



NAME OF UNDERTAKING:

NORM CONTAMINATED TUBULAR STORAGE AREA

PROPONENT:

(i) Name of Corporate Body:

ASCO Canada Limited (henceforth referred to as ASCO)

(ii) Address:

10 Corisande Drive
Mount Pearl, NF
A1N 5A4

(iii) Chief Executive Officer:

Name: Robert Crosbie
Official Title: President
Address: 10 Corisande Drive
Mount Pearl, NF
A1N 5A4
Telephone No.: (709) 748-7800

(iv) Principal Contact Person for purposes of environmental assessment:

Name: Greg Perchard
Official Title: Interim HSE Advisor
Address: 10 Corisande Drive
Mount Pearl, NF
A1N 5A4
Telephone No.: (709) 748-7802

THE UNDERTAKING:

(i) Nature of the Undertaking:

ASCO has prepared a comprehensive management plan to encompass the safe handling and temporary storage of NORM contaminated tubulars and related materials from the offshore oil industry in Eastern Canada.



(ii) Purpose/Rationale/Need for the Undertaking:

The purpose of the proposed undertaking is to expand our service base for our clients. Clients of ASCO have collectively identified the potential need for the handling and interim storage of NORM contaminated tubing and materials arising from offshore oil activities.

DESCRIPTION OF THE UNDERTAKING:

(i) Geographical Location:

The proposed undertaking will be located at 10 Corisande Drive, Donovans Industrial Park, Mount Pearl, NF. Please see Appendix 1 for the exact location of the facility and Appendix 2 for the current site plan.

(ii) Physical Features:

Currently two industrial buildings occupy the site. The buildings are located in the central portion of the site with gravel covered and landscaped areas located around the site buildings and along the east property boundary. Asphalt covered areas are located to the east of the main site building. The property has a total area of approximately 6.9 hectares. See Appendix 2 for current site plan.

With respect to the proposed undertaking, ASCO has identified an area within the existing pipeyard for NORM contaminated tubular storage as illustrated in Appendix 3. The designated area shall be fenced to prevent unauthorized entrance. The area encompassed by fencing will be determined by the degree of external gamma radiation emitted by the tubulars.

(iii) Operation:

ASCO intends to provide a handling and interim storage area for discrete NORM contaminated materials on behalf of its clients, the generator(s).

An area of the ASCO Pipeyard (see Appendix 3) has been identified as the storage location and will be fenced in order to prevent unauthorized entrance. The area encompassed by the fencing will be determined by the degree of external gamma



radiation emitted by the tubulars. Materials will be received only if accompanied by appropriate documentation and will be stored in the designated area. Said materials will be stored for the time period required by the generator(s) prior to being sent for cleaning/decontamination.

The operation will be open as long as the services are needed. It is not anticipated to be permanent storage, but rather transitory in nature until the client(s) direct movement of tubulars to a decontamination facility.

Potential sources of pollutants include:

1. It has been determined that all NORM contaminated tubulars entering the storage area will be securely packaged to prevent the release of NORM contaminated material during transport or in the case of an accident. However, there is the possibility that a tubular may arrive at the ASCO Pipeyard with missing or damaged thread protectors, which may result in loss of scale containment (falling to the ground).

A variety of environmental protection measures will be enforced to mitigate such potential contamination as follows:

- All tubulars shall have in place thread protectors on each open end. They will be further secured with NORM caution tape (similar to duct tape).
- Tubulars will only be received by ASCO if shipped in plastic cradles thereby reducing the chance of tubulars impacting against each other, which could result in the loss or damage of plastic thread protectors.
- A receipt inspection will be performed on all tubulars and accompanying documentation. Tubulars will be examined to verify integrity of thread protectors and NORM caution tape. Accompanying documentation shall be checked for the following waste management information:
 - Item identification number and date,
 - Description of waste,
 - Source of waste,
 - Radionuclides present,
 - Specific Activity of waste (Bq/g),
 - Removable surface contamination (Bq/cm²),
 - Aggregate Dose Rate of shipment and estimated volume of NORM.



- Tubulars and area will be visually inspected on a monthly basis to ensure the integrity of thread protectors and tape.
- ASCO will keep extra thread protectors and NORM caution tape on hand in the event of lost or damaged protectors.
- **ASCO Canada Ltd. will not accept any tubulars into their yard that are not properly shipped and/or with insufficient documentation.**

It is noteworthy that this scale is very difficult to remove and the likelihood of loss is remote.

2. The petroleum oil and lubricants of the mechanical equipment (e.g. forklifts), which will be used during the operation of the facility. This equipment is in good repair, and shall be inspected by a qualified service provider on a regular basis. Two emergency spill kits are located on site.

A NORM survey was conducted on November 20th, 2000 by Jacques Whitford Environment Limited, as were Phase I and II environmental site assessments in November 2000 and January 2001 respectively (see attached NORM Environmental Protection Plan). Additional surveys of background radiation levels on site will be taken prior to material arriving at the storage area. All baseline data will be compared to post operation data after NORM materials have been removed. Any and all appropriate remedial measures will be undertaken if required.

ASCO does not anticipate any potential causes of resource conflicts.

(iv) Occupations:

Occupations, according to the National Occupational Classification (2001), anticipated for this undertaking include 1 Inspector in Public and Environmental Health and Occupational Health and Safety (2263) and 4 Material Handlers (7452).

The appropriate hazardous material handling and emergency response training has been provided for these, and other personnel.



(v) Project-Related Documents:

ASCO Canada Limited Naturally Occurring Radioactive Material (NORM) Environmental Protection Plan.

APPROVAL OF THE UNDERTAKING:

This undertaking will require approval from the Department of Environment. The registration document and the previously submitted NORM Environmental Protection Plan are intended to meet the Department's requirements.

SCHEDULE:

The earliest possible date for project construction could be March 2002, with the latest possible date for project construction being May 2002 depending on client requirements.

FUNDING:

This undertaking does not depend upon a grant or loan of capital funds from any government agency.

An estimate of capital costs associated with the undertaking is approximately \$10,000.

Original dated Jan 07/02

Original signed for Robert Crosbie, President

Date

Signature of Chief Executive Officer

Appendix 1

Taken from the National Topographic System
North American Datum 1983

Map No. 1 N/10 (St. John's), 1/50 000

Latitude of photocopied section: 52°47' - 52°55'

Longitude of photocopied section: 47°30' - 47°37'





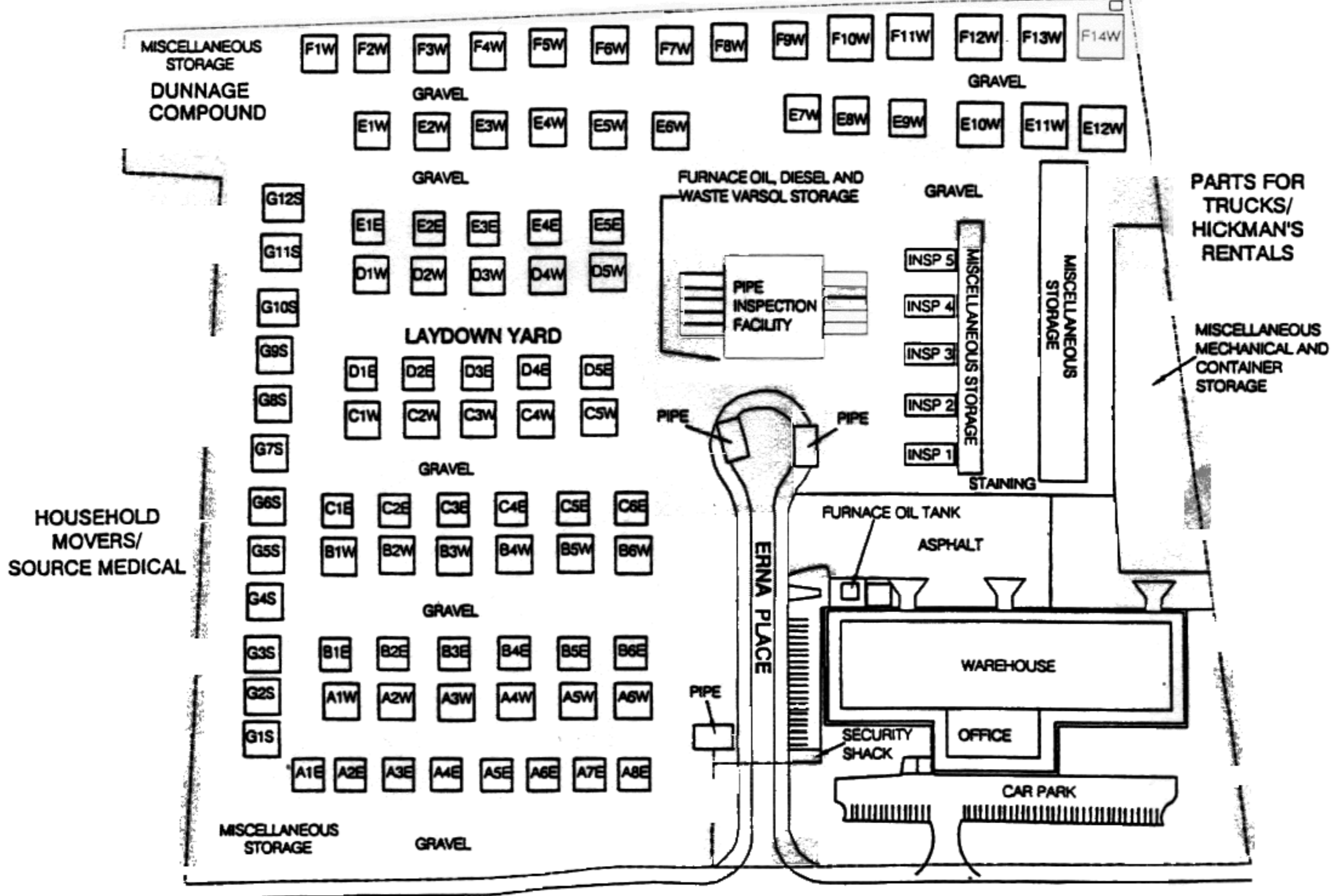
LEGEND

————— PROPERTY BOUNDARY

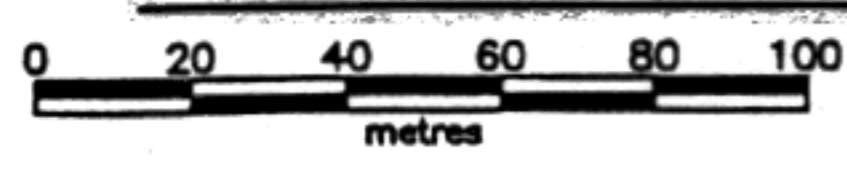
FEED MILL

NWS HOLDINGS LTD.

EXPLOSIVES SHED



CORISANDE DRIVE



TRANSPORT CANADA RESCUE AND ENVIRONMENTAL RESPONSE

SCHLUMBERGER

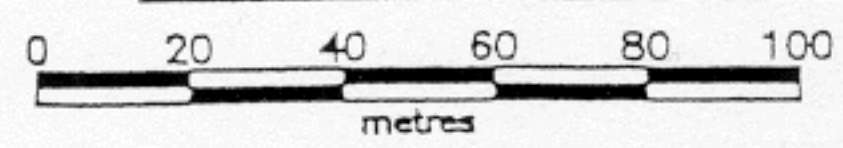
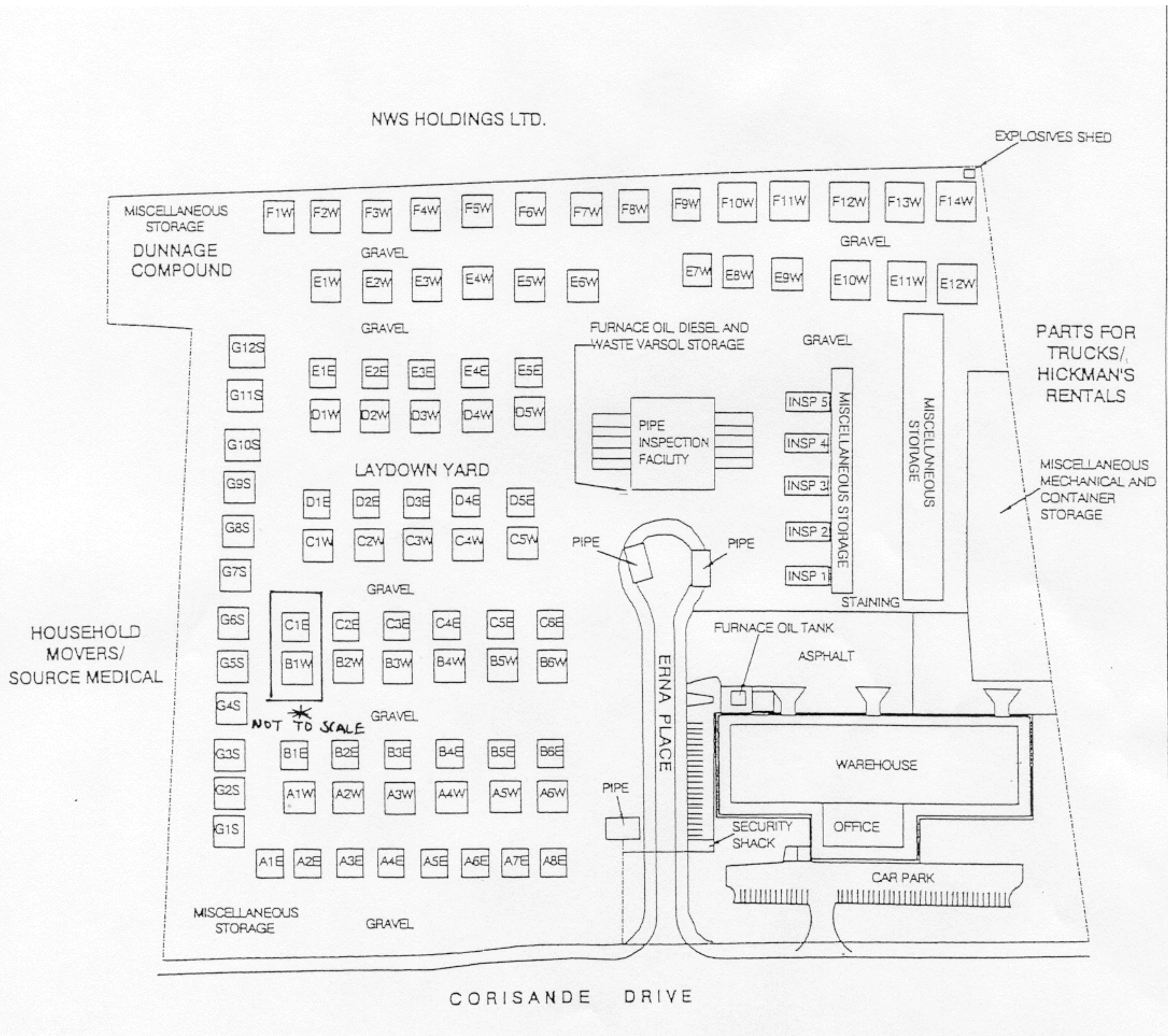
Appendix 3
ASCo Canada Ltd. Proposed NORM Storage Area
 10 Corisande Drive
 Donovans Industrial Park
 Mount Pearl, NF



LEGEND

————— PROPERTY BOUNDARY

FEED MILL



TRANSPORT CANADA RESCUE AND ENVIRONMENTAL RESPONSE

SCHLUMBERGER