

March 1, 1988

NOV 30 88

Contents of  
Petroleum Tank Release  
Corrective Action Report

Minnesota Pollution Control Agency

Federal and State laws require persons responsible for a release of petroleum from a tank to conduct corrective actions adequate to "minimize, eliminate, or clean up a release to protect the public health and welfare or the environment".

A remedial investigation must yield sufficient information to select and design an adequate cleanup action. The remedial investigation and cleanup (corrective action) must not only deal with current pollution, but must also protect against future on and off site problems. This document describes the information that must be contained in a remedial investigative report and cleanup proposal.

The hazards which must be addressed include:

- fire and explosion from product and product vapor;
- contamination of drinking water;
- contamination of soil, ground water or surface water.

Investigating and cleaning up a release of petroleum from a tank can be simple and straightforward or extremely complex depending upon the site and its soil and ground water conditions, the amount and type of product released, and the current and future uses of the site and neighboring area. These site specific conditions make it impossible for the Minnesota Pollution Control Agency (MPCA) to specify a definite number of test borings or a certain type of water analysis to be done in all cases. Rather, this document lists the conditions and items of information that an investigation must address in order to determine cleanup which assures protection of the public's health and safety and the environment. Presented below are outlines of "Parts I and II (the Remedial Investigation), and Part III (the cleanup proposal)" of a corrective action report. Reports must contain this or equivalent information to be considered acceptable to the MPCA staff. If some of the required information cannot be found you should include a statement to that effect in the report. If you believe that some of the information is not relevant to your site you should say so and describe why it is not relevant.

Part I of the report (Background Information) must contain descriptions of the site, the area around the release site, the product and the tanks. Much or all of this information can be gathered by owners or operators of the facility (responsible persons). The information should be as detailed as possible and may be submitted separately from, and before, Parts II and III.

Part II of the report (Technical Data and Conclusions) must contain detailed descriptions of soil, water, and chemical conditions at the release site. Few responsible persons will have sufficient expertise and experience to gather and interpret this information. Certain parts must be done by a certified or registered person, for example, monitoring wells must be constructed according to the State well code by licensed well drillers or engineers who register annually with the Minnesota Department of Health.

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Part III of the report (Cleanup Proposal) must contain a detailed, scientifically defensible proposal to clean up the release. Since each site is unique, detailed minimum requirements for parts II and III cannot be specified at the beginning of the project.

Proper investigation and cleanup at sites may require special or additional information. If instructed to do so, responsible persons will be expected to provide investigation work plans to MPCA staff for approval prior to starting each phase of work.

If a responsible person plans to apply to the Minnesota Petroleum Tank Release Compensation Board for partial reimbursement of investigative and cleanup costs, a second copy of the report should be made for the Board.

If information is missing from a report, or if it is inadequate or unclear, the MPCA may:

- reject the report;
- require responsible persons to conduct additional work;
- notify the Petroleum Tank Release Compensation Board that the responsible persons' corrective actions are inadequate, and/or;
- conduct the necessary additional work with MPCA staff or contractors and attempt to recover the cost of this work from responsible parties.

This document will be updated periodically. If you did not receive it directly from the MPCA please check with the MPCA Project Leader for your site to make sure you are using the latest and most appropriate version.

This version supercedes the December 14, 1987 version

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Part I.  
BACKGROUND INFORMATION

A. Legal description of property:

B. History of site ownership and operation since at least the point at which petroleum releases did or could have occurred on the property:

1. name, current address and telephone number of all current owners and operators *Erwin C. Radunz & Rose Radunz*
2. name, current address and telephone number (if known) of all past owners and operators if you are alleging multiple responsible parties *R#1, Clearwater, Mn 55320*
3. years of ownership/operation *None*
4. general activities conducted at site by each owner/operator *Truckstop*
5. general construction history of site *Station*

C. Map or maps and descriptions appropriate in scale and scope showing:

1. your building
2. adjacent and nearby buildings *none*
3. paved (concrete or asphalt) areas *all asphalt*
4. property line *City Road 8*
5. location of above and underground tanks and associated lines, pumps and dispensers *a total of 20 acres*
6. location of former tanks *none*
7. soil boring locations (if done) *all around underground tanks*
8. monitoring well locations (if done) *none*
9. underground utilities on and adjacent to site (sewer, water, telephone, electric)
10. basements and tile drain and sump systems on and adjacent to site *None*
11. street names
12. major pumping wells and municipal wells (get info from city) *None*
13. private wells (city may know this)
14. water bodies (rivers, ponds, lakes) *None*
15. surface elevations from surveys or topo maps or city, elevation relative to nearby landmark acceptable
16. north arrow and map legend (scale, such as 1 inch = 100 feet)

D. Tank and Leak Information:

1. age of all existing and previously removed tanks on site *12 years*
2. size of all tanks on site (diameter, length, gallons) *5 tanks (2-20000)*
3. tank construction material of all tanks on site (construction prints if available) *Steel*
4. present contents of all tanks on site *diesel fuel and gasoline*
5. previous contents of all tanks on site *" " "*
6. type and locations of product pumps, piping, and dispensers *see diagram*
7. method and results of product inventory reconciliation (describe and attach charts, etc.) *every morning all sticks*

*readings are taken on tanks, add inventory ending previous inventory, beginning and account for gallons to coin side with meters on pumps*

8. corrosion protection on tanks and lines (yes/no and description)
9. type and location of leak detectors
10. type of fill under and around tanks and lines (clay, sand, etc.)
11. type of tank anchors (if any)

E. Description of all leaks, spills, overfills or other releases on the site

1. date of release July 1988
2. date release reported to MPCA July 1988
3. product released Diesel
4. quantity lost about 1200-2000 gallons 2,000 - 2,200
5. quantity recovered about 1800 gallons 1200 + 160 cu. yds of saturated soil.
6. location on site
7. cleanup action taken slop taken to Koch Refinery
8. offsite effects none

F. Tank integrity test dates, methods, testers, and results (include data and worksheets or calculations):

G. Condition of tanks and lines (if removed):

1. corrosion: yes/no  no Tank tanks did not leak
2. visible leak: yes/no  no
3. loose fittings: yes/no  no Coupling in line cracked
4. carefully examined for signs of leakage:  yes  no
5. observer (fire marshal, city official, testing laboratory employee, etc.) present when tank(s) removed?:  yes  no  
    ◦ name of independent observer Landweh's Heavy Equip  
    ◦ organization  
    ◦ address St. Cloud, Minn  
    ◦ telephone
6. pictures of removed tanks (if available) None
7. disposition of tank (who took it, where disposed) Tank on premises
8. description of soil conditions in area of the tank excavation (with estimated volumes):
  - odors
  - visible product in soil
  - sheen on water mixed with soil
  - sheen on ground water in excavation
  - product on ground water in excavation
  - soil sampling descriptions
  - instrument readings (if available)
9. disposition of soil

H. Reports previously completed: soil, ground water, or others pertinent to the site.

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Part II  
Technical Data and Conclusions

A remedial investigation (RI) must define the nature, extent, and magnitude of contamination and identify threats to public health, welfare and to the environment. The following outline identifies the type of information which is typically required to achieve these goals. It is the consultant's responsibility to provide all necessary information and define the problem at the specific site under investigation. Pertinent information not provided will be requested by MPCA project staff.

Free product identified at any stage of the investigation must be reported to the MPCA within 24 hours. Potential or actual vapor migration posing imminent threats to public safety must be reported and corrective action implemented immediately.

The RI report must describe the actual and potential impacts of the release using the following information:

- A. Site map showing all sample locations:
  1. borings
  2. monitoring wells (include Minnesota Unique Well Number for all wells)
  3. recovery wells (include Minnesota Unique Well Number for all wells)
  4. vapor survey points
  5. other samples
  
- B. Soil, and bedrock technical information and map(s) from published reports or work done on site such as:
  1. published or generally known information
  2. information generated by this investigation
    - ° area soil (type, thickness, classification, etc.)
    - ° area bedrock (type, thickness, formation name, etc.)
    - ° boring logs, (description, methods, odors, blow count etc.)
    - ° soil characteristics (grain size, sorting, origin, texture, permeability, classification, etc.)
    - ° observed contamination (visual, odors, vapor survey results)
    - ° contaminant analytical results
    - ° bedrock (depth, type, etc.)
  
- C. Ground water technical information and maps such as:
  1. general description of area aquifers (use published or generally known information)
    - ° hydraulic characteristics
    - ° use
  
  2. observation of water table aquifer on site
    - ° depth to water table
    - ° surveyed elevations
    - ° contours
    - ° direction of ground water flow

3. perched conditions
  4. connections to other aquifers
    - °potential connections
    - °evidence of connection/no connection at site
  5. appearance of ground water
  6. sampling description
  7. analytical results
- D. Surface water technical information and map(s) such as:
1. ground water/surface water discharge points
  2. sampling description
  3. analytical results
- E. Technical information and map(s) for basements and other structures on and near the site:
1. description of past vapors/seepage into basements
  2. vapor surveys conducted in basements
  3. condition of basement (poured concrete, cement block; solid, cracked)
- F. Technical information and maps on utilities on and near the site:
1. description of past vapors/seepage
  2. vapor surveys conducted
- G. Description and map(s) of free product or vapors discovered at the site and description of the control measures instituted by the responsible person
- H. Technical conclusions must include at least:
1. source of the release
  2. current extent of release
    - °soil
    - °free product
    - °water
    - °vapor
    - °other
  3. potential extent of release
    - °soil
    - °free product
    - °water
    - °vapor
    - °other

Part II  
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- I. QA/QC summary - Analytical procedures and quality assurance/quality control measures followed in sampling must be described
- J. Sample summary charts which clearly identify all samples by sample ID# and sampling location, type, date, etc.
- K. Laboratory report sheets

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Part III  
Cleanup Proposal

Your Remedial Investigation will identify those cleanup actions which will protect health, welfare and the environment. Potential cleanup actions may include combinations of:

1. do nothing
2. soil excavation and treatment/disposal
3. in place soil treatment
4. product recovery
5. ground water removal and treatment
6. ground water gradient control
7. vapor control measures
8. drinking water supply replacement
9. resident relocation

Site maps, equipment diagrams, specifications, calculations etc. must be presented which demonstrate that the cleanup protects health, welfare and environment. Only very limited detail is provided in this document because cleanup actions are very site specific. Selection of cleanup action will depend on the responsible person's consultant and review by the MPCA staff.



Hasty Truck Terminal

RADSON, INC.

Petroleum Products

(612) 878-2614

Route 1  
Clearwater, Minnesota 55320

P.O. Box 1717  
St. Cloud, Minnesota 56302

to  
St. Cloud

Interstate 94 - exit 183

Service Road

to  
Mpls

1-20,000  
gal diesel fuel  
tanks  
removed to  
excavate  
terminal

underground  
storage tanks

lines  
lines

diesel  
Island  
pumps

8'  
8'

Truckstop

water  
well

County Road #8

50'

Shop

80'

20 acres where Hasty

septic  
system

Truck Stop located