

ER05
Draft-01
February 23, 2007



**Hoyt Lakes, Minnesota
STANDARD PROCEDURE**

Mine Site Spill Prevention Control and Countermeasures (SPCC) Plan

General Manager's Approval _____

Manager's Approval _____

Initiator _____

Date
Effective

2/19/07

SP
Number

ER05

History:

2/19/07 – ER05 - preliminary version to support Detailed Project Description

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1 SCOPE

This procedure applies to all PolyMet Mining, Inc. (PolyMet) employees, contractors, and vendors delivering, dispensing or using petroleum products (including petroleum wastes) at the Mine Site. **Note that this preliminary document is written to apply to the operating and fully staffed facility not the current non-operating situation and that all referenced procedures and manuals do not yet exist.**

2 POTENTIAL RELATED PROCEDURES

- Emergency Preparedness Procedures Manual
- Disposal of Used Antifreeze and Petroleum Products
- Storage Tank Management
- Hazardous Waste Management Plan
- National Fire Protection Association (NFPA) Hazardous Material Labeling
- Building Evacuation Reporting Areas

3 OBJECTIVE

This preliminary Spill Prevention Control and Countermeasures (SPCC) Plan is intended to support the Detailed Project Description submitted as part of the Environmental Impact Statement preparation process. A Professional Engineer (P.E.), registered in Minnesota, has **NOT** inspected the property, and reviewed, or certified this preliminary SPCC Plan because NorthMet Project facilities and structures have not been constructed at this time.

4 POLICY

A spill is an uncontrolled release of a petroleum product to the ground outside a building or water that can exit a building. It is the policy of PolyMet to promote a long term, continuous effort towards spill prevention first, and control and countermeasures where necessary. This SPCC Plan applies to spills of petroleum products that may occur at the Mine Site and has been prepared in accordance with the requirements set forth in Title 40, Part 112 of the Code of Federal Regulations, (40 CFR 112), revised July 17, 2002 and mandated by the Federal Oil Pollution Act of 1990 (FOPA).

The FOPA directs the prevention and preparation for “worst case discharges” that may reach surface waters, from facilities that store petroleum products. This plan will cover the storage and transfer of such products for the Mine Site. A separate plan covers the Plant Site.

PolyMet will have less than 1,000,000 gallons of tank capacity on site and, therefore, falls under the MPCA’s General AST rules and regulations. The policies and procedures set forth in this document, and a separate PolyMet Standard Procedure for Storage Tank Management, will be prepared to comply with Minnesota State Law, Chapter 7151, *Aboveground Storage of Liquid Substances*.

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This SPCC Plan details the equipment, personnel, procedures, and steps required to prevent, control and provide adequate countermeasures to a petroleum product spill. PolyMet will demonstrate the ability to rapidly and thoroughly recover petroleum product spills with a finalized SPCC Plan, and it is PolyMet's policy to support this SPCC Plan via continuous improvement of prevention, control and countermeasures.

5 GENERAL INFORMATION

The Mine Site is located in the City of Babbitt corporate boundary. A map of the Mine Site is presented in Appendix A. All tanks and materials will be located within the Mine Site. A listing of these tanks and materials will be provided in Appendix B upon construction of the Mine Site and finalization of the SPCC.

Physical barriers to spills that may be implemented include double wall tanks, soil plastic-lined berms, and steel, concrete or plastic containment vessels. The final barrier to the escape of spills will be the facility's storm water drainage system. The system will be described in a Storm Water Pollution Prevention (SWPP) Plan. The direction and spill locations for storm water and any spills that may occur via the Mine Site storm water control and/or drainage system will be described in the Mine Site SWPP Plan.

PolyMet will implement non-structural control measures, which may include standard spill prevention practices such as those outlined in this SPCC Plan and through the implementation of Best Management Practices (BMPs) outlined in the Mine Site SWPP Plan. BMPs will be employed on-site for:

- Vehicle Fueling;
- Above Ground Storage Tanks;
- Waste Storage Barrels;
- Employee Training; and,
- Preventive Maintenance Program.

6 IMPLEMENTATION

An SPCC Plan Administrator will be designated, and is responsible for developing, implementing and maintaining the SPCC Plan. Specific duties of the SPCC Plan Administrator include:

- Identify materials and wastes handled and stored, and potential spill sources.
- Review past spill incidents and prepare documentation of such events.
- Coordinate the development and implementation of the SPCC Plan.
- Establish and implement spill reporting procedures. Report spills to appropriate regulatory agencies and provide coordination for all containment and clean-up operations in accordance with emergency procedures.

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- Review the SPCC Plan at least once every five years to ensure its applicability, and update the plan, as necessary to ensure compliance with applicable regulations. Document completion of the review, sign a statement as to whether the plan will be amended, and add as an appendix to this SPCC Plan.
- Identify training programs required to establish the techniques of spill clean-up and containment for personnel directly involved in spill response operations.
- Contact back-up personnel as each situation dictates.
- Be accountable for spill prevention.
- Notify the EPA Regional Administrator in the event of a single spill greater than 1,000 gallons, or two spills more than 42 gallons each, occurring within any 12-month period. Supply all required information to Regional Administrator and amend the SPCC Plan if required.

Some or all of the above duties may be delegated to others. However, the Plan Administrator is ultimately responsible for coordination and proper implementation of the SPCC Plan. Appropriate personnel will be designated with the responsibility to make the telephone notification to the National Response Center, the MN Duty Officer, and response contractors. To comply with the immediacy requirement for spill reporting at all times, Main Gate personnel will be designated to make these notifications.

7 SPILL COUNTERMEASURES

7.1 Detection of Spills

An employee, vendor or contractor discovering a spill must immediately contact the Main Gate (218-225-4250 or 4250 on internal phones). The Main Gate will determine if site employees can reasonably control the spill or if the spill requires the appropriate emergency personnel. The Spill Notification Flowchart (Appendix C) will be followed.

7.2 Detection of Fire

Any employee, vendor or contractor discovering a fire must immediately contact the Main Gate (218-225-4250 or 4250 on internal phones). If the fire brigade is needed, the Main Gate will sound the fire call and the fire brigade will respond to the fire if available. If the Main Gate decides additional help is needed, or that the fire brigade cannot control the fire, the City of Hoyt Lakes and City of Babbitt Fire Departments will be called. If a fire is associated with a spill, the Main Gate will contact the Plan Administrator as soon as possible.

7.3 Assistance of Response Contractors

Response Contractors will be contacted when site personnel or equipment cannot control a spill. The clean-up contractor will also be contacted whenever it is necessary to dispose of recovered material from spills. The Plan Administrator, or other designee, is

responsible for making the contact. Telephone numbers are provided in Table 1 in the following section.

8 EMERGENCY CONTACT PROCEDURES

Whenever a spill occurs, spill notification should follow the Spill Notification Flowchart (Appendix C). If a major emergency response is needed, employees are to follow the Emergency Preparedness Procedure Manual. Flow charts summarizing the command system are posted throughout the facility. A copy of the Emergency Preparedness Procedure Manual will be available from the SPCC Plan Administrator.

Upon discovery of a spill, the person or persons discovering the incident must immediately contact the Main Gate. The Main Gate will then notify the Plan Administrator, or alternate if the Plan Administrator is not available. When contacting the Plan Administrator, the following information must be provided:

- Approximate time the spill incident or equipment malfunction was discovered and estimated time of occurrence.
- Cause of the spill incident or description of the equipment problem.
- Nature and estimated quantity of material spilled.
- Descriptions of immediate action taken to contain, treat, and/or clean up the spill.
- Estimated outage time for control equipment malfunctions.

Immediate notification and countermeasure are critical. Details of the incident can be provided later if there is not sufficient time to investigate. A Spill Reporting Form (Appendix D) must be completed.

Table 1 shows the emergency response organizations located nearest to the Mine Site. These agencies should be contacted by the Plan Administrator or designee as each situation dictates. If the spill is greater than five (5) gallons, the spill must be reported to the Minnesota Duty Officer (telephone number 800-422-0798) and the call documented (who made the call, the date and time of the call and the Duty Officer's name).

If the spill enters a navigable waterway off PolyMet's property, the National Response Center (800-424-8802) and EPA Region V, 24-hour spill line (312-353-2318) must be notified (Table 2).

Table 3 provides company contacts for the Plan Administrator's reporting procedure.

Table 1: Emergency Response Organizations

Emergency Response Personnel and State Notification	Phone Number
State Duty Officer (Notify Immediately if spill more than five gallons or a hazardous material)	(800) 422-0798 or (651) 649-5451
Department of Emergency Management (Back-up Only)	(651) 296-2233
Hoyt Lakes (Emergency)	911
Hoyt Lakes Fire Department (Non-emergency)	(218) 225-2110
Babbitt Fire Department (Emergency)	911
Aurora Sheriff's Department (Non-emergency)	(218) 229-2244
OSI Environmental (Response Contractor)	(218) 744-3064 or (800) 777-8542
Northern Minnesota Services (Response Contractor)	(218) 865-4744

Table 2: Federal Notification for Spills

Emergency Response Personnel - Federal Notification (spill enters a navigable waterway off PolyMet's property)	Phone Number
National Response Center	(800) 424-8802
EPA Region V (Chicago)	(800) 621-8431

Table 3: Company Notification for Spills

Emergency Response Personnel – Company Notification (to be contacted by Plan Administrator or designee)	Phone Number
To Be Determined	Work: Home:

9 FACILITY INSPECTIONS AND RECORD KEEPING

Programs, procedures, and practices to minimize the potential for uncontrolled spills will be maintained. Training will be provided to personnel, and training records maintained. PolyMet may also implement Standard Procedures for handling hazardous materials, disposal of waste products and other practices. These standard procedures may be incorporated into the finalized SPCC Plan.

Tanks drum storage areas will be inspected and monitored. These inspections include visual review of the integrity of the tanks/drums and any operational practices that may impact the facility. Based upon the results of the visual inspection, the Plan Administrator may consider use of additional leak detection techniques such as hydrostatic testing or nondestructive testing of shell thickness. A site specific inspection form will be created upon completion of construction activities. Inspection records will be maintained for all storage tanks.

Inspections will provide an important preventative maintenance procedure and lead to improvements in small spill and leak detection.

10 INVENTORY

Appendix B will list the major storage tanks (any stationary tank greater than 55 gallons) and drum storage areas when the SPCC is finalized. Corresponding map(s) showing tank and drum storage area locations will be included in Appendix B. Areas designated for storage of 55-gallon drums will include a containment slab, a pump-out sump, and a rain canopy.

11 VENDOR RESPONSIBILITY WHEN FUELING

Vendors shall supply a spill container and other spill response materials at all times when on PolyMet's property. If there is any petroleum product spilled onto the ground, the vendor is responsible for cleanup and the proper disposal of the cleanup materials. PolyMet will provide assistance if conditions warrant. The driver shall notify PolyMet's Main Gate at 225-4250 if there is any spill to the ground. The driver shall fill out a Spill Reporting Form (Appendix E) for any spill and, prior to leaving PolyMet's property, deliver the completed form to the Main Gate.

If the spill is greater than five (5) gallons, the vendor is required to report the spill to the Minnesota Duty Officer (telephone number 800-422-0798).

12 SPILL CONTINGENCY PLAN

12.1 General

Preventative maintenance programs, good housekeeping procedures, and routine visual inspections will be developed to prevent spills. If a spill does occur, this Spill Contingency Plan establishes the procedures to be followed.

12.2 Effective Action Plan

If a spill poses an immediate threat to persons or property, the Plan Administrator or alternates will follow the Spill Notification flowchart located in Appendix C, and emergency procedures will be implemented. If an individual building evacuation is necessary, employees will evacuate in accordance with standard procedures for the area specified.

Immediately upon discovering a spill that could possibly pollute surface water or groundwater, an employee should immediately report to their supervisor. If the supervisor is not immediately available, the employee should notify the Main Gate (225-4250). The supervisor or Main Gate will report to the Plan Administrator.

The source of the spill should be identified as quickly as possible. When the source of the spill is identified, steps should be taken to stop or at least reduce the flow of the spill as long as that action does not pose a threat to human health. If a storage tank is the source, the contents of the tank can be pumped down and transferred to another tank. Appendix D contains Exhibits 1 through 5 showing possible responses that can be taken to spills depending upon site conditions.

It is unlikely that any petroleum product spilled within a diked secondary containment system would escape. However, if large spills occur outside the diked area through transfer activities or other procedures, attempts will be made to contain the spill by construction of a temporary barricade in front of the path of flow using sand or dirt. When spilled material is flowing on the ground, a dike can be formed with sand, dirt, logs, and sandbags or by the use of another material. Rapid containment may provide enough time for procuring specialized materials such as sorbents, pumps, and temporary storage tanks. Once the product has been contained, appropriate clean-up measures should be implemented. A determination of the nature and extent of the leak will govern the extent of the manpower and equipment allocated to clean up the material.

12.3 Clean up Actions for Spills

(For further information, consult the Emergency Preparedness Procedure, and the Spill Notification Flowchart located in Appendix C).

- The person discovering the spill will contact their supervisor or the Main Gate. He/She will then be instructed if response measures should be taken in addition to the procedures outlined in this section.
- If it is determined safe by the supervisor and person discovering the spill, attempt to contain the spillage using available material or absorbents.
- Collect the spent absorbent in a container specifically labeled for the use.
- Following removal of the spilled product, spread additional absorbents over the spill area to remove any spill residue.
- Dispose of all spilled material and spent cleanup materials in accordance with PolyMet procedures. Contact the supervisor, Main Gate, or Plan Administrator for assistance in determining the proper handling and disposal procedures.
- Complete the Spill Reporting Form found in Appendix E and send the report to the Plan Administrator.

13 DESCRIPTION OF TRAINING AND EQUIPMENT

13.1 Training

This SPCC Plan will be reviewed in training sessions to familiarize personnel with the requirements of the plan. After training, personnel may be designated by company personnel as qualified to implement the SPCC Plan. PolyMet will be responsible for providing spill prevention briefings for operating personnel at least annually. These briefings will highlight and describe known spill events and failures, malfunctioning components, and recently developed precautionary measures. Furthermore, all new oil-handling personnel will have spill prevention training for the maintenance and operation of spill response equipment within one week of their start date and to all oil-handling employees yearly.

All records associated with the SPCC Plan will be kept and maintained on-site for a period of three years.

13.2 Equipment

13.2.1 Onsite Equipment

Equipment that could be utilized in the containment and cleanup of a spill such as cranes, dozers, pumps, dump trucks, and loaders may be available at the Mine Site. All equipment required should be made available for deployment to a spill area at the discretion of an appropriate manager, supervisor, or designee. In the utilization of equipment, consideration must be given to versatility and mobility. For instance, initially a rubber tired dozer would be more valuable on a spill site, due to its mobility, than a tracked dozer.

13.2.2 Contractor Equipment

Outside contractors will be utilized for containment and cleanup of a spill should it be necessary. Outside contractors will be reviewed with respect to equipment capability and spill response availability. Their equipment availability and location will be noted.

14 SECURITY

The following is a list of security measures implemented at PolyMet to prevent, detect and control petroleum product spills:

- Personnel are present at the Mine Site 24 hours a day.
- The Main Gate to the Mine Site is manned 24 hours a day.
- All other entrances to the Mine Site are gated.
- The Mine Site is patrolled.
- Fencing or natural barriers (such as thick forest cover) prevent entrance to the Mine Site.
- Facility lighting is adequate to permit detection of possible spills at all petroleum product storage locations.

APPENDIX A
MINE SITE MAP

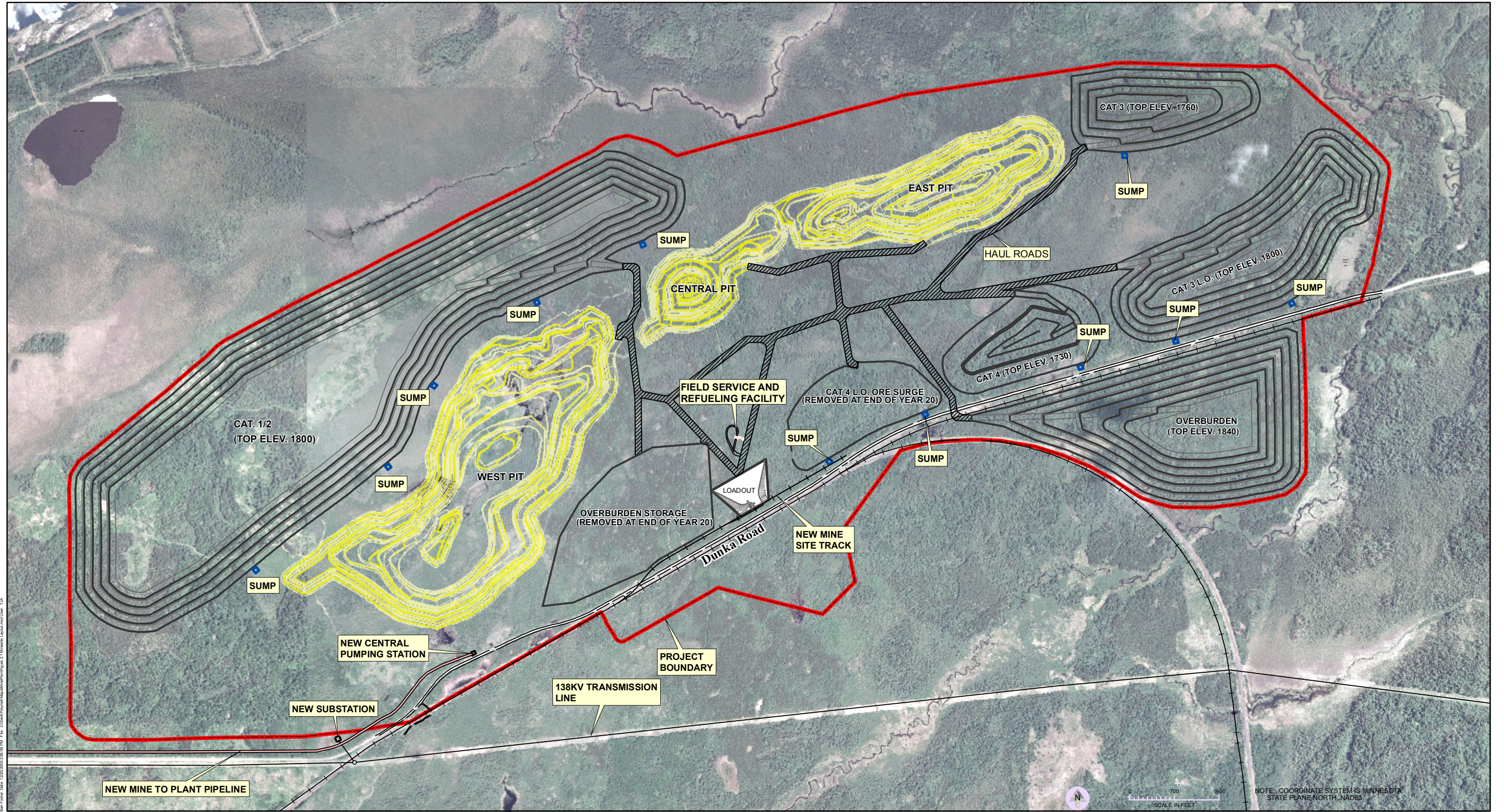


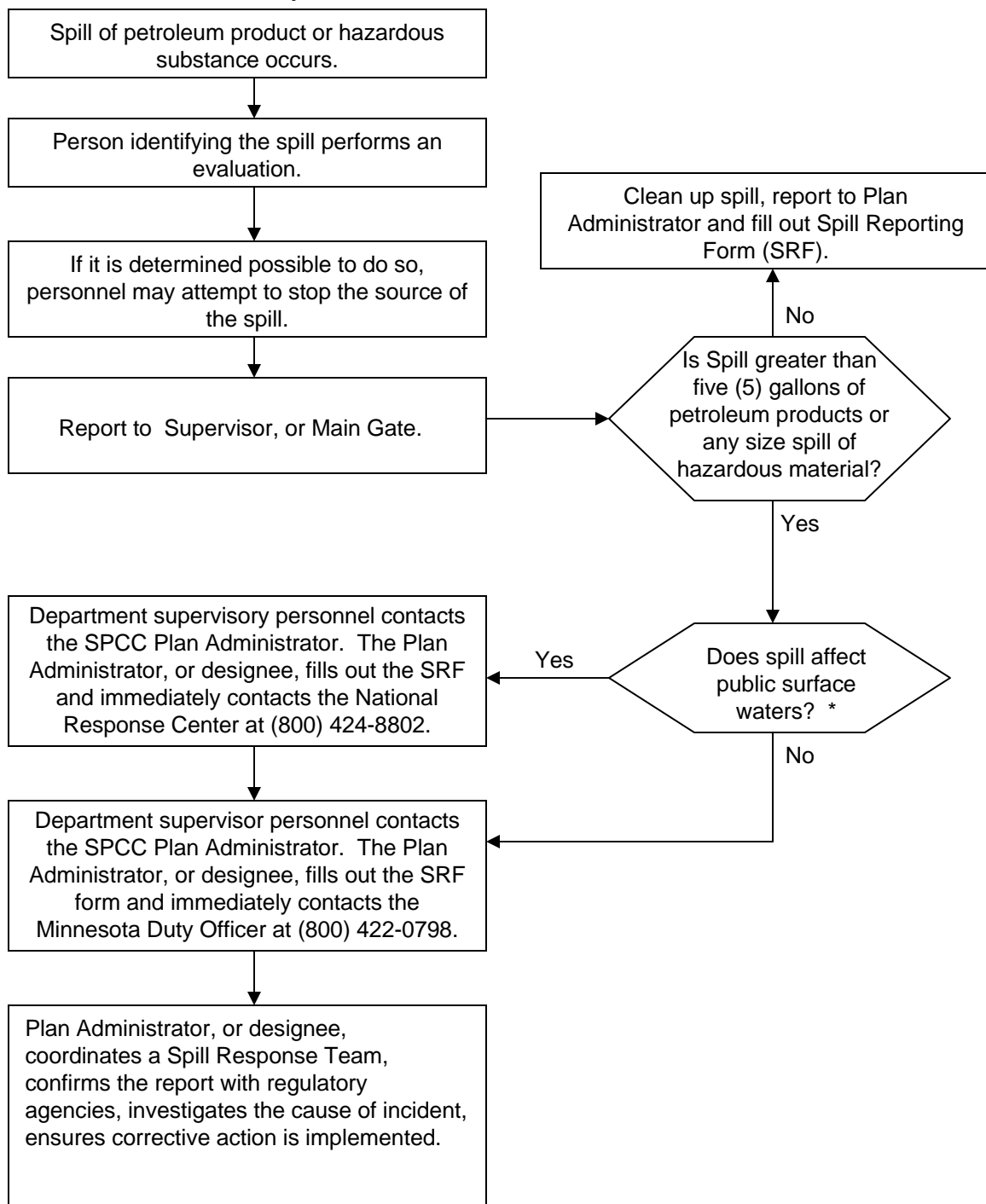
Figure 2.1
 MINE SITE LAYOUT
 NorthMet Mine/PolyMet Mining Company
 Babbitt, Minnesota

APPENDIX B
ACTIVE TANK & EQUIPMENT INVENTORIES
(INTENTIONALLY LEFT BLANK)

APPENDIX C
SPILL NOTIFICATION FLOWCHART AND PROCESS

PolyMet Mining, Inc.

Spill Notification Process



All supervisory personnel are designated with the responsibility to make the telephone notification to the National Response Center, the MN Duty Officer, and response contractors. To comply with the immediacy requirement for spill reporting at all times, the supervisors may also make notifications.

APPENDIX D
SPILL REPORTING FORM

**POLYMENT MINING, INC.
SPILL REPORTING FORM**

FIRST PERSON OBSERVING SPILL:

Name of Individual: _____ Date: _____ Time: _____

NOTIFICATION TO MAIN GATE

Name of Individual: _____ Date: _____ Time: _____

NOTIFICATION TO GENERAL MANAGERS OFFICE:

Date: _____ Time: _____

NOTIFICATION TO GOVERNMENTAL AGENCYS:

Contacted by: _____

State Duty Officer (**Notify Immediately**) Contacted:
(800) 422-0798 or (651) 649-5451

Date: _____ Time: _____

National Response Center Contacted:
(800) 424-8802

Date: _____ Time: _____

LOCATION OF SPILL: _____

TYPE OF SPILL (i.e. Tank Overflow. Pipeline Break): _____

TYPE OF MATERIAL INVOLVED: _____

QUANTITY OF MATERIAL SPILLED. IF KNOWN (Estimate): _____

DISTANCE TO NEAREST WATER COURSE: _____

DID OR DID NOT ENTER WATER COURSE: Yes _____ No _____

DID OR DID NOT LEAVE PROPERTY: Yes _____ No _____

IMMEDIATE CLEAN UP ACTION TAKEN: _____

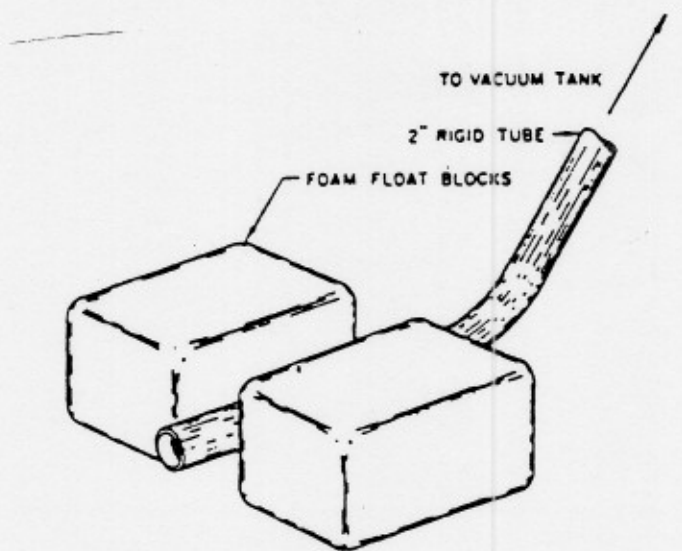
APPENDIX E
SPILL RESPONSE EXHIBITS

366

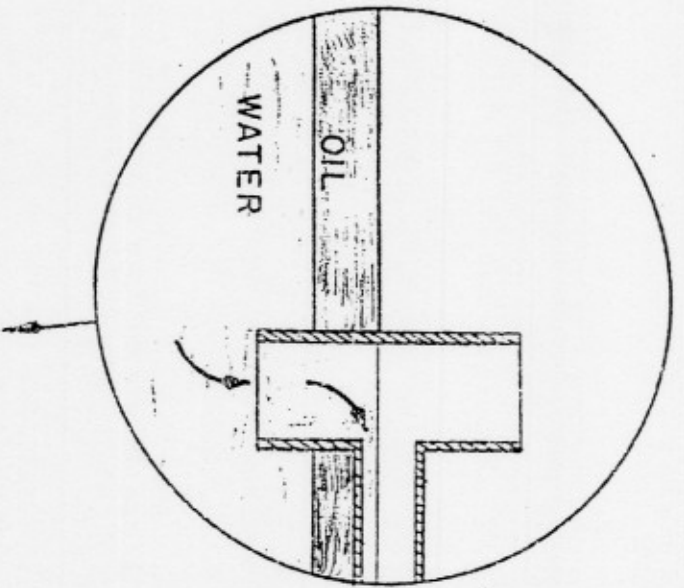
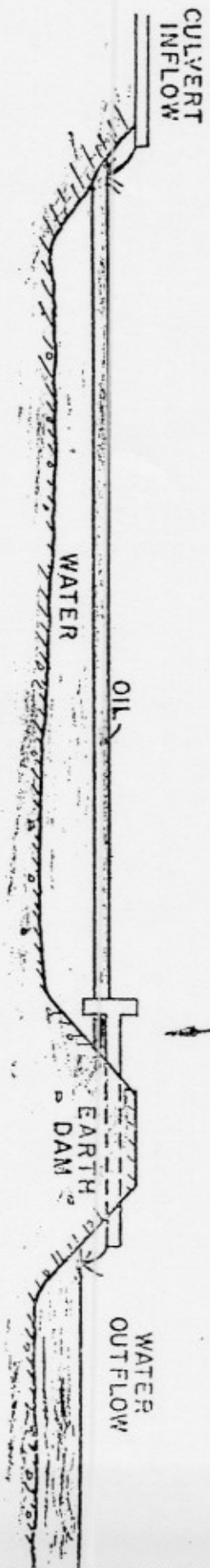
Oil Spill Prevention and Removal Handbook

A Horizontal Skimmer Head in its simplest form consists of a short piece of 2 inch pipe on the end of the vacuum hose provided with flotation means. (See Figure 190.)

FIGURE 190: HORIZONTAL SKIMMER HEAD



Source: Report EPA-R2-73-115



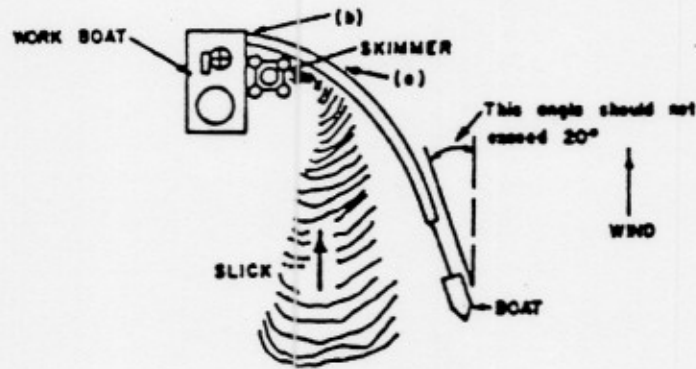
PROPOSED OIL COLLECTION POND

NOT TO SCALE

EXHIBIT 2

3/23/76

FIGURE 42: MAIN SLICK RECOVERY



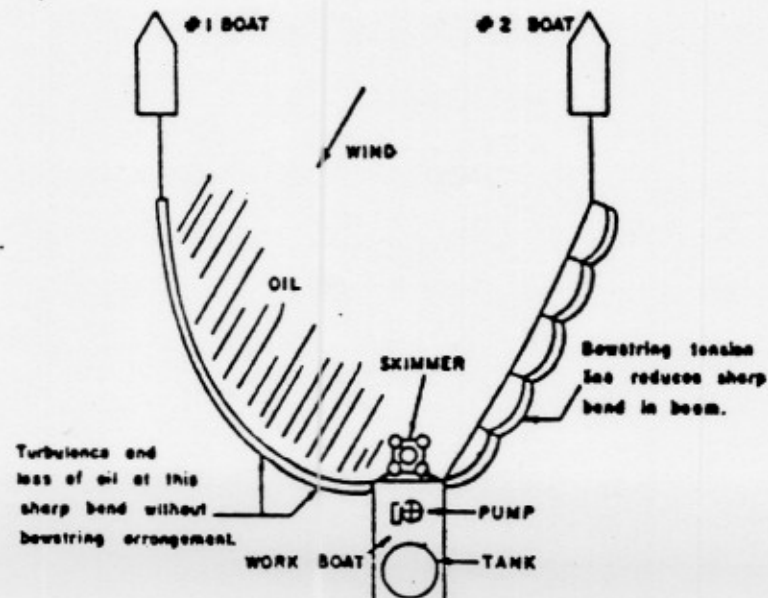
Source: Report PB 213,880

No comments will be made about the type of skimmer, oil-water separation system or storage system. These are obviously a very important concern and will control the speed at which the recovery system will move with the slick to prevent loss.

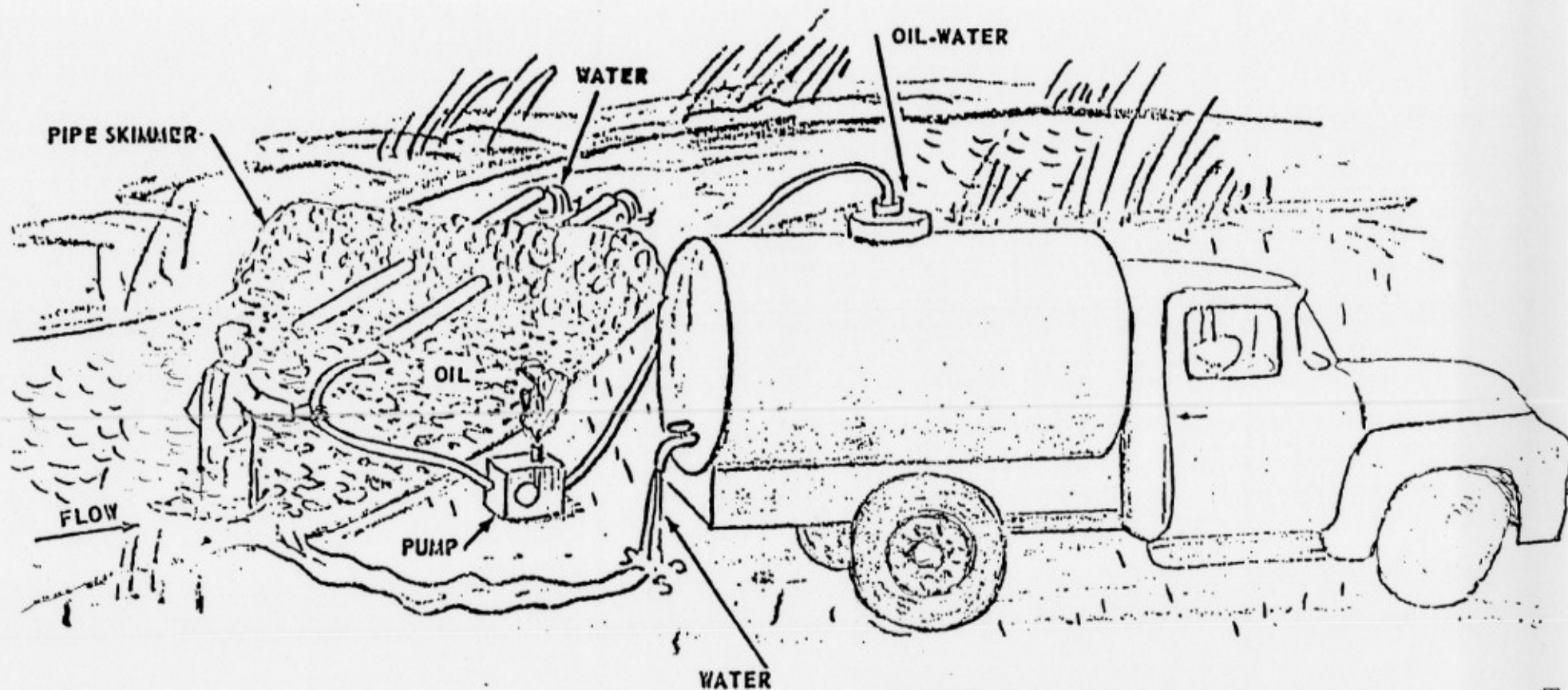
There are two other problems to contend with: (1) it is obvious from the calculations that it will not be possible to remove all of the oil from the water surface before it gets into the beach area; and (2) the slick is not remaining as one integral mass and portions of it are breaking away and being left behind in the bay.

Next, consider handling those portions of the slick being left behind in the bay. Two small fishing boats and a contractor's work boat having flat deck space in the bow, have been contracted for and the remaining fence boom and the small skimmer mounted on them. These can be arranged as shown in Figure 43.

FIGURE 43: TOWING A FUNNEL BOOM ARRANGEMENT

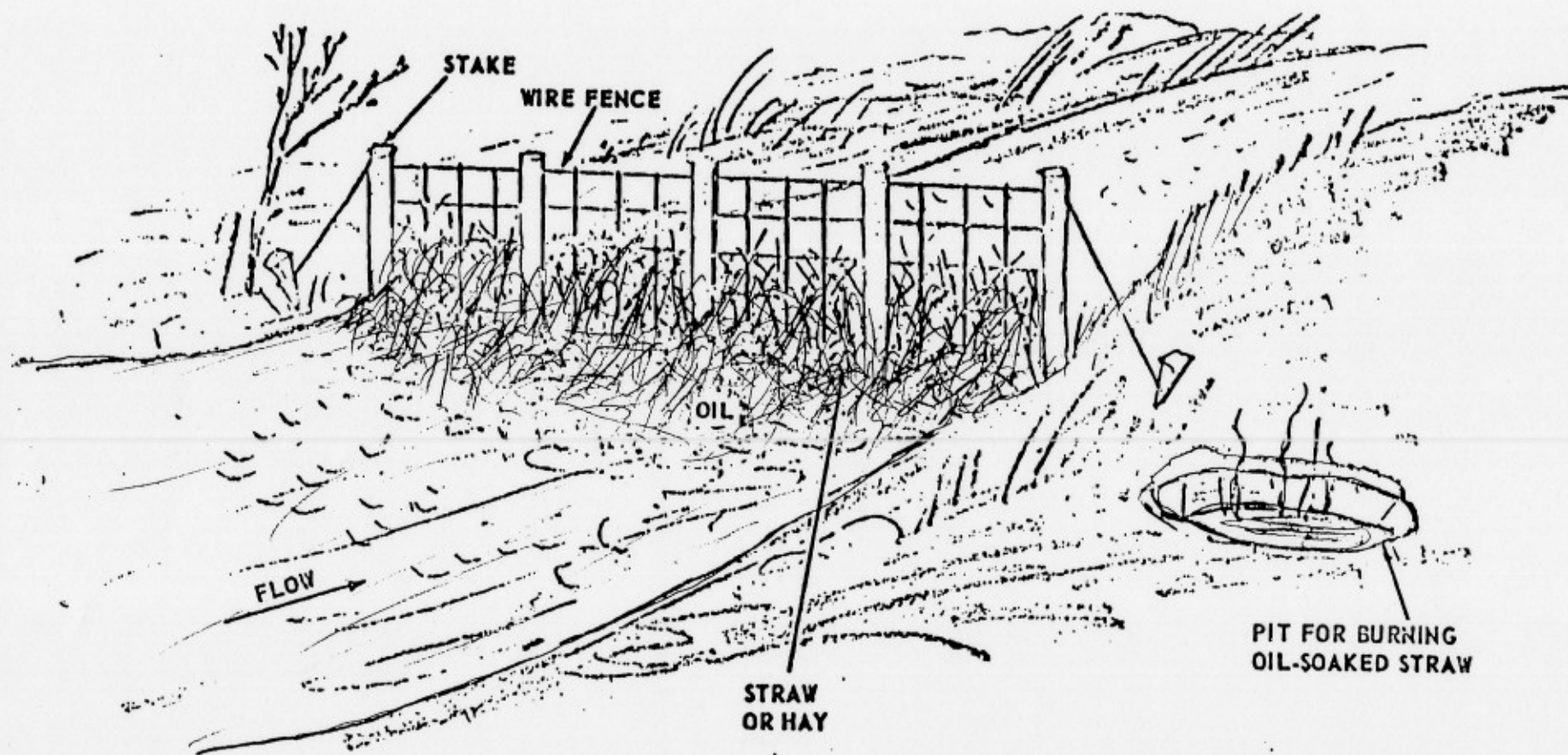


USE OF TANK TRUCK



Impounded oil may be removed from a stream by pumping it into a tank truck. The oil-water mixture is pumped into the top of the tank and, after separation of oil and water, the water may be returned to the stream by opening a valve at the bottom of the tank. Sufficient settling time should be allowed to permit a fairly complete separation.

STRAW SKIMMING DAM



Stretch wire fence across stream and anchor securely. Straw is placed on upstream side of fence. This type of installation should be used in a location where the stream banks are of sufficient height and movement of water is relatively slow.