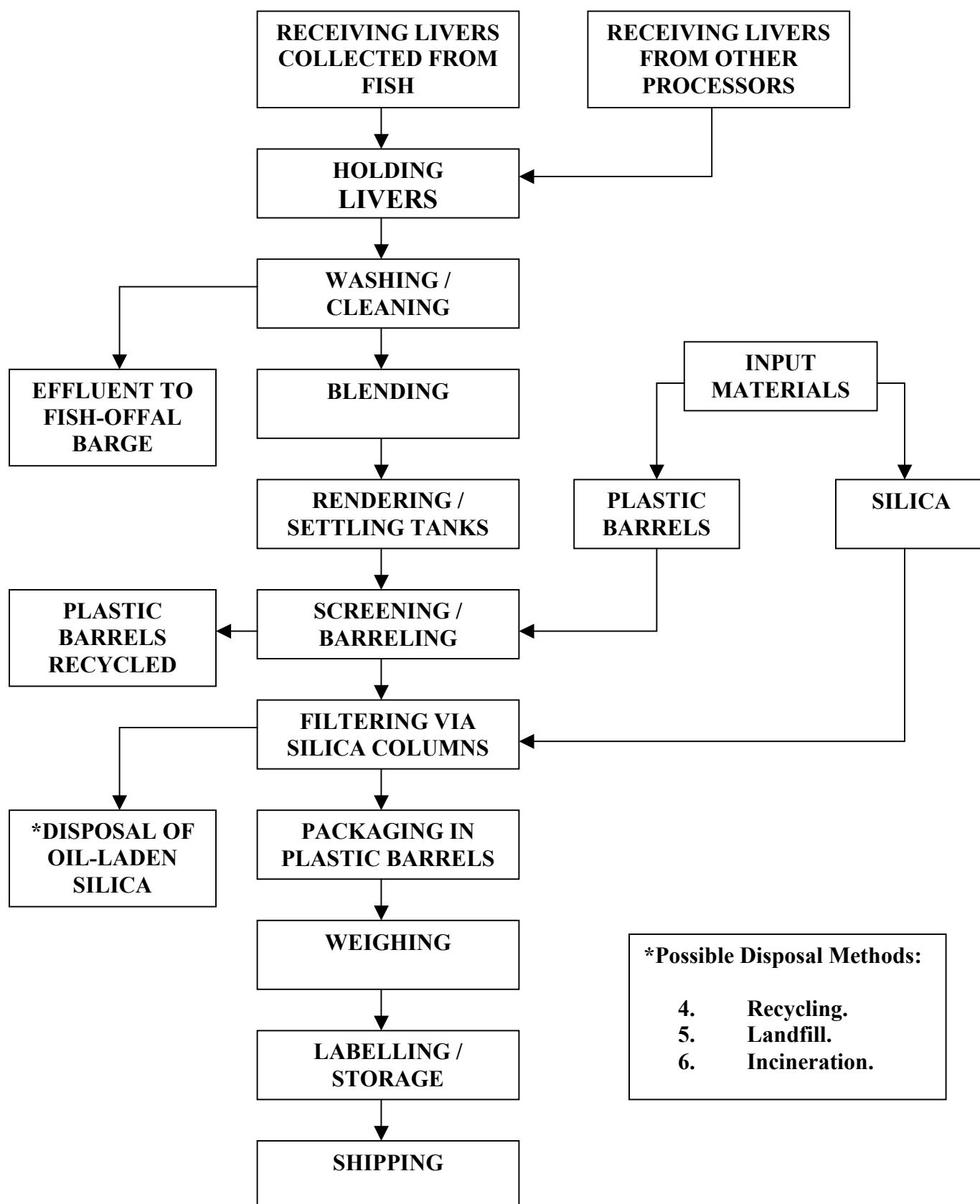
LOCATION MAP #2



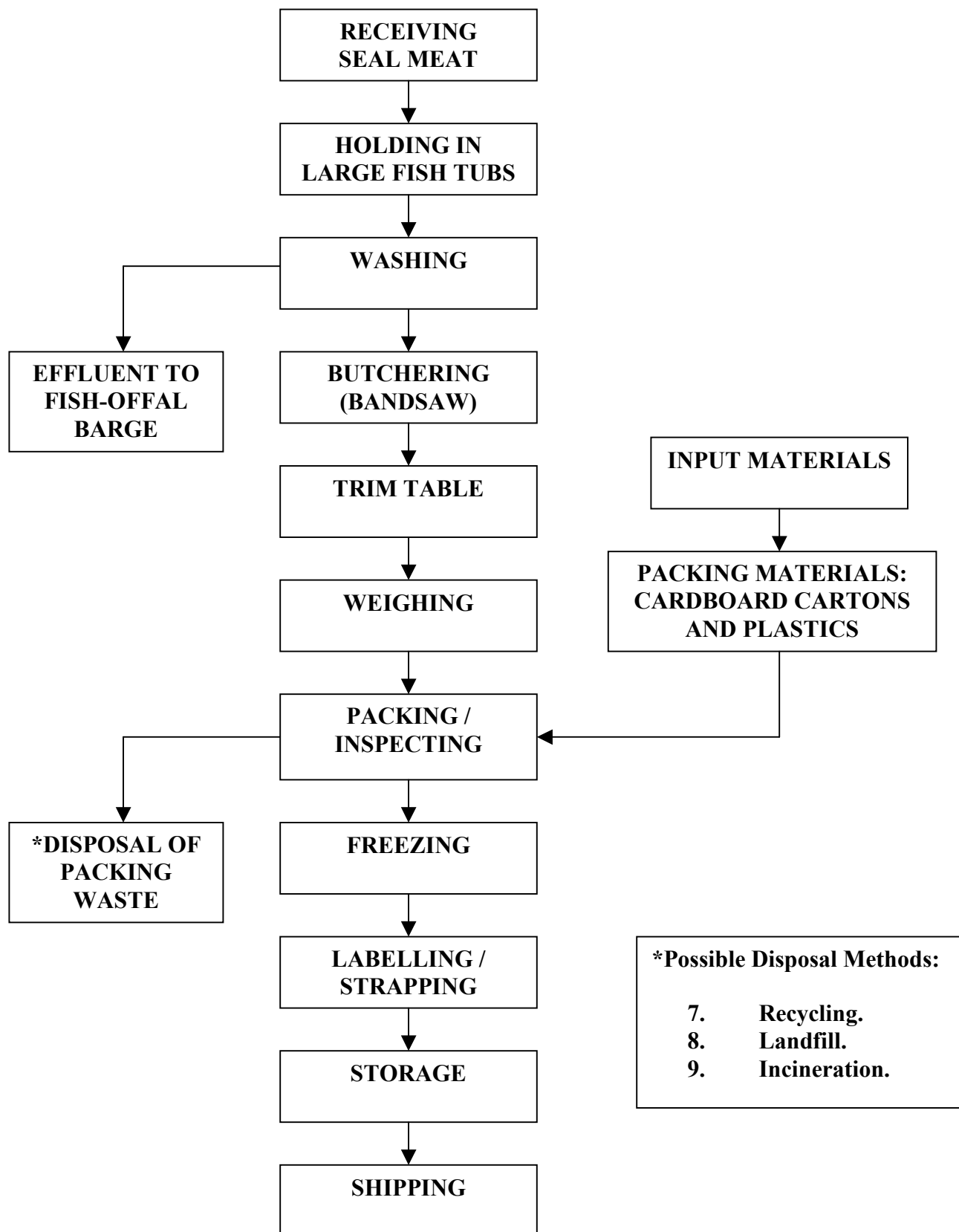
PLANT FLOOR PLAN



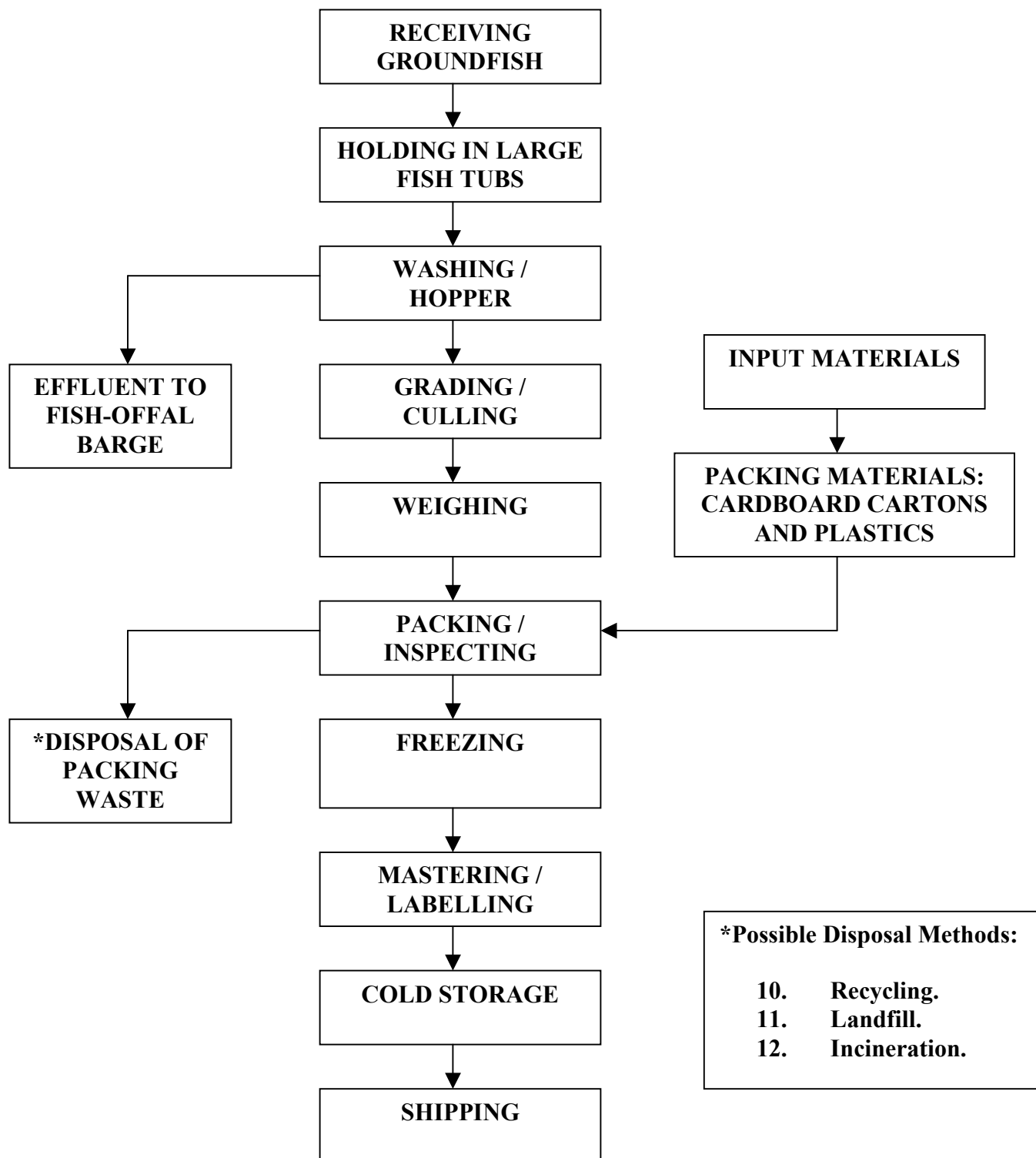
SEAL OIL PROCESSING FLOWCHART

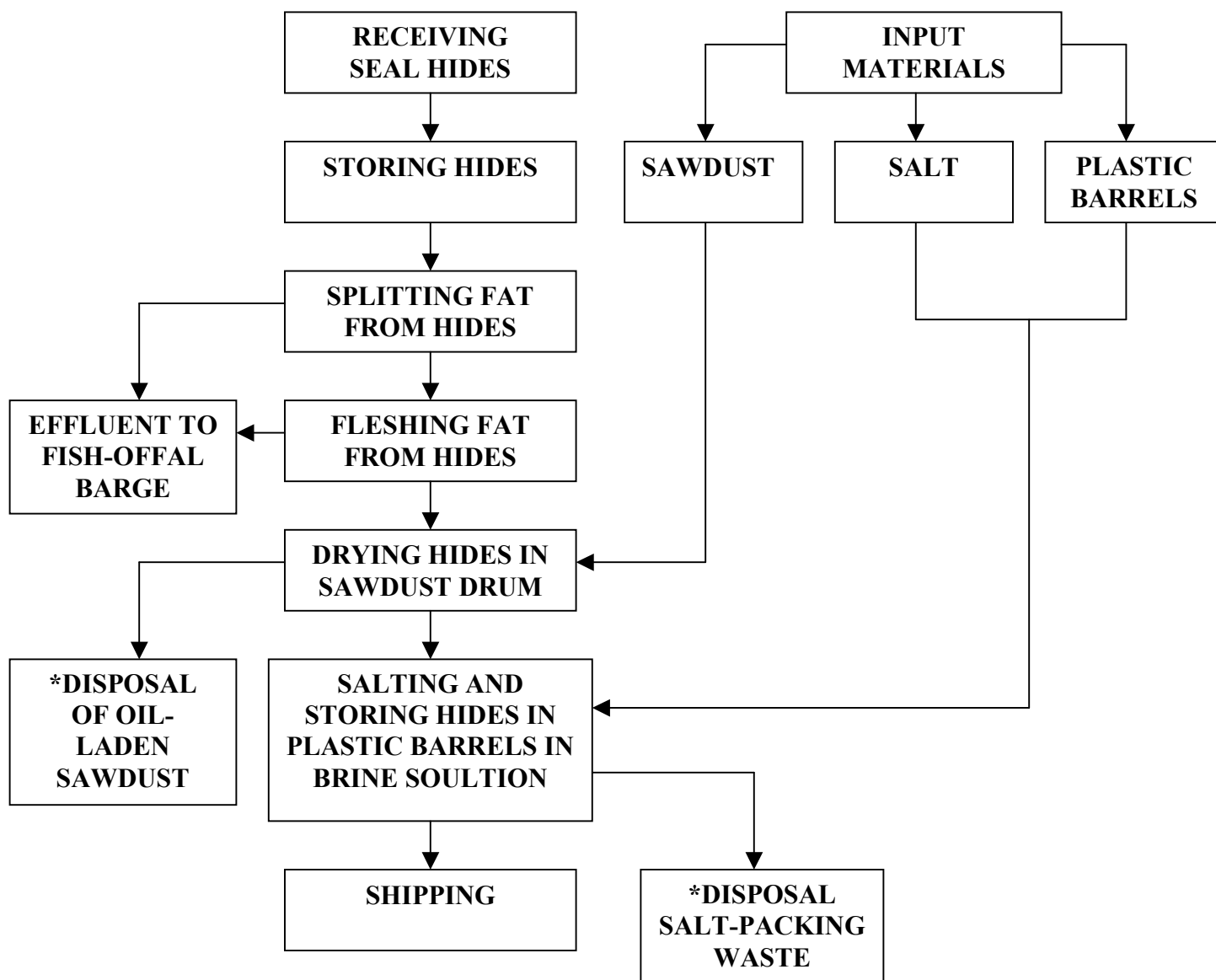
FISH LIVERS PROCESSING FLOWCHART

SEAL MEAT PROCESSING FLOWCHART



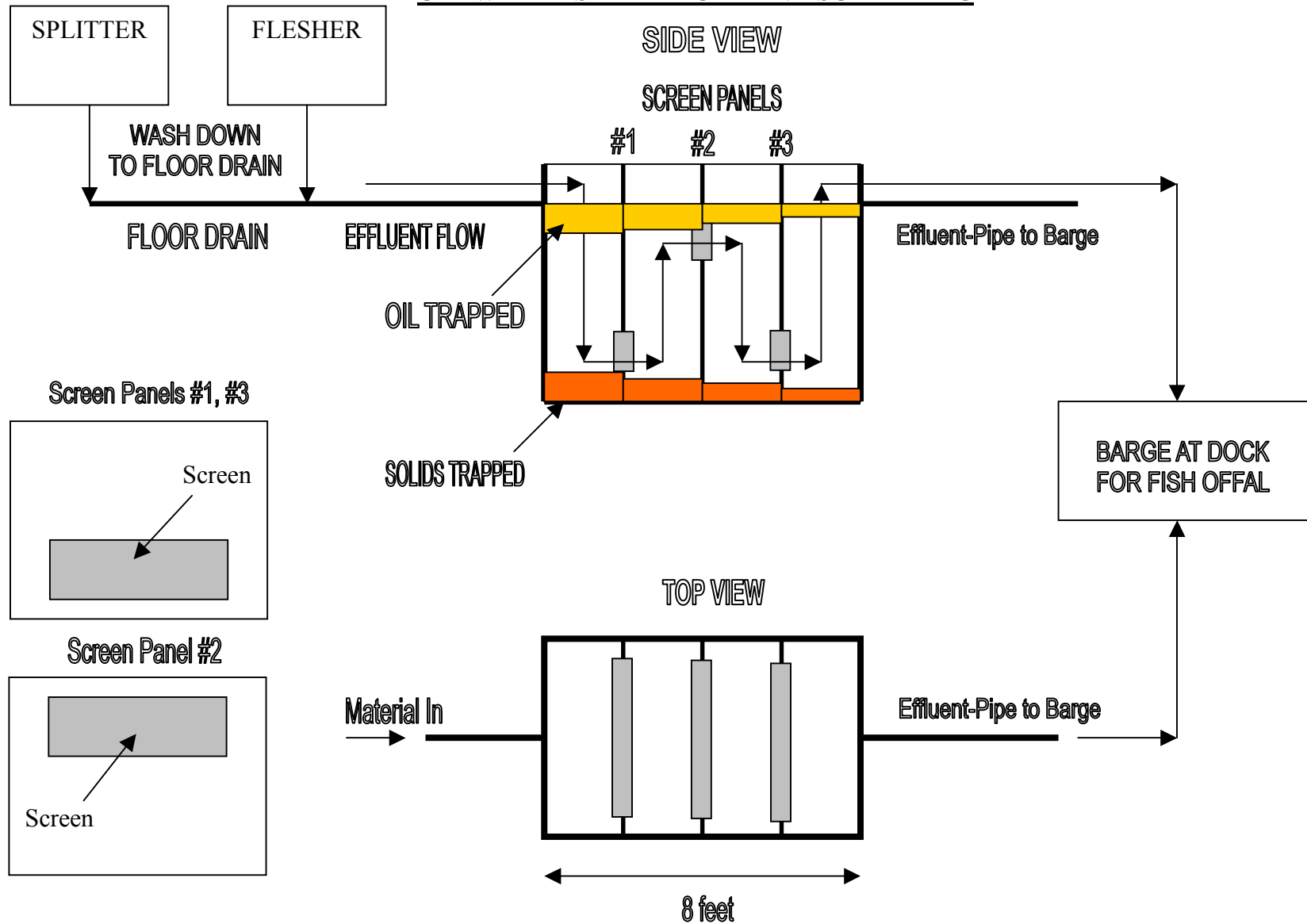
GROUND FISH PROCESSING FLOWCHART



SEAL HIDES PROCESSING FLOWCHART***Possible Disposal Methods:**

13. Recycling.
14. Landfill.
15. Incineration.

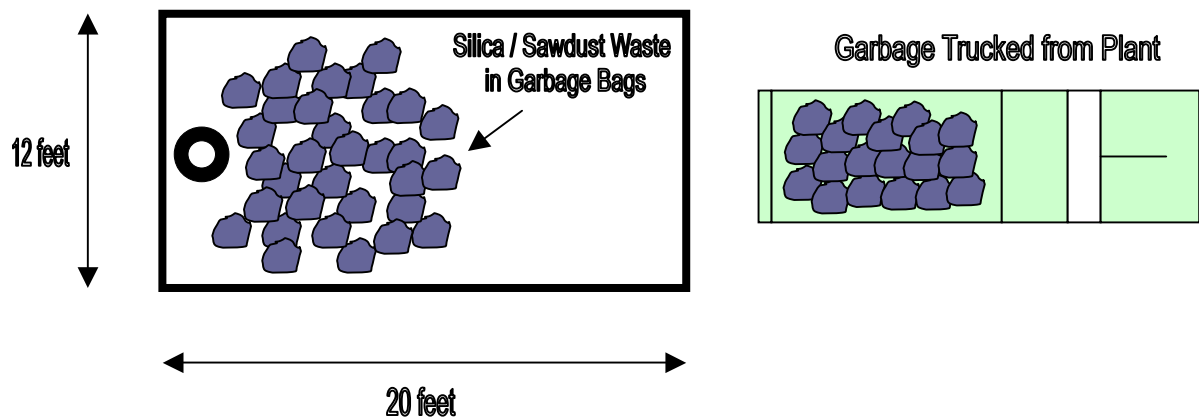
OIL-WATER SEPARATOR TANK SCHEMATIC



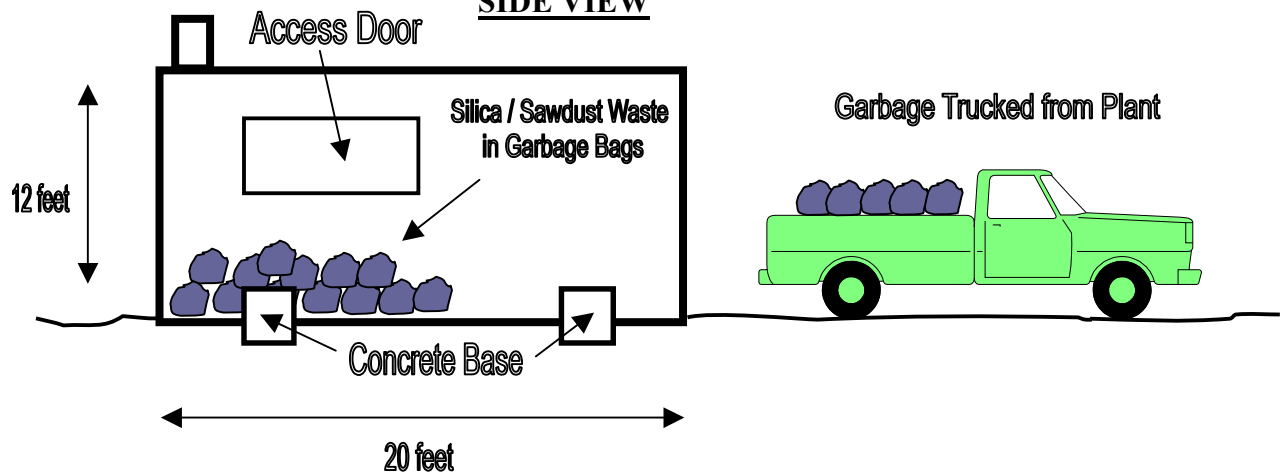
INCINERATOR SCHEMATIC

An incinerator may be used to contain and burn oil-laden silica and sawdust, bi-products of the oil refining and seal-hide processes. The incinerator, a modified tank, will be placed at the Fleur de Lys town dump.

TOP VIEW



SIDE VIEW



END VIEW

